

INSTITUTE OF GEOLOGICAL SCIENCES
MINERAL RESOURCES DIVISION

STATISTICAL
SUMMARY OF THE
MINERAL INDUSTRY

WORLD PRODUCTION,
EXPORTS AND IMPORTS

1964-1969



LONDON
HER MAJESTY'S STATIONERY OFFICE
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NATURAL ENVIRONMENT RESEARCH COUNCIL
INSTITUTE OF GEOLOGICAL SCIENCES
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PREFACE

This publication is prepared by the Statistics Unit of the Mineral Resources Division of the Institute of Geological Sciences. The Institute was formed in June 1965 by the incorporation of Overseas Geological Surveys with the Geological Survey of Great Britain and the Museum of Practical Geology and is a constituent body of the Natural Environment Research Council.

The statistical tables have been compiled from a large number of official and commercial sources. The information obtained from Mines Reports, Trade Returns and other published works, and the assistance given by government and private correspondents throughout the world, are gratefully acknowledged.

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EXPLANATORY NOTES

Coverage. Although this Summary attempts to provide a comprehensive world coverage of mineral production and trade, it has not been possible to obtain complete information for every country. In the production tables, estimates for certain countries have been included where necessary in order to arrive at world totals. In the trade tables, however, such estimates have generally not been attempted and the coverage is limited to that available from the official trade returns. The absence of import or export figures for a particular country from a table does not necessarily signify no trade in the commodity concerned, but may mean only that the item has not been separately specified in that country's trade returns.

Arrangement of Countries. In each table, Commonwealth countries are grouped separately from other countries. Within their respective groups the countries are then listed alphabetically by continents in the following order: Europe, Africa, North and Central America, South America, Asia and Australasia.

For Swaziland and Botswana, production statistics are recorded separately but the foreign trade is dealt with for Customs purposes as part of that of South Africa. The trade figures for South-West Africa are also generally included with those for South Africa.

The trade statistics for Southern Yemen formerly Aden (1964-1967) may include those of other states.

The trade statistics for India include those of Goa.

The production and trade statistics for West Malaysia and Singapore are now shown separately, the trade statistics including trade between these countries. West Malaysia and Singapore constituted the territory "Malaya" shown in previous editions of this Summary.

The trade statistics for Spain and Spanish Dependencies exclude the trade between these territories.

Production of Ores and Metals. In the sections on cobalt, copper, lead, tin and zinc tables are given showing both the production of ore, in terms of its metal content, and the actual production of metal. The metal content of the ore produced is either as calculated from average assay values or is the amount of metal estimated to be recoverable. The ore is, of course, not necessarily smelted in the country of origin and the metal production in a particular country may be derived from both domestic and imported ores. Secondary metal is excluded, as far as possible, from the metal production tables but where important is given in footnotes to the producing countries.

Imports and Exports. Except in the cases of gold and silver, the figures shown in the tables are intended to represent exports of domestic produce and imports retained, i.e. total imports less re-exports. In certain cases it has not been possible to allow for re-exports and figures relate to total exports and total imports. Shipments of coal and oil as bunker fuel, which constitute an important part of the trade of some countries, are shown separately in the export tables; where these shipments consist of, or include, foreign produce a footnote is given to that effect.

Units. The units of weight employed in the tables are: the metric carat, the troy ounce, the lb. (avdp.) and the long ton. Their equivalents in certain other units are as follows:

| | | | |
|----------------|--------------------------|---------------|------------------------|
| 1 metric carat | = 0.2 gramme | 1 lb. (avdp.) | = 7,000 grains |
| | = 3.08648 grains | | = 14.5833 troy ounces |
| | | | = 0.453592 kilogrammes |
| 1 troy ounce | = 480 grains | 1 long ton | = 2,240 lb. (avdp.) |
| | = 31.1035 grammes | | = 1.12 short tons |
| | = 155.5175 metric carats | | = 1.016047 metric tons |

The factors used for converting volumes of liquids into long tons are given in footnotes to the tables relating to Coal By-Products (p. 86) and Petroleum and Allied Products (pp. 239,253).

Symbols. The following symbols are used in this Summary:

— = Nil, or negligible. *r* = Revised figure. *n.a.* = Information not available.

ABRASIVES*

PRODUCTION OF NATURAL ABRASIVES

Long tons

| Producing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-----------|------------|-------------|-------------|------------|-----------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Kenya— | | | | | | |
| Pumice (b) | 1,415 | 1,023 | 780 | 120 | — | — |
| Corundum | — | — | — | 25 | 42 | 117 |
| Rhodesia— | | | | | | |
| Corundum | 2,563 | (a) 3,205 | (c) 3,500 | (c) 4,500 | n.a. | n.a. |
| Tanzania— | | | | | | |
| Corundum (a) | 391 | — | 100 | 38 | — | — |
| Canada— | | | | | | |
| Grindstones | — | 4 | 4 | 9 | — | — |
| Dominica— | | | | | | |
| Pumice (b) | 1,477 | 1,965 | 4,059 | 39,241 | 51,675 | 54,971 |
| India— | | | | | | |
| Corundum | 531 | r 490 | r 575 | r 531 | 321 | 445 |
| Garnet | 290 | r 233 | r 215 | 583 | r 1,952 | 1,746 |
| Australia— | | | | | | |
| Garnet | 80 | 130 | 239 | 175 | n.a. | n.a. |
| New Zealand— | | | | | | |
| Pumice (b) | 20,518 | 107,863 | 18,039 | 16,144 | 16,315 | 19,001 |
| OTHER COUNTRIES | | | | | | |
| Belgium— | | | | | | |
| Grindstones | 48 | 43 | 44 | 37 | 36 | 29 |
| France— | | | | | | |
| Pumice (b) | 902 | 697 | 793 | 616 | 583 | 580 |
| Millstones | 1,085 | 1,173 | 1,512 | 1,476 | 1,263 | n.a. |
| Sharpening stones | 11 | 10 | 12 | 8 | 7 | n.a. |
| Germany (Federal)— | | | | | | |
| Pumice (d) | 5,729,000 | 5,016,000 | 5,305,000 | 4,071,000 | 3,504,000 | 3,939,000 |
| Tripoli | 25 | 25 | 8 | — | n.a. | n.a. |
| Greece— | | | | | | |
| Emery | 7,480 | 7,500 | 7,480 | 7,480 | 7,500 | 6,990 |
| Pumice | 225,482 | r 321,247 | r 323,115 | r 224,000 | 279,000 | 388,000 |
| Pumicite | 308,701 | 400,000 | (c) 345,000 | (c) 491,000 | n.a. | n.a. |
| Iceland— | | | | | | |
| Pumice (b) | 9,842 | (c) 10,000 | (c) 10,000 | (c) 10,000 | (c) 10,000 | n.a. |
| Italy— | | | | | | |
| Pumice | 947,600 | 804,198 | 760,664 | 715,900 | n.a. | n.a. |
| Whetstones | 59 | 64 | n.a. | n.a. | n.a. | n.a. |
| Spain— | | | | | | |
| Pumice | — | 50,540 | 96,213 | 107,548 | 166,503 | 228,021 |
| Sweden— | | | | | | |
| Grindstones and whetstones | 1,945 | 948 | 548 | 217 | n.a. | n.a. |
| Canary Islands— | | | | | | |
| Pumice (b) | 2,257 | 4,905 | n.a. | n.a. | n.a. | n.a. |
| Malagasy Republic— | | | | | | |
| Garnet | (a) 52 | (a) 103 | (a) 6 | (a) 28 | (a) 28 | (a) 2 |
| South Africa— | | | | | | |
| Corundum | 53 | 307 | 357 | 313 | 252 | 225 |

*See also Aluminium, Diamonds and Diatomaceous earth.

(a) Exports.

(b) May include pumice for use other than as an abrasive.

(c) United States Bureau of Mines' estimate.

(d) Marketable. Including pumice and pumicite for constructional purposes.

PRODUCTION OF NATURAL ABRASIVES (cont.)

Long tons

| Producing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-----------|-----------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| United States (c)— | | | | | | |
| Emery | 8,227 | 9,571 | 9,912 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Garnet | 14,396 | 17,259 | 19,600 | 18,298 | 19,764 | 18,266 |
| Pumice and pumicite | | | | | | |
| (a) (b) | 2,478,993 | 3,010,000 | 2,873,000 | 3,076,786 | 3,151,786 | 3,222,321 |
| Tripoli | 57,690 | 63,516 | 59,074 | 63,379 | 76,370 | 75,600 |
| Argentina— | | | | | | |
| Garnet | <i>n.a.</i> | 59 | 84 | 93 | <i>n.a.</i> | <i>n.a.</i> |
| Turkey— | | | | | | |
| Emery | 15,378 | 12,374 | 29,005 | 24,088 | 30,864 | 43,457 |

Abrasives are also produced in other countries, statistics for which are not available.

The following crude artificial abrasives were produced in Canada (long tons):

| | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--------------------|---------|---------|-------------|-------------|-------------|-------------|
| Silicon carbide .. | 76,279 | 87,987 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Fused alumina .. | 132,446 | 151,151 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |

The United States Bureau of Mines reports the following artificial abrasives sold, shipped or used from plants in the United States and Canada (long tons):

| | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|------------------------|---------|---------|---------|---------|---------|---------|
| Silicon carbide .. | 117,772 | 123,466 | 142,000 | 127,000 | 142,000 | 144,000 |
| Aluminium oxide .. | 153,091 | 174,532 | 218,000 | 185,000 | 171,000 | 193,000 |
| Metallic abrasives† .. | 139,109 | 170,131 | 183,000 | 182,000 | 193,000 | 205,000 |

†Shipments for U.S. plants only.

The figures given above include material used for refractories and other non-abrasive purposes.

(a) Including pumice for use other than as an abrasive.

(b) Including volcanic cinders used principally for ballast which amounted to 1,438,476 tons in 1964, 2,579,000 tons in 1965, 2,383,000 tons in 1966, 2,383,930 tons in 1967, 2,722,321 tons in 1968 and 2,688,393 in 1969.

(c) Sold or used by producers.

EXPORTS OF ABRASIVES*

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|--------------|-------------|-------------|-------------|--------------|--------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Abrasives, natural .. | 4,586 | 3,036 | 3,617 | 4,701 | 8,811 | 5,386 |
| Corundum artificial .. | 4,260 | 5,023 | 5,345 | 4,953 | 3,226 | 3,355 |
| Grinding wheels, etc. .. | 7,233 | 7,431 | 7,005 | 5,684 | 5,776 | 7,529 |
| Rhodesia— | | | | | | |
| Corundum | 2,972 | 3,208 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Tanzania— | | | | | | |
| Corundum | 391 | — | 100 | 38 | — | — |
| Canada— | | | | | | |
| Natural abrasives, including diatomaceous earth | 172 | 128 | 27 | 55 | 92 | 94 |
| Artificial abrasives, crude | 211,379 | 239,454 | 264,034 | 227,097 | 233,519 | 257,551 |
| Artificial abrasive wheels, etc. | } (£104,770) | } (£57,345) | } (£53,068) | } (£42,196) | } (£112,156) | } (£127,000) |
| Grindstones | | | | | | |
| Dominica | | | | | | |
| Pumice (a) | — | — | 949 | 12,111 | 25,744 | 22,748 |
| Hong Kong— | | | | | | |
| Grinding and polishing wheels, etc. | 58 | 41 | 72 | 48 | 86 | 39 |
| India (c)— | | | | | | |
| Grindstones, etc. .. | 2,887 | 703 | 250 | 175 | 255 | 277 |
| New Zealand (d)— | | | | | | |
| Pumice (a) | 851 | 933 | 822 | 735 | 638 | 601 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Natural abrasives | 8 | — | — | — | 2 | 4 |
| Millstones and grindstones | 9 | 4 | 6 | 6 | 6 | 5 |
| Corundum, artificial .. | 10,772 | 14,750 | 17,279 | 19,541 | 18,769 | 22,740 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Natural abrasives .. | 8 | 4 | 303 | 484 | 422 | 382 |
| Carborundum | 253 | 199 | 184 | 186 | 180 | 215 |
| Corundum, artificial .. | 27 | 145 | 224 | 120 | 190 | 158 |
| Millstones, grindstones, etc. (b) | 1,150 | 1,218 | 1,473 | 1,581 | 1,452 | 2,303 |
| Denmark— | | | | | | |
| Emery | 2 | — | 2 | 2 | — | 1 |
| Millstones and grindstones | 54 | 37 | 34 | 20 | 12 | 9 |
| Finland— | | | | | | |
| Grindstones, etc. (b) .. | 99 | 46 | 48 | 75 | 70 | 9 |
| France— | | | | | | |
| Emery | } 103 | } 49 | } 24 | } 33 | } 62 | } 24 |
| Corundum | | | | | | |
| Pumice | 52 | 32 | 133 | 296 | 280 | 62 |
| Other natural abrasives | 630 | 292 | 392 | 487 | 170 | 413 |
| Millstones and grindstones | } 1,977 | } 2,007 | } 2,345 | } 2,165 | } 2,351 | } 2,532 |
| Whetstones | | | | | | |
| Carborundum | | | | | | |
| Corundum, artificial .. | 9,784 | 10,011 | 13,639 | 12,160 | 11,405 | 13,722 |

*See also Aluminium, Diamonds and Diatomaceous earth. (c) Years ended March 31 following that stated.

(a) May include pumice for use other than as an abrasive.

(d) Year ended June 30 of that stated.

(b) Including artificial.

EXPORTS OF ABRASIVES (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|-------------|------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Germany (Federal)— | | | | | | |
| Emery and corundum | 161 | 243 | 174 | 17 | 76 | 9 |
| Pumice (d) | 628,613 | 583,193 | 554,048 | 636,054 | 468,033 | 535,560 |
| Other natural abrasives | 2 | — | — | — | — | 150 |
| Millstones, grindstones, etc. (a) | 2,113 | 5,096 | 6,421 | 7,985 | 5,442 | 9,833 |
| Carborundum | 6,083 | 6,926 | 7,196 | 7,306 | 8,027 | 7,360 |
| Corundum, artificial .. | 19,021 | 21,031 | 24,443 | 26,868 | 27,896 | 35,152 |
| Greece— | | | | | | |
| Emery | 4,649 | 5,632 | 5,170 | 5,460 | 6,485 | 5,835 |
| Pumice | 121,092 | 197,849 | 184,528 | 113,334 | 181,128 | 205,029 |
| Italy— | | | | | | |
| Pumice | 316,665 | 146,381 | 314,415 | 270,090 | 295,584 | 295,730 |
| Emery and corundum | 22 | 306 | 50 | 88 | 21 | 253 |
| Other natural abrasives | 113 | 891 | 979 | 2,179 | 15,843 | 20,403 |
| Millstones | } 1,571 | 2,201 | 2,774 | 3,228 | 3,798 | 4,984 |
| Grindstones | | | | | | |
| Wetstones | | | | | | |
| Carborundum | 8,236 | 7,692 | 8,139 | 9,574 | 11,301 | 11,039 |
| Corundum, artificial .. | 629 | 2,172 | 3,083 | 3,822 | 4,584 | 3,892 |
| Netherlands— | | | | | | |
| Natural abrasives .. | 9,394 | 4,713 | 4,801 | 4,862 | 5,124 | 5,525 |
| Millstones, grindstones, etc. | 381 | 557 | 716 | 805 | 988 | 1,172 |
| Corundum, artificial .. | 13 | 25 | 19 | 30 | 52 | 32 |
| Norway— | | | | | | |
| Natural abrasives .. | 76 | — | — | — | — | — |
| Carborundum | 22,453 | 27,282 | 35,071 | 35,973 | 41,541 | 48,888 |
| Sweden— | | | | | | |
| Emery | 11 | 15 | — | — | } 10 | 33 |
| Other natural abrasives | 41 | 44 | 35 | 31 | | |
| Carborundum | 216 | 831 | 284 | 130 | 504 | 123 |
| Corundum, artificial .. | 704 | 890 | 1,299 | 1,337 | 1,355 | 2,077 |
| Millstones, grindstones, etc. | 1,448 | 227 | 86 | 48 | 104 | 221 |
| Switzerland— | | | | | | |
| Carborundum, emery, etc., crude | } 3,168 | 3,666 | 3,932 | 3,414 | 3,267 | 4,533 |
| do. do. ground | | | | | | |
| Yugoslavia— | | | | | | |
| Natural abrasives .. | 2,534 | 48 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Millstones, grindstones, etc. | 190 | 950 | 1,044 | 5,804 | 1,236 | 1,586 |
| Carborundum | 49 | 34 | 79 | — | 239 | 116 |
| Corundum, artificial .. | <i>n.a.</i> | 3,104 | 4,078 | 3,200 | 4,846 | 5,698 |
| Malagasy Republic— | | | | | | |
| Garnet | 52 | 103 | 6 | 28 | 28 | 2 |
| South Africa— | | | | | | |
| Corundum | 53 | — | — | — | — | — |
| Other natural abrasives | 87 | 8 | 92 | 5 | 6 | 1 |
| Grinding wheels, etc. .. | 212 | 227 | 171 | 178 | 196 | 311 |
| Mexico— | | | | | | |
| Pumice, etc. | 7,051 | 7,067 | 6,619 | 3,596 | 7,206 | <i>n.a.</i> |
| United States— | | | | | | |
| Corundum | 138 | (b) | (b) | (b) | (b) | (b) |
| Emery powder | 607 | (b) | (b) | (b) | (b) | (b) |
| Grindstones | 160 | 1,932 | 1,960 | 1,620 | 2,291 | 2,131 |
| Wetstones, etc. | 332 | 210 | 273 | 410 | 329 | 408 |
| Pulp stones | 1,463 | 1,461 | 1,951 | 1,838 | 982 | 1,098 |
| Other natural abrasives | 12,492 | 12,010 | 14,893 | 12,806 | 18,607 | 14,660 |
| Aluminium oxide, fused | 16,706 | 15,405 | 16,282 | 17,468 | 13,860 | 15,180 |
| Carborundum | 10,013 | (c) 11,392 | 7,994 | 5,770 | 6,324 | 5,605 |

(a) Including artificial.

(q) Included with "other natural abrasives".

(c) May include other crude artificial abrasives.

(d) Including pumice and pumicite for construction purposes.

EXPORTS OF ABRASIVES (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|-------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| United States (<i>cont.</i>)— | | | | | | |
| Unfused alumina .. | 403 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Other crude artificial abrasives | 155 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Japan— | | | | | | |
| Emery | 361 | 414 | 622 | 637 | 894 | 794 |
| Other natural abrasives | 96 | 74 | 104 | 564 | 1,582 | 2,166 |
| Grindstones, etc. .. | 788 | 972 | 1,234 | 1,376 | 1,948 | 2,505 |
| Artificial abrasives .. | 817 | 1,529 | 2,489 | 2,706 | 3,151 | 3,985 |
| Turkey— | | | | | | |
| Emery | 9,071 | 16,392 | 26,414 | 20,328 | 23,134 | 47,575 |

IMPORTS OF ABRASIVES*

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|--------------|--------------|--------------|--------------|--------------|--------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Natural abrasives .. | 14,153 | 13,789 | 21,382 | 55,274 | 79,885 | 63,678 |
| Corundum, artificial .. | 15,151 | 17,409 | 12,411 | 18,140 | 13,801 | 17,691 |
| Carborundum .. | 13,763 | 16,918 | 12,291 | 12,780 | 14,491 | 15,558 |
| Grinding wheels of hard abrasives .. | 917 | 1,018 | 1,503 | 1,218 | 1,691 | 2,002 |
| Grindstones and whetstones etc. .. | | | | | | |
| Malta— | | | | | | |
| Pumice .. | 7 | (£1,089) | (£3,134) | (£2,673) | (£3,011) | (£6,004) |
| Grinding and polishing wheels .. | (£5,924) | (£4,771) | (£7,507) | (£8,331) | (£13,528) | (£16,549) |
| Ghana— | | | | | | |
| Grinding and polishing wheels .. | 57 | 62 | 438 | 103 | 1,110 | 349 |
| Kenya and Uganda— | | | | | | |
| Grindstones, etc. .. | 69 | 54 | 45 | 53 | 80 | 73 |
| Mauritius— | | | | | | |
| Grindstones, etc. .. | 30 | 51 | 39 | 30 | 46 | 40 |
| Nigeria— | | | | | | |
| Natural abrasives .. | 183 | 119 | 334 | 180 | 43 | 123 |
| Grinding stones, etc. .. | 238 | 290 | 203 | 129 | 124 | 117 |
| Rhodesia— | | | | | | |
| Grinding and polishing wheels and stones .. | 187 | 179 | n.a. | n.a. | n.a. | n.a. |
| Tanzania— | | | | | | |
| Grindstones, etc. .. | 12 | 22 | 24 | 18 | 30 | 33 |
| Zambia— | | | | | | |
| Grinding and polishing wheels and stones .. | 63 | 96 | 116 | 107 | 99 | 123 |
| Canada— | | | | | | |
| Pumice .. | 9,711 | 9,404 | 12,881 | 7,890 | 5,713 | 4,297 |
| Other natural abrasives | 3,955 | 5,552 | 7,296 | 7,441 | 8,746 | 8,239 |
| Artificial abrasives, ground .. | (£1,373,256) | (£1,402,499) | (£1,564,511) | (£1,483,783) | (£1,567,101) | (£1,685,000) |
| Artificial abrasive manufactures .. | | | | | | |
| Grindstones and wheels | (£996,534) | (£1,128,725) | (£1,129,022) | (£1,116,324) | (£1,629,153) | (£1,700,000) |
| Jamaica— | | | | | | |
| Natural abrasives .. | 12 | 4 | 61 | 4 | 42 | 7 |
| Grindstone .. | 11 | 10 | 14 | 14 | 66 | 317 |
| Trinidad and Tobago— | | | | | | |
| Grindstones and wheels | 15 | 22 | 22 | 13 | 20 | 26 |
| Ceylon— | | | | | | |
| Natural abrasives .. | 21 | 16 | 19 | 70 | 32 | 21 |
| Grinding and polishing wheels, etc. .. | (£9,435) | (£17,741) | (£13,587) | (£9,093) | (£30,525) | (£56,315) |
| Cyprus— | | | | | | |
| Grindstones and millstones .. | (£6,538) | (£9,193) | (£11,838) | (£17,867) | (£23,423) | (£30,120) |
| Hong Kong— | | | | | | |
| Natural abrasives .. | 200 | 212 | 256 | 448 | 416 | 510 |
| Grinding and polishing wheels, etc. .. | 1,867 | 329 | 257 | 285 | 337 | 374 |
| India (a)— | | | | | | |
| Natural abrasives .. | 3,455 | 536 | 206 | 54 | 388 | 144 |
| Carborundum .. | 107 | 226 | 523 | 474 | 176 | 232 |
| Grinding stones, etc. .. | 262 | 322 | 293 | 237 | 129 | 176 |

*See also Aluminium, Diamonds and Diatomaceous earth.

(a) Years ended March 31 following that stated.

IMPORTS OF ABRASIVES (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|-------------|-----------|-----------|-----------|-----------|-------------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Malaysia (West)— | | | | | | |
| Natural abrasives | <i>n.a.</i> | 109 | 134 | 106 | 104 | 103 |
| Grinding and polishing wheels, etc. | <i>n.a.</i> | 304 | 288 | 313 | 377 | 514 |
| Sarawak— | | | | | | |
| Grinding and polishing wheels, etc. | 35 | 46 | 23 | 26 | 19 | <i>n.a.</i> |
| Singapore— | | | | | | |
| Grinding and polishing wheels | 200 | 155 | 136 | 107 | 233 | 197 |
| Australia (a)— | | | | | | |
| Pumice | 920 | 1,012 | 628 | 624 | 417 | 1,530 |
| Grindstones, etc. | 293 | 386 | (b) 174 | (b) 375 | (b) 447 | (b) 559 |
| Garnet grains | 105 | 128 | 92 | 116 | 87 | (d) |
| Tripoli | 729 | 536 | 499 | 425 | 519 | (d) |
| Other natural abrasives | 1,129 | 1,520 | (b) 522 | (b) 420 | (b) 403 | (d) |
| Artificial abrasives | 4,547 | 5,611 | 4,063 | 3,592 | 4,218 | 7,319 |
| New Zealand (a)— | | | | | | |
| Pumice | 53 | 56 | 78 | 53 | 113 | <i>n.a.</i> |
| Corundum, emery, etc. | 8 | 3 | 7 | 5 | | |
| Grindstones, etc. £ | (180,167) | (214,677) | (232,789) | (275,935) | (268,099) | <i>n.a.</i> |
| Irish Republic— | | | | | | |
| Grindstones, oilstones, etc. | 219 | 233 | 239 | 254 | 297 | 371 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Pumice | 698 | 643 | 722 | 312 | 456 | 1,546 |
| Other natural abrasives | 136 | 106 | 122 | 100 | 140 | 164 |
| Carborundum | 1,589 | 1,778 | 1,843 | 1,840 | 2,073 | 2,489 |
| Corundum, artificial | 3,390 | 3,338 | 4,070 | 3,580 | 4,924 | 2,981 |
| Grindstones | | | | | | |
| Millstones | 95 | 116 | 111 | 141 | 218 | 154 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Pumice | 187,555 | 206,788 | 168,845 | 194,728 | 138,772 | 160,272 |
| Other natural abrasives | 889 | 711 | 801 | 619 | 1,044 | 2,533 |
| Corundum, artificial | 2,632 | 3,110 | 3,211 | 3,456 | 3,579 | 3,786 |
| Millstones, grindstones, etc. (c) | 1,447 | 1,408 | 1,436 | 1,302 | 1,156 | 1,799 |
| Carborundum | 2,929 | 2,526 | 2,905 | 2,227 | 2,289 | 4,073 |
| Denmark— | | | | | | |
| Emery, etc. | 673 | 721 | 662 | 521 | 483 | 491 |
| Pumice | 3,459 | 2,371 | 4,286 | 4,807 | 2,939 | 7,472 |
| Carborundum | 391 | 440 | 313 | 288 | 342 | 456 |
| Corundum, artificial | 439 | 439 | 424 | 476 | 576 | 968 |
| Millstones and grindstones | | | | | | |
| Finland— | | | | | | |
| Emery, pumice, etc. | 377 | 295 | 267 | 286 | 183 | 241 |
| Carborundum | 207 | 602 | 589 | 841 | 718 | 616 |
| Millstones, grindstones, etc. (c) | 1,397 | 1,399 | 1,355 | 1,305 | 1,243 | 1,754 |
| France— | | | | | | |
| Emery | — | 1,146 | 1,014 | 755 | 636 | 855 |
| Corundum | — | 21 | 87 | 33 | 38 | 103 |
| Pumice | 36,897 | 36,100 | 38,723 | 33,168 | 26,807 | 18,379 |
| Other natural abrasives | 3,646 | 2,135 | 2,682 | 7,984 | 3,147 | 28,069 |

(a) Years ended June 30 of that stated.

(b) Owing to reclassification not strictly comparable with earlier years.

(c) Including artificial.

(d) Included, if any, with Pumice.

IMPORTS OF ABRASIVES (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|---------|---------|---------|---------|---------|---------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| France <i>(cont.)</i> — | | | | | | |
| Millstones and grindstones | } 2,998 | 3,478 | 4,087 | 4,279 | 4,373 | 5,729 |
| Whetstones | | | | | | |
| Carborundum | | | | | | |
| Corundum, artificial | 3,876 | 4,514 | 6,473 | 7,597 | 9,392 | 10,898 |
| Germany (Federal)— | 1,391 | 1,544 | 2,358 | 3,145 | 2,602 | 4,662 |
| Emery and corundum | 1,182 | 538 | (b) | 647 | 876 | 519 |
| Pumice, etc. | 203,795 | 108,748 | 75,538 | 71,303 | 25,087 | 16,331 |
| Other natural abrasives | 1,737 | 2,512 | 3,416 | 1,826 | 2,301 | 2,380 |
| Millstones, grindstones, etc. (a) | 391 | 2,242 | 6,834 | 2,533 | 1,719 | 3,863 |
| Carborundum | 5,144 | 6,401 | 7,994 | 7,973 | 11,197 | 14,895 |
| Corundum, artificial | 3,707 | 4,546 | 6,636 | 4,534 | 5,848 | 10,746 |
| Greece— | | | | | | |
| Millstones, grindstones, etc. | 129 | 261 | 188 | 218 | 162 | 173 |
| Other abrasives | 73 | 40 | n.a. | n.a. | 9 | 267 |
| Iceland— | | | | | | |
| Millstones, etc. | 11 | 13 | 14 | 8 | 8 | 18 |
| Italy— | | | | | | |
| Emery and corundum | 1,556 | 1,316 | 1,469 | 1,078 | 1,793 | 868 |
| Other natural abrasives | 1,397 | 1,282 | 1,797 | 1,876 | 2,005 | 2,591 |
| Millstones Grindstones etc. | 2,519 | 2,489 | 3,373 | 3,743 | 3,591 | 4,154 |
| Corundum, artificial | 5,577 | 3,829 | 6,887 | 8,276 | 6,282 | 8,328 |
| Carborundum | 1,869 | 1,800 | 2,253 | 1,839 | 2,339 | 3,281 |
| Netherlands— | | | | | | |
| Emery | 4,803 | 5,417 | (b) | (b) | (b) | (b) |
| Pumice and tripoli | 435,652 | 421,349 | 377,455 | 355,476 | 365,471 | 367,792 |
| Other natural abrasives | 404 | 426 | 7,883 | 9,764 | 8,009 | 8,591 |
| Millstones and grindstones (a) | 1,417 | 1,642 | 1,680 | 1,436 | 1,679 | 1,879 |
| Corundum, artificial | 2,714 | 3,160 | 2,849 | 3,251 | 3,093 | 3,580 |
| Carborundum | 695 | 714 | 679 | 844 | 919 | 995 |
| Norway— | | | | | | |
| Natural abrasives | 344 | 332 | 392 | 427 | 393 | 540 |
| Whetstones | 4 | 7 | 5 | 2 | 5 | 5 |
| Carborundum | 16 | 76 | 84 | 12 | 10 | 29 |
| Corundum, artificial | 698 | 609 | 928 | 738 | 623 | 990 |
| Portugal— | | | | | | |
| Emery, etc. | 280 | 420 | 355 | 111 | 326 | 310 |
| Pumice | 360 | 356 | 245 | 181 | 122 | 336 |
| Millstones etc. | 192 | 220 | 215 | 20 | 279 | 303 |
| Spain— | | | | | | |
| Emery powder | 138 | 664 | 417 | 370 | 171 | 365 |
| Corundum, artificial | 776 | 1,232 | 2,172 | 1,681 | 1,646 | 3,580 |
| Carborundum | 871 | 1,138 | 1,380 | 1,313 | 1,137 | 2,554 |
| Sweden— | | | | | | |
| Emery | 546 | 630 | 359 | 425 | } 588 | 498 |
| Other natural abrasives | 643 | 516 | 944 | 301 | | |
| Carborundum, etc. | 3,868 | 4,495 | 5,392 | 3,863 | 4,588 | 4,437 |
| Corundum, artificial | 4,453 | 5,671 | 5,397 | 5,177 | 6,233 | 5,705 |
| Millstones Grindstones, etc. | 63 | 80 | 31 | 38 | 17 | 23 |
| Switzerland— | | | | | | |
| Emery, crude | } 677 | 1,163 | 1,031 | 233 | 243 | 241 |
| Carborundum, emery, etc., ground | | | | | | |
| Pumice (c) | | | | | | |
| | 7,544 | 2,375 | 2,744 | 1,261 | 1,038 | 1,842 |

(a) Including artificial.

(b) Included with "other natural abrasives."

(c) May include pumice for use other than as an abrasive.

IMPORTS OF ABRASIVES (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|-------------|---------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Switzerland (<i>cont.</i>)— | | | | | | |
| Millstones | } 98 | 76 | 71 | 44 | <i>n.a.</i> | 141 |
| Grindstones | | | | | | |
| Whetstones | | | | | | |
| Corundum, artificial .. | 11 | 14 | 11 | 2 | <i>n.a.</i> | 59 |
| Yugoslavia— | 4,004 | 4,882 | 4,678 | 4,006 | 4,430 | 4,697 |
| Natural abrasives .. | 422 | 267 | 456 | 684 | 384 | 548 |
| Millstones, grindstones, etc. | 350 | 486 | 858 | 615 | 820 | 1,291 |
| Corundum, artificial .. | <i>n.a.</i> | 513 | 497 | 977 | 1,127 | 1,798 |
| Carborundum | 1,024 | 844 | 951 | 1,737 | 974 | 1,341 |
| Malagasy Republic— | | | | | | |
| Natural abrasives .. | 14 | 13 | 12 | 14 | 19 | 21 |
| Morocco— | | | | | | |
| Millstones and grind- stones | 148 | 132 | 40 | 48 | 51 | 48 |
| Natural abrasives .. | 23 | 12 | 39 | 23 | 9 | 16 |
| South Africa— | | | | | | |
| Emery | } 3,526 | 1,737 | 4,821 | 2,792 | 4,656 | 2,705 |
| Pumice | | | | | | |
| Other abrasives .. | | | | | | |
| Abrasive wheels and discs | } 181 | 281 | 176 | 251 | 260 | 366 |
| Grindstones, millstones, etc. | | | | | | |
| Sudan— | | | | | | |
| Natural abrasives .. | 152 | 34 | 51 | 3 | 91 | 211 |
| Grindstones | 172 | 221 | 298 | 77 | 143 | 201 |
| Tunisia— | | | | | | |
| Pumice | 46 | 29 | 256 | 22 | 150 | 37 |
| Millstones and grind- stones (a) | 71 | 33 | 71 | 52 | 129 | 85 |
| Costa Rica— | | | | | | |
| Pumice, emery and corundum | 6 | 10 | 13 | 7 | 7 | 9 |
| Guatemala— | | | | | | |
| Natural abrasives .. | 6 | 5 | 6 | 13 | 25 | 11 |
| Mexico— | | | | | | |
| Emery and carborundum | 1,626 | (b) 302 | (b) 669 | (b) 402 | (b) 406 | <i>n.a.</i> |
| Pumice | 156 | 18 | 17 | 39 | 6 | <i>n.a.</i> |
| Millstones and grind- stones | 306 | 362 | 297 | 165 | 124 | <i>n.a.</i> |
| United States— | | | | | | |
| Corundum, crude .. | 1,758 | 1,696 | r 2,292 | r 1,657 | 5,045 | — |
| Pumice, crude | 4,910 | 8,889 | 8,386 | r 5,091 | 8,425 | 7,521 |
| do. manufactured .. | 2,761 | 3,152 | 3,848 | r 1,860 | 2,849 | 1,121 |
| Emery, Tripoli, etc. .. | <i>n.a.</i> | 8 | r 34,993 | r 14,509 | 28,695 | <i>n.a.</i> |
| Crude artificial abrasives | 198,260 | 226,767 | 260,000 | 220,000 | 260,000 | 266,900 |
| Argentina— | | | | | | |
| Emery | 2,389 | 3,426 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Grindstones | 45 | 14 | 24 | 14 | 23 | 31 |
| Brazil— | | | | | | |
| Emery, pumice, etc. .. | 52 | 55 | 463 | 695 | 858 | <i>n.a.</i> |
| Carborundum | 149 | 172 | 246 | 500 | 47 | <i>n.a.</i> |
| Millstones, grindstones, etc. | 85 | 49 | 130 | 112 | 192 | <i>n.a.</i> |
| Chile— | | | | | | |
| Emery | 61 | 84 | <i>n.a.</i> | 29 | <i>n.a.</i> | <i>n.a.</i> |
| Carborundum | 11 | 16 | <i>n.a.</i> | 43 | <i>n.a.</i> | <i>n.a.</i> |
| Millstones, grindstones, etc. | 311 | 460 | <i>n.a.</i> | 247 | <i>n.a.</i> | <i>n.a.</i> |

(a) Including artificial.

(b) Emery only.

IMPORTS OF ABRASIVES (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Colombia— | | | | | | |
| Emery and pumice .. | 75 | 105 | 109 | 67 | 75 | <i>n.a.</i> |
| Tripoli and other natural abrasives .. | 31 | 31 | 21 | 30 | 49 | <i>n.a.</i> |
| Millstones and grindstones (a) .. | 253 | 193 | 114 | 109 | 48 | <i>n.a.</i> |
| Corundum, artificial .. | 255 | 104 | 176 | <i>n.a.</i> | 266 | <i>n.a.</i> |
| Peru— | | | | | | |
| Emery and pumice .. | 53 | 53 | 125 | 86 | 47 | <i>n.a.</i> |
| Millstones, grindstones, etc. (a) .. | 125 | 284 | 159 | 298 | 133 | <i>n.a.</i> |
| Venezuela— | | | | | | |
| Natural abrasives .. | 138 | 164 | 193 | 196 | 336 | 420 |
| Carborundum .. | 9 | 49 | 33 | 75 | 41 | 22 |
| Iran (b)— | | | | | | |
| Emery, etc. .. | 16 | 48 | 53 | 50 | 34 | <i>n.a.</i> |
| Iraq— | | | | | | |
| Emery, pumice, etc. .. | 4 | <i>n.a.</i> | 9 | 4 | 9 | 5 |
| Grindstones, whetstones, etc. .. | 166 | <i>n.a.</i> | 258 | 218 | 248 | 264 |
| Israel— | | | | | | |
| Natural abrasives .. | 112 | 1,651 | 107 | 110 | 126 | 155 |
| Japan— | | | | | | |
| Emery .. | 60 | 38 | 49 | 34 | 31 | 36 |
| Other natural abrasives | 1,445 | 1,337 | 1,796 | 2,849 | 4,127 | 4,932 |
| Grindstones, etc. .. | 12 | 110 | 89 | 123 | 144 | 212 |
| Artificial abrasives .. | 1,283 | 1,224 | 970 | 1,473 | 3,403 | 3,649 |
| Lebanon— | | | | | | |
| Emery .. | 6 | 1 | 3,513 | 13 | 39 | 54 |
| Pumice, etc. .. | 1,007 | 23 | 6,167 | 33 | 31 | 2,312 |
| Millstones .. | 137 | 204 | 213 | 194 | 237 | 266 |
| Philippine Republic— | | | | | | |
| Emery .. | 243 | 247 | <i>n.a.</i> | 388 | <i>n.a.</i> | <i>n.a.</i> |
| Pumice .. | 19 | 16 | <i>n.a.</i> | — | <i>n.a.</i> | <i>n.a.</i> |
| Other natural abrasives | 55 | 79 | <i>n.a.</i> | 113 | <i>n.a.</i> | <i>n.a.</i> |
| Thailand— | | | | | | |
| Natural abrasives .. | 549 | 892 | 854 | 1,149 | 1,077 | 1,239 |
| Turkey— | | | | | | |
| Natural abrasives .. | <i>n.a.</i> | <i>n.a.</i> | 28 | 24 | 24 | 23 |
| Carborundum .. | 17 | 26 | 58 | 61 | 85 | 217 |
| Millstones and grindstones (a) .. | 313 | 534 | 684 | 573 | 589 | 578 |

(a) Including artificial.

(b) Years ended March 20 following that stated.

ALUMINIUM
(Including Bauxite and Cryolite)
PRODUCTION OF BAUXITE

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|----------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Ghana | 246,400 | 304,200 | 346,800 | 345,400 | 287,000 | 241,900 |
| Sierra Leone | 128,418 | 204,000 | 270,826 | 329,259 | 462,891 | 435,333 |
| Rhodesia | 2,438 | 2,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Jamaica (b) | 7,811,188 | 8,514,365 | 8,918,378 | 9,247,258 | 8,391,000 | 10,280,000 |
| Guyana (c) | 2,477,628 | 2,872,588 | 3,304,701 | 3,328,000 | 3,663,000 | 4,238,000 |
| India | 582,862 | 695,000 | 734,000 | 776,538 | 921,503 | 997,000 |
| Malaysia (West) | 463,829 | 843,172 | 940,447 | 885,389 | 786,042 | 1,056,068 |
| Sarawak | 158,090 | 135,163 | — | — | — | — |
| Australia | 783,900 | 1,167,671 | 1,798,261 | 4,176,474 | 4,876,822 | 7,799,197 |
| TOTAL | 12,654,800 | 14,738,000 | 16,320,000 | 20,536,000 | 19,396,000 | 25,049,000 |
| OTHER COUNTRIES | | | | | | |
| Austria | 3,649 | — | — | — | — | — |
| France | 2,394,308 | 2,619,764 | 2,766,164 | 2,768,167 | 2,670,000 | 2,729,000 |
| Germany (Federal) | 4,090 | 3,832 | 3,609 | 2,248 | 3,200 | 3,156 |
| Greece | 1,030,000 | 1,250,429 | 1,359,248 | r 1,633,000 | 1,790,000 | 1,882,000 |
| Hungary | 1,453,958 | 1,454,000 | 1,406,000 | 1,623,000 | 1,928,000 | 1,904,000 |
| Italy | 247,814 | 240,571 | 238,339 | 238,206 | 212,782 | 224,545 |
| Roumania | 7,000 | 12,000 | (d) 15,000 | (a) 15,000 | (a) 20,000 | (a) 20,000 |
| Spain | 6,665 | 4,097 | r 3,915 | r 4,682 | 5,685 | 4,677 |
| U.S.S.R. (e) | 4,300,000 | 4,600,000 | 4,700,000 | 5,000,000 | 5,000,000 | 5,100,000 |
| Yugoslavia | 1,273,000 | 1,549,000 | 1,857,000 | 2,097,000 | 2,039,000 | 2,094,000 |
| Guinea | 1,652,000 | 1,840,000 | 1,583,000 | 1,639,000 | 2,084,000 | (d) 2,500,000 |
| Mozambique | 6,179 | 5,593 | 6,000 | 6,177 | 3,223 | 4,324 |
| Dominican Republic (b) | 800,662 | 878,921 | 805,463 | 1,074,370 | 923,576 | 1,085,441 |
| Haiti (b) | 430,256 | 376,546 | 355,718 | 354,000 | 439,000 | 764,000 |
| United States (b) | 1,601,000 | 1,654,000 | 1,796,000 | 1,654,000 | 1,665,000 | 1,796,000 |
| Brazil | 129,571 | 153,505 | 245,984 | 298,070 | 301,000 | (d) 315,000 |
| Surinam | 3,929,875 | 4,291,000 | 5,475,000 | 5,380,000 | 5,571,000 | 6,138,000 |
| Indonesia | 637,574 | 677,389 | 690,150 | 905,633 | 865,413 | 912,000 |
| Turkey | 4,398 | 10,121 | 31,770 | 21,151 | (d) 20,000 | (d) 20,000 |
| TOTAL (d) | 19,900,000 | 21,600,000 | 23,000,000 | 24,800,000 | 25,500,000 | 27,500,000 |
| WORLD'S TOTAL (d) | 32,600,000 | 36,300,000 | 39,600,000 | 45,300,000 | 44,900,000 | 53,000,000 |

Bauxite is known to have been produced in China.

(a) United States Bureau of Mines' estimate.

(b) Dried bauxite equivalent.

(c) Dried bauxite equivalent. Shipments of dried and calcined ore were as follows (long tons):

| | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------|---------|-----------|-----------|-----------|-----------|-----------|
| Metallurgical | 740,244 | 1,123,848 | 1,306,804 | 1,582,717 | 1,547,460 | 1,834,046 |
| Chemical | 100,321 | 133,781 | 204,098 | 184,005 | 214,609 | 252,793 |
| Refractory | 326,180 | 361,714 | 363,258 | 368,218 | 393,684 | 454,144 |
| Abrasive | 142,432 | 124,239 | 133,921 | 92,174 | 128,936 | 130,415 |

Exports of calcined ore are shown on page 13.

(d) Estimated.

PRODUCTION (EXPORTS) OF CRYOLITE IN GREENLAND

| Year | Long tons | | | | |
|--------------|-----------|----|----|----|--------|
| 1964 | .. | .. | .. | .. | 50,078 |
| 1965 | .. | .. | .. | .. | 58,971 |
| 1966 | .. | .. | .. | .. | 63,037 |
| 1967 | .. | .. | .. | .. | 65,619 |
| 1968 | .. | .. | .. | .. | 66,432 |
| 1969 | .. | .. | .. | .. | 48,521 |

PRODUCTION OF ALUMINIUM

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom .. | 31,711 | 35,635 | 36,548 | r 38,430 | 37,559 | 33,257 |
| Canada | 752,357 | 741,522 | 794,567 | 860,128 | 874,260 | 968,000 |
| India | 55,772 | 58,600 | 82,000 | 94,703 | 118,203 | 130,400 |
| Australia | 78,744 | 86,379 | 90,412 | 91,326 | 95,810 | 124,423 |
| TOTAL | 918,600 | 922,100 | 1,003,000 | 1,095,300 | 1,125,873 | 1,256,000 |
| OTHER COUNTRIES | | | | | | |
| Austria | 64,716 | 76,410 | 76,618 | 77,501 | 84,542 | 88,300 |
| Czechoslovakia (b) .. | 60,000 | 61,000 | 61,000 | 64,000 | 64,000 | (a) 65,000 |
| France | 310,999 | 335,150 | 357,770 | 355,505 | 359,924 | 366,000 |
| Germany— | | | | | | |
| Federal | 216,445 | 234,433 | 240,035 | 248,902 | 253,362 | 258,571 |
| East (a) | 45,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 |
| Greece | — | — | 35,628 | 71,000 | 75,300 | 81,840 |
| Hungary | 55,976 | 57,180 | 59,541 | 60,820 | 62,092 | 62,989 |
| Italy | 113,769 | 122,018 | 125,629 | 125,760 | 140,100 | 142,275 |
| Netherlands | — | — | 20,020 | 31,250 | 48,000 | 68,200 |
| Norway | 256,897 | 274,891 | 318,580 | 355,282 | 460,903 | 499,921 |
| Poland | 47,000 | 46,600 | 54,300 | 91,000 | 92,000 | 95,300 |
| Roumania | — | 22,435 | 46,111 | 49,210 | 75,069 | 88,234 |
| Spain | 48,860 | 51,086 | 62,673 | r 76,947 | 87,911 | 116,825 |
| Sweden | 31,600 | 29,100 | 28,000 | 33,000 | 54,700 | 65,010 |
| Switzerland | 63,220 | 66,089 | 67,640 | 71,178 | 75,641 | 75,843 |
| U.S.S.R. (b) | 800,000 | 830,000 | 875,000 | 950,000 | 982,000 | (a)1,000,000 |
| Yugoslavia | 34,756 | 38,160 | 41,358 | 43,870 | 47,320 | 47,606 |
| Cameroun | 51,033 | 50,000 | 47,400 | 47,540 | 44,682 | 45,999 |
| Mexico | 17,399 | 18,787 | 20,572 | 21,173 | 22,164 | 31,872 |
| United States | 2,279,238 | 2,459,355 | 2,650,327 | 2,918,981 | 2,906,287 | 3,387,000 |
| Brazil | 26,219 | 29,927 | 26,461 | 29,232 | 40,800 | 50,400 |
| China (b) | 100,000 | 100,000 | 100,000 | 80,000 | 90,000 | 120,000 |
| Formosa | 19,066 | 18,613 | 16,945 | 15,196 | 19,704 | 21,800 |
| Japan (c) | 261,563 | 289,261 | 331,945 | 376,109 | 474,294 | 556,073 |
| TOTAL | 4,900,000 | 5,300,000 | 5,700,000 | 6,200,000 | 6,600,000 | 7,400,000 |
| WORLD'S TOTAL | 5,800,000 | 6,200,000 | 6,700,000 | 7,300,000 | 7,700,000 | 8,600,000 |

In addition secondary metal produced in certain countries was as follows (long tons):

| | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|----------------------|---------|---------|---------|---------|---------|---------|
| United Kingdom .. | 183,113 | 185,801 | 195,135 | 188,207 | 197,190 | 206,600 |
| France | 50,000 | 44,000 | 59,000 | 59,000 | 74,000 | 89,000 |
| Germany (Federal) .. | 185,583 | 199,716 | 193,632 | 182,579 | 228,240 | 267,057 |
| Italy | 57,000 | 60,000 | 84,000 | 100,000 | 100,000 | 126,000 |
| United States | 492,581 | 572,070 | 618,778 | 622,992 | 729,382 | 850,800 |
| Japan | 102,800 | 116,000 | 137,200 | 175,300 | 216,900 | 273,000 |

(a) Estimated.

(b) United States Bureau of Mines' estimate.

(c) Including high-purity aluminium.

EXPORTS OF ALUMINIUM, ETC.*

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-----------|------------|-------------|---------------|---------------|---------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Alumina and hydrate .. | 17,138 | 20,915 | 13,660 | 21,847 | 16,853 | 9,992 |
| Unwrought (a) .. | 6,738 | 23,931 | 26,017 | 21,873 | 20,980 | 21,384 |
| Scrap (a) .. | 1,561 | 6,790 | 7,489 | 2,004 | 1,591 | 1,294 |
| Semi-manufactures (a) | 47,081 | 44,764 | 47,402 | 37,760 | 39,397 | 40,190 |
| of which—Foil .. | 7,273 | 7,153 | 7,212 | 6,721 | 8,872 | 8,588 |
| Powder .. | 427 | 600 | 840 | 969 | 1,162 | 852 |
| Aluminium sulphates .. | 36,651 | 38,317 | 19,167 | 13,664 | 17,822 | 19,873 |
| Ghana— | | | | | | |
| Bauxite .. | 264,458 | 282,887 | 306,098 | 295,693 | 237,193 | 241,501 |
| Sierra Leone— | | | | | | |
| Bauxite .. | 126,553 | 173,472 | 240,488 | 329,259 | 462,891 | 435,333 |
| Canada— | | | | | | |
| Alumina (e) .. | 4,501 | 6,937 | 11,656 | 11,277 | 13,414 | 18,131 |
| Unwrought (a) .. | 560,707 | 631,707 | 639,627 | 679,151 | 770,210 | 791,685 |
| Scrap .. | 29,292 | (a) 34,746 | (a) 40,867 | (a) 47,579 | (a) 46,487 | (a) 46,355 |
| Semi-manufactures (a) | 16,458 | 23,590 | 30,732 | 27,385 | 26,612 | 17,111 |
| of which—Foil .. | 338 | 389 | 262 | 206 | 248 | 196 |
| Jamaica— | | | | | | |
| Bauxite (b) .. | 5,967,210 | 6,784,459 | 7,019,615 | 7,142,416 | 6,212,053 | 7,601,416 |
| Alumina .. | 768,085 | 720,599 | 790,690 | 824,533 | 907,818 | 1,137,062 |
| Guyana— | | | | | | |
| Bauxite, dried .. | 585,452 | 1,263,490 | 1,530,893 | 1,823,734 | 1,777,747 | 1,733,648 |
| do. calcined .. | 733,854 | 494,374 | 492,496 | 458,808 | 587,217 | 650,561 |
| Alumina .. | 245,195 | 275,211 | 296,953 | 268,908 | 244,231 | 296,115 |
| Hong Kong— | | | | | | |
| Scrap .. | 992 | 1,456 | 1,533 | 1,852 | 1,978 | 2,627 |
| Semi-manufactures (a) | 2,803 | 2,292 | 3,523 | 3,287 | 4,625 | 4,763 |
| India— | | | | | | |
| Bauxite .. | 92,932 | 61,840 | 76,705 | 59,912 | 97,354 | 66,656 |
| Unwrought (a) (c) .. | 534 | 2 | 396 | 749 | 18,554 | 8,040 |
| Semi-manufactures (a) (c) | 290 | 1,112 | 1,075 | 1,173 | 4,059 | 9,570 |
| Aluminium sulphate (c) | 11,815 | 7,336 | 157 | 904 | 6,611 | 10,890 |
| Malaysia (West)— | | | | | | |
| Bauxite .. | 547,945 | 670,894 | 1,007,158 | 852,299 | 776,980 | 863,003 |
| Sarawak— | | | | | | |
| Bauxite .. | 165,903 | 164,609 | — | — | — | n.a. |
| Singapore— | | | | | | |
| Semi-manufactures (a) | 725 | 762 | 889 | 574 | 866 | 764 |
| of which—Foil .. | 159 | 113 | 191 | 171 | 146 | 68 |
| Aluminium sulphates .. | 3,014 | 4,504 | 6,956 | 8,211 | 10,029 | 7,334 |
| Australia— | | | | | | |
| Bauxite .. | 405,825 | 610,574 | (d) 859,000 | (d) 1,118,000 | (d) 1,540,000 | (d) 2,400,000 |
| Unwrought (a) .. | 15,128 | 21,207 | 16,210 | 10,501 | 5,577 | 19,453 |
| Scrap (a) .. | 405 | 1,073 | 1,454 | 1,126 | 2,036 | 3,683 |
| Semi-manufactures (a) | 563 | 2,152 | 6,470 | 4,835 | 4,753 | 1,782 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Bauxite .. | 2,350 | — | — | — | — | — |
| Unwrought (a) .. | 33,327 | 31,466 | 36,498 | 23,220 | 24,413 | 26,703 |
| Scrap .. | 4,210 | 4,369 | 5,365 | 5,806 | 9,039 | 8,108 |
| Semi-manufactures (a) | 21,725 | 21,346 | 26,166 | 28,655 | 31,233 | 39,648 |
| of which—Foil .. | 2,958 | 3,796 | 3,545 | 4,828 | 4,551 | 5,633 |
| Powder .. | 1,126 | 913 | 2,422 | 3,800 | 4,312 | 4,349 |

* In these tables the description "unwrought" aluminium corresponds to item 684.1 of the Standard International Trade Classification (revised) and comprises ingots, blocks, unwrought bars, etc. "Semi-manufactures" corresponds to S.I.T.C. (revised) 684.2 and includes foil and powder as well as wrought bars, rods, wire, sheets, tubes, pipes, etc.

(a) Including alloys. (c) Years ended March 31 following that stated.

(b) Estimated dry equivalent; shipments contain 8-14% free moisture. (d) Estimated.

(e) Officially described as "Aluminium ores and concentrates" but believed to consist wholly or largely of alumina.

EXPORTS OF ALUMINIUM, ETC. (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Bauxite | 14 | 315 | — | — | 20 | 180 |
| Cryolite | 141 | 140 | 489 | 1 | — | — |
| Alumina and hydrate .. | 3 | 8 | 13 | 131 | 25 | 16 |
| Unwrought | 334 | 1,201 | 1,633 | 5,160 | 6,225 | 9,482 |
| do. alloys | 723 | 1,120 | 1,493 | 1,551 | 807 | 861 |
| Scrap | 6,501 | 8,362 | 8,284 | 9,741 | 11,283 | 13,395 |
| Semi-manufactures (a) | 83,025 | 97,230 | 121,559 | 101,427 | 112,668 | 129,790 |
| Aluminium sulphates .. | 14,511 | 15,030 | 15,015 | 13,947 | n.a. | n.a. |
| Denmark— | | | | | | |
| Refined cryolite | 23,988 | 25,732 | 26,381 | 27,844 | 28,345 | 44,683 |
| Unwrought | 1 | — | 146 | 18 | 25 | — |
| do. alloys | 1,880 | 3,019 | 2,513 | 1,808 | 2,333 | 2,342 |
| Scrap | 329 | 443 | 1,040 | 1,174 | 808 | 700 |
| Semi-manufactures (a) | 683 | 895 | 1,151 | 1,473 | 2,637 | 3,644 |
| of which—Foil | 192 | 223 | 218 | 350 | 495 | 1,149 |
| Finland— | | | | | | |
| Unwrought | 788 | 293 | 806 | 830 | 1,266 | 597 |
| Semi-manufactures .. | 1,182 | 1,093 | 1,256 | 1,646 | 2,695 | 3,644 |
| of which—Foil | 1,037 | 988 | 1,158 | 1,516 | 2,367 | 2,922 |
| France— | | | | | | |
| Bauxite | 196,481 | 198,596 | 275,748 | 155,757 | 154,836 | 145,696 |
| Cryolite | 39 | 547 | 11 | 102 | 1,573 | 1,489 |
| Alumina | 139,557 | 105,030 | 141,902 | 181,314 | 204,079 | 249,511 |
| do. hydrate | 14,555 | 24,616 | 13,691 | 19,758 | 26,287 | 32,493 |
| Unwrought | 85,409 | 122,687 | 110,682 | 102,170 | 120,319 | 112,576 |
| do. alloys | 37,778 | 57,127 | 57,661 | 35,896 | 63,588 | 64,392 |
| Scrap (a) | 11,246 | 6,181 | 11,657 | 13,144 | 12,123 | 12,105 |
| Semi-manufactures (a) | 51,624 | 45,103 | 57,208 | 66,313 | 68,657 | 84,601 |
| of which—Foil | 7,876 | 8,382 | 8,453 | 9,588 | 10,187 | 12,265 |
| Powder | 256 | 423 | 810 | 663 | 1,112 | 2,611 |
| Aluminium sulphates .. | 10,956 | 11,690 | 9,903 | 11,911 | 5,522 | 6,537 |
| Germany (Federal)— | | | | | | |
| Bauxite and cryolite .. | 833 | 1,323 | 4,367 | 2,486 | 2,152 | 2,295 |
| Alumina | 74,200 | 77,448 | 90,674 | 111,992 | 85,195 | 106,722 |
| do. hydrate | 34,869 | 37,575 | 37,777 | 42,194 | 47,554 | 58,269 |
| Unwrought | 4,487 | 4,808 | 10,695 | 8,890 | 8,441 | 11,365 |
| do. alloys | 5,194 | 5,197 | 10,454 | 12,568 | 14,333 | 23,882 |
| Scrap (a) | 1,126 | 842 | 6,750 | 10,494 | 7,663 | 6,651 |
| Semi-manufactures (a) .. | 56,656 | 58,700 | 79,022 | 94,683 | 116,242 | 147,866 |
| of which—Foil | 22,503 | 26,392 | 31,143 | 32,372 | 37,293 | 44,758 |
| Powder | 1,686 | 2,135 | 2,376 | 3,117 | 3,554 | 3,337 |
| Greece— | | | | | | |
| Bauxite | 1,046,324 | 1,131,921 | 1,150,820 | 1,113,827 | 1,171,464 | 1,288,466 |
| Unwrought | n.a. | n.a. | 27,144 | 58,971 | 62,695 | 66,601 |
| Semi-manufactures .. | 994 | 426 | 1,344 | 2,160 | 1,606 | 5,240 |
| Alumina | n.a. | n.a. | n.a. | 33,223 | 71,125 | 116,650 |
| Hungary— | | | | | | |
| Bauxite | 749,069 | 555,000 | 611,000 | 657,450 | 654,847 | 645,748 |
| Alumina | 154,149 | 191,000 | 172,000 | 241,131 | 355,457 | 377,413 |
| Unwrought | 11,998 | 19,278 | 16,087 | 19,172 | 46,778 | 40,402 |
| Semi-manufactures .. | 4,839 | 5,696 | 6,834 | 7,817 | 4,637 | 4,509 |
| Italy— | | | | | | |
| Bauxite | 3,145 | 516 | 1,589 | 315 | — | 25 |
| Alumina | 5,305 | 8,456 | 6,994 | 8,556 | 9,224 | 6,750 |
| do. hydrate | 2,993 | 2,966 | 2,515 | 1,883 | 2,212 | 1,770 |
| Unwrought | 18,875 | 31,536 | 20,317 | 4,864 | 24,977 | 4,883 |
| do. alloys | | | | | | |
| Semi-manufactures (a) | 17,209 | 22,644 | 26,640 | 29,471 | 43,202 | 49,150 |
| of which—Foil | 1,207 | 1,736 | 3,294 | 4,018 | 5,535 | 6,295 |
| Aluminium sulphates .. | 126 | 2,506 | 3,654 | n.a. | n.a. | 35 |

(a) Including alloys.

EXPORTS OF ALUMINIUM, ETC. (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-------------|-------------|-------------------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Netherlands— | | | | | | |
| Bauxite | 147 | 2 | 375 | 70 | 380 | 971 |
| Unwrought (a) .. . | 741 | 1,003 | 15,901 | 25,193 | 43,031 | 63,055 |
| Scrap (a) | 8,843 | 9,318 | 11,549 | 10,055 | 11,645 | 16,543 |
| Semi-manufactures (a) | 13,499 | 15,605 | 17,188 | 18,760 | 26,551 | 36,775 |
| <i>of which—Foil..</i> .. . | 3,695 | 3,592 | 4,242 | 5,030 | 5,957 | 7,608 |
| <i>Powder</i> | 2 | 1 | 26 | 5 | 2 | 18 |
| Aluminium sulphates .. | 10 | 192 | 18 | 4 | 15,433 | 20,544 |
| Norway— | | | | | | |
| Alumina | — | 4 | — | 1 | 1 | — |
| Unwrought | 248,852 | 227,262 | 316,031 | 292,854 | 390,562 | 421,650 |
| do. alloys | 11,768 | 11,303 | 26,480 | 17,091 | 37,762 | 51,097 |
| Scrap | 251 | 618 | 1,821 | 3,728 | 5,500 | 6,638 |
| Semi-manufactures (a) | 4,595 | 4,995 | 7,574 | 7,645 | 12,134 | 25,309 |
| <i>of which—Foil..</i> .. . | 189 | 263 | 236 | 287 | 210 | 348 |
| <i>Powder</i> | 95 | 82 | 84 | 35 | 32 | 3 |
| Spain— | | | | | | |
| Unwrought | 8,105 | — | — | 10,673 | 5,516 | 620 |
| Semi-manufactures (a) | 2,603 | 1,989 | 3,161 | 4,555 | 6,952 | 8,805 |
| Sweden— | | | | | | |
| Unwrought (a) | 2,114 | 1,764 | 587 | 3,826 | 15,849 | 11,022 |
| Scrap | 887 | 598 | 719 | 1,428 | 948 | 543 |
| Semi-manufactures (a) | 11,380 | 8,212 | 13,769 | 18,336 | 18,154 | 25,954 |
| <i>of which—Powder</i> .. . | 365 | 421 | 447 | 504 | 584 | 793 |
| Aluminium sulphates .. | 8,374 | 6,814 | 4,530 | 3,575 | 8,030 | 14,461 |
| Switzerland— | | | | | | |
| Alumina and hydrate | 118 | 110 | 102 | 65 | 87 | 124 |
| Unwrought and scrap .. | 18,864 | 19,111 | 13,176 | 19,516 | 23,829 | 17,988 |
| do. alloys | | | | | | |
| Semi-manufactures (a) | 19,909 | 22,528 | 7,138 | 25,958 | 26,580 | 28,324 |
| U.S.S.R.— | | | | | | |
| Cryolite | 3,400 | 3,200 | 3,800 | 3,800 | 5,300 | 5,300 |
| Unwrought | 172,400 | 225,400 | 251,700 | 249,103 | 283,058 | 315,000 |
| Semi-manufactures .. . | 33,561 | 41,400 | 53,900 | 59,400 | 78,244 | 101,200 |
| Yugoslavia— | | | | | | |
| Bauxite | 1,062,639 | 932,672 | 1,455,887 | 1,784,128 | 1,817,636 | 1,951,275 |
| Alumina and hydrate .. . | 13,700 | 11,419 | 12,831 | 11,405 | 20,536 | 23,294 |
| Unwrought | 1,141 | 1,169 | 1,646 | 6,225 | 18,378 | 23,024 |
| Scrap | 1,637 | 2,384 | 145 | 153 | 4,102 | 4,969 |
| Semi-manufactures .. . | 18,201 | 21,321 | 17,841 | 18,053 | 21,948 | 13,221 |
| Cameroun— | | | | | | |
| Unwrought | 47,956 | 45,377 | 45,384 | 46,170 | <i>n.a.</i> | <i>n.a.</i> |
| Guinea— | | | | | | |
| Bauxite | 164,017 | 240,188 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Alumina | <i>n.a.</i> | <i>n.a.</i> | 512,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Morocco— | | | | | | |
| Scrap (a) | 261 | 440 | 565 | 429 | 481 | 640 |
| Mozambique— | | | | | | |
| Bauxite | 7,249 | 5,880 | 5,535 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| South Africa— | | | | | | |
| Semi-manufactures | 936 | 1,362 | 1,513 | 1,375 | 1,699 | 2,094 |
| Tunisia— | | | | | | |
| Unwrought and scrap | 187 | 224 | 181 | 139 | 135 | 261 |
| Dominican Republic— | | | | | | |
| Bauxite | 909,028 | 1,121,380 | 985,465 | ^{c)} 1,000,644 | 1,187,789 | <i>n.a.</i> |
| Greenland— | | | | | | |
| Cryolite | 50,078 | 58,971 | 63,037 | 65,619 | 66,432 | 48,521 |
| Haiti— | | | | | | |
| Bauxite (b) (c) | 458,287 | 382,000 | 328,000 | 362,000 | 461,506 | 685,200 |

(a) Including alloys. (b) Including shipments from stockpile built up during development period.

(c) United States imports.

EXPORTS OF ALUMINIUM, ETC. (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-----------|-----------|-----------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| United States | | | | | | |
| Alumina, etc. | 293,542 | 288,540 | 296,127 | 499,090 | 790,181 | 892,420 |
| Cryolite (b) | 3,022 | 3,895 | 2,481 | 1,096 | 671 | 709 |
| Unwrought (a) | 186,702 | 147,849 | 168,071 | 186,615 | 160,964 | 307,511 |
| Scrap (a) | 61,263 | 34,417 | 43,451 | 48,689 | 44,131 | 77,014 |
| Semi-manufactures | 66,415 | 102,041 | 87,374 | 100,910 | 119,145 | 120,956 |
| <i>of which—Foil</i> | 1,487 | 2,762 | 2,761 | 3,225 | 3,633 | 4,732 |
| <i>Powder (Al content)</i> | 495 | 562 | 810 | 1,009 | 1,149 | 1,160 |
| Aluminium sulphates | 14,742 | 13,965 | 19,696 | 14,440 | 16,296 | 10,959 |
| Argentina— | | | | | | |
| Unwrought | 1,295 | 134 | 8 | 10 | — | — |
| Aluminium sulphates | 50 | 34 | 39 | 25 | 47 | 59 |
| Brazil— | | | | | | |
| Bauxite | 3,494 | 2,166 | 2,235 | 2,195 | 3,193 | <i>n.a.</i> |
| Surinam— | | | | | | |
| Bauxite | 3,921,312 | 4,299,917 | 4,512,113 | 3,804,839 | 3,726,000 | 3,619,000 |
| Alumina | — | 58,419 | 343,344 | 673,727 | 692,000 | 847,000 |
| Unwrought | — | 1,233 | 25,295 | 30,606 | 42,900 | 52,900 |
| Formosa— | | | | | | |
| Unwrought (a) | 7,093 | 5,645 | 3,747 | r 955 | 3,490 | 194 |
| Semi-manufactures (a) | 3,225 | 2,691 | 2,819 | 3,288 | 1,315 | 5,710 |
| Aluminium sulphates | <i>n.a.</i> | 522 | 240 | 424 | <i>n.a.</i> | 365 |
| Indonesia— | | | | | | |
| Bauxite | 645,246 | 567,592 | 677,134 | 887,754 | 834,312 | <i>n.a.</i> |
| Israel— | | | | | | |
| Scrap | 855 | 801 | 889 | 836 | 875 | 1,337 |
| Japan— | | | | | | |
| Bauxite | 591 | 787 | 796 | 514 | 325 | 142 |
| Cryolite | — | 1 | — | — | — | 48 |
| Alumina | 102,100 | 92,427 | 106,623 | 73,317 | 12,196 | 90,209 |
| do. hydrate | 6,155 | 8,101 | 11,031 | 12,840 | 14,602 | 20,525 |
| Unwrought | 18,870 | 28,654 | 18,392 | 1,249 | 250 | 1,114 |
| do. alloys | 291 | 50 | 577 | 658 | 1,010 | 1,806 |
| Semi-manufactures (a) | 16,916 | 24,833 | 30,633 | 19,243 | 35,283 | 40,597 |
| <i>of which—Foil</i> | 2,809 | 3,296 | 4,212 | 4,959 | 5,518 | 6,837 |
| Aluminium sulphates | 14,582 | 12,228 | 14,587 | 13,048 | 9,878 | 10,465 |

(a) Including alloys.

(b) Including artificial.

IMPORTS OF ALUMINIUM, ETC.*

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|---------------|-----------|-----------|-----------|-----------|------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Bauxite, uncalcined .. | } (b) 373,550 | { 437,941 | 454,068 | 436,604 | 405,722 | 443,117 |
| do. calcined .. | | | | | | |
| Cryolite .. | 3,398 | 2,476 | 2,439 | 1,533 | 2,300 | 1,452 |
| Alumina and Hydrate | 8,603 | 9,591 | 6,856 | 5,910 | 5,777 | 8,529 |
| Unwrought .. | 255,164 | 236,815 | 259,029 | 223,971 | 260,063 | 240,246 |
| do. alloys .. | 70,203 | 79,748 | 81,436 | 77,779 | 94,230 | 108,451 |
| Scrap (a) .. | 12,010 | 23,479 | 15,981 | 13,905 | 12,783 | 13,009 |
| Semi-manufactures (a) | 26,166 | 23,893 | 28,261 | 30,284 | 37,870 | 46,185 |
| of which—Foil .. | 3,177 | 2,682 | 3,423 | 2,210 | 3,659 | 5,977 |
| Malta— | | | | | | |
| Semi-manufactures .. | (£114,924) | (£60,373) | (£38,835) | (£52,911) | (£86,185) | (£108,747) |
| Ghana— | | | | | | |
| Alumina .. | — | — | 18,320 | 114,673 | 680,819 | 206,468 |
| Unwrought (a) .. | 78 | 283 | 207 | 387 | 233 | 166 |
| Semi-manufactures (a) | 1,122 | 5,909 | 7,068 | 2,020 | 1,836 | 1,987 |
| Kenya— | | | | | | |
| Unwrought (a) .. | 761 | 22 | n.a. | 3 | 2 | 4 |
| Semi-manufactures (a) | 630 | 728 | 653 | 693 | 1,273 | 1,139 |
| of which—Foil .. | 176 | 184 | 179 | 209 | 174 | 314 |
| Malawi— | | | | | | |
| Semi-manufactures .. | — | 372 | 511 | 494 | 226 | 465 |
| Mauritius— | | | | | | |
| Semi-manufactures (a) | 345 | 324 | 277 | 272 | 166 | 116 |
| Nigeria— | | | | | | |
| Unwrought and semi-manufactures (a) .. | 6,325 | 2,402 | 1,232 | 1,950 | 2,927 | 4,617 |
| Rhodesia— | | | | | | |
| Semi-manufactures (a) | 806 | 1,106 | n.a. | n.a. | n.a. | n.a. |
| of which—Foil .. | 115 | 129 | n.a. | n.a. | n.a. | n.a. |
| Sierra Leone— | | | | | | |
| Semi-manufactures (a) | 29 | 62 | 168 | 165 | 294 | n.a. |
| Tanzania— | | | | | | |
| Unwrought .. | 2,217 | 1,272 | 3,349 | 673 | 2,024 | 2,730 |
| Semi-manufactures (a) | 932 | 757 | 341 | 215 | 161 | 281 |
| Uganda— | | | | | | |
| Semi-manufactures (a) | 162 | 433 | 463 | 400 | 733 | 1,602 |
| of which—Foil .. | 113 | 97 | 112 | 83 | 147 | 218 |
| Zambia— | | | | | | |
| Semi-manufactures (a) | 184 | 346 | 340 | 368 | 509 | 508 |
| Barbados— | | | | | | |
| Semi-manufactures (a) | 63 | 98 | 120 | 116 | 109 | 115 |
| Jamaica— | | | | | | |
| Semi-manufactures (a) | 1,925 | 2,049 | 2,656 | 4,403 | 3,239 | 3,373 |
| Canada— | | | | | | |
| Bauxite .. | 1,563,668 | 1,827,745 | 2,254,078 | 2,286,887 | 2,241,430 | 2,224,247 |
| Alumina .. | 777,655 | 714,265 | 721,285 | 679,228 | 759,367 | 949,127 |
| Cryolite .. | 2,163 | 2,161 | 3,260 | 2,751 | 4,052 | 3,419 |
| Unwrought .. | 3,568 | 6,200 | 15,110 | 7,300 | 13,431 | 10,296 |
| Scrap (a) .. | 17,957 | 29,658 | 20,899 | 8,522 | 14,539 | 13,910 |
| Semi-manufactures (a) | | | | | | |
| (excluding Foil) .. | 34,410 | 41,248 | 53,076 | 71,796 | 78,877 | 83,245 |
| of which—Powder .. | 250 | 807 | 797 | 524 | 545 | 841 |
| Foil .. | 576 | 509 | 406 | 916 | 553 | 471 |
| Aluminium sulphates .. | 2,484 | 1,755 | 2,104 | 1,608 | 1,658 | 1,801 |

*See footnote on p.13 concerning the descriptions "unwrought" aluminium and "semi-manufactures" used in these tables.

(a) Including alloys.

(b) Owing to reclassification figures may not be strictly comparable with those for 1965 onwards.

IMPORTS OF ALUMINIUM, ETC. (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-----------|-----------|--------|--------|--------|--------|
| COMMONWEALTH COUNTRIES—(cont.) | | | | | | |
| Trinidad and Tobago— | | | | | | |
| Semi-manufactures (a) | 1,602 | 447 | 638 | 766 | 398 | 938 |
| Aluminium sulphates .. | 876 | 1,394 | 1,128 | 1,165 | 1,647 | 1,540 |
| Guyana— | | | | | | |
| Semi-manufactures (a) | 405 | 128 | 140 | 465 | 524 | 386 |
| Aluminium sulphates .. | — | 499 | 347 | 536 | 243 | 485 |
| Ceylon— | | | | | | |
| Semi-manufactures (a) | 3,801 | 2,859 | 2,409 | 2,034 | 2,305 | n.a. |
| of which—Foil.. .. | 114 | 68 | 65 | 362 | 405 | n.a. |
| Cyprus— | | | | | | |
| Semi-manufactures (a) | 248 | 284 | 400 | 417 | 781 | 782 |
| Hong Kong— | | | | | | |
| Bauxite | 633 | 437 | 63 | 500 | 348 | 85 |
| Unwrought (a) | 10,337 | 4,725 | 7,088 | 9,761 | 13,267 | 11,397 |
| Scrap | 20 | 41 | 81 | 120 | 57 | 521 |
| Semi-manufactures (a) | 3,820 | 3,946 | 3,669 | 2,466 | 4,740 | 6,548 |
| of which—Foil.. .. | 737 | 910 | 683 | 751 | 795 | 937 |
| Aluminium sulphate .. | 1,480 | 2,282 | 1,065 | 888 | 2,216 | 2,322 |
| India (b)— | | | | | | |
| Cryolite | 2,414 | 3,051 | 1,152 | 1,068 | 384 | 1,014 |
| Alumina | 2,062 | 800 | 15,798 | 19,064 | 5,720 | 14,782 |
| Unwrought | 3,473 | 1,494 | 9,593 | 24,977 | 7,825 | 1,790 |
| do. alloys | 9 | 100 | 52 | 98 | 18 | 1,829 |
| Scrap | 10 | 44 | — | — | — | — |
| Semi-manufactures (a) | 19,094 | 12,711 | 22,697 | 13,123 | 1,812 | 650 |
| of which—Foil.. .. | 185 | 189 | 90 | 144 | 99 | 42 |
| Powder | 144 | 178 | 156 | 202 | 64 | 19 |
| Aluminium sulphate .. | 17 | 120 | — | 10 | — | — |
| Malaysia (West)— | | | | | | |
| Unwrought (a) | n.a. | 550 | 1,566 | 1,522 | 1,593 | 1,488 |
| Semi-manufactures (a) | n.a. | 3,253 | 2,953 | 2,927 | 2,808 | 3,127 |
| of which—Foil.. .. | n.a. | 736 | 804 | 813 | 816 | 1,172 |
| Pakistan— | | | | | | |
| Unwrought (a) | 22,363 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Semi-manufactures (a) | 3,738 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Aluminium sulphates .. | 36 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Sabah— | | | | | | |
| Semi-manufactures (a) | 148 | 173 | 130 | 104 | 35 | 125 |
| Sarawak— | | | | | | |
| Semi-manufactures (a) | 283 | 325 | 340 | 179 | 352 | n.a. |
| Aluminium sulphates .. | 329 | 484 | 340 | 374 | 479 | n.a. |
| Singapore— | | | | | | |
| Bauxite | 4 | 101 | 61,080 | 295 | 688 | 572 |
| Alumina and hydrate .. | 423 | 1,644 | 3,293 | 3,722 | 5,109 | 7,120 |
| Semi-manufactures (a) | 2,747 | 2,997 | 3,108 | 2,730 | 4,294 | 6,166 |
| of which—Foil.. .. | 236 | 294 | 370 | 455 | 482 | 578 |
| Aluminium sulphate .. | 2,190 | 1,761 | 252 | 139 | 503 | 1,413 |
| Australia— | | | | | | |
| Bauxite | 577 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Cryolite | (d) 3,282 | (d) 2,387 | 187 | 237 | 201 | 59 |
| Alumina and hydrate (c) | 65,427 | 64,927 | 51,074 | 59,045 | 10,204 | 3,745 |
| Unwrought (a) | 565 | 357 | 449 | 361 | 11,975 | 1,062 |
| Scrap (a) | 872 | 797 | 937 | 1,468 | 856 | 754 |
| Semi-manufactures (a) | 2,788 | 3,856 | 2,460 | 2,177 | 2,942 | 4,096 |
| of which—Foil.. .. | 1,063 | 1,433 | 702 | 516 | 1,285 | 1,377 |
| Powder | 297 | 440 | 257 | 365 | 418 | 158 |
| New Zealand (c)— | | | | | | |
| Unwrought | 5,633 | 8,937 | 7,872 | 9,910 | 6,790 | 9,670 |
| Semi-manufactures (a) | 2,732 | 2,537 | 2,924 | 5,621 | 4,321 | 5,302 |
| of which—Foil.. .. | 758 | 684 | 829 | 875 | 814 | n.a. |

(a) Including alloys.

(b) Years ended March 31 following that stated.

(c) Years ended June 30 of that stated.

(d) Including artificial.

IMPORTS OF ALUMINIUM, ETC. (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Irish Republic— | | | | | | |
| Unwrought (a) | 8,813 | 7,707 | 10,189 | 8,228 | 8,295 | 8,203 |
| Semi-manufactures (a) .. | 3,894 | 3,984 | 4,851 | 4,706 | 5,666 | 6,195 |
| of which—Foil | 677 | 796 | 841 | 694 | 786 | 898 |
| Aluminium sulphates | 2,011 | 3,539 | 3,288 | 845 | 394 | 513 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Bauxite | 16,590 | 22,534 | 24,191 | 30,459 | 24,656 | 25,648 |
| Cryolite | 434 | 410 | 415 | 351 | 255 | 410 |
| Alumina | 139,606 | 163,750 | 151,498 | 163,102 | 164,342 | 185,121 |
| do. hydrate | 5,603 | 5,954 | 6,008 | 5,402 | 6,092 | 6,206 |
| Unwrought (a) | 2,011 | 1,381 | 2,463 | 5,256 | 7,592 | 7,300 |
| Semi-manufactures (a) .. | 4,378 | 6,913 | 7,683 | 7,148 | 6,701 | 9,211 |
| Aluminium sulphates | 1,793 | 1,734 | 2,141 | 2,379 | 2,408 | 2,454 |
| Belgium-Luxemburg— | | | | | | |
| Bauxite | 5,071 | 7,129 | 9,546 | 7,975 | 11,154 | 17,104 |
| Cryolite | 141 | 140 | 136 | 254 | 281 | 323 |
| Alumina | 1,010 | 918 | 1,342 | 1,945 | 2,061 | 2,318 |
| do. hydrate | 11,022 | 10,023 | 11,738 | 11,841 | 9,908 | 10,443 |
| Unwrought | 81,764 | 79,287 | 106,061 | 105,645 | 111,432 | 121,559 |
| do. alloys | 29,091 | 35,884 | 44,080 | 32,127 | 45,474 | 52,106 |
| Scrap | 2,636 | 3,707 | 1,765 | 1,701 | 2,086 | 4,702 |
| Semi-manufactures (a) .. | 18,047 | 18,373 | 24,861 | 22,401 | 22,728 | 28,433 |
| of which—Foil | 3,941 | 3,813 | 3,473 | 3,508 | 3,982 | 5,525 |
| Powder | 192 | 415 | 533 | 718 | 341 | 306 |
| Aluminium sulphates | 133 | 131 | 229 | 233 | 7,927 | 10,789 |
| Denmark— | | | | | | |
| Bauxite | 400 | 2,770 | 1,363 | 1,997 | 935 | 966 |
| Crude cryolite | 37,732 | 38,169 | 46,123 | 48,456 | 54,402 | 48,521 |
| Unwrought | 6,364 | 6,534 | 5,089 | 5,716 | 7,512 | 6,896 |
| do. alloys | 758 | 2,634 | 1,354 | 3,214 | 2,331 | 6,781 |
| Scrap | 921 | 1,253 | 1,075 | 605 | 3,086 | 1,547 |
| Semi-manufactures (a) .. | 14,735 | 13,985 | 14,467 | 16,787 | 18,721 | 23,443 |
| of which—Foil | 2,616 | 3,457 | 3,577 | 4,116 | 4,276 | 5,055 |
| Powder | 152 | 170 | 146 | 172 | 159 | 218 |
| Aluminium sulphates | 4,813 | 5,753 | 5,611 | 4,659 | 6,038 | 8,249 |
| Finland— | | | | | | |
| Alumina | 89 | 56 | 54 | 74 | 66 | 70 |
| do. hydrate | 11,368 | 13,499 | 13,470 | 16,388 | 12,029 | 16,176 |
| Unwrought (a) | 6,238 | 8,113 | 11,788 | 14,232 | 12,068 | 14,977 |
| Semi-manufactures (a) .. | 13,141 | 12,189 | 13,702 | 13,564 | 15,787 | 17,151 |
| of which—Foil | 848 | 1,310 | 1,489 | 1,405 | 1,476 | 1,282 |
| Powder | 422 | 273 | 171 | 126 | 174 | 183 |
| Aluminium sulphates | 9,912 | 9,809 | 7,507 | 6,431 | 3,383 | 1,981 |
| France— | | | | | | |
| Bauxite | 143,542 | 114,669 | 151,131 | 222,803 | 329,558 | 472,319 |
| Cryolite | 1,703 | 1,358 | 1,953 | 1,408 | 1,604 | 2,122 |
| Alumina | 65,979 | 19,332 | 20,072 | 2,902 | 30,826 | 4,895 |
| do. hydrate | 30 | 57 | 133 | 312 | 383 | 525 |
| Unwrought | 65,746 | 64,514 | 80,024 | 91,263 | 87,867 | 119,807 |
| do. alloys | 5,548 | 6,048 | 5,868 | 5,951 | 8,446 | 20,221 |
| Scrap (a) | 2,643 | 1,071 | 5,397 | 5,455 | 5,228 | 13,887 |
| Semi-manufactures (a) .. | 15,997 | 20,550 | 29,943 | 37,608 | 58,279 | 85,150 |
| of which—Foil | 6,493 | 7,187 | 8,805 | 10,408 | 13,753 | 17,274 |
| Powder | 854 | 605 | 855 | 1,675 | 2,382 | 2,323 |
| Aluminium sulphates | 40 | 2 | 1,030 | 1,360 | 2,220 | 7,587 |
| Germany (Federal)— | | | | | | |
| Bauxite | 1,596,607 | 1,610,277 | 1,852,721 | 1,773,565 | 1,947,020 | 1,987,200 |
| Cryolite | 3,187 | 3,519 | 2,734 | 1,580 | 1,523 | 2,807 |
| Alumina | 52,717 | 56,816 | 50,743 | 64,488 | 47,709 | 83,083 |
| do. hydrate | 1,480 | 805 | 1,304 | 1,664 | 1,604 | 1,291 |
| Unwrought | 134,041 | 136,663 | 147,335 | 153,665 | 220,923 | 306,172 |
| do. alloys | 28,623 | 30,178 | 26,666 | 28,788 | 66,687 | 108,943 |
| Scrap | 55,918 | 57,736 | 50,045 | 48,933 | 66,031 | 79,441 |

(a) Including alloys.

IMPORTS OF ALUMINIUM, ETC. (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|---------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Germany (Federal) | | | | | | |
| <i>(cont.)</i> — | | | | | | |
| Semi-manufactures (a) | 28,387 | 32,152 | 37,917 | 38,143 | 68,186 | 90,901 |
| of which—Foil . . . | 2,785 | 3,666 | 4,844 | 4,502 | 6,257 | 7,769 |
| Powder . . . | 437 | 540 | 1,281 | 2,785 | 3,439 | 3,326 |
| Germany (East)— | | | | | | |
| Bauxite . . . | 322,002 | 246,156 | 285,549 | 313,990 | 237,014 | 241,282 |
| Alumina . . . | 41,522 | 45,454 | 28,599 | 49,310 | 43,788 | 63,624 |
| Greece— | | | | | | |
| Alumina . . . | 816 | 445 | 2,286 | 294 | 245 | <i>n.a.</i> |
| do. hydrate . . . | 469 | 882 | 8,961 | 1,420 | 1,047 | 1,046 |
| Unwrought . . . | 8,422 | 8,446 | 6,406 | 2,419 | 1,598 | 1,035 |
| Semi-manufactures (a) | 1,291 | 2,437 | 1,494 | 967 | 1,061 | 1,438 |
| of which—Foil . . . | 896 | 746 | 434 | 762 | 923 | 1,178 |
| Aluminium sulphates . . . | 1 | 249 | 209 | <i>n.a.</i> | — | <i>n.a.</i> |
| Hungary— | | | | | | |
| Cryolite . . . | 1,727 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Unwrought . . . | 7,522 | — | — | — | 64,234 | 48,632 |
| Iceland— | | | | | | |
| Semi-manufactures . . . | 310 | 288 | 400 | 241 | 630 | 343 |
| Italy— | | | | | | |
| Bauxite . . . | 373,533 | 469,079 | 526,353 | 533,968 | 576,670 | 578,416 |
| Cryolite . . . | 895 | 601 | 559 | 623 | 436 | 720 |
| Alumina . . . | 4,543 | 1,978 | 29,549 | 22,507 | 41,537 | 65,008 |
| do. hydrate . . . | 364 | 708 | 7,446 | 3,754 | 5,450 | 6,739 |
| Unwrought . . . | 32,174 | 33,159 | 62,236 | 80,834 | 84,504 | 131,260 |
| do. alloys . . . | | | | | | |
| Scrap . . . | 31,268 | 27,364 | 52,339 | 63,842 | 43,100 | 22,896 |
| Semi-manufactures (a) | 17,198 | 15,640 | 20,290 | 25,933 | 23,378 | 29,091 |
| of which—Foil . . . | 3,640 | 3,193 | 4,810 | 5,266 | 4,730 | 6,939 |
| Powder . . . | 206 | 168 | 143 | 79 | 160 | 220 |
| Aluminium sulphates . . . | 178 | 1,360 | 4,332 | 6,524 | 6,859 | 8,829 |
| Netherlands— | | | | | | |
| Bauxite . . . | 4,262 | 21,347 | 34,745 | 16,278 | 40,296 | 105,908 |
| Cryolite . . . | 207 | 141 | 1,533 | 779 | 1,018 | 735 |
| Alumina . . . | 834 | 1,204 | 61,312 | 65,339 | 101,258 | 138,358 |
| do. hydrate . . . | 8,077 | 9,224 | 9,428 | 9,857 | 18,530 | 17,561 |
| Unwrought (a) . . . | 22,020 | 19,855 | 19,515 | 19,112 | 32,700 | 42,639 |
| Scrap (a) . . . | 2,925 | 3,086 | 3,823 | 4,516 | 8,646 | 9,460 |
| Semi-manufactures (a) | 29,262 | 28,906 | 34,218 | 36,520 | 40,626 | 50,370 |
| of which—Foil . . . | 4,818 | 5,425 | 5,880 | 6,422 | 7,641 | 8,148 |
| Powder . . . | 126 | 160 | 148 | 196 | 319 | 302 |
| Aluminium sulphates . . . | 11,438 | 12,433 | 13,074 | 13,630 | 12,249 | 12,934 |
| Norway— | | | | | | |
| Bauxite . . . | 29,560 | 28,792 | 32,056 | 34,293 | 36,510 | 21,970 |
| Cryolite . . . | 2,613 | 4,226 | 4,442 | 4,247 | 4,362 | 4,305 |
| Alumina . . . | 515,664 | 531,793 | 604,873 | 701,340 | 916,897 | 967,127 |
| Unwrought . . . | 10,829 | 9,036 | 8,085 | 10,714 | 9,766 | 13,629 |
| do. alloys . . . | 822 | 676 | 964 | 1,487 | 11,476 | 11,866 |
| Scrap . . . | 56 | 31 | 571 | 294 | 576 | 52 |
| Semi-manufactures (a) | 9,952 | 6,926 | 10,565 | 11,846 | 10,323 | 16,333 |
| of which—Foil . . . | 495 | 535 | 648 | 666 | 930 | 916 |
| Powder . . . | 174 | 208 | 123 | 145 | 135 | 313 |
| Aluminium sulphates . . . | 9,989 | 4,328 | 1,441 | 780 | 461 | 669 |
| Poland— | | | | | | |
| Bauxite . . . | 85,700 | 113,973 | 113,687 | 106,112 | 110,482 | 95,019 |
| Cryolite . . . | 1,616 | 1,460 | 4,127 | 4,351 | 4,208 | 3,541 |
| Alumina . . . | 91,800 | 84,700 | 118,136 | 164,670 | 193,198 | 192,890 |
| Portugal— | | | | | | |
| Cryolite . . . | 30 | 45 | 32 | 49 | 47 | 49 |
| Unwrought (a) . . . | 733 | 1,157 | 836 | 610 | 756 | 823 |
| Semi-manufactures (a) | 6,293 | 7,195 | 8,014 | 7,783 | 8,350 | 9,700 |
| of which—Powder . . . | 78 | 79 | 101 | 186 | 92 | 102 |
| Aluminium sulphates . . . | 4,177 | 3,704 | 4,723 | 4,213 | 5,414 | 6,108 |

(a) Including alloys.

IMPORTS OF ALUMINIUM, ETC. (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|---------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Spain— | | | | | | |
| Bauxite | 52,285 | 83,890 | 76,327 | 63,675 | 71,592 | 92,132 |
| Cryolite | 418 | 645 | 1,143 | 1,155 | 1,042 | 1,951 |
| Alumina and hydrate .. | 99,541 | 113,690 | 137,219 | 156,262 | 178,350 | 211,740 |
| Unwrought and scrap .. | 9,989 | 16,798 | 25,736 | 15,669 | 15,874 | 21,326 |
| Semi-manufactures (a) | 6,421 | 7,907 | 11,418 | 9,069 | 5,871 | 6,219 |
| <i>of which—Powder</i> .. | 27 | 53 | 55 | 51 | 75 | 146 |
| Sweden— | | | | | | |
| Bauxite | 30,856 | 22,625 | 26,770 | 48,344 | 40,397 | 48,103 |
| Cryolite | 1,190 | 1,159 | 292 | 1,234 | 1,255 | 424 |
| Alumina and hydrate .. | 67,204 | 69,833 | 47,162 | 84,977 | 141,480 | 145,766 |
| Unwrought | 17,324 | 17,559 | 31,899 | 20,587 | 14,040 | 20,300 |
| do. alloys | 7,550 | 9,262 | 8,562 | 8,598 | 10,423 | 13,838 |
| Scrap | 112 | 28 | 235 | 1,074 | 2,125 | 2,196 |
| Semi-manufactures (a) | 19,831 | 18,727 | 21,825 | 24,997 | 25,693 | 31,700 |
| <i>of which—Foil</i> .. | 2,929 | 3,008 | 4,216 | 3,596 | 3,930 | 4,626 |
| <i>Powder</i> | 240 | 381 | 414 | 318 | 324 | 243 |
| Aluminium sulphates .. | 10,370 | 4,817 | 6,489 | 5,284 | 5,867 | 4,873 |
| Switzerland— | | | | | | |
| Bauxite | 2,553 | 2,871 | 1,954 | 583 | 329 | 291 |
| Cryolite | 226 | 155 | 507 | 876 | 640 | 541 |
| Alumina | 118,767 | 134,225 | 132,545 | 141,888 | 159,342 | 147,076 |
| Unwrought and scrap (a) | 5,871 | 12,055 | 13,176 | 6,694 | 15,331 | 18,819 |
| Semi-manufactures (a) | 8,029 | 6,769 | 7,138 | 6,615 | 7,938 | 10,487 |
| Aluminium sulphates .. | 3,926 | 4,126 | 4,799 | 4,063 | 3,936 | 4,140 |
| U.S.S.R.— | | | | | | |
| Bauxite | (b) 442,200 | (b) 473,400 | (c) 774,800 | (d) 620,960 | (d) 705,213 | (c) 1,305,167 |
| Semi-manufactures .. | 5,512 | 7,200 | 600 | n.a. | 2,160 | 1,470 |
| Yugoslavia— | | | | | | |
| Bauxite | 5,442 | 3,368 | 6,983 | 7,693 | 9,803 | 221,691 |
| Cryolite | 358 | n.a. | n.a. | n.a. | n.a. | 15 |
| Alumina and hydrate .. | 2,638 | 61 | 67 | 3,429 | 1,287 | 5,945 |
| Unwrought | 15,612 | 19,476 | 25,707 | 24,900 | 21,221 | 38,538 |
| Semi-manufactures (a) | 1,103 | 1,161 | 1,188 | 2,739 | 4,279 | 8,409 |
| <i>of which—Foil</i> .. | 393 | 253 | 824 | 1,278 | 1,702 | 1,674 |
| Angola— | | | | | | |
| Semi-manufactures .. | 643 | 856 | 695 | 854 | 909 | 1,086 |
| Aluminium sulphates .. | 1,032 | 1,207 | n.a. | n.a. | 966 | 1,358 |
| Cameroun— | | | | | | |
| Alumina | 92,550 | 83,637 | 43,140 | 72,540 | n.a. | n.a. |
| Egypt— | | | | | | |
| Unwrought and scrap .. | 4,717 | 4,881 | 8,196 | 8,384 | 8,007 | 4,506 |
| Semi-manufactures .. | 884 | 1,675 | 1,542 | 500 | 277 | 1,209 |
| <i>of which—Foil</i> .. | 415 | 593 | 258 | 140 | 158 | n.a. |
| Malagasy Republic— | | | | | | |
| Aluminium sulphates | 281 | 271 | 276 | 441 | 502 | 465 |
| Morocco— | | | | | | |
| Bauxite | 907 | 2,462 | 984 | 1,970 | 1,575 | n.a. |
| Alumina and hydrate .. | n.a. | 119 | 598 | 652 | 737 | 720 |
| Semi-manufactures (a) | 1,864 | 1,584 | 1,565 | 2,505 | 2,114 | 3,187 |
| <i>of which—Foil</i> .. | 320 | 243 | 129 | 41 | 55 | 27 |
| <i>Powder</i> | 51 | 60 | 62 | 102 | 63 | 151 |
| Aluminium sulphates .. | 1,346 | 1,412 | 661 | 65 | 40 | 3 |
| Mozambique— | | | | | | |
| Semi-manufactures (a) | 275 | 384 | 465 | 496 | 447 | n.a. |
| South Africa— | | | | | | |
| Bauxite | 8,504 | 7,641 | 15,438 | 8,310 | 12,059 | 16,307 |
| Cryolite | 71 | 76 | | | | |
| Alumina and hydrate .. | 284 | 732 | 559 | 685 | 903 | 1,341 |
| Unwrought | 16,659 | 20,052 | 26,907 | 17,560 | 23,816 | 40,540 |

(a) Including alloys.

(b) Imports from Greece.

 (c) Imports from Greece and
Yugoslavia.

(d) Imports from Yugoslavia.

IMPORTS OF ALUMINIUM, ETC. (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-------------|------------------|------------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| South Africa <i>(cont.)</i> — | | | | | | |
| Semi-manufactures (a) | 7,823 | 8,262 | 9,225 | 9,924 | 8,502 | 6,743 |
| of which—Foil .. | 640 | 667 | 205 | 370 | 516 | 939 |
| Powder .. | 150 | 20 | 31 | 63 | 84 | 54 |
| Sudan— | | | | | | |
| Semi-manufactures (a) | 888 | 862 | 1,193 | 1,368 | 938 | 954 |
| Aluminium sulphates .. | 1,134 | 507 | 809 | 669 | 1,214 | 5,446 |
| Tunisia— | | | | | | |
| Unwrought and scrap (a) | — | 22 | 16 | 14 | 1 | 1 |
| Semi-manufactures .. | 394 | 506 | 394 | 556 | 510 | 511 |
| Costa Rica— | | | | | | |
| Semi-manufactures (a) | 670 | 764 | 794 | 828 | 1,128 | 1,169 |
| Cuba— | | | | | | |
| Sulphate | 354 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Unwrought | 497 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Semi-manufactures .. | 4,089 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Honduras— | | | | | | |
| Semi-manufactures .. | 230 | 221 | 484 | 1,114 | 386 | <i>n.a.</i> |
| Mexico— | | | | | | |
| Bauxite, calcined .. | 4,801 | 14,745 | 9,732 | 13,332 | 11,351 | <i>n.a.</i> |
| Alumina and hydrate .. | 36,761 | 48,697 | 46,790 | 47,310 | 49,123 | <i>n.a.</i> |
| Unwrought | 50 | 529 | 117 | 145 | 1,589 | <i>n.a.</i> |
| Semi-manufactures .. | 6,883 | 4,379 | 1,164 | 3,885 | 7,308 | <i>n.a.</i> |
| Aluminium sulphates .. | 831 | 2 | 3 | 2 | 18 | <i>n.a.</i> |
| Nicaragua— | | | | | | |
| Semi-manufactures .. | 282 | 617 | 745 | 751 | 528 | 736 |
| Salvador— | | | | | | |
| Semi-manufactures (a) | 356 | 426 | 882 | 1,387 | 1,235 | 373 |
| United States— | | | | | | |
| Bauxite, crude dried (c) | 10,180,000 | 11,199,000 | 11,529,000 | 11,594,000 | 10,976,000 | 12,400,000 |
| do. calcined .. | 188,970 | 215,989 | 204,173 | 214,136 | 207,316 | 220,458 |
| Cryolite | 21,664 | 21,438 | 28,263 | 32,428 | 30,154 | 18,220 |
| Alumina and hydrate .. | 227,961 | 202,303 | 478,387 | 871,793 | 1,200,883 | 1,719,402 |
| Unwrought (a) .. | 350,788 | 468,542 | <i>r</i> 371,183 | <i>r</i> 328,297 | 515,045 | 418,153 |
| Scrap | 7,279 | 24,133 | 30,015 | 27,222 | 33,501 | 25,758 |
| Semi-manufactures .. | 51,431 | 61,685 | <i>r</i> 112,337 | <i>r</i> 55,444 | 63,293 | 56,861 |
| of which—Foil (b) .. | 4,619 | <i>n.a.</i> | 2,490 | 1,573 | 1,706 | 1,554 |
| Aluminium sulphates .. | <i>n.a.</i> | 7,362 | <i>r</i> 10,815 | <i>r</i> 10,883 | 13,587 | <i>n.a.</i> |
| Argentina— | | | | | | |
| Bauxite | 30,781 | 28,954 | 42,873 | 33,539 | 36,935 | 29,444 |
| Ingots and bars .. | 33,107 | 35,814 | 36,356 | 30,532 | <i>n.a.</i> | <i>n.a.</i> |
| Brazil— | | | | | | |
| Cryolite | 962 | 988 | 1,076 | 1,121 | 1,367 | <i>n.a.</i> |
| Alumina | 39 | 1,018 | 576 | 455 | 67 | <i>n.a.</i> |
| do. hydrate .. | 460 | 391 | 582 | 467 | 642 | <i>n.a.</i> |
| Unwrought (a) .. | 18,256 | 21,499 | 38,916 | 28,641 | 30,753 | <i>n.a.</i> |
| Semi-manufactures (a) | 250 | 387 | 1,342 | 1,068 | 1,571 | <i>n.a.</i> |
| of which—Foil .. | 98 | 114 | 242 | 203 | 234 | <i>n.a.</i> |
| Powder | 16 | 77 | 176 | 424 | 646 | <i>n.a.</i> |
| Aluminium sulphates .. | — | 1 | 6 | 7 | — | <i>n.a.</i> |
| Chile— | | | | | | |
| Unwrought | 2,502 | 3,099 | <i>n.a.</i> | 3,990 | <i>n.a.</i> | <i>n.a.</i> |
| Bars, sheets and alloys .. | 192 | 211 | <i>n.a.</i> | 1,000 | <i>n.a.</i> | <i>n.a.</i> |
| Colombia— | | | | | | |
| Bauxite | 4,413 | 9,024 | 8,841 | 5,893 | 5,836 | <i>n.a.</i> |
| Alumina and hydrates .. | 92 | 155 | 206 | 259 | 472 | <i>n.a.</i> |
| Unwrought (a) .. | 6,163 | 3,828 | 8,473 | 4,673 | 8,876 | <i>n.a.</i> |
| Semi-manufactures (a) | 1,182 | 621 | 1,211 | 972 | 1,135 | <i>n.a.</i> |
| Aluminium sulphates .. | 1,368 | 1,069 | 641 | 4 | 1 | <i>n.a.</i> |

(a) Including alloys. (b) Excluding leaves 5½ in. by 5½ in. recorded by number only.

(c) Dry Bauxite equivalent.

IMPORTS OF ALUMINIUM, ETC. (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|------------------------------------|-------------|-------------|-------------|-----------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Ecuador— | | | | | | |
| Semi-manufactures .. | 517 | 651 | 354 | 655 | <i>n.a.</i> | <i>n.a.</i> |
| Aluminium sulphates .. | 1,041 | 866 | 969 | 2,290 | <i>n.a.</i> | <i>n.a.</i> |
| Peru— | | | | | | |
| Unwrought (a) .. | 865 | 1,743 | 2,391 | 3,016 | 3,308 | <i>n.a.</i> |
| Semi-manufactures (a) .. | 2,394 | 2,250 | 1,555 | 1,504 | 1,693 | <i>n.a.</i> |
| Aluminium sulphates .. | 275 | 219 | 249 | 54 | 157 | <i>n.a.</i> |
| Uruguay— | | | | | | |
| Unwrought | <i>n.a.</i> | 399 | 1,463 | 1,746 | 1,220 | 1,298 |
| Aluminium sulphates .. | <i>n.a.</i> | 20 | 1,722 | 3,445 | <i>n.a.</i> | <i>n.a.</i> |
| Venezuela— | | | | | | |
| Unwrought | 1,970 | 2,921 | 1,727 | 2,651 | 306 | 20 |
| Semi-manufactures .. | 6,136 | 4,685 | 6,255 | 9,906 | 8,420 | 6,023 |
| Aluminium sulphates .. | 8,683 | 11,449 | 12,023 | 9,688 | 13,642 | 11,977 |
| Alumina and hydrate .. | 268 | 323 | 364 | 458 | 25,489 | 33,434 |
| Burma— | | | | | | |
| Unwrought | 3,284 | 3,609 | 1,360 | 576 | 1,133 | <i>n.a.</i> |
| Semi-manufactures (a) .. | | | | | | |
| Formosa— | | | | | | |
| Bauxite | 88,446 | 103,087 | 88,921 | 101,715 | 54,393 | 104,269 |
| Foil | 27 | 18 | 17 | 62 | 400 | 114 |
| Iran (b)— | | | | | | |
| Unwrought (a) .. | 4,066 | 2,986 | 6,048 | 4,547 | 5,691 | <i>n.a.</i> |
| Semi-manufactures .. | 1,767 | 1,381 | 2,013 | 2,809 | 3,471 | <i>n.a.</i> |
| Iraq— | | | | | | |
| Semi-manufactures (a) .. | 2,768 | <i>n.a.</i> | 4,106 | 3,206 | 3,811 | 3,010 |
| Aluminium sulphates .. | 4,314 | <i>n.a.</i> | 7,043 | 3,323 | <i>n.a.</i> | 9,298 |
| Israel— | | | | | | |
| Unwrought and semi-manufactures .. | 8,089 | 7,544 | 9,156 | 8,044 | 13,841 | 14,378 |
| of which—Foil | 54 | 122 | 120 | 115 | 203 | 235 |
| Japan— | | | | | | |
| Bauxite | 1,596,316 | 1,648,943 | 1,793,101 | 2,052,979 | 2,411,163 | 3,072,493 |
| Cryolite | 7,428 | 6,234 | 4,883 | 8,863 | 7,445 | 8,723 |
| Unwrought | 18,239 | 23,268 | 47,504 | 133,543 | 139,081 | 266,172 |
| do. alloys | 15,612 | 18,741 | 28,281 | 29,025 | 27,409 | 42,811 |
| Scrap | 9,160 | 4,169 | 18,792 | 2,665 | 2,404 | 2,480 |
| do. alloys | 15,673 | 5,059 | | 17,851 | 21,157 | 16,182 |
| Semi-manufactures (a) .. | 1,788 | 925 | 1,866 | 3,473 | 3,781 | 4,721 |
| Alumina and hydrate .. | 48,269 | 53,884 | 96,697 | 116,721 | 175,828 | 220,120 |
| Jordan— | | | | | | |
| Semi-manufactures .. | 156 | 502 | 532 | 386 | 516 | 505 |
| of which—Foil | 87 | 238 | 117 | 84 | 87 | 84 |
| Korea (South)— | | | | | | |
| Unwrought and semi-manufactures .. | 3,228 | 7,282 | 9,852 | 12,198 | 14,496 | 15,842 |
| Lebanon— | | | | | | |
| Unwrought | 2,337 | 1,406 | 3,860 | 3,658 | 4,192 | 7,253 |
| Semi-manufactures .. | 636 | 570 | 575 | 511 | 813 | 547 |
| Philippine Republic— | | | | | | |
| Unwrought | 4,386 | 4,215 | 7,100 | 7,345 | <i>n.a.</i> | <i>n.a.</i> |
| Semi-manufactures (a) .. | 937 | 1,003 | | 1,172 | <i>n.a.</i> | <i>n.a.</i> |
| of which—Foil | 269 | 324 | <i>n.a.</i> | 255 | <i>n.a.</i> | <i>n.a.</i> |
| Aluminium sulphates .. | 3,196 | 1,606 | <i>n.a.</i> | 1,117 | <i>n.a.</i> | <i>n.a.</i> |
| Southern Yemen— | | | | | | |
| Unwrought | 386 | 296 | 208 | 164 | 183 | <i>n.a.</i> |
| Syria— | | | | | | |
| Unwrought | 287 | 428 | 116 | 69 | 425 | 522 |

(a) Including alloys.

(b) Years ending March 20 following that stated.

IMPORTS OF ALUMINIUM, ETC. (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------|-------|-------|-------|--------|--------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Thailand— | | | | | | |
| Unwrought (a) .. | 2,953 | 1,807 | 3,853 | 4,484 | 5,148 | 5,881 |
| Semi-manufactures (a) .. | 2,311 | 3,220 | 2,873 | 3,434 | 3,522 | 4,390 |
| <i>of which—Foil..</i> .. | 740 | 998 | 1,010 | 1,381 | 1,197 | 1,537 |
| Aluminium sulphates .. | 351 | 702 | 199 | 326 | 528 | 1,098 |
| Turkey— | | | | | | |
| Unwrought (a) .. | 1,554 | 5,551 | 8,102 | 9,128 | 12,445 | 13,046 |
| Semi-manufactures (a) .. | 1,616 | 1,720 | 2,825 | 3,925 | 2,928 | 2,900 |
| <i>of which—Foil..</i> .. | 471 | 873 | 1,846 | 2,630 | 1,970 | 2,130 |
| Aluminium sulphates .. | 3,152 | 4,687 | 8,382 | 1,415 | 6,448 | 6,968 |
| Alumina and hydrate .. | 23 | 67 | 56 | 186 | 131 | 232 |

(a) Including alloys.

ANTIMONY
PRODUCTION OF ANTIMONY ORE
(Metal content)

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|----------------|----------------|----------------|---------------|---------------|---------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Rhodesia | 36 | 123 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Canada (a) | — | — | — | — | — | — |
| Pakistan | 81 | 60 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sarawak | 70 | 50 | 65 | 31 | 23 | 85 |
| Australia (b) | 273 | 35 | 98 | 91 | 158 | 103 |
| OTHER COUNTRIES | | | | | | |
| Austria | 879 | 681 | 650 | 679 | 692 | <i>n.a.</i> |
| Czechoslovakia (e) | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 |
| France | 165 | 119 | 275 | 164 | — | — |
| Italy | 529 | 261 | 261 | 609 | 1,248 | 1,275 |
| Portugal | 12 | 11 | 4 | 23 | 20 | 1 |
| Spain | 53 | 85 | <i>r</i> 98 | <i>r</i> 119 | 130 | 118 |
| U.S.S.R. (e) | 7,000 | 7,000 | 7,000 | 7,000 | 7,000 | 7,000 |
| Yugoslavia | 3,579 | 3,906 | 3,550 | 3,030 | 2,620 | (e) 3,000 |
| Algeria | — | 65 | (f) 60 | <i>r</i> 100 | 53 | 60 |
| Morocco | 1,535 | 2,165 | 1,232 | 1,463 | 1,254 | 1,296 |
| South Africa | 12,679 | 12,312 | 11,191 | 12,201 | 16,585 | 17,816 |
| Guatemala | — | — | 14 | 30 | 14 | 98 |
| Mexico | 4,712 | 4,396 | 4,407 | 3,741 | 3,408 | 3,176 |
| United States (d) | 564 | 754 | 828 | 796 | 764 | 823 |
| Bolivia (g) | 9,488 | 8,627 | 10,499 | 11,295 | 10,940 | 12,893 |
| Peru (c) | 671 | 637 | <i>r</i> 835 | <i>r</i> 738 | 773 | 843 |
| China (f) | 15,000 | 15,000 | 15,000 | 12,000 | 12,000 | 12,000 |
| Japan | 495 | 180 | 76 | 56 | 19 | 3 |
| Thailand | 1,249 | (f) 1,250 | 1,046 | 1,010 | 186 | <i>n.a.</i> |
| Turkey | <i>r</i> 1,486 | <i>r</i> 1,599 | <i>r</i> 1,503 | <i>r</i> 912 | 1,456 | 2,580 |
| TOTAL* | 62,000 | 60,000 | 60,000 | 58,000 | 62,000 | 66,000 |

*Excluding any antimony ore produced in Hungary, Afghanistan and Iran.

- (a) The following figures represent the antimony content of antimonial lead and of flue dust and slags (long tons): 1964—711; 1965—581; 1966—628; 1967—566; 1968—518; 1969—377.
- (b) In addition the antimony content of antimonial slag obtained as a by-product of lead refining was as follows (long tons): 1964—843; 1965—909; 1966—873; 1967—810; 1968—672; 1969—730.
- (c) Metal plus content of ore.
- (d) Secondary metal was recovered as follows (long tons): 1964—19,946; 1965—21,715; 1966—21,659; 1967—21,129; 1968—21,160; 1969—17,778.
- (e) Estimate.
- (f) United States Bureau of Mines' estimate.
- (g) Content of ore exported plus exports of metal.

EXPORTS OF ANTIMONY

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— Regulus and refined .. | 1,079 | 1,241 | 751 | 840 | 1,678 | 1,607 |
| Rhodesia— Ore | 162 | 207 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sarawak— Ore | — | 106 | — | — | — | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Austria— Ore | 820 | 730 | 383 | 465 | 389 | 193 |
| Sulphide | 312 | 199 | 262 | 290 | 397 | 375 |
| Belgium-Luxemburg E.U.— Oxide | 1,765 | 1,609 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| France— Ore | 50 | — | — | — | — | — |
| Crude and regulus .. | 54 | 56 | 38 | 52 | 139 | 191 |
| Germany (Federal)— Ore | — | 1 | — | 106 | — | — |
| Regulus, scrap, etc. .. | 226 | 172 | 205 | 186 | 118 | 74 |
| Oxide | 438 | <i>n.a.</i> | 263 | 238 | 236 | 139 |
| Italy— Regulus and scrap .. | 1 | 1 | 1 | 1 | 20 | 102 |
| Netherlands— Regulus (a) | 55 | 30 | 7 | 9 | 12 | 18 |
| Oxide | 130 | 122 | 31 | 22 | 31 | 65 |
| Sweden— Regulus | 34 | 12 | 22 | 11 | 1 | 76 |
| U.S.S.R.— Regulus | 4,200 | 2,700 | 2,400 | 1,300 | 787 | 1,200 |
| Yugoslavia— Regulus | 1,921 | 2,261 | 1,981 | 1,720 | 1,267 | 1,246 |
| Morocco— Ore | 1,838 | 2,979 | 3,169 | 3,272 | 2,687 | 2,772 |
| South Africa— Ore | 21,722 | 18,711 | 17,658 | 20,437 | 25,440 | 31,474 |
| Mexico— Ore and concentrates .. | 11,871 | 11,170 | 14,264 | 9,404 | 6,079 | <i>n.a.</i> |
| Regulus and refined .. | 290 | 276 | 316 | 186 | 307 | <i>n.a.</i> |
| United States— Ore | 346 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Metal and alloys .. | 375 | 13 | 26 | 73 | 97 | 127 |
| Oxide | <i>n.a.</i> | 34 | 75 | 148 | 106 | 185 |
| Bolivia— Ore (<i>Sb content</i>) .. | 9,488 | 8,621 | 10,471 | 11,287 | 10,900 | 12,300 |
| Regulus | — | 6 | 27 | 8 | <i>n.a.</i> | <i>n.a.</i> |
| Peru— Ore and metal (<i>Sb content</i>) | 978 | 686 | 852 | 886 | 1,325 | 1,300 |
| Thailand— Ore | 1,447 | 1,964 | 3,146 | 2,734 | 1,085 | 1,333 |
| Turkey— Ore | 2,587 | 3,380 | 2,863 | 2,586 | 1,983 | 3,486 |
| Sulphide | — | 220 | 352 | 950 | 565 | 1,900 |

(a) Including scrap.

IMPORTS OF ANTIMONY, ETC.

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ore and concentrates (b) | 13,989 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Zambia— | | | | | | |
| Refined and regulus .. | 61 | 12 | 81 | 13 | 53 | 29 |
| Canada— | | | | | | |
| Oxide | 317 | 275 | 332 | 237 | 354 | 352 |
| India— | | | | | | |
| Ore | 1,323 | 1,675 | 2,077 | 1,504 | 1,777 | 1,610 |
| Metal | 59 | 34 | 56 | 17 | 1 | 6 |
| Oxide (d) | 41 | 92 | 65 | 90 | 23 | 49 |
| Sulphide (d) | 4 | 37 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Australia (c)— | | | | | | |
| Concentrates | 43 | 21 | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Regulus | 829 | 251 | 186 | 20 | 2 | 30 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Regulus | 162 | 94 | 112 | 125 | 127 | 88 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Regulus (a) | 162 | 111 | 102 | 108 | 23 | 47 |
| Oxide | 287 | 88 | 60 | 50 | 115 | 77 |
| Denmark— | | | | | | |
| Regulus | 106 | 106 | 146 | 119 | 66 | 107 |
| France— | | | | | | |
| Ore | 2,648 | 1,651 | 1,497 | 1,241 | 2,392 | 4,030 |
| Crude and regulus (a) .. | 2,623 | 1,700 | 2,398 | 2,177 | 1,213 | 981 |
| Sulphide | 7 | 7 | 11 | 11 | 14 | 6 |
| Germany (Federal)— | | | | | | |
| Ore | 2,619 | 2,749 | 3,147 | 2,976 | 3,323 | 4,309 |
| Regulus, scrap, etc. .. | 3,298 | 2,707 | 2,733 | 2,364 | 1,418 | 1,576 |
| Oxide | 815 | <i>n.a.</i> | 581 | 572 | 1,042 | 1,397 |
| Greece— | | | | | | |
| Regulus | 18 | 56 | 34 | 28 | 44 | 7 |
| Italy— | | | | | | |
| Ore | <i>n.a.</i> | 15 | 830 | 760 | 4,610 | 649 |
| Regulus and scrap | 334 | 430 | 491 | 584 | 145 | 323 |
| Oxide | 226 | 256 | 264 | 298 | 397 | 544 |
| Sulphide | <i>n.a.</i> | <i>n.a.</i> | 18 | 25 | 3 | 51 |
| Netherlands— | | | | | | |
| Regulus (a) | 289 | 230 | 273 | 145 | 144 | 120 |
| Oxide | 590 | 583 | 510 | 485 | 543 | 698 |
| Norway— | | | | | | |
| Regulus | 93 | 100 | 43 | 84 | 119 | 68 |
| Portugal— | | | | | | |
| Sulphide | 1 | — | — | — | — | — |
| Spain— | | | | | | |
| Ore | 523 | 696 | 305 | 64 | 885 | 658 |
| Regulus | 151 | 268 | 140 | 288 | 216 | 191 |
| Oxide | 253 | 221 | 307 | 193 | 160 | 77 |
| Sweden— | | | | | | |
| Regulus | 419 | 270 | 340 | 299 | 475 | 413 |
| Switzerland— | | | | | | |
| Regulus | 349 | 205 | 191 | 266 | 274 | 208 |
| Yugoslavia— | | | | | | |
| Ore | <i>n.a.</i> | 132 | 160 | <i>n.a.</i> | <i>n.a.</i> | 1,319 |

(a) Including scrap.

(b) Including crude.

(c) Years ended June 30 of that stated.

(d) Years ended March 31 following that stated.

IMPORTS OF ANTIMONY, ETC. (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-------------|----------------|----------------|-------------|-------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Morocco— | | | | | | |
| Regulus | 10 | 12 | 15 | 12 | 8 | 19 |
| Cuba— | | | | | | |
| Regulus (a) | 110 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Mexico— | | | | | | |
| Oxide | 18 | 24 | 26 | 18 | 20 | <i>n.a.</i> |
| United States— | | | | | | |
| Ore (<i>Sb content</i>) | 9,532 | 9,250 | 11,125 | <i>r</i> 9,390 | 9,477 | 10,802 |
| Crude | 28 | 21 | 56 | 25 | 53 | <i>n.a.</i> |
| Regulus (a) | 2,953 | 2,366 | <i>r</i> 2,471 | <i>r</i> 2,370 | 2,404 | 1,242 |
| Oxide | 2,795 | 1,940 | 4,807 | 4,552 | 4,286 | 4,210 |
| Argentina— | | | | | | |
| Ore | 497 | 1,058 | 427 | 484 | 279 | 363 |
| Brazil— | | | | | | |
| Ore | 64 | 269 | 290 | 232 | 227 | <i>n.a.</i> |
| Regulus | 157 | 71 | 233 | 69 | 313 | <i>n.a.</i> |
| Oxide | 14 | 34 | 111 | 77 | 113 | <i>n.a.</i> |
| Sulphide | 108 | 37 | 106 | 109 | 108 | <i>n.a.</i> |
| Chile— | | | | | | |
| Regulus | 33 | 69 | <i>n.a.</i> | 25 | <i>n.a.</i> | <i>n.a.</i> |
| Colombia— | | | | | | |
| Metal | 11 | 15 | 20 | 19 | 16 | <i>n.a.</i> |
| Uruguay— | | | | | | |
| Regulus | <i>n.a.</i> | 10 | 10 | 4 | 15 | 1 |
| Venezuela— | | | | | | |
| Regulus | 13 | 21 | 34 | 10 | 71 | 58 |
| Japan— | | | | | | |
| Ore and concentrates | 6,398 | 4,473 | 7,286 | 8,927 | 7,946 | 12,457 |
| Regulus | 911 | 124 | 305 | 876 | 61 | 5 |
| Sulphide | 98 | 49 | 20 | 152 | <i>n.a.</i> | <i>n.a.</i> |

(a) Including waste and scrap.

ARSENIC
PRODUCTION OF ARSENIC

Long tons

| Producing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|--------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Rhodesia— | | | | | | |
| White arsenic | 184 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Canada— | | | | | | |
| White arsenic (a) .. | 145 | 180 | 313 | 337 | 309 | 313 |
| OTHER COUNTRIES | | | | | | |
| France— | | | | | | |
| White arsenic | 11,217 | 11,944 | 11,853 | 13,947 | 13,300 | 13,800 |
| Germany (Federal) (b)— | | | | | | |
| White arsenic, etc. .. | 37 | 69 | 371 | 102 | 595 | 302 |
| Portugal— | | | | | | |
| White arsenic | 366 | 183 | 191 | 248 | 180 | 230 |
| Spain— | | | | | | |
| White arsenic | 140 | 116 | 110 | 127 | 128 | 98 |
| Sweden— | | | | | | |
| White arsenic | 17,686 | 16,264 | 14,458 | 19,901 | 20,767 | 16,239 |
| South West Africa— | | | | | | |
| Lead concentrates | | | | | | |
| (As content) | — | — | 744 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| White arsenic | — | — | 39 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Mexico— | | | | | | |
| Ores (As ₂ O ₃ content) .. | 10,992 | 9,968 | 11,706 | 11,157 | 10,086 | 5,951 |
| Brazil— | | | | | | |
| White arsenic | 185 | 252 | 315 | 218 | 307 | 295 |
| Peru— | | | | | | |
| White arsenic | 611 | 492 | 359 | 263 | 1,207 | 473 |
| Japan— | | | | | | |
| White arsenic | 491 | 471 | 538 | 633 | 675 | 701 |

Arsenic has also been produced in the United Kingdom, Austria, Belgium, Czechoslovakia, East Germany, Hungary, U.S.S.R., United States, Argentina, Iran, China and Korea.

(a) Refined white arsenic produced plus the content of crude arsenic exported but excluding arsenic contained in gold ores exported.

(b) Exports.

EXPORTS OF ARSENIC, ETC.

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Arsenates and Arsenites | <i>n.a.</i> | 7,849 | 8,941 | 6,874 | 2,962 | 3,706 |
| Organo-arsenic compounds | £68,143 | £52,210 | £45,483 | £34,464 | £38,061 | £61,727 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Arsenates and arsenites | 121 | 127 | 2 | — | 59 | 49 |
| France— | | | | | | |
| White arsenic | 9,316 | 10,211 | 10,714 | 12,514 | 13,041 | 11,438 |
| Arsenates | 48 | 38 | 49 | 94 | 46 | 75 |
| Germany (Federal)— | | | | | | |
| White arsenic, etc. | 37 | 69 | 371 | 102 | 595 | 302 |
| Arsenates | 57 | 59 | 64 | 22 | 16 | 13 |
| Italy— | | | | | | |
| White arsenic | — | 41 | 5 | 3 | 30 | 112 |
| Arsenates and arsenites | 104 | 11 | 12 | 4 | 3 | 21 |
| Netherlands— | | | | | | |
| White arsenic | 38 | 40 | 2 | 9 | 14 | 25 |
| Arsenates and arsenites | 27 | 3 | 8 | 13 | 10 | 9 |
| Portugal— | | | | | | |
| White arsenic | 491 | 349 | 370 | 186 | 105 | 163 |
| Sweden— | | | | | | |
| White arsenic | 13,577 | 11,692 | 16,580 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Metallic arsenic | 344 | 432 | 512 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| South West Africa— | | | | | | |
| Lead concentrates | | | | | | |
| (<i>As content</i>) | — | — | 744 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| White arsenic | — | — | 39 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Mexico— | | | | | | |
| White arsenic, pure | 11,023 | 9,063 | 9,260 | 8,122 | 3,295 | <i>n.a.</i> |
| do. crude | 86 | 813 | 1,612 | 2,416 | 2,985 | <i>n.a.</i> |
| United States— | | | | | | |
| Arsenate of lead | 836 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Arsenate of lime | 686 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Japan— | | | | | | |
| White arsenic | 22 | 9 | 42 | 52 | 63 | 6 |

IMPORTS OF ARSENIC, ETC.

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| White arsenic | 9,619 | 10,914 | 9,918 | 9,527 | <i>n.a.</i> | <i>n.a.</i> |
| Arsenates and arsenites | <i>n.a.</i> | 3 | 9 | 13 | <i>n.a.</i> | <i>n.a.</i> |
| India (b)— | | | | | | |
| Arsenic and its oxides .. | 524 | 529 | 248 | 556 | 668 | 695 |
| Malaysia (West)— | | | | | | |
| Arsenite of soda | <i>n.a.</i> | 7,882 | 8,157 | 5,875 | 3,149 | 2,833 |
| Pakistan— | | | | | | |
| Arsenic and its oxides .. | 10 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Australia (a)— | | | | | | |
| White arsenic | 1,800 | 1,729 | 1,198 | 1,499 | 1,863 | 1,006 |
| Arsenates and arsenites | <i>n.a.</i> | <i>n.a.</i> | 42 | 49 | 13 | 36 |
| New Zealand (a)— | | | | | | |
| White arsenic, etc. | 160 | 72 | 153 | 159 | 141 | <i>n.a.</i> |
| Arsenate of lead | 40 | 26 | 23 | 30 | 16 | <i>n.a.</i> |
| Other arsenates and arsenites | 99 | 55 | 5 | 20 | — | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| White arsenic, etc. | 49 | 40 | 46 | 21 | 32 | 65 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| White arsenic | 72 | 44 | 21 | 20 | 5 | 10 |
| Denmark— | | | | | | |
| White arsenic | 21 | 15 | 22 | 25 | 27 | 31 |
| Arsenates and arsenites | 158 | 50 | 2 | 2 | 2 | 1 |
| France— | | | | | | |
| Metallic arsenic | 33 | 33 | 38 | 16 | 51 | 79 |
| White arsenic | 79 | 108 | 39 | 5 | 20 | 5 |
| Germany (Federal)— | | | | | | |
| Metallic arsenic | 34 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | (c) 67 |
| White arsenic, etc. | 950 | 1,288 | 1,151 | 1,058 | 1,007 | 944 |
| Sulphide | 1 | — | — | 1 | — | — |
| Greece— | | | | | | |
| White arsenic | 31 | 32 | 66 | <i>n.a.</i> | 94 | <i>n.a.</i> |
| Arsenates and arsenites | 59 | — | 1 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Italy— | | | | | | |
| White arsenic | 1,600 | 1,836 | 1,587 | 1,461 | 2,620 | 2,312 |
| Metallic arsenic (c) | 21 | 16 | 28 | 61 | 88 | 97 |
| Arsenates and arsenites | 4 | 5 | 12 | 14 | 29 | 43 |
| Netherlands— | | | | | | |
| White arsenic etc. | 840 | 887 | 823 | 950 | 932 | 1,023 |
| Arsenates and arsenites | 55 | 43 | 19 | — | — | — |
| Norway— | | | | | | |
| White arsenic | 88 | 67 | 69 | 72 | 105 | 66 |
| Portugal— | | | | | | |
| Arsenate of soda | 1 | 1 | 12 | 1 | — | — |
| Switzerland— | | | | | | |
| White arsenic, etc. | 97 | 78 | 85 | 85 | 120 | 93 |
| Yugoslavia— | | | | | | |
| Metallic arsenic | 6 | 8 | 1 | 9 | 10 | 8 |
| White arsenic | <i>n.a.</i> | 11 | 104 | 250 | 481 | 759 |
| Arsenates | <i>n.a.</i> | 12 | 17 | <i>n.a.</i> | 4 | — |
| Malagasy Republic— | | | | | | |
| Arsenates | 15 | 20 | 11 | 17 | 11 | 10 |
| Tunisia— | | | | | | |
| Arsenates and arsenites | 1 | 3 | 5 | 6 | 6 | 4 |
| Mexico— | | | | | | |
| White arsenic | 17 | — | — | — | — | <i>n.a.</i> |

(a) Years ended June 30 of that stated.

(b) Years ended March 31 of year following that stated.

(c) May include some tellurium.

IMPORTS OF ARSENIC, ETC. (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|--------|--------|--------|----------|--------|--------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| United States— | | | | | | |
| Metallic arsenic | 137 | 161 | 162 | 263 | 366 | 309 |
| White arsenic | 16,237 | 13,862 | 16,679 | r 24,174 | 22,495 | 16,223 |
| Sulphide | 25 | 41 | 27 | 258 | 100 | 85 |
| Arsenate of soda | 143 | 138 | 163 | 113 | 33 | 491 |
| Argentina— | | | | | | |
| White arsenic | 522 | 329 | 481 | 396 | 427 | 460 |
| Brazil— | | | | | | |
| Metallic arsenic | 15 | 21 | 7 | 15 | — | n.a. |
| White arsenic | 297 | 112 | 256 | 612 | 514 | n.a. |
| Arsenates | 2 | — | 5 | — | 12 | n.a. |
| Chile— | | | | | | |
| White arsenic | 56 | 124 | n.a. | 113 | n.a. | n.a. |
| Colombia— | | | | | | |
| White arsenic | 39 | 18 | 9 | 23 | 157 | n.a. |
| Uruguay— | | | | | | |
| Arsenate of lead | n.a. | n.a. | 10 | n.a. | n.a. | n.a. |
| Japan— | | | | | | |
| White arsenic | 2,169 | 2,526 | 2,743 | 2,011 | 3,365 | 2,590 |
| Sulphide | 47 | 41 | 30 | 22 | 73 | 49 |
| Turkey— | | | | | | |
| Arsenic compounds | — | 17 | 26 | 19 | 77 | 52 |

ASBESTOS
PRODUCTION OF ASBESTOS

Long tons

| Producing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Botswana | 1,929 | 793 | — | — | — | <i>n.a.</i> |
| Kenya— | | | | | | |
| Anthophyllite | 182 | 121 | 65 | 50 | — | — |
| Rhodesia | 137,010 | (b) 164,762 | (c) 156,000 | (c) 95,763 | (c) 84,642 | <i>n.a.</i> |
| Swaziland | 35,591 | 36,503 | 32,270 | 35,852 | 38,341 | 38,468 |
| Canada (a)— | | | | | | |
| Chrysotile | 1,267,724 | 1,239,475 | 1,329,513 | 1,296,521 | 1,424,956 | 1,425,402 |
| Crude | 211 | 145 | <i>n.a.</i> | 257 | 259 | <i>n.a.</i> |
| Fibre | 593,111 | 588,927 | <i>n.a.</i> | 629,728 | 693,755 | <i>n.a.</i> |
| Shorts and Waste | 674,402 | 650,403 | <i>n.a.</i> | 666,536 | 730,942 | <i>n.a.</i> |
| Cyprus | 12,281 | 15,733 | 24,519 | r 19,477 | 19,012 | 21,363 |
| India | 3,313 | 4,700 | r 7,476 | r 7,982 | 8,930 | 9,494 |
| Australia— | | | | | | |
| Chrysotile | 1,577 | 1,046 | 560 | 527 | 799 | 734 |
| Crocidolite | 10,614 | 9,280 | 11,464 | 120 | — | — |
| Total | 1,470,000 | 1,472,000 | 1,561,000 | 1,470,000 | 1,580,000 | 1,580,000 |
| OTHER COUNTRIES | | | | | | |
| Bulgaria | 1,279 | 1,279 | 1,772 | (c) 1,280 | (c) 1,280 | (c) 1,280 |
| Finland | 10,367 | (e) 11,881 | 11,830 | (c) 11,600 | (c) 12,932 | (c) 13,779 |
| France | 21,687 | 9,981 | 295 | 148 | 492 | — |
| Greece | 62 | — | 38 | — | <i>n.a.</i> | <i>n.a.</i> |
| Italy | 67,109 | 70,441 | 80,774 | 99,149 | 101,803 | 110,706 |
| Portugal | — | 47 | 10 | 51 | 84 | 200 |
| U. S. S. R. (c) | 720,000 | 733,000 | 743,000 | 757,000 | 787,000 | 984,000 |
| Yugoslavia | 8,286 | 9,451 | 7,509 | 8,879 | 10,230 | 11,280 |
| Egypt | 1,553 | 2,880 | 1,837 | 11,748 | 2,560 | — |
| Mozambique | — | 80 | <i>n.a.</i> | 499 | 118 | 775 |
| South Africa— | | | | | | |
| Amosite | 68,996 | 72,085 | 85,658 | 84,730 | 86,831 | 88,528 |
| Blue | 91,424 | 108,145 | 128,462 | 119,901 | 107,803 | 122,700 |
| Chrysotile | 32,072 | 34,728 | 32,841 | 35,086 | 37,982 | 42,868 |
| United States (d) | 90,261 | 105,603 | 112,436 | 109,990 | 107,759 | 112,443 |
| Argentina | 484 | 217 | 56 | 492 | 341 | <i>n.a.</i> |
| Bolivia (b) | <i>n.a.</i> | 7 | 4 | 2 | 1 | <i>n.a.</i> |
| China (c) | 120,000 | 130,000 | 140,000 | 150,000 | 150,000 | 160,000 |
| Formosa | 469 | 788 | 644 | 563 | 1,181 | 3,032 |
| Japan— | | | | | | |
| Chrysotile | 16,052 | 14,688 | 14,832 | 16,019 | 24,100 | 21,000 |
| Amphibole | — | — | 4,300 | 8,122 | <i>n.a.</i> | <i>n.a.</i> |
| Korea (South) | 1,252 | 1,527 | 320 | 2,132 | 3,259 | <i>n.a.</i> |
| Philippine Republic | 524 | — | 492 | 57 | 31 | 44 |
| Turkey | r 1,497 | r 3,759 | r 4,084 | r 3,851 | 3,487 | 5,087 |
| Total* | 1,300,000 | 1,400,000 | 1,500,000 | 1,500,000 | 1,450,000 | 1,690,000 |
| WORLD'S TOTAL* | 2,700,000 | 2,800,000 | 3,000,000 | 3,000,000 | 3,000,000 | 3,300,000 |

*Including an estimate for asbestos produced in Brazil but excluding asbestos known to have been produced in Czechoslovakia, Roumania, Eritrea and North Korea.

(a) Sales and shipments.

(b) Exports.

(c) United States Bureau of Mines' estimate.

(d) Sold or used by producers.

(e) Fibre.

EXPORTS OF ASBESTOS

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|------------|-------------|-------------|--------------|--------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Unmanufactured .. | 5,703 | 5,987 | 4,695 | 4,246 | 4,389 | 4,711 |
| Packing, etc. .. | 10,423 | 11,068 | 10,718 | 8,985 | 9,469 | 11,063 |
| Cement products .. | 57,857 | 37,607 | 33,322 | 31,427 | 32,986 | 38,371 |
| Yarn and cloth .. | 3,843 | 3,846 | 3,927 | 3,182 | 3,656 | 4,101 |
| Other manufactures .. | 14,466 | 13,085 | 13,147 | 12,418 | 12,778 | 12,009 |
| Rhodesia— | | | | | | |
| Unmanufactured .. | 158,769 | 164,762 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Cement products .. | (£491,982) | (£634,260) | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Canada— | | | | | | |
| Crude | 191 | 110 | 154 | 204 | 180 | 121 |
| Fibre | 562,960 | 563,194 | 654,094 | 583,286 | 645,641 | 695,215 |
| Shorts and waste .. | 627,453 | 614,736 | 636,969 | 614,763 | 657,437 | 701,773 |
| Manufactured .. | (£654,355) | (£670,009) | (£786,070) | (£866,527) | (£1,231,018) | (£1,565,000) |
| Cyprus— | | | | | | |
| Unmanufactured .. | 11,317 | 17,263 | 18,888 | 18,541 | 17,700 | 22,146 |
| India— | | | | | | |
| Unmanufactured .. | 8 | 9 | 29 | 68 | 22 | 7 |
| Manufactured (a) .. | 51 | 138 | 70 | 89 | 147 | 313 |
| Cement products (a) .. | 1,038 | 444 | 394 | 1,587 | 5,612 | 11,318 |
| Malaysia (West)— | | | | | | |
| Cement products .. | <i>n.a.</i> | 2,453 | 2,217 | 3,869 | 8,649 | 12,689 |
| Other manufactures .. | <i>n.a.</i> | 50 | 214 | 39 | 17 | 5 |
| Singapore— | | | | | | |
| Cement products .. | 36,732 | 26,400 | 26,762 | 15,842 | 16,614 | 17,211 |
| Other manufactures .. | 53 | 127 | 136 | 640 | 214 | 138 |
| Australia— | | | | | | |
| Unmanufactured .. | 6,500 | 4,295 | 4,146 | 2,254 | 718 | 162 |
| Packing (b) | (£74,305) | (£141,226) | (£216,215) | (£41,200) | (£94,181) | (£93,000) |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Unmanufactured .. | 15 | 9 | 1,674 | 13 | 56 | 53 |
| Manufactured (c) .. | 1,973 | 2,641 | 2,482 | 2,923 | 3,039 | 3,813 |
| Cement products (d) .. | 10,519 | 13,376 | 10,833 | 5,995 | 17,909 | 30,422 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Unmanufactured .. | 128 | 23 | 43 | 32 | 987 | 227 |
| Manufactured (c) .. | 478 | 643 | 663 | 598 | 620 | 1,392 |
| Cement products (d) .. | 213,063 | 210,948 | 189,675 | 196,249 | 204,628 | 210,927 |
| Denmark— | | | | | | |
| Unmanufactured .. | 67 | 159 | 47 | 59 | 48 | 361 |
| Manufactured (c) .. | 513 | 875 | 726 | 1,058 | 886 | 1,061 |
| Cement products (d) .. | 7,102 | 7,447 | 6,774 | 6,690 | 9,866 | 14,742 |
| Finland— | | | | | | |
| Unmanufactured .. | 7,435 | 8,426 | 8,393 | 8,709 | 10,159 | 11,760 |
| Manufactured | 725 | 1,131 | 570 | 517 | 577 | 1,420 |
| France— | | | | | | |
| Unmanufactured .. | 8,786 | 4,934 | 1,899 | 1,069 | 1,014 | 781 |
| Manufactured (c) .. | 4,408 | 5,006 | 4,776 | 4,519 | 5,311 | 5,429 |
| Cement products (d) .. | 38,107 | 33,731 | 50,758 | 28,577 | 23,301 | 32,969 |

(a) Years ended March 31 following that stated.

(b) Years ended June 30 of that stated.

(c) Including brake and clutch linings of material other than asbestos.

(d) Including manufactures of other fibro-cements.

EXPORTS OF ASBESTOS (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Germany (Federal)— | | | | | | |
| Unmanufactured .. | 249 | 271 | 469 | 501 | 1,474 | 692 |
| Manufactured (a) .. | 4,301 | 5,351 | 6,863 | 8,085 | 11,218 | 11,358 |
| Cement products (b) .. | 57,804 | 36,156 | 24,957 | 55,882 | 58,424 | 44,515 |
| Greece— | | | | | | |
| Manufactured .. | 949 | 100 | n.a. | 505 | 114 | 164 |
| Italy— | | | | | | |
| Unmanufactured .. | 8,890 | 25,293 | 35,370 | 33,488 | 41,168 | 45,321 |
| Manufactured (a) .. | 2,378 | 1,295 | 1,493 | 1,085 | 617 | 1,821 |
| Cement products (b) .. | 49,877 | 42,902 | 50,518 | 84,568 | 23,523 | 65,018 |
| Netherlands— | | | | | | |
| Unmanufactured .. | 17 | 92 | 15 | 53 | 54 | 159 |
| Manufactured (a) .. | 2,462 | 1,899 | 2,271 | 2,564 | 3,489 | 3,730 |
| Cement products (b) .. | 7,906 | 5,627 | 4,030 | 3,485 | 4,608 | 4,224 |
| Portugal— | | | | | | |
| Unmanufactured .. | 2 | 41 | 18 | 57 | n.a. | 72 |
| Manufactured .. | 552 | 664 | 1,134 | 919 | 53 | 1,626 |
| Spain— | | | | | | |
| Manufactured (a) .. | 141 | 268 | 406 | 488 | 691 | 1,040 |
| Cement products (b) .. | 277 | 1,893 | 303 | 1,610 | 2,668 | 11,189 |
| Sweden— | | | | | | |
| Unmanufactured .. | 134 | 13 | 55 | 22 | 20 | 35 |
| Manufactured (a) .. | 111 | 166 | 150 | 66 | 105 | 167 |
| Cement products .. | 22,517 | 20,005 | 23,028 | 25,115 | 15,627 | 17,134 |
| Switzerland— | | | | | | |
| Unmanufactured .. | 57 | 71 | 84 | 73 | 31 | 50 |
| Manufactured (a) .. | 233 | 71 | 250 | 261 | 433 | 473 |
| Cement products (b) .. | 3,523 | 5,837 | 3,193 | 1,572 | 5,930 | 4,819 |
| U.S.S.R.— | | | | | | |
| Unmanufactured .. | 208,800 | 244,500 | 252,700 | 280,696 | 298,805 | 341,000 |
| Yugoslavia— | | | | | | |
| Unmanufactured .. | 4,264 | 4,387 | 2,533 | 1,634 | 1,545 | 2,410 |
| Manufactured .. | 1,726 | 1,108 | 1,181 | 1,378 | 2,160 | 2,904 |
| Cement products .. | 500 | 6,626 | 24,410 | 6,194 | 45,543 | 60,276 |
| Morocco— | | | | | | |
| Cement products .. | 10,561 | 14,849 | 5,463 | 6,381 | 7,808 | 6,328 |
| Mozambique— | | | | | | |
| Unmanufactured .. | — | 143 | 106 | 204 | 118 | 774 |
| South Africa— | | | | | | |
| Unmanufactured (c) .. | 223,350 | 221,121 | 229,827 | 230,321 | 254,279 | 273,907 |
| Cement products .. | (£157,338) | (£272,288) | 5,143 | 9,274 | 7,450 | 8,335 |
| Other manufactures .. | (£105,688) | (£94,663) | (£186,849) | (£266,985) | (£261,123) | (£109,299) |
| United States— | | | | | | |
| Unmanufactured .. | 24,000 | 38,388 | 41,687 | 46,608 | 36,801 | 30,822 |
| Spun, woven and packing .. | 1,357 | 2,255 | 3,195 | 4,469 | 5,236 | 6,179 |
| Brake linings .. | (£1,721,809) | (£1,690,816) | (£1,874,550) | (£2,110,857) | (£2,385,000) | (£2,835,000) |
| Clutch facings .. | (£659,061) | (£604,603) | (£679,149) | (£844,488) | (£965,833) | (£1,235,833) |
| Pipe covering and cement .. | n.a. | 10,327 | 13,171 | 21,406 | 14,774 | 12,254 |
| Other manufactures .. | 11,596 | (£2,192,335) | (£1,811,000) | (£1,580,900) | (£2,163,750) | (£2,363,750) |
| Bolivia— | | | | | | |
| Unmanufactured .. | n.a. | 7 | 4 | 2 | 1 | — |
| Colombia— | | | | | | |
| Cement products .. | 4,358 | 1,977 | 17,316 | 16,700 | 5,526 | n.a. |
| Peru— | | | | | | |
| Manufactured .. | 31 | 4 | — | 15 | n.a. | n.a. |
| Venezuela— | | | | | | |
| Unmanufactured .. | 7 | — | — | — | — | — |

(a) Including brake and clutch linings of material other than asbestos.

(b) Including manufactures of other fibro-cements.

(c) Including, if any, produce of Botswana and Swaziland.

EXPORTS OF ASBESTOS (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|--------|--------|--------|--------|--------|--------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Formosa— | | | | | | |
| Unmanufactured .. | 50 | 86 | 68 | 56 | 44 | 44 |
| Manufactured | 828 | 16 | 185 | 87 | — | 52 |
| Japan— | | | | | | |
| Unmanufactured .. | 53 | 757 | 700 | 326 | 189 | 1,448 |
| Manufactured | 4,134 | 3,332 | 4,656 | 3,877 | 4,588 | 4,577 |
| Cement products .. | 15,942 | 47,980 | 37,696 | 15,254 | 28,756 | 28,617 |
| Lebanon— | | | | | | |
| Cement products .. | 15,021 | 27,123 | 28,576 | 26,984 | 34,144 | 33,803 |
| Thailand— | | | | | | |
| Cement products .. | n.a. | n.a. | 812 | n.a. | n.a. | n.a. |
| Turkey— | | | | | | |
| Unmanufactured .. | — | — | 591 | — | — | — |

IMPORTS OF ASBESTOS

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Unmanufactured— | | | | | | |
| Crude and fibre .. | 160,626 | 157,782 | 178,561 | 160,173 | 163,239 | 160,462 |
| Waste | 22,759 | 18,149 | 10,659 | 6,996 | 12,178 | 16,524 |
| Manufactured | 922 | 709 | 569 | 1,991 | 2,129 | 7,111 |
| Cement products .. | 22,564 | 27,292 | 26,071 | 29,587 | 30,586 | 21,951 |
| Channel Islands— | | | | | | |
| Manufactured | 2,696 | 2,594 | 1,314 | 2,323 | 2,243 | 3,529 |
| Malta— | | | | | | |
| Manufactured | (£13,837) | (£14,367) | (£13,560) | (£22,612) | (£22,220) | (£66,994) |
| Gambia— | | | | | | |
| Cement sheets and pipes | 534 | 594 | 624 | 311 | 13 | 58 |
| Ghana— | | | | | | |
| Cement sheets, pipes etc. | 20,144 | 18,042 | 18,222 | 10,594 | 70,703 | 58,630 |
| Kenya— | | | | | | |
| Manufactured | 902 | 976 | 1,906 | 4,180 | 3,994 | 2,136 |
| Mauritius— | | | | | | |
| Manufactured | 877 | 1,244 | 2,252 | 1,164 | 2,552 | 1,537 |
| Nigeria— | | | | | | |
| Cement sheets and pipes | 7,558 | 8,478 | 5,885 | 1,230 | 73 | 62 |
| Unmanufactured | 1,643 | 3,744 | 4,521 | 9,708 | 15,036 | 20,036 |
| Sierra Leone— | | | | | | |
| Cement sheets and pipes | 288 | — | 1,920 | 1,809 | 744 | <i>n.a.</i> |
| Tanzania— | | | | | | |
| Manufactured | 918 | 535 | 2,651 | 1,420 | 4,717 | 2,076 |
| Uganda— | | | | | | |
| Unmanufactured | 736 | 860 | 1,416 | 764 | 1,276 | 1,926 |
| Manufactured | 619 | 400 | 819 | 841 | 1,392 | 1,598 |
| Zambia— | | | | | | |
| Unmanufactured | 1,175 | 913 | 1,106 | 759 | 125 | — |
| Cement products | (£442,007) | (£411,686) | (£403,620) | 3,639 | 5,966 | 4,679 |
| Canada— | | | | | | |
| Unmanufactured | 8,230 | 6,142 | 5,857 | 6,512 | 5,296 | 6,651 |
| Packing | 325 | 342 | 425 | 628 | 594 | 547 |
| Other manufactures .. | (£1,811,982) | (£1,922,075) | (£1,996,352) | (£2,829,464) | (£3,445,618) | (£4,124,000) |
| Barbados— | | | | | | |
| Manufactured | 31 | 30 | 48 | 17 | 139 | 120 |
| Bermuda— | | | | | | |
| Sheets, etc. | (£10,101) | (£13,780) | (£12,424) | (£13,752) | (£19,434) | (£21,122) |
| Grenada— | | | | | | |
| Manufactured | 2 | 4 | 1 | 7 | 4 | <i>n.a.</i> |
| Jamaica— | | | | | | |
| Unmanufactured | 171 | 349 | 182 | 539 | 838 | 870 |
| Manufactured | 546 | 369 | 159 | 285 | 272 | 647 |
| Cement products | 446 | 2,858 | 1,952 | 363 | 91 | 356 |
| St. Vincent— | | | | | | |
| Cement products | <i>n.a.</i> | 3 | 7 | 11 | 9 | <i>n.a.</i> |
| Trinidad and Tobago— | | | | | | |
| Cement products | 159 | 498 | 706 | 99 | 291 | 305 |
| Other manufactures .. | 507 | 821 | 1,880 | 638 | 103 | 132 |
| Guyana— | | | | | | |
| Cement products | 900 | 1,990 | 453 | r 915 | 1,036 | 2,176 |
| Other manufactures .. | 177 | | | r 314 | 556 | 112 |
| Brunei— | | | | | | |
| Cement products | 1,434 | 1,203 | 1,227 | 865 | 3,009 | 3,027 |
| Ceylon— | | | | | | |
| Unmanufactured | 463 | 693 | — | 1,766 | 830 | 6,735 |
| Cement sheets, etc. .. | 158 | 9 | 6 | 91 | 28 | 338 |
| Other manufactures .. | 777 | 4,385 | 4,352 | 1,820 | 4,134 | 1,295 |
| Cyprus— | | | | | | |
| Sheets and pipes | 2,689 | 4,080 | 4,336 | 6,458 | 4,525 | 12,077 |
| Other manufactures .. | (£33,539) | (£88,458) | (£47,711) | (£50,049) | (£36,957) | (£47,537) |

IMPORTS OF ASBESTOS (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---------------------------------------|------------|------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Hong Kong— | | | | | | |
| Unmanufactured .. | (e) 1 | 235 | 362 | 144 | 266 | 215 |
| Manufactured .. | (£103,632) | (£144,149) | (£100,887) | (£130,598) | (£166,893) | (£209,600) |
| Cement products .. | 11,115 | 8,057 | 5,903 | 5,186 | 9,536 | 9,227 |
| India— | | | | | | |
| Unmanufactured .. | 35,222 | 37,219 | 29,482 | 29,315 | 26,251 | 33,078 |
| Manufactured (b) .. | 1,768 | 2,669 | 768 | 547 | 353 | 383 |
| Cement products (b) .. | 180 | 162 | 83 | 132 | 115 | 60 |
| Malaysia (West)— | | | | | | |
| Unmanufactured .. | n.a. | 7,787 | 8,837 | 10,922 | 10,190 | 8,647 |
| Cement products .. | n.a. | 14,619 | 11,836 | 4,441 | 1,063 | 1,335 |
| Other manufactures .. | n.a. | 351 | 678 | 1,456 | 330 | 347 |
| Pakistan— | | | | | | |
| Cement sheets .. | 134 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Sabah— | | | | | | |
| Manufactured .. | 10 | 22 | 18 | 13 | 29 | 11 |
| Cement products .. | 3,587 | 3,778 | 2,976 | 3,328 | 4,066 | 4,567 |
| Sarawak— | | | | | | |
| Cement products .. | 3,786 | 6,420 | 5,159 | 4,425 | 6,058 | n.a. |
| Other manufactures .. | 14 | 12 | 13 | 15 | 41 | n.a. |
| Singapore— | | | | | | |
| Unmanufactured .. | 8,216 | 4,778 | 3,617 | 4,367 | 3,020 | 1,147 |
| Cement products .. | 10,689 | 6,509 | 3,963 | 3,821 | 4,062 | 7,765 |
| Other manufactures .. | 448 | 747 | 1,012 | 1,631 | 1,244 | 1,560 |
| Australia— | | | | | | |
| Unmanufactured .. | 38,299 | 46,179 | 49,243 | 46,950 | 59,590 | 52,739 |
| Manufactured (a) .. | (£594,958) | (£665,094) | f(£681,000) | f(£873,200) | f(£910,274) | f(£983,000) |
| New Zealand (a)— | | | | | | |
| Unmanufactured .. | 5,468 | 7,566 | 7,618 | 7,950 | 5,851 | 5,804 |
| Manufactured £ | (281,867) | (312,511) | (369,774) | (371,704) | (482,911) | (303,592) |
| Cement products £ | | | | | | |
| Irish Republic— | | | | | | |
| Unmanufactured .. | 3,218 | 5,009 | 5,938 | 4,806 | 3,955 | 6,392 |
| Manufactured .. | 1,419 | 1,566 | 1,297 | 1,172 | 1,397 | 3,026 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Unmanufactured .. | 21,091 | 30,611 | 33,629 | 17,199 | 31,245 | 33,810 |
| Manufactured (c) .. | 504 | 579 | 830 | 713 | 742 | 1,303 |
| Cement products (d) .. | 7,537 | 8,715 | 12,899 | 9,902 | 6,854 | 5,451 |
| Belgium-Luxemburg E.U.— | | | | | | |
| Unmanufactured .. | 55,026 | 60,062 | 51,685 | 54,893 | 60,150 | 63,700 |
| Manufactured (c) .. | 2,884 | 2,720 | 2,680 | 2,656 | 2,332 | 3,163 |
| Cement products (d) .. | 6,919 | 2,524 | 2,035 | 2,692 | 3,712 | 5,651 |
| Czechoslovakia— | | | | | | |
| Unmanufactured .. | 24,130 | 27,126 | 32,475 | r 32,538 | 36,323 | 28,767 |
| Denmark— | | | | | | |
| Unmanufactured .. | 19,126 | 26,169 | 20,440 | 23,122 | 24,727 | 24,535 |
| Manufactured (c) .. | 1,702 | 2,431 | 1,931 | 1,540 | 1,916 | 2,664 |
| Cement products (d) .. | 7,338 | 12,945 | 2,233 | 8,617 | 1,571 | 8,100 |
| Finland— | | | | | | |
| Unmanufactured .. | 6,648 | 7,360 | 6,292 | 6,329 | 4,468 | 4,652 |
| Manufactured .. | 795 | 1,825 | 749 | 1,362 | 1,499 | 2,255 |
| France— | | | | | | |
| Unmanufactured .. | 107,811 | 104,981 | 122,476 | 124,741 | 126,583 | 133,003 |
| Manufactured (c) .. | 2,413 | 3,355 | 3,138 | 2,967 | 3,213 | 5,538 |
| Cement products (d) .. | 38,692 | 31,101 | 57,054 | 120,298 | 130,965 | 113,406 |

(a) Years ended June 30 of that stated.

(b) Years ended March 31 following that stated.

(c) Including brake and clutch linings of material other than asbestos.

(d) Including manufactures of other fibro-cements.

(e) Excess of re-exports.

(f) Owing to reclassification not strictly comparable with earlier years.

IMPORTS OF ASBESTOS (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|---------|---------|---------|---------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Germany (Federal)— | | | | | | |
| Unmanufactured .. | 140,556 | 170,733 | 166,738 | 123,812 | 185,140 | 162,127 |
| Manufactured (a) .. | 7,885 | 8,657 | 8,181 | 6,572 | 10,029 | 12,788 |
| Cement products (b) .. | 92,976 | 109,043 | 104,517 | 88,551 | 105,325 | 106,426 |
| Germany (East) | | | | | | |
| Unmanufactured .. | 23,465 | 28,207 | 26,415 | 37,734 | 36,491 | 45,657 |
| Greece— | | | | | | |
| Unmanufactured .. | 4,879 | 4,397 | 3,849 | 5,427 | 8,331 | 11,430 |
| Manufactured (a) (c) .. | 3,028 | 4,561 | 3,806 | 5,009 | 6,613 | 3,104 |
| Hungary— | | | | | | |
| Unmanufactured .. | 14,744 | 10,533 | 14,449 | 13,891 | <i>n.a.</i> | <i>n.a.</i> |
| Iceland— | | | | | | |
| Unmanufactured .. | 5 | 7 | 15 | 7 | 11 | 7 |
| Manufactured .. | 189 | 178 | 148 | 205 | 176 | 283 |
| Italy— | | | | | | |
| Unmanufactured .. | 44,505 | 38,029 | 42,931 | 44,712 | 50,463 | 57,257 |
| Manufactured (a) .. | 3,567 | 3,235 | 4,029 | 4,288 | 2,312 | 5,933 |
| Cement products (b) .. | 14,554 | 12,494 | 13,878 | 11,074 | 9,945 | 19,810 |
| Netherlands— | | | | | | |
| Unmanufactured .. | 22,908 | 18,632 | 16,759 | 17,802 | 22,939 | 20,327 |
| Manufactured (a) .. | 4,579 | 3,841 | 5,251 | 4,922 | 6,407 | 5,475 |
| Cement products (b) .. | 110,011 | 112,534 | 101,914 | 92,732 | 97,056 | 115,427 |
| Norway— | | | | | | |
| Unmanufactured .. | 5,786 | 5,018 | 5,492 | 5,593 | 4,650 | 6,835 |
| Manufactured (a) .. | 1,828 | 1,813 | 1,887 | 2,167 | 2,029 | 2,215 |
| Cement products (b) .. | 13,346 | 12,855 | 13,778 | 14,862 | 15,330 | 19,686 |
| Poland— | | | | | | |
| Unmanufactured .. | 21,359 | 32,000 | 41,691 | 41,959 | 41,574 | 56,153 |
| Portugal— | | | | | | |
| Unmanufactured .. | 2,472 | 3,816 | 4,032 | 4,233 | 4,201 | 3,418 |
| Manufactured (a) .. | 363 | 434 | 516 | 568 | 586 | 856 |
| Spain— | | | | | | |
| Unmanufactured .. | 50,696 | 48,433 | 74,328 | 46,750 | 61,779 | 84,096 |
| Manufactured (a) (b) .. | 2,525 | 2,627 | 2,813 | 2,426 | 2,148 | 1,964 |
| Sweden— | | | | | | |
| Unmanufactured .. | 19,446 | 20,828 | 19,288 | 13,320 | 18,435 | 15,848 |
| Manufactured (a) .. | 3,464 | 4,265 | 4,257 | 4,067 | 3,995 | 4,947 |
| Cement products .. | 13,513 | 12,527 | 7,546 | 10,399 | 11,675 | 10,141 |
| Switzerland— | | | | | | |
| Unmanufactured .. | 12,330 | 14,436 | 15,523 | 12,511 | 14,762 | 15,465 |
| Manufactured (a) .. | 3,147 | 3,026 | 2,399 | 2,379 | 2,629 | 2,985 |
| Cement products (b) .. | 5,690 | 2,230 | 2,030 | 1,932 | 1,168 | 1,324 |
| Yugoslavia— | | | | | | |
| Unmanufactured .. | 15,329 | 12,750 | 13,165 | 18,349 | 16,855 | 26,044 |
| Manufactured .. | 595 | 405 | 617 | 633 | 1,730 | 1,130 |
| Cement products .. | 639 | 21 | 6,883 | 12,196 | 2,617 | 7,804 |
| Angola— | | | | | | |
| Unmanufactured .. | 992 | 1,342 | 1,330 | 1,425 | 549 | 398 |
| Manufactured (a) .. | 166 | 281 | 284 | 154 | 130 | 170 |
| Egypt— | | | | | | |
| Unmanufactured .. | 3,360 | 4,533 | 6,709 | 5,440 | 3,896 | <i>n.a.</i> |
| Manufactured .. | 518 | 407 | 560 | 276 | 222 | 387 |
| Libya— | | | | | | |
| Manufactured .. | 22 | 55 | 72 | 53 | 65 | <i>n.a.</i> |
| Malagasy Republic— | | | | | | |
| Manufactured (a) .. | 85 | 70 | 55 | 89 | 91 | <i>n.a.</i> |
| Cement products .. | 716 | 490 | 637 | 670 | 1,254 | <i>n.a.</i> |
| Morocco— | | | | | | |
| Unmanufactured .. | 1,964 | 2,640 | 2,455 | 2,104 | 2,188 | 2,505 |
| Manufactured (a) .. | 129 | 147 | 150 | 187 | 52 | 223 |
| Cement products .. | 80 | 1 | 1 | 2 | 1 | — |

(a) Including brake and clutch linings of material other than asbestos.

(b) Including manufactures of other fibro-cements.

(c) Including cement products.

IMPORTS OF ASBESTOS (cont.)

Long ton

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Mozambique— | | | | | | |
| Unmanufactured .. | 450 | 863 | 992 | 1,053 | <i>n.a.</i> | <i>n.a.</i> |
| Manufactured .. | 49 | 52 | 58 | 71 | <i>n.a.</i> | <i>n.a.</i> |
| South Africa— | | | | | | |
| Unmanufactured .. | 4,489 | 8,467 | 11,128 | 13,772 | 12,920 | 15,154 |
| Packing .. | (<i>d</i>) | (<i>d</i>) | (<i>d</i>) | (<i>d</i>) | (<i>d</i>) | (<i>d</i>) |
| Cement products | (£41,476) | (£272,288) | 845 | 595 | 326 | 531 |
| Other manufactures .. | (£940,489) | (£1,038,571) | (£832,609) | (£1,006,158) | (£1,014,549) | (£659,620) |
| Sudan— | | | | | | |
| Manufactured .. | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 3 | 1,195 | 2,599 |
| Tunisia— | | | | | | |
| Unmanufactured .. | 279 | 400 | 2,934 | 2,131 | 1,068 | 1,959 |
| Manufactured (a) .. | 179 | 100 | 146 | 96 | 93 | 63 |
| Cement products (b) .. | 12,917 | 5,838 | 3,475 | 628 | 1,395 | 2,506 |
| Costa Rica— | | | | | | |
| Manufactured .. | 77 | 75 | 125 | 163 | 74 | 102 |
| Cuba— | | | | | | |
| Manufactured .. | 4,724 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Cement .. | 5,970 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Guatemala— | | | | | | |
| Unmanufactured .. | 453 | 983 | 545 | 541 | 361 | 897 |
| Manufactured (c) .. | 103 | 140 | 297 | 157 | 189 | 376 |
| Honduras— | | | | | | |
| Manufactured .. | 82 | 48 | 61 | 64 | 117 | <i>n.a.</i> |
| Mexico— | | | | | | |
| Unmanufactured .. | 23,715 | 21,140 | 25,123 | 30,085 | 33,274 | <i>n.a.</i> |
| Manufactured .. | 444 | 869 | 646 | 318 | 245 | <i>n.a.</i> |
| Netherlands Antilles— | | | | | | |
| Manufactured .. | 266 | 166 | 145 | 217 | 247 | <i>n.a.</i> |
| Cement sheets .. | 2,104 | 2,270 | 2,741 | 2,084 | 2,748 | <i>n.a.</i> |
| Nicaragua— | | | | | | |
| Manufactured .. | 55 | 146 | 69 | 56 | 64 | 75 |
| Panama Republic— | | | | | | |
| Cement products .. | 522 | 6 | 5 | 5 | 1,003 | <i>n.a.</i> |
| Salvador— | | | | | | |
| Unmanufactured .. | 813 | 781 | 1,222 | 679 | 1,003 | 742 |
| Manufactured .. | 84 | 122 | 152 | 6 | 33 | 29 |
| United States— | | | | | | |
| Unmanufactured— | | | | | | |
| Crude .. | } 660,144 | 49,500 | r 78,806 | 33,600 | 34,124 | } 620,144 |
| Mill fibre .. | | 15,508 | 15,783 | 14,270 | 15,255 | |
| Other .. | | 577,456 | 576,422 | 528,123 | 609,469 | |
| Manufactured .. | 43,357 | 42,800 | r 32,756 | r 26,630 | 40,443 | 44,735 |
| Argentina— | | | | | | |
| Unmanufactured and | | | | | | |
| manufactured .. | 12,866 | 15,396 | 13,655 | 14,251 | 16,721 | <i>n.a.</i> |
| Brazil— | | | | | | |
| Unmanufactured .. | 13,123 | 14,912 | 18,648 | 17,227 | 27,150 | <i>n.a.</i> |
| Manufactured .. | 611 | 240 | 659 | 383 | 726 | <i>n.a.</i> |
| Chile— | | | | | | |
| Manufactured .. | 7,225 | 6,081 | <i>n.a.</i> | 352 | <i>n.a.</i> | <i>n.a.</i> |
| Colombia— | | | | | | |
| Unmanufactured .. | 7,886 | 8,818 | 16,033 | 13,535 | 13,870 | <i>n.a.</i> |
| Manufactured .. | 1,212 | 407 | 708 | 383 | 355 | <i>n.a.</i> |
| Cement products .. | 383 | 1 | 1 | — | 5 | <i>n.a.</i> |
| Ecuador— | | | | | | |
| Unmanufactured .. | 755 | 939 | 369 | 613 | <i>n.a.</i> | <i>n.a.</i> |
| Manufactured .. | 376 | 684 | 326 | 237 | <i>n.a.</i> | <i>n.a.</i> |

(a) Including brake and clutch linings of material other than asbestos.

(b) Including manufactures of other fibro-cements.

(c) Including cement products.

(d) Included with "other manufactures".

IMPORTS OF ASBESTOS (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|---------|---------|---------|---------|---------|---------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Peru— | | | | | | |
| Unmanufactured .. | 2,861 | 4,464 | 3,477 | 4,098 | 3,875 | n.a. |
| Manufactured .. | 588 | 757 | 355 | 405 | 358 | n.a. |
| Surinam— | | | | | | |
| Manufactured .. | 1,135 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Uruguay .. | n.a. | 1,276 | 1,360 | 1,077 | 1,145 | 766 |
| Venezuela— | | | | | | |
| Unmanufactured .. | 4,643 | 4,248 | 5,233 | 4,932 | 5,575 | 4,599 |
| Manufactured .. | 829 | 488 | 430 | 388 | 388 | 974 |
| Cement products .. | 5,294 | 2,442 | 9,246 | 18,379 | 4,553 | 1,960 |
| Burma— | | | | | | |
| Unmanufactured .. | 1,166 | 1,871 | 452 | 1 | 1,418 | n.a. |
| Cement products .. | 6 | 18 | — | 4 | — | n.a. |
| Formosa— | | | | | | |
| Unmanufactured .. | 1,032 | 1,604 | 2,329 | 2,277 | 3,298 | 5,855 |
| Manufactured .. | 385 | 468 | 428 | 392 | 400 | 539 |
| Iran (a)— | | | | | | |
| Unmanufactured .. | 2,258 | 3,289 | 4,611 | 5,713 | 5,821 | n.a. |
| Manufactured .. | 136 | 147 | 348 | 431 | 490 | n.a. |
| Cement products .. | 895 | 1,686 | 1,022 | 394 | 623 | n.a. |
| Iraq— | | | | | | |
| Unmanufactured .. | 2,740 | n.a. | 503 | 595 | 1,165 | 2,728 |
| Manufactured .. | 170 | n.a. | 168 | 179 | 249 | 305 |
| Cement products .. | 99 | n.a. | 12 | 226 | 336 | 660 |
| Israel— | | | | | | |
| Unmanufactured .. | 7,438 | 8,325 | 5,759 | 4,202 | 8,220 | 8,450 |
| Japan— | | | | | | |
| Unmanufactured .. | 141,695 | 131,413 | 233,586 | 185,760 | 196,266 | 233,427 |
| Manufactured .. | 1,099 | 958 | 1,294 | 1,141 | 786 | 1,220 |
| Cement products .. | 151 | 338 | 972 | 228 | 240 | 365 |
| Jordan— | | | | | | |
| Manufactured .. | n.a. | n.a. | 552 | 929 | 2,264 | 4,913 |
| Korea (South)— | | | | | | |
| Unmanufactured .. | 3,055 | 6,284 | 11,880 | 21,685 | 24,816 | 27,196 |
| Lebanon— | | | | | | |
| Unmanufactured .. | 3,934 | 3,843 | 4,445 | 4,944 | 6,542 | 5,928 |
| Manufactured .. | 89 | 96 | 181 | 156 | 197 | 345 |
| Cement products .. | 221 | 703 | 373 | 78 | 21 | 200 |
| Philippine Republic— | | | | | | |
| Unmanufactured .. | 1,864 | 1,268 | n.a. | 1,808 | n.a. | n.a. |
| Manufactured .. | 122 | 111 | n.a. | 118 | n.a. | n.a. |
| Cement products .. | 71 | 115 | n.a. | 16 | n.a. | n.a. |
| Syria— | | | | | | |
| Cement sheets .. | 4,969 | 4,060 | 4,862 | 4,111 | 2,236 | 2,545 |
| Other manufactures .. | 69 | 28 | 148 | 100 | 286 | 316 |
| Thailand— | | | | | | |
| Unmanufactured .. | 7,742 | 8,226 | 16,333 | 20,132 | 18,578 | 23,402 |
| Manufactured .. | 554 | 632 | 862 | 859 | 804 | 779 |
| Cement products .. | 4,871 | 5,001 | 8,077 | 2,752 | 2,671 | 2,851 |
| Turkey— | | | | | | |
| Unmanufactured .. | 2,416 | 2,612 | 6,567 | 5,791 | 8,180 | 9,913 |
| Manufactured .. | 1,027 | 393 | 501 | 648 | 257 | 296 |
| Cement products .. | 7,980 | 35 | 95 | 14 | 5 | 41 |

(a) Years ended March 20 following that stated.

BARIUM MINERALS

PRODUCTION OF BARIUM MINERALS*

Long tons

| Producing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|------------------|---------------------|---------------------|---------------------|---------------------|----------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Barytes, unground .. | 7,000 | — | 6,000 | 4,000 | 1,000 | 1,000 |
| do. ground .. | 28,000 | 30,000 | 26,000 | 26,000 | 25,000 | 16,000 |
| Witherite .. | 7,000 | 7,000 | 5,000 | 6,000 | 5,000 | 2,000 |
| Kenya .. | — | 35 | 96 | 209 | 345 | 428 |
| Rhodesia .. | 1,394 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Swaziland .. | 15 | 483 | 1,027 | 556 | 876 | 561 |
| Canada .. | 151,026 | 181,272 | 197,657 | 153,812 | 123,267 | 126,243 |
| India .. | 46,217 | 47,520 | 51,777 | <i>r</i> 52,179 | 50,900 | 58,364 |
| Pakistan .. | 11,817 | 8,696 | 7,700 | <i>r</i> 6,218 | 10,193 | 10,200 |
| Australia .. | 12,302 | 11,976 | 13,726 | 15,666 | 39,197 | 31,674 |
| Irish Republic .. | 40,386 | 92,226 | 122,000 | 69,610 | 133,080 | 157,970 |
| OTHER COUNTRIES | | | | | | |
| Austria .. | 1,241 | 2,297 | 2,756 | 2,389 | 1,437 | 1,500 |
| France .. | 82,497 | 102,440 | 97,556 | 100,386 | 89,562 | 93,500 |
| Germany (Federal) .. | 460,081 | 461,941 | 444,124 | 403,187 | 424,637 | 435,529 |
| Greece .. | 116,714 | 129,286 | 146,900 | <i>r</i> 146,000 | 185,030 | (<i>c</i>) 187,000 |
| Italy .. | 103,091 | 140,758 | 169,988 | 151,633 | 200,758 | 238,087 |
| Poland (<i>c</i>) .. | 45,000 | 45,000 | 46,000 | 46,000 | 46,000 | 49,000 |
| Portugal .. | 343 | 1,070 | 1,000 | 311 | 315 | 106 |
| Spain .. | 58,199 | 54,589 | <i>r</i> 79,053 | 49,337 | 63,984 | 67,502 |
| U.S.S.R. (<i>c</i>) .. | 200,000 | 210,000 | 220,000 | 260,000 | 260,000 | 276,000 |
| Yugoslavia .. | 100,064 | 95,576 | 78,923 | 83,144 | 69,323 | (<i>c</i>) 70,000 |
| Algeria .. | 29,165 | 42,091 | (<i>a</i>) 35,000 | 30,904 | 44,275 | 50,573 |
| Egypt .. | 4,479 | 15,111 | 6,692 | 1,262 | 367 | — |
| Morocco .. | 88,425 | 102,239 | 104,577 | 89,088 | 76,926 | 85,567 |
| South Africa .. | 2,531 | 1,319 | 6,085 | 1,470 | 511 | 3,457 |
| Mexico .. | 328,768 | 362,524 | 286,979 | 219,754 | 242,645 | 174,127 |
| United States .. | 729,202 | 755,050 | 899,076 | 842,930 | 827,437 | 961,793 |
| Argentina .. | 13,488 | 16,744 | 17,703 | 21,704 | 15,918 | (<i>c</i>) 16,000 |
| Brazil .. | 33,007 | 63,344 | 64,262 | 84,647 | 42,385 | 33,364 |
| Chile .. | 1,074 | 2,806 | 2,006 | 4,430 | 3,920 | (<i>c</i>) 3,500 |
| Colombia .. | 10,000 | 8,700 | (<i>c</i>) 8,800 | 5,900 | 7,000 | 12,242 |
| Peru .. | 123,439 | 109,022 | <i>r</i> 170,732 | <i>r</i> 183,653 | <i>n.a.</i> | 65,500 |
| Burma (<i>c</i>) .. | — | 3,000 | <i>n.a.</i> | 9,300 | 9,400 | 8,100 |
| China (<i>c</i>) .. | 100,000 | 100,000 | 120,000 | 100,000 | 118,000 | 140,000 |
| Iran (<i>b</i>) .. | 42,321 | (<i>c</i>) 61,000 | (<i>c</i>) 83,000 | (<i>c</i>) 89,000 | (<i>c</i>) 93,000 | (<i>c</i>) 69,000 |
| Japan .. | 39,116 | 41,612 | 39,638 | 36,979 | 54,534 | 61,304 |
| Korea (South) .. | 2,700 | 1,267 | 19 | — | 5 | <i>n.a.</i> |
| Korea (North) (<i>c</i>) .. | 65,000 | 80,000 | 80,000 | 100,000 | 100,000 | 100,000 |
| Philippine Republic .. | 1,453 | — | 2 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Turkey .. | <i>r</i> 5,290 | <i>r</i> 10,973 | <i>r</i> 16,307 | <i>r</i> 31,713 | 19,645 | 29,263 |
| TOTAL† .. | 3,100,000 | 3,300,000 | 3,500,000 | 3,300,000 | 3,500,000 | 3,600,000 |

*Barytes unless otherwise stated.

†Excluding barytes known to have been produced in Bulgaria, Czechoslovakia, Germany (East) and Norway.

(a) Estimated.

(b) Years ended March 20 of year following that stated.

(c) United States Bureau of Mines' estimate.

EXPORTS OF BARIUM MINERALS, ETC.*

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Canada— | | | | | | |
| Barytes | 139,756 | 165,207 | 177,727 | 130,449 | 104,010 | 96,973 |
| India— | | | | | | |
| Unground barytes .. | 7,834 | 4,791 | 2,718 | 6,503 | 2,819 | 13,542 |
| Pakistan (a)— | | | | | | |
| Barytes | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 2,811 | 3,920 | 2,712 |
| Australia— | | | | | | |
| Ground barytes .. | 6,209 | 2,183 | 4,797 | 4,174 | 19,564 | 23,995 |
| Irish Republic— | | | | | | |
| Unground barytes .. | 31,939 | 95,686 | 127,827 | 73,584 | 140,006 | 153,964 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Barytes | 6 | — | 1 | 60 | — | 69 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Barytes and witherite .. | } 191 | } 209 | } 133 | } 45 | } 62 | } 91 |
| Barytes, ground | | | | | | |
| Sulphate | | | | | | |
| Carbonate | | | | | | |
| Chloride | 30 | 4 | — | — | — | — |
| Chloride | — | 25 | — | — | 27 | 1 |
| France— | | | | | | |
| Barytes | 15,907 | 13,774 | 12,695 | 17,848 | 14,821 | 14,165 |
| Witherite | 3 | 49 | 3 | 21 | 3 | 23 |
| Chloride | 6,922 | 8,206 | 10,079 | 11,449 | 10,006 | 14,896 |
| Carbonate | 2,723 | 3,154 | 1,200 | 1,566 | 6,704 | 3,338 |
| Sulphate | 1,023 | 927 | 1,899 | 2,619 | 2,778 | 5,089 |
| Sulphide | 5 | — | — | — | 1 | 1 |
| Germany (Federal)— | | | | | | |
| Barytes and witherite .. | 121,560 | 111,541 | 112,746 | 107,209 | 118,712 | 115,551 |
| Carbonate | 15,097 | 26,634 | 29,132 | 27,570 | 26,700 | 33,651 |
| Chloride | 4,401 | 3,447 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sulphate | 19,945 | 18,559 | 18,839 | 21,726 | 23,336 | 23,981 |
| Greece— | | | | | | |
| Barytes | 65,854 | 49,816 | 47,552 | 61,855 | 64,816 | 73,194 |
| Italy— | | | | | | |
| Barytes | 11,009 | 32,223 | 17,323 | 40,256 | 30,794 | 51,737 |
| Witherite | — | 64 | 73 | — | 198 | 25 |
| Carbonate | 694 | 2,209 | 2,015 | 1,096 | 6,522 | <i>n.a.</i> |
| Chloride | 885 | 1,462 | 4,739 | 6,065 | 5,351 | <i>n.a.</i> |
| Sulphate | 104 | 93 | 290 | 119 | 314 | 563 |
| Netherlands— | | | | | | |
| Barytes | 278 | 584 | 1,161 | 1,696 | 444 | 1,831 |
| Carbonate | 622 | 535 | 706 | 109 | 168 | 218 |
| Chloride | 154 | 92 | 184 | 64 | 49 | 49 |
| Sulphate | 2,559 | 1,530 | 2,605 | 2,633 | 3,002 | 2,731 |
| Sulphide | 2,919 | 79 | — | — | — | — |
| Poland— | | | | | | |
| Barytes | 814 | 532 | 189 | — | — | — |
| Portugal— | | | | | | |
| Barytes | 107 | 20 | 979 | 6 | 10 | — |
| Spain— | | | | | | |
| Barytes | 55,779 | 49,147 | 48,265 | 22,787 | 49,358 | 40,966 |
| Carbonate | 214 | 380 | 280 | 177 | 153 | 123 |
| Yugoslavia— | | | | | | |
| Unground barytes .. | 54,601 | 45,450 | 31,164 | 29,771 | 35,354 | 39,530 |
| Ground barytes .. | 17,124 | 16,175 | 15,963 | 14,547 | 15,917 | 12,560 |

*For Lithopone, see "Zinc".

(a) Years ended June 30th of that stated.

EXPORTS OF BARIUM MINERALS, ETC. (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--------------------------------------|-------------|---------|---------|---------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Algeria— | | | | | | |
| Barytes | 8,267 | 6,008 | 9,350 | 28,739 | <i>n.a.</i> | <i>n.a.</i> |
| Morocco— | | | | | | |
| Barytes | 71,695 | 106,234 | 96,750 | 87,708 | 80,298 | 85,559 |
| South Africa— | | | | | | |
| Barytes | 132 | 4 | — | — | — | 4 |
| Mexico— | | | | | | |
| Barytes | 174,259 | 216,067 | 188,535 | 117,280 | 97,790 | <i>n.a.</i> |
| Argentina— | | | | | | |
| Barytes | 54 | 59 | 229 | 10 | 1,243 | 98 |
| Brazil— | | | | | | |
| Barytes | 57,958 | 21,738 | 47,998 | 48,293 | 12,098 | <i>n.a.</i> |
| Peru— | | | | | | |
| Barytes | 124,968 | 106,246 | 23,276 | 66,374 | 85,007 | <i>n.a.</i> |
| Japan— | | | | | | |
| Barytes | <i>n.a.</i> | 49 | 1,198 | 1,636 | 2,897 | 3,447 |
| Chloride | 135 | 285 | 1,652 | 1,809 | 1,787 | 355 |
| Sulphate | 77 | 2,050 | 77 | 291 | 405 | 516 |
| Korea (South)— | | | | | | |
| Barytes | 2,560 | 1,096 | — | — | <i>n.a.</i> | <i>n.a.</i> |
| Turkey— | | | | | | |
| Barytes | — | 3 | 1,162 | 270 | 16,419 | 25,074 |

IMPORTS OF BARIUM MINERALS, ETC.*

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Unground barytes | 37,787 | 54,481 | 47,100 | 30,647 | 17,874 | 30,762 |
| Ground barytes | 8,817 | 12,598 | 9,790 | 20,208 | 14,910 | 24,839 |
| Chloride (c) | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 2,907 | 3,138 |
| Sulphate (c) | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 6,537 | 5,688 |
| Canada— | | | | | | |
| Barytes | 2,862 | 3,291 | 3,719 | 5,289 | 7,054 | 5,574 |
| Carbonate | 3,876 | 5,723 | 3,235 | 3,528 | 3,121 | 3,575 |
| Trinidad and Tobago— | | | | | | |
| Barytes | 51,711 | 27,296 | 50,358 | 44,106 | 14,646 | <i>n.a.</i> |
| India (a)— | | | | | | |
| Barytes | 4 | 11 | — | 9 | — | — |
| Carbonate | 611 | 333 | 9 | 11 | 5 | 12 |
| Chloride | 402 | 627 | 1 | 23 | — | — |
| Sulphate | 110 | 252 | 135 | 198 | 125 | 10 |
| Australia (b)— | | | | | | |
| Witherite | <i>n.a.</i> | <i>n.a.</i> | 79 | 78 | 75 | } 1,571 |
| Barytes ground | — | 636 | 319 | 299 | 869 | |
| Barytes unground | <i>n.a.</i> | 1,571 | 1,108 | 1,169 | 749 | } 1,037 |
| Carbonate | 661 | 547 | 598 | 920 | 946 | |
| Chloride | 286 | 197 | 691 | 1,564 | 1,548 | 1,333 |
| Sulphate incl. blanc fixe | 269 | 331 | 282 | 297 | 610 | 344 |
| New Zealand (b)— | | | | | | |
| Barytes and witherite | 1,229 | 780 | 1,000 | 2,267 | 859 | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Barytes | 8,421 | 8,347 | 5,860 | 7,280 | 5,633 | 8,326 |
| Carbonate | 659 | 731 | 857 | 1,128 | 947 | 976 |
| Chloride | 327 | 365 | 330 | 286 | 360 | 364 |
| Sulphate | 376 | 478 | 404 | 442 | 558 | 435 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Barytes and witherite | } 23,463 | 25,236 | 14,677 | 5,888 | 5,978 | 6,005 |
| Barytes, ground | | | | | | |
| Sulphate | 2,761 | 1,743 | 1,956 | 1,683 | 2,012 | 2,271 |
| Carbonate | 977 | 795 | 898 | 1,022 | 630 | 1,616 |
| Chloride | 2,041 | 2,362 | 1,923 | 1,792 | 1,999 | 2,410 |
| Sulphide | 2,929 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Denmark— | | | | | | |
| Barytes | 654 | 612 | 1,122 | 1,912 | 922 | 1,107 |
| Carbonate | 642 | 629 | 533 | 556 | 476 | 545 |
| Chloride | 186 | 189 | 201 | 228 | <i>n.a.</i> | <i>n.a.</i> |
| Sulphate | 362 | 814 | 1,514 | 210 | 299 | 206 |
| Finland— | | | | | | |
| Barytes | } 627 | 592 | 508 | 636 | 482 | 484 |
| Witherite | | | | | | |
| Chloride | 227 | 353 | 160 | 143 | 302 | <i>n.a.</i> |
| Carbonate | 579 | 806 | 679 | 719 | 1,033 | 1,026 |
| Sulphate | 1,408 | 1,270 | 1,611 | 1,282 | 2,067 | 1,710 |
| France— | | | | | | |
| Barytes | 66,626 | 73,250 | 81,625 | 87,278 | 79,242 | 78,072 |
| Witherite | 1 | 16 | 2 | 9 | 23 | 24 |
| Chloride | 447 | 380 | 2 | 947 | 315 | 5 |
| Carbonate | 111 | 142 | 415 | 823 | 110 | 73 |
| Sulphate | 1,156 | 1,105 | 1,357 | 1,681 | 2,102 | 2,045 |

*For Lithopone, see "Zinc".

(a) Years ended March 31 following that stated.

(b) Years ended June 30 of that stated.

(c) Not recorded as a separate import item prior to 1968.

IMPORTS OF BARIUM MINERALS, ETC. (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|----------|---------|------------------|------------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Germany (Federal)— | | | | | | |
| Barytes and witherite .. | 44,972 | 53,190 | 29,364 | 38,660 | 43,398 | 59,589 |
| Carbonate | 2,234 | 3,815 | 3,648 | 3,081 | 3,254 | 7,050 |
| Chloride | 802 | 1,890 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sulphate | 190 | 128 | 307 | 446 | 2,362 | 2,945 |
| Greece— | | | | | | |
| Sulphate | 292 | 283 | 330 | 367 | 328 | 388 |
| Iceland— | | | | | | |
| Sulphate | 22 | 21 | 43 | 59 | 73 | 131 |
| Italy— | | | | | | |
| Barytes | 27,418 | 18,429 | 40,328 | 6,552 | 11,078 | 5,745 |
| Witherite | 2 | 185 | — | 22 | 42 | — |
| Carbonate | 118 | 1,457 | 79 | 49 | 878 | 730 |
| Chloride | 24 | 12 | 71 | 1 | — | 14 |
| Sulphate | 1,202 | 1,274 | 1,623 | 1,662 | 1,874 | 1,777 |
| Netherlands— | | | | | | |
| Barytes and witherite .. | } 36,485 | 28,702 | 27,853 | 20,819 | 29,600 | 34,024 |
| Barytes, ground | | | | | | |
| Carbonate | | | | | | |
| Chloride | | | | | | |
| Sulphate | 7,970 | 8,402 | 5,852 | 4,161 | 5,811 | 5,974 |
| Chloride | 407 | 396 | 321 | 334 | 337 | 352 |
| Sulphate | 1,036 | 872 | 975 | 953 | 857 | 1,232 |
| Norway— | | | | | | |
| Barytes | 532 | 454 | 1,887 | 1,168 | 16,069 | 16,046 |
| Carbonate | 463 | 485 | 484 | 563 | 539 | 705 |
| Chloride | 243 | 416 | 321 | 308 | <i>n.a.</i> | <i>n.a.</i> |
| Sulphate | 97 | 69 | 76 | 107 | 209 | 139 |
| Poland— | | | | | | |
| Barytes | 5,125 | 6,912 | 9,729 | 26,082 | 12,196 | 16,874 |
| Portugal— | | | | | | |
| Barytes | 181 | 197 | 231 | 293 | 205 | 294 |
| Chloride | 1 | 5 | 6 | 3 | — | 197 |
| Sulphate | 212 | 273 | 176 | 108 | 149 | 164 |
| Spain— | | | | | | |
| Barytes | 96 | 379 | 494 | 341 | 670 | 932 |
| Sulphate | 72 | 133 | 218 | 331 | 795 | 1,288 |
| Sweden— | | | | | | |
| Barytes and witherite .. | 1,644 | 1,848 | 1,457 | 1,660 | 1,265 | 1,547 |
| Carbonate | 2,819 | 2,826 | 3,118 | 3,017 | 3,824 | 3,838 |
| Chloride | 296 | 372 | 280 | 497 | 534 | 383 |
| Sulphate | 2,351 | 2,640 | 2,399 | 2,790 | 2,822 | 3,372 |
| Switzerland— | | | | | | |
| Barytes | 1,989 | 4,683 | 3,325 | 2,214 | 1,797 | 1,741 |
| Sulphate | 1,505 | 1,768 | 1,825 | 1,617 | 1,636 | 2,202 |
| U.S.S.R.— | | | | | | |
| Barytes | 96,100 | 103,500 | 139,500 | 140,839 | 176,960 | 140,400 |
| Malagasy Republic— | | | | | | |
| Barytes and witherite .. | 2 | 64 | — | 5 | 146 | — |
| Morocco— | | | | | | |
| Barytes | 15 | 4 | 1 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| South Africa— | | | | | | |
| Barytes | 2,376 | 3,091 | 3,005 | 2,826 | 3,424 | 4,317 |
| Tunisia— | | | | | | |
| Barytes | 4,281 | 10,009 | 1,172 | 2,845 | 2,135 | 2,543 |
| Mexico— | | | | | | |
| Barytes | 442 | 634 | 445 | 454 | 464 | <i>n.a.</i> |
| Carbonate | 674 | 697 | 877 | 484 | 343 | <i>n.a.</i> |
| Chloride | 500 | 735 | 599 | 371 | 414 | <i>n.a.</i> |
| United States— | | | | | | |
| Unground barytes .. | 535,669 | 635,931 | <i>r</i> 624,111 | <i>r</i> 475,188 | 591,701 | 548,209 |
| Ground barytes .. | 947 | 420 | — | — | — | 2,000 |
| Witherite | 2,171 | 2,317 | <i>r</i> 1,909 | <i>r</i> 1,125 | 1,812 | 408 |

IMPORTS OF BARIUM MINERALS, ETC. (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| United States <i>(cont.)</i> — | | | | | | |
| Carbonate | 929 | 737 | 1,027 | 726 | 586 | 791 |
| Chloride | 1,012 | 794 | 1,104 | 874 | 1,262 | 966 |
| Sulphate | 2,066 | 1,450 | 2,415 | 2,008 | 2,485 | 2,415 |
| Argentina— | | | | | | |
| Barytes | <i>n.a.</i> | <i>n.a.</i> | 62 | — | — | 117 |
| Sulphate | 58 | 378 | 142 | 204 | 202 | 254 |
| Barium compounds .. | 139 | 19 | 6 | 19 | 69 | 13 |
| Brazil— | | | | | | |
| Barytes | 24 | 30 | 45 | 7 | 83 | <i>n.a.</i> |
| Carbonate | 939 | 1,359 | 2,140 | 3,598 | 3,427 | <i>n.a.</i> |
| Chloride | 383 | 983 | 1,051 | 863 | 749 | <i>n.a.</i> |
| Sulphate | 392 | 530 | 340 | 295 | 707 | <i>n.a.</i> |
| Chile— | | | | | | |
| Barytes | <i>n.a.</i> | 2,376 | <i>n.a.</i> | 1,357 | <i>n.a.</i> | <i>n.a.</i> |
| Carbonate | 33 | 79 | <i>n.a.</i> | 31 | <i>n.a.</i> | <i>n.a.</i> |
| Chloride | 5 | — | <i>n.a.</i> | — | <i>n.a.</i> | <i>n.a.</i> |
| Sulphate | 17 | 3 | <i>n.a.</i> | 35 | <i>n.a.</i> | <i>n.a.</i> |
| Colombia— | | | | | | |
| Barytes | — | 1 | — | — | — | <i>n.a.</i> |
| Carbonate | 91 | 135 | 176 | 273 | 334 | <i>n.a.</i> |
| Chloride | 84 | 33 | 54 | 42 | 37 | <i>n.a.</i> |
| Sulphate | 20 | 7 | 42 | 105 | 48 | <i>n.a.</i> |
| Ecuador— | | | | | | |
| Sulphate | 579 | 447 | 760 | 23 | <i>n.a.</i> | <i>n.a.</i> |
| Peru— | | | | | | |
| Barytes and witherite .. | <i>n.a.</i> | 89 | 96 | <i>n.a.</i> | 199 | <i>n.a.</i> |
| Carbonate | 107 | 94 | 96 | 279 | <i>n.a.</i> | <i>n.a.</i> |
| Chloride | 127 | 90 | 36 | 90 | 18 | <i>n.a.</i> |
| Sulphate | 44 | 65 | 35 | 27 | 20 | <i>n.a.</i> |
| Uruguay— | | | | | | |
| Sulphate | <i>n.a.</i> | 56 | 32 | 10 | 3 | 17 |
| Venezuela— | | | | | | |
| Barytes | 17,058 | 17,124 | 12,009 | 8,040 | 14,693 | 12,410 |
| Carbonate | 40 | 55 | 35 | 62 | 54 | 43 |
| Chloride | 218 | 352 | 56 | 263 | 141 | 204 |
| Sulphate | 121 | 104 | 79 | 171 | 208 | 163 |
| Formosa— | | | | | | |
| Carbonate | 136 | 182 | 98 | 178 | 238 | 337 |
| Chloride | 35 | 30 | 64 | 158 | 203 | 47 |
| Iraq— | | | | | | |
| Barytes | <i>n.a.</i> | <i>n.a.</i> | — | 64 | 1,990 | 10 |
| Israel— | | | | | | |
| Barytes | 455 | 425 | 518 | 991 | 750 | 4,042 |
| Japan— | | | | | | |
| Barytes | 11,164 | 14,084 | 38,552 | 33,259 | 6,023 | 29,000 |
| Lebanon— | | | | | | |
| Barytes and witherite .. | 206 | 20 | 7 | 31 | 49 | 20 |
| Turkey— | | | | | | |
| Barytes | 2,416 | 197 | 730 | — | — | 292 |
| Carbonate | 9 | 62 | 123 | 86 | 99 | 168 |
| Chloride | 108 | 162 | 270 | 133 | 178 | 156 |
| Sulphate | 42 | 40 | 94 | — | — | — |

BENTONITE
(see also Fuller's Earth)
PRODUCTION OF BENTONITE

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|-------------|-------------|-----------------|------------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Tanzania | 5 | — | 50 | 200 | — | — |
| Cyprus (a) | 1,528 | 3,190 | 2,658 | 4,539 | 9,069 | 9,036 |
| India | 21,176 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Australia— | | | | | | |
| Bentonite | 158 | 160 | 159 | 95 | 100 | <i>n.a.</i> |
| Bentonitic clay | 841 | 1,027 | 667 | 262 | 203 | <i>n.a.</i> |
| New Zealand | 1,806 | 2,926 | 2,416 | 3,053 | 3,113 | 5,630 |
| OTHER COUNTRIES | | | | | | |
| Austria | 3,072 | 3,973 | 1,660 | 945 | 502 | <i>n.a.</i> |
| Greece | 97,736 | 112,096 | 89,096 | <i>r</i> 122,042 | 134,584 | 196,800 |
| Hungary | 96,830 | 105,000 | 90,000 | 83,000 | 59,000 | 90,958 |
| Italy | 129,665 | 149,965 | 206,427 | 240,723 | 252,529 | 206,681 |
| Spain | 14,239 | 17,597 | 23,593 | 16,167 | 26,652 | 34,405 |
| Mozambique | 903 | 2,680 | 3,805 | 3,853 | 2,614 | 2,578 |
| South Africa | 9,166 | 10,783 | 11,716 | 14,922 | 12,452 | 14,274 |
| United States (c) | 1,544,199 | 1,685,667 | 1,839,836 | 1,823,965 | 2,176,362 | 2,140,000 |
| Argentina | <i>n.a.</i> | 41,871 | 41,959 | 41,788 | 45,915 | <i>n.a.</i> |
| Peru | 654 | 4,941 | <i>r</i> 22,220 | <i>r</i> 2,807 | <i>n.a.</i> | <i>n.a.</i> |
| Turkey | (b) 2,000 | (b) 2,000 | (b) 2,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |

Bentonite is also produced in Canada, France, Germany, Algeria, Morocco, and Japan.

(a) Exports of bentonitic clay.

(c) Sold or used by producers.

(b) Estimated.

EXPORTS OF BENTONITE

Long tons

| Exporting Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|-------------|---------|---------|---------|---------|---------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Tanzania | 5 | — | 50 | 130 | 27 | — |
| Cyprus (a) | 1,528 | 3,190 | 2,658 | 4,539 | 9,069 | 9,036 |
| India | 66 | 587 | 302 | 400 | 958 | 1,693 |
| OTHER COUNTRIES | | | | | | |
| Austria | 3 | 90 | 59 | 53 | 10 | 1 |
| Germany (Federal) .. | 232 | 583 | 1,008 | 11,401 | 17,634 | 29,207 |
| Italy | 22,147 | 20,893 | 28,869 | 26,547 | 30,598 | 15,498 |
| Spain | 5,536 | 3,196 | 1,695 | 3,228 | 2,840 | 5,674 |
| Sweden | 23 | 16 | 35 | 52 | 120 | 270 |
| Yugoslavia | 17,358 | 14,006 | 13,483 | 25,819 | 23,371 | 21,982 |
| Morocco | 8,401 | 6,060 | 110 | 155 | 123 | 734 |
| South Africa | 41 | 1,504 | 17,726 | 1,237 | 2,158 | 1,303 |
| United States | <i>n.a.</i> | 203,157 | 270,354 | 284,512 | 426,182 | 447,702 |
| Argentina | 5,548 | 5,135 | 6,340 | 5,265 | 10,306 | 7,642 |

(a) Bentonitic clay.

IMPORTS OF BENTONITE

Long tons

| Importing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom (b) .. | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 31,444 | 33,219 | 46,592 |
| Canada | 102,184 | 162,645 | 171,617 | 196,305 | 274,732 | 262,475 |
| India | 904 | 57 | 77 | 6 | 11 | 10 |
| Australia (a) | 14,060 | 16,054 | 15,104 | 20,927 | 43,810 | 58,155 |
| OTHER COUNTRIES | | | | | | |
| Austria | 13,604 | 17,814 | 16,523 | 2,766 | 323 | 498 |
| Germany (Federal) .. | 4,550 | 11,374 | 5,931 | 21,547 | 22,377 | 39,520 |
| Italy | 4,642 | 4,775 | 2,615 | 7,415 | 9,798 | 9,817 |
| Poland | 8,668 | 3,648 | 3,785 | 4,166 | 4,804 | 5,323 |
| Portugal | 1,547 | 1,579 | 2,024 | 1,538 | 2,596 | 3,073 |
| Spain | 8,859 | 12,309 | 14,963 | 15,206 | 14,873 | 18,792 |
| Sweden | 5,804 | 4,849 | 5,423 | 4,416 | 8,022 | 5,340 |
| Morocco | 20 | 4 | <i>n.a.</i> | — | 70 | — |
| South Africa | 1,514 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| United States | 160 | 389 | 131 | 110 | 130 | 68 |
| Brazil | 8,069 | 4,476 | 8,482 | 5,410 | 7,808 | <i>n.a.</i> |
| Chile | 2,234 | 1,817 | <i>n.a.</i> | 3,108 | <i>n.a.</i> | <i>n.a.</i> |
| Colombia | 2,194 | 1,806 | 3,034 | 1,383 | <i>n.a.</i> | <i>n.a.</i> |
| Ecuador | 352 | 417 | 459 | 130 | <i>n.a.</i> | <i>n.a.</i> |
| Peru | <i>n.a.</i> | 857 | 793 | <i>n.a.</i> | 1,260 | <i>n.a.</i> |
| Uruguay | <i>n.a.</i> | 6 | 52 | 31 | 18 | 31 |
| Venezuela | 4,540 | 3,687 | 3,462 | 4,337 | 8,282 | 6,734 |
| Turkey (b) | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 968 | 2,054 | 856 |

(a) Including bentonitic clay.

(b) Not recorded separately prior to 1967.

BERYL
PRODUCTION OF BERYL

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Kenya | 1 | — | — | 17 | 11 | 3 |
| Rhodesia | 162 | (c) 85 | n.a. | n.a. | n.a. | n.a. |
| Uganda | 409 | 188 | 278 | 307 | 355 | 282 |
| India (a) | — | r 1,346 | r 446 | r 4,828 | n.a. | n.a. |
| Australia | 111 | 38 | 52 | 55 | 15 | 2 |
| OTHER COUNTRIES | | | | | | |
| Portugal | 18 | 39 | 12 | 14 | 126 | 28 |
| Sweden | (a) 44 | (a) — | (a) — | (a) — | (a) — | (a) — |
| Congo Republic | 121 | 19 | n.a. | n.a. | n.a. | 143 |
| Malagasy Republic | 209 | 20 | 12 | 29 | 78 | 74 |
| Mozambique | 399 | 216 | 79 | 166 | 93 | 120 |
| Rwanda and Burundi | 281 | n.a. | 131 | 107 | 28 | n.a. |
| South Africa | 135 | 41 | 21 | 103 | 304 | 308 |
| South West Africa | 7 | 52 | 21 | n.a. | n.a. | n.a. |
| United States (b) | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Argentina | 185 | 374 | 251 | 264 | 584 | n.a. |
| Brazil | 567 | 440 | 418 | 408 | 458 | n.a. |
| TOTAL* | 3,000 | 4,500 | 3,500 | 3,000 | 3,000 | 4,000 |

*Excluding beryl known to have been produced in the U.S.S.R.

(a) Imports into the United States.

(b) Shipments from mine. Including lower grade beryllium ore as follows:

1964—nil; 1965—nil; 1966—nil; 1967—nil; 1968—150 long tons; 1969—n.a. long tons.

(c) Exports.

EXPORTS OF BERYL

Long tons

| Exporting Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|-------------|-----------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Rhodesia | 142 | 85 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Uganda | 466 | 272 | 222 | 310 | 475 | 314 |
| India (a) | — | 1,346 | 446 | 4,828 | — | — |
| Australia | 93 | 50 | 37 | 637 | 135 | 9 |
| OTHER COUNTRIES | | | | | | |
| Italy | — | — | 325 | 908 | — | — |
| Portugal | <i>n.a.</i> | 54 | 10 | 28 | 51 | 58 |
| Congo Republic | (a) 225 | (a) 1,201 | (a) — | (a) — | (a) — | <i>n.a.</i> |
| Malagasy Republic | 235 | 62 | 6 | 24 | 56 | 75 |
| Mozambique | 376 | 218 | 81 | 188 | 102 | 54 |
| South Africa | 82 | 96 | 31 | 62 | 318 | 316 |
| South West Africa | 10 | 24 | 2 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| U.S.A. | 73 | 53 | 27 | 34 | 42 | 13 |
| Argentina | 395 | 156 | 244 | 262 | 561 | 518 |
| Brazil | 1,379 | 1,095 | 695 | 1,289 | <i>n.a.</i> | <i>n.a.</i> |

(a) Imports into the United States.

IMPORTS OF BERYL*

Long tons

| Importing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------|-------|-------------|-------|-------|-------|-------------|
| France | 375 | <i>n.a.</i> | 402 | — | — | <i>n.a.</i> |
| United States | 4,844 | 6,956 | 1,917 | 8,492 | 3,415 | 5,736 |

*Imports of Beryl are not recorded separately in the trade returns of most countries.

BISMUTH
PRODUCTION OF BISMUTH ORE, ETC.*

Long tons

| Producing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|------|-------------|-------------|--------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Canada— | | | | | | |
| Metal plus content of bullion and concentrates exported .. | 179 | 191 | 235 | 298 | 289 | 322 |
| Australia— | | | | | | |
| Concentrates (Bi content) | — | — | — | 11 | 180 | 221 |
| OTHER COUNTRIES | | | | | | |
| France— | | | | | | |
| Mispickel (<i>Bi content</i>) .. | 68 | 60 | 62 | 55 | 63 | <i>n.a.</i> |
| Spain— | | | | | | |
| Ore (<i>Bi content</i>) .. | — | — | 9 | <i>r</i> 4 | 6 | 12 |
| Sweden— | | | | | | |
| Metal (<i>c</i>) | 67 | 34 | 34 | 30 | 19 | 14 |
| Yugoslavia— | | | | | | |
| Metal | 82 | 87 | 102 | 106 | 84 | 101 |
| Mozambique— | | | | | | |
| Ore (<i>Bi content</i>) .. | 9 | 6 | <i>n.a.</i> | <i>r</i> 2 | 2 | 3 |
| South Africa— | | | | | | |
| Ore (<i>Bi content</i>) .. | — | — | — | — | 2 | — |
| South West Africa— | | | | | | |
| Ore | 5 | 1 | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Mexico— | | | | | | |
| Ore (<i>Bi content</i>) .. | 465 | 477 | 447 | 501 | 516 | 597 |
| Bolivia (<i>b</i>)— | | | | | | |
| Ore, etc. (<i>Bi content</i>) .. | 270 | 292 | 367 | 523 | 656 | 600 |
| Peru— | | | | | | |
| Concentrates (<i>a</i>) (<i>Bi content</i>) | 14 | 61 | <i>r</i> 21 | <i>r</i> 33 | 796 | 36 |
| Lead bars (<i>Bi content</i>) .. | 46 | 88 | 80 | 62 | | 51 |
| Metal | 664 | 646 | 655 | 700 | | |
| Korea (South)— | | | | | | |
| Ore (<i>Bi content</i>) .. (<i>c</i>) | 500 | <i>r</i> 78 | <i>r</i> 94 | <i>r</i> 107 | 101 | 108 |

*Bismuth ore has also been produced in Germany, Roumania, Burma and China and the metal recovered as a by-product in the United Kingdom, U.S.S.R., United States and Japan.

(a) Recoverable.

(b) Exports.

(c) United States Bureau of Mines' estimate.

EXPORTS OF BISMUTH, ETC.

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Bismuth.. .. | 717 | 530 | 325 | 379 | 303 | 352 |
| Bismuth salts | 55 | 43 | 48 | 46 | 44 | 41 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Bismuth (a) | 146 | 84 | 115 | 60 | 156 | 189 |
| France— | | | | | | |
| Bismuth (a) | 60 | 58 | 70 | 82 | 59 | 71 |
| Germany (Federal)— | | | | | | |
| Bismuth.. .. | 58 | 71 | 98 | 125 | 80 | 111 |
| Netherlands— | | | | | | |
| Bismuth (a) | 155 | 276 | 225 | 211 | 146 | 85 |
| Bismuth salts | 47 | 48 | 45 | 6 | 49 | 67 |
| Yugoslavia— | | | | | | |
| Bismuth.. .. | 38 | 54 | 46 | 64 | 44 | 54 |
| South Africa— | | | | | | |
| Ore | — | 1 | — | — | — | — |
| Mexico— | | | | | | |
| Bismuth, refined | 171 | 145 | 271 | 216 | 229 | <i>n.a.</i> |
| do. impure bars | 393 | 408 | 242 | 371 | 332 | <i>n.a.</i> |
| United States— | | | | | | |
| Matte, residues, etc. | 6 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Metal and alloys | 21 | 153 | 40 | 68 | 54 | 200 |
| Argentina— | | | | | | |
| Ore | — | 15 | — | — | — | — |
| Bolivia— | | | | | | |
| Ore, etc. (<i>Bi content</i>) | 270 | 292 | 367 | 523 | 600 | 656 |
| Peru— | | | | | | |
| Bars, etc. (<i>Bi content</i>) | 730 | 730 | 733 | 822 | 794 | 648 |
| Japan— | | | | | | |
| Bismuth.. .. | 245 | 134 | 251 | 266 | 384 | 237 |

(a) Including scrap.

IMPORTS OF BISMUTH, ETC.

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Bismuth (c) | 609 | 370 | 368 | 324 | 318 | 324 |
| Unwrought alloys .. | 379 | 290 | 150 | 262 | 158 | 237 |
| India (a)— | | | | | | |
| Bismuth and alloys .. | 56 | 26 | 16 | 20 | 9 | 19 |
| Australia (b)— | | | | | | |
| Bismuth | 17 | 11 | 8 | 7 | 12 | 10 |
| Bismuth salts | 7 | 7 | 1 | — | — | — |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Bismuth | 71 | 37 | 98 | 89 | 169 | 237 |
| Bismuth salts | 84 | 98 | 68 | 81 | 78 | 98 |
| France— | | | | | | |
| Bismuth (c) | 773 | 689 | 737 | 793 | 928 | 829 |
| Germany (Federal)— | | | | | | |
| Bismuth (c) | 254 | 230 | 258 | 246 | 147 | 233 |
| Italy— | | | | | | |
| Bismuth | 41 | 44 | 102 | 52 | 55 | 107 |
| Bismuth salts | 23 | <i>n.a.</i> | 4 | 55 | <i>n.a.</i> | 19 |
| Netherlands— | | | | | | |
| Bismuth salts | 104 | 87 | 123 | 67 | 84 | 208 |
| Poland— | | | | | | |
| Bismuth | 97 | 66 | 59 | 103 | 119 | 130 |
| Spain— | | | | | | |
| Bismuth | 21 | 11 | 10 | 12 | 25 | 34 |
| Morocco— | | | | | | |
| Bismuth salts | 8 | 38 | 11 | 10 | 19 | 5 |
| Mexico— | | | | | | |
| Bismuth salts | 10 | 5 | 1 | — | — | <i>n.a.</i> |
| United States— | | | | | | |
| Bismuth | 551 | 615 | 751 | 616 | 565 | 399 |
| Argentina— | | | | | | |
| Bismuth and its salts .. | 9 | 17 | 16 | 18 | 17 | 22 |
| Brazil— | | | | | | |
| Bismuth | 2 | 12 | 10 | 10 | 18 | <i>n.a.</i> |
| Bismuth salts | 16 | 11 | 21 | 10 | 15 | <i>n.a.</i> |
| Chile— | | | | | | |
| Bismuth | <i>n.a.</i> | 1 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Colombia— | | | | | | |
| Bismuth salts | 6 | 1 | 3 | 1 | 2 | <i>n.a.</i> |
| Peru— | | | | | | |
| Bismuth salts | 1 | 1 | 1 | 1 | <i>n.a.</i> | <i>n.a.</i> |
| Japan— | | | | | | |
| Bismuth | 2 | 32 | 2 | 2 | 3 | 36 |
| Turkey— | | | | | | |
| Bismuth salts | 3 | 5 | 5 | 8 | 6 | 16 |

(a) Years ended March 31 following that stated.

(c) Including scrap.

(b) Years ended June 30 of that stated.

BORATES
PRODUCTION OF CRUDE BORATES

Long tons

| Producing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--------------------------------------|-------------|---------|---------|-----------|---------|---------|
| Italy— Boric acid | 314 | 85 | — | — | — | — |
| United States (a)— Borates | 693,106 | 721,000 | 773,000 | r 796,000 | 859,000 | 910,000 |
| Argentina— Borates | <i>n.a.</i> | 45,000 | 34,787 | 17,684 | 20,694 | 22,000 |
| Chile— Boron minerals .. | 3,262 | 4,441 | 3,683 | — | — | — |
| Turkey— Borates | 126,228 | 168,277 | 221,728 | 224,891 | 261,648 | 319,345 |

Borates are known to have been produced in the U.S.S.R., Germany, Iran and Tibet.

(a) Sold or used by producers.

EXPORTS OF BORATES

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Borax | 917 | 881 | 441 | 332 | 564 | 231 |
| Other borates and perborates | 9,835 | 11,825 | 11,087 | 9,613 | 8,968 | 7,686 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Perborates | 2,287 | 3,132 | 3,923 | 3,963 | 4,231 | 3,910 |
| Belgium-Luxemburg E.U.— | | | | | | |
| Boron minerals | 10 | — | 41 | 4,366 | 69 | 507 |
| Borax, refined | 12 | 179 | 10 | 2 | 3 | 23 |
| Boric acid | 1 | 4 | 4 | 18 | 16 | 30 |
| Borates and perborates | 5,626 | 6,625 | 8,625 | 7,597 | 11,756 | 15,907 |
| France— | | | | | | |
| Boron minerals | 667 | 1,193 | 2,086 | 994 | 4,044 | 1,455 |
| Borax, refined | 7,086 | 6,442 | 7,333 | 7,704 | 9,056 | 10,205 |
| Boric acid | 13,166 | 13,547 | 13,995 | 17,017 | 17,532 | 16,790 |
| Borates and perborates | 7,935 | 4,676 | 7,994 | 5,251 | 6,053 | 6,513 |
| Germany (Federal)— | | | | | | |
| Boron minerals | 7 | 110 | 187 | 211 | 1,304 | 4,245 |
| Borax | 95 | 102 | 109 | 87 | 123 | 640 |
| Boric acid | 82 | 76 | 51 | 50 | 114 | 149 |
| Borates and perborates | 12,239 | 13,596 | 20,813 | 22,830 | 26,497 | 20,913 |
| Italy— | | | | | | |
| Boric acid | 5,954 | 5,426 | 4,865 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Borax, refined | 2,056 | 1,129 | 1,077 | — | — | — |
| Perborates | 237 | 407 | 401 | 311 | 456 | 2,129 |
| Netherlands— | | | | | | |
| Boron minerals | 84,194 | 131,437 | 167,599 | 218,549 | 242,757 | 269,432 |
| Borax, refined | 8,593 | 34,739 | 43,762 | 36,706 | 37,535 | 37,812 |
| Boric acid | 25 | 23 | 37 | 87 | 44 | 58 |
| Perborates | <i>n.a.</i> | — | 5 | 7 | — | — |
| Sweden— | | | | | | |
| Perborate of sodium | 42 | 42 | 23 | 16 | 71 | 912 |
| Switzerland— | | | | | | |
| Borates and perborates | 1,535 | 2,012 | 2,327 | 2,398 | 4,111 | 8,591 |
| Yugoslavia— | | | | | | |
| Perborates | <i>n.a.</i> | 357 | 389 | 871 | 625 | <i>n.a.</i> |
| United States— | | | | | | |
| Borax, borates and boric acid | 342,054 | (a) 155,371 | (a) 185,142 | (a) 166,503 | (a) 184,582 | (a) 208,615 |
| Argentina— | | | | | | |
| Borates of calcium and sodium | 875 | 200 | 157 | 494 | 197 | — |
| Japan— | | | | | | |
| Borates and perborates | 83 | 104 | 101 | 187 | 190 | 775 |
| Boric acid | 31 | 11 | 12 | 27 | 30 | — |
| Turkey— | | | | | | |
| Borates | 116,538 | 169,528 | 172,556 | 208,771 | 209,419 | 102,726 |

(a) Borax and boric acid only.

IMPORTS OF BORATES

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--------------------------------------|--------|--------|-------------|-----------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Boron minerals | 29,893 | 41,641 | <i>n.a.</i> | 52,561 | <i>n.a.</i> | <i>n.a.</i> |
| Borax | 27,279 | 21,848 | 20,946 | 14,578 | 12,991 | 13,008 |
| Other Borates and perborates | 1,499 | 396 | 1,820 | 4,495 | 3,913 | 3,007 |
| Boric acid | 3,255 | 3,068 | 4,741 | 6,228 | 8,808 | 9,467 |
| Canada— | | | | | | |
| Borax | 9,390 | 8,601 | 9,360 | 8,990 | 11,421 | 9,335 |
| Boric acid | 1,463 | 2,393 | 3,280 | 3,412 | 3,859 | 5,385 |
| Hong Kong— | | | | | | |
| Borax, refined | 3,724 | 3,626 | 3,735 | 4,225 | 3,612 | 4,797 |
| Boric acid | 123 | 144 | 187 | 135 | 99 | 204 |
| India— | | | | | | |
| Boron minerals | — | 31 | 591 | 936 | 4,003 | 1,673 |
| Borax | 8,683 | 8,986 | 2,137 | 4,545 | 1,671 | 8,422 |
| Boric acid (b) | 2,421 | 571 | 25 | 55 | 61 | 4 |
| Australia (a)— | | | | | | |
| Boron minerals | 975 | 1,293 | (d) 1,870 | (d) 2,010 | (d) 1,953 | (d) 1,405 |
| Boron salts | 4,462 | 4,316 | (d) 3,454 | (d) 4,257 | (d) 5,055 | (d) 3,970 |
| Boric acid | 1,304 | 1,425 | 1,350 | 1,883 | 2,006 | 1,769 |
| New Zealand (a)— | | | | | | |
| Boric acid | 1,450 | 1,411 | 633 | 477 | 423 | <i>n.a.</i> |
| Borates and perborates | 2,338 | 2,920 | 1,936 | 1,283 | 1,076 | <i>n.a.</i> |
| Irish Republic— | | | | | | |
| Borax | 1,035 | 857 | 962 | 561 | 1,112 | 922 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Boron minerals | 5,447 | 5,043 | 5,698 | 8,018 | 8,200 | 7,558 |
| Borates | 27 | 23 | 57 | 9 | 441 | 631 |
| Boric acid | 22 | 185 | 31 | 11 | 8 | 296 |
| Perborates | 3 | 2 | 2 | (c) | (c) | (c) |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Boron minerals | 922 | 1,484 | 11,632 | 16,659 | 16,987 | 21,875 |
| Borax, refined | 9,507 | 8,400 | 3,083 | 2,361 | 2,750 | 3,581 |
| Boric acid | 717 | 588 | 1,502 | 961 | 1,566 | 3,023 |
| Borates and perborates | 2,485 | 2,486 | 3,665 | 2,294 | 2,181 | 2,184 |
| Denmark— | | | | | | |
| Boron minerals | 925 | 1,353 | 1,292 | 1,240 | 1,802 | 2,217 |
| Borax | 140 | 152 | 176 | 225 | 354 | 471 |
| Boric acid | 135 | 130 | 101 | 118 | 228 | 127 |
| Borates and perborates | 3,209 | 4,668 | 5,347 | 5,650 | 6,468 | 7,656 |
| Finland— | | | | | | |
| Boron minerals | 1,496 | 2,333 | 2,390 | 2,499 | 2,865 | 5,119 |
| Borax | 557 | 758 | 589 | 698 | 786 | 943 |
| Boric acid | 172 | 115 | 187 | 149 | 103 | 182 |
| Borates and perborates | 2,288 | 1,840 | 2,140 | 2,833 | 2,998 | 2,377 |
| France— | | | | | | |
| Boron minerals | 46,436 | 66,238 | 72,025 | 81,601 | 96,118 | 105,892 |
| Borax refined | 25,671 | 25,311 | 22,002 | 18,542 | 15,382 | 20,812 |
| Boric acid | 613 | 414 | 814 | 596 | 901 | 1,901 |
| Borates and perborates | 614 | 729 | 1,082 | 1,219 | 1,436 | 1,827 |

(a) Years ended June 30 of that stated.

(b) Years ended March 31 following that stated.

(c) Included with Borates.

(d) Owing to reclassification not strictly comparable with earlier years.

IMPORTS OF BORATES (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|--------|---------|---------|---------|---------|---------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Germany (Federal)— | | | | | | |
| Boron minerals .. | 47,850 | 54,183 | 64,819 | 91,124 | 101,028 | 106,073 |
| Boric acid | 10,906 | 11,339 | 11,005 | 8,936 | 13,263 | 15,684 |
| Borax | 20,600 | 20,399 | 16,588 | 14,018 | 14,312 | 19,305 |
| Borates and perborates | 1,136 | 1,396 | 1,447 | 153 | 2,138 | 1,902 |
| Greece— | | | | | | |
| Boron minerals .. | 310 | 333 | 458 | 588 | 472 | 673 |
| Borax | 1 | 17 | 18 | 16 | 28 | 54 |
| Boric acid | 37 | 39 | 61 | 23 | 101 | 244 |
| Italy— | | | | | | |
| Boron minerals .. | 53,637 | 82,184 | 72,417 | 69,635 | 80,704 | 94,778 |
| Borax | 6,683 | 7,284 | 9,540 | 5,482 | 8,771 | 5,737 |
| Boric acid | 108 | 20 | — | — | — | (a) |
| Borates | 5,958 | 1,876 | 5,297 | 3,165 | 1,023 | 18,915 |
| Perborates | | | | | | |
| Netherlands— | | | | | | |
| Boron minerals .. | 90,726 | 162,366 | 170,902 | 226,956 | 276,983 | 305,122 |
| Borax | 20,691 | 46,352 | 50,014 | 40,203 | 35,109 | 45,830 |
| Boric acid | 2,333 | 2,425 | 1,643 | 1,392 | 1,300 | 1,779 |
| Perborates | 5,195 | 5,890 | 8,290 | 8,360 | 12,220 | 11,882 |
| Norway— | | | | | | |
| Borax | 2,492 | 1,705 | 2,395 | 2,571 | 3,471 | 3,725 |
| Boric acid | 726 | 604 | 156 | 208 | 294 | 343 |
| Perborate of sodium | 2,018 | 1,897 | 2,321 | 1,983 | 2,042 | 2,528 |
| Portugal— | | | | | | |
| Boric acid | 163 | 125 | 129 | 151 | 123 | 172 |
| Borax | 1,355 | 1,198 | 1,818 | 1,588 | 2,599 | 2,709 |
| Spain— | | | | | | |
| Boron minerals .. | 10,876 | 8,757 | 13,156 | 16,810 | 20,187 | 25,949 |
| Boric acid | 316 | 678 | 660 | 696 | 878 | 1,425 |
| Borates and perborates | 730 | 763 | 1,262 | 1,720 | 3,307 | 8,317 |
| Sweden— | | | | | | |
| Borax | 4,166 | 5,412 | 5,626 | 7,973 | 10,148 | 7,848 |
| Boric acid | 418 | 539 | 793 | 1,089 | 780 | 778 |
| Perborate of sodium | 4,662 | 6,095 | 6,937 | 4,793 | 5,560 | 5,842 |
| Switzerland— | | | | | | |
| Boron minerals .. | 206 | 436 | 459 | 740 | 745 | 1,227 |
| Boric acid | 583 | 479 | 566 | 479 | 475 | n.a. |
| Borates | 4,737 | 5,129 | 5,134 | 4,907 | 6,366 | 7,959 |
| Perborates | 4 | 293 | 123 | 1,118 | 2,451 | 5 |
| U.S.S.R.— | | | | | | |
| Borax | 15,000 | 9,800 | 10,000 | 7,480 | n.a. | n.a. |
| Yugoslavia— | | | | | | |
| Boron minerals .. | n.a. | 598 | 1,352 | 1,821 | 298 | 512 |
| Boric acid | 408 | 703 | 550 | 281 | 3,405 | 105 |
| Borates | n.a. | 1,599 | 2,913 | 2,758 | 4,531 | 5,677 |
| Perborates | n.a. | 184 | 1,550 | 2,523 | 1,074 | 1 |
| Angola— | | | | | | |
| Borax | 24 | 75 | 43 | 60 | 127 | 92 |
| Morocco— | | | | | | |
| Borates | 317 | 439 | 406 | 862 | 767 | 856 |
| Perborates | 16 | 36 | 28 | 27 | 51 | 56 |
| Mozambique— | | | | | | |
| Borax | 8 | 5 | 4 | 3 | n.a. | n.a. |
| Boric acid | 1 | 3 | 2 | 5 | n.a. | n.a. |
| South Africa— | | | | | | |
| Boron minerals .. | 99 | 14 | 804 | 383 | 641 | 762 |
| Boric acid | 574 | 236 | 403 | 687 | 403 | 545 |
| Borates and perborates | 2,273 | 3,942 | 3,985 | 3,821 | 2,988 | 3,106 |
| Tunisia— | | | | | | |
| Borax etc. | 19 | 34 | 37 | 98 | 35 | 3 |

(a) Included with boron minerals.

IMPORTS OF BORATES (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Mexico— | | | | | | |
| Borax | 2,390 | <i>n.a.</i> | <i>n.a.</i> | 62 | 105 | <i>n.a.</i> |
| Boric acid | 950 | 1,425 | 1,853 | 936 | 985 | <i>n.a.</i> |
| Brazil— | | | | | | |
| Boron minerals .. | — | 49 | 1,161 | 1,926 | 2,667 | <i>n.a.</i> |
| Boric acid | 1,004 | 865 | 910 | 966 | 1,356 | <i>n.a.</i> |
| Sodium borate and perborate | 7,895 | 7,089 | 7,782 | 6,516 | 9,564 | <i>n.a.</i> |
| Borates | — | 6 | 3 | 2 | 18 | <i>n.a.</i> |
| Colombia— | | | | | | |
| Borax | 357 | 226 | 1,174 | 493 | 899 | <i>n.a.</i> |
| Boric acid | 189 | 115 | 521 | 129 | 171 | <i>n.a.</i> |
| Perborate of sodium .. | 109 | 68 | 92 | 12 | 102 | <i>n.a.</i> |
| Ecuador— | | | | | | |
| Borax | 34 | 52 | 37 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Boric acid | 16 | 17 | 10 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Peru— | | | | | | |
| Borax | 347 | 392 | 388 | 350 | 423 | <i>n.a.</i> |
| Boric acid | 88 | 108 | 231 | 285 | 175 | <i>n.a.</i> |
| Uruguay— | | | | | | |
| Borates | <i>n.a.</i> | 113 | 303 | 109 | 197 | 224 |
| Venezuela— | | | | | | |
| Borax | 1,515 | 1,899 | 1,092 | 1,438 | 1,250 | 1,071 |
| Boric acid | 142 | 192 | 127 | 242 | 205 | 286 |
| Formosa— | | | | | | |
| Borax | 1,442 | 1,848 | 1,634 | 2,059 | 1,996 | 2,416 |
| Boric acid | 110 | 109 | 91 | 79 | 196 | 169 |
| Iran (a)— | | | | | | |
| Borax | 230 | 178 | 292 | 449 | 485 | <i>n.a.</i> |
| Boric acid | 23 | 7 | 22 | 27 | 18 | <i>n.a.</i> |
| Israel— | | | | | | |
| Borates | 493 | 429 | <i>n.a.</i> | 328 | 487 | 204 |
| Perborate of sodium .. | 271 | 321 | <i>n.a.</i> | 241 | 186 | 39 |
| Japan— | | | | | | |
| Borax | 26,951 | 26,474 | 28,621 | 39,968 | 35,883 | 50,325 |
| Boric acid | 7,351 | 6,106 | 7,954 | 7,819 | 10,804 | 13,889 |
| Korea (South)— | | | | | | |
| Borax | 663 | 1,425 | 653 | 1,354 | <i>n.a.</i> | <i>n.a.</i> |
| Lebanon— | | | | | | |
| Borates and perborates | 796 | 1,071 | 1,330 | 2,111 | 1,718 | 1,935 |
| Philippine Republic— | | | | | | |
| Boric acid | 110 | 203 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Thailand— | | | | | | |
| Borax | 467 | 560 | 512 | 582 | 452 | 561 |
| Boric acid | 107 | 57 | 95 | 50 | 59 | 921 |
| Turkey— | | | | | | |
| Borax | 590 | 160 | 699 | 1,482 | 1,734 | 2,676 |
| Boric acid | 21 | 7 | 11 | 106 | 16 | 13 |
| Borates and perborates | 49 | 160 | 266 | 41 | 146 | 42 |

(a) Years ended March 20 following that stated.

BROMINE
PRODUCTION OF BROMINE

Lb. avdp.

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|-------------|--------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| India | 317,000 | 26,000 | 210,000 | 344,000 | 514,000 | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| France (a) | 5,858,000 | 6,177,000 | 7,044,000 | 7,652,000 | 8,624,500 | <i>n.a.</i> |
| Germany (Federal) | 5,434,000 | 6,493,000 | 7,000,000 | 7,000,000 | 7,000,000 | 7,000,000 |
| Italy | 3,537,402 | 4,539,756 | 4,359,640 | 7,722,792 | 8,943,491 | 9,000,000 |
| United States (a) (b) | 238,019,000 | 274,569,000 | 275,009,000 | 292,072,000 | 304,501,000 | 335,242,000 |
| Israel | 8,400,000 | (a)9,300,000 | 9,300,000 | 616,300,000 | 20,700,000 | 22,000,000 |
| Japan | 6,360,000 | 9,508,000 | 11,000,000 | 13,000,000 | 13,959,000 | 14,000,000 |

Bromine is also produced in the United Kingdom (from sea water) and Spain.

(a) Sales.

(b) Including bromine content of compounds.

EXPORTS OF BROMINE, ETC.

Lb. avdp.

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— Bromides and bromates | (£180,195) | (£181,972) | (£161,337) | (£120,840) | (£251,679) | (£231,530) |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Bromine | 33,069 | 2,205 | — | — | — | 220 |
| Bromides, etc. | 16,314 | 7,496 | 32,200 | 23,100 | 77,603 | 97,885 |
| France— | | | | | | |
| Bromine | 2,153,916 | 2,427,289 | 2,416,000 | 2,879,000 | 3,730,221 | 4,420,268 |
| Bromides | 2,087,777 | 1,856,292 | 2,848,000 | 2,454,000 | 2,012,820 | 3,203,316 |
| Germany (Federal)— | | | | | | |
| Bromides | 177,500 | 72,500 | 76,500 | 60,600 | 58,900 | 48,061 |
| Italy— | | | | | | |
| Bromine | 215,389 | 186,300 | 205,300 | 278,003 | 280,640 | 157,851 |
| Bromides | 35,133 | 1,100 | 5,500 | 15,873 | 9,259 | 32,187 |
| Netherlands— | | | | | | |
| Bromides, etc. | 1,045,000 | 664,000 | 628,000 | 740,753 | 877,440 | 1,141,994 |
| United States— | | | | | | |
| Bromine and compounds (a) | 17,036,442 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Israel— | | | | | | |
| Bromine | <i>n.a.</i> | 6,867,000 | 4,967,000 | <i>n.a.</i> | 6,741,735 | 8,613,459 |
| Japan— | | | | | | |
| Bromine compounds | 390,172 | 796,828 | 557,990 | 793,699 | 287,423 | <i>n.a.</i> |

(a) Including organic compounds.

IMPORTS OF BROMINE, ETC.

Lb. avdp.

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Hong Kong— | | | | | | |
| Bromates and bromides | 13,328 | 5,152 | 18,256 | 18,592 | 33,600 | 29,120 |
| India (b)— | | | | | | |
| Bromine | 265,961 | 113,238 | 3,146 | 163 | 629,320 | 444,877 |
| Bromide of potash | 602 | 694 | 1,008 | 4,409 | 3,386 | 1,109 |
| Bromide of soda | — | 16,480 | 5,278 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Australia (a)— | | | | | | |
| Bromate of potash | 42,096 | } 103,595 | 145,429 | 161,713 | 176,206 | 190,575 |
| Bromide of potash | 78,978 | | | | | |
| Bromates and bromides of soda | 94,734 | | | | | |
| Other bromates and bromides | <i>n.a.</i> | <i>n.a.</i> | 137,283 | 109,652 | 144,034 | 214,914 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Bromine | 37,000 | 30,000 | 44,800 | 35,000 | 48,000 | 85,000 |
| Bromides, etc. | 1,465,000 | 902,100 | 1,162,300 | 1,567,300 | 1,440,700 | 1,460,562 |
| Denmark— | | | | | | |
| Bromine | 6,600 | 18,000 | 24,000 | 63,000 | 5,000 | <i>n.a.</i> |
| Bromide of potash | 8,800 | 18,000 | 11,000 | 22,000 | } 200,600 | 167,550 |
| Bromide of soda | 94,800 | 130,000 | 148,000 | 143,000 | | |
| Other bromides | 39,683 | 40,000 | 35,000 | 57,000 | | |
| Finland— | | | | | | |
| Bromine | 1,733 | 1,664 | 2,520 | 2,721 | 1,682 | <i>n.a.</i> |
| France— | | | | | | |
| Bromine | 253,500 | — | 13,000 | — | 57,300 | — |
| Bromides | 33,100 | 156,500 | 104,000 | 295,400 | 189,600 | 121,200 |
| Germany (Federal)— | | | | | | |
| Bromides | 399,300 | 755,700 | 887,700 | 1,163,400 | 1,178,591 | 1,552,495 |
| Greece— | | | | | | |
| Bromine | 2,313 | 1,486 | 2,652 | 3,221 | 97 | 3,390 |
| Bromides, etc. | 31,456 | 24,837 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Italy— | | | | | | |
| Bromine | 177,700 | 49,400 | 26,455 | 26,235 | 44,313 | 1,602,538 |
| Bromides | 155,100 | 280,900 | 286,601 | 395,729 | 383,383 | 1,006,350 |
| Netherlands— | | | | | | |
| Bromine | 911,000 | 1,543,000 | 1,391,000 | 1,644,648 | 1,488,120 | 1,693,150 |
| Bromides, etc. | 327,000 | 282,000 | 165,000 | 158,733 | 191,802 | 119,050 |
| Norway— | | | | | | |
| Bromine | — | 2,000 | — | — | — | — |
| Portugal— | | | | | | |
| Bromine | 441 | 661 | 882 | 661 | 1,764 | 660 |
| Bromide of soda | } 32,600 | 5,700 | 6,614 | 24,250 | <i>n.a.</i> | 30,864 |
| Bromide of potash | | | | | | |
| Bromide of ammonium | | | | | | |
| Spain— | | | | | | |
| Bromine | 75 | 381,347 | 110,284 | 172,685 | 219,356 | 201 |
| Bromides | 85,608 | 76,053 | 78,773 | 66,357 | 126,335 | 99,208 |
| Sweden— | | | | | | |
| Bromine | 2,205 | — | — | — | — | — |
| Yugoslavia— | | | | | | |
| Bromine | <i>n.a.</i> | 14,185 | 8,045 | 2,427 | 5,004 | 3,728 |
| Bromides, bromates, etc. | <i>n.a.</i> | 31,110 | 65,319 | 111,470 | 96,265 | 103,154 |
| Morocco— | | | | | | |
| Bromides | 6,241 | 3,604 | 10,161 | 9,952 | 4,147 | 22,544 |

(a) Years ended June 30 of that stated.

(b) Years ended March 31 following that stated.

IMPORTS OF BROMINE, ETC. (cont.)

Lb. avdp.

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|-------------|---------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Mexico— | | | | | | |
| Bromine | 100,650 | 79,735 | 80,281 | 102,771 | 79,366 | <i>n.a.</i> |
| Bromides of potash and soda | 40,730 | 41,277 | 29,657 | 64,035 | 41,127 | <i>n.a.</i> |
| Argentina— | | | | | | |
| Bromine and compounds | 342,552 | 300,131 | 186,026 | 344,840 | 165,408 | 257,508 |
| Brazil— | | | | | | |
| Bromine | 743 | 408 | 30,206 | 11,788 | 558 | <i>n.a.</i> |
| Bromides | 332,298 | 514,676 | 624,281 | 268,274 | 75,311 | <i>n.a.</i> |
| Chile— | | | | | | |
| Bromine | <i>n.a.</i> | 1,457 | <i>n.a.</i> | 2 | <i>n.a.</i> | <i>n.a.</i> |
| Bromides | <i>n.a.</i> | 44 | <i>n.a.</i> | 13 | <i>n.a.</i> | <i>n.a.</i> |
| Colombia— | | | | | | |
| Bromine | 2,571 | 1,243 | — | 2,023 | 2 | <i>n.a.</i> |
| Bromides, etc. | 25,153 | 13,369 | 27,941 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Peru— | | | | | | |
| Bromine | 324 | 328 | 1,122 | 637 | 300 | <i>n.a.</i> |
| Bromides | 6,660 | 14,987 | 7,198 | 5,794 | 17,877 | <i>n.a.</i> |
| Iran (a)— | | | | | | |
| Bromides | 36,564 | 11,872 | 3,450 | 30,479 | 56,934 | <i>n.a.</i> |
| Japan— | | | | | | |
| Bromine compounds | 40,431 | 60,777 | 165,115 | 76,397 | 22,218 | 63,445 |
| Philippine Republic— | | | | | | |
| Bromide of potash | 4,683 | 4,497 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Thailand— | | | | | | |
| Bromide of potash | 19,619 | 31,603 | 27,750 | 33,826 | 23,850 | 35,273 |
| Turkey— | | | | | | |
| Bromine | 176 | 324 | 463 | 450 | 990 | 364 |
| Bromides | 10,748 | 21,343 | 13,623 | 20,461 | 20,818 | 35,878 |

(a) Years ended March 20 following that stated.

CADMIUM
PRODUCTION OF CADMIUM

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom .. | 194 | 217 | 181 | 205 | 202 | 241 |
| Zambia | 14 | 18 | 12 | 10 | 9 | 6 |
| Canada (b) | 1,238 | 784 | 1,445 | 2,159 | 2,239 | 1,950 |
| Australia | 494 | 516 | 518 | 516 | 465 | 562 |
| OTHER COUNTRIES | | | | | | |
| Austria | 19 | 21 | 21 | 19 | 19 | 19 |
| Belgium | 1,000 | 800 | 700 | 700 | 800 | (g) 800 |
| France | 484 | 421 | 440 | 490 | 517 | (g) 542 |
| Germany (Federal) .. | 314 | 322 | 350 | 392 | 337 | 779 |
| Italy | 273 | 269 | 241 | 215 | 246 | (g) 236 |
| Netherlands (e) .. | 105 | 90 | 100 | 100 | 140 | 140 |
| Norway | 111 | 77 | 71 | 83 | 86 | 85 |
| Poland (g) | 410 | 420 | 425 | 409 | 409 | 413 |
| Spain | 60 | (e) 60 | (e) 60 | (e) 66 | (e) 69 | (e) 79 |
| U.S.S.R. (g) | 1,800 | 1,900 | 1,900 | 2,165 | 2,165 | 2,263 |
| Yugoslavia (g) .. | 40 | 40 | 40 | 147 | 148 | 147 |
| Congo Republic .. | 464 | 393 | 414 | 279 | 315 | 348 |
| South West Africa (a) .. | 315 | 535 | 433 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Guatemala | — | 2 | 1 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Honduras | 103 | 87 | 107 | 111 | 118 | 150 |
| Mexico (c) | 737 | 713 | 799 | 1,226 | 1,175 | 1,553 |
| United States— | | | | | | |
| Metal (d) | 4,669 | 4,317 | 4,670 | 3,883 | 4,755 | 5,646 |
| Ecuador | 2 | 1 | 1 | 1 | — | — |
| Peru (f) | 223 | 322 | r 402 | r 437 | 168 | 182 |
| Japan | 1,196 | 1,456 | 1,476 | 1,867 | 2,160 | 2,721 |
| Philippine Republic .. | 11 | 10 | 5 | 3 | 2 | — |
| TOTAL* | 13,000 | 13,000 | 13,000 | 15,000 | 15,000 | 17,000 |

*In the case of South West Africa and Mexico the metal is wholly or mainly extracted in other countries and, to avoid duplication, is excluded from the total. A certain amount of duplication in the case of certain other countries, however, is unavoidable.

Cadmium is also reported to be produced in Bulgaria.

- (a) Estimated cadmium content of copper-lead-zinc concentrates produced and exported for treatment, plus, as from 1965, production of metal.
- (b) Metal produced plus cadmium content of concentrates exported.
- (c) Including cadmium content of flue dust, etc., exported for treatment.
- (d) Including secondary.
- (e) Estimate. Source: "Metallgesellschaft".
- (f) Including recoverable cadmium content of concentrates.
- (g) Estimate. Source: United States Bureau of Mines.

EXPORTS OF CADMIUM, ETC.

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Zambia | 13 | 13 | 8 | 11 | 9 | 8 |
| Canada | 725 | 609 | 898 | 749 | 805 | 753 |
| Australia | 340 | 449 | 512 | 467 | 545 | 423 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg E.U. (a) .. | 829 | 724 | 573 | 646 | 847 | 1,020 |
| France— | | | | | | |
| Cadmium (a) | 76 | 102 | 45 | 47 | 49 | 57 |
| Cadmium sulphide | — | — | 2 | 19 | 24 | 49 |
| Germany (Federal)— | | | | | | |
| Cadmium (a) | 52 | 109 | 136 | 145 | 68 | 154 |
| Cadmium oxide | 9 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 13 | 10 |
| Italy— | | | | | | |
| Cadmium (a) | 14 | 12 | 93 | 74 | 53 | 38 |
| Netherlands (a) | 183 | 302 | 262 | 248 | 402 | 191 |
| Norway | 72 | 97 | 69 | 65 | 75 | 78 |
| Poland | 292 | 393 | 334 | 277 | 284 | 273 |
| U.S.S.R. | 689 | 900 | 600 | 500 | 689 | 689 |
| Yugoslavia | 2 | <i>n.a.</i> | <i>n.a.</i> | 12 | 71 | 128 |
| Congo Republic (d) | 470 | 380 | 340 | 260 | 470 | 500 |
| South West Africa (b) | 315 | 271 | 411 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Mexico (c) | 953 | 955 | 1,110 | 876 | 171 | <i>n.a.</i> |
| United States— | | | | | | |
| Metal, alloys, dross, flue dust, etc. | 643 | 33 | 169 | 309 | 237 | 484 |
| Peru | 205 | 220 | 248 | 152 | 162 | <i>n.a.</i> |
| Japan | 345 | 705 | 648 | 556 | 698 | 760 |

(a) Including scrap.

(b) Cadmium content of concentrates exported for treatment plus, as from 1966, exports of metal.

(c) Including cadmium content of flue dust, etc., exported for treatment.

(d) Estimated.

IMPORTS OF CADMIUM, ETC.

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|-------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | 1,549 | 1,375 | 638 | 1,070 | 1,238 | 1,340 |
| India (a) | 105 | 151 | 62 | 109 | 34 | 1 |
| OTHER COUNTRIES | | | | | | |
| Austria | 12 | 12 | 8 | 8 | 10 | 11 |
| Belgium-Luxemburg E.U. (b) | 222 | 327 | 514 | 392 | 624 | 752 |
| Denmark | 21 | 23 | 15 | 22 | 24 | 23 |
| France— | | | | | | |
| Cadmium (b) | 567 | 403 | 540 | 497 | 346 | 738 |
| Cadmium sulphide | 12 | 15 | 17 | 21 | 15 | 20 |
| Germany (Federal)— | | | | | | |
| Cadmium (b) | 890 | 1,177 | 1,129 | 1,171 | 1,512 | 1,726 |
| Cadmium oxide | 73 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 185 |
| Italy— | | | | | | |
| Cadmium (b) | 47 | 41 | 56 | 89 | 167 | 36 |
| Cadmium oxide | 15 | 1 | 15 | 11 | 6 | <i>n.a.</i> |
| Cadmium sulphide | 12 | <i>n.a.</i> | <i>n.a.</i> | 18 | 24 | 31 |
| Netherlands— | | | | | | |
| Cadmium (b) | 174 | 247 | 257 | 168 | 343 | 121 |
| Cadmium salts | 75 | 78 | 92 | 123 | 121 | 143 |
| Spain | 16 | 12 | 21 | 3 | 4 | 9 |
| Sweden | 140 | 110 | 215 | 113 | 93 | 77 |
| U.S.S.R. | 153 | 233 | 179 | 217 | 231 | 214 |
| Yugoslavia | 12 | 13 | 9 | 4 | — | — |
| United States— | | | | | | |
| Cadmium | 493 | 947 | 1,499 | 708 | 860 | 481 |
| Flue dust (cadmium content) | 568 | 580 | 527 | 520 | 717 | 498 |
| Argentina— | | | | | | |
| Cadmium and salts | 1 | 3 | 2 | 1 | — | — |
| Brazil— | | | | | | |
| Cadmium | 28 | 33 | 56 | 45 | 62 | <i>n.a.</i> |
| Cadmium salts | — | — | — | 3 | 1 | <i>n.a.</i> |
| Japan | 22 | 23 | 14 | 31 | 17 | 9 |

(a) Years ended March 31 following that stated.

(b) Including scrap.

CEMENT
PRODUCTION OF CEMENT

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | 16,698,000 | 16,921,000 | 16,486,000 | 17,304,000 | 17,592,000 | 17,148,000 |
| Kenya | 415,000 | 476,000 | 463,000 | 485,804 | 535,000 | 642,776 |
| Malawi | 31,000 | 31,000 | 43,000 | 43,000 | 54,000 | 60,000 |
| Nigeria | 653,000 | 967,000 | 986,000 | 709,810 | 564,000 | 557,000 |
| Uganda | 71,524 | 132,662 | 120,000 | 135,142 | 150,000 | 167,000 |
| Zambia | 149,000 | 218,000 | 252,000 | 240,000 | 275,000 | 205,000 |
| Canada (a) | 7,006,593 | 7,462,234 | 7,973,707 | 7,138,351 | 7,290,897 | 7,628,234 |
| Bahamas (c) | — | <i>n.a.</i> | 820,000 | 820,000 | 820,000 | 820,000 |
| Jamaica | 277,465 | 311,069 | 349,819 | 329,722 | 403,000 | 407,000 |
| Trinidad | 173,300 | 186,200 | 208,500 | 187,200 | 206,600 | 239,500 |
| Ceylon | 73,436 | 84,477 | 81,572 | 188,741 | 218,490 | 278,652 |
| Cyprus | 77,792 | 95,255 | 89,566 | 182,158 | 237,500 | 242,600 |
| Hong Kong | 211,636 | 236,836 | 243,016 | 212,000 | 255,000 | 372,000 |
| India | 9,537,000 | 10,411,000 | 10,877,000 | 11,122,000 | 11,400,000 | 13,400,000 |
| Malaysia (West) | 458,000 | 726,000 | 771,000 | 885,000 | 922,538 | 958,094 |
| Pakistan | 1,522,000 | 1,680,000 | 1,856,000 | 2,006,000 | 2,532,000 | 2,656,000 |
| Australia | 3,568,000 | 3,742,000 | 3,616,000 | 3,769,000 | 3,868,000 | 4,240,000 |
| Fiji | 31,000 | 39,000 | 40,000 | 46,000 | 50,000 | 55,000 |
| New Zealand | 775,000 | 829,000 | 864,000 | 801,000 | 751,000 | 790,000 |
| TOTAL | 42,000,000 | 45,000,000 | 46,000,000 | 45,000,000 | 48,000,000 | 51,000,000 |
| Irish Republic | 1,020,067 | 1,202,084 | 1,118,016 | 1,243,786 | 1,330,996 | 1,252,550 |
| OTHER COUNTRIES | | | | | | |
| Albania | 125,153 | 132,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Austria | 3,709,200 | 3,980,410 | 4,429,990 | 4,476,240 | 4,478,600 | 4,490,000 |
| Belgium (b) | 5,753,730 | 5,811,873 | 5,702,000 | 4,828,400 | 5,652,222 | 6,170,372 |
| Bulgaria | 2,545,000 | 2,639,000 | 2,806,000 | 3,305,000 | 3,457,000 | 3,496,000 |
| Czechoslovakia | 5,406,000 | 5,623,000 | 6,033,000 | 6,358,000 | 6,390,000 | 6,627,000 |
| Denmark— | | | | | | |
| Portland cement | 1,676,665 | 1,798,548 | 1,993,535 | 2,168,653 | 2,241,976 | 2,563,000 |
| Special cements | 191,322 | 169,584 | | | | |
| Finland | 1,547,099 | 1,742,047 | 1,532,000 | 1,490,088 | 1,453,000 | 1,731,000 |
| France— | | | | | | |
| Portland cement | 15,970,694 | 16,578,377 | 17,746,365 | 18,928,390 | 20,324,835 | 27,105,000 |
| Portland blast furnace cements | 3,417,770 | 3,577,982 | 3,494,278 | 3,557,425 | 3,171,100 | |
| Slag cements | 4,569 | 3,560 | 1,805 | 49,490 | 1,745 | |
| Masonry cements | 585,288 | 608,850 | 628,055 | 542,224 | 627,117 | |
| Natural cements | 251,470 | 209,388 | 80,160 | 102,249 | 46,774 | |
| Special cements | 966,934 | 1,033,616 | 985,332 | 852,203 | 820,807 | |
| Germany (Federal)— | | | | | | |
| Portland cement | 24,397,000 | 25,033,000 | 25,375,000 | 23,287,000 | 24,919,000 | 26,553,000 |
| Portland blast furnace cements | 7,756,000 | 7,741,000 | 7,960,000 | 7,090,000 | 7,109,000 | 7,093,000 |
| Special cements | 947,000 | 820,000 | 854,000 | 832,000 | 887,000 | 878,000 |
| Germany (East) | 5,676,000 | 5,991,000 | 6,348,000 | 7,069,000 | 7,432,000 | 7,292,000 |
| Greece | 2,629,688 | 3,161,460 | 3,537,583 | 3,675,602 | 4,015,072 | 4,763,560 |
| Hungary | 2,221,037 | 2,345,771 | 2,560,000 | 2,614,000 | 2,757,000 | 2,524,000 |
| Iceland | 106,000 | 112,000 | 113,000 | 114,000 | 100,000 | <i>n.a.</i> |
| Italy | 22,500,000 | 20,400,000 | 22,000,000 | 26,000,000 | 29,000,000 | 31,000,000 |
| Luxemburg | 202,000 | 218,000 | 209,000 | 179,848 | 188,322 | 203,668 |
| Netherlands | 2,827,300 | 2,926,300 | 3,113,000 | 3,296,000 | 3,382,000 | 3,200,000 |
| Norway | 1,516,171 | 1,576,703 | 1,797,685 | 2,118,278 | 2,260,809 | 2,453,000 |
| Poland | 8,623,000 | 9,422,000 | 9,881,000 | 10,962,000 | 11,410,000 | 11,643,000 |
| Portugal | 1,595,985 | 1,653,156 | 1,692,682 | 1,792,664 | 1,832,521 | 2,002,625 |
| Roumania | 4,677,000 | 5,321,000 | 5,793,000 | 6,239,000 | 6,915,000 | 7,396,000 |

(a) Sold or used by producers. Excluding Portland cement made from imported clinker.

(b) Excluding natural cement.

(c) Estimate based on full capacity production.

PRODUCTION OF CEMENT (cont.)

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|--------------|--------------|--------------|-------------|-------------|-------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Spain— | | | | | | |
| Portland cement .. | 7,509,853 | 8,769,904 | 10,603,927 | 12,074,346 | 13,918,341 | 14,825,120 |
| Natural cement .. | 376,718 | 331,417 | 263,068 | 334,038 | 273,919 | n.a. |
| Other cements .. | 312,065 | 956,512 | 1,023,299 | 817,821 | 754,419 | 934,741 |
| Sweden— | | | | | | |
| Portland cement .. | 3,449,785 | 3,591,531 | 3,591,834 | 3,743,590 | } 3,850,477 | 3,895,061 |
| Other cements .. | 119,152 | 124,241 | 105,209 | 96,274 | | |
| Switzerland .. | 4,254,047 | 3,975,658 | 4,257,326 | 4,109,723 | 4,252,278 | 4,462,533 |
| U.S.S.R. .. | 63,900,000 | 71,240,000 | 78,740,000 | 83,460,000 | 86,069,000 | 88,354,000 |
| Yugoslavia .. | 2,992,000 | 3,054,000 | 3,181,000 | 3,261,000 | 3,804,000 | 3,901,000 |
| Algeria .. | 772,000 | 728,000 | 648,000 | 648,000 | 853,000 | 935,000 |
| Angola .. | 210,440 | 241,582 | 259,858 | 274,862 | 306,764 | 376,714 |
| Canary Islands .. | 167,213 | 241,129 | (g) | (g) | (g) | (g) |
| Cape Verde Islands .. | 12,000 | 4,000 | 3,000 | 8,000 | n.a. | n.a. |
| Congo Republic .. | 228,663 | 244,000 | (e) 260,000 | 287,000 | 289,000 | n.a. |
| Egypt .. | 2,229,000 | 2,283,000 | 2,587,000 | 2,711,000 | 3,097,124 | 3,556,000 |
| Ethiopia (d) .. | 33,000 | 94,000 | (e) 98,000 | 148,000 | 168,000 | n.a. |
| Morocco .. | 911,800 | 776,000 | 843,200 | 860,368 | 999,794 | 911,000 |
| Mozambique .. | 178,675 | 216,873 | 220,529 | 239,115 | 281,000 | 300,849 |
| Senegal .. | 201,700 | 178,500 | 191,400 | 169,700 | 199,100 | 203,600 |
| Sudan .. | 89,289 | 48,365 | 98,000 | 89,000 | 145,000 | n.a. |
| Tunisia .. | 448,000 | 446,000 | 469,000 | 464,000 | 462,000 | 592,900 |
| South Africa .. | 3,401,610 | 3,819,890 | 3,926,980 | 3,750,000 | 3,995,000 | 5,000,000 |
| Costa Rica .. | 29,839 | 112,468 | 113,894 | 115,312 | 126,442 | 149,030 |
| Cuba .. | 793,000 | 788,000 | 787,000 | 882,000 | n.a. | n.a. |
| Dominican Republic .. | 292,817 | 208,474 | 273,110 | 305,442 | 321,540 | 383,772 |
| Guatemala (f) .. | 152,000 | 189,000 | 167,000 | 165,629 | 161,517 | 180,429 |
| Haiti .. | 50,587 | 41,000 | 37,000 | 39,000 | 40,000 | n.a. |
| Honduras .. | 72,000 | 93,000 | 103,000 | 109,000 | 127,000 | 129,646 |
| Mexico .. | 4,347,000 | 4,254,000 | 4,890,000 | 5,400,000 | 5,913,000 | 6,549,000 |
| Nicaragua .. | 60,088 | 65,028 | 86,600 | 89,285 | 108,755 | 107,357 |
| Panama Republic .. | 123,000 | 162,000 | 148,000 | 148,000 | n.a. | n.a. |
| Salvador .. | 88,621 | 79,444 | 139,176 | 143,054 | 152,278 | 139,475 |
| United States (a)— | | | | | | |
| Portland cement .. | 61,877,700 | 62,345,800 | 64,563,200 | 62,006,300 | 66,288,300 | 68,748,000 |
| Prepared masonry cement (b) .. | 2,765,900 | 2,878,000 | 2,858,000 | 2,745,000 | 2,900,100 | 2,907,000 |
| Natural, slag and hydraulic lime cements | 46,200 | 46,800 | 19,000 | 15,900 | 14,400 | 15,000 |
| Argentina .. | 2,845,206 | 3,253,266 | 3,431,720 | 3,496,650 | 4,146,331 | 4,278,215 |
| Bolivia .. | 62,514 | 64,786 | 65,000 | (f) 66,000 | 70,000 | 69,700 |
| Brazil .. | 5,123,520 | 5,138,434 | 5,465,000 | 6,363,000 | 7,240,000 | 7,699,926 |
| Chile .. | 1,246,673 | 1,169,148 | 1,342,686 | 1,184,064 | 1,230,963 | 1,405,000 |
| Colombia .. | 1,941,000 | 2,837,303 | 2,192,803 | 2,080,314 | 2,329,826 | 2,353,238 |
| Ecuador .. | 284,000 | (f) 320,000 | 372,000 | 422,914 | 434,000 | n.a. |
| Paraguay .. | 23,000 | 29,000 | 26,000 | 15,000 | 24,000 | 36,809 |
| Peru .. | 800,598 | 1,000,772 | 1,052,000 | 1,026,000 | 1,070,000 | 1,080,000 |
| Uruguay .. | 406,000 | 424,000 | 471,000 | 414,000 | 506,000 | n.a. |
| Venezuela .. | 1,820,384 | 2,078,492 | 2,080,272 | 2,242,320 | 2,398,173 | n.a. |
| Afghanistan (c) .. | r 142,200 | r 172,200 | r 174,000 | r 123,600 | 90,600 | 103,400 |
| Burma .. | 129,000 | 133,000 | 139,000 | 138,000 | 174,000 | 197,000 |
| Cambodia .. | n.a. | 50,000 | 58,000 | (e) 59,000 | 59,000 | n.a. |
| China .. | e 10,334,000 | e 11,000,000 | e 11,000,000 | e 8,000,000 | 8,853,000 | 10,000,000 |
| Formosa .. | 2,320,000 | 2,410,000 | 3,060,000 | 3,431,743 | 3,930,300 | 4,023,000 |
| Indonesia .. | 432,000 | (e) 360,000 | 333,000 | 324,000 | 404,000 | 531,000 |
| Iran (c) .. | (f) 730,000 | 772,000 | 1,372,000 | 1,372,000 | 1,377,000 | f 1,380,000 |
| Iraq .. | 1,006,660 | 1,265,000 | 1,321,000 | e 1,575,000 | 1,575,000 | f 1,575,000 |

(a) Including Puerto Rico.

(b) Excluding masonry cement produced by companies purchasing Portland cement for reprocessing.

(c) Years ended March 20 of year following that stated.

(d) Years ended September 10 of that stated.

(e) United States Bureau of Mines' estimate.

(f) Estimated.

(g) Included with Spain.

PRODUCTION OF CEMENT (cont.)

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Israel | 1,080,000 | 1,240,000 | 1,150,000 | 791,000 | 1,087,000 | 1,279,000 |
| Japan | 32,460,000 | 32,173,000 | 37,672,000 | 42,608,000 | 46,927,000 | 50,575,000 |
| Jordan | 302,929 | 300,272 | 368,264 | 315,495 | 375,189 | 480,400 |
| Korea (South) | 1,222,496 | 1,588,648 | 1,850,528 | 2,402,473 | 3,516,000 | 4,788,000 |
| Korea (North) | 2,569,000 | 2,362,000 | 2,460,000 | 2,559,000 | 2,656,000 | 2,760,000 |
| Lebanon | 867,244 | 950,000 | 1,079,000 | 1,000,000 | 892,000 | 1,233,000 |
| Philippine Republic | 1,182,148 | 1,505,000 | 1,620,000 | 2,079,000 | 2,518,000 | 2,900,000 |
| Saudi Arabia | 238,000 | 249,000 | 246,000 | 348,000 | 393,000 | 549,000 |
| Syria | 625,000 | 663,000 | 671,000 | 677,000 | 902,000 | 919,000 |
| Thailand | 1,053,635 | 1,228,286 | 1,459,312 | 1,710,000 | 2,133,960 | 2,365,430 |
| Turkey | 2,893,445 | 3,193,189 | 3,803,696 | 4,181,892 | 4,653,000 | 5,704,000 |
| Vietnam (South) | 74,116 | 186,295 | 132,527 | 177,901 | 143,000 | <i>n.a.</i> |
| Vietnam (North) | 639,000 | 740,000 | (b) 738,000 | (b) 738,000 | (b) 500,000 | <i>n.a.</i> |
| TOTAL (a) | 366,000,000 | 382,000,000 | 409,000,000 | 425,000,000 | 454,000,000 | 481,000,000 |
| WORLD'S TOTAL (a) | 408,000,000 | 427,000,000 | 456,000,000 | 470,000,000 | 503,000,000 | 533,000,000 |

(a) Estimated.

(b) United States Bureau of Mines' estimate.

CHINA CLAY
PRODUCTION OF CHINA CLAY

Long tons

| Producing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-------------|-----------|-----------|------------|-----------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom (c) .. | 2,033,000 | 2,203,000 | 2,482,000 | 2,591,000 | 2,751,000 | 2,751,000 |
| Kenya | 1,268 | 1,687 | 879 | 1,433 | 1,331 | 1,449 |
| Nigeria | 3 | 25 | 20 | 320 | n.a. | n.a. |
| Rhodesia | 18,750 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Swaziland | 307 | 741 | 578 | 1,830 | 2,111 | 1,610 |
| Tanzania | 109 | 164 | 286 | 307 | 596 | 732 |
| Ceylon | 1,502 | 803 | 1,591 | 2,574 | 2,822 | 3,035 |
| Hong Kong | 5,043 | 4,712 | 5,771 | 8,435 | 5,575 | 4,341 |
| India | 428,022 | 504,000 | 540,329 | 504,898 | 498,000 | 520,351 |
| Malaysia (West) .. | 1,420 | 1,562 | 1,576 | 1,758 | 1,497 | 2,016 |
| Pakistan | 956 | 1,426 | 2,714 | 2,881 | 3,033 | n.a. |
| Australia | 40,808 | 59,683 | 50,110 | 66,112 | 59,343 | n.a. |
| OTHER COUNTRIES | | | | | | |
| Austria (crude) .. | 362,305 | 322,503 | 371,715 | 377,718 | 321,978 | 342,575 |
| Belgium | 49,099 | 23,450 | 178,267 | 97,245 | (e) 97,000 | n.a. |
| Bulgaria (f) | 82,000 | 93,000 | 92,000 | 123,000 | 125,000 | 128,000 |
| Czechoslovakia .. | 308,056 | 317,000 | 320,000 | 335,000 | 336,000 | 338,000 |
| France | 123,000 | 130,000 | 150,000 | 148,000 | n.a. | n.a. |
| Germany (Federal) .. | 403,010 | 393,270 | 400,687 | 397,339 | 460,912 | 481,655 |
| Greece | 48,750 | r 85,445 | r 62,469 | r 59,052 | 77,623 | 59,000 |
| Hungary | 49,543 | 53,000 | 61,000 | 65,000 | 62,000 | 59,000 |
| Italy— | | | | | | |
| Crude | 95,850 | 106,149 | 83,352 | 86,397 | 85,659 | 94,990 |
| Kaolinic earth .. | 92,751 | 48,600 | 35,579 | 15,000 | 10,000 | n.a. |
| Portugal— | | | | | | |
| Crude and washed .. | 37,688 | 39,756 | 33,528 | 36,621 | 40,754 | 44,122 |
| Spain | (f) 138,701 | (f) 144,396 | 188,022 | 212,606 | 223,114 | 269,982 |
| Sweden (b) | 43,342 | 41,075 | 26,855 | 28,666 | 27,263 | 28,247 |
| Yugoslavia | 5,000 | 5,000 | 5,000 | 4,500 | n.a. | n.a. |
| Egypt | 61,804 | 47,020 | 49,198 | 31,613 | 30,776 | n.a. |
| Eritrea | (c) 500 | (c) 200 | n.a. | 500 | n.a. | n.a. |
| Morocco | — | 967 | — | n.a. | n.a. | n.a. |
| Mozambique | 10 | 150 | 345 | 612 | 514 | 1,250 |
| South Africa | 38,835 | 40,740 | 39,879 | 32,316 | 32,195 | 32,636 |
| Mexico | 63,211 | 79,854 | 95,065 | 77,350 | 74,520 | 88,315 |
| United States (a) .. | 2,974,412 | 3,217,815 | 3,915,577 | 3,547,249 | 3,751,000 | 3,750,000 |
| Argentina | 41,711 | 71,580 | 72,270 | 63,084 | 71,009 | n.a. |
| Chile | 45,237 | 29,625 | 39,862 | 28,959 | 26,000 | n.a. |
| Colombia | 79,416 | 82,000 | 25,893 | 82,790 | 82,700 | 86,800 |
| Ecuador | 718 | 416 | 1,907 | 70 | 900 | n.a. |
| Peru | 325 | 384 | 411 | n.a. | n.a. | n.a. |
| Iran (d) | 6,860 | 9,448 | n.a. | n.a. | n.a. | n.a. |
| Japan | 105,655 | 87,871 | 115,706 | 147,913 | 167,000 | 186,000 |
| Korea (South) | 59,580 | 71,103 | r 104,070 | 101,054 | 59,557 | 52,146 |
| Vietnam (South) .. | 2,038 | n.a. | n.a. | n.a. | n.a. | n.a. |

China clay is known to have been produced in East Germany, Roumania, U.S.S.R., Brazil, China, Formosa, Israel, Indonesia and Thailand.

(a) Sold or used by producers.

(e) United States Bureau of Mines' estimate.

(b) Sales.

(f) Washed or equivalent.

(c) From 1965 onwards the figures are unofficial. The official production statistics for China Clay and China Stone together are as follows (long tons): 1965—2,232,000; 1966—2,512,000; 1967—2,611,000; 1968—2,781,000; 1969—2,784,000.

(d) Years ended March 20 of year following that stated.

EXPORTS OF CHINA CLAY

Long tons

| Exporting Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|-------------|-----------|-----------|-----------|-----------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | 1,360,813 | 1,482,160 | 1,712,091 | 1,760,137 | 1,848,145 | 2,096,278 |
| Tanzania | 10 | — | — | — | — | — |
| Hong Kong | 2,900 | 3,665 | 3,924 | 4,823 | 3,062 | 4,875 |
| India (a) | 698 | 147 | 80 | 529 | 107 | 135 |
| Malaysia (West) | <i>n.a.</i> | 114 | 216 | 120 | 138 | 549 |
| OTHER COUNTRIES | | | | | | |
| Austria | 34,401 | 30,180 | 30,990 | 27,374 | 26,385 | 28,611 |
| Belgium-Luxemburg | | | | | | |
| E.U. | 71 | 400 | 921 | 1,220 | 1,052 | 1,433 |
| Czechoslovakia | 163,000 | 167,000 | 163,000 | 162,000 | 167,000 | 245,000 |
| Denmark | 73 | 47 | 92 | 57 | 46 | 42 |
| France | 55,056 | 55,223 | 55,062 | 52,784 | 59,206 | 62,892 |
| Germany (Federal) | 55,866 | 54,508 | 65,300 | 77,311 | 75,594 | 89,684 |
| Germany (East) | 61,722 | 68,878 | 71,522 | 78,503 | 72,444 | 63,516 |
| Italy | 359 | 528 | 390 | 234 | 469 | 589 |
| Netherlands | 209 | 114 | 740 | 145 | 20,792 | 37,550 |
| Portugal | 10,792 | 10,420 | 2,397 | 2,401 | 429 | 892 |
| Spain | 18,435 | 24,709 | 18,220 | 19,277 | 17,428 | 32,482 |
| Sweden | 62 | 120 | 141 | 160 | 1,993 | 540 |
| U.S.S.R. | 98 | 1,100 | 300 | 5,200 | 13,287 | <i>n.a.</i> |
| Morocco | 272 | 8 | — | — | — | — |
| South Africa | 263 | 396 | 505 | 872 | 701 | 633 |
| United States | 135,469 | 172,210 | 226,257 | 287,437 | 348,109 | 426,495 |
| Argentina | 49 | 10 | 5 | 41 | 22 | 71 |
| Brazil | 710 | 1,383 | 689 | 945 | 1,403 | <i>n.a.</i> |
| Japan | 2,736 | 2,790 | 1,018 | 1,743 | 2,665 | 3,943 |
| Korea (South) | 13,170 | 20,073 | 28,016 | 25,942 | 38,982 | 40,355 |
| Turkey | 256 | 20 | 49 | — | — | — |

(a) Years ended March 31 following that stated.

IMPORTS OF CHINA CLAY

Long tons

| Importing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|---------|---------|---------|---------|---------|---------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Canada | 151,557 | 173,184 | 175,693 | 169,921 | 160,979 | 205,327 |
| Hong Kong | (b) 197 | (b) 16 | 131 | 51 | 148 | 389 |
| India | 5,690 | 4,325 | 2,019 | 3,412 | 2,072 | 2,992 |
| Malaysia (West) | n.a. | 1,501 | 1,233 | 1,299 | 1,177 | 1,397 |
| Pakistan | 2,916 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Australia | 20,918 | 22,316 | 25,652 | 26,197 | 25,549 | 24,276 |
| New Zealand (d) | 2,763 | 2,856 | 2,602 | 3,004 | 2,413 | n.a. |
| OTHER COUNTRIES | | | | | | |
| Austria | 12,773 | 18,775 | 21,805 | 27,955 | 31,264 | 38,838 |
| Belgium-Luxemburg | | | | | | |
| E.U. | 57,491 | 63,541 | 92,017 | 93,897 | 128,714 | 179,842 |
| Denmark | 34,788 | 30,799 | 37,793 | 30,877 | 35,232 | 37,436 |
| Finland | 132,614 | 147,406 | 178,754 | 209,726 | 199,596 | 234,197 |
| France | 201,772 | 206,291 | 236,064 | 225,048 | 252,368 | 281,752 |
| Germany (Federal) | 358,831 | 375,447 | 420,637 | 391,800 | 498,025 | 534,432 |
| Germany (East) | 19,355 | 21,147 | 31,404 | 26,194 | 29,301 | 28,263 |
| Hungary | 59,483 | 67,371 | 65,878 | 63,939 | 67,073 | 89,934 |
| Italy | 279,603 | 264,174 | 321,408 | 364,692 | 438,375 | 479,947 |
| Netherlands | 128,128 | 126,030 | 142,551 | 131,439 | 150,327 | 190,312 |
| Norway | 69,586 | 62,731 | 70,658 | 66,681 | 72,755 | 85,744 |
| Poland | 76,500 | 70,844 | 76,567 | 70,187 | 77,799 | 89,632 |
| Portugal | 252 | 268 | 446 | 970 | 2,253 | 3,539 |
| Spain | 15,781 | 27,955 | 38,612 | 44,189 | 52,760 | 63,980 |
| Sweden | 159,821 | 162,699 | 116,738 | 189,506 | 204,560 | 212,771 |
| Yugoslavia | 25,461 | 27,127 | 23,001 | 26,096 | 29,233 | 35,591 |
| Angola | 63 | 40 | 84 | 74 | 99 | 92 |
| Morocco | 1,807 | 2,670 | 2,387 | 2,004 | 3,013 | 3,414 |
| Mozambique | 125 | 108 | 94 | 73 | n.a. | n.a. |
| South Africa (a) | 1,174 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Costa Rica | 101 | 209 | 134 | 176 | 394 | 152 |
| Cuba | 182 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Guatemala | 275 | 188 | 301 | 657 | 897 | 1,137 |
| Mexico | 9,193 | 8,952 | 13,201 | 12,897 | 17,373 | n.a. |
| United States | 104,568 | 81,925 | 104,309 | 82,229 | 67,094 | 58,217 |
| Argentina | 10,452 | 9,213 | 10,494 | 11,411 | 13,599 | 15,332 |
| Brazil | 110 | 93 | 472 | 909 | 1,723 | n.a. |
| Chile | 241 | 256 | n.a. | 165 | n.a. | n.a. |
| Colombia | 3,180 | 1,964 | 4,579 | 2,219 | 3,144 | n.a. |
| Ecuador | 5 | 9 | 83 | 25 | n.a. | n.a. |
| Peru | 1,827 | 1,199 | 1,603 | 3,488 | 2,882 | n.a. |
| Uruguay | n.a. | 1,186 | 1,588 | 1,618 | 1,327 | 1,399 |
| Venezuela | 5,976 | 5,345 | 5,566 | 6,375 | 9,645 | 8,960 |
| Iran (c) | 519 | 346 | 422 | 639 | 1,040 | n.a. |
| Japan | 52,920 | 59,119 | 78,928 | 102,286 | 122,157 | 134,387 |
| Philippine Republic | 2,812 | 4,166 | 3,267 | 3,888 | n.a. | n.a. |
| Turkey | 7 | 7 | 17 | 25 | 21 | 26 |

(a) Including Cornish or China stone.

(c) Years ended March 20 following that stated.

(b) Excess of re-exports.

(d) Years ended June 30 of that stated.

**CHROME ORE AND CHROMIUM
PRODUCTION OF CHROME ORE**

Long tons

| Producing Country | Estimated Cr ₂ O ₃ content | | | | | 1969 | 1968 | 1967 | 1966 | 1965 | 1964 |
|-------------------------------|--|------------|------------|------------|-----------|-----------|------|---------|---------|---------|---------|
| | 1964 | 1965 | 1966 | 1967 | 1968 | | | | | | |
| COMMONWEALTH COUNTRIES | | | | | | | | | | | |
| Rhodesia .. | 440,510 | f 625,062 | e 500,000 | e 312,000 | e 375,000 | e 357,000 | | 250,000 | 300,000 | 211,000 | 178,000 |
| Cyprus (a) .. | r 2,983 | r 4,875 | r 10,297 | 21,035 | 24,708 | 23,543 | | 5,000 | r 2,400 | r 1,500 | 11,000 |
| India .. | 34,417 | 58,742 | 76,430 | 107,805 | 202,409 | 222,496 | | 36,700 | 28,200 | 16,500 | 106,800 |
| Pakistan (c) .. | 13,290 | 14,261 | 26,718 | 25,956 | 25,610 | 25,893 | | 13,000 | 7,000 | 6,000 | 13,000 |
| Australia .. | 72 | 23 | — | — | — | — | | — | 10 | 32 | — |
| TOTAL .. | 488,289 | 703,000 | 600,000 | r 467,000 | 628,000 | 629,000 | | — | — | — | — |
| OTHER COUNTRIES | | | | | | | | | | | |
| Albania .. | 301,976 | 305,900 | 296,900 | 321,700 | e 321,000 | e 321,000 | | n.a. | n.a. | n.a. | n.a. |
| Finland .. | n.a. | n.a. | n.a. | 6,300 | 35,600 | 70,200 | | n.a. | n.a. | n.a. | n.a. |
| Greece .. | 39,466 | 47,040 | 45,596 | 10,257 | 13,000 | 23,800 | | 20,000 | 20,000 | 20,000 | 11,000 |
| U.S.S.R. (e) .. | 1,300,000 | 1,400,000 | 1,400,000 | 1,500,000 | 1,620,000 | 1,673,000 | | n.a. | n.a. | n.a. | n.a. |
| Yugoslavia .. | 86,963 | 78,590 | 53,355 | 46,417 | 44,546 | 38,811 | | 18,400 | 22,520 | 24,500 | 12,800 |
| Malagasy Republic .. | 11,584 | 2,346 | — | — | — | — | | 470,000 | n.a. | n.a. | 530,483 |
| South Africa .. | 836,132 | 927,230 | 1,044,186 | 1,130,906 | 1,134,524 | 1,178,752 | | n.a. | n.a. | n.a. | n.a. |
| Sudan .. | (b) 17,000 | (e) 30,000 | 17,000 | 18,000 | 22,000 | 21,000 | | n.a. | n.a. | n.a. | n.a. |
| Cuba .. | 32,000 | (e) 29,000 | (e) 29,000 | (e) 29,000 | n.a. | n.a. | | n.a. | n.a. | n.a. | n.a. |
| Brazil .. | 25,384 | 31,543 | 23,856 | 14,788 | 16,762 | 16,071 | | n.a. | n.a. | n.a. | n.a. |
| Colombia .. | 394 | 260 | — | — | — | 160 | | n.a. | n.a. | n.a. | n.a. |
| Iran (d) .. | e 120,000 | 130,000 | 140,000 | 147,000 | 157,000 | n.a. | | 70,000 | 60,000 | 58,000 | n.a. |
| Japan .. | 43,261 | 41,173 | 32,314 | 44,497 | 27,450 | 29,312 | | 11,000 | 14,000 | 15,000 | 10,700 |
| Philippine Republic .. | 460,696 | 545,764 | 551,264 | 413,124 | 431,768 | 462,240 | | 188,000 | 185,000 | 157,000 | 166,000 |
| Turkey .. | 406,167 | 558,106 | 503,564 | 365,276 | b 400,000 | 651,810 | | 240,000 | 270,000 | 190,000 | 270,500 |
| New Caledonia .. | — | — | — | 1,795 | — | — | | — | — | — | — |
| TOTAL .. | 3,700,000 | 4,200,000 | 4,200,000 | 4,000,000 | 4,300,000 | 4,700,000 | | — | — | — | — |
| World's TOTAL .. | 4,200,000 | 4,900,000 | 4,800,000 | 4,700,000 | 4,900,000 | 5,300,000 | | — | — | — | — |

Chrome ore is also produced in Bulgaria, Roumania and North Vietnam.

(a) Figures relate to saleable production.

(b) Estimated.

(c) West Pakistan.

(d) Years ended March 20 following that stated.

(e) United States Bureau of Mines' estimate.

(f) Exports.

EXPORTS OF CHROME ORE, ETC.

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|---------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Chromium metal .. | 616 | 595 | 1,527 | 639 | 1,054 | 1,262 |
| Rhodesia— | | | | | | |
| Ore | 448,477 | 625,062 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ferro-chrome | 22,332 | 20,939 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Canada— | | | | | | |
| Ferro-chrome | 154 | 183 | 31 | — | 1 | — |
| Cyprus— | | | | | | |
| Ore and concentrates .. | 9,150 | 2 | 2,501 | 26,948 | 23,591 | 27,973 |
| India (a)— | | | | | | |
| Ore | 30,468 | 25,025 | 68,717 | 65,980 | 108,327 | 140,927 |
| Pakistan— | | | | | | |
| Ore | 22,398 | <i>n.a.</i> | 21,883 | (c) 13,286 | (c) 2,489 | (c) 1,083 |
| OTHER COUNTRIES | | | | | | |
| Albania— | | | | | | |
| Ore | 305,800 | 292,900 | 304,100 | 317,900 | <i>n.a.</i> | <i>n.a.</i> |
| Austria— | | | | | | |
| Ore | 635 | 841 | 486 | 508 | 234 | 697 |
| France— | | | | | | |
| Chromium metal .. | 182 | 312 | 321 | 225 | 210 | 338 |
| Ferro-chrome | 17,717 | 19,419 | 24,934 | 20,662 | 21,318 | 12,711 |
| Germany (Federal)— | | | | | | |
| Ore | 1,497 | 1,718 | 1,178 | 1,382 | 1,295 | 3,258 |
| Chromium metal .. | 52 | 39 | 79 | 97 | 19 | 29 |
| Greece— | | | | | | |
| Ore | 22,153 | 29,051 | 20,345 | 13,226 | 15,088 | 25,453 |
| Italy— | | | | | | |
| Ore | 2,038 | — | 14 | 47 | 114 | 117 |
| Ferro-chrome | 4,137 | 7,011 | 7,941 | 7,498 | 3,787 | 7,329 |
| Netherlands— | | | | | | |
| Ore | 1,252 | 986 | 1,686 | 3,268 | 3,727 | 2,555 |
| Norway— | | | | | | |
| Ferro-chrome | 33,672 | 30,384 | 28,797 | 27,065 | 33,690 | 37,894 |
| Ferro-silico-chrome .. | 8,106 | 4,086 | 355 | 945 | 5,021 | 3,087 |
| Sweden— | | | | | | |
| Ore | — | — | — | — | 84 | 25 |
| Ferro-chrome | 20,231 | 18,685 | 22,555 | 22,979 | 22,591 | 21,372 |
| U.S.S.R.— | | | | | | |
| Ore | 652,500 | 736,000 | 905,000 | 1,013,733 | 1,031,448 | 1,125,900 |
| Ferro-chrome | 15,200 | 24,400 | 29,300 | 31,000 | 32,800 | 37,200 |
| Yugoslavia— | | | | | | |
| Ore and concentrates .. | 23,508 | 13,443 | 12,864 | 6,811 | 9,114 | 3,090 |
| Ferro-chrome | 6,906 | 9,948 | 9,090 | 8,028 | 8,303 | 5,811 |
| Malagasy Republic— | | | | | | |
| Ore | 6,892 | 7,677 | 1 | — | — | 32,459 |
| South Africa— | | | | | | |
| Ore | 628,122 | 690,143 | 812,628 | 690,054 | 772,755 | 905,219 |
| Sudan— | | | | | | |
| Ore | 11,000 | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Cuba— | | | | | | |
| Ore | 17,730 | 30,201 | 36,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| United States— | | | | | | |
| Ore | 5,684 | 6,292 | 16,614 | 6,780 | 11,201 | 44,184 |
| Chromium metal .. | 41 | 198 | 116 | 82 | 78 | 134 |
| Ferro-chrome | 8,957 | 10,716 | 6,828 | 12,012 | 24,221 | 21,940 |
| Iran (b)— | | | | | | |
| Ore | 122,512 | 157,325 | 129,743 | 87,368 | 61,147 | <i>n.a.</i> |

(a) Years ended March 31 following that stated.

(b) Years ended March 20 following that stated.

(c) Years ended 30th June of that statek.

EXPORTS OF CHROME ORE, ETC. (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|---------|-------------|---------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Japan— | | | | | | |
| Ore and concentrates .. | <i>n.a.</i> | 1,513 | <i>n.a.</i> | 5 | 1 | — |
| Ferro-chrome | 3,800 | 23,358 | 21,904 | 6,228 | 5,515 | 3,047 |
| Philippine Republic— | | | | | | |
| Ore and concentrates .. | 578,000 | 536,678 | 568,856 | 455,752 | 405,402 | 500,000 |
| Turkey— | | | | | | |
| Ore | 338,700 | 450,258 | 500,687 | 309,346 | 380,806 | 489,269 |
| Ferro-chrome | 5,770 | 5,852 | 7,251 | 5,123 | 9,678 | 7,096 |
| New Caledonia— | | | | | | |
| Ore | 5,899 | — | — | 1,216 | <i>n.a.</i> | <i>n.a.</i> |

IMPORTS OF CHROME ORE, ETC.

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--------------------------------------|---------|---------|---------|---------|---------|---------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ore | 222,235 | 200,982 | 185,662 | 98,359 | 156,432 | 195,643 |
| Ferro-chrome | 47,254 | 60,894 | 50,065 | 44,627 | 58,464 | 65,338 |
| Ferro-silico-chrome | 4,473 | 4,495 | 4,133 | 5,998 | 4,299 | 7,773 |
| Zambia— | | | | | | |
| Ore | 395 | 279 | 513 | 848 | 801 | 1,929 |
| Canada— | | | | | | |
| Ore and concentrates | | | | | | |
| (Cr content) | 18,566 | 31,614 | 18,643 | 30,790 | 20,002 | 37,433 |
| Ferro-chrome | 9,359 | 13,693 | 11,193 | 19,411 | 13,433 | 22,431 |
| India— | | | | | | |
| Ore | — | 1 | 1 | 5 | — | — |
| Ferro-chrome (a) | 1,280 | 861 | 519 | 1,185 | 459 | 1,411 |
| Australia— | | | | | | |
| Ore | 32,212 | 8,079 | 4,025 | 25,115 | 23,898 | n.a. |
| Ferro-chrome | 2,993 | 5,864 | 2,420 | 3,430 | 3,487 | 5,877 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Ore | 49,480 | 40,572 | 47,310 | 36,405 | 53,678 | 83,830 |
| Ferro-chrome | 15,037 | 15,240 | 16,053 | 14,420 | 17,640 | 23,669 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Ore | 1,412 | 972 | 1,683 | 2,098 | 13,991 | 17,490 |
| Chromium metal | 28 | 14 | 12 | 27 | 51 | 56 |
| Ferro-chrome and silico-chrome | 6,950 | 6,325 | 6,571 | 6,721 | 7,582 | 8,727 |
| Czechoslovakia— | | | | | | |
| Ore | 218,000 | 208,000 | 184,000 | 155,000 | n.a. | n.a. |
| Denmark— | | | | | | |
| Ferro-chrome | 347 | 414 | 480 | 401 | 593 | 798 |
| Finland— | | | | | | |
| Ferro-chrome | 457 | 1,340 | 1,090 | 1,000 | 1,291 | 1,428 |
| France— | | | | | | |
| Ore | 190,339 | 220,747 | 233,614 | 244,920 | 258,963 | 325,110 |
| Ferro-chrome | 2,252 | 2,627 | 2,782 | 1,150 | 4,311 | 10,165 |
| Germany (Federal)— | | | | | | |
| Ore | 232,954 | 300,734 | 303,459 | 280,164 | 355,622 | 480,869 |
| Chromium metal | 67 | 70 | 41 | 89 | 234 | 377 |
| Germany (East)— | | | | | | |
| Ore (b) | 29,791 | 29,607 | 29,123 | 34,959 | 28,693 | 31,387 |
| Hungary— | | | | | | |
| Ore | 29,213 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Ferro-chrome | 4,215 | 4,556 | 10,254 | 9,303 | 8,108 | 6,837 |
| Italy— | | | | | | |
| Ore | 79,112 | 98,684 | 110,486 | 93,326 | 62,093 | 157,922 |
| Chromium metal | 21 | 39 | 32 | 58 | 77 | 72 |
| Ferro-chrome | 16,711 | 14,673 | 24,291 | 23,336 | 11,073 | 25,525 |
| Netherlands— | | | | | | |
| Ore | 2,728 | 4,491 | 3,690 | 5,858 | 3,236 | 4,069 |
| Chromium metal | 17 | 29 | 6 | 9 | 16 | 30 |
| Ferro-chrome | 820 | 2,208 | 2,551 | 1,106 | 2,263 | 2,286 |
| Norway— | | | | | | |
| Ore | 107,660 | 75,383 | 68,786 | 62,021 | 68,517 | 93,769 |
| Poland— | | | | | | |
| Ore | 115,500 | 152,801 | 141,928 | 147,865 | 134,808 | 159,895 |
| Spain— | | | | | | |
| Ore | 18,001 | 29,108 | 28,694 | 15,736 | 29,030 | 44,664 |
| Ferro-chrome | 2,143 | 1,899 | 2,342 | 1,485 | 2,420 | 6,176 |

(a) Years ended March 31 following that stated.

 (b) Cr₂O₃ content.

IMPORTS OF CHROME ORE, ETC. (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|-------------|-----------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Sweden— | | | | | | |
| Ore | 149,654 | 139,237 | 156,276 | 138,496 | 147,077 | 181,070 |
| Chromium metal | 162 | 105 | 150 | 226 | 174 | 211 |
| Ferro-chrome | 7,516 | 23,407 | 16,889 | 13,744 | 18,651 | 30,108 |
| Yugoslavia— | | | | | | |
| Ore | 59,031 | 53,855 | 39,534 | 53,111 | 74,295 | 65,428 |
| South Africa— | | | | | | |
| Ore | 47,795 | 77,931 | 96,379 | 29,401 | 22,744 | 31,835 |
| Mexico— | | | | | | |
| Ferro-chrome | 573 | 453 | 318 | 379 | 491 | <i>n.a.</i> |
| United States— | | | | | | |
| Ore | 1,274,796 | 1,350,663 | 1,664,643 | r 1,107,734 | 968,439 | 987,492 |
| (Cr ₂ O ₃ content) | 576,512 | 617,046 | 750,760 | 505,482 | 451,829 | 451,782 |
| Ferro-chrome | 23,321 | 49,216 | 87,500 | r 51,324 | 53,407 | 55,041 |
| (Cr content) | 15,800 | 33,001 | 59,151 | 34,351 | 35,615 | 27,450 |
| Metal | 654 | 902 | 2,221 | 1,084 | 1,219 | 1,331 |
| Brazil— | | | | | | |
| Ore | — | — | 2,005 | 6,116 | 7,068 | <i>n.a.</i> |
| Ferro-chrome | 472 | 243 | 1,174 | 777 | 1,573 | <i>n.a.</i> |
| Chile— | | | | | | |
| Ferro-chrome | 340 | 316 | <i>n.a.</i> | 269 | <i>n.a.</i> | <i>n.a.</i> |
| Formosa— | | | | | | |
| Ore | <i>n.a.</i> | 266 | 866 | 49 | — | <i>n.a.</i> |
| Japan— | | | | | | |
| Ore | 390,166 | 354,609 | 415,210 | 586,285 | 625,817 | 721,262 |
| Ferro-chrome | 5,581 | 492 | 197 | 6,247 | 3,430 | 9,545 |
| Turkey— | | | | | | |
| Ferro-chrome | 20 | — | — | 19 | 25 | <i>n.a.</i> |

COAL, COKE AND BY-PRODUCTS

PRODUCTION OF COAL (Including Brown Coal and Lignite)

Long tons

| Producing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|--------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Great Britain— | | | | | | |
| Mined— | | | | | | |
| Anthracite | 3,468,200 | 2,941,000 | 2,800,000 | 2,671,000 | 2,391,000 | 2,178,000 |
| Bituminous | 183,349,300 | 177,226,000 | 164,755,900 | 162,388,000 | 154,833,100 | 142,078,200 |
| Opencast— | | | | | | |
| Anthracite | 1,129,900 | 1,262,000 | 1,612,500 | 1,375,800 | 1,558,000 | 1,454,000 |
| Bituminous | 5,679,600 | 6,070,300 | 5,413,700 | 5,708,900 | 5,305,600 | 4,866,000 |
| Northern Ireland— | | | | | | |
| Bituminous | 6,831 | 4,542 | 3,630 | 2,024 | <i>n.a.</i> | <i>n.a.</i> |
| Nigeria— | | | | | | |
| Sub-bituminous | 663,816 | 728,336 | 630,125 | 200,000 | <i>n.a.</i> | <i>n.a.</i> |
| Rhodesia— | | | | | | |
| Bituminous | 2,720,646 | ^a 2,989,692 | ^a 3,008,812 | ^a 3,019,198 | ^a 3,092,046 | ^a 3,397,925 |
| Swaziland— | | | | | | |
| Anthracite | 4,009 | 29,493 | 65,705 | 76,730 | 87,398 | 102,608 |
| Tanzania— | | | | | | |
| Bituminous | 746 | 2,358 | 2,488 | 1,688 | 3,310 | 2,519 |
| Zambia— | | | | | | |
| Bituminous | — | — | 112,324 | 387,000 | 565,000 | 390,982 |
| Canada— | | | | | | |
| Bituminous | 6,446,761 | 6,223,153 | 6,005,106 | 5,779,154 | 5,151,100 | 4,872,162 |
| Sub-bituminous | 1,879,386 | 2,281,029 | 2,310,433 | 2,369,015 | 2,651,389 | 2,852,636 |
| Lignite | 1,780,392 | 1,842,797 | 1,855,504 | 1,783,022 | 2,009,124 | 1,803,665 |
| India— | | | | | | |
| Bituminous | 61,454,000 | 66,100,000 | 66,890,000 | 67,145,000 | 69,696,000 | 73,037,000 |
| Lignite | 1,544,392 | 2,263,962 | 2,528,000 | 2,882,000 | 4,061,000 | 4,122,000 |
| Pakistan— | | | | | | |
| Lignite | 1,195,000 | 1,212,000 | 1,280,000 | 1,320,000 | 1,254,000 | 1,280,000 |
| Australia— | | | | | | |
| Semi-anthracite | 78,947 | 70,342 | 46,000 | 38,000 | 31,000 | 15,000 |
| Bituminous | 24,477,232 | 28,227,762 | 30,081,000 | 31,299,000 | 36,755,000 | 41,674,000 |
| Sub-bituminous | 2,845,031 | 3,140,439 | 3,244,000 | 3,370,000 | 3,486,000 | 3,675,000 |
| Brown coal | 19,034,792 | 20,658,856 | 21,782,977 | 23,384,000 | 22,974,000 | 22,911,000 |
| New Zealand— | | | | | | |
| Anthracite | 147 | 65 | 218 | 183 | 5 | — |
| Bituminous | 681,683 | 663,222 | 632,269 | 584,996 | 571,912 | 480,125 |
| Sub-bituminous | 2,038,253 | 1,837,884 | 1,796,643 | 1,617,410 | 1,483,467 | 1,677,956 |
| Lignite | 156,889 | 157,863 | 165,339 | 166,635 | 169,184 | 168,526 |
| TOTAL | 320,636,000 | 325,934,000 | 317,000,000 | 317,000,000 | 317,000,000 | 313,000,000 |
| Irish Republic— | | | | | | |
| Anthracite | 150,665 | 130,296 | 138,250 | 113,675 | 106,132 | 88,830 |
| including dust | 76,200 | 65,460 | 62,746 | 62,220 | 57,639 | 61,880 |
| Semi-bituminous | 76,200 | 65,460 | 62,746 | 62,220 | 57,639 | 61,880 |
| OTHER COUNTRIES | | | | | | |
| Albania— | | | | | | |
| Brown coal and lignite | 287,020 | 295,000 | 344,000 | 335,000 | 423,000 | 400,000 |
| Austria— | | | | | | |
| Bituminous | 101,697 | 57,685 | 20,173 | 13,670 | <i>n.a.</i> | <i>n.a.</i> |
| Brown coal | 5,669,741 | 5,364,275 | 5,199,547 | 4,531,252 | 4,111,000 | 3,780,084 |
| Belgium— | | | | | | |
| Anthracite | 5,966,672 | } 19,473,620 | 17,222,932 | 16,175,276 | 14,572,305 | 12,991,524 |
| Bituminous | 15,001,362 | | | | | |

(a) Sales for years ended August 31 of that stated.

PRODUCTION OF COAL (cont.)

Long tons

| Producing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|--------------|--------------|--------------|---------------|--------------|--------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Bulgaria— | | | | | | |
| Anthracite and bituminous | 589,000 | 543,000 | 483,000 | 460,000 | 432,000 | 423,000 |
| Brown coal and lignite .. | 23,346,000 | 24,082,000 | 24,264,000 | c28,000,000 | 27,834,341 | 28,156,000 |
| Czechoslovakia— | | | | | | |
| Bituminous | 27,756,000 | 27,188,000 | 26,309,000 | 25,536,000 | 25,518,000 | 26,640,000 |
| Brown coal | 70,343,000 | 67,952,000 | 68,752,000 | 66,120,000 | 69,716,000 | 74,073,000 |
| Lignite | 4,068,000 | 4,108,000 | 4,186,000 | 4,116,000 | 3,986,000 | 4,011,000 |
| Denmark— | | | | | | |
| Lignite | 2,160,000 | 2,094,000 | 1,951,000 | 1,281,000 | (c) 800,000 | n.a. |
| France— | | | | | | |
| Anthracite and bituminous | 52,204,523 | 50,536,672 | 49,542,834 | 46,872,414 | 41,249,000 | 39,943,000 |
| Lignite | 2,208,653 | 2,647,157 | 2,523,340 | 2,883,744 | 3,170,000 | 2,903,000 |
| Germany— | | | | | | |
| Federal Republic (b)— | | | | | | |
| Anthracite | 9,342,760 | 9,110,385 | 8,798,791 | } 110,293,592 | 110,249,187 | 109,866,800 |
| Bituminous (a) .. | 130,659,149 | 123,872,700 | 115,209,704 | | | |
| Pechkohle | 1,839,293 | 1,707,818 | 1,141,435 | 876,272 | 820,836 | 750,625 |
| Brown coal | 109,190,748 | 100,297,899 | 96,540,870 | 95,239,053 | 99,917,801 | 105,728,853 |
| East Germany— | | | | | | |
| Bituminous | 2,303,000 | 2,177,000 | 1,956,000 | 1,761,000 | 1,600,000 | 1,500,000 |
| Brown coal | 252,868,000 | 246,877,000 | 245,107,000 | 238,205,000 | 243,210,000 | 250,532,000 |
| Greece— | | | | | | |
| Lignite | 3,797,808 | 5,000,059 | 4,889,844 | 5,151,497 | 5,638,000 | 6,626,000 |
| Hungary— | | | | | | |
| Bituminous | 4,060,242 | 4,293,000 | 4,291,000 | 3,989,000 | 4,175,000 | 4,035,000 |
| Brown coal | 22,009,507 | 21,840,000 | 21,222,000 | 19,282,000 | 19,567,000 | 19,094,000 |
| Lignite | 4,980,300 | 4,808,000 | 4,355,000 | 3,332,000 | 3,041,000 | 2,953,000 |
| Italy— | | | | | | |
| Anthracite | 9,336 | 5,504 | 84 | — | — | — |
| Bituminous | 454,689 | 377,807 | 411,203 | 403,926 | 359,364 | 297,909 |
| Brown coal | 1,184,023 | 994,833 | 1,049,395 | 2,166,464 | 1,701,153 | 1,902,671 |
| Netherlands— | | | | | | |
| Bituminous and anthracite | 11,299,000 | 11,265,000 | 9,893,000 | 7,938,000 | 6,557,000 | 5,468,000 |
| Poland— | | | | | | |
| Bituminous | 115,500,000 | 116,900,000 | 120,000,000 | 121,900,000 | 126,602,000 | 132,880,000 |
| Brown coal | 19,960,000 | 22,269,000 | 24,121,000 | 23,544,000 | 26,453,000 | 30,377,000 |
| Portugal— | | | | | | |
| Anthracite | 437,000 | 420,809 | 411,585 | 435,735 | 391,000 | 409,958 |
| Brown coal | 99,000 | 88,270 | 49,926 | 37,996 | 30,130 | 7,793 |
| Roumania— | | | | | | |
| Anthracite and bituminous | (e) | (e) | (e) | (e) | (e) | (e) |
| Lignite | 4,588,000 | 5,375,000 | 6,400,000 | 7,526,000 | 9,002,000 | 9,100,000 |
| Brown coal | (d)6,359,000 | (d)6,529,000 | (d)6,838,000 | (d)7,256,000 | (d)7,749,000 | (d)9,795,000 |
| Spain— | | | | | | |
| Anthracite | 2,638,154 | 2,730,912 | r 2,670,000 | r 2,725,000 | 2,817,000 | 2,756,000 |
| Bituminous | 9,365,202 | 10,007,734 | r 9,970,000 | r 9,443,000 | 9,311,000 | 8,661,000 |
| Lignite | 2,562,745 | 2,729,071 | r 2,612,000 | r 2,624,000 | 2,787,000 | 2,657,000 |
| Spitzbergen— | | | | | | |
| Bituminous— | | | | | | |
| Norwegian mines .. | 435,092 | 418,903 | 426,912 | 419,882 | 340,804 | 379,178 |

(a) Including Stockheim hard coal.

(b) Excluding production from "small mines", reported as follows (long tons):

Hard coal; 1964—448,281; 1965—341,242; 1966—276,976; 1967—217,024; 1968—144,813; 1969—147,847.

Brown coal: 1964—96; 1965—nil; 1966—nil; 1967—20; 1968—nil, 1969—nil.

(c) Estimated.

(d) Including anthracite and bituminous.

(e) Included with brown coal.

PRODUCTION OF COAL (cont.)

Long tons

| Producing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|--------------|-------------|-------------|-------------|-------------|---------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Sweden— | | | | | | |
| Bituminous | 83,147 | 57,925 | 39,500 | 11,200 | 19,500 | 21,357 |
| U.S.S.R.— | | | | | | |
| Bituminous and | | | | | | |
| anthracite | 402,412,000 | 421,123,000 | 432,234,000 | 439,000,000 | 440,843,000 | 451,964,000 |
| Lignite | 142,835,000 | 147,483,000 | 144,121,000 | 149,000,000 | 135,764,000 | 137,704,000 |
| Yugoslavia— | | | | | | |
| Bituminous | 1,242,000 | 1,151,000 | 1,115,000 | 895,000 | 822,000 | 671,000 |
| Brown coal and lignite | 27,803,000 | 28,333,000 | 27,715,000 | 25,154,000 | 25,488,000 | 25,407,000 |
| Algeria (Sahara)— | | | | | | |
| Bituminous and | | | | | | |
| anthracite | 45,000 | 44,000 | 44,000 | 17,000 | — | 27,000 |
| Congo Republic— | | | | | | |
| Bituminous | 98,000 | 112,000 | 108,000 | 131,000 | 69,800 | 64,200 |
| Egypt— | | | | | | |
| Bituminous | — | 20,000 | (c) 20,000 | <i>n.a.</i> | <i>n.a.</i> | 4,000 |
| Malagasy Republic— | | | | | | |
| Bituminous | 3,800 | 1,786 | — | — | — | <i>n.a.</i> |
| Morocco— | | | | | | |
| Anthracite | 400,000 | 411,900 | 444,000 | 474,000 | 444,000 | 391,000 |
| Mozambique— | | | | | | |
| Bituminous | 241,000 | 233,748 | 267,000 | 278,000 | 309,000 | 272,417 |
| South Africa— | | | | | | |
| Anthracite | } 44,207,819 | 1,226,985 | 1,059,838 | 1,259,387 | 1,343,760 | 1,517,001 |
| Bituminous | | 46,467,805 | 46,124,711 | 47,262,423 | 49,495,100 | 50,402,116 |
| Greenland— | | | | | | |
| Bituminous | 24,000 | 20,000 | 33,000 | 31,000 | <i>n.a.</i> | <i>n.a.</i> |
| Mexico— | | | | | | |
| Bituminous | 2,093,000 | 1,974,000 | 2,068,000 | 2,125,000 | 2,500,000 | 2,750,000 |
| United States— | | | | | | |
| Anthracite | 15,343,081 | 13,273,174 | 11,554,700 | 10,942,913 | 10,233,000 | } 495,980,000 |
| Bituminous | 432,185,946 | 454,504,502 | 473,214,822 | 489,407,000 | 482,000,000 | |
| Lignite | 2,633,654 | 2,717,161 | 3,464,829 | 4,009,000 | 4,370,000 | |
| Argentina— | | | | | | |
| Lignite | 326,800 | 368,083 | 350,971 | 398,396 | 464,678 | 507,000 |
| Brazil— | | | | | | |
| Bituminous and lignite | 2,942,775 | 3,087,612 | 3,327,031 | 4,039,301 | 2,327,000 | 5,043,000 |
| Chile— | | | | | | |
| Bituminous | 1,754,349 | 1,700,000 | 1,626,124 | 1,472,434 | 1,586,000 | 1,676,989 |
| Columbia— | | | | | | |
| Bituminous | 3,000,000 | 3,000,000 | a 2,500,000 | 3,000,000 | 3,100,000 | 3,317,000 |
| Peru— | | | | | | |
| Anthracite | 31,236 | 7,608 | r 8,038 | r 12,381 | } 170,000 | 200,000 |
| Bituminous | 113,525 | 119,286 | r 139,681 | r 151,824 | | |
| Venezuela— | | | | | | |
| Bituminous | 36,011 | 30,803 | 33,536 | 33,914 | 28,459 | 31,000 |
| Afghanistan (b)— | | | | | | |
| Bituminous | r 112,700 | 144,000 | r 161,600 | r 151,000 | 124,800 | 136,200 |
| Burma | 10,000 | 10,000 | 10,000 | 15,000 | 15,000 | 15,000 |
| China (c) | 290,000,000 | 300,000,000 | 320,000,000 | 220,000,000 | 300,000,000 | 330,000,000 |
| Formosa— | | | | | | |
| Bituminous | 4,948,248 | 4,974,635 | 4,935,335 | 4,998,000 | 4,935,134 | 4,572,086 |
| Indonesia— | | | | | | |
| Bituminous | 439,000 | 384,000 | 314,778 | 205,969 | 172,827 | 188,000 |
| Iran (b)— | | | | | | |
| Bituminous | 270,000 | 271,000 | 300,000 | 300,000 | 300,000 | 300,000 |
| Japan— | | | | | | |
| Anthracite | 1,682,000 | 1,604,000 | 1,588,000 | 1,492,000 | 1,464,000 | 1,205,000 |
| Bituminous | 48,443,000 | 47,148,000 | 48,948,000 | 45,733,000 | 43,962,000 | 42,478,000 |
| Lignite | 680,139 | 564,000 | 445,000 | 359,000 | 328,725 | 245,000 |

(a) Estimated.

(b) Years ended March 20 following that stated.

(c) United States Bureau of Mines estimate.

PRODUCTION OF COAL (cont.)

Long tons

| Producing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Korea (South)— | | | | | | |
| Anthracite | 9,469,600 | 10,086,400 | 11,429,900 | 12,239,800 | 10,080,242 | 10,110,752 |
| Korea (North) | 14,300,000 | 17,500,000 | 19,200,000 | <i>a</i> 20,000,000 | <i>a</i> 23,000,000 | <i>a</i> 25,000,000 |
| Mongolia | 613,000 | 970,000 | <i>(b)</i> 1,000,000 | 1,040,000 | 1,230,000 | 1,300,000 |
| Philippine Republic— | | | | | | |
| Bituminous | 113,121 | 93,048 | <i>r</i> 74,134 | <i>r</i> 68,651 | 31,642 | 52,000 |
| Thailand— | | | | | | |
| Lignite | 101,996 | 122,996 | 168,429 | 330,000 | 300,000 | 342,000 |
| Turkey— | | | | | | |
| Bituminous | 7,037,000 | 6,905,000 | <i>(b)</i> 7,300,000 | 7,350,000 | 7,387,623 | 7,620,983 |
| Lignite | 5,812,000 | <i>r</i> 6,249,408 | <i>r</i> 6,467,366 | <i>r</i> 6,544,982 | 7,951,115 | 8,403,458 |
| Vietnam (North)— | | | | | | |
| Anthracite | 3,300,000 | <i>(a)</i> 3,500,000 | <i>(a)</i> 3,500,000 | <i>(a)</i> 3,000,000 | <i>(a)</i> 3,300,000 | <i>(a)</i> 3,300,000 |
| Vietnam (South)— | | | | | | |
| Anthracite | 71,621 | — | — | — | <i>n.a.</i> | <i>n.a.</i> |
| TOTAL | 2,390,000,000 | 2,430,000,000 | 2,470,000,000 | 2,360,000,000 | 2,380,000,000 | 2,510,000,000 |
| WORLD'S TOTAL .. | 2,710,000,000 | 2,760,000,000 | 2,790,000,000 | 2,677,000,000 | 2,702,000,000 | 2,826,000,000 |

(a) Estimated.

(b) United States Bureau of Mines' estimate.

PRODUCTION OF COKE

Long tons

| Producing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Great Britain— | | | | | | |
| Gas-works—coke (a) .. | 8,801,000 | 7,769,000 | 7,202,000 | 6,198,000 | 4,594,000 | 2,986,000 |
| breeze (a) .. | 2,169,000 | 1,988,000 | 1,800,000 | 1,591,000 | 1,191,000 | 778,000 |
| Coke-ovens—coke .. | 16,857,000 | 17,073,000 | 16,117,000 | 15,322,000 | 16,247,000 | 16,575,000 |
| breeze .. | 1,343,000 | 1,392,000 | 1,365,000 | 1,317,000 | 1,418,000 | 1,464,000 |
| Rhodesia | (e) 132,771 | (f) 171,855 | (f) 200,163 | 178,529 | 205,998 | 245,131 |
| Canada (c) | 3,877,662 | 3,900,706 | 3,951,831 | 3,955,624 | 4,741,752 | 4,466,317 |
| Hong Kong— | | | | | | |
| Gas-works (c) | 13,000 | 13,000 | 10,000 | 9,000 | <i>n.a.</i> | <i>n.a.</i> |
| India— | | | | | | |
| Gas-works | 68,215 | 63,288 | 64,434 | 65,974 | <i>n.a.</i> | <i>n.a.</i> |
| Hard | 7,202,827 | 7,850,000 | 8,030,645 | 7,470,000 | <i>n.a.</i> | <i>n.a.</i> |
| Soft | 2,171,662 | 2,570,000 | 2,834,721 | 2,756,000 | <i>n.a.</i> | <i>n.a.</i> |
| Australia (d)— | | | | | | |
| Coke—gas-works .. | 693,361 | 632,501 | 559,301 | 551,326 | 507,253 | <i>n.a.</i> |
| coke-ovens .. | 2,915,005 | 3,118,262 | 3,178,856 | 3,365,000 | 3,891,000 | 4,381,000 |
| Breeze | 417,949 | 471,787 | 492,801 | 521,426 | 607,099 | <i>n.a.</i> |
| New Zealand (b)— | | | | | | |
| Gas-works | 68,000 | 66,000 | 55,000 | 61,000 | 61,000 | 52,000 |
| Irish Republic— | | | | | | |
| Gas-works (c) | 128,758 | 124,567 | 103,585 | 88,748 | 53,751 | 35,387 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Gas-works | 307,792 | 281,203 | 220,000 | 210,000 | 195,000 | <i>n.a.</i> |
| Coke-ovens | 1,582,661 | 1,523,786 | 1,451,000 | 1,400,000 | 1,600,000 | 1,700,000 |
| Belgium— | | | | | | |
| Gas-works | 2,000 | 2,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Coke-ovens | 7,281,000 | 7,220,000 | 6,851,000 | 6,744,000 | 7,129,000 | 7,135,500 |
| Bulgaria | 463,085 | 721,027 | 787,630 | 790,000 | 804,000 | 807,000 |
| Czechoslovakia— | | | | | | |
| Hard coke | 9,272,000 | 9,346,000 | 9,316,000 | 9,160,000 | 9,382,000 | 9,883,000 |
| Brown-coal coke .. | 1,899,000 | 1,666,000 | 1,745,000 | 1,783,000 | 1,779,000 | 1,524,000 |
| Denmark (gas-works) .. | 344,000 | 259,000 | 287,000 | 242,000 | 289,000 | <i>n.a.</i> |
| Finland | <i>n.a.</i> | 140,000 | 151,000 | 134,000 | 118,000 | 134,000 |
| France— | | | | | | |
| Gas-works (e) | 60,000 | 20,000 | 14,200 | 8,700 | 8,400 | <i>n.a.</i> |
| Coke-ovens | 13,784,875 | 13,196,915 | 12,743,534 | 12,237,000 | 12,145,000 | 13,390,000 |
| Semi-coke | 291,611 | 237,166 | 244,714 | 194,000 | 160,000 | 65,000 |
| Germany (Federal)— | | | | | | |
| Gas-works | 4,834,000 | 4,086,000 | 3,520,000 | 2,824,000 | 2,290,000 | 2,368,000 |
| Coke-ovens—hard coke | 42,664,000 | 42,610,000 | 39,260,000 | 34,688,000 | 35,671,000 | 38,307,000 |
| do. brown-coal coke .. | 587,000 | 569,000 | 534,000 | 388,000 | — | — |
| Germany (East)— | | | | | | |
| Hard coke | 3,344,000 | 3,158,000 | 3,141,000 | 2,875,000 | 2,511,000 | 2,353,000 |
| Brown-coal coke .. | 7,488,000 | 7,226,000 | 7,207,000 | 6,848,000 | 6,687,000 | 6,331,000 |
| Greece (gas-works) .. | 17,886 | 16,966 | 17,341 | r 17,000 | 15,000 | 13,800 |
| Hungary— | | | | | | |
| Gas-works | 420,000 | 460,000 | 450,000 | <i>n.a.</i> | 430,000 | <i>n.a.</i> |
| Coke-ovens—hard coke | 764,000 | 765,000 | 771,000 | 639,000 | 492,000 | 504,000 |
| do. brown-coal coke | 41,000 | 45,000 | 42,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Italy— | | | | | | |
| Gas-works | 533,067 | 379,618 | 334,236 | 312,278 | 264,491 | 190,887 |
| Coke-ovens | 4,608,932 | 5,646,098 | 6,168,226 | 6,147,479 | 6,373,720 | 6,565,021 |
| Luxemburg— | | | | | | |
| Gas-works | 28,000 | 13,000 | <i>n.a.</i> | 10,000 | 10,000 | 10,000 |

(a) Excluding coke used for heating retorts.

(e) Sales.

(b) Sales for years ended March 31 of the year following that stated. (f) Years ended August 31

(c) Including coke-breeze.

of that stated.

(d) Years ended June 30 of that stated.

PRODUCTION OF COKE (cont.)

Long tons

| Producing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|------------|------------|------------|------------|------------|------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Netherlands— | | | | | | |
| Gas-works | 107,000 | 96,000 | 59,000 | 17,322 | 3,000 | n.a. |
| Coke-ovens | 4,443,000 | 4,218,100 | 3,767,500 | 3,261,700 | 2,889,000 | 1,978,000 |
| Norway— | | | | | | |
| Gas-works | 127,820 | 21,115 | n.a. | n.a. | n.a. | n.a. |
| Coke-ovens | 106,000 | 255,800 | 261,705 | 284,413 | 305,466 | 314,987 |
| Poland— | | | | | | |
| Gas-works | 1,176,800 | 1,244,000 | 1,268,600 | 1,255,800 | 1,271,600 | 1,326,000 |
| Coke-ovens | 12,819,000 | 12,986,000 | 13,263,000 | 13,704,000 | 14,187,000 | 14,585,000 |
| Portugal (gas-works) .. | 9,658 | 13,000 | 10,000 | 10,000 | 10,000 | 10,000 |
| Roumania— | | | | | | |
| Coke-ovens | 1,128,000 | 1,117,000 | 1,086,000 | 1,113,000 | 1,115,000 | 924,000 |
| Spain— | | | | | | |
| Gas-works | 176,712 | 98,306 | 76,600 | 54,140 | 17,616 | 16,043 |
| Coke-ovens | 2,528,752 | 2,711,673 | 2,755,000 | 2,916,000 | 3,466,000 | 3,642,000 |
| Sweden (a) | 893,554 | 882,735 | 1,011,331 | 997,604 | 1,060,000 | n.a. |
| Switzerland— | | | | | | |
| Gas-works | 461,749 | 445,157 | 402,161 | 348,340 | 300,183 | 374,887 |
| U.S.S.R. (a) | 65,235,000 | 66,397,000 | 67,418,000 | 68,000,000 | 70,376,000 | n.a. |
| Yugoslavia— | | | | | | |
| Gas-works | 16,975 | 14,159 | 10,617 | 7,129 | 2,000 | n.a. |
| Coke-ovens | 1,142,000 | 1,233,000 | 1,207,000 | 1,200,000 | 1,215,000 | 1,207,000 |
| Libya— | | | | | | |
| Gas-works (b) | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 |
| South Africa— | | | | | | |
| Gas-works | 95,014 | 688,162 | 104,000 | 114,000 | 95,000 | n.a. |
| Coke-ovens | 2,353,606 | 2,024,865 | 3,197,000 | 4,055,000 | 3,651,000 | n.a. |
| Mexico (coke-ovens) .. | 773,716 | 811,123 | 851,757 | 1,014,177 | 1,135,000 | 1,122,777 |
| United States— | | | | | | |
| Coke-ovens— | | | | | | |
| Coke | 54,382,492 | 58,212,074 | 58,892,230 | 56,942,000 | 56,141,000 | 57,142,000 |
| Breeze and screenings | 3,483,971 | 3,604,700 | 3,582,464 | 3,593,000 | 3,638,000 | 3,929,000 |
| Beehive— | | | | | | |
| Coke | 1,103,828 | 1,479,409 | 1,287,761 | 720,000 | 692,000 | 634,000 |
| Breeze and screenings | 19,985 | 38,607 | 32,317 | 19,000 | 22,000 | 18,000 |
| Other coke | 181,000 | 133,000 | 150,000 | 146,000 | 155,000 | n.a. |
| Brazil— | | | | | | |
| Gas works | (c)280,000 | 216,000 | 220,000 | 202,000 | 195,000 | n.a. |
| Coke-ovens | 898,000 | 890,000 | 932,000 | 1,300,000 | 1,400,000 | n.a. |
| Chile | 324,067 | 299,848 | n.a. | n.a. | n.a. | n.a. |
| Colombia | 452,681 | n.a. | 318,285 | 428,000 | 435,000 | 465,450 |
| Peru | 25,164 | 26,969 | 16,290 | 34,285 | n.a. | n.a. |
| Uruguay (gas-works)— | | | | | | |
| Coke | 20,521 | 19,254 | 20,648 | 20,946 | 19,343 | 16,038 |
| Breeze | 3,642 | 3,611 | 1,788 | 1,633 | 2,694 | 1,767 |
| China (c) | 15,000,000 | 16,000,000 | 17,000,000 | 13,000,000 | 15,000,000 | 17,000,000 |
| Formosa | 241,755 | 252,448 | 253,180 | 248,336 | 251,623 | n.a. |
| Japan— | | | | | | |
| Gas-works | 3,662,204 | 3,612,000 | 3,654,000 | 4,100,000 | 30,123,000 | 35,453,000 |
| Coke-ovens | 10,369,434 | 14,764,000 | 16,763,000 | 21,000,000 | | |
| Beehive, etc. | 3,110,941 | | | | | |
| Korea (North) (c) .. | 1,400,000 | 1,600,000 | 1,800,000 | 1,800,000 | 2,000,000 | 2,000,000 |
| Turkey— | | | | | | |
| Gas-works | 170,000 | 114,000 | 175,000 | 178,000 | n.a. | n.a. |
| Coke-ovens | 845,000 | 1,223,000 | 1,102,000 | 1,265,000 | 1,407,500 | 1,420,000 |
| Semi-coke | 78,000 | 71,000 | 71,000 | 71,000 | n.a. | n.a. |

(a) Including coke-breeze.

(c) United States Bureau of Mines' estimate.

(b) Estimated.

PRODUCTION OF BRIQUETTES

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|------------|------------|-------------|------------|------------|------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Great Britain (a) .. | 2,464,000 | 2,176,000 | 2,379,000 | 2,647,000 | 2,859,000 | 3,193,000 |
| Canada | 53,494 | 62,000 | 51,375 | 37,050 | 39,510 | n.a. |
| Australia— | | | | | | |
| Brown-coal briquettes.. | 1,856,000 | 1,903,000 | 1,859,000 | 1,844,000 | 1,552,000 | 1,464,000 |
| New Zealand | 14,690 | 17,764 | 18,520 | 19,369 | n.a. | n.a. |
| OTHER COUNTRIES | | | | | | |
| Belgium | 1,397,094 | 1,057,322 | 946,073 | 854,926 | 810,029 | 811,000 |
| Czechoslovakia— | | | | | | |
| Brown-coal briquettes | 772,000 | 779,000 | 782,000 | 899,000 | 1,083,000 | 1,287,000 |
| Denmark— | | | | | | |
| Brown-coal briquettes.. | 58,474 | 23,911 | n.a. | n.a. | n.a. | n.a. |
| France | 6,532,907 | 5,720,445 | 4,981,534 | 4,776,505 | 4,492,000 | 4,131,000 |
| Germany (Federal)— | | | | | | |
| Coal briquettes.. .. . | 5,326,113 | 4,472,387 | 3,941,825 | 3,521,689 | 3,470,644 | 3,845,005 |
| Brown-coal briquettes.. | 15,113,594 | 12,481,957 | 11,641,945 | 10,887,781 | 10,193,599 | 10,332,793 |
| Germany (East)— | | | | | | |
| Brown-coal briquettes.. | 60,533,000 | 59,426,000 | 58,487,000 | 55,201,000 | 55,498,000 | 55,970,000 |
| Hungary— | | | | | | |
| Coal briquettes.. .. . | 1,126,810 | 1,324,000 | } 1,331,000 | 1,051,000 | 1,218,000 | 1,290,000 |
| Brown coal semi-coke briquettes | 153,556 | 84,000 | | | | |
| Netherlands— | | | | | | |
| Coal briquettes | 1,334,000 | 1,229,000 | 1,108,500 | 1,073,966 | 1,036,000 | n.a. |
| Brown-coal briquettes.. | 65,000 | 45,000 | 42,000 | 28,000 | 20,000 | n.a. |
| Poland— | | | | | | |
| Coal briquettes.. .. . | 613,000 | 603,000 | 562,000 | 544,000 | 577,000 | n.a. |
| Brown-coal briquettes.. | 370,000 | 330,000 | 359,000 | 343,000 | 341,000 | n.a. |
| Portugal | 40,517 | 33,652 | 37,518 | 36,754 | 29,501 | 32,004 |
| Spain | 1,037,216 | 830,399 | 600,598 | 330,319 | 133,264 | 150,260 |
| United States (c) .. . | 203,473 | 322,084 | (b) 300,000 | n.a. | n.a. | n.a. |

(a) Production at manufactured fuel plants.

(b) Estimated.

(c) In addition packaged fuel produced was as follows (long tons):

1964—8,323; 1965—7,447; 1966—(b) 8,000; 1967—n.a.; 1968—n.a.; 1969—n.a.

PRODUCTION OF COAL BY-PRODUCTS*

Long tons

| Producing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|------------------------------------|-----------|-------------|-------------|-------------|---------------|---------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Great Britain— | | | | | | |
| Tar (crude) distilled .. | 2,564,000 | 2,401,000 | 2,341,000 | 2,152,000 | } <i>n.a.</i> | } <i>n.a.</i> |
| Tar (refined) | 632,000 | 564,000 | 563,000 | 580,000 | | |
| Pitch | 480,000 | 463,000 | 377,000 | 308,000 | | |
| Motor benzol | 118,000 | 100,000 | 93,300 | 69,000 | | |
| Other motor spirits, etc. | 6,000 | — | — | — | | |
| Other refined light oils .. | 260,000 | 244,000 | 219,000 | 221,000 | | |
| Creosote-pitch mixture | 829,000 | 796,000 | 846,000 | 737,000 | | |
| Creosote oil | 470,000 | 410,000 | 400,000 | 380,000 | | |
| Naphthalene (crude) .. | 81,800 | 81,600 | 81,100 | 77,700 | | |
| Naphthalene (refined) | 5,200 | 3,900 | 3,600 | 7,000 | | |
| Pyridine bases | 4,000 | 5,600 | 4,200 | 4,000 | | |
| Natural phenol | 19,400 | 18,400 | 18,200 | 17,300 | | |
| Refined cresylic acid .. | 67,000 | 67,900 | 64,200 | 62,800 | | |
| Anthracene 40-50% .. | 4,200 | 4,000 | 3,500 | 3,600 | | |
| Rhodesia— | | | | | | |
| Tar (crude) (c) | 2,945 | 3,009 | 3,342 | 4,540 | 4,637 | 3,175 |
| Ammonia liquor (c) .. | 670 | 967 | 621 | r 964 | 1,123 | 1,266 |
| Canada— | | | | | | |
| Tar (refined) | 9,462 | 3,160 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Pitch | 89,000 | 78,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Creosote oils | 35,960 | 40,100 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| India (coke-ovens)— | | | | | | |
| Tar | 260,939 | 242,411 | 241,099 | 203,688 | } <i>n.a.</i> | } <i>n.a.</i> |
| Benzol | 8,067 | 9,994 | 9,269 | 9,725 | | |
| Benzene | 16,894 | 20,394 | 18,081 | 9,717 | | |
| Toluol | 157 | 194 | 205 | 206 | | |
| Toluene | 1,998 | 2,159 | 1,976 | 1,652 | | |
| Xylene | 183 | 150 | 125 | 1,030 | | |
| Solvent naphtha .. | 909 | 1,380 | 1,603 | 1,628 | | |
| Pitch | 72,004 | 69,383 | 67,219 | 88,577 | | |
| Naphthalene | 2,838 | 5,955 | 2,850 | 3,661 | | |
| Ammonium sulphate .. | 73,867 | 62,139 | 228,985 | 59,307 | | |
| Light oil | 4,350 | 5,633 | 6,167 | 3,045 | | |
| Middle oil | 7,124 | 5,373 | 3,060 | 2,403 | | |
| Heavy oil (230-270°C.) | 2,442 | 2,018 | 1,182 | 2,823 | | |
| Anthracene oil | 13,608 | 8,663 | 5,509 | 7,887 | | |
| Australia— | | | | | | |
| Tar (crude) (a) | 279,712 | 282,560 | 289,430 | 274,774 | 269,508 | <i>n.a.</i> |
| Tar (refined) (a) | 213,882 | 225,790 | 228,290 | 183,021 | 202,514 | <i>n.a.</i> |
| Tar oils (crude) (a) .. | 12,447 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| New Zealand (b)— | | | | | | |
| Tar (gas-works) | 11,300 | 12,000 | 12,300 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Irish Republic (gas-works)— | | | | | | |
| Tar | 15,997 | 14,196 | 10,038 | 9,997 | 10,083 | 4,420 |
| OTHER COUNTRIES | | | | | | |
| Belgium— | | | | | | |
| Tar (crude) | 278,163 | 277,557 | 251,530 | 250,098 | 257,951 | <i>n.a.</i> |
| Benzol (crude) | 64,603 | 67,169 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |

*Some of the products are derived from the crude products shown. Duplication, therefore, is unavoidable in many cases.

See page 86 for conversion rates.

See Nitrogen Compounds (pages 226-229) for total production of ammonium sulphate.

(a) Years ended June 30 of the year stated.

(b) Sales for years ended March 31 of the year following that stated

(c) Sales for years ended August 31 of that stated.

PRODUCTION OF COAL BY-PRODUCTS (cont.)

Long tons

| Producing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| OTHER COUNTRIES (cont.) | | | | | | |
| France— | | | | | | |
| Tar (crude) | 651,471 | 614,947 | 593,853 | 554,507 | 537,268 | n.a. |
| Ammonium sulphate .. | 134,355 | 128,912 | 125,443 | 120,071 | n.a. | n.a. |
| Benzol (crude) | 168,000 | 162,000 | n.a. | n.a. | n.a. | n.a. |
| Pitch | 229,142 | 229,936 | 224,964 | 199,027 | 166,853 | n.a. |
| Naphthalene (crude) .. | 24,507 | 31,156 | 9,954 | 6,647 | n.a. | 6,351 |
| Germany (Federal)— | | | | | | |
| Tar (crude) | 1,953,646 | 1,922,542 | 1,758,640 | 1,571,333 | 1,580,609 | 1,631,334 |
| Pitch | 967,136 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Tar oils | 744,142 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Naphthalene | 161,309 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Benzol (crude) | 570,706 | 561,361 | 505,202 | 448,841 | 456,702 | 466,451 |
| Refined benzols | 567,974 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Phenol | 17,641 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Cresol and xylol | 20,284 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Anthracene | 45,591 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Pyridine and bases .. | 1,393 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Hungary— | | | | | | |
| Brown coal tar | 28,316 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Pitch | 40,507 | 39,547 | 35,952 | 16,000 | n.a. | n.a. |
| Benzol | 6,258 | 6,094 | 6,793 | 7,506 | 9,191 | n.a. |
| Creosote | 6,704 | 7,152 | 7,301 | n.a. | n.a. | n.a. |
| Italy— | | | | | | |
| Tar | 202,033 | 241,584 | 249,582 | 239,967 | 247,300 | 255,355 |
| Ammonium sulphate .. | 43,349 | 50,854 | 59,664 | 55,504 | n.a. | n.a. |
| Benzol (crude) | 43,010 | 56,538 | 58,685 | 58,062 | 59,704 | 58,348 |
| Naphthalene (crude) .. | 10,492 | 11,335 | 11,459 | 10,572 | 13,987 | 12,398 |
| Distillates | 64,926 | 65,515 | 63,089 | 70,868 | 78,055 | 81,975 |
| Benzol (refined) | 23,366 | 20,303 | 27,531 | 20,305 | 23,246 | 21,061 |
| Toluol and xylol | 6,056 | 5,086 | 8,468 | 8,167 | 8,716 | 6,398 |
| Pitch | 80,990 | 83,587 | 80,605 | 81,816 | 91,890 | 96,999 |
| Solvent naphtha | 1,176 | 1,074 | 1,167 | 1,286 | 1,102 | 790 |
| Norway— | | | | | | |
| Tar (gas-works) | 3,017 | 31,364 | n.a. | n.a. | n.a. | n.a. |
| Poland— | | | | | | |
| Tar (coke-ovens) | 547,900 | 556,600 | 578,900 | 590,800 | 612,100 | n.a. |
| Tar (gas-works) | 83,000 | 94,100 | 90,300 | 88,200 | 92,300 | n.a. |
| Ammonium sulphate (coke-ovens) .. | 140,000 | 144,000 | 148,100 | 150,600 | 155,300 | n.a. |
| Benzol (coke-ovens) .. | 168,800 | 173,100 | 180,200 | 181,900 | 192,500 | n.a. |
| Portugal (gas-works)— | | | | | | |
| Creosote | 449 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Pitch | 465 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Spain— | | | | | | |
| Tar | 124,423 | 126,306 | 140,908 | 129,506 | 149,956 | 150,156 |
| Pitch | 28,543 | 31,852 | 40,575 | 36,778 | 42,909 | 48,136 |
| Benzol | 47,784 | 51,355 | 53,740 | 54,372 | 66,428 | 70,655 |
| Benzene | 13,274 | 15,118 | 14,992 | 15,096 | 10,467 | 8,628 |
| Toluol | 1,798 | 1,912 | 1,926 | 2,246 | 1,427 | 1,084 |
| Toluene | 1,221 | 1,303 | 1,376 | 1,215 | 515 | 388 |
| Xylene | 767 | 650 | 610 | 550 | 517 | 647 |
| Solvent naphtha | 205 | 94 | 73 | 57 | 37 | 127 |
| Anthracene | 5,819 | 7,003 | 6,325 | 10,611 | 12,009 | 13,800 |
| Naphthalene | 6,869 | 6,718 | 6,589 | 5,130 | 6,595 | 9,497 |
| Sweden— | | | | | | |
| Tar (crude) | 39,506 | 37,174 | 43,235 | 43,284 | n.a. | n.a. |
| Pitch | 216 | 7 | 16 | 22 | n.a. | n.a. |
| Benzol, toluol, etc. .. | 12,149 | 10,410 | 10,525 | 9,118 | n.a. | n.a. |
| Distillates, etc. | | | | | | |
| Switzerland— | | | | | | |
| Tar (crude) (gas-works) | 26,064 | 25,393 | 23,965 | 19,683 | 15,812 | 13,833 |

PRODUCTION OF COAL BY-PRODUCTS (cont.)

Long tons

| Producing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Yugoslavia— | | | | | | |
| Benzol | 11,105 | 10,420 | 11,786 | 12,134 | 10,983 | n.a. |
| Mexico— | | | | | | |
| Benzol | n.a. | 5,092 | 5,420 | 6,762 | n.a. | n.a. |
| Ammonium sulphate .. | n.a. | 9,514 | 9,388 | 9,481 | n.a. | n.a. |
| Creosote | n.a. | 9,592 | 9,950 | 10,415 | n.a. | n.a. |
| United States— | | | | | | |
| Coke-ovens— | | | | | | |
| Tar (crude) | 3,260,331 | 3,430,503 | 3,426,783 | 3,334,000 | 3,248,530 | 3,285,000 |
| Pitch | 970,099 | 1,040,858 | 932,449 | 892,000 | n.a. | n.a. |
| Sulphate equivalent of ammonia pro- duced (a) | 708,846 | 717,641 | 769,649 | 745,000 | 685,000 | n.a. |
| Benzol | 396,481 | 393,302 | 367,411 | 289,000 | 295,000 | 325,000 |
| do. motor | 2,322 | 10,556 | 9,970 | 11,000 | 11,000 | 11,000 |
| Toluol and xylol .. | 106,666 | 103,127 | 94,492 | 81,000 | 82,000 | 18,000 |
| Solvent naphtha .. | 14,371 | 17,373 | 10,130 | 12,000 | 12,000 | 11,000 |
| Other light products | 27,457 | 26,649 | 21,161 | 28,000 | n.a. | n.a. |
| All sources (c)— | | | | | | |
| Tar (crude) | 3,260,331 | 3,430,503 | 3,426,783 | 3,334,000 | 3,248,530 | n.a. |
| Crude light oil .. | 828,897 | 875,670 | 875,465 | 840,000 | 796,290 | 863,033 |
| Naphthalene (crude) | 190,040 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Creosote oil | 449,492 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Tar, road | 238,020 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Tar for other uses (b) | 85,333 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Pitch of tar | 1,676,000 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Pitch of tar coke .. | | | | | | |
| Uruguay (gas-works)— | | | | | | |
| Tar | 1,944 | 1,770 | 1,943 | 2,078 | 1,961 | 1,845 |
| Benzol | 196 | 189 | 142 | 207 | 161 | 130 |
| Japan— | | | | | | |
| Tar | 1,239,994 | 1,358,000 | 1,475,000 | 1,666,000 | 1,581,756 | n.a. |
| Benzol (crude) | 311,586 | 364,781 | 395,915 | 459,475 | n.a. | n.a. |
| do. (other) | 302,922 | 375,177 | 520,876 | 642,211 | 848,538 | n.a. |
| Creosote oil | 279,234 | 303,458 | 324,651 | 349,985 | 380,763 | n.a. |
| Turkey— | | | | | | |
| Road tar | 27,138 | 40,091 | 56,678 | 61,015 | 61,288 | n.a. |
| Pitch | 8,950 | 5,870 | 2,370 | 3,180 | 5,473 | n.a. |
| Benzol | 7,367 | 6,855 | 7,909 | 8,413 | 7,223 | n.a. |
| Toluol and xylol .. | n.a. | n.a. | n.a. | n.a. | 1,291 | n.a. |
| Solvent naphtha .. | 156 | 171 | 107 | 91 | 59 | n.a. |
| Creosote | n.a. | n.a. | n.a. | n.a. | 2,433 | n.a. |
| Naphthalene | 570 | 540 | 840 | 1,205 | 602 | 1,240 |

*The following rates have been used for conversion of Imperial gallons to long tons : Tar, 195; Benzol, 250; Creosote, 210; Motor fuel, 310; Toluol, 255; Solvent naphtha, 260; Phenol, 210; Cresylic acid, 214.

(a) Actual ammonium sulphate produced was as follows (long tons):

1964—607,935; 1965—619,011; 1966—681,938; 1967—658,000; 1968—626,000; 1969—601,000

(b) Used for paints, etc.

(c) Including products obtained from coke-ovens except ammonium sulphate.

EXPORTS OF COAL, COKE AND BY-PRODUCTS*

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-----------|-----------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Anthracite— | | | | | | |
| smalls and graded .. | 1,161,166 | 827,295 | 652,456 | 573,746 | 634,129 | 928,989 |
| large | 133,088 | 87,840 | 24,401 | 11,415 | 26,661 | 20,652 |
| other | 378,066 | 272,382 | 99,623 | 53,286 | 158,366 | 210,167 |
| Bituminous— | | | | | | |
| smalls and graded .. | 3,597,859 | 2,121,629 | 1,676,166 | 994,939 | 1,617,925 | 1,997,127 |
| unscreened | 179,279 | 122,410 | 42,235 | 25,077 | 40,446 | 13,533 |
| large | 152,894 | 153,983 | 118,587 | 109,053 | 109,445 | 118,960 |
| other | 268,018 | 209,438 | 155,051 | 82,103 | 74,674 | 98,355 |
| Coke, gas | 410,686 | 357,296 | 384,183 | 332,669 | 320,204 | 268,162 |
| do. other | 1,056,819 | 636,247 | 584,182 | 426,818 | 519,001 | 736,057 |
| Manufactured fuel .. | 50,632 | 32,412 | 14,318 | 14,450 | 56,483 | 93,182 |
| Tar | 84,619 | 66,282 | 76,848 | 65,120 | 48,337 | 36,921 |
| Pitch | 195,179 | 186,829 | 173,916 | 147,135 | 142,862 | 142,246 |
| Channel Islands (Jersey) | | | | | | |
| Coke | 13,560 | 16,301 | 13,274 | 953 | — | — |
| Tar | 3,171 | 2,602 | 2,896 | 1,304 | 1,300 | — |
| Gibraltar— | | | | | | |
| Coal (bunkers) (b) .. | 410 | 20 | 5 | — | 22 | — |
| Kenya— | | | | | | |
| Coal (bunkers) (b) .. | 1,775 | 638 | 45 | 10 | <i>n.a.</i> | — |
| Nigeria— | | | | | | |
| Coal | 7,894 | 210 | 240 | 8 | — | — |
| Coke | 14,300 | 15,036 | 869 | — | — | — |
| Patent fuel | 37,525 | — | 1,720 | — | — | — |
| Rhodesia— | | | | | | |
| Coal | 1,320,887 | 1,608,179 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Coke | 103,315 | 144,018 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Canada— | | | | | | |
| Coal | 1,141,177 | 1,094,637 | 1,097,161 | 1,194,958 | 1,291,976 | 1,230,243 |
| do. (bunkers) (c) .. | 12,069 | 389 | — | — | 833 | <i>n.a.</i> |
| Coke | 88,853 | 63,867 | 69,600 | 58,296 | 128,367 | 243,747 |
| Tar and pitch | 45,659 | 30,237 | 29,948 | 37,183 | 72,238 | 59,895 |
| Trinidad and Tobago— | | | | | | |
| Coal (bunkers) (b) .. | — | 11 | 14 | 4 | — | <i>n.a.</i> |
| Ceylon— | | | | | | |
| Coal (bunkers) (b) .. | 339 | 279 | 126 | — | — | — |
| Hong Kong— | | | | | | |
| Coke | 30 | 150 | 62 | 180 | 40 | — |
| India (d)— | | | | | | |
| Coal | 1,250,108 | 687,706 | 353,305 | 278,185 | 418,449 | 257,918 |
| Coke | 10,492 | 5,048 | 8,997 | 9,062 | 39,463 | 31,646 |
| Tar and pitch | 1,212 | 184 | 4 | 7 | 3 | 32 |
| Singapore— | | | | | | |
| Coke | 434 | 693 | 507 | 942 | 966 | 1,347 |
| Australia (a)— | | | | | | |
| Coal | 3,805,747 | 6,051,147 | 7,654,070 | 8,804,802 | 10,199,608 | 13,799,747 |
| do. (bunkers) | 86 | 23,978 | 41 | 457 | 345 | 482 |
| Coke | 79,432 | 106,750 | 110,430 | 80,064 | 285,138 | 146,983 |
| New Zealand (a)— | | | | | | |
| Coal | 149 | 20 | 7 | 4 | 6 | 10 |
| Coke | 221 | 437 | 12 | 18 | 29 | 292 |
| Tar | 5 | — | — | — | — | 66 |

*For Ammonium sulphate, etc. see Nitrogen Compounds, pages 230-231.

(a) Years ended June 30 of that stated.

(b) Foreign coal. (See imports.)

(c) Domestic produce. Shipments from mines to ships' bunkers.

(d) Years ended March 31 following that stated.

EXPORTS OF COAL, COKE AND BY-PRODUCTS (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|------------|------------|------------|------------|------------|------------|
| Irish Republic— | | | | | | |
| Anthracite | 6,469 | 5,974 | 6,293 | 4,334 | 3,766 | 6,411 |
| Other coal | 101 | 725 | 1,514 | 2,200 | 3,631 | 4,727 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Coal | 27 | 22 | 17 | 20 | 22 | 22 |
| Brown coal | 16,280 | 9,809 | 9,274 | 15,120 | 9,044 | 7,374 |
| Coke | 24 | 28 | 10,433 | 47,518 | 122,961 | 140,203 |
| Tar | 400 | 76 | 62 | 1 | — | 15 |
| Pitch | 400 | 301 | 608 | 1,026 | 756 | 618 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Coal | 2,099,556 | 1,816,841 | 1,197,851 | 1,499,981 | 1,148,285 | 908,857 |
| do. (bunkers) (a) .. | 590 | 263 | — | — | — | — |
| Coke | 397,437 | 503,379 | 411,957 | 407,867 | 321,755 | 374,478 |
| Briquettes | 434,587 | 129,778 | 102,034 | 92,628 | 98,624 | 116,981 |
| Tar | 28,145 | 50,248 | 50,670 | 41,821 | 31,549 | 45,858 |
| Pitch | 15,168 | 6,371 | 17,382 | 57,132 | 32,549 | 30,161 |
| Czechoslovakia— | | | | | | |
| Coal | 2,547,000 | 2,340,000 | 2,044,000 | 2,291,000 | 2,382,000 | 2,612,000 |
| Brown coal | 1,388,000 | 1,166,000 | 1,125,000 | 1,120,000 | 1,140,000 | 1,228,000 |
| Coke | 1,858,000 | 1,806,000 | 2,359,000 | 2,133,000 | 2,245,000 | 2,545,000 |
| Denmark— | | | | | | |
| Coal | — | 1 | 6 | 12 | 214 | 57 |
| Brown coal briquettes | 43,567 | 9,605 | 49 | 1 | — | — |
| Coke | 43,828 | 50,240 | 38,858 | 44,425 | 78,377 | 86,684 |
| Tar and pitch | 18,376 | 2,961 | 3,598 | 1,542 | 2,807 | 1,396 |
| France— | | | | | | |
| Anthracite | 43,027 | 110,556 | 142,671 | 187,033 | 302,809 | 433,018 |
| Bituminous | 855,749 | 718,720 | 543,948 | 508,918 | 543,836 | 651,578 |
| Lignite | 21,005 | 59,720 | 75,729 | 82,322 | 28,527 | 17,003 |
| Coke | 35,813 | 56,249 | 108,194 | 116,003 | 182,395 | 873,966 |
| Briquettes | 29,248 | 40,223 | 20,231 | 15,388 | 13,928 | 42,343 |
| Brown coal briquettes | 224 | 489 | 383 | 180 | 7 | 8 |
| Tar and pitch | 15,112 | 16,556 | 11,822 | 18,773 | 26,089 | 15,527 |
| Germany (Federal)— | | | | | | |
| Coal | 13,502,765 | 13,078,608 | 15,545,381 | 17,165,557 | 19,928,831 | 17,274,579 |
| do. (bunkers) (a) .. | 17,863 | 10,860 | 2,052 | 1,651 | 456 | n.a. |
| Brown coal | 207,957 | 156,313 | 142,941 | 105,190 | 90,656 | 14,691 |
| Coke | 10,752,600 | 9,575,755 | 8,173,301 | 7,501,993 | 9,119,930 | 9,427,865 |
| Coal briquettes | 379,560 | 272,880 | 214,126 | 169,514 | 156,183 | 150,453 |
| Brown-coal briquettes | 1,446,338 | 1,164,714 | 1,071,393 | 1,034,917 | 951,082 | 955,235 |
| Tar and pitch | 268,177 | 281,608 | 304,629 | 313,424 | 302,596 | 351,732 |
| Germany (East)— | | | | | | |
| Coal | 467 | — | — | — | — | — |
| Coke | 120,000 | 123,000 | 73,000 | 66,000 | n.a. | n.a. |
| Brown coal briquettes | 6,692,000 | 5,868,000 | 5,172,000 | 3,886,000 | 3,894,000 | 3,453,580 |
| Hungary— | | | | | | |
| Coal | 80,719 | n.a. | n.a. | — | n.a. | n.a. |
| Italy— | | | | | | |
| Coal (incl. bunkers) .. | 4,162 | 1,588 | 3,578 | 2,690 | 3,988 | 2,415 |
| Coke | 99,263 | 118,260 | 151,288 | 214,737 | 230,278 | 339,750 |
| Tar | 587 | 142 | 560 | 281 | 328 | 433 |
| Pitch | 29,444 | 20,704 | 21,116 | 34,120 | 24,583 | 27,050 |
| Netherlands— | | | | | | |
| Coal | 2,123,830 | 2,058,757 | 1,820,550 | 1,904,918 | 1,944,222 | 1,763,948 |
| do. (bunkers) (a) .. | 418 | 531 | — | — | — | n.a. |
| Brown coal | 39 | — | 49 | 20 | — | — |
| Coke | 2,289,764 | 2,366,273 | 1,873,022 | 1,966,248 | 1,473,720 | 776,112 |

(a) Bunkers for foreign ships only.

EXPORTS OF COAL, COKE AND BY-PRODUCTS (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|------------|------------|------------|------------|------------|------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Netherlands (cont.) | | | | | | |
| Briquettes | 763,330 | 821,530 | 812,383 | 730,807 | 787,960 | 822,443 |
| Brown coal briquettes .. | 39,685 | 23,180 | 20,373 | 11,815 | 9,698 | 294 |
| Tar | 25,859 | 27,654 | 27,044 | 26,535 | 26,712 | 26,745 |
| Pitch | 6,979 | 8,237 | 3,891 | 2,409 | 122 | 780 |
| Norway— | | | | | | |
| Coal | 82,968 | 135,391 | 128,030 | 138,141 | 66,407 | 61,735 |
| Coke | 3,842 | 98,037 | 48,710 | 48,023 | 123,042 | 62,956 |
| Tar | 6,214 | 12,583 | 17,586 | 16,040 | 18,303 | 12,073 |
| Pitch | 19 | 22 | 76 | 17 | 15 | 18 |
| Poland— | | | | | | |
| Coal | 18,963,600 | 20,713,000 | 22,053,000 | 23,649,000 | 25,591,000 | 25,957,000 |
| Brown coal | 5,295,900 | 5,117,000 | 4,980,000 | 3,647,000 | 3,939,000 | 4,311,000 |
| Coke | 2,213,500 | 2,287,000 | 2,321,000 | 2,318,000 | 2,372,000 | 2,287,000 |
| Pitch | 15,230 | 8,838 | 3,396 | 3,203 | n.a. | 5,602 |
| Portugal— | | | | | | |
| Coal | 167 | 124 | 104 | 41 | 44 | 55 |
| do. (bunkers) (a) .. | 30 | 52 | 3 | n.a. | n.a. | n.a. |
| Tar and pitch | 15 | 15 | 14 | 77 | 13 | 10 |
| Spain— | | | | | | |
| Anthracite | 9 | 2,365 | — | 60 | — | 18 |
| Bituminous (incl. bunkers) | 2,279 | 127 | 1,416 | 1,635 | 1,520 | 7,604 |
| Other coal | | | | | | |
| Coke | | | | | | |
| Tar and pitch | 226 | 236 | 217 | 177 | 7,846 | 4,151 |
| Sweden— | | | | | | |
| Coal | 6,849 | 2,766 | 852 | 716 | 792 | 124 |
| Coke | 11,983 | 9,271 | 7,610 | 8,369 | 8,466 | 59,294 |
| Tar, pitch, etc. . . . | 8,636 | 11,042 | 17,463 | 30,621 | 19,291 | 20,862 |
| Switzerland— | | | | | | |
| Coal | 787 | — | — | — | — | 3,911 |
| Coke | 59 | 141 | 204 | 22,676 | 34,996 | 52,050 |
| Briquettes | 93 | 9 | 3 | 3 | 4 | — |
| Tar and pitch | 264 | 68 | 58 | 161 | 152 | 55 |
| U.S.S.R.— | | | | | | |
| Anthracite | 4,021,500 | 3,272,000 | 3,029,000 | 2,931,951 | 3,147,000 | 3,981,000 |
| Other coal | 18,926,300 | 18,534,000 | 18,295,000 | 18,778,000 | 20,914,000 | 22,931,000 |
| Coke | 3,935,800 | 3,693,000 | 3,945,000 | 3,635,000 | 3,763,000 | 3,932,900 |
| Pitch | 123,500 | 71,600 | 59,400 | 60,726 | 82,476 | 73,400 |
| Yugoslavia— | | | | | | |
| Bituminous | 110,060 | 84,136 | 84,051 | n.a. | n.a. | n.a. |
| Brown coal | 19,638 | 21,197 | 4,323 | 15,810 | 9,176 | 11,942 |
| Lignite | 31,208 | 23,138 | 23,475 | 29,882 | 21,549 | 37,387 |
| Briquettes | 39 | — | — | — | — | — |
| Pitch | 1,111 | 413 | 806 | 9,014 | 3,022 | 2,870 |
| Tar | — | — | — | — | 49 | 74 |
| Ceuta— | | | | | | |
| Coal (bunkers) (b) .. | n.a. | 114 | 39 | 40 | 305 | 30 |
| Malagasy Republic— | | | | | | |
| Coal (bunkers) | 2 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Morocco— | | | | | | |
| Anthracite | 133,517 | 97,486 | 26,700 | 65,542 | 55,997 | 48,967 |
| Other coal | 3 | 18 | — | — | 4 | — |
| Briquettes | 1,226 | 815 | 990 | 947 | 1,013 | 2,577 |
| Mozambique— | | | | | | |
| Coal (incl. bunkers) .. | 34,113 | 86,664 | 84,555 | 72,200 | 67,135 | 94,622 |
| South Africa— | | | | | | |
| Coal | 1,362,767 | 1,321,241 | 1,095,644 | 1,236,675 | 1,215,129 | 812,165 |
| Coke | 711 | 902 | 1,211 | 1,305 | 30,399 | 11,996 |
| Tar and pitch | 520 | 1,027 | 193 | 53 | n.a. | 6,512 |

(a) Bunkers for foreign ships only.

(b) Foreign coal (see imports).

EXPORTS OF COAL, COKE AND BY-PRODUCTS (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--------------------------------------|------------|------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Mexico— | | | | | | |
| Coal and coke | — | 29 | 4 | 8 | 2 | <i>n.a.</i> |
| United States— | | | | | | |
| Anthracite | 1,406,337 | 759,471 | 683,951 | 531,069 | 462,642 | 560,261 |
| Bituminous | 42,829,842 | 44,804,786 | 44,019,991 | 44,205,697 | 45,211,839 | 50,208,813 |
| do. (bunkers) | 225,701 | 216,815 | 191,531 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Coke (inc. briquettes of coke) | 467,585 | 744,346 | 984,077 | 634,268 | 707,096 | 1,454,899 |
| Briquettes of coal | 15,944 | 79,023 | 105,312 | 106,869 | 55,979 | 64,867 |
| Tar and pitch | 209,346 | 79,902 | 102,487 | 103,071 | 90,478 | 22,388 |
| Chile— | | | | | | |
| Coal (including bunkers) | 99 | 836 | <i>n.a.</i> | 788 | <i>n.a.</i> | <i>n.a.</i> |
| Peru— | | | | | | |
| Coal | 9,639 | 15,659 | <i>n.a.</i> | — | <i>n.a.</i> | <i>n.a.</i> |
| Formosa— | | | | | | |
| Coal (including bunkers) | 94,833 | 1,907 | 15,236 | 12,168 | <i>n.a.</i> | <i>n.a.</i> |
| Indonesia— | | | | | | |
| Coal | — | — | — | 8,169 | 6,200 | <i>n.a.</i> |
| Iran (a)— | | | | | | |
| Coal | 113 | 303 | 369 | 151 | 283 | <i>n.a.</i> |
| Japan— | | | | | | |
| Coal | 67,636 | 65,691 | 32,542 | 57,886 | 25,886 | 21,965 |
| Coke | 9,466 | 28,246 | 57,525 | 45,720 | 61,914 | 82,606 |
| Tar and pitch | 36,957 | 25,244 | 14,931 | 13,195 | 10,135 | 10,585 |
| Korea (South)— | | | | | | |
| Anthracite | 247,560 | 201,724 | 159,898 | 169,350 | 222,692 | 230,714 |
| Lebanon— | | | | | | |
| Coal and briquettes | 2,195 | 1,261 | 932 | 922 | 944 | 413 |
| Coke | 690 | 835 | 798 | 979 | 1,814 | 1,568 |
| Turkey— | | | | | | |
| Coal | 16,204 | 9,050 | 9,790 | 2,757 | 4,331 | 139,689 |

(a) Years ended March 20 following that stated.

IMPORTS OF COAL, COKE AND BY-PRODUCTS*

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1939 |
|------------------------------------|----------|-----------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Coal | 351 | 2,571 | 29,651 | 6,754 | 1,907 | 2,024 |
| Coke | — | 17 | 2,906 | 246 | } 3,211 | 670 |
| Manufactured fuel | 647 | 5,481 | 209 | 466 | | |
| Tar | 3,309 | 16,840 | 10,893 | 18,126 | 1,917 | 13,911 |
| Channel Islands— | | | | | | |
| Anthracite | 62,971 | 49,279 | 30,393 | } 56,685 | 63,182 | 57,128 |
| Bituminous | 87,288 | 81,530 | 78,654 | | | |
| Coke | 4,831 | 5,101 | 7,757 | | | |
| Gibraltar— | | | | | | |
| Coal (b) | 1,410 | 1,327 | 1,688 | (a) 25 | 940 | (a) 5 |
| Malta— | | | | | | |
| Coal | 4,110 | 443 | 1,995 | 1,774 | 2,668 | — |
| Coke | 387 | 165 | 673 | — | 401 | — |
| Gambia— | | | | | | |
| Coal, coke and patent fuel | — | — | 52 | 1 | — | 11 |
| Tar | 4 | 243 | 13 | 16 | 2 | 12 |
| Ghana— | | | | | | |
| Coal | 44,581 | 26,886 | 51,117 | 28,661 | <i>n.a.</i> | <i>n.a.</i> |
| Coke and patent fuel | 314 | 428 | 1,417 | 677 | 302 | <i>n.a.</i> |
| Tar | 140 | 164 | 27 | 184 | 122 | 28 |
| Kenya— | | | | | | |
| Coal (b) | 32,652 | 52,729 | 46,658 | 48,126 | 39,651 | 30,730 |
| Coke | 1,567 | 1,143 | 1,858 | 1,217 | 1,351 | 1,171 |
| Tar | 5 | 12 | <i>n.a.</i> | 7 | 1 | 7 |
| Malawi— | | | | | | |
| Coal | 61,472 | 66,649 | 78,027 | 52,732 | 46,817 | 31,587 |
| Coke | 114 | 88 | <i>n.a.</i> | 46 | 61 | 12 |
| Mauritius— | | | | | | |
| Coal | 1,966 | 1,703 | 2,891 | 301 | 994 | 735 |
| Coke | 213 | 240 | 157 | 297 | 312 | 294 |
| Tar | 21 | 22 | 15 | 11 | — | — |
| Nigeria— | | | | | | |
| Coal, coke and patent fuel | 4,285 | 2,618 | 12,097 | 75,434 | 2,272 | 4,935 |
| Tar | 666 | 815 | 587 | 264 | 399 | 322 |
| Rhodesia— | | | | | | |
| Coal | } 12,285 | 9,830 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Coke | | | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Tar | | | 264 | 253 | <i>n.a.</i> | <i>n.a.</i> |
| St. Helena— | | | | | | |
| Coal | 63 | 73 | 40 | 40 | 45 | 60 |
| Sierra Leone— | | | | | | |
| Coal, coke and briquettes | 80 | 4,070 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Tar | 139 | 93 | 119 | 141 | 237 | <i>n.a.</i> |
| Tanzania— | | | | | | |
| Coal | 144 | 200 | 135 | 109 | 47 | 115 |
| Coke | 419 | 315 | 160 | 196 | 905 | 327 |
| Tar | 7 | 9 | 19 | 15 | 28 | 13 |
| Uganda— | | | | | | |
| Coal | 114 | 82 | 59 | 66 | 70 | 36 |
| Coke | 430 | 122 | 17 | 359 | 348 | 410 |
| Tar | 10 | 2 | — | — | — | 2 |
| Zambia— | | | | | | |
| Coal | 962,396 | 1,142,052 | 892,149 | 967,452 | 682,458 | 670,189 |
| Coke briquettes | 64,711 | 59,178 | 69,841 | 73,095 | 84,350 | 78,600 |
| Tar | 642 | 563 | 500 | 138 | 27 | 3 |

*For ammonium sulphate, etc., see Nitrogen Compounds, pages 232-238.

(a) Excess of re-exports.

(b) Includes coal imported for bunkering purposes. (See exports.)

IMPORTS OF COAL, COKE AND BY-PRODUCTS (*cont.*)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|------------------|------------|------------------|------------|------------|-------------|
| COMMONWEALTH COUNTRIES (<i>cont.</i>) | | | | | | |
| Canada— | | | | | | |
| Anthracite | 579,802 | 571,311 | 528,097 | 468,458 | 384,104 | 389,301 |
| do. dust | 3,982 | 262 | 2,432 | 868 | — | — |
| Bituminous | 12,798,206 | 14,242,996 | 14,144,344 | 13,918,238 | 14,799,102 | 15,041,426 |
| Briquettes | 6,375 | 7,084 | 4,410 | 7,579 | 5,412 | 5,412 |
| Coke | 281,931 | 508,844 | 522,290 | 345,579 | 228,040 | 250,808 |
| Tar and Pitch | 104,131 | 101,894 | 128,234 | 113,641 | 98,906 | 120,627 |
| Bahamas— | | | | | | |
| Coal | 7 | 6 | 6 | 3 | 3 | — |
| Barbados— | | | | | | |
| Coal, coke and patent fuel | 330 | 332 | 540 | 619 | 86 | 239 |
| Bermuda— | | | | | | |
| Bituminous | <i>n.a.</i> | 38 | 54 | 14 | — | 15 |
| British Honduras— | | | | | | |
| Coal and coke | 18 | 27 | 21 | 6 | 21 | 7 |
| Grenada— | | | | | | |
| Coal | 2 | — | 1 | — | 2 | <i>n.a.</i> |
| Coke | — | 10 | 2 | 2 | — | <i>n.a.</i> |
| Jamaica— | | | | | | |
| Coal | 87 | 61 | 47 | 31 | 27 | 25 |
| Coke | 772 | 1,304 | 517 | 776 | 792 | 842 |
| Tar | 42 | 29 | 32 | 21 | 27 | 33 |
| St. Kitts— | | | | | | |
| Coal, coke and patent fuel | 10 | 9 | 35 | 10 | 80 | <i>n.a.</i> |
| St. Lucia— | | | | | | |
| Coal | 12 | 15 | 8 | 1 | 1 | <i>n.a.</i> |
| Tar | 6 | 6 | 3 | 3 | 5 | <i>n.a.</i> |
| St. Vincent— | | | | | | |
| Coal | <i>n.a.</i> | 3 | 2 | — | — | <i>n.a.</i> |
| Trinidad and Tobago— | | | | | | |
| Coal (<i>b</i>) | 796 | 516 | (<i>c</i>) 276 | 316 | 67 | 110 |
| Coke | 221 | 120 | (<i>c</i>) 23 | 20 | 71 | 72 |
| Falkland Islands— | | | | | | |
| Coal | 115 | 166 | 113 | 156 | 126 | 39 |
| Coke | — | 2 | 45 | 49 | 19 | 14 |
| Guyana— | | | | | | |
| Coal | (<i>c</i>) 145 | 88 | 68 | 70 | 24 | 4 |
| Coke | 3 | 16 | 21 | 36 | 48 | 50 |
| Patent fuel | 103 | 80 | 60 | 60 | 56 | — |
| Tar | 138 | 99 | 145 | 73 | 121 | 75 |
| Ceylon— | | | | | | |
| Coal (<i>b</i>) | 172,534 | 136,395 | 30,509 | 136,289 | 41,553 | 21,994 |
| Coke | 1,925 | 268 | 553 | 965 | 1,294 | 2,277 |
| Tar | 2 | 4,269 | 61 | 640 | 42 | 923 |
| Cyprus— | | | | | | |
| Coal | 401 | 201 | 514 | 174 | 195 | 178 |
| Coke | 215 | 372 | 344 | 206 | 908 | 613 |
| Tar and pitch | 8 | 5 | — | 12 | — | — |
| Hong Kong— | | | | | | |
| Coal | 168,979 | 167,361 | 144,328 | 113,925 | 76,559 | 43,910 |
| Coke | 6,191 | 5,500 | 4,930 | 5,387 | 9,472 | 7,299 |
| India— | | | | | | |
| Coal | 1,784 | 2,451 | 2,856 | 1,040 | 237 | 1,068 |
| Coke | 422 | 579 | 1,375 | 111 | 591 | 8,452 |
| Tar and pitch (<i>a</i>) | 18 | 23 | 34 | 292 | 13 | 17 |

 (*a*) Years ending March 31 following that stated.

 (*c*) Excess of re-exports.

 (*b*) Including imports for bunkering purposes.

 (*See exports.*)

IMPORTS OF COAL, COKE AND BY-PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Malaysia (West)— | | | | | | |
| Anthracite | <i>n.a.</i> | 16,845 | 17,660 | 10,871 | 11,959 | 16,505 |
| Coke | <i>n.a.</i> | 5,418 | 5,492 | 6,387 | 5,526 | 6,333 |
| Pakistan— | | | | | | |
| Coal | 710,125 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Coke | 488 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Tar and pitch | 3,699 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Singapore— | | | | | | |
| Anthracite | 10 | 2,462 | 1,018 | 78 | — | — |
| Other coal | 4,856 | — | 2,816 | — | 3,791 | 34 |
| Coke | 3,187 | 3,741 | 3,309 | 4,287 | 5,069 | 3,985 |
| Australia (a)— | | | | | | |
| Coal | 12,816 | (d) 2,700 | 8,476 | 8,276 | 8,491 | 19,554 |
| Coke | 37,284 | 51,490 | (b) 10,846 | (b) 2,968 | (b) 1,868 | (b) 1,078 |
| Tar and pitch | 7,553 | 12,064 | 9,570 | 10,882 | 6,092 | 10,547 |
| Fiji— | | | | | | |
| Coal | 4,008 | 3,029 | 2,003 | 5,601 | 2,025 | <i>n.a.</i> |
| Coke | 336 | 314 | 265 | 171 | 269 | <i>n.a.</i> |
| Tar | 21 | 29 | — | 28 | 28 | <i>n.a.</i> |
| New Zealand (a)— | | | | | | |
| Coal | 588 | 6 | 17,505 | 38,618 | 4,981 | <i>n.a.</i> |
| Coke | 92 | 67 | 64 | 60 | 50 | <i>n.a.</i> |
| Sabah— | | | | | | |
| Coal and coke | 63 | 75 | 38 | 30 | 26 | 20 |
| Sarawak— | | | | | | |
| Coal and coke | 21 | (c) 12 | (c) 21 | (c) 11 | (c) 10 | <i>n.a.</i> |
| Tar | 557 | 219 | 1,101 | 94 | 25 | <i>n.a.</i> |
| Western Samoa— | | | | | | |
| Coal and coke | 31 | 12 | 20 | 7 | 12 | 7 |
| Irish Republic— | | | | | | |
| Anthracite | 51,683 | 46,108 | 65,534 | 66,012 | 71,783 | 71,473 |
| Bituminous | 1,285,898 | 1,222,375 | 1,247,298 | 1,171,566 | 1,129,451 | 1,049,820 |
| Coke | 12,384 | 11,914 | 15,076 | 17,011 | 21,505 | 27,549 |
| Patent fuel | 3,400 | 5,991 | 2,906 | 2,511 | 2,234 | 6 |
| Tar | 4,337 | 2,587 | 2,751 | 3,215 | 3,655 | 3,925 |
| OTHER COUNTRIES | | | | | | |
| Albania— | | | | | | |
| Coke | 10,228 | 17,206 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Austria— | | | | | | |
| Coal | 3,748,377 | 3,539,692 | 3,319,308 | 3,074,538 | 3,311,965 | 2,999,461 |
| Brown coal | 118,087 | 113,915 | 39,458 | 41,375 | 33,063 | 46,059 |
| Coke | 894,393 | 950,536 | 974,006 | 947,789 | 1,001,738 | 1,053,243 |
| Briquettes | 631,190 | 601,447 | 522,296 | 564,040 | 495,636 | 562,940 |
| Tar, pitch, etc. | 17,830 | 17,182 | 15,557 | 24,081 | 3,820 | 3,959 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Coal | 6,904,132 | 6,799,998 | 6,121,098 | 5,794,867 | 6,630,804 | 6,561,615 |
| do. coke | 4,243,848 | 3,998,881 | 3,570,153 | 3,643,976 | 4,400,253 | 5,155,163 |
| do. briquettes | 236,608 | 328,512 | 340,097 | 325,344 | 349,637 | 311,905 |
| Brown coal | — | — | 25 | — | — | 238 |
| do. do. coke | <i>n.a.</i> | 1,071 | 521 | 312 | 428 | 671 |
| do. do. briquettes | 223,453 | 195,423 | 171,462 | 134,765 | 96,314 | 118,075 |
| Tar | 34,372 | 37,641 | 37,478 | 41,030 | 41,169 | 35,287 |
| Pitch | 93,506 | 17,273 | 2,647 | 461 | 252 | 529 |

(a) Years ended June 30 of that stated.

(c) Coke only

(d) Excess of re-exports

(b) Owing to reclassification not strictly comparable with earlier years.

IMPORTS OF COAL, COKE AND BY-PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|------------|-------------|--------------|------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Bulgaria— | | | | | | |
| Coal | 1,763,000 | 2,218,000 | 3,100,250 | 1,950,697 | 1,946,759 | <i>n.a.</i> |
| Coke | 346,785 | 259,679 | 295,262 | 320,107 | 299,473 | <i>n.a.</i> |
| Czechoslovakia— | | | | | | |
| Coal | 4,964,000 | 4,466,000 | 3,966,000 | 4,096,000 | 4,549,000 | 4,551,000 |
| Denmark— | | | | | | |
| Coal | 3,718,425 | 3,382,984 | 3,620,785 | 3,571,807 | 4,096,132 | 3,554,759 |
| Coke | 1,127,848 | 843,074 | 810,592 | 577,626 | 438,691 | 541,492 |
| Coal briquettes | 2,590 | 2,307 | 1,876 | 8,575 | 1,306 | 828 |
| Brown coal briquettes | 156,788 | 148,084 | 135,513 | 103,669 | 92,692 | 77,785 |
| Coke briquettes | 20,937 | 31,314 | 8,318 | 1,710 | <i>n.a.</i> | (a) |
| Tar | 95 | 73 | 134 | 2,393 | 576 | 1,876 |
| Pitch | 195 | 329 | 325 | 357 | 147 | 169 |
| Faroe Islands— | | | | | | |
| Coal | 2,275 | 2,280 | 2,534 | 2,357 | 1,213 | <i>n.a.</i> |
| Finland— | | | | | | |
| Anthracite | 255,752 | 184,201 | 204,504 | 127,382 | 103,748 | 100,211 |
| Other coal | 2,119,791 | 2,293,196 | 1,805,928 | 1,896,170 | 1,955,408 | 2,323,263 |
| Briquettes | 5,990 | 2,606 | 4,839 | 2,840 | 1,936 | 1,191 |
| Coke | 873,339 | 818,746 | 715,053 | 724,855 | 651,430 | 749,605 |
| Tar | 13 | 53 | 73 | 45 | 89 | 78 |
| France— | | | | | | |
| Anthracite | 4,008,663 | 3,314,916 | 3,160,056 | 3,012,629 | 2,846,683 | 2,810,753 |
| Bituminous | 9,932,549 | 8,425,965 | 7,756,467 | 8,251,636 | 8,535,310 | 9,508,472 |
| Lignite | 1,826 | 3,998 | 4,643 | 14,795 | 12,226 | 14,790 |
| Coke | 4,860,499 | 4,391,403 | 3,675,090 | 3,273,349 | 3,463,964 | 3,238,423 |
| Coal briquettes | 762,762 | 408,080 | 327,579 | 318,649 | 329,081 | 256,962 |
| Brown-coal briquettes | 535,745 | 374,355 | 357,271 | 336,775 | 340,284 | 289,140 |
| Tar and pitch | 473,642 | 307,538 | 244,119 | 288,522 | 254,814 | 229,648 |
| Germany (Federal)— | | | | | | |
| Coal | 6,946,361 | 7,052,934 | 6,675,104 | 6,473,250 | 5,499,294 | 6,240,082 |
| Brown coal | 1,011,539 | 915,330 | 1,037,210 | 1,106,851 | 1,137,806 | 1,125,100 |
| Coke | 358,683 | 526,238 | 499,090 | 557,451 | 347,293 | 717,265 |
| Coal briquettes | 366,969 | 300,623 | 281,134 | 270,437 | 306,443 | 441,116 |
| Brown-coal briquettes | 196,801 | 47,950 | 28,546 | 20,697 | 23,087 | 27,303 |
| Tar and pitch | 112,208 | 94,410 | 51,131 | 37,127 | 42,585 | 53,052 |
| Germany (East)— | | | | | | |
| Coal | 10,247,000 | 9,315,000 | 9,023,000 | 8,143,000 | 6,185,000 | 6,643,393 |
| Brown coal | 5,363,000 | 5,136,000 | 4,986,000 | 3,673,000 | <i>n.a.</i> | <i>n.a.</i> |
| Coke | 3,257,000 | 3,154,000 | 3,181,000 | 2,833,000 | 2,798,000 | 2,733,141 |
| Greece— | | | | | | |
| Anthracite | 9,117 | 8,740 | 6,479 | 6,449 | 6,975 | 6,239 |
| Other coal | 121,349 | 187,679 | 108,701 | 107,238 | 64,675 | 91,297 |
| Coke | 167,066 | 203,163 | 248,799 | 121,015 | 208,377 | 266,388 |
| Tar and pitch | 699 | 463 | 4,052 | 7,123 | 6,685 | 11,685 |
| Hungary— | | | | | | |
| Coal | 3,227,785 | 2,663,000 | 2,346,000 | 1,714,488 | 1,634,767 | 1,675,881 |
| Coke | 1,137,482 | 2,102,000 | 1,181,000 | 2,171,160 | 2,134,743 | 1,106,075 |
| Pitch | 98 | — | — | — | <i>n.a.</i> | 7,144 |
| Iceland— | | | | | | |
| Coal | 12,494 | 7,895 | 4,928 | 5,038 | 2,965 | 2,295 |
| Coke | 860 | 925 | 742 | 354 | 1,164 | 352 |
| Tar | 35 | 20 | 18 | 18 | 16 | 105 |
| Italy— | | | | | | |
| Anthracite | 9,894,769 | { 9,350,245 | } 10,522,042 | 11,625,991 | 10,375,199 | 11,224,516 |
| Bituminous | | { 797,262 | | | | |
| Lignite | 31,403 | 47,811 | 24,663 | 49,547 | 22,156 | 36,188 |
| Coke | 359,405 | 265,710 | 336,377 | 346,566 | 309,475 | 200,080 |
| Briquettes | 469,183 | 290,594 | 290,923 | 300,538 | 238,191 | 273,026 |
| Tar | 69 | 1,402 | 2,582 | 6,696 | 1,594 | 1,590 |
| Pitch | 6,314 | 2,921 | 4,854 | 4,513 | 2,719 | 6,581 |

(a) included with coke.

IMPORTS OF COAL, COKE AND BY-PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-----------|-----------|-----------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Netherlands— | | | | | | |
| Coal | 9,152,089 | 6,994,381 | 6,573,537 | 6,928,287 | 7,295,080 | 5,836,782 |
| Brown coal | 200,508 | 146,412 | 132,447 | 89,109 | 74,331 | 871 |
| Coke | 305,220 | 276,313 | 205,221 | 184,631 | 390,372 | 986,870 |
| Briquettes | 91,661 | 53,925 | 44,139 | 24,347 | 18,720 | 11,758 |
| Brown-coal briquettes | 157,358 | 143,413 | 111,484 | 83,763 | 67,622 | 61,546 |
| Tar | 81,235 | 74,165 | 70,230 | 67,792 | 77,497 | 56,297 |
| Pitch | 53,168 | 32,231 | 57,586 | 54,341 | 84,045 | 89,746 |
| Norway— | | | | | | |
| Coal (a) | 272,238 | 358,969 | 366,190 | 414,917 | 529,042 | 543,941 |
| Coke | 754,848 | 670,000 | 730,198 | 620,966 | 681,421 | 715,898 |
| Briquettes | — | 11 | 24 | 1 | — | — |
| Tar and pitch | 54,235 | 61,876 | 65,834 | 77,739 | 88,045 | 85,093 |
| Poland— | | | | | | |
| Anthracite | 19,400 | 34,000 | 23,000 | 30,000 | 32,000 | 24,000 |
| Other coal | 1,259,100 | 1,191,000 | 1,123,000 | 1,194,000 | 1,236,000 | 1,070,000 |
| Brown-coal briquettes | 620,900 | 627,000 | 427,000 | 219,000 | 134,000 | 296,000 |
| Portugal— | | | | | | |
| Anthracite | 10,118 | 10,099 | 4,847 | 7,164 | 8,692 | 4,114 |
| Other coal | 389,180 | 410,334 | 457,744 | 374,539 | 376,601 | 331,370 |
| Coke | 241,806 | 213,143 | 285,203 | 293,336 | 227,110 | 340,047 |
| Briquettes | 761 | 681 | 123 | 71 | 295 | — |
| Tar and pitch | 2,468 | 6,396 | 3,727 | 3,578 | 2,740 | 2,409 |
| Roumania— | | | | | | |
| Coal | 706,500 | 695,100 | 685,200 | 780,672 | 661,091 | <i>n.a.</i> |
| Coke | 930,700 | 915,100 | 1,074,200 | 1,071,899 | 1,545,105 | <i>n.a.</i> |
| Spain— | | | | | | |
| Anthracite | 40,586 | 83,082 | 64,035 | 33,596 | 25,521 | 29,734 |
| Bituminous | 1,779,888 | 1,605,027 | 1,369,614 | 1,283,675 | 2,086,421 | 2,181,160 |
| Coke | 99,826 | 65,664 | 65,468 | 124,390 | 99,740 | 108,778 |
| Tar and pitch | 53,163 | 52,136 | 36,807 | 24,502 | 24,992 | 34,272 |
| Sweden— | | | | | | |
| Anthracite | 79,443 | 95,511 | 91,535 | 97,342 | 91,193 | 114,217 |
| Other coal | 1,882,835 | 1,581,449 | 1,739,239 | 1,554,097 | 1,616,475 | 1,430,287 |
| Coke | 1,620,546 | 1,381,425 | 1,266,157 | 997,294 | 1,057,004 | 1,083,786 |
| Briquettes | 5,575 | 2,643 | 7,144 | 5,828 | 8,432 | 13,578 |
| Tar, pitch, etc. | 6,394 | 303 | 237 | 175 | 195 | 254 |
| Switzerland— | | | | | | |
| Coal | 1,356,028 | 1,097,145 | 874,297 | 633,566 | 561,463 | 508,875 |
| Lignite | 319 | 276 | 396 | 667 | 95 | 1,943 |
| Coke | 483,024 | 468,173 | 361,090 | 278,267 | 291,055 | 229,806 |
| Briquettes | 217,696 | 176,602 | 139,608 | 123,102 | 118,129 | 118,272 |
| Tar and pitch | 23,079 | 21,355 | 12,075 | 16,941 | 22,108 | 24,662 |
| U.S.S.R.— | | | | | | |
| Coal | 5,000,000 | 6,700,000 | 7,200,000 | 7,700,000 | 6,791,000 | 7,100,000 |
| Coke | 650,600 | 652,000 | 644,000 | 674,181 | 647,600 | 649,000 |
| Yugoslavia— | | | | | | |
| Anthracite | 136,773 | 149,548 | 132,228 | 141,684 | 135,204 | 151,780 |
| Other coal | 1,858,798 | 2,001,488 | 1,661,901 | 1,280,094 | 1,579,510 | 1,649,650 |
| Coke | 188,584 | 109,256 | 169,017 | 112,579 | 108,452 | 119,017 |
| Coke dust | — | — | 61 | — | — | — |
| Tar and pitch | 76 | 62 | 25 | 68 | 15 | 5 |
| Algeria— | | | | | | |
| Coal | <i>n.a.</i> | 12,655 | 10,523 | 41,087 | 55,352 | <i>n.a.</i> |
| Coke | <i>n.a.</i> | 9,403 | 11,033 | 4,633 | 6,523 | <i>n.a.</i> |
| Angola— | | | | | | |
| Coal | 21,202 | 19,912 | 31,643 | 19,546 | 37,202 | 33,540 |
| Coke | 9,583 | 750 | 620 | 543 | 457 | 686 |
| Tar and pitch | 160 | 243 | 225 | 181 | 239 | 340 |
| Cameroun— | | | | | | |
| Coal, coke, etc. | 377 | 440 | 450 | 850 | <i>n.a.</i> | <i>n.a.</i> |

(a) Excluding coal imported from Spitzbergen.

IMPORTS OF COAL, COKE AND BY-PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Canary Islands— | | | | | | |
| Coal | <i>n.a.</i> | 965 | 37 | 25 | 24 | 27 |
| Egypt— | | | | | | |
| Coal | 296,594 | 402,462 | 287,294 | 472,452 | 497,238 | 483,895 |
| Coke | 212,585 | 32,000 | 5,000 | <i>n.a.</i> | <i>n.a.</i> | 71,235 |
| Equatorial African Community— | | | | | | |
| Coal, coke, briquettes .. | 143 | 219 | 136 | 108 | 148 | 127 |
| Ethiopia (a)— | | | | | | |
| Coal | 1,800 | <i>n.a.</i> | <i>n.a.</i> | 752 | 4,747 | 9,741 |
| French Somaliland— | | | | | | |
| Coal | — | — | — | — | — | 15 |
| Ivory Coast— | | | | | | |
| Coal and briquettes .. | 52 | 108 | 78 | 5 | 46 | 60 |
| Coke | 236 | 151 | 129 | 185 | 279 | 202 |
| Libya— | | | | | | |
| Coal, coke, briquettes .. | 2,271 | 6,644 | 97 | 2,215 | 3,549 | <i>n.a.</i> |
| Malagasy Republic— | | | | | | |
| Coal and briquettes .. | 13,113 | 14,634 | 14,962 | 16,943 | 20,802 | 18,348 |
| Coke | 88 | 71 | 71 | 69 | 166 | 74 |
| Tar and pitch | 55 | 163 | 93 | 95 | 64 | 142 |
| Melilla— | | | | | | |
| Coal | <i>n.a.</i> | 92 | — | — | — | — |
| Morocco— | | | | | | |
| Coal | 105,007 | 33,383 | 18,940 | 42,007 | 59,681 | 58,050 |
| Coke | 14,187 | 9,707 | 13,130 | 13,888 | 16,324 | 17,233 |
| Tar | 26 | — | — | — | — | — |
| Pitch | 1,044 | 1,544 | 1,547 | 1,861 | 1,471 | 728 |
| Mozambique— | | | | | | |
| Coal | 316,592 | 337,338 | 225,314 | r 205,990 | 305,000 | <i>n.a.</i> |
| Coke | 1,402 | 1,317 | 1,385 | 1,511 | <i>n.a.</i> | <i>n.a.</i> |
| Tar, pitch and asphalt .. | 8,014 | 6,435 | 3,999 | 70 | <i>n.a.</i> | <i>n.a.</i> |
| Senegal— | | | | | | |
| Coal and briquettes .. | 685 | 622 | 205 | 143 | 308 | <i>n.a.</i> |
| Coke | 131 | 261 | 67 | 151 | 130 | <i>n.a.</i> |
| South Africa— | | | | | | |
| Coal | 96,489 | 23,763 | 641 | 733 | 20,661 | 18,759 |
| Coke | 13 | 32,696 | 25,483 | 3,749 | 6,112 | 7,285 |
| Sudan— | | | | | | |
| Coal | — | 6,262 | — | — | — | — |
| Coke | 295 | 895 | 295 | — | — | 984 |
| Togo— | | | | | | |
| Coal and briquettes .. | 104 | 25 | 53 | 13 | 65 | 11 |
| Tunisia— | | | | | | |
| Coal | 33,709 | 30,053 | 29,146 | 37,042 | 28,210 | 20,420 |
| Coke | 6,510 | 20,670 | 54,985 | 106,476 | 98,983 | 109,721 |
| Tar and pitch | 15 | 78 | 42 | 15 | 22 | 22 |
| Costa Rica— | | | | | | |
| Coal | 45 | 35 | 81 | 46 | 54 | 38 |
| Coke | 137 | 78 | 161 | 70 | 190 | 128 |
| Cuba— | | | | | | |
| Coke | 18,861 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Bituminous | 28,218 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Anthracite | 60,672 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Greenland— | | | | | | |
| Coal | 9,763 | 8,672 | 5,872 | 14,247 | 11,556 | <i>n.a.</i> |
| Guatemala— | | | | | | |
| Coal | 32 | 60 | 48 | 91 | 20 | 30 |
| Coke | 139 | 202 | 253 | 94 | 79 | 180 |
| Honduras— | | | | | | |
| Coal | 186 | 76 | 148 | 121 | 186 | <i>n.a.</i> |
| Coke | 10 | 10 | 29 | 2 | 16 | <i>n.a.</i> |

(a) Years ended September 10 of that stated.

IMPORTS OF COAL, COKE AND BY-PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | | | | | | |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|--------|-------|------------|------------|------------|---------|
| OTHER COUNTRIES | | | | | | | | | | | | |
| <i>(cont.)</i> | | | | | | | | | | | | |
| Mexico— | | | | | | | | | | | | |
| Coal | 48,890 | 53,586 | 61,614 | 59,228 | 65,054 | <i>n.a.</i> | | | | | | |
| Coke | 27,168 | 55,362 | 122,836 | 144,994 | 298,917 | <i>n.a.</i> | | | | | | |
| Tar | 3,536 | 1,907 | 2,426 | 663 | 326 | <i>n.a.</i> | | | | | | |
| Nicaragua— | | | | | | | | | | | | |
| Coal | 14 | 15 | 24 | — | 10 | 7 | | | | | | |
| Coke | 41 | 67 | 82 | 58 | 105 | 133 | | | | | | |
| Panama Republic— | | | | | | | | | | | | |
| Coal | 20 | 45 | 1,645 | 2,900 | <i>n.a.</i> | <i>n.a.</i> | | | | | | |
| Salvador— | | | | | | | | | | | | |
| Coal | 97 | 101 | 90 | 98 | 151 | 101 | | | | | | |
| Coke | 259 | 255 | 235 | 181 | 150 | 260 | | | | | | |
| Tar | 61 | 55 | 58 | 63 | 67 | 43 | | | | | | |
| St. Pierre and Miquelon— | | | | | | | | | | | | |
| Coal | 8,409 | 6,898 | 7,486 | 8,159 | 2,459 | 5,135 | | | | | | |
| United States— | | | | | | | | | | | | |
| Bituminous coal | 272,011 | 155,159 | 139,949 | 189,565 | 138,803 | 70,496 | | | | | | |
| Other coal | | | 28,380 | 28,970 | 64,130 | 27,955 | | | | | | |
| Coke | | | 85,501 | 82,144 | 84,004 | 154,511 | | | | | | |
| Briquettes | | | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | | | | | | |
| Argentina— | | | | | | | | | | | | |
| Coal | 680,345 | 646,400 | 686,901 | 793,257 | 511,751 | 424,169 | | | | | | |
| Coke | 68,243 | 80,583 | 50,843 | 38,633 | 30,926 | 45,646 | | | | | | |
| Tar and pitch | 293 | 73 | 55 | 33 | 393 | 2,517 | | | | | | |
| Bolivia— | | | | | | | | | | | | |
| Coal and coke | 1,229 | 761 | 784 | 371 | <i>n.a.</i> | <i>n.a.</i> | | | | | | |
| Brazil— | | | | | | | | | | | | |
| Coal | 1,330,639 | 1,031,260 | 1,716,875 | 1,513,181 | 1,386,037 | <i>n.a.</i> | | | | | | |
| Coke | 150,166 | 122,837 | 56,926 | 42,813 | 61,544 | <i>n.a.</i> | | | | | | |
| Chile— | | | | | | | | | | | | |
| Coal | 430,307 | 31,856 | <i>n.a.</i> | 278,919 | <i>n.a.</i> | <i>n.a.</i> | | | | | | |
| Coke | 103 | 541 | <i>n.a.</i> | 3 | <i>n.a.</i> | <i>n.a.</i> | | | | | | |
| Tar and pitch | 18,001 | 19,656 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | | | | | | |
| Colombia— | | | | | | | | | | | | |
| Coal | 263 | 13 | — | — | 30 | <i>n.a.</i> | | | | | | |
| Peru— | | | | | | | | | | | | |
| Coal | 51 | 1,108 | 10 | — | — | <i>n.a.</i> | | | | | | |
| Coke | 2,678 | 7,987 | 4,440 | 12,431 | 10,188 | <i>n.a.</i> | | | | | | |
| Tar | 37 | 11 | 9 | 27 | 3 | <i>n.a.</i> | | | | | | |
| Uruguay— | | | | | | | | | | | | |
| Coal | <i>n.a.</i> | 32,434 | 13,980 | 14,825 | 20,607 | 260,051 | | | | | | |
| Coke | <i>n.a.</i> | 1,903 | 1,922 | 2,116 | 1,572 | 2,190 | | | | | | |
| Venezuela— | | | | | | | | | | | | |
| Coal | 694 | 9,930 | 3,810 | 4,380 | 17,914 | 26,744 | | | | | | |
| Coke | 179,064 | 190,500 | 153,858 | 205,582 | 354,597 | 272,307 | | | | | | |
| Burma— | | | | | | | | | | | | |
| Coal | 205,911 | 118,262 | 69,527 | 183,368 | <i>n.a.</i> | <i>n.a.</i> | | | | | | |
| Coke | 1,080 | 5 | | | | | 5,169 | 4,853 | | | | |
| Formosa— | | | | | | | | | | | | |
| Coke | 5,622 | 17,307 | 10,390 | 15,976 | 9,563 | 12,895 | | | | | | |
| Iraq— | | | | | | | | | | | | |
| Coal | 290 | <i>n.a.</i> | 548 | 465 | 529 | 93 | | | | | | |
| Coke | 841 | 579 | 635 | 603 | 1,000 | 977 | | | | | | |
| Israel— | | | | | | | | | | | | |
| Anthracite | 18,269 | 2,600 | 1,356 | 262 | 3,468 | 871 | | | | | | |
| Other coal | | | | | | | | | | | | |
| Coke | | | | | | | 8,548 | 6,337 | 6,377 | 6,205 | 5,928 | 8,555 |
| Japan— | | | | | | | | | | | | |
| Anthracite | 13,023,813 | 16,810,362 | 19,201,248 | 1,413,248 | 1,433,704 | 1,280,604 | | | | | | |
| Other coal | | | | | | | 48,633 | 7 | 23,651,317 | 30,478,212 | 39,232,070 | |
| Coke | | | | | | | — | — | — | 219,721 | 231,699 | 169,885 |
| Tar and pitch | | | | | | | 113 | 5,208 | 31 | 28 | 25 | 7 |

IMPORTS OF COAL, COKE AND BY-PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|---------|---------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Jordan— | | | | | | |
| Coal and briquettes .. | 607 | 545 | 466 | <i>n.a.</i> | 461 | <i>n.a.</i> |
| Korea (South)— | | | | | | |
| Coal | 158,549 | 98,015 | 62,315 | 55,914 | 53,000 | <i>n.a.</i> |
| Coke | 4,474 | 16,900 | 26,821 | 31,101 | 50,345 | 62,633 |
| Lebanon— | | | | | | |
| Coal and briquettes .. | 4,457 | 1,875 | 1,722 | 2,165 | 1,842 | 1,132 |
| Coke | 9,955 | 10,089 | 3,608 | 2,244 | 5,751 | 11,363 |
| Philippine Republic— | | | | | | |
| Coal | 39 | 64 | <i>n.a.</i> | 130 | <i>n.a.</i> | <i>n.a.</i> |
| Coke | 11,339 | 20,372 | <i>n.a.</i> | 14,569 | <i>n.a.</i> | <i>n.a.</i> |
| Tar | 59 | 19 | <i>n.a.</i> | 12 | <i>n.a.</i> | <i>n.a.</i> |
| Syria— | | | | | | |
| Coal and briquettes .. | 2,290 | 2,221 | 605 | 1,213 | 2,285 | 1,522 |
| Coke | 1,995 | 3,116 | <i>n.a.</i> | 1,071 | 3,112 | 3,267 |
| Thailand— | | | | | | |
| Coal | — | 1,355 | 1,337 | 59 | 3 | 78 |
| Coke | 1,996 | 3,566 | 4,153 | 4,453 | 9,789 | 9,219 |
| Tar | 4 | 78 | 77 | — | — | 20 |
| Turkey— | | | | | | |
| Coal | 295 | 130 | 328 | 326 | <i>n.a.</i> | <i>n.a.</i> |
| Coke | 4,019 | 4,134 | 7,807 | 11,662 | 15,837 | 18,615 |
| Pitch | 49 | 98 | 74 | — | — | — |
| Vietnam (South)— | | | | | | |
| Coal, coke and briquettes | 23,000 | 14,760 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| French Polynesia— | | | | | | |
| Coal | 16 | 21 | — | 10 | 10 | 5 |
| New Caledonia— | | | | | | |
| Coal | 182,726 | 246,382 | 215,880 | 243,653 | <i>n.a.</i> | <i>n.a.</i> |
| Coke | 100,405 | 52,822 | 137,638 | 82,897 | <i>n.a.</i> | <i>n.a.</i> |

COBALT
PRODUCTION OF COBALT ORE
(Metal content)

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Zambia (a) | 1,394 | 1,510 | 1,490 | 1,430 | 1,321 | 1,770 |
| Canada (c) | 1,422 | 1,629 | 1,567 | 1,609 | 1,799 | 1,430 |
| Australia (d) | 17 | 18 | 17 | 17 | 13 | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Congo Republic (b) .. | 7,555 | 8,256 | 11,119 | 9,565 | 9,941 | 10,409 |
| Morocco | 1,545 | 1,644 | 1,788 | 1,725 | 1,494 | 1,388 |
| Cuba (e) | 690 | 790 | 901 | 1,027 | 1,071 | 1,518 |
| TOTAL* | 14,000 | 16,000 | 20,000 | 19,000 | 19,000 | 20,000 |

*An allowance has been made for cobalt contained in ores produced in Uganda, Finland and the United States.

Ores containing cobalt are also known to have been produced in Cyprus, Greece, Norway, Spain, Sweden, the U.S.S.R., China and Korea.

- (a) Refined metal plus estimated cobalt content of cobalt alloy and other cobalt.
- (b) Electrolytic cobalt plus recoverable cobalt in cobalt alloy.
- (c) Metal recovered from smelter products plus cobalt contained in cobalt ores and residues exported.
- (d) Estimated cobalt content of cobalt oxide.
- (e) Recoverable cobalt in sulphide. United States Bureau of Mines' estimate.

METAL PRODUCTION OF COBALT

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|-------|-------|--------|-------|--------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Zambia | 1,341 | 1,510 | 1,490 | 1,430 | 1,321 | 1,770 |
| OTHER COUNTRIES | | | | | | |
| France | 737 | 875 | 827 | 1,017 | 927 | <i>n.a.</i> |
| Germany (Federal) (a) .. | 1,422 | 1,335 | 1,091 | 869 | 796 | 770 |
| Norway (b) | 698 | 810 | 786 | 501 | 633 | 723 |
| Congo Republic | 7,057 | 8,231 | 11,119 | 9,565 | 10,000 | 9,420 |

Cobalt and its compounds are also known to have been produced in the United Kingdom, Canada, Belgium, the U.S.S.R. and the United States. In addition, the following amounts of cobalt oxide hydrate, salts and driers were produced in the United States (in terms of cobalt content):

| Year | Long tons | Year | Long tons |
|---------|-----------|---------|-------------|
| 1964 .. | 696 | 1967 .. | 917 |
| 1965 .. | 772 | 1968 .. | 984 |
| 1966 .. | 899 | 1969 .. | <i>n.a.</i> |

- (a) Obtained chiefly from pyrite sinter imported from Cyprus, Finland, Norway, Spain, Sweden and other countries. Including secondary metal.
- (b) Obtained from copper-nickel matte imported from Canada.

EXPORTS OF COBALT, ETC.

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|--------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Cobalt (a) | 90 | 157 | 186 | 370 | 253 | 300 |
| Cobalt oxide | 462 | 368 | 460 | 192 | 92 | 70 |
| Zambia— | | | | | | |
| Cobalt | 1,443 | 1,411 | 1,602 | 2,058 | 1,208 | 1,563 |
| Cobalt alloys | 31 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | — | — |
| Canada— | | | | | | |
| Cobalt | 265 | 130 | 280 | 669 | 541 | 516 |
| Cobalt oxides and salts .. | 739 | 631 | 584 | 863 | 735 | 536 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Cobalt (b) (c) | 951 | 2,373 | 3,225 | 2,213 | 2,112 | 1,514 |
| France— | | | | | | |
| Ingots and scrap (a) | 564 | 639 | 595 | 598 | 717 | 449 |
| Cobalt salts | 10 | 31 | 17 | — | 5 | 24 |
| Germany (Federal)— | | | | | | |
| Cobalt (c) | 776 | 626 | 441 | 189 | 178 | 195 |
| Cobalt oxide | 24 | 456 | 56 | 39 | 38 | 25 |
| Norway— | | | | | | |
| Cobalt | 559 | 872 | 797 | 427 | 503 | 945 |
| Sweden— | | | | | | |
| Cobalt | 9 | 2 | 3 | 5 | 3 | 4 |
| U.S.S.R.— | | | | | | |
| Cobalt | 197 | 200 | 100 | 100 | <i>n.a.</i> | <i>n.a.</i> |
| Congo Republic (d)— | | | | | | |
| Cobalt | 7,940 | 8,240 | 10,880 | 7,750 | <i>n.a.</i> | 5,600 |
| Morocco— | | | | | | |
| Ore | 28,647 | 6,151 | 19,226 | 15,319 | 17,991 | 15,108 |
| United States— | | | | | | |
| Ore and metal (c) | 573 | 555 | 456 | 669 | 972 | 1,050 |
| Japan— | | | | | | |
| Cobalt oxide | 4 | 21 | 3 | 2 | — | — |

(a) Including alloys.

(b) Exports of cobalt metal are not separately recorded. Figures relate to imports into the United States and Japan from Belgium.

(c) Including alloys and scrap.

(d) Estimated.

IMPORTS OF COBALT, ETC.

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|--------|--------|--------|--------|--------|---------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Cobalt (c) | 1,528 | 1,803 | 1,549 | 1,608 | 1,559 | 1,436 |
| Cobalt oxide | 990 | 859 | 1,101 | 657 | 810 | 385 |
| Hong Kong— | | | | | | |
| Cobalt oxide | 35 | 37 | 46 | 51 | 30 | 75 |
| India— | | | | | | |
| Cobalt oxide | 34 | 33 | 18 | 25 | 10 | 24 |
| Australia (a)— | | | | | | |
| Cobalt ingots, etc. | 62 | 50 | (d) 52 | (d) 77 | (d) 71 | (d) 121 |
| Cobalt oxide | 23 | 30 | 22 | 38 | 29 | 15 |
| Cobalt salts | r 176 | r 182 | r 125 | r 182 | 237 | 133 |
| New Zealand (a)— | | | | | | |
| Cobalt salts | — | 1 | n.a. | 1 | — | |
| OTHER COUNTRIES | | | | | | |
| Denmark— | | | | | | |
| Cobalt | 26 | 21 | 20 | 22 | 24 | 31 |
| France— | | | | | | |
| Ore | 10,228 | 11,488 | 11,933 | 11,736 | 11,417 | 8,574 |
| Ingots and scrap (c) | 227 | 308 | 430 | 392 | 269 | 653 |
| Cobalt oxide | 88 | 129 | 134 | 131 | 112 | 134 |
| Germany (Federal)— | | | | | | |
| Cobalt (b) | 667 | 775 | 722 | 561 | 1,175 | 1,570 |
| Cobalt oxide | 257 | 259 | 315 | 306 | 414 | 431 |
| Italy— | | | | | | |
| Cobalt (b) | 313 | 271 | 384 | 327 | 339 | 450 |
| Cobalt oxide | 243 | 216 | 206 | 211 | 225 | 256 |
| Netherlands— | | | | | | |
| Cobalt | 161 | 244 | 160 | 234 | 174 | 239 |
| Portugal— | | | | | | |
| Cobalt oxide | 3 | 2 | 3 | 4 | — | n.a. |
| Sweden— | | | | | | |
| Cobalt | 233 | 188 | 256 | 187 | 166 | 389 |
| Yugoslavia— | | | | | | |
| Cobalt | 50 | 25 | 29 | 28 | 44 | 54 |
| Mexico— | | | | | | |
| Cobalt oxide | 45 | 50 | 67 | 68 | 97 | n.a. |
| United States— | | | | | | |
| Cobalt metal | 5,077 | 6,628 | 7,978 | 3,547 | 4,115 | 5,373 |
| Cobalt oxide | 676 | 422 | 571 | 466 | 530 | 525 |
| Cobalt salts | 42 | 49 | 67 | 75 | 48 | 58 |
| Argentina— | | | | | | |
| Cobalt metal | 46 | 46 | 44 | 59 | 70 | 77 |
| Cobalt salts | 23 | 15 | 10 | 10 | 10 | — |
| Brazil— | | | | | | |
| Cobalt oxide | 31 | 30 | 42 | 36 | 54 | n.a. |
| Japan— | | | | | | |
| Ingots, slabs and grains | 1,603 | 1,270 | 2,005 | 2,604 | 1,934 | 4,109 |
| Cobalt oxide | 314 | 278 | 329 | 453 | 434 | 524 |

(a) Years ended June 30 of that stated.

(d) Owing to reclassification not strictly comparable with earlier years.

(b) Including alloys and scrap.

(c) Including alloys.

COPPER
PRODUCTION OF COPPER ORE
(Metal content)

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Kenya (f) | 1,400 | 1,400 | 500 | 10 | 37 | 76 |
| Rhodesia | 16,376 | 17,678 | (c) 16,900 | 17,678 | (b) 19,200 | (b) 27,400 |
| Uganda (h) | 17,971 | 16,870 | 15,844 | 14,198 | 15,354 | 16,310 |
| Zambia | 622,362 | 684,753 | 613,594 | 652,500 | 654,384 | 736,300 |
| Canada (g) | 434,732 | 453,461 | 448,702 | 547,602 | 565,458 | 498,418 |
| Cyprus (e) | 16,530 | 18,960 | 24,347 | 15,200 | 21,570 | 18,860 |
| India | 10,048 | 10,000 | 10,000 | 9,000 | 9,000 | 10,000 |
| Australia | 104,050 | 90,388 | 109,537 | 90,361 | 107,906 | 129,264 |
| New Zealand | 70 | 10 | — | 150 | 50 | 70 |
| TOTAL | 1,223,000 | 1,294,000 | 1,239,000 | 1,327,000 | 1,379,000 | 1,437,000 |
| Irish Republic | — | — | 1,115 | 3,425 | 6,777 | 6,170 |
| OTHER COUNTRIES | | | | | | |
| Albania (c) | 2,500 | 4,130 | 4,910 | 5,900 | 5,900 | 5,900 |
| Austria | 1,588 | 1,551 | 1,872 | 1,930 | 2,079 | 2,300 |
| Bulgaria | 18,000 | 24,000 | 29,000 | 35,000 | 37,000 | 38,000 |
| Finland | 31,800 | 29,300 | 25,970 | 28,377 | 29,500 | 32,500 |
| France (d) | 263 | 279 | 427 | 399 | 385 | 383 |
| Germany— | | | | | | |
| Federal Republic | 1,557 | 960 | 1,153 | 1,171 | 1,317 | 1,421 |
| East (b) | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 |
| Italy | 1,800 | 1,700 | 2,200 | 2,500 | 2,500 | 2,400 |
| Norway | 14,737 | 14,534 | 14,581 | 14,225 | 16,511 | 21,144 |
| Poland | 14,200 | 15,000 | 15,000 | 15,000 | 15,000 | 45,000 |
| Portugal | 4,296 | 3,801 | 3,676 | 3,605 | 4,450 | 4,010 |
| Spain (i) | 9,716 | 8,637 | r 8,645 | r 8,416 | 8,233 | 10,039 |
| Sweden | 15,934 | 15,538 | 15,036 | 15,044 | 17,925 | 24,753 |
| U.S.S.R. (b) | 675,000 | 700,000 | 750,000 | 850,000 | 850,000 | 875,000 |
| Yugoslavia | 62,186 | 61,562 | 61,239 | 62,154 | 69,373 | 80,387 |
| Algeria | 1,023 | 956 | 1,045 | 1,033 | 1,030 | n.a. |
| Congo Republic (h) | 272,623 | 284,047 | 310,679 | 313,938 | 319,375 | 351,269 |
| Congo, Republic of | — | (c) 60 | n.a. | 445 | 514 | 8 |
| Morocco | 1,720 | 1,784 | 2,292 | 2,180 | 2,634 | 2,497 |
| South Africa | 58,552 | 59,500 | 122,692 | 125,521 | 126,206 | 124,192 |
| South West Africa | 34,000 | 39,000 | 38,000 | 33,000 | 30,000 | 25,000 |
| Cuba (b) | 6,000 | 6,000 | 6,000 | 6,300 | 6,700 | 7,100 |
| Haiti | 4,950 | 3,897 | 2,687 | 2,313 | 1,572 | 1,768 |
| Mexico (d) | 51,676 | 68,070 | 73,221 | 61,633 | 64,000 | 65,690 |
| Nicaragua | 9,094 | 10,025 | 9,610 | 9,188 | 6,614 | 5,794 |
| United States (d) | 1,113,196 | 1,206,905 | 1,276,029 | 851,843 | 1,075,554 | 1,379,088 |
| Argentina | 340 | 510 | 332 | 404 | n.a. | n.a. |
| Bolivia (a) | 4,607 | 4,656 | 5,612 | 6,229 | 6,790 | 7,775 |
| Brazil (c) | 2,000 | 2,000 | 2,000 | 2,900 | (b) 3,500 | 3,700 |
| Chile (d) | 623,541 | 570,000 | 650,000 | 650,000 | 648,000 | 676,000 |

(a) Exports of ore (metal content) and metal.

(b) Estimated.

(c) United States Bureau of Mines' estimate.

(d) Amount estimated as recoverable.

(e) Estimated copper content of concentrates, cement copper and cupreous pyrites exported. The copper content of copper concentrates and cement copper produced was as follows (long tons): 1964—11,300; 1965—18,000; 1966—16,000; 1967—15,500; 1968—14,500; 1969—16,700.

(f) Copper content of cement copper.

(g) Blister copper plus recoverable copper in ores and matte exported.

(h) Smelter.

(i) Excluding copper contained in iron pyrites, estimated at about 10,000 tons per annum in recent years. This may or may not be recovered.

PRODUCTION OF COPPER ORE (cont.)

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Ecuador | 181 | 127 | 220 | 408 | 548 | 525 |
| Peru (d) | 173,658 | 177,488 | r 196,840 | r 189,625 | 210,139 | 196,000 |
| Burma (c) | 120 | 140 | 100 | r 70 | 40 | 40 |
| China (a) (b) | 75,000 | 75,000 | 85,000 | 80,000 | 85,000 | 100,000 |
| Formosa | 1,711 | 1,522 | 1,962 | 2,207 | 2,200 | 2,303 |
| Israel | (c) 8,000 | (c) 8,000 | (c) 8,500 | 10,000 | 10,100 | 10,500 |
| Japan | 104,497 | 105,376 | 109,522 | 115,986 | 118,038 | 119,211 |
| Korea (South) | 600 | 1,100 | 1,000 | 770 | 916 | 949 |
| Korea (North) (c) | 10,000 | 12,000 | 12,000 | 12,000 | 12,000 | 12,000 |
| Philippine Republic | 59,503 | 61,749 | 72,592 | 84,800 | 108,533 | 129,000 |
| Turkey (a) | r 27,742 | r 28,299 | r 28,483 | r 28,717 | 31,463 | 29,477 |
| TOTAL | 3,500,000 | 3,600,000 | 3,900,000 | 3,600,000 | 3,900,000 | 4,400,000 |
| WORLD'S TOTAL | 4,700,000 | 4,900,000 | 5,100,000 | 5,000,000 | 5,300,000 | 5,800,000 |

Ores containing copper are also known to have been produced in Fiji, Czechoslovakia, Hungary, Malaysia (West) and Iran.

- (a) Smelter.
- (b) Estimated.
- (c) United States Bureau of Mines' estimate.
- (d) Amount estimated as recoverable.

METAL PRODUCTION OF COPPER

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Rhodesia | 14,998 | 17,000 | (g) 17,000 | (g) 17,000 | 19,000 | 21,000 |
| Uganda | 17,971 | 16,870 | 15,844 | 14,198 | 15,346 | 16,400 |
| Zambia | 633,368 | 674,282 | 577,077 | 606,486 | 654,600 | 683,968 |
| Canada (a) | 355,314 | 376,777 | 379,000 | 446,291 | 465,280 | 402,370 |
| India | 9,325 | 9,212 | 9,362 | 8,763 | 9,139 | 9,597 |
| Australia | 80,589 | 73,414 | 90,487 | 70,826 | 91,536 | 113,756 |
| TOTAL | 1,111,565 | 1,168,000 | 1,089,000 | 1,138,000 | 1,256,000 | 1,247,000 |
| OTHER COUNTRIES | | | | | | |
| Albania | 2,169 | (g) 4,000 | (g) 4,000 | (g) 4,000 | (g) 6,000 | (g) 6,000 |
| Austria (b) | 14,411 | 15,950 | 16,756 | 17,168 | 17,734 | 18,995 |
| Bulgaria | 20,769 | 24,849 | r 25,300 | r 32,900 | 35,900 | 37,400 |
| Finland | 31,500 | 31,900 | 31,900 | 33,400 | 35,900 | 33,400 |
| Germany— | | | | | | |
| Federal Republic | 67,200 | 73,000 | 69,100 | 72,100 | 94,200 | 91,400 |
| East (e) | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 |
| Italy | 266 | 235 | 438 | 163 | n.a. | n.a. |
| Norway | 17,233 | 19,768 | 19,607 | 19,588 | 23,103 | 49,164 |
| Poland | 36,000 | 36,800 | 39,200 | 41,500 | 42,900 | 45,000 |
| Spain | 21,067 | 30,533 | 23,662 | 28,545 | 45,054 | 37,203 |
| Sweden | 28,246 | 29,359 | 28,418 | 31,689 | 27,400 | 32,575 |
| U.S.S.R. (e) | 675,000 | 700,000 | 750,000 | 800,000 | 800,000 | 900,000 |
| Yugoslavia | 50,899 | 47,743 | 57,317 | 60,384 | 71,739 | 80,000 |
| Congo Republic | 272,623 | 284,047 | 310,679 | 313,938 | 319,375 | 356,495 |
| South Africa | 53,652 | 53,591 | 113,214 | 125,520 | 126,206 | 123,658 |
| South-West Africa | 28,061 | 29,237 | 32,511 | 31,160 | 29,700 | 28,010 |
| Mexico | 50,054 | 66,451 | 54,366 | 53,582 | 58,825 | 64,603 |
| United States (d) | 1,195,029 | 1,280,402 | 1,309,318 | 769,946 | 1,130,784 | 1,415,584 |
| Chile | 577,292 | 531,279 | 623,384 | 621,101 | 613,400 | 645,901 |
| Peru | 150,323 | 156,641 | r 147,575 | r 159,266 | 184,834 | 167,700 |
| China (e) | 75,000 | 75,000 | 85,000 | 77,000 | 85,000 | 100,000 |
| Formosa | 1,857 | 2,154 | r 2,437 | 2,954 | 2,502 | 3,193 |
| Japan (f) | 277,734 | 295,461 | 313,902 | 389,062 | 469,734 | 521,445 |
| Korea (South) | 2,766 | 2,243 | 2,854 | 3,195 | 4,480 | 5,140 |
| Korea (North) (g) | 10,000 | 12,000 | 12,000 | 12,000 | 12,000 | 12,000 |
| Turkey | r 27,742 | r 28,299 | r 28,483 | r 28,717 | 31,463 | 29,477 |
| TOTAL | 3,700,000 | 3,900,000 | 4,300,000 | 3,700,000 | 4,000,000 | 4,800,000 |
| WORLD'S TOTAL | 4,800,000 | 5,100,000 | 5,400,000 | 4,800,000 | 5,300,000 | 6,100,000 |

(a) Copper content of blister and anode copper.

(b) Including secondary metal.

(c) Exports.

(d) In addition, secondary metal was recovered as follows (long tons):

1964—975,912; 1965—1,118,973; 1966—1,191,294; 1967—1,035,631; 1968—1,087,777; 1969—1,228,119.

(e) Estimated.

(f) In addition, secondary metal was recovered as follows (long tons):

1964—58,569; 1965—64,442; 1966—84,547; 1967—73,557; 1968—70,011; 1969—97,768.

(g) United States Bureau of Mines' estimate.

EXPORTS OF COPPER, ETC.*

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Unwrought—Refined .. | 37,814 | 43,026 | 49,533 | 57,943 | 52,425 | 58,708 |
| Alloys .. | 35,385 | 33,954 | 42,960 | 57,168 | 48,484 | 46,243 |
| Scrap (a) .. | 3,227 | 12,536 | 10,379 | 2,817 | 1,586 | 2,196 |
| Semi-manufactures .. | 35,260 | 51,939 | 53,922 | 46,716 | } 73,580 | 83,648 |
| do. alloys .. | 24,972 | 24,758 | 27,105 | 24,175 | | |
| Sulphate .. | 18,122 | 15,627 | 13,284 | 12,457 | 10,539 | 7,466 |
| Kenya— | | | | | | |
| Unwrought (a) .. | 3,358 | 3,665 | 1,564 | — | — | — |
| Rhodesia— | | | | | | |
| Ore and concentrates .. | 7,022 | 6,868 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Unwrought Refined .. | 15,160 | 16,467 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Bar and rod .. | 3,699 | 1,487 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Uganda— | | | | | | |
| Unwrought (a) .. | 18,214 | 17,283 | 15,550 | 14,738 | 15,385 | 16,374 |
| Zambia— | | | | | | |
| Matte .. | 1,437 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Unwrought— | | | | | | |
| Blister .. | 151,175 | 150,389 | 84,305 | 77,562 | 89,199 | 105,432 |
| Electrolytic .. | 519,778 | 522,310 | 505,404 | 512,433 | 537,207 | 608,613 |
| Other .. | <i>n.a.</i> | 3 | 3 | 497 | 5,264 | 3,139 |
| Canada— | | | | | | |
| Ore, matte, etc. (<i>Cu content</i>) .. | 93,348 | 77,679 | 84,721 | 115,157 | 144,495 | 140,908 |
| Unwrought .. | 200,244 | 178,420 | 170,260 | 246,356 | 246,981 | 187,530 |
| Scrap .. | 11,739 | 17,534 | 26,255 | 27,822 | 58,199 | 35,746 |
| Scrap alloys .. | 7,873 | 8,810 | 12,005 | 16,382 | 25,528 | 20,812 |
| Semi-manufactures .. | 39,954 | 41,317 | 44,133 | 33,343 | 51,790 | 35,032 |
| do. alloys (c) .. | 5,700 | 5,064 | 8,090 | 10,844 | 9,898 | 13,468 |
| Cyprus— | | | | | | |
| Ore and concentrates .. | 61,139 | 69,649 | 57,755 | 44,625 | 62,746 | 59,072 |
| Cupreous pyrites .. | 86,128 | 173,513 | 161,653 | 183,673 | 148,021 | 102,971 |
| Copper cement .. | 3,873 | 4,915 | 14,545 | 8,773 | 12,068 | 8,742 |
| Hong Kong— | | | | | | |
| Scrap (a) .. | 5,719 | 6,043 | 6,041 | 7,904 | 9,481 | 9,373 |
| Semi-manufactures (a) .. | 34 | 3 | 4 | 1 | 29 | 59 |
| India— | | | | | | |
| Semi-manufactures(a)(b) .. | 845 | 1,053 | 474 | 305 | 2,688 | 3,370 |
| Malaysia (West)— | | | | | | |
| Ore .. | <i>n.a.</i> | 1,750 | 750 | 1,000 | 1,256 | 1,000 |
| Singapore— | | | | | | |
| Semi-manufactures (a) .. | 408 | 434 | 484 | 713 | 690 | 545 |
| Sulphate .. | 40 | 59 | 89 | 45 | 62 | 105 |
| Australia— | | | | | | |
| Ores, concentrates and dross (<i>Cu content</i>) .. | 18,982 | 13,928 | 15,379 | 14,173 | 13,988 | 11,850 |
| Unwrought— | | | | | | |
| Blister .. | 40 | 2,115 | 6,538 | 6,893 | 7,063 | 8,425 |
| Refined .. | 13,817 | 11,703 | 7,484 | 9,325 | 16,518 | 32,208 |
| Alloys .. | 149 | 133 | 291 | 5 | 7 | 27 |
| Scrap (a) .. | 8,172 | 4,573 | 4,430 | 223 | (d) 32 | (d) 54 |
| Semi-manufactures (a) .. | 7,955 | 14,152 | 18,640 | 9,454 | 10,621 | 13,660 |

*In these tables the description "unwrought" copper corresponds to item 682.1 of the Standard International Trade Classification and includes both blister and refined copper. "Semi-manufactures" corresponds to S.I.T.C. 682.2 and includes foil and powder as well as rods, wire, sheets, strip, tubes, pipes, etc.

(a) Including alloys.

(b) Years ended March 31 following that stated.

(c) Including refinery shapes.

(d) Copper-base alloys only.

EXPORTS OF COPPER, ETC. (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---------------------------------------|---------|---------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Fiji— | | | | | | |
| Ore | — | 22 | 1 | 1 | 3,240 | <i>n.a.</i> |
| New Zealand (c)— | | | | | | |
| Unwrought (a) | — | 726 | 533 | 2,285 | 3,529 | 3,707 |
| Scrap (a) | 1,451 | 1,045 | 1,471 | 1,536 | 1,175 | 732 |
| Semi-manufactures (a) | 1,826 | 914 | 907 | 575 | 317 | 658 |
| Irish Republic— | | | | | | |
| Ore and concentrates | 124 | — | — | — | 11,046 | 18,160 |
| Scrap (a) | 2,804 | 3,465 | 4,284 | 3,930 | 2,881 | 4,186 |
| OTHER COUNTRIES | | | | | | |
| Albania— | | | | | | |
| Unwrought | 2,300 | 3,625 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Austria— | | | | | | |
| Unwrought | 2,708 | 4,402 | 4,401 | 3,921 | 4,256 | 4,623 |
| do. alloys | 938 | 381 | 228 | 549 | 739 | 994 |
| Scrap (a) | 306 | 177 | 393 | 297 | 233 | 489 |
| Semi-manufactures (a) | 8,017 | 5,153 | 5,223 | 4,703 | 4,057 | 6,780 |
| Sulphate | 517 | 758 | 258 | 537 | 208 | 680 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Unwrought (a) (b) | 245,872 | 259,003 | 258,830 | 281,884 | 304,933 | 256,856 |
| Scrap | 12,499 | 16,004 | 17,651 | 14,112 | 15,750 | 17,910 |
| Semi-manufactures (a) | 81,077 | 88,745 | 80,003 | 71,853 | 91,022 | 106,240 |
| Sulphate | 5,517 | 8,310 | 7,509 | 5,208 | 8,522 | 4,713 |
| Denmark— | | | | | | |
| Unwrought | 477 | 99 | 3 | 36 | — | 46 |
| do. alloys | 215 | 368 | 748 | 448 | 1,281 | 793 |
| Scrap (a) | 3,304 | 4,458 | 3,492 | 4,312 | 4,853 | 3,425 |
| Semi-manufactures (a) | 1,561 | 1,740 | 1,844 | 1,994 | 2,538 | 2,313 |
| Finland— | | | | | | |
| Unwrought (a) | 6,740 | 4,973 | 13,294 | 11,946 | 10,813 | 6,427 |
| Semi-manufactures (a) | 1,927 | 8,780 | 10,208 | 10,228 | 12,940 | 15,870 |
| France— | | | | | | |
| Ore | — | — | — | 169 | — | — |
| Matte | 795 | 1,637 | 681 | 219 | 611 | 899 |
| Unwrought— | | | | | | |
| Unrefined | 11,663 | 13,165 | 15,650 | 12,256 | 12,487 | 9,795 |
| Refined | 3,330 | 10,439 | 8,988 | 9,197 | 10,447 | 6,105 |
| Alloys | 4,655 | 5,143 | 6,205 | 4,512 | 1,962 | 2,051 |
| Scrap | 8,011 | 7,677 | 8,027 | 8,781 | 6,116 | 6,501 |
| do. alloys | 34,963 | 33,012 | 30,880 | 34,012 | 26,393 | 33,881 |
| Semi-manufactures (a) | 20,467 | 33,748 | 30,826 | 28,989 | 32,445 | 37,334 |
| Sulphate | 3,234 | 3,506 | 5,157 | 6,646 | 4,904 | 4,604 |
| Germany (Federal)— | | | | | | |
| Ore | — | 3,941 | 2,209 | 574 | — | — |
| Unwrought— | | | | | | |
| Unrefined | 367 | 858 | 2,145 | 2,988 | 3,954 | 1,182 |
| Refined | 75,501 | 101,251 | 147,633 | 156,082 | 136,854 | 93,963 |
| Alloys | 1,147 | 1,678 | 2,499 | 2,932 | 2,044 | 3,664 |
| Scrap (a) | 18,312 | 31,422 | 43,364 | 34,782 | 31,221 | 30,451 |
| Semi-manufactures (a) | 76,820 | 69,749 | 91,830 | 98,201 | 92,751 | 96,739 |
| Sulphate | 3,871 | 3,611 | 3,402 | 3,814 | 3,024 | 1,001 |
| Greece— | | | | | | |
| Semi-manufactures | 420 | 1,316 | 1,142 | 1,317 | 1,468 | 1,441 |
| Italy— | | | | | | |
| Ore | 2,442 | 999 | 2,366 | 6,008 | 7,959 | 8,253 |
| Unwrought (a) | 10,693 | 16,864 | 5,774 | 6,100 | 9,264 | 5,001 |
| Scrap (a) | 2,864 | 465 | 325 | 272 | 857 | 839 |

(a) Including alloys.

(b) Including matte.

(c) Year ended June 30 of that stated.

EXPORTS OF COPPER, ETC. (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|---------|---------|---------|---------|---------|---------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Italy (cont.)— | | | | | | |
| Semi-manufactures (a) | 27,038 | 35,614 | 23,564 | 18,096 | 22,188 | 24,997 |
| Sulphate | 1,491 | 17 | 2 | 13 | 128 | 617 |
| Netherlands— | | | | | | |
| Unwrought | 1,402 | 826 | 1,114 | 876 | 3,075 | 877 |
| do. alloys | 6,050 | 4,819 | 7,830 | 4,610 | 6,350 | 7,662 |
| Scrap (a) | 24,087 | 31,912 | 34,243 | 33,674 | 30,154 | 33,611 |
| Semi-manufactures (a) | 13,484 | 15,917 | 15,803 | 13,304 | 18,079 | 19,702 |
| Sulphate | 61 | 147 | 36 | 41 | 32 | 132 |
| Norway— | | | | | | |
| Ore | 14,091 | 10,559 | 15,106 | 12,955 | 19,723 | 35,016 |
| Unwrought— | | | | | | |
| Unrefined | 4,821 | 4,831 | 5,022 | 6,456 | 5,363 | 5,593 |
| Refined | 9,361 | 11,914 | 13,642 | 13,964 | 16,709 | 20,459 |
| Alloys | 1,714 | 2,939 | 3,057 | 3,267 | 3,326 | 3,630 |
| Scrap (a) | 2,269 | 1,998 | 1,892 | 1,973 | 1,495 | 1,684 |
| Semi-manufactures (a) | 1,968 | 2,940 | 4,947 | 2,936 | 2,478 | 3,278 |
| Portugal— | | | | | | |
| Ore | 180 | 18 | — | 32 | 31 | 19 |
| Unwrought | 1,091 | 742 | 1,351 | 861 | 850 | 367 |
| Semi-manufactures (a) | 71 | 341 | 343 | 148 | 280 | 832 |
| Sulphate | 211 | 755 | 311 | 341 | 685 | 214 |
| Spain— | | | | | | |
| Unwrought (a) | 6,384 | 13,975 | 19,895 | 35,343 | 33,547 | 21,486 |
| Scrap | 86 | 191 | 210 | 178 | 163 | 12 |
| Semi-manufactures (a) | 13 | 12 | 26 | 348 | 1,129 | 2,425 |
| Sweden— | | | | | | |
| Unwrought | 10,387 | 17,930 | 28,754 | 31,773 | 27,019 | 33,284 |
| do. alloys | 1,454 | 1,849 | 5,106 | 5,547 | 3,988 | 5,274 |
| Scrap (a) | 977 | 1,406 | 959 | 999 | 919 | 573 |
| Semi-manufactures (a) | 45,507 | 36,030 | 35,637 | 27,088 | 36,509 | 34,485 |
| Sulphate | 69 | 409 | 463 | 873 | 422 | 552 |
| Switzerland— | | | | | | |
| Unwrought (a) | 2,808 | 3,784 | 4,089 | 4,543 | 6,359 | 3,982 |
| Scrap (a) | 9,897 | 12,047 | 11,026 | 10,286 | 12,580 | 17,662 |
| Semi-manufactures (a) | 10,198 | 8,110 | 10,836 | 9,809 | 9,754 | 9,344 |
| Sulphate | 147 | 753 | 1,059 | 1,260 | 1,354 | 1,308 |
| U.S.S.R.— | | | | | | |
| Unwrought (d) | 88,100 | 91,600 | 118,200 | 92,510 | 107,574 | 105,700 |
| Semi-manufactures | 4,921 | 5,400 | 5,200 | 5,708 | 7,775 | 8,000 |
| Sulphate | 11,800 | 10,400 | 19,200 | 18,500 | 12,401 | 20,900 |
| Yugoslavia— | | | | | | |
| Matte | 1,033 | n.a. | — | n.a. | n.a. | — |
| Unwrought (a) | — | — | 176 | 1,397 | 9,210 | 17,242 |
| Semi-manufactures (a) | 21,845 | 22,134 | 31,356 | 23,260 | 33,679 | 45,011 |
| Sulphate | 9,241 | 1,571 | 5,197 | n.a. | 2,657 | 7,756 |
| Algeria— | | | | | | |
| Ore | 4,018 | 3,868 | 1,527 | 241 | 24,437 | n.a. |
| Angola— | | | | | | |
| Unwrought | 9 | 50 | 300 | 53 | — | 54 |
| Congo Republic— | | | | | | |
| Unwrought | 271,950 | 277,080 | 305,710 | 273,940 | 306,300 | 331,000 |
| Morocco— | | | | | | |
| Ore | 4,507 | 5,689 | 7,531 | 7,438 | 6,418 | 14,456 |
| Scrap (a) | 928 | 760 | 1,075 | 1,031 | 916 | 1,196 |
| South Africa— | | | | | | |
| Concentrates(Cu content) (c) | 3,287 | 4,259 | n.a. | n.a. | n.a. | n.a. |
| Unwrought | 81,128 | 82,208 | 119,822 | 145,328 | 136,369 | 116,667 |
| do. alloys | 88 | 3 | | | | |
| Semi-manufactures | 1,012 | 1,528 | 3,359 | 5,341 | 7,875 | 2,213 |

(a) Including alloys.

(b) Estimated.

(c) Including matte.

(d) Including wire.

EXPORTS OF COPPER, ETC. (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|---------|----------|----------|---------|---------|---------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| South West Africa— | | | | | | |
| Ore (<i>Cu content</i>) .. | 312 | 668 | 8,889 | n.a. | n.a. | n.a. |
| Lead concentrates (<i>Cu content</i>) .. | 5,834 | 7,895 | 4,372 | n.a. | n.a. | n.a. |
| Tunisia— | | | | | | |
| Unwrought and scrap .. | 459 | 1,259 | 967 | 548 | 893 | 985 |
| Cuba— | | | | | | |
| Ore | 22,016 | 20,982 | 13,000 | n.a. | n.a. | n.a. |
| Mexico— | | | | | | |
| Ore, concentrates, etc. . . | 7,178 | 6,635 | 5,651 | 2,055 | 1,180 | n.a. |
| Unwrought— | | | | | | |
| Unrefined | 15,686 | 7,821 | 7,163 | 6,272 | } 8,304 | n.a. |
| Refined | 620 | 824 | 246 | — | | |
| Semi-manufactures (<i>a</i>) | 1,606 | 4,136 | 5,213 | 825 | 4,156 | n.a. |
| United States— | | | | | | |
| Ores, matte, blister, etc. (<i>Cu content</i>) .. | 4,817 | 9,532 | 1,261 | 34,562 | 58,027 | 1,051 |
| Unwrought | 282,349 | 290,147 | 243,814 | 142,280 | 214,951 | 178,811 |
| do. alloys | 1,774 | 1,356 | 1,287 | 1,082 | 689 | 297 |
| Scrap | 39,062 | 28,357 | 16,043 | 15,729 | 30,455 | 6,779 |
| do. alloys | 61,313 | 58,326 | 38,991 | 57,926 | 76,731 | 69,945 |
| Semi-manufactures .. | 5,626 | 9,921 | } 17,820 | 19,380 | 14,014 | 21,291 |
| do. alloys .. | 5,917 | 10,918 | | | | |
| Sulphate | 971 | 1,906 | 3,181 | 964 | n.a. | n.a. |
| Argentina— | | | | | | |
| Ores | 1,292 | 184 | 263 | 138 | 277 | — |
| Matte | 349 | — | — | — | — | — |
| Bolivia— | | | | | | |
| Ore, etc. (<i>Cu content</i>) .. | 4,607 | 4,656 | 5,612 | 6,229 | 6,790 | 7,775 |
| Chile— | | | | | | |
| Ores and concentrates | 24,950 | } 27,640 | 30,525 | 29,790 | 33,800 | 40,200 |
| Precipitate | 6,796 | | | | | |
| Copper cement | 8,679 | | n.a. | n.a. | n.a. | n.a. |
| Unwrought— | | | | | | |
| Blister | 304,787 | 255,770 | 231,371 | 236,924 | n.a. | n.a. |
| Refined | 70,886 | 67,199 | 94,339 | 83,668 | 80,000 | 80,000 |
| Electrolytic | 136,216 | 148,355 | 218,024 | 271,874 | n.a. | n.a. |
| <i>Cu content</i> (<i>b</i>) | 555,251 | 513,910 | n.a. | n.a. | n.a. | n.a. |
| Semi-manufactures .. | 44,703 | 64,169 | 33,014 | 8,799 | 11,000 | 6,000 |
| Peru— | | | | | | |
| Ore (<i>Cu content</i>) .. | 22,022 | 23,488 | 22,763 | 25,078 | 20,249 | n.a. |
| Matte, etc. (<i>do.</i>) .. | 551 | } 726 | 543 | 753 | 285 | n.a. |
| Precipitate (<i>do.</i>) .. | 914 | | | | | |
| Unwrought (<i>do.</i>) .. | 152,979 | | 152,793 | 150,051 | 164,230 | 142,648 |
| Burma— | | | | | | |
| Matte | 450 | 398 | r 99 | r 217 | 181 | n.a. |
| Formosa— | | | | | | |
| Ore | 14,256 | 12,638 | 15,164 | 15,421 | 16,192 | 10,859 |
| Unwrought | 3 | 252 | — | — | — | 420 |
| Japan— | | | | | | |
| Unwrought | 1,541 | 2,627 | 1,538 | 1,386 | 11,823 | 14,747 |
| Semi-manufactures (<i>a</i>) | 26,232 | 49,643 | 39,116 | 33,103 | 31,411 | 37,585 |
| Sulphate | 33 | 9 | 987 | 1,402 | 5,531 | 443 |
| Korea (South)— | | | | | | |
| Unwrought | 2,057 | 2,879 | 716 | 308 | n.a. | n.a. |
| Philippine Republic— | | | | | | |
| Ore and concentrates .. | 243,524 | 253,662 | 299,300 | 389,400 | n.a. | n.a. |
| Copper-gold-silver concentrates .. | 6,245 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Scrap | 1,189 | 1,196 | n.a. | 1,926 | n.a. | n.a. |
| Turkey— | | | | | | |
| Ore | 8,297 | 7,972 | n.a. | n.a. | n.a. | n.a. |
| Unwrought | 12,779 | 20,035 | 19,604 | 15,514 | 14,900 | 6,974 |

(a) Including alloys.

 (b) Total metal content of above items (*not additional*) and of complex ores not shown.

IMPORTS OF COPPER, ETC.*

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ore and matte | 1,394 | 798 | 456 | 51 | 1,252 | — |
| Unwrought— | | | | | | |
| Electrolytic | 376,638 | 436,230 | 429,249 | 384,727 | 382,058 | 373,833 |
| Other refined | 42,639 | 62,577 | 31,798 | 24,798 | 26,890 | 28,414 |
| Blister | 98,901 | 75,010 | 37,316 | 31,060 | 39,404 | 43,896 |
| Alloys | 308 | 121 | 134 | 53 | 151 | 252 |
| Scrap | 768 | 2,887 | 1,413 | 842 | 2,390 | 4,700 |
| do. alloys | 2,619 | 2,768 | 3,495 | 1,142 | 5,540 | 3,434 |
| Semi-manufactures (a) | 10,090 | 7,164 | 6,285 | 7,062 | 11,546 | 10,673 |
| Malta— | | | | | | |
| Semi-manufactures .. | (£40,665) | (£46,934) | (£113,543) | (£55,001) | (£87,889) | (£107,936) |
| Ghana— | | | | | | |
| Semi-manufactures (a) | 471 | 993 | 447 | 391 | 440 | 604 |
| Kenya— | | | | | | |
| Unwrought (a) | 31 | 74 | 61 | 43 | 25 | 15 |
| Semi-manufactures (a) | 147 | 275 | 317 | 544 | 551 | 560 |
| Sulphate | 63 | 53 | 76 | 21 | — | — |
| Mauritius— | | | | | | |
| Semi-manufactures (a) | 107 | 81 | 45 | 26 | 50 | 34 |
| Nigeria— | | | | | | |
| Unwrought and semi-manufactures (a) .. | 1,864 | 1,562 | 2,680 | 2,193 | 1,190 | 880 |
| Rhodesia (c)— | | | | | | |
| Semi-manufactures (a) | 6,282 | 4,174 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sierra Leone— | | | | | | |
| Semi-manufactures (a) | 70 | 56 | 680 | 28 | 47 | <i>n.a.</i> |
| Tanzania— | | | | | | |
| Unwrought (a) | 1 | 4 | 1 | 1 | — | 8 |
| Semi-manufactures (a) | 64 | 57 | 103 | 111 | 145 | 160 |
| Sulphate | 1 | 1 | 3 | 17 | — | — |
| Uganda— | | | | | | |
| Semi-manufactures (a) | 80 | 122 | 155 | 146 | 159 | 285 |
| Zambia— | | | | | | |
| Unwrought (a) | 39 | 131 | 11 | 19 | 42 | 3 |
| Semi-manufactures (a) | 349 | 710 | 466 | 383 | 481 | 409 |
| Sulphate | 35 | 12 | 30 | 223 | 128 | 305 |
| Canada— | | | | | | |
| Unwrought | 6,045 | 5,131 | 9,368 | 4,740 | 5,201 | 16,193 |
| Scrap (b) | <i>n.a.</i> | <i>n.a.</i> | 302 | 9,503 | 15,668 | 2,407 |
| Semi-manufactures .. | 1,523 | 4,075 | 2,092 | 1,925 | 1,919 | 3,096 |
| do. alloys | 3,294 | 8,670 | 3,509 | 4,111 | 3,682 | 10,271 |
| Sulphate | 194 | 435 | 225 | 416 | 372 | 1,248 |
| Barbados— | | | | | | |
| Semi-manufactures (a) | 207 | 75 | 53 | 38 | 31 | 33 |
| Jamaica— | | | | | | |
| Semi-manufactures (a) | 160 | 151 | 223 | 209 | 348 | 532 |
| Sulphate | 2 | 1 | — | 10 | — | 1 |
| Trinidad and Tobago— | | | | | | |
| Semi-manufactures (a) | 189 | 281 | 199 | 111 | 107 | 198 |
| Sulphate | 15 | 21 | 20 | 22 | 28 | 9 |
| Guyana— | | | | | | |
| Semi-manufactures (a) | 36 | 69 | 22 | 66 | 51 | 59 |
| Ceylon— | | | | | | |
| Unwrought (a) | 29 | 43 | 52 | 123 | 45 | <i>n.a.</i> |
| Semi-manufactures (a) | 753 | 596 | 564 | 1,061 | 783 | <i>n.a.</i> |
| Cyprus— | | | | | | |
| Semi-manufactures (a) | 57 | 25 | 107 | 76 | 132 | 128 |

*See footnote on p.105 concerning the descriptions "unwrought" copper and "semi-manufactures" used in these tables.

(a) Including alloys.

(b) Copper alloys scrap only.

IMPORTS OF COPPER, ETC. (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Hong Kong— | | | | | | |
| Unwrought (a) | 508 | 3 | 121 | 115 | 199 | 71 |
| Scrap (a) | 354 | 12 | 611 | 2,548 | 4,075 | 3,620 |
| Semi-manufactures (a) | 11,881 | 8,831 | 7,626 | 9,450 | 12,969 | 10,894 |
| Copper sulphate | 29 | 10 | 10 | 82 | 20 | 31 |
| India (d)— | | | | | | |
| Unwrought | 51,824 | 42,471 | 19,698 | 22,461 | 33,790 | 41,220 |
| do. alloys | 58 | 196 | 98 | 141 | 34 | 64 |
| Scrap (a) | 1,954 | 1,042 | 590 | 1,013 | 521 | 481 |
| Semi-manufactures (a) | 5,580 | 14,748 | 14,237 | 15,719 | 8,517 | 4,503 |
| Malaysia (West)— | | | | | | |
| Unwrought (a) | <i>n.a.</i> | 33 | 18 | 23 | 32 | 12 |
| Semi-manufactures (a) | <i>n.a.</i> | 2,219 | 2,390 | 1,806 | 2,622 | 3,191 |
| Sulphate | <i>n.a.</i> | 114 | 160 | 182 | 150 | 315 |
| Pakistan— | | | | | | |
| Unwrought | 322 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Scrap | 124 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Semi-manufactures .. | 702 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sabah— | | | | | | |
| Semi-manufactures (a) | 95 | 84 | 61 | 30 | 49 | 55 |
| Sarawak— | | | | | | |
| Semi-manufactures (a) | 153 | 160 | 167 | 82 | 57 | <i>n.a.</i> |
| Singapore— | | | | | | |
| Semi-manufactures (a) | 1,066 | 1,767 | 1,954 | 2,186 | 2,520 | 2,830 |
| Sulphate | 132 | 127 | 77 | 85 | 102 | 192 |
| Australia (c)— | | | | | | |
| Unwrought | 5,038 | 32,654 | 943 | 3,078 | 4,844 | 118 |
| do. alloys | 1,090 | — | 192 | 46 | 79 | 46 |
| Scrap (a) | 535 | 526 | 374 | 1,190 | 2,052 | 2,000 |
| Semi-manufactures (a) | 1,818 | 4,136 | 2,110 | 1,737 | 1,725 | 2,042 |
| Sulphate | 1,223 | 2,586 | 1,276 | 1,675 | 1,505 | 2,032 |
| Fiji— | | | | | | |
| Semi-manufactures (a) | 61 | 68 | 59 | 47 | 75 | <i>n.a.</i> |
| New Zealand (c)— | | | | | | |
| Unwrought (a) | 184 | 120 | 258 | 173 | 190 | 172 |
| Semi-manufactures (a) | 12,934 | 13,447 | 15,370 | 12,739 | 10,396 | 11,631 |
| Irish Republic— | | | | | | |
| Unwrought (a) | 98 | 129 | 156 | 146 | 180 | 183 |
| Semi-manufactures (a) | 5,002 | 7,172 | 7,046 | 6,213 | 8,263 | 8,469 |
| Sulphate | 1,481 | 850 | 894 | 630 | 1,287 | 1,800 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Ore | 271 | 681 | 726 | — | — | — |
| Unwrought— | | | | | | |
| Unrefined | 5,945 | 5,299 | 4,996 | 4,720 | 5,186 | 4,992 |
| Refined | 18,053 | 17,188 | 13,907 | 15,507 | 16,251 | 20,885 |
| Alloys | 425 | 625 | 678 | 167 | 567 | 614 |
| Scrap | 1,736 | 979 | 870 | 397 | 995 | 1,287 |
| do. alloys | 2,784 | 4,250 | 4,492 | 4,355 | 5,608 | 7,805 |
| Semi-manufactures (a) | 4,113 | 3,607 | 4,087 | 3,973 | 3,700 | 4,210 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Ore | 2,141 | 2,192 | 11,954 | 10,608 | 14,204 | 16,960 |
| Unwrought (a) (b) .. | 316,844 | 312,370 | 338,520 | 307,634 | 371,514 | 341,376 |
| Scrap | 48,172 | 66,606 | 55,954 | 48,569 | 85,747 | 83,823 |
| Semi-manufactures (a) | 8,300 | 8,881 | 8,173 | 8,584 | 8,312 | 12,099 |
| Sulphate | 344 | 206 | 236 | 276 | 162 | 287 |

(a) Including alloys.

(b) Including matte.

(c) Years ended June 30 of that stated.

(d) Years ended March 31 following that stated.

IMPORTS OF COPPER, ETC. (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-----------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Bulgaria— | | | | | | |
| Sulphate | 7,991 | 6,595 | <i>n.a.</i> | 7,824 | 10,189 | <i>n.a.</i> |
| Denmark— | | | | | | |
| Unwrought | 4,372 | 3,526 | 3,924 | 3,595 | 3,974 | 3,616 |
| do. alloys | 103 | 181 | 54 | 51 | 153 | 236 |
| Scrap (a) | 80 | 283 | 287 | 397 | 302 | 232 |
| Semi-manufactures (a) | 23,711 | 29,530 | 20,847 | 22,222 | 24,850 | 28,527 |
| Sulphate | 3,767 | 2,969 | 2,847 | 2,206 | 2,396 | 2,923 |
| Finland— | | | | | | |
| Unwrought (a) .. | 5,643 | 12,059 | 11,546 | 6,524 | 8,026 | 7,556 |
| Semi-manufactures (a) | 1,995 | 3,766 | 4,403 | 4,258 | 3,614 | 3,047 |
| Sulphate | 794 | 1,328 | 1,697 | 989 | 636 | 469 |
| France— | | | | | | |
| Unwrought— | | | | | | |
| Unrefined | 9,648 | 4,643 | 6,776 | 11,426 | 14,877 | 15,594 |
| Refined | 244,863 | 257,864 | 297,171 | 231,575 | 253,820 | 317,967 |
| Alloys | 963 | 1,849 | 1,385 | 1,601 | 1,691 | 1,360 |
| Scrap | 2,075 | 2,898 | 2,323 | 1,711 | 2,372 | 1,701 |
| do. alloys | 4,988 | 8,786 | 16,099 | 9,603 | 12,201 | 11,239 |
| Semi-manufactures (a) | 14,854 | 15,504 | 20,715 | 23,258 | 27,697 | 39,129 |
| Sulphate | 1,320 | 60 | 281 | 127 | 555 | 1,909 |
| Germany (Federal)— | | | | | | |
| Ore | 146,971 | 142,583 | 134,604 | 130,251 | 202,857 | 202,552 |
| Burnt cupreous pyrites | 1,112,599 | 1,253,434 | 1,245,012 | 1,231,635 | 1,315,544 | 1,246,234 |
| Matte | 2,259 | 1,430 | 1,609 | 351 | 1,189 | 663 |
| Unwrought— | | | | | | |
| Unrefined | 133,717 | 139,832 | 144,029 | 162,164 | 144,072 | 142,515 |
| Refined | 304,991 | 294,510 | 261,062 | 267,909 | 318,726 | 350,322 |
| Alloys | 42,089 | 43,099 | 35,851 | 42,806 | 51,954 | 60,670 |
| Scrap (a) | 78,178 | 107,380 | 77,069 | 82,021 | 108,877 | 121,239 |
| Semi-manufactures (a) | 42,227 | 71,525 | 55,918 | 32,919 | 56,768 | 74,683 |
| Sulphate | 929 | 1,597 | 2,047 | 2,176 | 2,314 | 4,808 |
| Greece— | | | | | | |
| Unwrought— | | | | | | |
| Unrefined | 1,584 | — | 592 | } 8,309 | 8,637 | 9,217 |
| Refined | 4,376 | 6,268 | 4,794 | | 17 | 19 |
| Scrap | 31 | 4 | 6 | 414 | 430 | 337 |
| Semi-manufactures .. | 581 | 719 | 380 | 2,614 | 2,792 | 3,113 |
| Sulphate | 4,608 | 232 | 3,764 | | | |
| Hungary— | | | | | | |
| Unwrought | 22,363 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 30,951 |
| Sulphate | 4,368 | 4,427 | 9,047 | 11,590 | 4,769 | 3,716 |
| Iceland— | | | | | | |
| Semi-manufactures (a) | 187 | 225 | 192 | 177 | 103 | 85 |
| Italy— | | | | | | |
| Unwrought— | | | | | | |
| Unrefined | 5,422 | 2,027 | 2,743 | 4,352 | 1,505 | 2,905 |
| Refined (a) | 189,206 | 199,378 | 212,183 | 226,351 | 217,622 | 258,369 |
| Scrap (a) | 13,682 | 35,034 | 38,941 | 32,947 | 41,464 | 44,415 |
| Semi-manufactures (a) | 8,930 | 8,238 | 10,600 | 10,259 | 10,265 | 12,080 |
| Sulphate | 5,855 | 5,160 | 2,728 | 2,643 | 1,287 | 3,174 |
| Netherlands— | | | | | | |
| Unwrought | 34,034 | 31,746 | 28,601 | 30,510 | 7,268 | 10,538 |
| do. alloys | 1,979 | 2,788 | 2,102 | 2,245 | 3,482 | 3,721 |
| Scrap (a) | 8,566 | 10,275 | 8,574 | 10,615 | 7,577 | 7,310 |
| Semi-manufactures (a) | 57,690 | 67,505 | 60,034 | 49,289 | 61,648 | 67,734 |
| Sulphate | 2,628 | 2,984 | 2,636 | 2,729 | 2,669 | 3,058 |
| Norway— | | | | | | |
| Copper-nickel matte .. | 50,009 | 59,760 | 60,405 | 52,673 | 76,488 | 68,734 |
| Unwrought | 4,970 | 4,576 | 4,643 | 3,502 | 3,092 | 2,295 |
| do. alloys | 228 | 284 | 365 | 554 | 499 | 391 |
| Scrap (a) | 66 | 157 | 5 | 3 | 54 | 7 |
| Semi-manufactures (a) | 19,975 | 21,367 | 23,298 | 22,786 | 20,240 | 23,355 |
| Sulphate | 566 | 1,561 | 1,397 | 1,148 | 578 | 940 |

(a) Including alloys.

IMPORTS OF COPPER, ETC. (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|--------|--------|--------|--------|--------|--------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Poland— | | | | | | |
| Concentrates | 18,798 | 16,177 | 20,552 | 18,337 | 17,057 | 14,425 |
| Unwrought | 27,485 | 28,550 | 35,887 | 37,098 | 34,886 | 25,862 |
| Sulphate | 1,566 | 1,371 | 2,917 | 3,012 | 2,051 | 3,131 |
| Portugal— | | | | | | |
| Ore and concentrates .. | — | — | — | — | 26 | 1,046 |
| Matte | — | — | — | 3,912 | — | — |
| Unwrought (a) | 5,294 | 6,607 | 6,321 | 3,833 | 2,939 | 5,035 |
| Scrap | 353 | 134 | 117 | 78 | 19 | 943 |
| Semi-manufactures (a) | 5,137 | 5,473 | 6,727 | 5,954 | 6,756 | 7,958 |
| Sulphate | 4,542 | 2,472 | 74 | 644 | 395 | 373 |
| Spain— | | | | | | |
| Ore | 19,569 | 22,503 | 22,462 | 33,271 | 65,666 | 64,640 |
| Unwrought (a) | 41,372 | 33,637 | 53,082 | 59,285 | 61,147 | 70,551 |
| Scrap (a) | 10,040 | 17,230 | 19,372 | 11,002 | 25,133 | 19,386 |
| Semi-manufactures (a) | 9,919 | 17,725 | 16,970 | 6,208 | 5,736 | 6,503 |
| Sulphate | 70 | 42 | 128 | 31 | 6 | 2,608 |
| Sweden— | | | | | | |
| Ore | 65,908 | 75,694 | 73,755 | 61,734 | 45,532 | 50,590 |
| Matte | 10,653 | 8,298 | 9,114 | 17,471 | 18,587 | 24,644 |
| Unwrought— | | | | | | |
| Unrefined | 1,465 | 307 | 54,791 | 63,261 | 8,755 | 8,621 |
| Refined | 56,278 | 62,344 | | | 67,631 | 61,362 |
| Alloys | 3,614 | 5,827 | 2,738 | 2,636 | 3,022 | 3,186 |
| Scrap (a) | 4,617 | 10,230 | 9,518 | 6,729 | 9,421 | 12,708 |
| Semi-manufactures (a) | 17,764 | 34,736 | 32,081 | 18,306 | 18,459 | 20,006 |
| Sulphate | 96 | 95 | 42 | 106 | 356 | 483 |
| Switzerland— | | | | | | |
| Unwrought | 37,220 | 40,585 | 41,330 | 40,408 | 36,820 | 37,349 |
| do. alloys | 637 | 1,043 | 1,165 | 1,409 | 1,104 | 3,180 |
| Scrap (a) | 296 | 421 | 538 | 550 | 628 | 503 |
| Semi-manufactures (a) | 20,444 | 24,126 | 23,193 | 20,865 | 21,972 | 26,840 |
| Sulphate (cu. content) .. | 394 | 21 | 412 | 445 | 218 | 803 |
| U.S.S.R.— | | | | | | |
| Unwrought | 9,400 | 700 | 7,300 | 13,779 | 9,252 | 394 |
| Sulphate | 8,858 | — | — | — | — | — |
| Yugoslavia— | | | | | | |
| Unwrought | 9,347 | 6,179 | 3,536 | 15,546 | 20,901 | 31,334 |
| Semi-manufactures (a) | 2,551 | 2,151 | 4,838 | 5,283 | 6,701 | 7,829 |
| Scrap | 3,091 | 10,962 | 9,354 | 1,148 | 1,050 | 1,852 |
| Angola— | | | | | | |
| Semi-manufactures (a) | 396 | 514 | 770 | 558 | 556 | 586 |
| Sulphate | 163 | 25 | 25 | 18 | 17 | 48 |
| Egypt— | | | | | | |
| Unwrought and scrap .. | 5,222 | 3,348 | 4,133 | 618 | 1,228 | 1,491 |
| Semi-manufactures (a) | 379 | n.a. | n.a. | n.a. | n.a. | 1,013 |
| Malagasy Republic— | | | | | | |
| Semi-manufactures (a) | 179 | 140 | 96 | 89 | 165 | 533 |
| Morocco— | | | | | | |
| Semi-manufactures (a) | 2,571 | 2,074 | 2,236 | 2,245 | 2,483 | 2,665 |
| Sulphate | 1 | — | — | — | — | — |
| Mozambique— | | | | | | |
| Semi-manufactures (a) | 408 | 508 | 701 | 528 | 326 | n.a. |
| South Africa— | | | | | | |
| Ore and concentrates .. | 4,947 | 6,021 | 6,143 | 8,279 | 58,150 | 9,244 |
| Unwrought | 30,809 | 32,479 | 38,495 | 32,119 | 9,994 | 2,649 |
| do. alloys | | 37 | | | | |
| Semi-manufactures (a) | 4,308 | 3,746 | 3,973 | 4,191 | 2,367 | 1,241 |
| Sudan— | | | | | | |
| Unwrought | 3 | 222 | — | — | — | 1 |
| Semi-manufactures .. | 242 | — | 59 | 18 | 155 | 232 |
| Sulphate | 2 | 396 | 3 | 353 | 382 | 2 |

(a) Including alloys.

IMPORTS OF COPPER, ETC. (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|---------|---------|----------|-----------|---------|---------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Tunisia— | | | | | | |
| Semi-manufactures (a) | 640 | 523 | 538 | 1,161 | 492 | 940 |
| Sulphate | 131 | 147 | 94 | 123 | 189 | 86 |
| Costa Rica— | | | | | | |
| Semi-manufactures (a) | 163 | 312 | 280 | 237 | 211 | n.a. |
| Sulphate | 26 | 30 | 26 | 28 | 20 | 29 |
| Cuba— | | | | | | |
| Ore | 20 | — | — | n.a. | n.a. | n.a. |
| Semi-manufactures .. | 2,866 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Guatemala— | | | | | | |
| Semi-manufactures (a) | 183 | 200 | 104 | 151 | 94 | 238 |
| Sulphate | 16 | 31 | 8 | 53 | 35 | 30 |
| Honduras— | | | | | | |
| Sulphate | 33 | 55 | 45 | 99 | 106 | n.a. |
| Mexico— | | | | | | |
| Unwrought (a) | 19 | 55 | 12 | 10 | 13 | n.a. |
| Semi-manufactures (a) | 451 | 1,177 | 633 | 582 | 731 | n.a. |
| Sulphate | 1 | — | — | — | — | n.a. |
| Nicaragua— | | | | | | |
| Semi-manufactures .. | 154 | 126 | 129 | 174 | 118 | 66 |
| Salvador— | | | | | | |
| Semi-manufactures .. | 586 | 975 | 1,712 | 1,621 | 1,525 | 797 |
| United States (b)— | | | | | | |
| Cu content of— | | | | | | |
| Ore and concentrates | 38,616 | 10,130 | 10,358 | 31,851 | 64,183 | 3,203 |
| Matte, precipitate, etc. | 96 | 378 | 331 | 362 | 102 | 6 |
| Unwrought— | | | | | | |
| Blister | 360,605 | 290,549 | 398,418 | r 241,361 | 267,037 | 215,810 |
| Refined | 100,620 | 104,793 | 145,637 | 294,722 | 360,420 | 117,166 |
| Scrap | 4,638 | 12,222 | r 14,618 | r 2,344 | 6,466 | 5,256 |
| do. alloys | 883 | 2,738 | 6,571 | r 5,954 | 3,944 | 2,673 |
| Semi-manufactures .. | n.a. | 57,398 | 109,141 | r 66,379 | 90,498 | 69,958 |
| do. alloys | n.a. | | | | | |
| Sulphate | n.a. | 485 | n.a. | 137 | 253 | n.a. |
| Argentina— | | | | | | |
| Unwrought | 20,861 | 22,873 | 13,941 | 12,102 | 15,274 | 22,996 |
| Brazil— | | | | | | |
| Unwrought (a) | 27,371 | 22,417 | 42,229 | 35,861 | 42,141 | n.a. |
| Semi-manufactures (a) | 337 | 315 | 494 | 264 | 514 | n.a. |
| Sulphate | 3,335 | 2,713 | 3,115 | 1,970 | 2,370 | n.a. |
| Colombia— | | | | | | |
| Unwrought | 633 | 953 | 547 | 535 | 1,090 | n.a. |
| Semi-manufactures (a) | 5,833 | 3,428 | 5,060 | 3,566 | 3,132 | n.a. |
| Sulphate | 7 | 1 | 45 | 3 | 7 | n.a. |
| Peru— | | | | | | |
| Semi-manufactures (a) | 609 | 3,837 | 887 | 6,774 | 592 | n.a. |
| Sulphate | 554 | 165 | 104 | 42 | 4 | n.a. |
| Uruguay— | | | | | | |
| Unwrought | n.a. | 1,029 | 600 | 792 | 410 | 744 |
| Venezuela— | | | | | | |
| Semi-manufactures (a) | 6,376 | 6,634 | 7,767 | 6,774 | 7,337 | 6,520 |
| Sulphate | 55 | 2,068 | 46 | 22 | 63 | 97 |

(a) Including alloys.

(b) The figures shown are imports for consumption. According to the U.S. Bureau of Mines, general imports, which also include material entering the country under bond, were as follows (long tons Cu content):

| | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|----------------------|---------|---------|---------|---------|---------|---------|
| Ore and concentrates | 45,924 | 32,522 | 37,117 | 32,372 | 24,152 | 34,595 |
| Matte | 537 | 458 | 331 | 79 | 454 | 289 |
| Unwrought— | | | | | | |
| Blister | 347,838 | 296,929 | 319,495 | 265,068 | 241,712 | 212,454 |
| Refined | 123,213 | 122,683 | 145,180 | 295,152 | 357,391 | 117,117 |
| Scrap | 3,994 | 13,699 | 25,934 | 14,610 | 10,196 | 5,258 |

IMPORTS OF COPPER, ETC. (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|---------|---------|---------|-----------|-----------|-----------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Burma— | | | | | | |
| Semi-manufactures (a) | 134 | 264 | r 174 | 122 | 116 | n.a. |
| Formosa— | | | | | | |
| Unwrought (a) | 1,996 | 1,450 | 975 | 1,183 | 2,316 | 2,062 |
| Semi-manufactures (a) | 2,766 | 4,031 | 3,829 | 2,372 | 2,550 | 3,426 |
| Iran (b)— | | | | | | |
| Unwrought (a) | 499 | 1,010 | 421 | 4,923 | 3,071 | n.a. |
| Scrap | 784 | 108 | 44 | 71 | 41 | n.a. |
| Semi-manufactures (a) | 3,179 | 3,403 | 3,660 | 6,761 | 6,601 | n.a. |
| Iraq— | | | | | | |
| Semi-manufactures (a) | 1,156 | n.a. | 2,934 | 1,190 | 1,515 | 1,954 |
| Japan— | | | | | | |
| Ore and concentrates | 586,470 | 575,070 | 680,196 | 1,006,011 | 1,044,331 | 1,101,841 |
| Matte | 24,113 | 33,781 | 25,706 | 24,522 | 23,594 | 30,018 |
| Unwrought | 117,853 | 110,573 | 133,090 | 258,380 | 279,925 | 343,804 |
| do. alloys | 2,631 | 2,648 | 14,211 | 13,379 | 7,001 | 11,579 |
| Scrap | 28,829 | 12,531 | 9,699 | 13,023 | 7,381 | 6,717 |
| do. alloys | 77,373 | 51,392 | 65,827 | 62,873 | 49,711 | 42,832 |
| Semi-manufactures (a) | 5,884 | 11,345 | 7,682 | 1,730 | 1,984 | 4,747 |
| Sulphate | — | — | 520 | — | — | — |
| Jordan— | | | | | | |
| Semi-manufactures (a) | 216 | 94 | 127 | 236 | 187 | 148 |
| Korea (South)— | | | | | | |
| Unwrought and Semi-manufactures | 233 | 112 | 351 | 2,084 | 2,114 | 2,108 |
| Lebanon— | | | | | | |
| Semi-manufactures (a) | 668 | 529 | 480 | 587 | 576 | 844 |
| Philippine Republic— | | | | | | |
| Semi-manufactures (a) | 4,580 | 4,898 | 4,495 | 5,082 | n.a. | n.a. |
| Sulphate | — | — | n.a. | n.a. | n.a. | n.a. |
| Thailand— | | | | | | |
| Unwrought (a) | 336 | 354 | 388 | 361 | 219 | 478 |
| Semi-manufactures (a) | 2,914 | 3,502 | 3,568 | 5,082 | 5,122 | 4,255 |
| Turkey— | | | | | | |
| Semi-manufactures (a) | 363 | 196 | 507 | 401 | 373 | 318 |
| Sulphate | 3,152 | 4,687 | 90 | — | — | — |

(a) Including alloys.

(b) Years ended March 20 of year following that stated.

DIAMONDS
PRODUCTION OF DIAMONDS†

Metric carats

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Ghana (b) | 2,668,000 | 2,273,000 | 2,815,500 | 2,537,500 | 2,447,100 | 2,390,900 |
| Lesotho | (a) 2,472 | 5,492 | (a) 12,506 | (a) 21,737 | (a) 11,914 | (a) 29,787 |
| Sierra Leone | a) 1,649,847 | 1,461,145 | 1,436,722 | 1,160,102 | 2,432,770 | 2,000,849 |
| Tanzania | 650,461 | 756,969 | 946,656 | 926,757 | 702,395 | 777,289 |
| Guyana | 109,682 | 112,873 | 98,887 | 97,351 | 66,311 | 51,549 |
| India | 2,260 | 4,466 | 2,113 | 7,626 | 8,658 | 11,896 |
| TOTAL | 5,083,000 | 4,614,000 | 5,312,000 | 4,751,000 | 5,797,000 | 5,262,000 |
| OTHER COUNTRIES | | | | | | |
| Angola— | | | | | | |
| Gem | 874,096 | 886,788 | 967,972 | 982,868 | 1,316,411 | 1,516,125 |
| Industrial | 274,972 | 268,937 | 300,169 | 305,632 | 350,776 | 505,407 |
| Congo Republic— | | | | | | |
| Gem | 295,000 | 14,106 | 11,483 | 263,000 | 550,768 | 1,802,000 |
| Industrial | 14,457,000 | 12,489,768 | 12,417,000 | 13,153,602 | 11,352,733 | 11,621,000 |
| Central African Republic | 442,281 | 536,810 | 539,935 | 520,628 | 609,360 | (a) 526,908 |
| Ivory Coast | 200,270 | 198,179 | 183,435 | 175,825 | 187,009 | 202,414 |
| Guinea | (c) 50,000 | n.a. | n.a. | n.a. | n.a. | n.a. |
| South Africa | 4,449,978 | 5,025,598 | 6,036,677 | 6,667,607 | 7,433,318 | 7,862,837 |
| South West Africa | 1,541,544 | 1,656,234 | 1,758,956 | 1,700,000 | 1,722,000 | 1,840,500 |
| Venezuela | 115,604 | 88,800 | 84,695 | 69,630 | 111,720 | 193,784 |
| TOTAL* | 23,000,000 | 21,000,000 | 23,000,000 | 24,000,000 | 24,000,000 | 26,000,000 |
| WORLD'S TOTAL* .. | 28,000,000 | 26,000,000 | 28,000,000 | 29,000,000 | 30,000,000 | 33,000,000 |

†For values see next page.

*Including an estimate for diamonds produced in Brazil but excluding diamonds produced in the U.S.S.R., Liberia and Indonesia.

Note—Estimated production of synthetic diamond in the United States was as follows (metric carats): 1964—5,200,000; 1965—5,400,000; 1966—6,000,000; 1967—8,000,000; 1968—11,000,000; 1969—n.a.

(a) Exports.

(b) Production was shared by Companies and African diggers as follows:

| | | Companies | African diggers |
|---------|-----------|-----------|-----------------|
| 1964 .. | 2,290,000 | 378,000 | |
| 1965 .. | 2,222,000 | 51,000 | |
| 1966 .. | 2,772,000 | 47,000 | |
| 1967 .. | 2,519,000 | 18,800 | |
| 1968 .. | 2,431,900 | 15,200 | |
| 1969 .. | 2,383,600 | 7,300 | |

(c) Estimated.

PRODUCTION OF DIAMONDS†

£ sterling

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Ghana (b) | 6,355,000 | 4,981,000 | 7,637,000 | 6,303,000 | 7,984,000 | 5,465,597 |
| Lesotho | (a) 56,266 | 265,938 | (a) 348,603 | (a) 508,328 | 219,585 | (a) 684,167 |
| Sierra Leone | a19,911,496 | b17,701,000 | b17,038,000 | b14,870,785 | 23,466,517 | 30,457,614 |
| Tanzania (b) | 6,646,000 | 6,623,000 | 9,439,000 | 11,147,000 | 8,129,449 | 10,317,000 |
| Guyana | (b) 966,000 | (b)1,290,000 | (b)1,110,000 | b 1,701,000 | (b)920,748 | 722,000 |
| India | 91,350 | 185,300 | 86,000 | 158,000 | (c) 182,000 | (c) 246,000 |
| TOTAL | 34,026,000 | 31,046,000 | 35,659,000 | 34,688,000 | 39,034,000 | 47,892,000 |
| OTHER COUNTRIES | | | | | | |
| Angola | (b)9,786,000 | b11,260,000 | 14,537,610 | b14,856,400 | c19,000,000 | c20,000,000 |
| Congo Republic— | | | | | | |
| Gem | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Industrial | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Central African Republic | (b)4,700,000 | (b)5,379,000 | (b)5,698,000 | 5,361,000 | 7,542,000 | 6,072,000 |
| Ivory Coast (b) | 564,000 | 660,000 | 649,000 | (c)1,310,000 | 1,576,000 | 1,568,000 |
| Guinea | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| South Africa (c) | 22,149,000 | 25,686,000 | 32,727,000 | 29,355,000 | 44,700,000 | 60,000,000 |
| South West Africa (c) .. | 30,411,000 | 36,729,000 | 43,952,000 | n.a. | n.a. | n.a. |
| Venezuela (b) | 1,581,000 | 1,214,000 | 1,158,000 | 952,000 | 1,528,000 | 2,650,000 |
| TOTAL* | 83,000,000 | 94,000,000 | 112,000,000 | 109,000,000 | 120,000,000 | 130,000,000 |
| WORLD'S TOTAL* .. | 117,000,000 | 125,000,000 | 147,000,000 | 144,000,000 | 160,000,000 | 180,000,000 |

†For quantities in metric carats see previous page.

*Including an estimate for diamonds produced in Brazil.

(a) Exports.

(b) Estimated on export value (f.o.b.).

(c) Estimated.

SALES OF DIAMONDS

Sales effected through the Central Selling Organisation of the Diamond Corporation Ltd. were as follows:

| | (£ sterling) |
|--------------|---------------------------|
| | <i>Gem and Industrial</i> |
| 1964 | 133,186,049 |
| 1965 | 148,316,941 |
| 1966 | 177,845,823 |
| 1967 | 178,763,764 |
| 1968 | 250,129,109 |
| 1969 | 288,538,255 |
| 1969 | 220,510,610 |

EXPORTS OF DIAMONDS

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-------------|-------------|---------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Diamonds .. £ | 151,239,797 | 158,384,070 | 196,109,871 | 188,297,234 | 271,674,457 | 328,374,760 |
| Ghana— | | | | | | |
| Industrial diamonds Ct. | 2,569,376 | 3,084,365 | 1,998,683 | 1,989,890 | 2,996,511 | 2,477,414 |
| £ | 6,120,369 | 6,758,903 | 5,421,633 | 4,944,000 | 7,117,217 | 5,662,475 |
| Sierra Leone .. Ct. | 1,649,847 | 1,525,437 | 1,319,326 | 1,161,063 | 2,432,770 | 1,863,550 |
| £ | 19,911,496 | 18,479,519 | 15,645,912 | 14,878,774 | 23,465,517 | 27,101,942 |
| Tanzania | | | | | | |
| Gem diamonds.. Ct. | 337,711 | 417,097 | 452,988 | } Ct. 987,605 | Ct. 682,651 | Ct. 780,211 |
| £ | 5,795,763 | 6,185,707 | 7,698,478 | | | |
| Industrial diamonds Ct. | 326,059 | 410,675 | 451,414 | } £11,146,500 | £7,900,930 | £10,356,000 |
| £ | 985,391 | 1,069,662 | 1,301,550 | | | |
| Guyana Ct. | 106,607 | 105,355 | r 92,085 | 72,948 | 70,724 | 56,486 |
| £ | 938,842 | 1,203,704 | 1,062,063 | 1,282,182 | 982,024 | 791,324 |
| India (b)— | | | | | | |
| Gem diamonds £ | 2,017,175 | 3,546,137 | 5,352,306 | 7,874,865 | 16,525,311 | 14,351,593 |
| Malaysia (West)— | | | | | | |
| Cut and polished £ | n.a. | 20,238 | 1,804 | — | — | 1,669 |
| Australia (a)— | | | | | | |
| Gem diamonds Ct. | 80 | 118 | 81 | 122 | 56 | 16 |
| £ | 4,826 | 5,423 | 3,061 | 12,000 | 1,314 | 2,800 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Cut and polished Ct. | 1,520,733 | 1,561,285 | 1,646,844 | 1,643,915 | 1,765,745 | 1,788,816 |
| £ | 69,582,566 | 74,649,405 | 89,378,579 | 91,188,586 | 114,424,741 | 129,294,625 |
| Industrial, rough and | | | | | | |
| bort Ct. | 8,943,065 | 9,373,860 | 12,075,495 | 11,887,839 | 13,129,084 | 13,443,577 |
| £ | 29,477,700 | 29,255,142 | 37,762,590 | 41,479,746 | 56,527,741 | 61,769,284 |
| France— | | | | | | |
| Uncut £ | 618,313 | 643,337 | 682,941 | 586,514 | 802,012 | 681,320 |
| Cut £ | 1,605,013 | 1,205,007 | 1,553,013 | 1,283,526 | 2,230,242 | 3,826,407 |
| Industrial diamonds £ | 32,885 | 34,812 | 3,644 | 74 | 144 | 75 |
| Dust £ | 40,851 | 40,505 | 62,158 | 149,570 | 157,736 | 149,737 |
| Netherlands .. Ct. | 1,078,097 | 965,766 | 1,309,679 | 1,513,823 | 1,220,263 | 1,331,930 |
| £ | 10,412,728 | 10,102,000 | 12,944,895 | 10,482,423 | 12,609,576 | 13,571,133 |
| Dust Ct. | 695,156 | 879,989 | 1,078,617 | 1,118,363 | 1,272,792 | 1,640,110 |
| £ | 671,168 | 829,210 | 1,014,840 | 1,055,440 | 1,293,854 | 1,664,078 |
| Sweden— | | | | | | |
| Industrial diamonds £ | 68,136 | 64,300 | 109,700 | 20,786 | 1,600 | 2,300 |
| Angola Ct. | 1,094,541 | 1,157,411 | 1,264,020 | 1,315,890 | 1,530,434 | 1,980,394 |
| £ | 9,321,830 | 11,275,960 | 13,992,259 | 15,178,147 | 19,735,666 | 26,712,647 |
| Central African | | | | | | |
| Republic .. Ct. | 421,040 | 509,445 | 552,451 | 479,025 | 634,627 | 536,790 |
| £ | 4,474,569 | 5,105,142 | 5,829,775 | 4,929,308 | 7,901,000 | 6,186,000 |
| Congo (Republic of) Ct. | 5,264,891 | 5,303,706 | n.a. | n.a. | n.a. | n.a. |
| £ | 7,041,400 | 7,127,500 | n.a. | n.a. | n.a. | n.a. |
| Ivory Coast .. Ct. | 235,975 | 199,015 | 181,090 | 191,285 | 181,475 | 316,630 |
| £ | 664,398 | 663,000 | 640,700 | 595,800 | 669,830 | 777,765 |
| Liberia Ct. | 571,868 | 540,000 | 555,000 | 1,025,625 | 792,985 | 835,952 |
| £ | 1,392,000 | 1,479,000 | 1,954,000 | 5,379,000 | 3,780,503 | 3,680,000 |
| South Africa (c)— | | | | | | |
| Uncut Ct. | 1,809,284 | 2,203,752 | 2,630,320 | 2,776,500 | 3,170,853 | 3,434,565 |
| £ | 37,027,602 | 47,814,596 | 60,848,827 | 58,926,628 | 81,624,810 | 88,917,099 |
| Cut and polished Ct. | 111,429 | 146,209 | 174,701 | 184,670 | 224,325 | 255,363 |
| £ | 10,444,073 | 14,510,333 | 18,132,667 | 19,749,624 | 28,964,079 | 37,712,826 |

(a) Years ended June 30 of that stated.

(b) Years ended March 31 following that stated.

(c) In addition synthetic diamonds were exported as follows:

| | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------|-----------|---------|-----------|-----------|-----------|-----------|
| Ct. | 2,638,598 | 775,197 | 2,487,050 | 1,971,751 | 2,798,985 | 4,443,338 |
| £ | 810,418 | 194,200 | 621,479 | 1,115,288 | 2,803,037 | 3,304,709 |

EXPORTS OF DIAMONDS (cont.)

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|------------|------------|------------|------------|------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| United States— | | | | | | |
| Uncut Ct. | 39,335 | 60,573 | 85,897 | 58,832 | 122,306 | 149,954 |
| £ | 927,795 | 1,102,237 | 1,495,184 | 1,056,717 | 2,344,352 | 3,458,124 |
| Cut Ct. | 112,975 | 98,870 | 114,941 | 128,077 | 156,201 | 183,353 |
| £ | 13,907,174 | 14,329,631 | 19,520,407 | 20,948,620 | 37,163,524 | 47,488,868 |
| Industrial diamonds Ct. | 1,324,195 | 2,003,218 | 1,097,346 | 147,564 | 299,945 | 344,801 |
| £ | 1,686,715 | 2,616,860 | 1,600,202 | 335,300 | 480,478 | 880,728 |
| Dust Ct. | 1,892,097 | 1,147,838 | 2,403,000 | 4,317,410 | 6,014,657 | 8,121,679 |
| £ | 1,467,212 | 1,168,736 | 2,472,158 | 4,543,983 | 6,923,297 | 8,999,665 |
| Brazil Ct. | 5,345 | 30,585 | 35,515 | 4,245 | n.a. | n.a. |
| £ | 30,978 | 227,916 | 378,863 | 89,000 | n.a. | n.a. |
| Israel— | | | | | | |
| Polished.. .. Ct. | 1,240,737 | 1,332,728 | 1,450,017 | 1,448,627 | 1,701,000 | 1,775,000 |
| £ | 49,161,000 | 54,966,168 | 67,856,000 | 70,025,500 | 95,522,083 | 105,644,000 |
| Japan— | | | | | | |
| Industrial diamonds Ct. | 64,380 | 109,455 | 361,085 | 473,315 | 76,760 | 118,230 |
| £ | 63,806 | 108,371 | 356,803 | 563,708 | 187,242 | 167,865 |
| Cut and polished Ct. | 2,005,685 | 676,465 | 587,105 | 647,920 | 3,015 | 325 |
| £ | 250,495 | 306,044 | 233,554 | 391,420 | 40,677 | 45,004 |

IMPORTS OF DIAMONDS

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|------------------------------------|---------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | £ 149,220,456 | 177,306,790 | 187,340,191 | 213,397,699 | 291,531,536 | 327,773,189 |
| Malta— | | | | | | |
| Rough diamonds | £ 2,901 | 7,546 | 3,399 | 1,836 | 1,519 | 321 |
| Cut and polished | £ 3,804 | 6,204 | 6,421 | 6,733 | 7,080 | 4,887 |
| Zambia— | | | | | | |
| Industrial diamonds | Ct. 144,323 | 9,857 | 17,505 | 11,750 | n.a. | n.a. |
| | £ 227,974 | 13,919 | 26,261 | 20,015 | n.a. | n.a. |
| Canada— | | | | | | |
| Unset (b) .. | Ct. 59,330 | 69,924 | 68,147 | 72,754 | 79,802 | 89,582 |
| (b) | £ 3,189,162 | 4,090,331 | 4,065,008 | 4,514,245 | 5,577,353 | 6,384,000 |
| Dust, bort, etc. . . | Ct. 894,208 | 1,285,945 | 1,398,853 | 1,383,487 | 1,413,789 | 1,696,930 |
| | £ 1,472,208 | 2,168,271 | 2,443,118 | 2,479,746 | 2,668,619 | 3,180,000 |
| Hong Kong— | | | | | | |
| Gem diamonds . . | Ct. 136,284 | 254,894 | 310,798 | 286,568 | 377,317 | 435,109 |
| | £ 4,790,550 | 9,133,870 | 14,971,776 | 15,315,089 | 24,624,231 | 28,917,249 |
| Industrial diamonds | £ 4,772 | (a) 462 | (a) 6,649 | (a) 1,197 | 22,878 | 26,115 |
| India (c)— | | | | | | |
| Gem diamonds . . | £ 8,696 | 149,695 | 669,572 | 2,210,007 | 12,482,539 | 11,917,756 |
| Industrial and bort | £ 192,683 | 139,552 | 379,549 | 603,128 | 393,717 | 332,747 |
| Malaysia (West)— | | | | | | |
| Gem diamonds | £ n.a. | 1,276,317 | 615,844 | 491,269 | 528,600 | 560,957 |
| Australia (d)— | | | | | | |
| Industrial diamonds | Ct. 470,928 | 370,697 | 405,453 | 490,794 | 541,389 | 633,221 |
| | £ 593,615 | 571,405 | 595,000 | 736,400 | 945,318 | 1,138,000 |
| Other diamonds | Ct. 28,506 | 32,349 | 29,494 | 25,841 | 25,449 | 33,831 |
| | £ 1,046,208 | 1,315,222 | 1,404,000 | 1,574,000 | 1,692,198 | 2,269,000 |
| New Zealand (d)— | | | | | | |
| Industrial diamonds | £ 10,417 | 13,170 | 11,406 | 16,830 | 18,287 | n.a. |
| Other diamonds | £ 195,028 | 167,099 | 213,766 | 202,626 | 153,988 | n.a. |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Rough diamonds | Ct. 5,080,413 | 5,764,017 | 7,134,069 | 6,971,660 | 9,347,950 | 9,976,847 |
| | £ 50,393,320 | 52,376,176 | 65,232,682 | 58,994,400 | 97,963,075 | 115,431,200 |
| Cut diamonds . . | Ct. 428,975 | 484,589 | 566,405 | 597,876 | 833,335 | 1,012,036 |
| | £ 27,962,424 | 29,984,182 | 40,872,859 | 41,189,797 | 63,767,650 | 87,510,016 |
| Industrial, rough and bort | Ct. 9,440,154 | 8,827,020 | 10,297,150 | 9,530,780 | 10,582,335 | 20,608,162 |
| | £ 16,659,322 | 16,821,049 | 20,602,264 | 18,982,312 | 24,312,050 | 33,095,949 |
| France— | | | | | | |
| Uncut | Ct. n.a. | n.a. | n.a. | 767,780 | 1,030,380 | 876,840 |
| | £ 2,346,682 | 2,389,651 | 2,868,688 | 2,893,358 | 3,736,706 | 3,716,410 |
| Cut and polished | Ct. n.a. | n.a. | n.a. | 82,675 | 99,165 | 108,445 |
| | £ 5,337,109 | 4,638,958 | 6,379,727 | 6,136,175 | 13,710,425 | 12,395,874 |
| Industrial diamonds | Ct. n.a. | n.a. | n.a. | 153,195 | 40,265 | 20,245 |
| | £ 5,408 | 32,769 | 8,161 | 9,695 | 23,800 | 8,552 |
| Dust | Ct. n.a. | n.a. | n.a. | 1,330,045 | 1,287,545 | 1,846,375 |
| | £ 950,599 | 1,086,192 | 1,148,510 | 1,239,787 | 1,448,231 | 1,765,791 |
| Netherlands . . | Ct. 1,438,384 | 1,183,579 | 1,544,472 | 1,647,356 | 1,275,966 | 1,455,132 |
| | £ 10,275,512 | 10,747,441 | 12,257,024 | 11,063,001 | 12,383,978 | 12,549,378 |
| Dust | Ct. 597,020 | 950,459 | 1,177,370 | 764,936 | 1,416,527 | 1,527,731 |
| | £ 541,998 | 835,370 | 1,152,454 | 671,437 | 1,336,901 | 1,450,161 |
| Norway | Ct. 5,000 | 95,000 | 5,000 | 40,000 | 15,000 | 5,000 |
| | £ 1,952 | 2,451 | 2,954 | 3,159 | 589 | 700 |
| Sweden— | | | | | | |
| Industrial diamonds | £ 284,224 | 452,200 | 462,800 | 379,354 | 277,706 | 429,929 |

(a) Excess of re-exports.

(b) Excluding uncut.

(c) Years ended March 31 following that stated.

(d) Years ended June 30 of that stated.

IMPORTS OF DIAMONDS (cont.)

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|------------|------------|------------|------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Yugoslavia— | | | | | | |
| Industrial diamonds Ct. | 646,300 | 116,945 | 252,150 | 372,285 | 51,800 | 70,085 |
| £ | 42,393 | 11,278 | 102,265 | 78,211 | 37,400 | 78,880 |
| South Africa— | | | | | | |
| Rough diamonds .. | (a) | (a) | (a) | (a) | (a) | (a) |
| Cut and polished Ct. | 1,423 | 7,182 | 1,477 | 1,868 | 4,265 | 4,552 |
| £ | 60,807 | 360,869 | 51,620 | 104,919 | 245,508 | 197,823 |
| Mexico— | | | | | | |
| Uncut Ct. | 2,125 | n.a. | n.a. | 5,815 | 11,580 | n.a. |
| £ | 29,410 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Industrial diamonds Ct. | 131,225 | n.a. | n.a. | 35,000 | 50,000 | n.a. |
| £ | 92,918 | n.a. | n.a. | n.a. | n.a. | n.a. |
| United States— | | | | | | |
| Uncut Ct. | 1,547,955 | 1,900,936 | 2,032,432 | 2,505,763 | 2,514,362 | 2,931,969 |
| £ | 53,474,506 | 62,663,214 | 74,480,654 | 77,231,000 | 105,272,230 | 119,819,136 |
| Cut and polished Ct. | 1,096,795 | 1,258,745 | 1,451,596 | 1,454,992 | 1,833,935 | 1,757,211 |
| £ | 38,858,883 | 47,081,428 | 59,335,818 | 63,326,000 | 92,699,401 | 90,450,534 |
| Industrial diamonds Ct. | 6,529,209 | 5,412,395 | 7,408,160 | 6,043,093 | 4,248,560 | 4,731,179 |
| £ | 13,779,968 | 12,355,677 | 14,293,492 | 12,735,000 | 15,328,327 | 12,415,217 |
| Dust Ct. | 2,752,382 | 4,259,995 | 5,453,374 | 4,752,930 | 5,643,130 | 5,400,492 |
| £ | 2,371,582 | 3,772,443 | 4,639,805 | 3,910,000 | 5,220,266 | 4,954,225 |
| Bort, manufactured Ct. | 3,901,982 | 2,612,309 | 3,336,252 | 4,254,996 | 685,639 | 357,002 |
| £ | 3,492,697 | 2,458,557 | 2,892,237 | 3,651,000 | 640,408 | 382,318 |
| Argentina— | | | | | | |
| Industrial diamonds Ct. | 905,000 | 19,922 | 60,000 | 1,290,000 | 400,000 | 4,130,000 |
| £ | n.a. | n.a. | n.a. | 20,200 | n.a. | n.a. |
| Dust Ct. | 12,060 | 2,007 | 3,000 | 5,000 | 56,000 | n.a. |
| £ | 1,200 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Israel— | | | | | | |
| Rough diamonds Ct. | 2,972,000 | 2,708,000 | 3,125,000 | 3,090,000 | 3,873,000 | 4,304,000 |
| £ | 41,875,000 | 39,599,000 | 49,712,000 | 50,028,000 | 75,220,000 | 87,653,000 |
| Industrial diamonds Ct. | 442,000 | 590,000 | 624,000 | 588,000 | 549,000 | 659,000 |
| £ | 1,231,000 | 2,043,000 | 2,091,000 | 1,763,000 | 2,034,000 | 2,438,000 |
| Bort Ct. | 542,000 | 504,000 | 699,000 | 765,000 | 674,000 | 707,000 |
| £ | 426,000 | 387,000 | 490,000 | 576,000 | 563,000 | 605,000 |
| Japan— | | | | | | |
| Industrial diamonds Ct. | 382,825 | 390,220 | 524,055 | 734,010 | 753,000 | 651,000 |
| £ | 1,819,000 | 1,857,999 | 2,420,110 | 3,381,502 | 4,973,408 | 2,182,500 |
| Uncut Ct. | 34,300 | 44,815 | 32,705 | 24,195 | 3,330 | 12,940 |
| £ | 198,246 | 189,730 | 213,270 | 223,055 | 87,396 | 432,894 |
| Cut and polished Ct. | 664,395 | 285,115 | 247,495 | 469,055 | 315,155 | 570,830 |
| £ | 5,867,651 | 9,253,027 | 13,775,084 | 15,175,187 | 22,347,244 | 25,376,000 |
| Dust Ct. ^b | 1,570,160 | 1,431,260 | 1,741,990 | 1,983,410 | 1,877,565 | 1,997,800 |
| £ ^b | 1,614,088 | 1,487,665 | 1,789,325 | 1,925,186 | 2,127,989 | 2,182,000 |

(a) Total imports and re-exports were as follows:

| | Total imports | | Re-exports | |
|------|---------------|------------|------------|------------|
| | Carats | £ | Carats | £ |
| 1964 | 15,737,300 | 13,818,406 | 18,389,917 | 30,567,203 |
| 1965 | 19,102,532 | 19,096,236 | n.a. | n.a. |
| 1966 | 13,286,020 | 14,757,100 | 19,850,338 | 23,549,404 |
| 1967 | 19,140,474 | 18,639,679 | 19,683,575 | 25,096,779 |
| 1968 | 3,705,161 | 9,832,317 | 7,410,048 | 16,478,269 |
| 1969 | 3,131,499 | 7,198,959 | 9,185,449 | 23,605,939 |

(b) Includes synthetic dust.

DIATOMACEOUS EARTH
PRODUCTION OF DIATOMACEOUS EARTH

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | 13,717 | 15,079 | 14,697 | 12,484 | 14,701 | 12,778 |
| Kenya | 3,007 | 2,183 | 1,744 | 1,856 | 2,022 | 2,267 |
| Canada (a) | 1,021 | 73 | 62 | <i>n.a.</i> | 465 | 435 |
| Australia | 8,732 | 6,958 | 7,148 | 3,822 | 2,280 | 3,350 |
| New Zealand | 1,679 | 1,729 | 4,660 | 1,408 | 2,033 | 2,129 |
| OTHER COUNTRIES | | | | | | |
| Austria | 3,771 | 3,970 | 3,695 | 3,599 | 2,932 | 1,737 |
| Denmark— | | | | | | |
| Diatomaceous earth (b) | 5,000 | 4,000 | 6,862 | 9,267 | 11,938 | 9,000 |
| Moler (b) | 150,000 | 180,000 | 92,747 | (c) 94,352 | 86,454 | (c) 82,529 |
| Finland | 2,136 | 935 | 1,181 | 1,594 | 1,948 | 1,960 |
| France (f) | 130,981 | 148,256 | 139,027 | 157,103 | 167,955 | <i>n.a.</i> |
| Germany (Federal) | 47,086 | 51,790 | 50,525 | 55,595 | 54,638 | 52,149 |
| Italy | 68,255 | 62,267 | 61,725 | 59,007 | 59,100 | (b) 67,000 |
| Portugal (f) | 1,970 | 2,586 | 3,433 | 4,038 | 3,444 | 2,761 |
| Spain (f) | 11,167 | 11,724 | 16,319 | 16,860 | 11,081 | 8,320 |
| Sweden | 214 | 392 | 473 | 509 | 500 | 591 |
| Yugoslavia (e) | 10,000 | 10,000 | 10,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Algeria | 20,080 | 15,500 | 15,579 | 17,975 | 17,716 | 20,000 |
| Egypt | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 1,201 | 1,279 |
| Mozambique | — | — | 32 | r 5 | 206 | 118 |
| South Africa | 487 | 961 | 214 | 576 | 614 | 505 |
| Costa Rica | (e) 3,500 | 2,953 | (e) 2,900 | (e) 10,000 | (e) 10,000 | (e) 15,000 |
| United States | (d) 518,105 | (d) 518,105 | (g) 560,000 | (g) 560,000 | (g) 560,000 | 534,358 |
| Argentina | 7,649 | 5,999 | 10,770 | 8,017 | 6,443 | <i>n.a.</i> |
| Colombia | 227 | 200 | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Peru | 2,552 | 2,432 | r 2,880 | r 3,610 | 3,344 | <i>n.a.</i> |
| Korea (South) | 36,635 | 570 | 252 | 2,203 | 2,179 | 2,869 |

Diatomaceous earth is known to have been produced in Hungary, Norway, Roumania, U.S.S.R., Brazil and Japan.

(a) Shipments.

(b) Estimated.

(c) Exports.

(d) Average annual production 1963-1965.

(e) United States Bureau of Mines' estimate.

(f) Including tripoli.

(g) Estimated average annual production 1966-1968.

EXPORTS OF DIATOMACEOUS EARTH

Long tons

| Exporting Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|---------|---------|---------|---------|---------|---------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Kenya | 1,646 | 1,161 | 763 | 723 | 525 | 609 |
| OTHER COUNTRIES | | | | | | |
| Austria | 133 | 136 | 253 | 239 | 251 | 105 |
| Belgium-Luxemburg E.U. | 951 | 926 | 839 | 856 | 288 | 393 |
| Denmark— | | | | | | |
| Diatomaceous earth .. | 8,711 | 9,065 | 7,966 | 10,290 | 9,419 | 8,937 |
| Moler | 80,950 | 102,041 | 92,747 | 94,352 | 86,513 | 82,529 |
| Moler bricks | 35,944 | 41,036 | 38,811 | 34,712 | 33,186 | 36,568 |
| Finland | 117 | 2,139 | 134 | 96 | 27 | 57 |
| France | 14,360 | 16,302 | 19,471 | 16,865 | 17,685 | 14,634 |
| Germany (Federal) .. | 4,501 | 5,869 | 4,984 | 3,559 | 5,230 | 5,796 |
| Italy | 818 | 4,060 | 1,503 | 1,616 | 3,426 | 1,945 |
| Netherlands | 93 | 142 | 131 | 267 | 1,288 | 250 |
| Norway | — | 2 | 25 | — | 2 | 60 |
| Portugal | 532 | 459 | 334 | 280 | 249 | 234 |
| Spain | 523 | 780 | 949 | 1,038 | 2,072 | 1,380 |
| Sweden | 90 | 106 | 101 | 217 | 102 | 131 |
| Yugoslavia | 5,459 | 3,572 | 3,504 | 1,651 | 1,398 | 1,217 |
| Algeria | 14,387 | 10,028 | 7,051 | 6,682 | 11,717 | n.a. |
| South Africa | 654 | 851 | 244 | 414 | n.a. | 83 |
| United States | 114,287 | 101,632 | 128,313 | 132,571 | 149,580 | 156,782 |
| Japan | 449 | 436 | 429 | 647 | 761 | 1,975 |

IMPORTS OF DIATOMACEOUS EARTH

Long tons

| Importing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|-------------|--------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom (a) | 56,238 | 45,848 | 42,363 | 46,467 | 42,640 | 39,220 |
| Canada | 22,401 | 22,401 | 26,089 | 29,758 | 27,393 | 27,199 |
| India (d) | 1,528 | 1,753 | 1,247 | 1,929 | 1,230 | 1,585 |
| Malaysia (West) | <i>n.a.</i> | 238 | 273 | 337 | 294 | 313 |
| Australia (b) | 4,579 | 5,789 | 5,028 | 5,082 | 4,733 | 6,095 |
| New Zealand (b) | 650 | 706 | 785 | 819 | 870 | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Austria | 1,642 | 2,156 | 2,721 | 2,318 | 2,112 | 2,221 |
| Belgium-Luxemburg | | | | | | |
| E.U. | 7,589 | 8,391 | 7,541 | 6,943 | 5,846 | 4,163 |
| Denmark | 1,732 | 1,748 | 2,352 | 2,488 | 4,081 | 4,500 |
| Finland | 1,010 | 752 | 905 | 1,119 | 1,065 | 911 |
| France | 13,793 | 7,860 | 8,987 | 6,994 | 6,898 | 6,709 |
| Germany (Federal) | 61,732 | 85,876 | 75,217 | 68,017 | 62,415 | 63,739 |
| Greece | 886 | 453 | 1,407 | 1,367 | 905 | 1,321 |
| Iceland | 604 | 511 | 968 | 1,554 | 650 | 767 |
| Italy | 6,975 | 7,959 | 9,468 | 6,112 | 7,740 | 4,350 |
| Netherlands | 8,051 | 8,397 | 8,050 | 7,383 | 7,914 | 10,530 |
| Norway | 3,983 | 3,878 | 4,313 | 4,963 | 4,167 | 3,708 |
| Portugal | 1,197 | 1,493 | 1,572 | 2,022 | 2,285 | 2,476 |
| Spain | 1,696 | 1,528 | 1,755 | 1,412 | 7,875 | 5,817 |
| Sweden | 8,369 | 8,634 | 8,636 | 9,311 | 8,582 | 9,657 |
| Switzerland | 1,903 | 1,568 | 2,013 | 1,918 | 1,997 | 2,560 |
| Yugoslavia | 247 | 140 | 325 | 585 | 641 | 793 |
| Angola | 82 | 145 | 129 | 177 | 153 | 335 |
| Egypt | 397 | 2,305 | 1,381 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Morocco | 751 | 763 | 735 | 921 | 718 | 1,052 |
| South Africa | 4,107 | 3,041 | 3,228 | 3,529 | 3,823 | 3,859 |
| Costa Rica | 1,275 | 1,085 | 457 | 428 | 341 | 433 |
| Guatemala | 186 | 292 | 307 | 754 | 507 | 745 |
| Honduras | 85 | 106 | 82 | 64 | 198 | <i>n.a.</i> |
| Mexico | (c) 1,108 | 270 | 78 | 48 | 224 | <i>n.a.</i> |
| Salvador | 430 | 361 | 405 | 562 | 588 | 509 |
| Brazil | 1,187 | 1,667 | 1,993 | 1,365 | 673 | <i>n.a.</i> |
| Chile (c) | 492 | 315 | <i>n.a.</i> | 254 | <i>n.a.</i> | <i>n.a.</i> |
| Colombia | 1,166 | 1,124 | 912 | 906 | 1,184 | <i>n.a.</i> |
| Peru (c) | 1,675 | 3,395 | 3,447 | 3,373 | 1,205 | <i>n.a.</i> |
| Uruguay | <i>n.a.</i> | 245 | 300 | 305 | 71 | 158 |
| Venezuela | 2,602 | 1,958 | 2,085 | 1,897 | 2,826 | 3,328 |
| Israel | 190 | 193 | 343 | 349 | 540 | 765 |
| Japan | 839 | 763 | 806 | 1,276 | 949 | 1,464 |
| Lebanon | 652 | 1,533 | 1,188 | 130 | 290 | 282 |
| Philippine Republic | 269 | 2,230 | <i>n.a.</i> | 1,409 | <i>n.a.</i> | <i>n.a.</i> |
| Thailand | 7 | 30 | 7 | — | — | — |
| Turkey | 56 | 13 | 20 | 53 | 106 | 47 |

(a) Chiefly moler from Denmark.

(b) Years ended June 30 of that stated.

(c) Including tripoli, etc.

(d) Years ended March 31 following that stated.

FELDSPAR
(see also Nepheline Syenite)
PRODUCTION OF FELDSPAR

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| China stone | 57,000 | 29,456 | 29,631 | 29,720 | 30,384 | 32,579 |
| Kenya | — | — | 161 | 396 | 527 | 1,535 |
| Canada | 8,169 | 9,736 | 9,754 | 9,280 | 9,482 | 10,485 |
| Ceylon | 4 | 613 | 412 | 292 | 577 | 594 |
| Hong Kong | 1,556 | 1,119 | 1,343 | 1,135 | 1,582 | 1,909 |
| India | 23,997 | 25,232 | 27,530 | 25,375 | 33,000 | 30,800 |
| Pakistan | 48 | — | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Australia (a) .. | 9,021 | 8,726 | 7,259 | 4,450 | 4,473 | 4,838 |
| OTHER COUNTRIES | | | | | | |
| Austria | 1,603 | 1,397 | 1,507 | 2,441 | 2,140 | 1,777 |
| Finland | 10,560 | 11,685 | 25,901 | 34,472 | 53,567 | (c) 62,000 |
| Germany (Federal) (b) .. | 299,989 | 313,280 | 285,796 | 261,464 | 283,258 | 355,573 |
| Italy | 109,851 | 95,467 | 143,199 | 145,133 | 165,722 | 184,823 |
| Norway— | | | | | | |
| Unground | 47,475 | 40,918 | 52,291 | 96,391 | 130,590 | 126,034 |
| Ground | 22,547 | 22,067 | 34,457 | 16,707 | 26,451 | <i>n.a.</i> |
| Poland | (c) 26,300 | (c) 26,300 | (c) 27,600 | (c) 28,000 | (c) 28,000 | (c) 29,000 |
| Portugal | 10,895 | 8,165 | 1,603 | <i>n.a.</i> | <i>n.a.</i> | 23,698 |
| Spain | 16,466 | 25,166 | 49,819 | 46,709 | 46,522 | 43,044 |
| Sweden (d)— | | | | | | |
| Unground | 21,606 | 18,295 | 12,396 | 9,883 | 5,100 | 4,724 |
| Ground | 29,353 | 27,909 | 24,205 | 25,127 | 21,800 | 28,050 |
| U.S.S.R. (c) | 215,000 | 225,000 | 235,000 | 235,000 | 235,000 | 239,000 |
| Yugoslavia | 33,260 | 55,052 | 40,914 | 36,412 | 43,342 | (c)45,000 |
| Angola | 493 | — | — | — | <i>n.a.</i> | <i>n.a.</i> |
| Egypt | 4,653 | (c) 4,000 | 3,444 | <i>n.a.</i> | 1,691 | 3,000 |
| Eritrea | (c) 9,800 | — | 1,526 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Malagasy Republic | 1 | — | — | — | <i>n.a.</i> | <i>n.a.</i> |
| South Africa | 35,525 | 41,636 | 33,996 | 24,498 | 19,574 | 21,687 |
| South West Africa | 1,893 | 2,281 | 1,179 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Mexico | 31,400 | 46,900 | 81,400 | 62,600 | <i>n.a.</i> | <i>n.a.</i> |
| United States (d) | 587,194 | 624,598 | 655,452 | 615,397 | 667,679 | 720,000 |
| Argentina | 6,390 | 19,822 | 21,071 | 20,029 | 18,042 | <i>n.a.</i> |
| Chile | 814 | 408 | 1,099 | 857 | 920 | <i>n.a.</i> |
| Colombia | 11,426 | 10,600 | 18,779 | 19,700 | 20,700 | 22,050 |
| Peru | 837 | 926 | 470 | 2,460 | <i>n.a.</i> | <i>n.a.</i> |
| Uruguay | 883 | 1,227 | 1,722 | 1,242 | 405 | 1,218 |
| Japan | 61,445 | 57,244 | 50,845 | 49,906 | 65,101 | <i>n.a.</i> |
| Korea (South) | 13,468 | 15,595 | 15,053 | 16,551 | 20,661 | 22,600 |
| Philippine Republic | 7,924 | 12,095 | 8,479 | <i>n.a.</i> | 41,656 | 34,832 |
| Turkey | 2,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| TOTAL* | 1,900,000 | 1,900,000 | 2,000,000 | 1,900,000 | 2,200,000 | 2,200,000 |

*Excluding feldspar known to have been produced in Czechoslovakia, Roumania, Brazil, China and Vietnam.

(a) Including china stone.

(b) Including feldspathic sand obtained as a by-product of china clay washing.

(c) United States Bureau of Mines' estimate.

(d) Sold or used by producers.

EXPORTS OF FELDSPAR

Long tons

| Exporting Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|--------|--------|--------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Canada | 3,023 | 3,345 | 3,057 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| India (b) | 5,282 | 4,960 | 4,587 | 8,140 | 11,326 | 9,840 |
| OTHER COUNTRIES | | | | | | |
| Austria (a) | 645 | 1,725 | 2,131 | 404 | 286 | 409 |
| Belgium-Luxemburg | | | | | | |
| E.U. | 84 | 41 | 73 | 61 | 461 | 599 |
| Finland | 5,443 | 8,845 | 21,739 | 36,063 | 44,540 | 45,329 |
| France (a) | 26,476 | 24,938 | 23,096 | 19,609 | 21,311 | 26,822 |
| Germany (Federal) (a) .. | 11,926 | 11,576 | 11,697 | 11,891 | 12,714 | 14,745 |
| Italy | 21,440 | 22,809 | 23,213 | 24,176 | 24,772 | 26,926 |
| Netherlands (a) | 5,033 | 2,048 | 534 | 473 | 1,031 | 118 |
| Norway— | | | | | | |
| Crude | 43,158 | 31,339 | 31,614 | 30,924 | 35,417 | 24,411 |
| Ground | 22,077 | 18,621 | 18,087 | 12,370 | 14,958 | 43,190 |
| Sweden (a) | 26,807 | 19,617 | 16,148 | 13,660 | 14,050 | 14,103 |
| Yugoslavia | 20,901 | 24,779 | 20,058 | 20,305 | 15,237 | 17,798 |
| South Africa | 6,255 | 9,966 | 10,677 | 5,958 | 6,142 | 17,152 |
| South-West Africa | 2,476 | 1,410 | 816 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Japan | 1,711 | 2,339 | 2,694 | 3,552 | 3,349 | 5,755 |
| Korea (South) (a) | 11,094 | 21,437 | 13,245 | 28,072 | 35,605 | 47,022 |

(a) May include some leucite and nephelite.

(b) Years ended March 31 following that stated.

IMPORTS OF FELDSPAR

Long tons

| Importing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | 58,101 | 61,476 | 80,655 | 72,840 | 84,654 | 88,649 |
| New Zealand (c) | (a) 1,399 | (a) 1,349 | (a) 1,198 | (a) 1,656 | (a) 1,384 | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Austria (b) | 7,285 | 8,366 | 8,010 | 7,507 | 6,117 | 6,840 |
| Belgium-Luxemburg | | | | | | |
| E.U. (b) | 30,422 | 29,920 | 33,160 | 34,246 | 39,814 | 52,554 |
| Denmark (b) | 4,192 | 5,307 | 6,157 | 4,741 | 4,894 | 8,304 |
| Finland (b) | 727 | 891 | 1,023 | 1,245 | 1,173 | 645 |
| France (b) | 10,968 | 15,688 | 15,278 | 11,757 | 15,575 | 28,593 |
| Germany (Federal) (b) .. | 43,057 | 50,397 | 52,140 | 47,984 | 56,737 | 70,509 |
| Italy | 10,808 | 14,481 | 10,212 | 16,916 | 19,820 | 14,441 |
| Netherlands (b) | 28,489 | 26,540 | 25,638 | 26,112 | 31,550 | 32,355 |
| Poland | 11,654 | 13,955 | 11,281 | 11,746 | 12,899 | 12,817 |
| Sweden (b) | 307 | 2,870 | 4,895 | 5,570 | 5,004 | 4,791 |
| Morocco (b) | — | — | <i>n.a.</i> | 39 | 42 | 127 |
| South Africa (b) | 104 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 116 |
| Cuba | 7,509 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Mexico | 1,413 | 1,041 | 1,439 | 1,925 | 2,675 | <i>n.a.</i> |
| United States | 3,180 | 3,455 | 3,243 | 2,783 | 3,377 | 4,644 |
| Colombia | (a) 202 | 84 | 19 | 17 | <i>n.a.</i> | <i>n.a.</i> |
| Venezuela | 7,864 | 7,827 | 8,399 | 8,187 | 9,646 | 1,812 |
| Israel | 2,048 | 2,658 | 1,946 | 1,624 | 2,232 | 1,160 |
| Japan | 5,880 | 4,251 | 4,339 | 4,635 | 8,063 | 4,277 |
| Turkey | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 263 | 65 | 59 |

(a) Including fluorspar.

(b) May include some leucite and nephelite.

(c) Years ended June 30 of that stated.

FLUORSPAR
PRODUCTION OF FLUORSPAR

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom (a) .. | 107,765 | 128,933 | 152,211 | 151,940 | 193,000 | 187,292 |
| Kenya | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 189 | 1,832 |
| Rhodesia | 69 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Canada (e) | £749,683 | £888,365 | £728,289 | £807,584 | £1,003,371 | £1,170,304 |
| India | 383 | 641 | r 2,056 | 1,588 | 1,165 | 1,834 |
| Australia | — | — | — | — | — | — |
| OTHER COUNTRIES | | | | | | |
| France (c) | 261,400 | 299,935 | 331,975 | 385,872 | 423,400 | 442,900 |
| Germany— | | | | | | |
| Federal Republic .. | 88,357 | 81,609 | 83,210 | 85,554 | 86,358 | 83,427 |
| East (b) | 70,000 | 80,000 | 80,000 | 80,000 | 80,000 | 80,000 |
| Italy | 122,725 | 150,911 | 192,137 | 201,955 | 221,379 | 254,008 |
| Spain | 147,317 | 217,186 | 219,035 | r 280,799 | 304,409 | 305,514 |
| U.S.S.R. (b) | 300,000 | 350,000 | 350,000 | 375,000 | 375,000 | 375,000 |
| Morocco | 6,466 | 3,000 | — | — | — | — |
| South Africa | 59,313 | 64,747 | 80,595 | 93,802 | 106,845 | 147,903 |
| Tunisia | — | 3,000 | 2,584 | 2,461 | 5,364 | 12,201 |
| Mexico | 632,719 | 723,766 | 714,925 | 772,714 | 911,000 | 972,697 |
| United States (d) .. | 193,872 | 215,118 | 225,954 | 263,967 | 225,367 | 163,134 |
| Argentina | 9,816 | 11,736 | 15,834 | 18,951 | 21,168 | <i>n.a.</i> |
| China (b) | 200,000 | 220,000 | 225,000 | 250,000 | 250,000 | 250,000 |
| Japan | 18,820 | 16,254 | 13,814 | 15,063 | 15,478 | 12,000 |
| Korea (South) | 55,506 | 38,548 | 31,502 | 56,068 | 36,890 | 23,795 |
| Mongolia | (b) 56,100 | (b) 73,800 | (b) 50,000 | (b) 50,000 | (b) 60,000 | (b) 60,000 |
| Thailand | 62,535 | 51,013 | 47,268 | 131,049 | 241,226 | 293,599 |
| Turkey | 1,282 | 1,060 | 1,725 | r 594 | 1,699 | 2,061 |
| TOTAL | 2,500,000 | 2,800,000 | 2,900,000 | 3,200,000 | 3,500,000 | 3,600,000 |

Fluorspar is also known to have been produced in Belgium, Bulgaria, Burma and North Korea.

(a) Including fluorspar recovered from old lead and zinc mine dumps.

(b) United States Bureau of Mines' estimate.

(c) Crude. Production of saleable crude fluorspar and concentrates was as follows (long tons).

| | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---------------------|---------|---------|---------|---------|---------|-------------|
| Crude (Saleable) .. | 111,441 | 100,697 | 107,087 | 128,790 | 135,067 | <i>n.a.</i> |
| Concentrates | 80,630 | 91,779 | 104,946 | 111,767 | 121,373 | <i>n.a.</i> |

(d) Shipments from mine.

(e) Official figures available by value only. Company figures of shipments, which exclude small amounts produced in British Columbia, are as follows (long tons): 1964—86,000; 1965—100,000; 1966—*n.a.*; 1967—*n.a.*; 1968—*n.a.*; 1969—*n.a.*

EXPORTS OF FLUORSPAR

Long tons

| Exporting Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Canada | <i>n.a.</i> | <i>n.a.</i> | 11 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Finland | 592 | 19 | 2,371 | — | — | — |
| France | 57,699 | 84,968 | 87,001 | 107,381 | 115,409 | 100,612 |
| Germany (Federal) .. | 12,146 | 10,431 | 11,045 | 9,254 | 9,194 | 9,798 |
| Italy | 46,413 | 51,636 | 54,403 | 83,930 | 107,289 | 135,303 |
| Spain | 135,149 | 152,128 | 128,314 | 168,515 | 136,878 | 198,759 |
| Sweden | 58 | — | 348 | 430 | 589 | 298 |
| Morocco | 8,905 | 1,422 | <i>n.a.</i> | <i>n.a.</i> | 5 | 11 |
| South Africa | 50,503 | 41,954 | 56,621 | 87,323 | 83,934 | 111,507 |
| Mexico | 618,761 | 670,380 | 731,456 | 744,335 | 918,020 | <i>n.a.</i> |
| United States | 3,305 | 8,419 | 5,118 | 9,236 | 11,272 | 3,219 |
| Argentina | 667 | 504 | 867 | 339 | 965 | 491 |
| Bolivia | 9 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Japan | 37 | 238 | 268 | 459 | 112 | <i>n.a.</i> |
| Korea (South) | 31,760 | 32,013 | 38,599 | 47,422 | 48,947 | 36,570 |
| Thailand | 38,055 | 47,140 | 72,507 | 124,120 | 201,636 | 253,886 |

IMPORTS OF FLUORSPAR

Long tons

| Importing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|-------------|-------------|-------------|---------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Canada | 62,487 | 62,364 | 67,254 | 84,146 | 103,094 | 93,198 |
| India (c) | 4,226 | 3,111 | 5,545 | 8,221 | 4,068 | 12,240 |
| Australia (a) | 5,915 | 8,430 | 15,529 | 17,983 | 20,797 | 20,660 |
| OTHER COUNTRIES | | | | | | |
| Austria | 14,362 | 13,794 | 13,591 | 13,337 | 15,182 | 14,320 |
| Belgium-Luxemburg | | | | | | |
| E.U. | 8,005 | 7,059 | 6,487 | 9,775 | 13,032 | 13,872 |
| Denmark | 472 | 597 | 1,668 | 1,678 | 3,570 | 1,701 |
| Finland | 3,162 | 6,282 | 4,840 | 4,287 | 6,182 | 6,485 |
| France | — | 324 | 3,060 | 3,421 | 359 | 6,623 |
| Germany (Federal) .. | 59,773 | 109,095 | 118,441 | 116,572 | 151,062 | 160,448 |
| Italy | 14,559 | 5,587 | 14,612 | 32,346 | 21,273 | 28,802 |
| Netherlands | 14,243 | 18,672 | 15,558 | 19,556 | 22,250 | 27,554 |
| Norway | 1,859 | 3,094 | 2,738 | 2,383 | 2,774 | 2,259 |
| Poland | 26,400 | 29,784 | 39,579 | 29,961 | 32,822 | 27,083 |
| Sweden | 11,020 | 20,553 | 20,858 | 10,498 | 13,900 | 17,182 |
| U.S.S.R. | 130,400 | 114,500 | 93,400 | 83,067 | 100,389 | 131,980 |
| Yugoslavia | 3,972 | 3,429 | 7,010 | 1,174 | 1,839 | 2,966 |
| Mexico | 11 | 8 | 70 | 2 | 13 | <i>n.a.</i> |
| United States | 614,226 | 729,059 | 784,416 | 814,170 | 937,596 | 1,026,380 |
| Brazil | — | — | — | 25 | <i>n.a.</i> | <i>n.a.</i> |
| Chile | <i>n.a.</i> | 742 | <i>n.a.</i> | 2,184 | <i>n.a.</i> | <i>n.a.</i> |
| Colombia | (b) 202 | 186 | 147 | 26 | <i>n.a.</i> | <i>n.a.</i> |
| Venezuela | 475 | 164 | 3,744 | 1,968 | 198 | 56 |
| Israel | 513 | 915 | 318 | 516 | 655 | 169 |
| Japan | 203,573 | 168,851 | 220,710 | 353,207 | 486,247 | 513,625 |
| Turkey | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 3,469 | 1,180 | 2,512 |

(a) Years ended June 30 of that stated. (c) Years ended March 31 following that stated.

(b) Including feldspar.

FULLER'S EARTH

(see also Bentonite)

PRODUCTION OF FULLER'S EARTH

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| India | (b) 25,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Australia | 159 | 152 | — | 75 | 75 | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Algeria | 52,087 | 58,940 | (b) 60,000 | (b) 60,000 | (b) 60,000 | (b) 60,000 |
| Morocco | 31,779 | 37,009 | 30,004 | 26,138 | 29,492 | 13,353 |
| South Africa | 161 | 580 | — | 1,131 | 212 | 1,112 |
| United States (a) .. . | 492,755 | 602,162 | 678,248 | 717,785 | 822,812 | 800,000 |

Fuller's earth is also produced in the United Kingdom, France, Senegal, Iran, Japan and Turkey.

(a) Sold or used by producers.

(b) Estimated.

EXPORTS OF FULLER'S EARTH*

Long tons

| Exporting Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|------------------------|-------------|--------|--------|--------|--------|-------------|
| OTHER COUNTRIES | | | | | | |
| Morocco | 22,833 | 21,956 | 27,679 | 21,291 | 15,064 | 1,800 |
| United States | <i>n.a.</i> | 16,585 | 20,784 | 27,096 | 37,652 | 33,429 |
| Iran (a) | 74 | 7 | 6 | 6 | 20 | <i>n.a.</i> |

*Statistics of exports of Fuller's earth are not generally separately recorded in official trade returns.

(a) Years ended March 20 of year following that stated.

IMPORTS OF FULLER'S EARTH

Long tons

| Importing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Malawi | 48 | 128 | 146 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Zambia | <i>n.a.</i> | 157 | 223 | 202 | 156 | 166 |
| Canada | 5,566 | 6,125 | 6,805 | 8,106 | 8,080 | 8,703 |
| Ceylon | 354 | 201 | 433 | 150 | 243 | <i>n.a.</i> |
| India (a) | 254 | 177 | 47 | 63 | 46 | 97 |
| OTHER COUNTRIES | | | | | | |
| Chile | 663 | 5 | <i>n.a.</i> | 17 | <i>n.a.</i> | <i>n.a.</i> |
| Peru | 1,487 | 1,214 | <i>n.a.</i> | 896 | <i>n.a.</i> | <i>n.a.</i> |
| Venezuela | 549 | 913 | 797 | 987 | 765 | 163 |
| Burma | 139 | 337 | 495 | 218 | 116 | <i>n.a.</i> |
| Israel | 4,526 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |

(a) Years ended March 31 following that stated.

GOLD
PRODUCTION OF GOLD
(Metal content)

Troy ounces fine

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|----------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Botswana | 10 | — | — | — | — | — |
| Ghana | 864,918 | 755,191 | 684,395 | 762,609 | 727,121 | 707,354 |
| Kenya | 12,480 | 12,013 | 11,898 | 33,366 | 31,974 | 17,903 |
| Nigeria | 195 | 63 | 40 | 39 | 248 | 298 |
| Rhodesia | 575,386 | 544,100 | (d) 550,000 | (c) 515,000 | (d) 500,000 | (c) 515,000 |
| Swaziland | 2,078 | 1,619 | 308 | — | n.a. | n.a. |
| Tanzania | 93,338 | (b) 90,819 | (b) 55,473 | 18,486 | 17,473 | 16,015 |
| Uganda (b) | — | 40 | — | — | — | — |
| Zambia | 5,130 | 5,196 | 5,100 | (c) 5,000 | (c) 5,000 | (c) 5,000 |
| Canada | 3,835,454 | 3,606,031 | 3,318,006 | 2,993,366 | 2,743,021 | 2,502,169 |
| Guyana | 1,936 | 1,906 | 2,795 | 2,378 | 4,088 | 2,102 |
| India | 148,500 | 130,600 | 120,200 | 101,600 | 115,400 | 98,317 |
| Malaysia (West) (c) | 6,900 | 3,800 | 2,800 | 1,300 | 1,453 | 3,153 |
| Sarawak | 3,115 | 2,601 | 2,611 | 2,521 | 2,718 | 2,270 |
| Australia | 963,834 | 877,643 | 916,985 | 805,336 | 781,782 | 714,347 |
| Fiji | 100,493 | 109,095 | 112,567 | 110,033 | 106,854 | 91,572 |
| New Guinea and Papua | 38,978 | 32,494 | 28,106 | 27,671 | 26,144 | 25,857 |
| New Zealand | 8,948 | 12,136 | 8,964 | 10,703 | 8,626 | 10,717 |
| Solomon Islands | 113 | 310 | n.a. | n.a. | n.a. | n.a. |
| TOTAL | 6,662,000 | 6,185,000 | 5,820,000 | 5,388,000 | 5,082,000 | 4,712,000 |
| OTHER COUNTRIES | | | | | | |
| Finland | 22,055 | 18,037 | 15,465 | 20,281 | 21,380 | 18,872 |
| France | 54,296 | 57,390 | 60,164 | 62,730 | 58,450 | 54,946 |
| Germany (Federal) | 2,402 | 1,865 | (d) 1,800 | r 916 | 1,000 | 1,000 |
| Portugal | 21,300 | 21,500 | 18,800 | 18,400 | 17,400 | 16,000 |
| Spain | 24,000 | 8,300 | 450 | 932 | n.a. | n.a. |
| Sweden | 117,700 | 118,100 | 79,570 | 60,668 | 49,737 | 42,310 |
| Yugoslavia | 106,773 | 103,911 | 84,942 | 68,063 | 70,314 | 76,069 |
| Angola | 7 | 2 | — | — | 9 | 12 |
| Cameroun | 864 | 1,352 | 961 | 993 | 514 | 193 |
| Central African Republic | 70 | 20 | 40 | — | n.a. | n.a. |
| Congo (Republic of) | 3,270 | 3,390 | 3,730 | r 5,048 | 4,790 | 3,922 |
| Congo Republic | 189,000 | 66,000 | 160,000 | 153,000 | 169,885 | 167,055 |
| Eritrea | (d) 2,300 | } 24,236 | 21,256 | 23,612 | 24,113 | n.a. |
| Ethiopia | (d) 25,000 | | 31,500 | 29,386 | 16,525 | 14,243 |
| Gabon | 39,100 | 34,000 | 31,500 | 29,386 | 16,525 | 14,243 |
| Liberia (d) (a) | 1,824 | 1,701 | 4,351 | 5,111 | 3,216 | 1,136 |
| Malagasy Republic | 420 | 568 | 809 | 755 | 476 | 646 |
| Mozambique | 40 | 30 | 11 | 22 | 6 | 21 |
| South Africa | 29,111,524 | 30,553,874 | 30,879,700 | 30,532,880 | 31,094,466 | 31,281,274 |
| South-West Africa | 32 | 14 | 12 | — | 10 | — |
| Sudan | 877 | 300 | (c) 200 | 200 | 29 | n.a. |

(a) Years ended August 31 of year stated.

(b) Exports.

(c) Estimated.

(d) United States Bureau of Mines' estimate.

PRODUCTION OF GOLD (cont.)

Troy ounces fine

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Upper Volta | 29,400 | 29,250 | 14,470 | — | — | — |
| Costa Rica (c) | 3,000 | 600 | 600 | 500 | 500 | 500 |
| Haiti | 8,090 | 6,719 | 5,071 | (c) 6,000 | 3,100 | n.a. |
| Honduras (b) | 3,319 | 3,546 | 3,516 | 2,860 | 6,426 | 6,200 |
| Mexico | 210,000 | 215,800 | 213,600 | 165,300 | 176,958 | 180,623 |
| Nicaragua | 211,900 | 198,152 | 169,154 | 194,683 | 184,034 | 148,694 |
| Salvador | (b) 390 | (b) 290 | (b) 236 | 673 | n.a. | n.a. |
| United States | 1,456,308 | 1,705,190 | 1,803,420 | 1,584,187 | 1,478,292 | 1,733,176 |
| Argentina | 300 | 60 | 160 | — | 14 | n.a. |
| Bolivia (d) | 50,042 | 84,950 | 16,238 | 1,149 | 745 | 44,078 |
| Brazil (a) | 142,500 | 155,000 | 168,000 | 173,000 | 184,855 | 185,507 |
| Chile | 63,080 | 57,100 | 67,770 | 58,130 | 57,743 | 59,093 |
| Colombia | 364,748 | 316,267 | 275,267 | 257,588 | 238,658 | 217,966 |
| Ecuador | 16,905 | 11,512 | 10,901 | 6,738 | 8,659 | 7,287 |
| French Guiana | — | — | 630 | 7,588 | 5,112 | 3,569 |
| Peru | 92,503 | 105,183 | 94,978 | 95,559 | 82,502 | 87,759 |
| Surinam | 8,258 | 6,269 | 5,159 | (c) 4,500 | (c) 4,690 | 2,379 |
| Venezuela | 33,536 | 22,390 | 16,895 | 18,917 | 20,600 | 19,385 |
| Burma | (c) 200 | (c) 200 | (c) 200 | (c) 200 | (c) 200 | (c) 200 |
| Cambodia | (c) 6,000 | (c) 4,500 | (c) 4,000 | (c) 4,000 | (c) 4,000 | (c) 4,000 |
| Formosa | 17,700 | 32,100 | 41,800 | 32,500 | 21,000 | 21,400 |
| Indonesia | 5,813 | 6,752 | 4,128 | 7,748 | 5,967 | 7,597 |
| Japan | 253,300 | 264,900 | 254,400 | 253,000 | 238,500 | 253,000 |
| Korea (South) | 75,780 | 62,820 | 60,540 | 63,337 | 54,913 | 46,458 |
| Philippine Republic | 425,770 | 437,474 | 453,546 | 498,114 | 527,355 | 571,145 |
| TOTAL* | 33,200,000 | 34,700,000 | 35,100,000 | 34,700,000 | 34,900,000 | 35,300,000 |
| WORLD'S TOTAL* (excl. U.S.S.R.) | 39,900,000 | 40,900,000 | 40,900,000 | 40,100,000 | 40,000,000 | 40,000,000 |

*In view of the wide divergences in estimates of the production of gold in the U.S.S.R. (ranging from 2-18 million ounces) figures for that country have been omitted. The United States Bureau of Mines' revised estimate of annual production in recent years is 4-6 million ounces.

(a) Mined gold only.

(c) United States Bureau of Mines' estimate.

(b) Imports into the United States.

(d) Exports.

TOTAL EXPORTS OF GOLD*

(Metal content)

Troy ounces fine

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Bullion, refined | 17,593,435 | 76,518,130 | 36,952,000 | 60,360,000 | 54,772,621 | 10,676,259 |
| Coin | 2,408,318 | 2,100,438 | 1,324,117 | 920,170 | 399,815 | 596,356 |
| Ghana— | | | | | | |
| Bullion | 830,839 | 782,723 | 690,036 | 767,340 | 735,042 | 713,042 |
| Kenya— | | | | | | |
| Bullion | 12,162 | 13,813 | 12,019 | 26,942 | 24,741 | 16,044 |
| Rhodesia— | | | | | | |
| Concentrates, etc.* .. . | 1,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Bullion | 565,110 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Tanzania— | | | | | | |
| Bullion, refined | 93,040 | 90,817 | 55,473 | 18,486 | 17,474 | 16,017 |
| Uganda— | | | | | | |
| Bullion | — | 40* | — | — | — | — |
| Canada— | | | | | | |
| Bullion— | | | | | | |
| Unrefined | 87,797 | 87,479 | 86,352 | 103,774 | 136,917 | 141,339 |
| Refined | 3,161,509 | 1,940,013 | 1,171,898 | 2,296,197 | 16,186,394 | 4,534,660 |
| Coin* | 71,800 | 124,400 | 249,700 | 177,500 | 56,300 | 26,900 |
| Hong Kong— | | | | | | |
| Bullion | 766,209 | 1,462,979 | 1,431,726 | 1,732,887 | 710,838 | 727,791 |
| Australia (a)— | | | | | | |
| Ores, etc. | 55,568 | 48,543 | 131,349 | 151,909 | 100,222 | 102,502 |
| Bullion, refined | 449,003 | 576,575 | 768,702 | 515,134 | 485,480 | 695,176 |
| do. unrefined | 562 | 157 | 1 | 61,280 | 15,831 | — |
| Fiji— | | | | | | |
| Bullion | 100,193 | 109,760 | 109,732 | 112,698 | 106,784 | 95,346 |
| New Guinea (a)— | | | | | | |
| Bullion* | 42,003 | 34,262 | 30,038 | 28,473 | 23,422 | 22,472 |
| New Zealand* (a)— | | | | | | |
| Beaten, rolled or drawn | 8,000 | 7,000 | 5,000 | 3,000 | 2,000 | <i>n.a.</i> |
| Papua (a)— | | | | | | |
| Bullion* | 28 | 56 | 56 | 30 | 47 | 6 |
| Solomon Islands— | | | | | | |
| Bullion | 101 | 323 | 349 | 672 | 654 | 413 |
| Irish Republic*— | | | | | | |
| Bullion | 1,338 | 1,380 | 3,900 | 1,800 | 1,529 | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Bullion and scrap | 43,000 | 51,000 | 79,000* | 119,000* | 374,950 | 141,703 |
| Coin | 113,000 | 60,000 | 106,000 | 64,301 | 128,603 | 212,195 |
| France— | | | | | | |
| Beaten, rolled or drawn | 28,000 | 21,000* | 47,000* | 53,000* | 98,000 | 62,000 |
| Germany (Federal)— | | | | | | |
| Bullion | 241,000 | 316,800 | 300,000 | 358,000 | 802,000 | 889,500 |

*Some countries record trade in gold by value or by the gross weight of bullion only. In such cases the weight has been obtained by dividing the value by the official annual average price of gold per fine ounce but in no case has any account been taken of the premium. Countries or items for which this conversion has been effected are marked with an asterisk.

(a) Years ended June 30 of that stated.

EXPORTS OF GOLD (cont.)

Troy ounces fine

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-------------|-------------|-------------|--------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Netherlands— | | | | | | |
| Bullion, etc. | 17,000* | 78,000* | 28,000* | 28,000 | 38,000 | 35,000 |
| Coin | 1,100 | — | 29,000 | — | 1,000 | 1,000 |
| Sweden*— | | | | | | |
| Bullion | 57,000 | 56,000 | 57,000 | 16,000 | 46,000 | 54,000 |
| Switzerland— | | | | | | |
| Bullion | 497,000 | 702,000* | 659,000* | 681,000 | 1,598,000 | 724,549 |
| Cameroun— | | | | | | |
| Bullion | 800 | 700* | <i>n.a.</i> | <i>n.a.</i> | <i>n. r.</i> | <i>n.a.</i> |
| Equatorial African Community— | | | | | | |
| Bullion | 35,000* | 30,000* | 25,000* | 23,000 | <i>n.a.</i> | <i>n.a.</i> |
| Mozambique— | | | | | | |
| Bullion | 393,000* | 291,000 | 294,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| South Africa— | | | | | | |
| Bullion | 30,846,000 | 35,090,000 | 24,534,000 | 32,294,000 | <i>n.a.</i> | <i>n.a.</i> |
| Sudan*— | | | | | | |
| Bullion | 200 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Upper Volta— | | | | | | |
| Bullion | 33,000 | 32,500 | 18,230 | — | — | — |
| Honduras— | | | | | | |
| Ore and base bullion | 2,200* | — | 3,860 | 4,906 | 6,005 | <i>n.a.</i> |
| Mexico— | | | | | | |
| Bullion | 22,000 | 6,000 | 7,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Nicaragua— | | | | | | |
| Bullion | 200,749 | 153,900* | 147,829 | 145,804 | 137,637 | 107,672 |
| United States— | | | | | | |
| Ore and base bullion | 21,566 | 49,836 | 49,117 | 112,578 | 181,385 | 58,867 |
| Refined bullion | 12,056,841 | 36,667,207 | 13,017,549 | 28,607,404 | 23,781,006 | 279,434 |
| Bolivia— | | | | | | |
| Ore | 488 | 300 | 555 | 1,149 | 745 | 44,078 |
| Bullion | 49,554 | 84,650 | 15,683 | 1,100 | 760 | <i>n.a.</i> |
| Chile— | | | | | | |
| Ores and concentrates | 55,621 | 52,920 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| French Guiana— | | | | | | |
| Bullion | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 1,100 | <i>n.a.</i> | <i>n.a.</i> |
| Peru— | | | | | | |
| Ores, concentrates, etc. | 36,847 | 35,734 | 43,594 | } 33,887 | 32,000 | 46,000 |
| Bullion | 2,487 | 8,900 | 10,044 | | | |
| Philippine Republic— | | | | | | |
| Ore and base bullion (a) | 46,067 | 62,184 | 93,872 | 56,677 | 61,597 | 47,110 |
| Refined bullion (a) | 318,615 | 321,583 | 295,718 | 286,087 | 426,376 | 412,158 |

(a) Imports into the United States.

TOTAL IMPORTS OF GOLD*

(Metal content)

Troy ounces fine

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ore, etc.* | 300 | 8,200 | 5,000 | — | 4 | — |
| Bullion— | | | | | | |
| Unrefined | 1,550,421 | 1,526,633 | 763,770 | 819,002 | 819,275 | 767,759 |
| Refined | 39,299,321 | 37,884,653 | 25,838,792 | 33,735,000 | 44,636,753 | 12,874,620 |
| Coin | 451,450 | 551,080 | 72,060 | 118,382 | 90,062 | 52,185 |
| Malta*— | | | | | | |
| Bullion and coin .. | 9,200 | 11,000 | 13,200 | 14,500 | 11,000 | 9,400 |
| Ghana— | | | | | | |
| Bullion | 4,942 | — | <i>n.a.</i> | 610 | 2,500 | <i>n.a.</i> |
| Partly worked | 808 | 1,904 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Coin | 2,115 | 49,933 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Kenya— | | | | | | |
| Bullion | 5,285 | 6,858 | 7,034 | 6,748 | 7,318 | 7,030 |
| Rhodesia*— | | | | | | |
| Concentrates | 2,200 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Tanzania— | | | | | | |
| Bullion | 1,434 | 2,700 | 3,676 | 556 | 62 | 152 |
| Uganda— | | | | | | |
| Bullion | 2,599 | 1,172 | 3,810 | 2,745 | 1,173 | 2,865 |
| Canada— | | | | | | |
| Bullion | 141,318 | 373,302 | 155,716 | 473,808 | 332,628 | 90,482 |
| Coin* | 75,000 | 442,000 | 29,000 | 133,000 | 221,000 | 78,000 |
| Jamaica*— | | | | | | |
| Bullion and coin .. | 200 | <i>n.a.</i> | — | 5,998 | — | — |
| Trinidad and Tobago— | | | | | | |
| Bullion and coin .. | 9,252 | 9,011 | 7,020 | 8,578 | 6,957 | <i>n.a.</i> |
| Brunei— | | | | | | |
| Bullion | 52,750 | 38,588 | 59,217 | 61,116 | 28,390 | 29,810 |
| Ceylon*— | | | | | | |
| Bullion | 100 | 11,000 | — | 30 | 55 | 20 |
| Partly worked | 13,500 | 100 | 12,700 | — | — | — |
| Cyprus— | | | | | | |
| Bullion | 7,581 | 13,036 | 15,706 | 16,084 | (c) 15,738 | (c) 15,414 |
| Hong Kong— | | | | | | |
| Bullion | 753,366 | 1,496,147 | 1,371,774 | 1,756,121 | 666,544 | 761,758 |
| Sabah— | | | | | | |
| Bullion | 4,610 | 15,528 | <i>n.a.</i> | 12,599 | 8,365 | 6,000 |
| Sarawak— | | | | | | |
| Bullion (b) | 23,000 | 30,000 | 26,000 | 18,000 | 18,000 | <i>n.a.</i> |
| Australia (a)— | | | | | | |
| Bullion | 149,109 | 129,415 | (d) 197,748 | (d) 151,792 | (d) 145,728 | (d) 113,369 |
| Fiji*— | | | | | | |
| Bullion | 400 | 200 | 300 | 300 | 300 | <i>n.a.</i> |
| New Zealand (a)— | | | | | | |
| Bullion | 1,257 | 429 | 1,838 | 588 | 30 | <i>n.a.</i> |
| Beaten, rolled or drawn | 9,746 | 10,150 | 10,744 | 13,088 | 7,395 | <i>n.a.</i> |
| Irish Republic*— | | | | | | |
| Bullion | 12,800 | 21,200 | 20,400 | 23,500 | 30,000 | <i>n.a.</i> |

*See note on page 131.

(a) Years ended June 30 of that stated.

(b) Including coin and partly worked.

(c) Including partly worked.

(d) Owing to reclassification not strictly comparable with earlier years.

IMPORTS OF GOLD (cont.)

Troy ounces fine

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Bullion | 683,000* | 986,000* | 1,161,000* | 1,507,000 | 994,000 | 660,183 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Bullion, scrap, etc. .. | 418,000 | 1,140,000* | 656,000* | 1,275,000 | 1,097,000 | 1,480,000 |
| Coin | 270,000 | 610,000* | 579,000 | 479,000 | 212,000 | 212,000 |
| Finland— | | | | | | |
| Bullion and scrap .. | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 77,700 | 22,042 | 38,324 |
| France— | | | | | | |
| Beaten, rolled or drawn | 15,000 | 14,000 | 15,000 | 18,000 | 68,400 | 144,335 |
| Germany (Federal)— | | | | | | |
| Bullion | 2,694,000 | 3,656,900* | 3,686,000* | 5,256,000 | 4,195,000 | 4,018,000 |
| Coin | 99,000 | 251,100 | 345,000 | 345,000 | 301,000 | 358,000 |
| Italy— | | | | | | |
| Bullion and scrap .. | 1,299,000* | 1,578,000 | 1,071,000* | 1,620,000 | 1,038,000 | 1,473,000 |
| Netherlands— | | | | | | |
| Bullion | 197,000 | 235,000* | 38,000 | 35,000 | 53,000 | 42,000 |
| Coin | 100 | — | 1,000 | 39 | 200 | 600 |
| Norway— | | | | | | |
| Bullion | 24,000 | 29,800 | 26,200 | 40,000 | 38,000 | 33,000 |
| Sheets and rolled .. | 5,000 | 4,400* | 5,500* | 6,500 | (b) 10,000 | (b) 17,000 |
| Sweden— | | | | | | |
| Bullion* | 176,000 | 270,000 | 202,000 | 161,000 | 95,000 | 85,000 |
| Switzerland— | | | | | | |
| Bullion | 162,900 | 245,000 | 247,000 | 680,000 | 135,000 | 97,000 |
| Mozambique— | | | | | | |
| Bullion | 102,000* | 200* | 266,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sudan— | | | | | | |
| Bullion | 64 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| United States— | | | | | | |
| Ore and base bullion .. | 314,674 | 292,167 | 333,119 | 219,382 | 213,662 | 236,738 |
| Refined bullion .. | 854,211 | 2,613,161 | 866,926 | 710,487 | 5,730,853 | 5,624,649 |
| Brazil— | | | | | | |
| Bullion | 1,300 | 125 | 250* | 17,000* | 80,000* | <i>n.a.</i> |
| Formosa— | | | | | | |
| Bullion | 112,000 | 11,000 | 215,000 | 315,119 | <i>n.a.</i> | <i>n.a.</i> |
| Lebanon— | | | | | | |
| Bullion and scrap .. | 2,272,000 | 2,610,000* | 3,284,000 | 2,939,000 | 2,297,000 | 2,106,000 |
| Syria— | | | | | | |
| Bullion and scrap (a) .. | 11,800 | <i>n.a.</i> | <i>n.a.</i> | 360,000 | <i>n.a.</i> | <i>n.a.</i> |

*See note on page 131.

(a) Gross weight.

(b) Owing to a change of classification, not strictly comparable with previous years.

GRAPHITE
PRODUCTION OF GRAPHITE

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Ceylon (c) | 10,676 | 8,740 | 9,867 | 10,203 | 10,631 | 11,238 |
| Hong Kong— | | | | | | |
| 72%-80% fixed carbon | 617 | — | — | 3 | 297 | 135 |
| 50% fixed carbon .. | 93 | — | — | 16 | 201 | 87 |
| OTHER COUNTRIES | | | | | | |
| Austria (a) | 100,622 | 84,401 | 78,283 | 31,043 | 25,066 | 25,417 |
| Germany (Federal) .. | 13,211 | 13,397 | 12,935 | 11,666 | 12,640 | 12,829 |
| Italy | 1,664 | 1,152 | 1,053 | 1,847 | 1,107 | 1,691 |
| Norway | 7,128 | 8,346 | 7,818 | 7,439 | 8,140 | 9,173 |
| U.S.S.R. (b) | 59,000 | 59,000 | 64,000 | 64,000 | 69,000 | 69,000 |
| Malagasy Republic— | | | | | | |
| Flake | 6,953 | 8,012 | 7,873 | } 16,146 | 16,170 | 16,602 |
| Powder | 6,011 | 8,734 | 8,234 | | | |
| South Africa | 930 | 399 | 1,037 | 629 | 711 | 451 |
| South-West Africa .. | 246 | 354 | 357 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Mexico | 29,857 | 39,775 | 38,140 | 40,047 | 51,862 | 42,243 |
| Argentina | 218 | 114 | 155 | 211 | 108 | <i>n.a.</i> |
| Brazil | 4,598 | 6,851 | 9,018 | 9,080 | <i>n.a.</i> | <i>n.a.</i> |
| China (b) | 40,000 | 40,000 | 40,000 | 30,000 | 30,000 | 30,000 |
| Japan— | | | | | | |
| Flake | 2,024 | } 2,216 | 2,168 | 1,688 | 1,465 | 1,699 |
| Amorphous | 388 | | | | | |
| Korea (South)— | | | | | | |
| Flake | 2,043 | 2,724 | 2,126 | 2,388 | 633 | 584 |
| Amorphous | 258,238 | 250,235 | r 483,245 | r 358,251 | 353,330 | 305,104 |
| Korea (North) (b) .. | 70,000 | 70,000 | 74,000 | 74,000 | 74,000 | 74,000 |
| TOTAL* | 630,000 | 615,000 | 855,000 | 674,000 | 679,000 | 620,000 |

*An allowance has been made for graphite produced in India, Czechoslovakia and the United States.

(a) Crude.

(b) United States Bureau of Mines' estimate.

(c) Exports.

EXPORTS OF GRAPHITE

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|--------|--------|--------|--------|--------|--------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Crucibles | 3,527 | 3,553 | 3,391 | 3,650 | 3,612 | 3,844 |
| Ceylon | 10,676 | 8,740 | 9,867 | 10,203 | 10,631 | 11,238 |
| Hong Kong | 460 | 352 | 305 | 30 | 100 | 300 |
| India (b) | 14 | 8 | 11 | 33 | 164 | 124 |
| Australia (a) | 3 | 20 | 21 | — | — | — |
| OTHER COUNTRIES | | | | | | |
| Austria | 18,850 | 20,852 | 16,610 | 17,923 | 24,329 | 24,069 |
| Belgium-Luxemburg | | | | | | |
| E.U. | 44 | 8 | 28 | 5 | 32 | 11 |
| Denmark | 10 | 13 | 7 | 2 | 23 | 1 |
| France | 2,250 | 1,871 | 1,760 | 1,667 | 1,178 | 868 |
| Germany (Federal) | 6,580 | 7,636 | 7,065 | 7,554 | 7,907 | 7,461 |
| Italy | 1,272 | 1,654 | 1,398 | 1,467 | 1,543 | 1,478 |
| Netherlands | 81 | 27 | 59 | 68 | 189 | 151 |
| Norway | 7,389 | 8,211 | 7,638 | 7,274 | 8,558 | 8,491 |
| Sweden | 8 | 24 | 133 | 155 | 47 | — |
| U.S.S.R. | 7,400 | 6,000 | 8,200 | 9,349 | 10,039 | 11,900 |
| Malagasy Republic | 13,833 | 17,661 | 16,549 | 15,943 | 15,634 | 18,222 |
| South Africa | 38 | 65 | 24 | 16 | 19 | 22 |
| Mexico | 31,194 | 36,871 | 36,586 | 38,110 | 49,819 | n.a. |
| United States | 1,753 | 2,854 | 2,822 | 3,187 | 3,722 | 5,049 |
| Formosa | 261 | 192 | 185 | 5 | 36 | 10 |
| Japan | 345 | 689 | 666 | 640 | n.a. | 945 |
| Korea (South) | 42,045 | 48,102 | 55,183 | 50,422 | 47,278 | 42,345 |

(a) Years ended June 30 of that stated.

(b) Years ended March 31 following that stated.

IMPORTS OF GRAPHITE

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-----------|-----------|-----------|-----------|------------|------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Natural | 9,137 | 10,284 | 10,011 | 8,280 | 10,105 | 10,162 |
| Artificial | 531 | 2,635 | 737 | 1,831 | 590 | 1,178 |
| Canada— | | | | | | |
| Crucibles | (£81,196) | (£92,367) | (£92,393) | (£78,315) | (£118,000) | (£141,000) |
| Hong Kong | 417 | 60 | 31 | 5 | 47 | 132 |
| India (a)— | | | | | | |
| Graphite | 2,183 | 13,359 | 908 | 1,409 | 940 | 946 |
| Crucibles | n.a. | 974 | 439 | 736 | 568 | 334 |
| Malaysia West .. | n.a. | 109 | 145 | 144 | 174 | 103 |
| Pakistan— | | | | | | |
| Australia (b) .. | (c) 1,268 | (c) 1,543 | 1,211 | 1,449 | 1,274 | 1,741 |
| New Zealand (b) .. | 27 | 36 | 89 | 207 | 129 | n.a. |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Graphite | 219 | 293 | 231 | 293 | 683 | 582 |
| Crucibles, etc. .. | 174 | 227 | 259 | 412 | 307 | 517 |
| Belgium-Luxemburg | | | | | | |
| E.U. | 997 | 887 | 617 | 537 | 717 | 860 |
| Denmark | 405 | 361 | 403 | 283 | 296 | 395 |
| Finland | 242 | 424 | 386 | 341 | 326 | 323 |
| France | 4,375 | 4,928 | 4,803 | 4,805 | 4,700 | 3,751 |
| Germany (Federal) .. | 15,955 | 17,449 | 14,284 | 16,706 | 20,606 | 20,970 |
| Germany (East) .. . | 5,482 | 5,447 | 4,379 | 5,460 | 5,670 | 5,082 |
| Greece | 270 | 363 | 290 | 255 | 187 | 352 |
| Iceland | — | — | 1 | — | — | — |
| Italy | 9,181 | 11,275 | 9,385 | 13,567 | 13,361 | 13,772 |
| Netherlands | 358 | 337 | 242 | 182 | 235 | 443 |
| Norway | 244 | 280 | 452 | 380 | 342 | 384 |
| Poland | 10,352 | 10,405 | 12,266 | 9,854 | 11,386 | 10,492 |
| Portugal | 109 | 130 | 142 | 156 | 184 | 142 |
| Spain | 796 | 788 | 926 | 761 | 837 | 871 |
| Sweden | 897 | 924 | 1,438 | 966 | 1,090 | 1,210 |
| Switzerland | 552 | 547 | 616 | 463 | 500 | 347 |
| Yugoslavia | 1,043 | 1,032 | 919 | 1,123 | 878 | 984 |
| Morocco | 14 | 18 | 18 | 8 | 23 | 30 |
| Mozambique | 33 | 6 | 4 | 1 | n.a. | n.a. |
| South Africa | 540 | 442 | 422 | 465 | 484 | 346 |
| Sudan | — | — | 9 | — | 16 | 2 |
| Tunisia | — | 12 | 10 | 2 | — | — |
| Mexico— | | | | | | |
| Graphite | 65 | 266 | 131 | 204 | 184 | n.a. |
| Crucibles | 299 | 157 | 155 | n.a. | 240 | n.a. |

(a) Years ended March 31 following that stated.

(c) Including artificial.

(b) Years ended June 30 of that stated.

IMPORTS OF GRAPHITE (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|--------|--------|--------|----------|--------|--------|
| OTHER COUNTRIES (cont.) | | | | | | |
| United States (a) .. | 42,093 | 51,798 | 50,568 | r 43,144 | 60,550 | 52,176 |
| Argentina | 149 | 333 | 340 | 177 | 366 | — |
| Brazil— | | | | | | |
| Graphite | 133 | 177 | 124 | 165 | 154 | n.a. |
| Crucibles | 401 | 218 | 587 | 260 | 505 | n.a. |
| Chile | 170 | 84 | n.a. | 312 | n.a. | n.a. |
| Colombia (b) | 39 | 54 | 107 | 45 | 45 | n.a. |
| Peru (b) | 87 | 107 | 72 | 251 | 61 | n.a. |
| Uruguay | n.a. | 32 | 3 | 7 | 8 | 10 |
| Venezuela | 184 | 295 | 524 | 266 | 186 | 150 |
| Burma | 96 | 472 | r 25 | r 86 | 56 | n.a. |
| Formosa | 1,522 | 2,846 | 2,750 | 1,970 | 4,577 | 4,362 |
| Lebanon (b) | 538 | 105 | 10 | 34 | 92 | 28 |
| Japan | 55,773 | 51,437 | 51,909 | 54,325 | 61,939 | 56,694 |
| Philippine Republic .. | 107 | 34 | n.a. | 56 | n.a. | n.a. |
| Thailand | 482 | 471 | 431 | 842 | 1,000 | 990 |
| Turkey— | | | | | | |
| Graphite | 137 | 138 | 143 | 232 | 243 | 323 |
| Crucibles, etc. | 118 | 165 | 152 | 206 | 372 | 228 |

(a) In addition the following amounts of artificial graphite were imported:

| Year | Long tons | |
|------------|-----------|-----|
| 1964 | .. | 50 |
| 1965 | .. | 37 |
| 1966 | .. | 99 |
| 1967 | .. | 279 |
| 1968 | .. | 100 |
| 1969 | .. | 17 |

(b) Including artificial graphite.

GYPSUM
PRODUCTION OF GYPSUM

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Gypsum | 2,467,100 | 2,596,200 | 2,534,000 | 2,671,000 | 2,560,000 | 2,809,000 |
| Anhydrite | 2,048,000 | 1,799,000 | 1,724,000 | 1,850,000 | 2,154,000 | 1,714,000 |
| Kenya | 27,552 | 33,929 | 33,210 | 39,807 | 41,438 | 60,868 |
| Tanzania | 2,910 | 6,126 | 3,190 | 15,235 | 4,391 | 10,858 |
| Zambia | — | — | 1,058 | 1,478 | 1,058 | (e) 1,200 |
| Canada (a) (f) | 5,732,177 | 5,630,006 | 5,335,861 | 4,620,879 | 5,291,910 | 6,135,688 |
| Jamaica | 192,128 | 208,492 | 189,546 | 183,857 | 208,000 | 251,000 |
| Trinidad | 2,260 | 1,836 | 1,981 | 3,589 | 4,251 | 4,000 |
| Cyprus | r 48,911 | r 53,926 | r 52,024 | r 49,800 | 20,000 | 16,030 |
| India | 868,555 | 1,142,000 | 1,273,000 | 1,011,764 | 1,298,000 | 1,345,000 |
| Pakistan (g) | 192,283 | 147,068 | 111,210 | 101,000 | 45,321 | 134,000 |
| Australia | 795,003 | 833,521 | 801,552 | r 914,084 | 843,744 | 854,880 |
| Irish Republic | 228,036 | n.a. | n.a. | n.a. | n.a. | n.a. |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Gypsum | 376,441 | 459,911 | 616,064 | 579,157 | 554,278 | 521,686 |
| Anhydrite | 182,657 | 148,250 | 148,653 | 147,232 | 132,908 | 143,676 |
| Bulgaria | 127,000 | 171,000 | r 173,000 | r 164,000 | 206,000 | (e) 197,000 |
| Czechoslovakia | 345,000 | 366,000 | r 350,000 | r 365,000 | 401,000 | 433,000 |
| France (a) | 4,834,477 | 4,933,544 | 5,188,513 | 5,108,097 | 5,230,600 | 5,865,000 |
| Germany (Federal)— | | | | | | |
| Gypsum | (c)1,258,200 | (c)1,279,000 | 1,295,513 | 1,221,753 | 1,454,535 | 1,737,090 |
| Anhydrite | 99,819 | 140,643 | 142,710 | 99,203 | 42,996 | 60,303 |
| Germany (East) (d) | 261,000 | 254,000 | 255,000 | 268,000 | 264,000 | 278,000 |
| Greece | 138,394 | r 153,649 | 200,516 | r 215,541 | 226,657 | 231,300 |
| Italy (including alabaster) | 2,509,342 | 3,124,212 | 3,315,561 | (b)3,250,000 | (b)3,250,000 | (b)3,250,000 |
| Luxemburg | 7,045 | 7,565 | 6,000 | 9,307 | 6,264 | 9,044 |
| Poland (e) | 748,000 | 750,000 | 750,000 | 743,000 | 778,000 | 797,000 |
| Portugal | 63,953 | 79,650 | 111,117 | 102,586 | 104,617 | 93,632 |
| Spain— | | | | | | |
| Gypsum (b) | 3,307,000 | 3,588,000 | } 3,816,000 | | 3,838,000 | 3,937,000 |
| Anhydrite (b) | n.a. | n.a. | | | | |
| Switzerland (e) | 100,000 | 100,000 | 100,000 | n.a. | n.a. | n.a. |
| U.S.S.R. | 4,137,000 | 4,275,000 | (e)4,424,000 | (e)4,617,000 | 4,773,000 | (e)4,800,000 |
| Yugoslavia | 153,000 | 164,000 | 166,000 | 168,000 | 194,000 | (e) 200,000 |
| Angola | 9,890 | 10,000 | (e) 10,000 | r 11,798 | 12,782 | 16,138 |
| Egypt | 332,120 | 225,316 | 450,850 | 536,265 | 561,160 | 462,400 |
| Libya | 400 | 1,836 | 3,000 | 3,000 | 3,000 | n.a. |
| Niger | — | 1,500 | (e) 2,000 | 1,702 | 1,926 | n.a. |
| South Africa | 236,292 | 299,141 | 291,857 | 302,734 | 311,058 | 353,744 |
| Sudan | 4,000 | 4,000 | 2,000 | 4,000 | 10,000 | n.a. |
| Dominican Republic | 107,962 | 88,085 | 89,000 | 117,000 | 98,000 | (e) 98,000 |
| Guatemala | 7,000 | 9,000 | 12,000 | 11,000 | 7,578 | 7,602 |
| Mexico | 1,146,654 | 1,064,660 | 1,133,000 | 961,000 | 1,216,000 | 1,200,000 |
| Nicaragua | 5,500 | 5,000 | 9,000 | 10,000 | 14,000 | 30,000 |
| United States | 9,539,000 | 8,960,000 | 8,613,000 | 8,387,000 | 8,945,000 | 8,822,000 |
| Argentina (a) | 148,125 | 201,046 | 283,650 | 260,473 | 365,171 | n.a. |
| Brazil | 83,072 | 71,392 | 78,956 | 70,322 | 213,374 | n.a. |
| Chile | 117,278 | 105,466 | 118,000 | 130,653 | 119,000 | n.a. |
| Colombia | 105,800 | 110,000 | 113,000 | 116,000 | 121,000 | 151,250 |
| Paraguay | 770 | 2,200 | 3,000 | 2,000 | 3,400 | 3,445 |
| Peru | 49,246 | 65,425 | r 36,534 | r 40,771 | n.a. | n.a. |
| Venezuela | 75,000 | 89,000 | (e) 85,000 | (e) 84,000 | (e) 100,000 | 81,000 |

(a) Including anhydrite.

(b) Estimated.

(c) Excluding a small production in Rheinland-Pfalz.

(d) Crude estimated on production of calcined

(e) United States Bureau of Mines' estimate.

(f) Producers' shipments.

(g) West Pakistan.

PRODUCTION OF GYPSUM (cont.)

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Burma | (a) 1,000 | (a) 1,000 | (a) 1,000 | r 1,970 | 3,543 | 3,444 |
| Formosa | 16,824 | 27,320 | 8,280 | 16,197 | 5,547 | 5,042 |
| Israel | 74,000 | 90,000 | 100,000 | 90,000 | 70,000 | 80,000 |
| Japan | 738,914 | 639,000 | 588,000 | 575,000 | 553,671 | 551,117 |
| Philippine Republic | 40,311 | 27,054 | 15,087 | 19,953 | 20,325 | 36,400 |
| Saudi Arabia | 11,456 | 24,518 | 25,697 | 30,108 | 39,665 | (b) 34,400 |
| Syria | 20,000 | (b) 15,000 | (b) 15,000 | (b) 15,000 | (b) 15,000 | (b) 15,000 |
| Thailand | 41,238 | 11,063 | 39,003 | 60,722 | 126,070 | 90,580 |
| Turkey (a) | 200,000 | 220,000 | 250,000 | 275,000 | 290,000 | (a) 295,000 |
| TOTAL* | 45,000,000 | 44,000,000 | 44,000,000 | 44,000,000 | 47,000,000 | 49,000,000 |

*Excluding gypsum known to have been produced in Roumania, Cuba, China and many other countries. Also excluded is production of "Juss" (an impure sandy gypsum) in Iraq.

(a) Estimated.

(b) United States Bureau of Mines' estimate.

EXPORTS OF GYPSUM

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-----------|-----------|-----------|-----------|-----------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Calcined | 7,602 | 10,570 | 11,589 | 8,653 | 9,402 | 9,880 |
| Tanzania | 2,910 | 4,488 | 1,526 | — | 100 | 400 |
| Canada— | | | | | | |
| Crude | 4,515,404 | 4,238,070 | 4,171,891 | 3,478,691 | 3,985,362 | 4,349,271 |
| Jamaica | 137,463 | 192,738 | 197,769 | 188,696 | 249,326 | 337,225 |
| Cyprus— | | | | | | |
| Crude | 42,523 | 41,042 | 55,650 | 12,954 | 10,132 | 5,577 |
| Calcined | 1,670 | 1,418 | 1,196 | 293 | 213 | 194 |
| India (b) | 5 | 1 | — | — | 935 | 5 |
| Malaysia (West)— | | | | | | |
| Crude and calcined .. | <i>n.a.</i> | 228 | 20 | 34 | 29 | 61 |
| Singapore— | | | | | | |
| Crude and calcined .. | 306 | 756 | 1,157 | 593 | 327 | 1,392 |
| Australia (a)— | | | | | | |
| Crude | 181,021 | 166,557 | 184,450 | 238,873 | 211,185 | 263,658 |
| Calcined | 269 | 543 | 617 | 516 | 736 | 905 |
| Irish Republic— | | | | | | |
| Crude | 98,072 | 97,463 | 93,509 | 96,310 | 107,478 | 98,118 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Crude | 56,078 | 57,139 | 77,665 | 92,600 | 103,550 | 112,936 |
| Calcined | 998 | 1,177 | 804 | 818 | 1,365 | 1,690 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Crude | 338 | 722 | 299 | 44 | 182 | 1,594 |
| Calcined | 15,261 | 15,482 | 13,789 | 10,481 | 10,459 | 10,613 |
| Denmark— | | | | | | |
| Crude and calcined .. | 7 | 11 | 29 | 125 | 55 | 128 |
| France— | | | | | | |
| Crude | 636,357 | 649,802 | 665,445 | 689,472 | 734,991 | 803,502 |
| Calcined | 118,063 | 124,348 | 129,210 | 134,715 | 114,885 | 104,412 |
| Germany (Federal)— | | | | | | |
| Crude and calcined .. | 262,879 | 246,017 | 354,734 | 291,752 | 296,269 | 309,038 |
| Germany (East)— | | | | | | |
| Calcined | 49,943 | 59,771 | 32,571 | 58,266 | 71,809 | 66,878 |
| Italy— | | | | | | |
| Crude | 2,155 | 14,841 | 17,114 | 16,152 | 28,961 | 13,355 |
| Calcined | 11,007 | 3,237 | | | | |
| Netherlands— | | | | | | |
| Crude | 48 | 44 | 22 | 21 | 38 | 323 |
| Calcined | 107 | 123 | 80 | 208 | 159 | 858 |
| Poland | 385,666 | 480,627 | 447,000 | 441,130 | 532,802 | 517,951 |
| Portugal— | | | | | | |
| Crude | 153 | 130 | 216 | 122 | 200 | 72 |
| Calcined | 107 | 70 | 165 | 85 | 92 | 162 |
| Spain— | | | | | | |
| Crude and calcined .. | 4,433 | 6,523 | 3,756 | 4,762 | 4,182 | 15,202 |
| Sweden— | | | | | | |
| Calcined | 8 | — | — | — | 5 | — |
| Switzerland— | | | | | | |
| Ground and calcined .. | 108 | 68 | 109 | 1,334 | 2,183 | 2,354 |
| Yugoslavia— | | | | | | |
| Crude | 15 | 49 | 157 | — | 47 | 1,789 |
| Ground and calcined .. | — | | | | | |
| Angola— | | | | | | |
| Crude | 5,592 | 5,478 | 5,613 | 9,486 | 7,271 | 6,928 |

(a) Years ended June 30 of that stated. (b) Years ended March 31 following that stated.

EXPORTS OF GYPSUM (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-----------|---------|---------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Egypt— | | | | | | |
| Crude and ground | } 77,752 | 37,742 | 52,199 | 38,514 | 819 | 44 |
| Calcined | | | | | | |
| Morocco— | | | | | | |
| Crude | 13,178 | 34,356 | 48,772 | 49,887 | 66,785 | 76,102 |
| Calcined | 11,009 | 10,885 | 1,240 | 962 | 805 | 1,039 |
| South Africa | 16,575 | 19,507 | 21,293 | 20,373 | 25,799 | 26,388 |
| Mexico— | | | | | | |
| Crude | 1,118,913 | 1,058,873 | 964,142 | 860,142 | 1,142,898 | <i>n.a.</i> |
| Calcined | 13 | 80 | 22 | 69 | 3 | <i>n.a.</i> |
| United States— | | | | | | |
| Crude and calcined | 18,468 | 25,340 | 34,045 | 35,114 | 35,433 | 36,108 |
| Argentina | 9,122 | 13,922 | 17,945 | 13,097 | 14,799 | 9,637 |
| Bolivia | 687 | 467 | 1,929 | 1,920 | <i>n.a.</i> | <i>n.a.</i> |
| Venezuela | 3,423 | 1,183 | 2,166 | 6,693 | 9,616 | 13,754 |
| Iran (a)— | | | | | | |
| Crude | } 2,519 | { 46 | — | — | — | <i>n.a.</i> |
| Calcined | | | | | | |
| Japan— | | | | | | |
| Crude | 6,526 | 6,439 | 6,438 | 6,726 | 5,664 | 7,305 |
| Calcined | 365 | 780 | 7,266 | 3,949 | 7,908 | 9,248 |
| Syria | <i>n.a.</i> | 8,319 | 25,920 | 16,633 | 23,893 | 32,249 |

(a) Years ended March 20 following that stated.

IMPORTS OF GYPSUM

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|---------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Crude and calcined .. | 154,481 | 156,212 | 147,010 | 143,378 | 188,255 | 165,103 |
| Ghana | 25 | 4,577 | 2,520 | 5,483 | 7,697 | 19,104 |
| Malawi | 675 | 1,357 | 904 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Rhodesia— | | | | | | |
| Crude and calcined .. | 9,252 | 7,707 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Zambia | 7,617 | 9,250 | 16,044 | 2,870 | 21,345 | 18,797 |
| Bermuda— | | | | | | |
| Calcined | 601 | 306 | 325 | 267 | 269 | 240 |
| Canada— | | | | | | |
| Crude and ground .. | 72,309 | 67,351 | 76,708 | 61,707 | 61,662 | 73,035 |
| Calcined | 3,712 | 4,216 | | | | |
| Hong Kong | 9,870 | 9,832 | 17,766 | 4,329 | 22,263 | 18,326 |
| India (a)— | | | | | | |
| Crude | 98,872 | 15,434 | 8 | — | 2 | 1 |
| Calcined | 14 | | | | | |
| Malaysia (West)— | | | | | | |
| Crude and calcined .. | <i>n.a.</i> | 18,026 | 25,671 | 29,928 | 35,467 | 30,149 |
| Singapore— | | | | | | |
| Crude and calcined .. | 18,747 | 15,064 | 17,895 | 11,243 | 23,754 | 24,420 |
| New Zealand (b)— | | | | | | |
| Crude | 87,234 | 104,419 | 108,186 | 109,641 | 86,570 | 94,154 |
| Calcined | 2,362 | 1,858 | 1,650 | 1,279 | 1,045 | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Crude | 3,876 | 7,298 | 11,620 | 16,066 | 17,433 | 13,702 |
| Calcined | 3,736 | 42 | 7,546 | 11,008 | 12,695 | 8,223 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Crude | 372,748 | 375,278 | 388,658 | 378,147 | 392,263 | 393,719 |
| Calcined | 50,469 | 58,151 | 53,357 | 54,070 | 46,923 | 57,758 |
| Denmark— | | | | | | |
| Crude | 77,806 | 92,621 | 89,038 | 100,299 | 108,513 | 167,030 |
| Calcined | 6,739 | 6,423 | 5,069 | 6,667 | 4,890 | 4,739 |
| Finland— | | | | | | |
| Crude | 76,309 | 85,367 | 69,425 | 73,251 | 77,244 | 86,482 |
| Calcined | 43,947 | 45,463 | 38,041 | 39,676 | 43,158 | 40,129 |
| France— | | | | | | |
| Crude | 17,479 | 17,644 | 18,234 | 16,715 | 16,483 | 7,853 |
| Calcined | 2,595 | 4,115 | 4,496 | 21,011 | 4,155 | 2,788 |
| Germany (Federal)— | | | | | | |
| Crude and calcined .. | 78,809 | 76,482 | 98,229 | 119,380 | 122,044 | 119,883 |
| Greece— | | | | | | |
| Crude | 44 | 51 | 72 | 46 | 92 | 53 |
| Calcined | 197 | 318 | 333 | 700 | 576 | 748 |
| Iceland | 9,625 | 4,105 | 2,970 | 4,861 | 6,830 | 6,191 |
| Italy— | | | | | | |
| Crude | 45 | 635 | 1,049 | 1,550 | 908 | 87 |
| Calcined | 561 | 65 | | | | |
| Netherlands— | | | | | | |
| Crude | 185,512 | 140,610 | 231,693 | 154,450 | 171,925 | 161,041 |
| Calcined | 57,468 | 59,993 | 62,909 | 70,910 | 73,830 | 88,419 |
| Norway— | | | | | | |
| Crude | 41,608 | 54,657 | 72,172 | 91,026 | 132,665 | 134,614 |
| Calcined | 4,926 | 5,142 | 4,294 | 4,271 | 3,763 | 3,748 |
| Portugal— | | | | | | |
| Crude | 15,380 | 14,009 | 15,379 | 14,104 | 16,059 | 21,100 |
| Calcined | 17 | 10 | 7 | 11 | 8 | 8 |

(a) Years ended March 31 following that stated.

(b) Year ended June 30 of that stated.

IMPORTS OF GYPSUM (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-----------|-----------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Sweden— | | | | | | |
| Crude | 307,065 | 368,307 | 333,235 | 333,207 | 359,615 | 368,559 |
| Calcined | 23,532 | 23,654 | 22,927 | 25,448 | 21,347 | 21,212 |
| Switzerland— | | | | | | |
| Crude | 27,740 | 33,408 | 50,678 | 52,877 | 53,923 | 61,739 |
| Ground and calcined .. | 3,980 | 5,533 | 4,541 | 6,043 | 8,409 | 17,032 |
| Angola— | | | | | | |
| Crude and calcined .. | 91 | 131 | 215 | 129 | 61 | 66 |
| Malagasy Republic .. | 1,228 | 2,120 | 2,342 | <i>n.a.</i> | 4,040 | 3,106 |
| Morocco | — | — | 11 | — | — | — |
| Mozambique— | | | | | | |
| Crude | 4,502 | 5,694 | 8,319 | 11,989 | <i>n.a.</i> | <i>n.a.</i> |
| Calcined | 94 | 83 | 88 | 65 | <i>n.a.</i> | <i>n.a.</i> |
| South Africa— | | | | | | |
| Crude and calcined .. | 3,167 | 3,451 | 4,600 | 4,701 | 5,361 | 6,309 |
| Sudan | 260 | 193 | 672 | — | 870 | 53 |
| Tunisia— | | | | | | |
| Calcined | 541 | 300 | 393 | 397 | — | 634 |
| Costa Rica | 460 | 3,910 | 3,287 | 4,422 | 6,183 | 5,323 |
| Guatemala | 18 | — | 21 | 31 | 21 | 32 |
| Honduras— | | | | | | |
| Calcined | 16 | 19 | 28 | 15 | 23 | <i>n.a.</i> |
| Mexico— | | | | | | |
| Crude | 43 | 121 | 41 | 114 | 102 | <i>n.a.</i> |
| Panama Republic .. | 5,999 | 5,237 | 6,204 | 6,410 | <i>n.a.</i> | <i>n.a.</i> |
| Salvador— | | | | | | |
| Crude | 984 | 2,743 | 1,991 | 7,589 | 3,062 | 3,656 |
| Calcined | 46 | 61 | 66 | 57 | 54 | 43 |
| United States— | | | | | | |
| Crude | 5,587,234 | 5,277,909 | 4,892,000 | 4,074,100 | 4,887,500 | 5,230,300 |
| Ground and calcined .. | 1,218 | 1,366 | 1,596 | 1,600 | 1,767 | 1,655 |
| Argentina— | | | | | | |
| Crude | 27 | 28 | 1 | 10 | 34 | 39 |
| Brazil— | | | | | | |
| Crude | 916 | 841 | 2,014 | 1,225 | 1,595 | <i>n.a.</i> |
| Colombia— | | | | | | |
| Crude | 7,876 | 10,015 | 3,779 | 9,313 | 12,106 | <i>n.a.</i> |
| Calcined | 596 | 196 | 709 | 68 | 73 | <i>n.a.</i> |
| Peru— | | | | | | |
| Crude and calcined .. | 148 | 104 | 209 | 424 | 500 | <i>n.a.</i> |
| Uruguay— | | | | | | |
| Crude and ground .. | <i>n.a.</i> | 12,482 | 18,929 | 19,287 | 15,478 | 8,728 |
| Venezuela | 86 | 81 | 124 | 206 | 211 | 263 |
| Formosa | 58,669 | 44,488 | 71,445 | 61,119 | <i>n.a.</i> | 92,551 |
| Iran (a) | 144 | 220 | 129 | 934 | 372 | <i>n.a.</i> |
| Israel— | | | | | | |
| Calcined | 49 | 111 | 172 | 170 | <i>n.a.</i> | 134 |
| Japan | 89,551 | 49,537 | 48,308 | 43,267 | 56,186 | 59,722 |
| Korea (South) | 45,472 | 40,951 | 70,327 | 81,130 | 98,988 | 108,484 |
| Lebanon | 34,283 | 31,114 | 23,602 | 20,223 | 37,180 | 44,556 |
| Philippine Republic— | | | | | | |
| Crude | 27,145 | 25,525 | 63,548 | 57,093 | <i>n.a.</i> | <i>n.a.</i> |
| Calcined | | | | | | |
| Thailand— | | | | | | |
| Crude | 102 | 157 | 147 | 111 | 48 | 111 |

(a) Years ended March 20 of year following that stated.

IODINE
PRODUCTION OF IODINE

Lb. avdp.

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Chile | 4,763,265 | 5,027,000 | 6,462,000 | 4,886,000 | 4,329,900 | 5,398,698 |
| Indonesia.. .. . | 8,900 | 4,000 | 3,913 | 4,000 | 4,000 | 4,000 |
| Japan | 4,464,000 | 4,841,000 | 5,792,000 | 6,417,000 | 7,916,000 | 9,000,000 |

Iodine is also produced in the U.S.S.R. and the United States.

EXPORTS OF IODINE

Lb. avdp.

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-----------|-----------|-----------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom .. | 54,215 | 54,718 | 76,932 | 87,376 | 94,696 | 64,839 |
| OTHER COUNTRIES | | | | | | |
| France— | | | | | | |
| Resublimed | 16,400 | 24,300 | 13,000 | 24,000 | 33,000 | 55,000 |
| Germany (Federal) .. | 25,353 | 100,972 | 14,000 | 17,000 | 34,000 | 20,000 |
| Chile | 4,392,558 | 3,860,000 | 5,380,600 | 5,476,300 | <i>n.a.</i> | <i>n.a.</i> |
| Japan— | | | | | | |
| Crude | } 2,930,236 | 3,077,390 | 5,215,078 | 4,680,404 | 6,619,509 | 7,893,803 |
| Resublimed | | | | | | |

IMPORTS OF IODINE

Lb. avdp

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-----------|-----------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom .. | 939,502 | 1,174,108 | 1,242,474 | 1,428,663 | 1,394,904 | 1,543,929 |
| Canada— | | | | | | |
| Crude | 178,800 | 228,900 | 213,400 | 371,900 | 234,700 | 333,500 |
| India (a) | 220,498 | 349,413 | 297,370 | 216,326 | 226,245 | 247,934 |
| Australia (b)— | | | | | | |
| Crude | 200 | 7,728 | 19,600 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| New Zealand (b) .. | 1,455 | 3,593 | 1,653 | 1,752 | <i>n.a.</i> | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Denmark | 4,409 | 22,000 | 22,000 | 8,800 | <i>n.a.</i> | <i>n.a.</i> |
| France— | | | | | | |
| Crude | 630,522 | 881,849 | 1,113,000 | 798,073 | 630,522 | 870,826 |
| Germany (Federal) .. | 644,411 | 953,279 | 915,400 | 1,026,100 | 1,250,462 | 1,491,425 |
| Greece | 9,004 | 7,822 | 7,562 | 5,450 | 4,209 | 7,648 |
| Italy— | | | | | | |
| Crude | 284,760 | 91,500 | 303,100 | 312,836 | 278,885 | 391,541 |
| Resublimed | 3,047 | 900 | 10,582 | 3,527 | 2,866 | 9,700 |
| Portugal— | | | | | | |
| Crude | — | 9,000 | 8,818 | 4,409 | 4,409 | 8,818 |
| Resublimed | 2,866 | 2,000 | 5,732 | 882 | 11 | 882 |
| Spain— | | | | | | |
| Crude | 52,933 | 37,479 | 110,231 | 50,696 | 46,599 | 79,366 |
| Resublimed | 79 | 59 | 919 | 64 | 73 | — |
| Sweden | 4,000 | 9,000 | 7,000 | 7,000 | <i>n.a.</i> | <i>n.a.</i> |
| Yugoslavia | <i>n.a.</i> | 12,352 | 24,978 | 10,538 | 8,084 | 21,497 |
| Morocco— | | | | | | |
| Resublimed | 847 | 53 | 359 | 752 | 531 | 196 |
| Mexico | 81,847 | 45,746 | 78,207 | 97,305 | 136,686 | <i>n.a.</i> |
| United States— | | | | | | |
| Crude | 2,592,000 | 2,847,133 | 7,133,000 | 3,459,000 | 5,882,524 | 5,704,826 |
| Resublimed | 3,000 | 2,000 | 2,000 | 9,000 | 13,550 | 10,720 |
| Argentina— | | | | | | |
| Crude | 113,016 | 90,423 | 52,408 | 37,055 | 51,992 | 69,586 |
| Resublimed | 12,547 | 15,503 | 66 | — | 5,512 | 53,351 |
| Brazil | 24,959 | 36,100 | 49,364 | 41,692 | 47,631 | <i>n.a.</i> |
| Colombia | 4,676 | 2,599 | 5,031 | 4,274 | 9,771 | <i>n.a.</i> |
| Peru— | | | | | | |
| Crude | 1,618 | 1,570 | 1,124 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Resublimed | 2,928 | 2,100 | 2,211 | <i>n.a.</i> | 2,485 | <i>n.a.</i> |
| Venezuela | 7,328 | 11,391 | 6,515 | 7,961 | 7,032 | 8,377 |
| Turkey | 5,844 | 9,504 | 10,926 | 10,556 | 7,268 | 6,861 |

(a) Years ended March 31 following that stated.

(b) Years ended June 30 of that stated.

**IRON AND STEEL
PRODUCTION OF IRON ORE***
(including Manganiferous Iron Ore)

Long tons

| Producing Country | ORB | | | | | | | | | | | |
|-------------------------------|-------------------|-------------------|-------------------|--------------------|--------------------|--------------------|------------|------------|------------|------------|-------------|-------------|
| | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
| COMMONWEALTH COUNTRIES | | | | | | | | | | | | |
| United Kingdom (a) | 16,325,700 | 15,414,700 | 13,657,900 | 12,739,100 | 13,715,500 | 12,103,500 | 4,408,000 | 4,162,000 | 3,688,000 | 3,567,000 | 3,840,000 | 3,390,000 |
| Rhodesia | 810,981 | n.a. | n.a. | n.a. | n.a. | n.a. | 478,000 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Sierra Leone (f) | 1,980,535 | 2,296,983 | 2,182,792 | 2,224,467 | 2,495,451 | 1,996,124 | 1,276,000 | 1,475,000 | 1,410,000 | 1,446,000 | 1,453,000 | 1,198,000 |
| Swaziland | 59,242 | 1,003,848 | 1,566,091 | 1,715,985 | 2,018,031 | 2,266,201 | 37,000 | 632,000 | 987,000 | 1,032,000 | 1,271,000 | 1,428,000 |
| Norway | 34,219,484 | 35,677,621 | 36,331,083 | 37,783,750 | 42,360,090 | 35,714,855 | 18,821,000 | 19,622,000 | 19,982,000 | 20,283,000 | 24,246,000 | 19,643,170 |
| Hong Kong | 114,374 | 131,955 | 134,785 | 141,324 | 159,041 | 163,325 | 64,000 | 74,000 | 75,000 | 79,000 | 89,000 | 81,000 |
| India | 15,069,580 | 16,883,000 | 19,620,000 | 18,676,000 | 20,252,100 | 20,943,500 | 8,440,000 | 10,130,000 | 11,970,000 | 11,448,000 | 12,354,000 | 12,776,000 |
| Goa | 5,956,000 | 6,480,000 | 6,480,000 | 6,645,000 | 7,536,200 | 7,536,200 | 3,454,000 | 3,870,000 | 3,760,000 | 3,854,000 | 4,116,000 | 4,597,000 |
| Malaysia (West) | 6,465,695 | 6,872,711 | 5,762,440 | 5,349,780 | 5,108,342 | 5,131,022 | 3,621,000 | 3,849,000 | 3,227,000 | 2,996,000 | 2,860,000 | 2,879,000 |
| Pakistan (e) | 4,824 | 23,000 | 5,000 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Australia | 5,668,518 | 6,695,269 | 11,552,985 | 16,887,700 | 26,204,000 | 38,476,000 | 3,655,000 | 4,297,000 | 7,385,000 | 10,831,000 | 16,767,000 | 24,468,000 |
| New Zealand (b) | 2,550 | 2,236 | 2,624 | 2,575 | 3,286 | 1,167 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| TOTAL | 86,677,000 | 92,000,000 | 98,000,000 | 104,000,000 | 121,000,000 | 125,000,000 | | | | | | |
| OTHER COUNTRIES | | | | | | | | | | | | |
| Albania | 345,000 | (c) 360,000 | (c) 360,000 | (c) 399,000 | (c) 1,400,000 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Austria | 3,506,826 | 3,480,400 | 3,420,460 | 3,418,400 | 3,427,105 | 3,919,110 | 1,110,000 | 1,093,000 | 1,081,000 | 1,082,000 | 1,101,000 | 1,254,000 |
| Belgium | 60,000 | 90,000 | 122,000 | 87,000 | 80,000 | 93,000 | 21,000 | 32,000 | 43,000 | 30,000 | 28,000 | 32,000 |
| Bulgaria | 710,000 | 1,776,000 | 2,567,000 | 2,457,000 | 2,600,000 | 2,690,000 | 440,000 | 1,100,000 | 1,600,000 | 1,500,000 | 1,600,000 | 1,600,000 |
| Czechoslovakia | 2,801,000 | 2,407,900 | 2,202,000 | 1,884,000 | 1,548,000 | 1,544,000 | 840,000 | 720,000 | 660,000 | 570,000 | 511,000 | 510,000 |
| Finland | 469,000 | 670,000 | 646,000 | 633,000 | 650,000 | 579,000 | 305,000 | 440,000 | 420,000 | 412,000 | 420,000 | 376,000 |
| France | 59,975,576 | 58,591,587 | 54,550,015 | 48,444,253 | 54,366,000 | 54,550,000 | 18,148,000 | 17,812,000 | 16,843,000 | 15,232,000 | 16,906,000 | 16,369,000 |
| Germany—Federal Republic (e) | 8,559,334 | 7,827,626 | 7,083,399 | 6,679,268 | 6,345,172 | 5,964,682 | 2,752,000 | 2,512,000 | 2,265,000 | 2,152,000 | 2,031,000 | 1,927,576 |
| Germany—Eastern | 1,608,000 | 1,604,000 | 1,694,000 | 1,653,000 | 1,392,000 | 1,378,000 | 482,000 | 481,000 | 508,000 | 496,000 | 350,000 | 345,000 |
| Greece | 15,000 | 15,000 | 25,440 | 16,531 | 12,000 | 12,000 | 8,000 | 8,000 | 12,000 | 8,000 | 6,000 | 6,000 |
| Hungary | 762,460 | 750,000 | 735,000 | 704,000 | 628,000 | 670,000 | 185,000 | 184,000 | 180,000 | 172,000 | 158,000 | 165,000 |
| Italy | 861,809 | 772,300 | 814,805 | 725,026 | 697,105 | 751,586 | 440,000 | 390,000 | 390,000 | 390,000 | 362,000 | 380,000 |
| Luxemburg | 6,574,181 | 6,215,706 | 6,424,519 | 6,204,347 | 6,297,403 | 6,211,907 | 1,832,000 | 1,766,000 | 1,805,000 | 1,689,000 | 1,720,000 | 1,708,000 |
| Norway | 2,089,812 | 2,425,555 | 2,411,839 | 3,324,392 | 3,645,052 | 3,792,987 | 1,348,000 | 1,572,000 | 1,562,000 | 2,068,000 | 2,376,662 | 2,486,000 |
| Poland | 2,638,000 | 2,816,000 | 3,005,000 | 3,028,000 | 3,002,000 | 2,724,000 | 900,000 | 960,000 | 1,020,000 | 1,029,000 | 1,020,000 | 976,000 |
| Portugal | 212,000 | 208,000 | 189,000 | 194,000 | 197,000 | 160,800 | 106,000 | 102,000 | 92,000 | 97,000 | 98,000 | 79,000 |
| Roumania | 1,901,000 | 2,440,000 | 2,639,000 | 2,753,000 | 2,784,000 | 2,952,000 | 850,000 | 1,100,000 | 1,190,000 | 1,240,000 | 1,220,000 | 1,330,000 |
| Spain | 5,026,800 | 5,601,478 | 6,835,000 | 5,118,000 | 5,889,000 | 5,905,000 | 2,489,000 | 2,721,000 | 2,500,000 | 2,500,000 | 2,948,000 | 3,012,000 |
| Sweden | 26,198,490 | 28,890,053 | 27,545,300 | 27,889,300 | 26,762,100 | 32,661,000 | 16,036,000 | 17,760,000 | 17,150,000 | 17,150,000 | 16,500,000 | 20,136,000 |
| Switzerland (d) | 90,000 | 111,000 | 65,000 | 4,000 | n.a. | n.a. | 40,000 | 40,000 | 25,000 | 2,000 | n.a. | n.a. |
| U.S.S.R. | 143,285,000 | 151,000,000 | 157,600,000 | 165,594,000 | 174,200,000 | 183,200,000 | 86,000,000 | 91,000,000 | 95,000,000 | 99,000,000 | 100,000,000 | 110,000,000 |

* For detailed figures see page 149.

(a) In addition bog ore and iron ore (not used for smelting) are produced.

(b) Used mainly or entirely for purposes other than iron production.

(c) Estimated.

(d) Marketable production.

(e) Exports.

(f) West Pakistan.

(c) United States Bureau of Mines' estimate

PRODUCTION OF IRON ORE (cont.)

Long tons

| Producing Country | ORE | | | | | | | | | | Estimated Iron Content | | |
|--------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|------------------------|-------------|--|
| | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | |
| OTHER COUNTRIES (cont.) | | | | | | | | | | | | | |
| Yugoslavia | 2,271,000 | 2,464,000 | 2,453,000 | 2,538,000 | 2,677,000 | 2,678,000 | 1,000,000 | 1,100,000 | 1,100,000 | 1,109,000 | 1,205,000 | 1,205,000 | |
| Algeria | 2,699,000 | 3,083,000 | 1,457,000 | 4,099,000 | 3,031,000 | 2,923,000 | 1,460,000 | 1,570,000 | 790,000 | 1,350,000 | 1,540,000 | 1,540,000 | |
| Angola | 885,184 | 3,022,321 | 778,062 | 1,136,072 | 3,167,385 | 5,391,145 | 580,000 | 570,000 | 510,000 | 738,000 | 2,059,000 | 3,504,000 | |
| Egypt | 440,150 | 499,000 | 433,083 | 690,000 | 700,000 | 453,000 | n.d. | n.d. | n.d. | n.d. | 360,000 | n.d. | |
| Cuba | 894,000 | 743,000 | (f) 600,000 | (g) 690,000 | 700,000 | 370,000 | 450,000 | 300,000 | 300,000 | 350,000 | 360,000 | 360,000 | |
| Liberia (b) | 12,029,388 | 15,086,547 | 16,290,151 | 17,163,135 | 18,930,608 | 20,272,654 | 8,180,000 | 10,259,000 | 11,077,000 | 11,671,000 | 12,873,000 | 13,785,000 | |
| Mauritania | 5,090,000 | 6,185,000 | 7,044,000 | 6,933,000 | 7,918,000 | 8,541,000 | 3,280,000 | 4,060,000 | 4,520,000 | 4,548,000 | 5,194,000 | 5,603,000 | |
| Morocco | 873,611 | 6,936,097 | 1,000,661 | 870,447 | 7,794,197 | 8,737,000 | 518,000 | 558,000 | 597,000 | 519,000 | 493,000 | 493,000 | |
| South Africa (h) | 5,599,642 | 6,616,761 | 7,568,104 | 6,714,987 | 8,102,708 | 8,648,890 | 3,360,000 | 3,970,000 | 4,547,000 | 4,570,000 | 4,862,000 | 5,189,000 | |
| South West Africa | 9,331 | 32,316 | (a) 503,000 | (a) 503,000 | 999,600 | 930,500 | 500,000 | 590,000 | 680,000 | 500,000 | 550,000 | 510,000 | |
| Tunisia | 925,000 | 1,099,000 | 1,267,000 | 8,000 | 4,000 | 3,577,000 | n.d. | n.d. | n.d. | n.d. | 500,000 | n.d. | |
| Guatemala (f) | 7,000 | 8,000 | 2,460,000 | 2,653,000 | 3,151,000 | 3,527,000 | 1,370,475 | 1,567,581 | 1,474,254 | 1,593,000 | 1,772,000 | 1,975,000 | |
| Mexico | 2,280,000 | 2,610,000 | 2,460,000 | 2,653,000 | 3,151,000 | 3,527,000 | n.d. | n.d. | n.d. | n.d. | 1,772,000 | 1,975,000 | |
| United States (c) | 84,864,000 | 87,472,000 | 90,151,000 | 84,179,000 | 85,865,000 | 88,494,000 | 48,000,000 | 50,000,000 | 52,000,000 | 48,000,000 | 49,000,000 | 49,000,000 | |
| Argentina | 93,008 | 111,109 | 153,488 | 220,650 | 272,428 | 295,000 | 47,000 | 56,000 | 68,000 | 97,000 | 120,000 | 130,000 | |
| Chile | 16,694,380 | 17,873,111 | 22,887,115 | 23,129,000 | 24,800,000 | 29,000,000 | 11,690,000 | 12,510,000 | 16,020,000 | 16,200,000 | 17,400,000 | 20,000,000 | |
| Ecuador | 9,731,793 | 11,953,264 | 12,018,781 | 10,613,141 | 11,728,087 | 11,352,328 | 6,260,747 | 7,698,000 | 7,740,000 | 6,792,000 | 7,510,000 | 7,048,000 | |
| Colombia | 700,000 | 694,960 | 649,424 | 842,136 | 598,273 | 352,325 | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | |
| Peru | 8,593,913 | 10,134,020 | 11,000,000 | 10,830,000 | 8,409,000 | 8,929,000 | 5,204,000 | 5,914,000 | 5,788,000 | 6,015,000 | 5,000,000 | 5,200,000 | |
| Uruguay | 1,600 | 1,700 | 1,000 | 2,000 | 2,000 | 2,000 | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | |
| Venezuela | 15,397,909 | 17,371,381 | 17,559,212 | 16,853,101 | 15,900,000 | 19,700,000 | 9,855,000 | 11,118,000 | 11,238,000 | 10,786,000 | 10,200,000 | 12,600,000 | |
| Burma (e) | 50,000,000 | 50,000,000 | 50,000,000 | 35,000,000 | 32,000,000 | 33,000,000 | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | |
| China (d) | 20,000 | 59,000 | 2,000,000 | n.d. | 60,000 | 30,000 | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | |
| Iran (f) | 2,516,975 | 2,469,000 | 2,320,000 | 2,183,000 | 2,153,000 | 1,826,000 | 1,409,000 | 1,400,000 | 300,000 | 300,000 | 1,180,000 | 1,010,000 | |
| Japan (g) | 674,000 | 723,500 | 777,200 | 683,000 | 828,700 | 722,407 | 344,000 | 369,000 | 396,000 | 348,000 | 423,000 | 566,000 | |
| Korea (South) | 4,705,000 | 5,800,000 | f 6,000,600 | 6,400,000 | 6,900,000 | 7,400,000 | 780,000 | 820,000 | 840,000 | 851,000 | 766,000 | 883,000 | |
| Korea (North) | 1,345,369 | 1,415,070 | 1,454,412 | 1,531,848 | 1,531,848 | 1,536,350 | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | |
| Philippine Republic | 188,000 | 738,656 | 680,776 | 540,000 | 486,000 | 470,000 | 520,000 | 460,000 | 430,000 | 350,000 | 310,000 | 280,000 | |
| Thailand | 953,043 | 1,520,929 | 1,634,749 | 1,528,658 | 2,186,257 | 2,462,842 | 168,000 | 151,000 | 121,000 | 914,000 | 1,236,000 | 1,400,000 | |
| Turkey | 302,300 | 274,800 | 216,800 | 201,100 | 169,000 | — | 168,000 | 151,000 | 121,000 | 110,000 | 93,000 | — | |
| New Caledonia... | 498,000,000 | 527,000,000 | 534,000,000 | 515,000,000 | 539,000,000 | 572,000,000 | 572,000,000 | 572,000,000 | 572,000,000 | 572,000,000 | 572,000,000 | 572,000,000 | |
| TOTAL | 585,000,000 | 619,000,000 | 632,000,000 | 619,000,000 | 661,000,000 | 697,000,000 | 697,000,000 | 697,000,000 | 697,000,000 | 697,000,000 | 697,000,000 | 697,000,000 | |
| WORLD'S TOTAL | 585,000,000 | 619,000,000 | 632,000,000 | 619,000,000 | 661,000,000 | 697,000,000 | 697,000,000 | 697,000,000 | 697,000,000 | 697,000,000 | 697,000,000 | 697,000,000 | |

Iron ore is also produced in Cuba, the Lebanon and North Vietnam.

(a) Estimated. (b) Exports. (c) Usable ore.

(d) Including iron sand as follows (long tons):

1964—1,402,809; 1965—1,369,000; 1966—1,239,000; 1967—1,107,987; 1968—1,114,000; 1969—n.a.

(e) Used mainly or entirely for purposes other than iron production.

(f) United States Bureau of Mines estimate.

(g) Years ended March 20 following that stated.

(h) Including by-product magnetite as follows (long tons): 1964—845,451; 1965—892,513; 1966—878,220; 1967—860,000; 1968—911,912; 1969—1,852,035.

DETAILS OF PRODUCTION OF IRON ORE IN CERTAIN COUNTRIES

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|------------|--------------|-------------|--------------|------------|--------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Hematite | 427,100 | 408,200 | 397,900 | 399,500 | 364,800 | 279,000 |
| Jurassic ironstones— | | | | | | |
| Lower lias | 5,440,900 | 5,065,300 | 4,754,300 | 4,732,100 | 4,741,700 | 4,408,000 |
| Middle lias | 1,590,000 | 1,456,500 | 1,061,000 | 537,600 | 245,100 | 232,000 |
| Inferior oolite | 8,867,700 | 8,484,700 | 7,444,700 | 7,069,100 | 8,368,900 | 7,184,000 |
| Sierra Leone (c)— | | | | | | |
| Concentrates | 1,827,018 | 2,054,882 | 2,076,522 | 2,168,160 | 2,355,870 | 1,995,071 |
| Fines | 153,298 | 241,930 | 105,131 | 55,483 | 63,954 | n.a. |
| Ferromax | 219 | 171 | 1,139 | 824 | 1,422 | 1,053 |
| OTHER COUNTRIES | | | | | | |
| France— | | | | | | |
| Phosphoric | 56,547,534 | 55,238,426 | 50,807,451 | 45,315,739 | 51,448,000 | 52,033,000 |
| Medium phosphoric | 3,346,263 | 3,274,033 | 3,624,059 | 3,086,871 | 2,898,000 | 2,505,000 |
| Non-phosphoric | 81,779 | 79,128 | 58,505 | 41,644 | 19,000 | 12,000 |
| Luxemburg— | | | | | | |
| Siliceous iron ore | 3,419,260 | 3,001,948 | 2,965,075 | 2,862,828 | 2,887,314 | 3,120,384 |
| Calcareous iron ore | 2,787,177 | 2,901,279 | 3,151,375 | 3,067,740 | 3,337,684 | 3,049,369 |
| Ferruginous limestone | 367,744 | 312,479 | 308,069 | 273,780 | 72,405 | 41,154 |
| Portugal— | | | | | | |
| Hematite | 42,000 | 52,000 | 51,000 | 55,000 | 58,000 | 39,208 |
| Magnetite | 128,000 | 110,000 | 86,000 | 86,000 | 87,000 | 66,363 |
| Manganiferous iron ore | 42,000 | 46,000 | 52,000 | 53,000 | 52,000 | 55,273 |
| Sweden— | | | | | | |
| Manganiferous iron ore | 133,000 | 133,000 | 106,000 | 111,000 | 81,000 | } 32,661,000 |
| Other iron ore | 26,066,000 | 28,757,000 | 27,439,000 | 27,778,000 | 31,827,000 | |
| By phosphorus content (a) | | | | | | |
| 0·0% | — | 267,704 | 265,736 | 269,672 | 269,672 | n.a. |
| 0·0% to under 0·006% | 1,358,059 | r 1,356,500 | r 1,162,516 | r 1,692,637 | 1,433,064 | n.a. |
| 0·006% to under 0·04% | 3,306,509 | r 3,403,934 | r 3,465,121 | r 3,114,349 | 2,012,655 | n.a. |
| 0·04% to under 0·1% | 1,426,243 | r 2,371,033 | r 3,840,064 | r 3,361,481 | 5,703,194 | n.a. |
| 0·1% to under 0·7% | 6,674,363 | r 7,946,144 | r 6,457,033 | r 6,062,642 | 7,692,401 | n.a. |
| 0·7% to under 1% | 2,045,676 | r 2,447,273 | r 2,423,489 | r 2,724,848 | 3,531,685 | n.a. |
| 1% and over | 11,387,640 | r 11,097,619 | r 9,931,264 | r 10,663,845 | 11,265,151 | n.a. |
| United States— | | | | | | |
| Ore containing less than 5% Mn— | | | | | | |
| Hematite (b) | 47,603,000 | 47,043,000 | 46,602,000 | 40,991,000 | 34,627,000 | } 88,494,000 |
| Magnetite (b) | 34,395,000 | 36,927,000 | 39,841,000 | 40,656,000 | 49,331,000 | |
| Limonite | 1,806,000 | 2,664,000 | 2,913,000 | 1,760,000 | 1,177,000 | |
| Pyrite cinder and sinter | 1,032,000 | 805,000 | 791,000 | 772,000 | 728,000 | |
| Ore containing 5 to under 10% Mn | 27,725 | 32,935 | 4,035 | — | n.a. | |

(a) Calculated on a basis of 50% Fe content.

(b) A small quantity of hematite is included with magnetite, and a small quantity of magnetite with hematite.

(c) Exports.

EXPORTS OF IRON ORE
(including Manganiferous Iron Ore)

Long tons

| Exporting Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|-------------|------------|-------------|--------------------|---------------------|---------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | 403 | 273 | 217 | 213 | 1,198 | 334 |
| Rhodesia | 282,045 | 316,270 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sierra Leone | 1,980,535 | 2,296,983 | 2,182,792 | 2,224,667 | 2,495,451 | 1,996,124 |
| Canada | 30,473,700 | 30,799,252 | 30,693,745 | 31,406,52 | 36,010,719 | 27,906,105 |
| Hong Kong | 129,569 | 142,948 | 138,566 | 167,01 | 168,529 | 183,270 |
| India (b) | 10,407,378 | 12,075,253 | 13,191,038 | 13,516,997 | 15,498,348 | 16,285,529 |
| Malaysia (West) | 6,316,970 | 6,634,197 | 5,680,684 | 5,245,852 | 5,106,707 | 5,262,304 |
| Australia (e)— | | | | | | |
| Iron ore | 12,201 | 96,651 | 337,856 | <i>d</i> 5,468,386 | <i>d</i> 12,325,812 | <i>d</i> 20,071,987 |
| Burnt pyrites | 106,715 | 73,912 | 70,070 | — | — | — |
| Irish Republic— | | | | | | |
| Burnt pyrites | 6,067 | 1,610 | 1,259 | — | 1,491 | — |
| OTHER COUNTRIES | | | | | | |
| Albania— | | | | | | |
| Iron ore | 454,600 | 497,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Austria | 63 | 39 | 120 | 389 | 572 | 4,244 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Iron ore | 222,103 | 66,334 | 22,083 | 61,126 | 16,675 | 64,891 |
| Burnt pyrites | 184,691 | 195,922 | 206,658 | 226,790 | 266,959 | 220,905 |
| Bulgaria | 10,651 | 10,441 | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Denmark— | | | | | | |
| Bog ore (a) | 56,862 | 35,530 | 25,756 | 27,171 | 16,000 | 23,889 |
| Burnt pyrites | 101,999 | 93,503 | 86,790 | 81,975 | 100,139 | 117,325 |
| Finland— | | | | | | |
| Iron ore | 167,236 | 17,019 | 3,297 | 12,008 | 12,280 | 121,448 |
| Burnt pyrites | 122,807 | 105,868 | 68,902 | 5,530 | 14,125 | 4,978 |
| France— | | | | | | |
| Iron ore | 21,741,834 | 20,419,735 | 17,907,510 | 17,260,172 | 18,003,976 | 18,223,035 |
| Burnt pyrites | 286,846 | 238,875 | 298,446 | 223,365 | 206,440 | 180,334 |
| Germany (Federal)— | | | | | | |
| Iron ore | 285,072 | 274,323 | 295,609 | 326,973 | 18,035 | 17,170 |
| Burnt pyrites | 14,259 | 37,372 | 60,747 | 50,606 | 21,638 | 11,865 |
| Greece— | | | | | | |
| Iron ore | <i>n.a.</i> | 4,409 | <i>n.a.</i> | — | 591 | — |
| Burnt pyrites | <i>n.a.</i> | 24,641 | <i>n.a.</i> | 57,481 | 34,172 | 58,299 |
| Italy— | | | | | | |
| Iron ore | 6,427 | 36,437 | 19,043 | 19 | 23 | 126 |
| Burnt pyrites | 657,388 | 631,391 | 740,234 | 706,466 | 622,871 | 361,143 |
| Netherlands— | | | | | | |
| Iron ore | 3,070 | 6,587 | 3,837 | 3,277 | 3,241 | 6,993 |
| Burnt iron pyrites | 244,879 | 254,159 | 187,327 | 88,911 | 69,045 | 77,307 |
| Norway— | | | | | | |
| Iron ore | 1,527,988 | 1,351,992 | 1,414,106 | 2,345,625 | 2,697,254 | 2,688,547 |
| Burnt pyrites | 74,896 | 69,499 | 66,781 | 120,555 | 137,190 | 138,169 |
| Portugal— | | | | | | |
| Iron ore | 36,277 | 2,731 | — | — | — | — |
| Burnt pyrites | 22,775 | 3,986 | 335 | — | — | 4,922 |
| Spain (c) | 2,414,014 | 1,854,492 | 957,471 | 1,516,294 | 1,825,015 | 2,307,208 |
| Sweden— | | | | | | |
| Iron ore | 23,973,000 | 24,075,000 | 23,935,000 | 22,692,000 | 28,306,700 | 31,219,900 |
| Burnt pyrites | 341,000 | 417,000 | 254,000 | 294,000 | 273,000 | 260,800 |
| Switzerland (c) | 62,634 | 95,304 | 31,152 | 14,338 | 10,308 | 13,037 |

(a) Used for purposes other than iron making. (d) Including iron ore pellets.
 (b) Years ended March 31 following that stated. (e) Years ended June 30 of that stated.
 (c) Including burnt pyrites.

EXPORTS OF IRON ORE (cont.)

Long tons

| Exporting Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| U.S.S.R.— | | | | | | |
| Iron ore | 22,243,000 | 23,757,000 | 25,706,000 | 24,167,200 | 31,692,000 | 32,549,000 |
| Burnt pyrites | 927,122 | 1,213,000 | 1,478,000 | 1,586,000 | 1,507,804 | 1,509,000 |
| Yugoslavia— | | | | | | |
| Iron ore | 198,169 | 97,231 | <i>n.a.</i> | 89,714 | 95,808 | 151,318 |
| Burnt pyrites | 1,037 | 2,358 | <i>n.a.</i> | 516 | 2,332 | 1,173 |
| Algeria— | | | | | | |
| Iron ore | 2,783,645 | 2,945,431 | 1,574,730 | <i>n.a.</i> | 3,052,692 | <i>n.a.</i> |
| Burnt pyrites | 31,642 | 35,313 | 29,944 | 114,365 | 102,286 | <i>n.a.</i> |
| Angola | 1,109,740 | 682,450 | 616,893 | 768,290 | 435,196 | 601,036 |
| Guinea | <i>n.a.</i> | <i>n.a.</i> | 333,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Liberia | 12,029,388 | 15,086,547 | 16,290,151 | 17,163,135 | 18,930,608 | 20,272,654 |
| Mauritania | 4,900,000 | 5,871,000 | 7,044,260 | 7,330,200 | 7,581,000 | 8,441,000 |
| Morocco— | | | | | | |
| Iron ore | 977,997 | 942,141 | 777,301 | 901,297 | 646,243 | 853,994 |
| Burnt pyrites | 25,738 | 13,860 | 14,369 | 5,049 | 837 | <i>n.a.</i> |
| South Africa | 1,116,077 | 1,220,301 | 1,287,963 | 2,350,630 | 2,677,814 | 2,471,639 |
| Sudan | — | 34,023 | 46,941 | 8,612 | 9,857 | 8,610 |
| Tunisia | 817,634 | 895,842 | 862,492 | 762,642 | 643,621 | 558,497 |
| Dominican Republic | 5,567 | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Mexico | 21,148 | 9,757 | 118 | 77 | 134 | <i>n.a.</i> |
| United States | 6,963,375 | 7,084,682 | 7,778,916 | 5,943,198 | 5,926,729 | 5,159,823 |
| Brazil | 9,575,964 | 12,530,156 | 12,706,562 | 14,053,619 | 14,812,045 | <i>n.a.</i> |
| Chile | 8,969,654 | 10,555,000 | 10,559,486 | 9,737,628 | <i>n.a.</i> | <i>n.a.</i> |
| Peru | 5,122,981 | 6,274,264 | 6,207,798 | 5,230,481 | 5,122,828 | 5,761,000 |
| Venezuela | 14,658,189 | 16,737,405 | 16,767,674 | 16,226,490 | 14,814,861 | 18,691,982 |
| Iran (a) | 5,234 | — | — | — | — | <i>n.a.</i> |
| Korea (South) | 577,629 | 697,675 | 631,229 | 657,835 | 759,685 | 661,934 |
| Philippine Republic— | | | | | | |
| Iron ore | 1,324,083 | 1,367,091 | 1,489,319 | 1,527,959 | 1,492,000 | 1,446,000 |
| Burnt pyrites | 3,740 | 8,651 | <i>n.a.</i> | 11,623 | <i>n.a.</i> | <i>n.a.</i> |
| Turkey | — | — | — | 99,523 | 62,271 | 9,251 |
| New Caledonia | 308,397 | 271,501 | 210,621 | 195,106 | 194,435 | — |

(a) Years ended March 20 following that stated.

IMPORTS OF IRON ORE
(including Manganiferous Iron Ore)

Long tons

| Importing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--------------------------------|------------|------------|------------|------------|------------|------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Iron ore | 18,000,505 | 18,299,984 | 15,542,087 | 15,521,447 | 17,246,957 | 17,972,830 |
| Burnt pyrites | 597,774 | 556,972 | 400,501 | 553,417 | 343,456 | 196,676 |
| Kenya | 2,511 | 5,598 | 6,642 | 5,500 | — | 5,671 |
| Canada | 5,232,404 | 4,763,029 | 4,323,121 | 2,400,669 | 2,749,588 | 2,260,356 |
| Hong Kong | 1,545 | 9,838 | 12,100 | 1,984 | — | 6,093 |
| India (d) | 150 | — | 116 | — | — | 166 |
| Singapore | — | — | 16,081 | — | — | 70 |
| Australia (a) | 274,241 | 277,496 | 283,761 | 204,056 | 168,230 | 116,077 |
| Irish Republic | 267 | 1,242 | 713 | 555 | 518 | 456 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Iron ore | 1,089,893 | 1,101,776 | 1,156,800 | 889,978 | 1,352,805 | 1,580,063 |
| Burnt pyrites | 368,068 | 355,247 | 340,519 | 329,489 | 241,538 | 219,031 |
| Belgium-Luxemburg E.U.— | | | | | | |
| Iron ore | 22,535,724 | 23,369,882 | 21,068,540 | 21,533,065 | 25,921,327 | 27,082,154 |
| Burnt pyrites | 113,197 | 151,382 | 142,590 | 125,126 | 149,968 | 124,179 |
| Czechoslovakia | 9,162,000 | 9,402,000 | 9,189,000 | 10,202,000 | 10,971,000 | 10,546,000 |
| Denmark | (b) 2,048 | (b) 7,950 | (b) 12,000 | (b) 7,517 | (b) 6,400 | (b) 15,416 |
| Finland | 505,459 | 953,519 | 824,090 | 627,820 | 618,349 | 1,187,552 |
| France— | | | | | | |
| Iron ore | 3,545,327 | 3,846,865 | 4,178,100 | 4,766,596 | 4,937,516 | 6,831,325 |
| Burnt pyrites | 38,921 | 75,536 | 57,794 | 44,873 | 33,752 | 31,689 |
| Germany (Federal)— | | | | | | |
| Iron ore | 34,470,471 | 34,911,085 | 30,774,166 | 31,357,416 | 39,018,272 | 42,735,354 |
| Burnt pyrites | 1,918,140 | 1,858,488 | 1,715,370 | 1,587,537 | 1,760,999 | 1,609,093 |
| Germany (East) (c) | | | | | | |
| | 1,382,500 | 1,429,500 | 1,433,200 | 1,524,500 | 1,401,400 | 1,298,955 |
| Greece | 228,793 | 456,115 | 398,815 | 175,245 | 362,923 | 463,641 |
| Hungary | 2,619,766 | 2,442,000 | 2,653,000 | 2,763,652 | 2,785,304 | 2,867,850 |
| Italy | 4,959,134 | 7,886,661 | 8,032,473 | 9,769,503 | 9,909,465 | 10,785,153 |
| Netherlands | 3,011,856 | 3,519,462 | 3,396,862 | 3,583,135 | 4,282,405 | 4,883,299 |
| Norway | 19,635 | 17,105 | 8,522 | 7,606 | 13,633 | 46,905 |
| Poland | 8,943,200 | 9,127,000 | 9,280,000 | 9,897,000 | 10,931,000 | 11,392,000 |
| Roumania | 2,268,700 | 2,581,800 | 2,809,000 | 3,307,032 | 4,474,202 | 5,303,000 |
| Spain | 92,823 | 347,287 | 561,184 | 588,547 | 584,750 | 963,366 |
| Sweden— | | | | | | |
| Iron Ore | 72,000 | 169,000 | 211,000 | 3,000 | 80,000 | 46,000 |
| Burnt pyrites | 10,000 | 20,000 | 6,000 | 3,000 | 5,000 | 1,968 |
| Switzerland (b) | 1,958 | 2,562 | 7,126 | 21,149 | 23,691 | 37,651 |
| Yugoslavia | 375,248 | 358,162 | 386,898 | 126,182 | 197,636 | 257,457 |
| Morocco (b) | 24,605 | 442 | 984 | 443 | 1,526 | 886 |
| United States— | | | | | | |
| Iron ore | 42,408,092 | 45,103,418 | 46,259,167 | 44,627,059 | 43,940,547 | 40,758,217 |
| Burnt pyrites | 8,635 | 1,563 | | | | |
| Argentina | 1,003,020 | 1,032,519 | 695,738 | 866,155 | 606,001 | 459,826 |
| Formosa | 76,277 | 30,612 | 104,957 | 66,565 | 49,037 | 56,846 |
| Japan— | | | | | | |
| Iron ore | 30,678,093 | 38,370,349 | 45,361,775 | 55,790,332 | 67,066,569 | 81,930,146 |
| Burnt pyrites | 64,820 | 31,538 | 5,149 | 9,389 | 21,230 | 2,510 |

(a) Years ended June 30 of that stated.

(d) Years ended March 31 following that stated.

(b) Including burnt pyrites.

(c) Fe content.

PRODUCTION OF PIG-IRON AND FERRO-ALLOYS*

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | 17,273,600 | 17,459,900 | 15,709,700 | 15,153,000 | 16,431,700 | 16,359,700 |
| Rhodesia | 312,706 | 246,000 | 256,000 | 256,000 | <i>n.a.</i> | <i>n.a.</i> |
| Canada | 5,994,000 | 6,470,038 | 6,607,515 | 6,356,067 | 7,633,494 | 6,844,216 |
| India | 6,489,000 | 7,030,000 | 7,085,026 | 6,957,588 | 7,364,000 | 7,370,000 |
| Australia (c) | 3,930,107 | 4,183,678 | 4,666,885 | 4,977,334 | 5,483,000 | 6,010,000 |
| TOTAL | 34,000,000 | 35,390,000 | 34,370,000 | 33,691,000 | 37,168,000 | 36,840,000 |
| OTHER COUNTRIES | | | | | | |
| Austria | 2,174,200 | 2,170,400 | 2,164,700 | 2,111,400 | 2,440,000 | 2,772,000 |
| Belgium | 7,919,500 | 8,233,933 | 8,099,687 | 8,761,394 | 10,206,220 | 11,014,000 |
| Bulgaria | 450,000 | 684,000 | 855,000 | 1,012,000 | 1,100,000 | 1,080,000 |
| Czechoslovakia | 5,627,000 | 5,776,000 | 6,170,000 | 6,714,000 | 6,809,000 | 6,898,000 |
| Finland | 583,000 | 921,000 | 919,000 | 1,021,600 | 1,088,000 | 1,214,000 |
| France (a) | 15,612,174 | 15,520,937 | 15,343,969 | 15,462,067 | 16,190,198 | 17,924,458 |
| Germany— | | | | | | |
| Federal Republic | 26,882,000 | 26,706,000 | 25,158,000 | 26,933,000 | 29,826,000 | 33,231,000 |
| Eastern | 2,224,200 | 2,301,100 | 2,409,000 | 2,485,000 | 2,296,000 | 2,065,000 |
| Hungary | 1,476,414 | 1,564,000 | 1,614,000 | 1,631,000 | 1,623,000 | 1,725,000 |
| Italy | 3,567,441 | 5,539,551 | 6,315,450 | 7,346,375 | 7,867,079 | 7,821,963 |
| Luxemburg | 4,124,824 | 4,079,129 | 3,899,902 | 3,899,996 | 4,239,715 | 4,788,000 |
| Netherlands | 1,916,200 | 2,327,000 | 2,173,900 | 2,545,000 | 2,776,000 | 3,406,000 |
| Norway | 879,469 | 1,072,950 | 1,121,240 | 1,212,481 | 1,366,379 | 1,418,194 |
| Poland | 5,554,000 | 5,669,000 | 5,763,000 | 6,477,000 | 6,732,000 | 6,917,000 |
| Portugal | 264,217 | 271,404 | 244,880 | 280,836 | 284,047 | 339,172 |
| Roumania | 1,894,000 | 1,987,000 | 2,163,000 | 2,417,000 | 2,945,000 | 3,422,000 |
| Spain | 1,938,618 | 2,369,210 | 2,149,000 | 2,722,000 | 2,824,000 | 3,342,000 |
| Sweden | 2,324,201 | 2,420,992 | 2,367,451 | 2,534,953 | 2,767,600 | 2,742,000 |
| Switzerland | 30,000 | 25,000 | 25,000 | 24,000 | 22,000 | 25,000 |
| U.S.S.R. | 61,392,000 | 65,200,000 | 69,154,000 | 73,630,000 | 77,600,000 | 80,342,000 |
| Yugoslavia | 1,056,616 | 1,156,395 | 1,198,072 | 1,236,000 | 1,266,000 | 1,267,487 |
| Egypt | 189,062 | 170,000 | (d) 170,000 | 197,000 | <i>n.a.</i> | 416,000 |
| South Africa | 2,853,700 | 3,595,600 | 3,740,000 | 3,718,900 | 4,055,900 | 4,286,000 |
| Mexico | 954,000 | 973,000 | 1,162,569 | 1,318,669 | 1,570,000 | 2,100,000 |
| United States | 78,511,112 | 81,176,821 | 83,931,600 | 79,885,000 | 81,558,000 | 87,136,100 |
| Argentina | 580,000 | 652,700 | 510,400 | 600,000 | 559,666 | 574,012 |
| Brazil | 2,625,321 | 2,364,795 | 2,916,917 | 2,950,000 | 3,300,000 | 4,800,000 |
| Chile (b) | 430,000 | 304,000 | 426,000 | 498,000 | 434,600 | 476,000 |
| Colombia | 201,728 | 200,727 | 166,000 | 203,352 | 201,938 | 198,197 |
| Peru (b) | 27,000 | 20,000 | 28,000 | 29,000 | <i>n.a.</i> | <i>n.a.</i> |
| Venezuela | 318,000 | 329,000 | 345,000 | 416,000 | 604,000 | <i>n.a.</i> |
| China (d) | 18,000,000 | 19,000,000 | 20,000,000 | 14,000,000 | 19,000,000 | 20,000,000 |
| Formosa | 62,661 | 72,785 | 76,079 | 85,408 | 76,590 | 78,000 |
| Japan | 24,100,000 | 27,700,000 | 32,200,000 | 40,400,000 | 46,713,000 | 58,505,000 |
| Korea (South) | 1,314 | 18,092 | 20,270 | 22,039 | 46,000 | 41,000 |
| Korea (North) | 1,348,000 | (d)1,462,000 | (d)1,500,000 | d 1,722,000 | d 1,964,000 | (d)2,214,000 |
| Thailand | 5,000 | 5,000 | 2,000 | 6,000 | 17,000 | 11,000 |
| Turkey | r 293,000 | 499,000 | r 732,000 | 842,000 | 896,000 | 993,000 |
| TOTAL | 278,000,000 | 295,000,000 | 307,000,000 | 317,000,000 | 343,000,000 | 376,000,000 |
| WORLD'S TOTAL | 312,000,000 | 330,000,000 | 341,000,000 | 351,000,000 | 380,000,000 | 413,000,000 |

* For details see page 154.

(a) Excluding electric furnace and aluminio-thermic ferro-alloys. For these see page 155.

(b) Excluding ferro-alloys.

(c) Including recovery from scrap and excluding ferro-alloys. For ferro-alloys see page 154.

(d) United States Bureau of Mines' estimate.

DETAILS OF PRODUCTION OF PIG-IRON AND FERRO-ALLOYS IN CERTAIN COUNTRIES

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | | | | | | |
|---|------------|------------|------------|-------------|------------|------------|--------|--------|--------|--------|--------|------|
| COMMONWEALTH COUNTRIES | | | | | | | | | | | | |
| United Kingdom— | | | | | | | | | | | | |
| Hematite | 956,800 | 877,300 | 677,900 | 641,500 | 887,600 | 863,200 | | | | | | |
| Basic | 15,069,300 | 15,377,100 | 13,945,100 | 13,681,100 | 14,925,300 | 14,776,700 | | | | | | |
| Foundry | 1,079,100 | 1,012,300 | 926,700 | 678,700 | 453,700 | 596,100 | | | | | | |
| Forge | | | | | | | | | | | | |
| Direct castings | | | | | | | | | | | | |
| Blast furnace ferro-alloys— | | | | | | | | | | | | |
| Spiegeleisen | 16,900 | 21,200 | 9,100 | 151,700 | 165,200 | 153,700 | | | | | | |
| Ferro-manganese | 151,500 | 172,000 | 150,900 | | | | | | | | | |
| Canada— | | | | | | | | | | | | |
| Basic | 5,060,871 | 5,634,602 | 5,683,266 | r 5,516,909 | 6,751,729 | 5,854,432 | | | | | | |
| Foundry | 389,620 | 427,926 | 417,529 | r 475,394 | 500,446 | 561,329 | | | | | | |
| Malleable | 398,469 | 245,401 | 338,975 | r 213,771 | 232,290 | 246,041 | | | | | | |
| Ferro-alloys (a) | 145,000 | 162,109 | 167,745 | 149,993 | 149,029 | 184,414 | | | | | | |
| India— | | | | | | | | | | | | |
| Basic | 4,640,000 | 6,860,000 | 6,930,000 | 6,802,000 | 7,200,000 | 7,200,000 | | | | | | |
| Foundry | 1,297,000 | | | | | | | | | | | |
| Other pig-iron | 552,000 | | | | | | | | | | | |
| Direct castings | 123,749 | 146,973 | 135,311 | 133,684 | 143,507 | 151,115 | | | | | | |
| Ferro-manganese | | | | | | | | | | | | |
| Ferro-silicon | | | | | | | 17,245 | 20,215 | 19,088 | 19,881 | 20,176 | n.a. |
| Ferro-chrome | | | | | | | 319 | — | 627 | 68 | 317 | n.a. |
| Ferro-silicon zirconium | | | | | | | — | — | 180 | n.a. | n.a. | n.a. |
| Australia— | | | | | | | | | | | | |
| Pig-iron | 3,930,107 | 4,183,678 | 4,666,885 | 4,977,334 | 5,483,000 | 6,010,000 | | | | | | |
| Ferro-manganese (b) | 33,729 | 40,254 | 44,729 | 56,168 | 36,317 | n.a. | | | | | | |
| Ferro-silicon (b) | 5,015 | 4,404 | 4,225 | 8,807 | 10,052 | n.a. | | | | | | |
| Silico-manganese (b) | 13,510 | 15,748 | 10,716 | 18,940 | 14,870 | n.a. | | | | | | |
| Ferro-chrome (b) | 2,441 | 1,337 | 1,753 | 2,182 | 2,472 | n.a. | | | | | | |
| Chrome silicide (b) | 238 | — | — | — | — | n.a. | | | | | | |
| Ferro-silicon zirconium | — | — | 180 | n.a. | n.a. | n.a. | | | | | | |
| OTHER COUNTRIES | | | | | | | | | | | | |
| Austria— | | | | | | | | | | | | |
| Basic | 2,139,502 | 2,111,378 | 2,131,090 | 2,071,705 | 2,406,793 | 2,800,000 | | | | | | |
| Hematite | 29,575 | 53,954 | 28,847 | 34,024 | 27,951 | n.a. | | | | | | |
| Electric furnace ferro-alloys | | | | | | | | | | | | |
| | 5,100 | 5,100 | 4,800 | 5,700 | 5,500 | 6,000 | | | | | | |
| Belgium— | | | | | | | | | | | | |
| Basic | 7,816,863 | 8,122,069 | 7,977,674 | 8,655,058 | 9,994,616 | 10,896,000 | | | | | | |
| Forge | 1,021 | — | — | — | — | — | | | | | | |
| Foundry | 89,704 | 98,590 | 105,223 | 93,134 | 99,405 | 101,000 | | | | | | |
| Ferro-alloys | 11,912 | 13,274 | 16,790 | 13,202 | 13,780 | 17,000 | | | | | | |
| Czechoslovakia— | | | | | | | | | | | | |
| Basic | 4,944,000 | 5,048,000 | 5,471,000 | 6,157,000 | 6,322,000 | 6,434,000 | | | | | | |
| Foundry | 591,000 | 636,000 | 651,000 | 513,000 | 439,000 | 444,000 | | | | | | |
| Ferro-alloys | 92,000 | 92,000 | 48,000 | 44,000 | 48,000 | 21,000 | | | | | | |
| France— | | | | | | | | | | | | |
| Phosphoric (over 1.4% P)— | | | | | | | | | | | | |
| Basic | 12,793,864 | 12,357,070 | 12,048,514 | 11,893,889 | 12,486,121 | 13,115,377 | | | | | | |
| Foundry | 156,782 | 141,593 | 82,489 | 106,911 | 90,957 | 106,452 | | | | | | |
| Semi-phosphoric (from 0.5% to 1.4% P)— | | | | | | | | | | | | |
| Foundry | 288,060 | 267,647 | 195,494 | 96,341 | 94,207 | 93,729 | | | | | | |
| Open hearth, basic | (c) | (c) | (c) | (c) | (c) | (c) | | | | | | |
| Hematite (less than 0.5% P)— | | | | | | | | | | | | |
| Foundry | 443,040 | 500,599 | 542,941 | 615,195 | 571,367 | 709,495 | | | | | | |
| Open hearth and Bessemer | 1,279,228 | 1,653,051 | 1,951,609 | 2,322,088 | 2,466,278 | 3,330,972 | | | | | | |

(a) Factory shipments.

(b) Years ended November 30 of year stated.

(c) Included, if any, with phosphoric.

DETAILS OF PRODUCTION OF PIG-IRON AND FERRO-ALLOYS (cont.)

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|------------|------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| France <i>(cont.)</i> — | | | | | | |
| Blast furnace ferro-alloys— | | | | | | |
| Spiegeleisen | 90,725 | 103,703 | 52,252 | 56,529 | } 368,056 | 420,640 |
| Ferro-manganese | 315,021 | 321,945 | 296,762 | 258,340 | | |
| Other pig-iron | 245,454 | 175,329 | 173,908 | 113,212 | 112,773 | 147,793 |
| Electric furnace and aluminio-thermic ferro-alloys— | | | | | | |
| Ferro-silicon (50% Si) | 101,720 | 117,550 | 119,723 | 112,569 | 128,901 | <i>n.a.</i> |
| Silico-spiegeleisen and silico-manganese | 11,505 | 14,285 | 12,855 | 15,059 | 8,492 | <i>n.a.</i> |
| Silico-aluminium and silico-manganese-aluminium | 844 | 1,052 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ferro-manganese | 28,864 | 29,845 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ferro-chrome | 61,480 | 70,356 | } 83,806 | 93,586 | 96,116 | <i>n.a.</i> |
| Silico-chrome | 4,097 | 3,907 | | | | |
| Ferro-tungsten (<i>W content</i>) | 458 | 559 | } (a) 766 | (a) 606 | 542 | <i>n.a.</i> |
| Ferro-molybdenum (<i>Mo content</i>) | 1,786 | 1,428 | | | | |
| Ferro-vanadium (<i>V content</i>) | 306 | 392 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Titanium alloys | 3,915 | 4,876 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Silico-zirconium | 506 | 1,277 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ferro-silico-magnesium and silico-magnesium | 2,227 | 3,268 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ferro-niobium (<i>Nb + Ta content</i>) | 70 | 47 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Germany (Federal)— | | | | | | |
| Hematite and malleable | | | | | | |
| Basic | 1,234,000 | 1,271,000 | 1,120,000 | 999,000 | 1,080,000 | 1,157,000 |
| Foundry | 15,282,000 | 14,681,000 | 13,493,000 | 13,272,000 | 14,023,000 | 15,102,000 |
| Stahleisen | 493,000 | 446,000 | 299,000 | 244,000 | 275,000 | 300,000 |
| Spiegeleisen (blast-furnace) | 9,224,000 | 9,614,000 | 9,545,000 | 11,798,000 | 13,709,000 | 15,607,000 |
| Ferro-manganese (blast furnace) | } 283,000 | 276,000 | 291,000 | 250,000 | 323,000 | 234,000 |
| Siegerland special | | | | | | |
| Other pig-iron | | | | | | |
| Ferro-silicon (blast-furnace) | } 237,000 | 276,000 | 264,000 | 370,000 | 418,000 | 435,000 |
| Electric furnace and aluminio-thermic ferro-alloys | | | | | | |
| Germany (East)— | 129,371 | 141,721 | 145,506 | 129,648 | <i>n.a.</i> | <i>n.a.</i> |
| Foundry | 541,700 | 596,200 | 594,100 | 602,200 | } 2,296,000 | 2,065,000 |
| Open hearth | 1,225,200 | 1,238,700 | 1,342,300 | 1,408,100 | | |
| Basic Bessemer | 437,400 | 449,300 | 455,500 | 464,200 | | |
| Spiegeleisen | 19,100 | 16,600 | 17,100 | 10,600 | | |
| Other | 800 | 300 | — | — | | |
| Hungary— | | | | | | |
| Basic | 1,382,027 | 1,489,000 | 1,559,000 | 1,614,000 | 1,599,000 | 1,708,000 |
| Foundry | 87,698 | 64,000 | 48,000 | 9,000 | 12,000 | 18,000 |
| Spiegeleisen | 917 | 4,000 | — | 2,000 | 1,000 | — |
| Ferro-manganese | 161 | 1,536 | 2,223 | 7,558 | 10,904 | <i>n.a.</i> |
| Ferro-silicon | 5,611 | 5,542 | 5,035 | 6,544 | 6,573 | <i>n.a.</i> |
| Italy— | | | | | | |
| Pig-iron | 3,442,542 | 5,403,225 | 6,158,206 | 7,177,487 | 7,700,748 | 7,657,635 |
| Spiegeleisen | 1,330 | 2,829 | 3,420 | 4,120 | 4,761 | 4,259 |
| Ferro-manganese | 24,564 | 18,792 | 21,847 | 25,511 | 25,103 | 26,699 |
| Ferro-silicon | 44,099 | 48,226 | 61,427 | 62,172 | 58,787 | 63,032 |

(a) Excluding aluminio-thermic.

DETAILS OF PRODUCTION OF PIG-IRON AND FERRO-ALLOYS (cont.)

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|------------|-----------|------------|------------|------------|------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Italy (cont.)— | | | | | | |
| Silico-manganese .. | 26,990 | 33,817 | 31,534 | 32,488 | 32,412 | 28,428 |
| Ferro-chrome .. | 15,208 | 21,795 | 28,798 | 31,398 | 34,041 | 33,257 |
| Ferro-titanium .. | 232 | 76 | 99 | 203 | 135 | 422 |
| Ferro-tungsten .. | 21 | 2 | 15 | — | 11 | 9 |
| Ferro-vanadium .. | 129 | 140 | 147 | 170 | 69 | 129 |
| Ferro-molybdenum .. | 859 | 957 | 947 | 665 | 347 | 1,243 |
| Silico-aluminium .. | 1,090 | — | 814 | 711 | 263 | 501 |
| Silicon pig iron (10-12% Si) .. | 1,631 | 1,752 | 1,852 | 1,947 | 1,410 | 2,641 |
| Silico-spicgeleisen .. | 2,053 | 1,318 | 1,597 | 1,949 | 1,850 | n.a. |
| Silico-chrome .. | 2,885 | 2,047 | 802 | — | — | — |
| Calcium silicide .. | 3,049 | 3,670 | 3,340 | 4,699 | 4,566 | 4,529 |
| Ferro-phosphorus .. | 759 | 905 | 1,138 | 1,176 | n.a. | n.a. |
| Luxembourg— | | | | | | |
| Basic .. | 4 124,824 | 4,079,129 | 3,899,902 | 3,899,996 | 4,239,715 | 4,795,323 |
| Norway— | | | | | | |
| Pig-iron .. | 429,815 | 516,061 | 619,702 | 626,776 | 663,433 | 671,104 |
| Ferro-silicon .. | 220,970 | 273,710 | 232,745 | 283,304 | 350,800 | 347,562 |
| Ferro-manganese .. | 74,684 | 118,701 | 115,221 | 133,226 | 166,598 | 205,502 |
| Ferro-silico-manganese .. | 107,809 | 124,318 | 119,454 | 131,800 | 139,713 | 144,310 |
| Ferro-chrome and silico- chrome .. | 45,112 | 39,023 | 30,948 | 32,222 | 38,699 | 40,927 |
| Other ferro-alloys .. | 1,079 | 1,137 | 3,170 | 5,153 | 7,136 | 8,789 |
| Portugal— | | | | | | |
| Basic .. | 222,671 | 244,065 | 221,008 | 263,060 | 262,848 | 313,185 |
| Foundry .. | 35,930 | 20,490 | 15,772 | 10,395 | 13,897 | 15,445 |
| Ferro-manganese .. | 661 | 672 | 825 | 938 | 800 | 1,597 |
| Ferro-silicon .. | 4,633 | 5,962 | 7,034 | 6,079 | 6,207 | 8,576 |
| Ferro-tungsten .. | 322 | 215 | 241 | 364 | 295 | 368 |
| Spain— | | | | | | |
| Pig-iron .. | 1,873,333 | 2,300,843 | 2,073,000 | 2,644,000 | 2,735,000 | 3,248,000 |
| Ferro-manganese .. | 32,326 | 37,163 | 35,396 | 40,284 | 40,294 | 44,092 |
| Ferro-silicon .. | 16,364 | 14,867 | 18,237 | 21,873 | 20,483 | 24,703 |
| Ferro-tungsten .. | } 16,595 | } 16,337 | } 22,551 | } 15,649 | } 28,345 | } 24,999 |
| Ferro-chrome .. | | | | | | |
| Ferro-phosphorus .. | | | | | | |
| Other ferro-alloys .. | | | | | | |
| Sweden— | | | | | | |
| Pig-iron .. | 2,161,175 | 2,243,506 | 2,188,509 | 2,320,381 | 2,441,500 | 2,489,649 |
| Ferro-manganese .. | 26,250 | 25,703 | 25,014 | 38,772 | 34,300 | 28,936 |
| Ferro-silicon .. | 26,862 | 30,379 | 28,749 | 29,857 | 38,100 | 40,451 |
| Ferro-silico-manganese .. | 10,733 | 14,428 | 20,718 | 24,919 | 29,800 | 39,467 |
| Ferro-chrome .. | 50,036 | 56,217 | 55,192 | 53,980 | 59,800 | 61,414 |
| Ferro-tungsten .. | 208 | 78 | 51 | 316 | 492 | 492 |
| Ferro-molybdenum .. | 2,043 | 2,397 | 2,304 | 2,141 | 2,700 | 3,445 |
| Ferro-vanadium .. | 319 | 370 | 430 | 356 | 500 | 689 |
| Metallic silicon .. | 7,145 | 9,168 | 8,805 | 8,781 | 8,100 | 9,547 |
| Silico-chrome .. | 39,206 | 38,386 | 37,259 | 55,329 | 61,300 | 67,910 |
| Other ferro-alloys .. | 224 | 148 | 186 | 122 | — | — |
| U. S. S. R.— | | | | | | |
| Basic .. | 50,779,000 | n.a. | 58,887,000 | 63,134,000 | 66,721,000 | 70,391,000 |
| Foundry .. | 8,835,000 | n.a. | 8,837,000 | 9,161,000 | 9,437,000 | 8,789,000 |
| Spiegeleisen .. | 80,000 | n.a. | 91,000 | 90,000 | 74,000 | 85,000 |
| Ferro-manganese .. | 902,000 | n.a. | 888,000 | 897,000 | 929,000 | 865,000 |
| Other blast furnace ferro-alloys .. | 796,000 | n.a. | 451,000 | 349,000 | 383,000 | 216,000 |
| Yugoslavia— | | | | | | |
| Pig-iron .. | 1,009,814 | 1,097,447 | 1,125,155 | 1,158,000 | 1,182,000 | 1,179,079 |
| Ferro-alloys .. | 46,802 | 58,948 | 72,917 | 77,422 | 83,658 | 88,407 |
| South Africa— | | | | | | |
| Pig-iron .. | 2,614,500 | 3,219,600 | 3,367,900 | 3,366,200 | 3,713,100 | 3,868,700 |
| Ferro-alloys .. | 239,200 | 376,000 | 372,100 | 352,700 | 342,900 | 417,300 |

DETAILS OF PRODUCTION OF PIG-IRON AND FERRO-ALLOYS (cont.)

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| United States— | | | | | | |
| Basic | 69,997,803 | 71,813,215 | 74,529,700 | 72,629,000 | 74,461,000 | 80,257,600 |
| Bessemer | 2,435,272 | 2,425,000 | 2,573,200 | 1,537,000 | 1,283,000 | 1,166,100 |
| Low phosphorus | 174,737 | 195,939 | 186,600 | 148,000 | 151,000 | 85,700 |
| Foundry | 1,449,111 | 1,428,054 | 1,493,800 | 1,384,000 | 1,371,000 | 1,651,800 |
| Malleable | 2,029,979 | 2,505,409 | 2,542,900 | 1,634,000 | 1,611,000 | 1,300,000 |
| Other pig-iron | 279,691 | 368,902 | 370,500 | 332,000 | 391,000 | 375,900 |
| Ferro-manganese and spiegeleisen | 773,712 | 901,041 | 816,100 | 842,000 | 804,000 | |
| Ferro-silicon and silvery pig-iron | 598,416 | (a) 628,712 | (a) 463,400 | (a) 471,000 | 487,000 | } 2,299,000 |
| Other ferro-alloys | 772,391 | 910,549 | 955,400 | 908,000 | 1,014,000 | |
| Brazil— | | | | | | |
| Pig-iron | 2,586,979 | 2,317,477 | 2,865,576 | 3,050,000 | 3,300,000 | } 4,800,000 |
| Ferro-chrome | 128 | 2,150 | 2,978 | <i>n.a.</i> | <i>n.a.</i> | |
| Ferro-columbium | 18 | 272 | 452 | 520 | 1,126 | |
| Ferro-manganese | 20,317 | 22,829 | 27,795 | <i>n.a.</i> | <i>n.a.</i> | |
| Ferro-nickel | 3,172 | 3,525 | 3,708 | <i>n.a.</i> | <i>n.a.</i> | |
| Ferro-silicon | 8,120 | 7,489 | 9,178 | <i>n.a.</i> | <i>n.a.</i> | |
| Ferro-silico-manganese | 6,587 | 11,053 | 7,230 | <i>n.a.</i> | <i>n.a.</i> | |
| Japan— | | | | | | |
| Pig-iron | 23,402,839 | 27,068,000 | 31,512,000 | 39,462,000 | 45,664,000 | 57,229,000 |
| Spiegeleisen | 535 | 100 | 500 | 700 | <i>n.a.</i> | <i>n.a.</i> |
| Ferro-chrome | 134,632 | 115,000 | 135,100 | 194,300 | 211,000 | 255,000 |
| Ferro-manganese | 208,248 | 217,200 | 233,800 | 297,800 | 339,000 | 375,000 |
| Ferro-molybdenum | 1,406 | 1,200 | 1,700 | 2,000 | <i>n.a.</i> | <i>n.a.</i> |
| Ferro-phosphorus | 1,703 | 1,500 | 2,000 | 2,400 | <i>n.a.</i> | <i>n.a.</i> |
| Ferro-silicon | 111,995 | 118,900 | 136,400 | 144,000 | 164,000 | 221,000 |
| Ferro-tungsten | 1,159 | 700 | 700 | 1,100 | <i>n.a.</i> | <i>n.a.</i> |
| Ferro-nickel | 77,086 | 72,600 | 70,400 | 105,200 | 132,000 | 177,000 |
| Ferro-vanadium | 1,110 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Silico-manganese | 112,906 | 113,400 | 124,100 | 173,100 | 187,000 | 226,000 |
| Silico-chrome | 58,209 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Calcium-silicon | 9,477 | 5,500 | 7,200 | 7,800 | <i>n.a.</i> | <i>n.a.</i> |
| Turkey— | | | | | | |
| Pig-iron | r 288,000 | 492,000 | r 725,000 | 834,000 | 896,000 | 933,000 |
| Ferro-chrome | 4,745 | 7,355 | 7,000 | 8,337 | <i>n.a.</i> | <i>n.a.</i> |

(a) Excluding silvery pig-iron, included with "other pig-iron".

PRODUCTION OF STEEL INGOTS AND CASTINGS*

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | 26,229,900 | 27,006,100 | 24,315,300 | 23,895,200 | 25,862,200 | 26,422,300 |
| Rhodesia (c) | 125,597 | 128,000 | 128,000 | 134,000 | n.a. | n.a. |
| Canada | 8,150,417 | 8,954,374 | 8,931,132 | 8,666,145 | 10,045,532 | 9,202,278 |
| India | (c)5,937,477 | (c)6,311,398 | (c)6,502,000 | (c)6,216,000 | 6,600,000 | 6,366,000 |
| Pakistan | 12,067 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Australia (f) | 4,967,744 | 5,373,049 | 5,796,813 | 6,167,000 | 6,399,000 | 6,906,000 |
| TOTAL | 45,420,000 | 47,800,000 | 45,700,000 | 45,100,000 | 49,050,000 | 49,040,000 |
| Irish Republic (d) | 51,800 | 52,100 | 55,600 | 64,000 | 66,000 | n.a. |
| OTHER COUNTRIES | | | | | | |
| Austria | 3,143,976 | 3,170,438 | 3,142,383 | 2,975,224 | 3,412,719 | 3,864,000 |
| Belgium | 8,600,000 | 9,000,000 | 8,700,000 | 9,546,000 | 11,400,000 | 12,629,000 |
| Bulgaria | 467,000 | 579,000 | 689,000 | 1,219,000 | 1,438,000 | 1,491,000 |
| Czechoslovakia | 8,244,000 | 8,463,000 | 8,984,000 | 9,844,000 | 10,388,000 | 10,631,000 |
| Denmark | 389,900 | 405,400 | 398,300 | 395,000 | 450,000 | 474,000 |
| Finland | 352,000 | 373,000 | 409,000 | 421,000 | 696,000 | 898,000 |
| France | 19,467,773 | 19,294,145 | 19,275,848 | 19,344,752 | 20,087,668 | 22,155,833 |
| Germany— | | | | | | |
| Federal Republic | 36,749,000 | 36,240,000 | 34,758,000 | 36,164,000 | 40,509,000 | 44,600,000 |
| Eastern | 3,790,900 | 3,828,500 | 4,020,000 | 4,176,000 | 4,622,000 | 4,748,000 |
| Greece | 207,000 | 207,000 | 196,000 | 269,000 | 215,000 | 443,000 |
| Hungary | 2,327,404 | 2,480,294 | 2,607,000 | 2,696,000 | 2,857,000 | 2,984,000 |
| Italy | 9,638,613 | 12,481,118 | 13,423,208 | 15,648,746 | 16,683,992 | 16,168,669 |
| Luxemburg | 4,486,546 | 4,512,400 | 4,320,794 | 4,410,262 | 4,757,753 | 5,433,769 |
| Netherlands | 2,604,600 | 3,088,800 | 3,216,300 | 3,350,000 | 3,648,000 | 4,639,000 |
| Norway | 605,720 | 675,118 | 716,300 | 766,000 | 810,000 | 840,000 |
| Poland | 8,437,000 | 8,944,000 | 9,694,000 | 10,289,000 | 10,833,000 | 11,100,000 |
| Portugal | 245,703 | 264,929 | 261,288 | 305,864 | 307,000 | 394,000 |
| Roumania | 2,991,000 | 3,372,000 | 3,612,000 | 4,023,000 | 4,676,000 | 5,453,000 |
| Spain | 3,101,000 | 3,460,000 | 3,786,000 | 4,279,000 | 4,862,000 | 5,818,000 |
| Sweden | 4,438,938 | 4,637,290 | 4,678,726 | 4,570,000 | 5,014,000 | 5,239,000 |
| Switzerland | 340,000 | 342,000 | 421,000 | 438,000 | 446,000 | 492,000 |
| U.S.S.R. | 83,691,000 | 89,563,000 | 95,376,000 | 100,620,000 | 104,850,000 | 108,549,000 |
| Yugoslavia | 1,650,679 | 1,740,893 | 1,837,824 | 1,803,000 | 1,965,000 | 2,185,000 |
| Egypt | 179,791 | 183,278 | 194,204 | 196,000 | 187,000 | 482,000 |
| South Africa (a) | 2,954,400 | 3,080,100 | 3,092,300 | 3,521,300 | 3,869,700 | 4,428,800 |
| Mexico | 2,300,000 | 2,341,091 | 2,743,454 | 2,991,642 | 3,200,000 | 3,400,000 |
| United States (b) | 113,460,506 | 117,376,430 | 119,733,400 | 113,584,000 | 117,378,000 | 126,127,300 |
| Argentina (c) | 1,247,000 | 1,324,900 | 1,250,300 | 1,304,000 | 1,548,279 | 1,673,656 |
| Brazil | 3,024,400 | 2,969,200 | 3,800,000 | 3,500,000 | 4,300,000 | 3,661,000 |
| Chile (c) | 535,655 | 434,000 | 531,000 | 586,881 | 517,300 | 592,000 |
| Colombia | 192,979 | 200,490 | 171,000 | 256,000 | n.a. | 263,000 |
| Peru | 81,000 | 93,000 | 76,000 | 75,000 | 104,000 | n.a. |
| Uruguay | 14,000 | 13,000 | 10,200 | 13,300 | 8,400 | n.a. |
| Venezuela | 433,000 | 1,068,000 | 514,000 | 656,000 | 735,000 | n.a. |
| Burma (e) | 15,000 | 15,000 | 15,000 | 21,000 | 21,000 | 21,000 |
| China (e) | 14,000,000 | 15,000,000 | 16,000,000 | 11,000,000 | 15,000,000 | 16,000,000 |
| Formosa | 296,000 | 433,000 | 295,000 | (e) 246,000 | (e) 246,000 | 267,000 |
| Israel | (e) 82,000 | (e) 83,000 | (e) 83,000 | 84,000 | 100,000 | 120,000 |
| Japan | 39,170,588 | 40,511,000 | 47,029,100 | 61,172,000 | 65,837,000 | 80,868,000 |
| Korea (North) | 1,032,000 | 1,210,000 | (e)1,300,000 | (e)1,427,000 | e)1,723,000 | 1,968,000 |
| Korea (South) | 131,634 | 191,793 | 214,418 | 324,000 | 360,000 | 513,000 |

* For details see page 160.

(a) Excluding steel castings for which the amounts produced for sale were 93,200 tons, 106,900 tons, 99,700 tons, 146,000 tons, 125,800 and 117,700 tons, in 1964, 1965, 1966, 1967, 1968 and 1969 respectively.

(b) Excluding steel castings which were produced by companies not manufacturing steel ingots.

(c) Ingots only.

(f) Including recovery from scrap.

(d) Years ended June 30 of that stated.

(e) United States Bureau of Mines' estimate.

PRODUCTION OF STEEL INGOTS AND CASTINGS (cont.)

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Thailand | 4,000 | 7,000 | 5,000 | 3,000 | 5,000 | 4,000 |
| Turkey (a) | r 398,000 | r 572,000 | r 829,000 | r 981,000 | 1,092,000 | 1,151,000 |
| TOTAL | 386,000,000 | 404,000,000 | 422,000,000 | 440,000,000 | 471,000,000 | 514,000,000 |
| WORLD'S TOTAL .. | 431,000,000 | 452,000,000 | 468,000,000 | 485,000,000 | 520,000,000 | 563,000,000 |

(a) Ingots only.

DETAILS OF PRODUCTION OF STEEL INGOTS AND CASTINGS
IN CERTAIN COUNTRIES

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|----------------------------------|-------------|------------|-------------|-------------|------------|------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ingots and castings— | | | | | | |
| Open hearth, acid .. | 419,300 | 392,000 | 255,900 | 131,700 | 154,200 | 166,100 |
| do. basic .. | 18,069,600 | 16,822,200 | 14,114,700 | 13,518,400 | 14,028,400 | 13,785,600 |
| Bessemer, acid (a) .. | 290,300 | 258,400 | } 6,601,300 | 6,826,700 | 7,528,600 | 7,609,800 |
| do. basic (a) .. | 4,432,300 | 6,026,300 | | | | |
| Ingots, electric .. | } 2,938,700 | 3,437,300 | 3,343,400 | 3,418,400 | 4,151,000 | 4,860,800 |
| Castings, electric .. | | | | | | |
| All other ingots and castings .. | 79,700 | 69,900 | (b) | (b) | (b) | (b) |
| Canada— | | | | | | |
| Ingots— | | | | | | |
| Open hearth, basic and oxygen .. | 7,249,831 | 7,809,471 | 7,728,426 | r 7,530,683 | 8,659,364 | 7,649,434 |
| do. electric .. | 756,881 | 999,099 | 1,034,132 | r 999,645 | 1,259,035 | 1,414,714 |
| Castings— | | | | | | |
| Open hearth, basic .. | 1,206 | } 145,804 | 168,574 | r 131,129 | 127,133 | 138,130 |
| Electric .. | 142,499 | | | | | |
| India— | | | | | | |
| Ingots— | | | | | | |
| Open hearth, basic .. | 5,851,577 | 6,205,109 | } 6,502,000 | 6,216,000 | 6,600,000 | 6,366,000 |
| Electric .. | 85,900 | 106,289 | | | | |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Open hearth .. | 810,409 | 826,662 | 823,472 | 594,763 | 607,328 | 713,000 |
| Electric .. | 400,627 | 405,712 | 391,727 | 388,085 | 423,248 | 467,000 |
| L.D. .. | 1,932,940 | 1,938,064 | 1,927,184 | 1,992,376 | 2,382,143 | 2,685,000 |
| Belgium— | | | | | | |
| Ingots, open hearth .. | 435,767 | 377,825 | 245,521 | 211,472 | 188,000 | 270,000 |
| do. Bessemer, basic .. | 7,088,736 | 6,780,051 | 6,144,916 | 6,339,768 | 6,408,000 | 6,115,500 |
| do. electric .. | 340,904 | 333,607 | 302,787 | 285,813 | 307,000 | 343,000 |
| do. oxygen .. | 625,682 | 1,424,108 | 1,987,332 | 2,645,852 | 4,401,000 | 5,687,000 |
| Czechoslovakia— | | | | | | |
| Open hearth .. | 6,897,000 | 7,087,000 | 7,285,000 | 7,318,000 | 7,374,000 | 7,417,000 |
| Bessemer .. | 230,000 | 233,000 | 238,000 | 243,000 | 242,000 | 241,000 |
| Electric .. | 1,117,000 | 1,143,000 | 1,190,000 | 1,240,000 | 1,252,000 | 1,250,000 |
| Oxygen .. | — | — | 271,000 | 1,043,000 | 1,520,000 | 1,743,000 |
| Denmark— | | | | | | |
| Ingots, open hearth .. | 362,700 | 376,300 | 373,400 | } 379,900 | 432,000 | 457,000 |
| Castings do. .. | 5,400 | 6,100 | 8,100 | | | |
| do. electric .. | 21,800 | 23,000 | 16,800 | 14,800 | 17,700 | 18,700 |
| Finland— | | | | | | |
| Ingots .. | 338,000 | 357,000 | 393,000 | 405,000 | 680,000 | } 898,000 |
| Castings .. | 14,000 | 16,000 | 16,000 | 16,000 | 16,000 | |
| France— | | | | | | |
| Ingots and castings— | | | | | | |
| Bessemer, acid .. | 92,019 | 87,018 | 65,673 | 66,110 | 56,313 | 59,694 |
| do. basic .. | 10,435,836 | 10,231,772 | 10,138,067 | 9,952,647 | 10,341,283 | 10,495,893 |
| Open hearth, acid .. | 5,100,438 | 4,699,518 | 4,412,322 | 4,216,285 | 4,008,154 | 4,397,525 |
| do. basic .. | | | | | | |
| Crucible .. | 1,957 | 1,995 | 566 | — | — | — |
| Electric .. | 1,648,653 | 1,746,371 | 1,833,469 | 1,874,619 | 2,035,258 | 2,333,929 |
| Kaldo, L.D., etc. .. | 2,188,870 | 2,527,471 | 2,825,751 | 3,235,090 | 3,646,660 | 4,868,793 |
| Of which— | | | | | | |
| Ingots .. | 19,106,958 | 18,933,262 | 18,943,472 | 19,004,481 | 19,708,471 | 21,725,025 |
| Castings .. | 360,815 | 360,883 | 332,376 | 340,271 | 379,197 | 430,809 |

(a) Bessemer acid and basic includes V.L.N., L.D., Rotor and Kaldo.

(b) Included with Bessemer.

DETAILS OF PRODUCTION OF STEEL INGOTS AND CASTINGS (cont.)

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Germany (Federal)— | | | | | | |
| Ingots— | | | | | | |
| Open hearth | 16,482,000 | 15,479,000 | 13,488,000 | 13,335,000 | 14,314,000 | 13,302,000 |
| Bessemer, basic | 12,046,000 | 10,640,000 | 9,640,000 | 8,333,000 | 7,543,000 | 6,699,000 |
| Electric | 2,451,000 | 2,557,000 | 2,545,000 | 3,059,000 | 3,626,000 | 4,081,000 |
| Oxygen | 5,143,000 | 6,924,000 | 8,516,000 | 11,379,000 | 15,017,000 | 20,509,000 |
| Castings— | | | | | | |
| Open hearth | 87,000 | 78,000 | 57,000 | 49,000 | 57,000 | 73,000 |
| Electric | 501,000 | 530,000 | 497,000 | 462,000 | 557,000 | 632,000 |
| Other | 39,000 | 32,000 | 15,000 | 8,000 | 9,000 | 10,000 |
| Germany (East)— | | | | | | |
| Open hearth | 3,020,900 | 3,044,300 | 3,209,300 | 3,834,000 | } 4,622,000 | 4,748,000 |
| Bessemer, basic | 373,500 | 368,700 | 371,900 | 367,700 | | |
| Electric | 396,500 | 415,500 | 438,800 | 474,500 | | |
| Italy— | | | | | | |
| Ingots | 9,473,766 | 12,324,239 | 13,252,048 | 15,401,724 | 16,436,060 | 15,907,762 |
| Castings | 164,847 | 156,879 | 171,160 | 237,180 | 247,932 | 260,906 |
| Luxemburg— | | | | | | |
| Bessemer, basic and oxygen | 4,418,512 | 4,456,700 | 4,270,272 | 4,369,809 | 4,691,179 | 3,439,847 |
| Electric | 68,034 | 55,665 | 50,522 | 40,453 | 66,574 | 95,435 |
| L.D.A.C. | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 1,898,487 |
| Norway— | | | | | | |
| Ingots | 580,979 | 648,096 | 687,042 | 750,501 | 768,890 | 798,499 |
| Castings | 24,741 | 27,022 | 29,300 | 27,000 | 42,000 | <i>n.a.</i> |
| Portugal— | | | | | | |
| Ingots— | | | | | | |
| L.D. | 203,807 | 228,411 | 210,259 | 261,855 | 268,072 | 321,276 |
| Electric | 32,242 | 29,456 | 43,254 | 35,178 | 29,161 | 61,874 |
| Castings | 9,654 | 7,062 | 7,775 | 8,831 | 10,000 | 10,800 |
| Spain— | | | | | | |
| Open hearth and Bessemer | 1,947,000 | 2,010,000 | 1,953,000 | 1,994,000 | 1,925,000 | 1,881,000 |
| Electric | 824,000 | 1,045,000 | 1,285,000 | 1,378,000 | 1,696,000 | 2,067,000 |
| Oxygen | 330,000 | 405,000 | 548,000 | 907,000 | 1,241,000 | 1,870,000 |
| Sweden— | | | | | | |
| Open hearth, acid do. basic | 412,217 | 455,955 | 445,684 | 418,118 | 459,000 | } 1,332,000 |
| Bessemer, basic | 989,384 | 1,040,939 | 1,013,869 | 1,013,338 | 900,000 | |
| Electric | 456,704 | 364,410 | 140,908 | 94,550 | 46,000 | |
| Other | 1,861,594 | 1,765,118 | 1,708,534 | 1,717,866 | 1,957,000 | 2,154,000 |
| Other | 719,039 | 1,010,868 | 1,369,731 | 1,534,434 | 1,652,000 | 1,718,000 |
| U.S.S.R.— | | | | | | |
| Open hearth | 70,496,000 | 75,321,000 | 78,378,000 | 80,476,000 | 82,498,000 | 82,449,000 |
| Bessemer | 1,954,000 | 2,060,000 | 1,930,000 | 1,851,000 | 1,811,000 | 1,439,000 |
| Electric | 8,043,000 | 8,420,000 | 8,736,000 | 9,082,000 | 9,380,000 | 9,736,000 |
| Other | 3,198,000 | 3,762,000 | 6,332,000 | 9,211,000 | 11,160,000 | 14,949,000 |
| of which— | | | | | | |
| Ingots | 77,675,000 | <i>n.a.</i> | 89,063,000 | 94,438,000 | 98,166,000 | 101,632,000 |
| Castings | 6,016,000 | <i>n.a.</i> | 6,313,000 | 6,478,000 | 6,684,000 | 6,942,000 |
| Yugoslavia— | | | | | | |
| Open hearth | 1,459,240 | 1,515,310 | 1,547,713 | 1,525,519 | 1,573,000 | 1,593,000 |
| Electric | 191,439 | 225,988 | 289,213 | 277,546 | 392,000 | 592,000 |
| South Africa— | | | | | | |
| Ingots— | | | | | | |
| Open hearth (including duplex) | 1,675,200 | 1,638,500 | 1,649,400 | 1,747,200 | 1,884,700 | 1,834,100 |
| Oxygen | 873,700 | 971,100 | 1,002,800 | 1,256,900 | 1,371,400 | 1,612,400 |
| Electric | 405,500 | 470,500 | 440,100 | 517,200 | 613,700 | 982,300 |
| Castings (a) | 93,200 | 106,900 | 99,700 | 97,400 | 125,800 | 117,700 |

(a) Produced for sale.

DETAILS OF PRODUCTION OF STEEL INGOTS AND CASTINGS (cont.)

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---------------------------------|-------------|-------------|-------------|-------------|--------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| United States— | | | | | | |
| Ingots and castings (a)— | | | | | | |
| Open hearth, acid .. | 395,298 | 292,246 | 197,300 | 125,000 | } 58,782,000 | 54,369,900 |
| do. basic .. | 87,191,754 | 83,808,848 | 75,718,100 | 62,991,000 | | |
| Bessemer | 765,702 | 523,183 | 248,200 | (b) | } 43,582,000 | 53,782,400 |
| Oxygen | 13,787,666 | 20,427,326 | 30,293,000 | 36,995,000 | | |
| Electric | 11,320,086 | 12,324,827 | 13,276,800 | 13,473,000 | 15,013,000 | 17,975,000 |
| Of which— | | | | | | |
| Ingots | 113,261,201 | 117,137,796 | 119,450,400 | 113,410,000 | 117,223,000 | 125,973,000 |
| Castings | 199,305 | 238,634 | 283,000 | 173,000 | 155,000 | 154,000 |
| Japan— | | | | | | |
| Open hearth | 13,634,591 | 10,003,800 | 8,498,500 | 8,899,100 | 5,344,000 | 5,157,000 |
| Bessemer, basic .. | 17,303,032 | 22,271,100 | 29,439,900 | 40,000,000 | 48,494,000 | 62,000,000 |
| Electric | 8,232,965 | 8,236,100 | 9,090,700 | 11,181,500 | 11,996,000 | 13,518,000 |

(a) Excluding steel castings produced by companies not manufacturing steel ingots.

(b) Included with open hearth.

EXPORTS OF PIG-IRON, FERRO-ALLOYS, STEEL INGOTS AND CASTINGS, ETC.

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Pig-iron— | | | | | | |
| Forge and foundry .. | 10,877 | 24,189 | 6,856 | 8,637 | 15,783 | 5,372 |
| Refined | 7,422 | 9,228 | 7,000 | 6,516 | 5,798 | 12,866 |
| Other | 19,922 | 54,161 | 26,078 | 116,924 | 43,750 | 72,524 |
| Iron and steel powders, shot and sponge .. | | | | | | |
| Spiegeleisen | 18,907 | 20,022 | 18,122 | 15,614 | 18,163 | 20,461 |
| Ferro-manganese | 60 | 93 | — | 10 | 31 | 96 |
| Ferro-tungsten | 10,036 | 13,076 | 22,101 | 17,794 | 22,463 | 340 |
| Ferro-molybdenum | 896 | 1,005 | 1,175 | 1,176 | 1,366 | 1,638 |
| Ferro-titanium | 130 | 277 | 478 | 209 | 671 | 1,272 |
| Ferro-vanadium | 1,076 | 1,281 | 1,085 | 977 | 1,456 | 1,282 |
| Ferro-niobium and ferro-niobium-tantalum | 5 | 117 | 61 | 41 | 42 | 55 |
| Other ferro-alloys | 153 | 212 | 196 | 175 | 152 | 281 |
| Ingots, blooms, billets .. | 3,371 | 2,966 | 3,173 | 4,721 | 3,432 | 4,286 |
| Old and scrap (a) | 81,053 | 89,983 | 82,742 | 277,071 | 208,488 | 88,779 |
| Channel Islands— | 703,085 | 422,811 | 274,490 | 1,116,374 | 901,339 | 551,525 |
| Scrap (c) | 1,329 | 3,066 | 1,864 | 2,518 | 2,930 | 2,081 |
| Malta— | | | | | | |
| Scrap | 9,749 | 8,935 | 5,624 | 7,142 | 6,331 | 9,187 |
| Kenya— | | | | | | |
| Scrap | 22,562 | 8,618 | 5,628 | 5,490 | 2,368 | 3,680 |
| Nigeria— | | | | | | |
| Scrap | 10,755 | 6,110 | 9,519 | 6,656 | 7,409 | 20,173 |
| Rhodesia— | | | | | | |
| Pig-iron | 214,947 | 211,046 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ferro-alloys | 22,341 | 20,990 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ingots, etc. | 33,421 | 22,847 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Scrap | <i>n.a.</i> | 30 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Tanzania— | | | | | | |
| Scrap | 8,148 | 2,317 | 2,283 | 3,633 | 1,273 | 3,428 |
| Barbados— | | | | | | |
| Scrap | 300 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Jamaica— | | | | | | |
| Scrap | 20 | 1,018 | 148 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Trinidad and Tobago— | | | | | | |
| Old and scrap | 3,891 | 3,447 | 6,644 | 2,877 | 461 | 7,263 |
| Canada— | | | | | | |
| Pig-iron | 527,711 | 522,210 | 452,892 | 433,656 | 489,860 | 644,325 |
| Ferro-chrome | 154 | 183 | 31 | — | 1 | — |
| Ferro-manganese | 2,999 | 3,408 | 5,109 | 3,874 | 909 | 4,921 |
| Ferro-silicon | 41,060 | 41,453 | 33,949 | 37,437 | 42,156 | 43,303 |
| Other ferro-alloys | 214 | 1,654 | 5,314 | 1,056 | 571 | 2,875 |
| Ingots, blooms, billets .. | 394,853 | 271,220 | 197,307 | 156,988 | 266,297 | 153,400 |
| Old and scrap | 554,071 | 214,029 | 266,639 | 389,044 | 385,976 | 651,781 |
| Tin-plate scrap | 25,033 | 19,605 | 20,903 | 21,055 | 14,683 | 18,763 |
| Hong Kong— | | | | | | |
| Old and scrap | 148,947 | 126,773 | 92,968 | 115,310 | 109,773 | 111,604 |
| Tinplate scrap | 4,699 | 4,027 | 1,230 | 1,276 | 3,923 | 2,518 |
| India(b)— | | | | | | |
| Pig-iron | — | 6 | 168,165 | 550,724 | 756,153 | 497,764 |
| Ferro-manganese | 85,398 | 55,532 | 10,127 | 28,833 | 69,150 | 113,618 |
| Ingots, blooms, billets .. | — | 2,115 | 2,231 | 47,750 | 116,873 | 11,006 |
| Old and scrap | 442,780 | 439,378 | 444,917 | 563,398 | 395,444 | 10,490 |
| Malaysia (West)— | | | | | | |
| Scrap | <i>n.a.</i> | 34,370 | 31,939 | 36,642 | 25,121 | 23,729 |

(a) Excluding ships intended for breaking up as follows (gross tonnage): 1964—67,390; 1965—99,820; 1966—59,960; 1967—89,130; 1968—39,730; 1969—47,379

(b) Years ended March 31 following that stated.

(c) Jersey only.

EXPORTS OF PIG-IRON, FERRO-ALLOYS, STEEL INGOTS AND CASTINGS, ETC. (cont.)
Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---------------------------------------|-----------|-----------|-----------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Singapore— | | | | | | |
| Pig-iron | 853 | 342 | 2,359 | 1,433 | 909 | 250 |
| Ingots, blooms, etc. .. | 25 | 377 | 2,044 | 1,100 | 3,266 | 1,914 |
| Scrap | 23,113 | 11,376 | 8,455 | 3,535 | 592 | 1,105 |
| Australia (a)— | | | | | | |
| Pig-iron | 73,408 | 59,607 | 49,831 | (b) 129,751 | (b) 182,929 | (b) 346,183 |
| Ferro-alloys | 8 | 131 | 51 | (b) 16,922 | (b) 314 | (b) 304 |
| Ingots, blooms, billets .. | 20,291 | 5,843 | 80,768 | (b) 365,359 | (b) 343,461 | (b) 424,838 |
| Old and scrap | 336,041 | 353,963 | 250,082 | 338,005 | 344,917 | 419,419 |
| Tin-plate scrap | 15,576 | 14,518 | 14,989 | 65,123 | 78,231 | 62,563 |
| New Zealand (a)— | | | | | | |
| Scrap | 578 | 529 | 4,985 | 5,448 | 5,532 | 5,726 |
| Irish Republic— | | | | | | |
| Old and scrap | 44,875 | 34,558 | 18,346 | 31,533 | 20,056 | 11,182 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Pig-iron | 729 | 49,898 | 660 | 8,811 | 14,403 | 33,870 |
| Ferro-alloys | 3,354 | 3,659 | 3,903 | 4,317 | 5,034 | 5,101 |
| Ingots and blooms | 3,665 | 1,744 | 5,123 | 6,052 | 42,353 | 9,399 |
| Scrap | 3,825 | 3,686 | 5,441 | 11,377 | 6,021 | 4,961 |
| Belgium-Luxembourg | | | | | | |
| E.U.— | | | | | | |
| Pig-iron | 64,931 | 78,582 | 73,693 | 89,882 | 79,021 | 53,174 |
| Spiegeleisen | 4,080 | 1,076 | 2,066 | 3,150 | 2,542 | 2,923 |
| Ferro-manganese | 36,731 | 43,021 | 63,070 | 64,106 | 60,164 | 65,716 |
| Other ferro-alloys | 1,468 | 2,305 | 2,954 | 2,179 | 2,728 | 4,474 |
| Ingots | 41,290 | 7,436 | 20,520 | 6,948 | 7,391 | 109,687 |
| Blooms, billets, etc. .. | 647,265 | 747,398 | 641,885 | 552,521 | 639,173 | 798,003 |
| Old and scrap | 161,640 | 165,751 | 728,682 | 805,505 | 774,821 | 679,420 |
| Bulgaria— | | | | | | |
| Pig-iron | 128,851 | 296,243 | 363,006 | 75,587 | 17,224 | n.a. |
| Steel ingots | 3,875 | 6,566 | n.a. | n.a. | n.a. | n.a. |
| Denmark— | | | | | | |
| Blooms, billets, etc. .. | 3,329 | 3,085 | 3,042 | 2,344 | 2,485 | 3,332 |
| Old and scrap | 48,868 | 41,038 | 37,252 | 61,589 | 70,922 | 23,203 |
| Finland— | | | | | | |
| Pig-iron | 473,189 | 784,588 | 771,419 | 779,296 | 674,116 | 558,282 |
| Ferro-alloys | 39 | — | — | — | 6 | 19,359 |
| Blooms, billets, etc. .. | n.a. | 5,950 | 5,395 | 1,433 | 39 | 45,081 |
| Old and scrap | 4,173 | 3,036 | 3,566 | 4,828 | 10,231 | 6,172 |
| France— | | | | | | |
| Pig-iron | 99,370 | 98,501 | 55,865 | 70,546 | 45,756 | 40,832 |
| Spiegeleisen | 15,821 | 16,872 | 12,073 | 7,492 | 7,162 | 2,436 |
| Ferro-manganese | 192,878 | 200,442 | 184,815 | 167,227 | 204,910 | 227,058 |
| Ferro-silicon | 23,653 | 20,409 | 20,470 | 23,557 | 29,469 | 42,628 |
| Ferro-chrome | 15,980 | 18,175 | 22,727 | 19,536 | 21,318 | 12,711 |
| Other ferro-alloys | 8,428 | 13,225 | 19,693 | 23,067 | 30,066 | 40,840 |
| Ingots | 130,989 | 79,475 | 91,797 | 109,488 | 105,305 | 130,363 |
| Blooms, billets, etc. .. | 513,941 | 354,357 | 406,003 | 448,157 | 286,278 | 344,247 |
| Old and scrap | 1,478,046 | 1,802,489 | 1,793,996 | 2,156,413 | 2,157,290 | 2,193,934 |
| Germany (Federal)— | | | | | | |
| Pig-iron | 636,879 | 421,683 | 497,591 | 1,114,137 | 708,405 | 849,079 |
| Spiegeleisen | 10,034 | 9,214 | 11,533 | 12,278 | 13,804 | 11,156 |
| Ferro-alloys | 74,149 | 72,023 | 118,102 | 69,465 | 112,492 | 91,528 |
| Ingots, blooms, billets .. | 942,089 | 1,045,167 | 892,747 | 1,333,789 | 1,095,943 | 884,211 |
| Old and scrap | 1,287,500 | 1,929,245 | 1,948,780 | 2,091,848 | 1,817,670 | 1,801,539 |

(a) Years ended June 30 of that stated.

(b) Owing to reclassification, not comparable with earlier years (includes cast iron).

EXPORTS OF PIG-IRON, FERRO-ALLOYS, STEEL INGOTS AND CASTINGS, ETC. (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|------------------------------------|-----------|-------------|---------|-------------|-------------|---------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Hungary— | | | | | | |
| Pig iron | 61,754 | 81,531 | 78,318 | 78,240 | 62,431 | 16,327 |
| Iceland— | | | | | | |
| Scrap | 3,223 | 1,219 | 1,399 | 1,760 | <i>n.a.</i> | 3,568 |
| Italy— | | | | | | |
| Pig-iron | 63 | 203 | 195 | 157 | 470 | 148 |
| Spiegeleisen | 37 | 516 | 29 | 6 | 67 | 52 |
| Ferro-manganese | 7,497 | 6,969 | 9,125 | 8,478 | 17,042 | 7,758 |
| Ferro-molybdenum | 13 | 1 | 1 | 1 | 129 | 859 |
| Ferro-silicon | 572 | 1,500 | 1,854 | 1,442 | 1,336 | 1,185 |
| Ferro-silico-manganese | 9 | 38 | 540 | 117 | 139 | 163 |
| Ferro-chrome | 4,137 | 7,011 | 7,941 | 7,498 | 7,116 | 7,329 |
| Ferro-vanadium | 39 | 18 | 5 | <i>n.a.</i> | 1 | 41 |
| Other ferro-alloys | 99 | 2 | 249 | 595 | 279 | 365 |
| Ingots | } 111,073 | 84,723 | 34,157 | 14,588 | 30,701 | 28,943 |
| Blooms, billets, etc. | | | | | | |
| Scrap | | | | | | |
| | 4,829 | 1,798 | 2,030 | 2,504 | 6,819 | 18,393 |
| Netherlands— | | | | | | |
| Pig-iron | 93,188 | 83,196 | 97,069 | 291,919 | 118,919 | 54,971 |
| Sponge iron | 209 | 80 | 61 | 18 | 2 | 86 |
| Ferro-alloys | 257 | 221 | 727 | 658 | 788 | 217 |
| Ingots, blooms and billets | 81,557 | 193,728 | 266,145 | 800,116 | 725,177 | 996,739 |
| Old and scrap | 415,942 | 442,971 | 387,647 | 556,792 | 699,557 | 673,602 |
| Norway— | | | | | | |
| Pig-iron | 121,942 | 135,528 | 180,263 | 152,893 | 189,673 | 177,904 |
| Ferro-chrome | 33,672 | 30,384 | 28,797 | 27,065 | 33,690 | 37,894 |
| Ferro-manganese | 72,177 | 100,180 | 112,460 | 118,611 | 141,483 | 185,147 |
| Ferro-silicon | 215,382 | 236,363 | 216,214 | 263,125 | 323,615 | 340,971 |
| Ferro-silico-manganese | 105,999 | 116,953 | 106,830 | 111,466 | 129,790 | 141,217 |
| Other ferro-alloys | 10,244 | 6,694 | 3,423 | 4,714 | 12,771 | 10,281 |
| Ingots, blooms, billets | 103,908 | 104,188 | 110,951 | 172,273 | 30,162 | 45,701 |
| Old and scrap | 8,661 | 11,067 | 14,860 | 6,267 | 29,166 | 36,900 |
| Poland— | | | | | | |
| Pig-iron | 15,200 | 1,118 | 9,842 | 262,883 | 423,611 | 449,783 |
| Ferro-alloys | 6,239 | 4,334 | 3,024 | 284 | 1,042 | 2,276 |
| Portugal— | | | | | | |
| Pig-iron | 17,309 | 51 | 535 | 8 | 197 | 201 |
| Ferro-alloys | 5,627 | 4,316 | 6,282 | 7,789 | 6,085 | 8,345 |
| Old and scrap | 56,817 | 30,389 | 11,562 | 13,295 | 35,391 | 14,707 |
| Spain— | | | | | | |
| Pig-iron | 145,569 | 107,969 | 88,944 | 14,418 | 111,972 | 40,598 |
| Ferro-silicon | 7,888 | 3,123 | 8,537 | 9,275 | 11,476 | 4,722 |
| Other ferro-alloys | 9,680 | 6,477 | 2,715 | 4,399 | 12,004 | 7,764 |
| Ingots, blooms, billets | 49,165 | <i>n.a.</i> | 23,583 | — | 1,173 | 27,900 |
| Sweden— | | | | | | |
| Pig-iron | 37,134 | 30,208 | 13,616 | 81,342 | 40,866 | 70,168 |
| Sponge iron | 44,127 | 62,213 | 64,152 | 51,189 | 55,009 | 68,804 |
| Ferro-manganese | 2,913 | 3,130 | 8,028 | 12,561 | 15,052 | 25,440 |
| Ferro-silicon | 3,663 | 1,131 | 1,529 | 3,907 | 6,074 | 13,697 |
| Ferro-silico-manganese | 1,004 | 25 | 15 | 471 | 29 | 2,459 |
| Ferro-chrome | 20,231 | 18,685 | 22,555 | 22,979 | 22,591 | 21,372 |
| Ferro-tungsten | 71 | 86 | 147 | 104 | 142 | 1 |
| Other ferro-alloys | 2,321 | 2,341 | 2,600 | 9,425 | 5,804 | 11,301 |
| Ingots | } 118,742 | 99,725 | 57,180 | 55,114 | 54,667 | 82,419 |
| Blooms, billets, etc. | | | | | | |
| Old and scrap | | | | | | |
| | 21,469 | 18,443 | 18,367 | 16,975 | 11,244 | 15,687 |
| Switzerland— | | | | | | |
| Pig-iron and steel, etc. | — | 2 | — | 3 | 185 | 2 |
| Ferro-alloys | 15,086 | 12,807 | 9,790 | 11,761 | 9,260 | 11,429 |
| Old and scrap | 30,562 | 32,174 | 16,575 | 30,027 | 28,713 | 26,821 |

EXPORTS OF PIG-IRON, FERRO-ALLOYS, STEEL INGOTS AND CASTINGS, ETC. (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| U.S.S.R.— | | | | | | |
| Pig iron | 3,147,900 | 3,601,300 | 4,314,500 | 4,362,100 | 4,450,700 | 4,617,000 |
| Ferro-manganese | 58,700 | 66,200 | 86,000 | 85,626 | 95,665 | 105,800 |
| Ferro-silicon | 65,600 | 82,700 | 90,000 | 98,800 | 110,000 | 116,500 |
| Other ferro-alloys | 22,200 | 30,900 | 30,800 | 32,800 | 34,700 | 38,600 |
| Steel ingots and billets | 802,300 | 837,600 | 1,010,000 | 1,025,937 | 943,460 | 1,106,800 |
| Scrap | 464,200 | 555,600 | 605,600 | 666,900 | 653,600 | 1,304,300 |
| Yugoslavia— | | | | | | |
| Pig-iron | — | — | 1,377 | 75,746 | — | — |
| Ferro-chrome | 6,906 | 9,948 | 9,090 | 8,028 | 8,303 | 5,811 |
| Ferro-manganese | 4,631 | 3,038 | 701 | 389 | 20 | 1,344 |
| Silico-manganese | 1,812 | 2,105 | 8,960 | 11,215 | 16,484 | 14,866 |
| Ferro-silicon | 7,191 | 10,198 | 10,481 | 16,312 | 24,254 | 23,501 |
| Steel ingots | 46 | — | 1,911 | 7,366 | 37,337 | 26,200 |
| Scrap | 281 | 2,270 | 720 | 32,664 | 18,564 | 8,867 |
| Algeria— | | | | | | |
| Old and scrap | <i>n.a.</i> | 18,000 | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Morocco— | | | | | | |
| Old and scrap | 30,884 | 31,634 | 27,811 | 34,353 | 25,026 | 37,917 |
| Mozambique— | | | | | | |
| Scrap | 8,479 | 8,724 | 5,304 | 4,989 | <i>n.a.</i> | <i>n.a.</i> |
| South Africa— | | | | | | |
| Pig-iron | 348,027 | 554,386 | 757,757 | 918,499 | 661,975 | 602,084 |
| Ferro-manganese | 120,310 | 155,110 | 154,400 | 125,816 | 127,603 | 249,937 |
| Other ferro-alloys | 52,988 | 78,183 | 110,545 | 117,787 | 242,742 | 133,340 |
| Ingots, blooms, billets | 3,493 | 909 | 3,855 | 792 | 1,129 | 69,985 |
| Sudan— | | | | | | |
| Scrap | 2,021 | 1,653 | 8,969 | 7,733 | 1,565 | 2,441 |
| Tunisia— | | | | | | |
| Scrap | 10,926 | 7,894 | 5,180 | 21,489 | 18,922 | 12,582 |
| Mexico— | | | | | | |
| Ferro-alloys | — | — | 3,792 | — | — | <i>n.a.</i> |
| United States— | | | | | | |
| Pig-iron | 157,193 | 25,201 | 10,823 | 6,653 | 9,769 | <i>n.a.</i> |
| Spiegeleisen | 701 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Powders and sponge | 766 | 4,611 | 5,020 | 7,178 | 6,869 | 12,079 |
| Ferro-phosphorus | 145,684 | 71,349 | 56,198 | 20,447 | 32,775 | 33,349 |
| Ferro-manganese | 3,485 | 2,922 | 487 | 1,662 | 3,312 | 1,571 |
| Ferro-chrome | 8,957 | 10,716 | 6,828 | 12,012 | 24,221 | 21,940 |
| Ferro-molybdenum | 779 | 1,001 | 982 | 684 | 385 | 650 |
| Ferro-vanadium | 92 | 197 | 430 | 314 | 247 | 575 |
| Ferro-silicon | 5,165 | 4,094 | 5,189 | 10,512 | 16,404 | 5,792 |
| Ferro-tungsten | — | — | — | — | — | — |
| Ferro-titanium | 483 | 7,539 | 6,519 | 7,122 | 10,078 | 30,408 |
| Other ferro-alloys | 568 | | | | | |
| Steel ingots, slabs, blooms, billets and sheet bars | 882,731 | 605,542 | 304,610 | 275,337 | 496,580 | <i>n.a.</i> |
| Scrap (a) | 6,948,033 | 6,619,765 | 5,230,523 | 6,816,662 | 5,867,815 | 8,192,801 |
| Argentina— | | | | | | |
| Ingots, blooms, billets | 11,725 | 4,142 | 11,941 | 3,823 | <i>n.a.</i> | <i>n.a.</i> |
| Brazil— | | | | | | |
| Pig-iron | 146,601 | 99,696 | 1,968 | 259,564 | 65,531 | <i>n.a.</i> |
| Ferro-manganese | — | 7,145 | 764 | 305 | 79 | <i>n.a.</i> |
| Other ferro-alloys | 1,561 | 3,070 | 1,282 | 2,439 | 1,536 | <i>n.a.</i> |
| Chile— | | | | | | |
| Ferro-manganese | 5,537 | 2,796 | <i>n.a.</i> | 1,436 | <i>n.a.</i> | <i>n.a.</i> |
| Formosa— | | | | | | |
| Pig-iron | 4,461 | 5,851 | 9,551 | 4,168 | <i>n.a.</i> | <i>n.a.</i> |
| Ferro-manganese | 168 | 132 | 1,487 | 62 | 15 | 295 |
| Ferro-silicon | 1,277 | 1,138 | | | | |

(a) Including tin-plate and terne-plate scrap.

EXPORTS OF PIG-IRON, FERRO-ALLOYS, STEEL INGOTS AND CASTINGS, ETC. (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|--------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Israel— | | | | | | |
| Scrap | 1,418 | 1,253 | 351 | 952 | 1,245 | 1,949 |
| Japan— | | | | | | |
| Pig-iron | 514 | 3,444 | 20,503 | 5,668 | 676 | 718 |
| Ferro-chrome | 3,800 | 23,358 | 21,904 | 6,228 | 5,515 | 3,046 |
| Ferro-manganese | 8,724 | 15,072 | 14,808 | 4,736 | 7,043 | 11,149 |
| Ferro-silicon | 157 | 993 | 1,341 | 2,350 | 1,480 | 2,796 |
| Ferro-silico-manganese | 427 | 712 | 589 | 343 | 1,275 | 1,231 |
| Other ferro-alloys | 738 | 1,405 | 1,956 | 1,022 | 3,788 | 4,907 |
| Ingots, blooms, billets | 57,994 | 451,273 | 161,881 | 49,853 | 49,582 | 348,182 |
| Scrap | 4,239 | 2,757 | 2,767 | 4,424 | 42,982 | 79,099 |
| Korea (South)— | | | | | | |
| Scrap | 30 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Lebanon— | | | | | | |
| Scrap | 795 | 764 | 4,356 | 30,032 | 25,756 | 24,087 |
| Southern Yemen | | | | | | |
| Scrap | 1,688 | 848 | <i>n.a.</i> | 507 | 333 | <i>n.a.</i> |
| Thailand— | | | | | | |
| Scrap | 2,526 | 3,225 | 202 | — | — | 87 |
| Turkey— | | | | | | |
| Pig iron | — | 492 | — | — | — | — |
| Old and scrap | 133 | 492 | 365 | 1,838 | 883 | <i>n.a.</i> |
| Ferro-chrome | 5,770 | 5,852 | 7,251 | 5,123 | 9,678 | 7,096 |

IMPORTS OF PIG-IRON, FERRO-ALLOYS, STEEL INGOTS AND CASTINGS, ETC.

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|-------------|---------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Pig-iron— | | | | | | |
| Forge and foundry .. | 88,608 | 69,212 | 71,738 | 28,292 | 28,975 | 10,757 |
| Hematite | 166,869 | 160,502 | 232,514 | 197,735 | 151,907 | 122,547 |
| Basic | 77,854 | 83,476 | 78,853 | 35,971 | 38,790 | 23,137 |
| Other (vanadium-titanium pig-iron produced in electric furnace) | 2,395 | 2,859 | 1,922 | 1,948 | <i>n.a.</i> | <i>n.a.</i> |
| Sponge-iron | 9,856 | 9,276 | 9,325 | 8,686 | 11,053 | 13,160 |
| Spiegeleisen | 35 | 151 | 49 | — | — | — |
| Ferro-manganese .. | 62,037 | 80,387 | 75,849 | 73,324 | 66,381 | 94,366 |
| Ferro-silicon | 109,673 | 117,817 | 98,290 | 94,732 | 110,756 | 107,051 |
| Ferro-silicon-chrome .. | 4,473 | 4,495 | 4,133 | 5,998 | 4,299 | 7,773 |
| Ferro-chrome | 47,254 | 60,894 | 50,065 | 44,627 | 58,464 | 65,338 |
| Ferro-vanadium | 85 | 239 | 81 | 141 | 482 | 788 |
| Silico-manganese .. | 35,837 | 32,722 | 27,847 | 24,390 | 26,632 | 30,147 |
| Other ferro-alloys .. | 4,339 | 6,740 | 5,662 | 7,365 | 8,846 | 17,919 |
| Iron and steel ingots, etc. | 15,019 | 13,229 | 32,697 | 113,298 | 88,925 | 424,119 |
| Blooms, billets, slabs— | | | | | | |
| Iron | 11,089 | 13,894 | 68,960 | 166,220 | 376,329 | 576,307 |
| Steel | 430,383 | | | | | |
| Old and scrap (a) .. | 5,004 | 72,430 | 5,261 | 3,154 | 3,118 | 288,580 |
| Malta— | | | | | | |
| Ingots, etc. | 2,590 | 22 | 79 | 10 | 5 | 2 |
| Ghana— | | | | | | |
| Pig-iron | 231 | 241 | 1,213 | 394 | 1,236 | 257 |
| Ferro-manganese .. | 21 | 25 | 4 | 45 | 75 | 81 |
| Ingots, blooms, etc. .. | 2,031 | 3,098 | 160 | 315 | 83 | 404 |
| Kenya— | | | | | | |
| Pig-iron and Ferro-alloys | 619 | 997 | 1,499 | 1,340 | 946 | 568 |
| Ingots, blooms, etc. .. | 33 | 82 | 27 | 148 | 266 | 16 |
| Mauritius— | | | | | | |
| Pig-iron, ingots, etc. .. | 43 | 28 | 22 | 53 | 1,076 | 747 |
| Rhodesia— | | | | | | |
| Pig-iron, ingots, etc. .. | 371 | 262 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ferro-alloys | 1,164 | 1,370 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Tanzania— | | | | | | |
| Pig-iron and Ferro-alloys | 240 | 807 | 1,433 | 1,607 | 998 | 1,336 |
| Ingots, blooms, etc. .. | <i>n.a.</i> | — | — | 202 | 1 | — |
| Uganda— | | | | | | |
| Pig-iron and Ferro-alloys | 86 | 518 | 571 | 567 | 543 | 521 |
| Ingots, blooms, etc. .. | <i>n.a.</i> | 73 | — | 492 | 1,568 | 607 |
| Zambia— | | | | | | |
| Pig-iron | 2,472 | 6,800 | 5,084 | 2,311 | 1,234 | 2,745 |
| Ferro-alloys | 389 | 1,282 | 28 | 478 | 354 | 962 |
| Ingots | 33 | 1 | 123 | 95 | 142 | 11 |
| Canada— | | | | | | |
| Pig-iron | 14,188 | 29,887 | 28,979 | 25,663 | 32,837 | 20,486 |
| Sponge iron | 2,046 | 1,673 | 1,753 | 1,771 | 1,918 | 2,517 |
| Ferro-manganese and spiegeleisen | 19,491 | 30,859 | 43,855 | 14,325 | 24,947 | 21,896 |
| Ferro-chrome | 9,359 | 13,693 | 11,193 | 19,411 | 13,433 | 22,431 |
| Ferro-silicon | 3,065 | 5,589 | 5,247 | 5,182 | 8,764 | 8,080 |
| Ferro-tungsten | 77 | 158 | 86 | 86 | 53 | 94 |
| Ferro-vanadium .. | 232 | 290 | 427 | 346 | 237 | 349 |
| Silico-manganese and silico-spiegel | 1,557 | 703 | 1,724 | 3,752 | 1,200 | 4,071 |

(a) Excluding ships intended for breaking up as follows (gross tonnage): 1964—13,511; 1965—25,316; 1966—*n.a.*; 1967—1,048; 1968—8,342; 1969—17,014.

IMPORTS OF PIG-IRON, FERRO-ALLOYS, STEEL INGOTS AND CASTINGS, ETC. (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--------------------------------------|---------|---------|---------|---------|---------|---------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Canada (cont.)— | | | | | | |
| Other ferro-alloys | 1,334 | 2,565 | 2,029 | 3,168 | 4,020 | 3,999 |
| Ingots, blooms, billets .. | 5,715 | 26,433 | 33,816 | 29,190 | 8,646 | 268,890 |
| Scrap | 766,296 | 911,427 | 640,819 | 503,276 | 572,507 | 635,581 |
| Jamaica— | | | | | | |
| Pig-iron | 587 | 238 | 350 | 429 | 362 | 177 |
| Trinidad and Tobago— | | | | | | |
| Pig-iron | 11 | 4 | 20 | 28 | 8 | 12 |
| Ingots, etc. | 275 | 162 | 591 | 595 | 990 | 1,600 |
| Guyana— | | | | | | |
| Pig-iron, ingots, etc. .. | 229 | 1,369 | 715 | 853 | 26 | 195 |
| Ceylon— | | | | | | |
| Pig-iron | 1,091 | 777 | 1,384 | 997 | 2,016 | 342 |
| Ingots, blooms, billets etc. | 3,714 | 1,302 | 6,963 | 5,822 | 3,026 | n.a. |
| Cyprus— | | | | | | |
| Pig-iron | 145 | 59 | 255 | 355 | 372 | 531 |
| Ingots, etc. | 972 | 778 | 356 | 388 | 1,267 | 31 |
| Hong Kong— | | | | | | |
| Pig-iron | 7,080 | 9,328 | 12,101 | 2,810 | 8,074 | 1,043 |
| Ingots, blooms, billets .. | 813 | 7,377 | 10,542 | 25,961 | 2,177 | 24,521 |
| Old and scrap | 58,872 | 90,012 | 35,915 | 47,389 | 61,746 | 24,005 |
| Tinplate scrap | 16,992 | 15,780 | 16,806 | 55 | 560 | (a) 178 |
| India (b)— | | | | | | |
| Pig-iron | 104,690 | 75,161 | 1,839 | 315 | 320 | 3 |
| Ingots, blooms, billets .. | 53,069 | 40,970 | 23,929 | 20,759 | 20,812 | 11,006 |
| Ferro-chrome | 1,280 | 861 | 519 | 1,185 | 459 | 1,411 |
| Ferro-manganese | 462 | 534 | 539 | 317 | 114 | 34 |
| Ferro-silicon | 403 | 97 | 57 | 89 | 51 | 24 |
| Other ferro-alloys | 1,318 | 628 | 675 | 1,339 | 885 | 468 |
| Old and scrap | 686 | 4,219 | 7,008 | 10,444 | 11,373 | 10,490 |
| Malaysia (West)— | | | | | | |
| Pig-iron | n.a. | 5,568 | 7,805 | 5,602 | 3,035 | 10 |
| Ingots, slabs, etc. | n.a. | 401 | 215 | 11,906 | 17,901 | 161 |
| Scrap | n.a. | 1,119 | 4,268 | 5,593 | 219 | 1,110 |
| Pakistan— | | | | | | |
| Pig-iron | 64,364 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Ferro-alloys | 289 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Ingots, blooms, billets .. | 340,786 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Old and scrap | 972 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Sabah— | | | | | | |
| Ingots, etc. | 248 | 116 | 215 | 116 | 93 | 85 |
| Singapore— | | | | | | |
| Pig-iron | 5,778 | 8,163 | 10,445 | 20,512 | 19,962 | 5,619 |
| Ferro-alloys | 143 | 422 | 606 | 1,552 | 791 | 928 |
| Ingots, blooms, etc. | 5,826 | 16,094 | 4,945 | 22,449 | 27,813 | 32,048 |
| Scrap | 18,134 | 23,918 | 24,005 | 35,260 | 24,298 | 31,109 |
| Australia— | | | | | | |
| Ferro-manganese | 5,893 | 9,896 | 7,832 | 4,955 | 10,482 | 6,352 |
| Ferro-chrome | 2,993 | 5,864 | 2,420 | 3,430 | 3,487 | 5,877 |
| Ferro-molybdenum | 249 | 279 | 366 | 131 | 163 | 131 |
| Ferro-silicon | 7,630 | 13,002 | 7,500 | 9,291 | 6,227 | 7,600 |
| Other ferro-alloys | 2,506 | 3,546 | 1,889 | 5,684 | 3,059 | 2,913 |
| Ingots and billets, etc.(c) | 245 | 54,195 | 187 | 79 | 179 | 274 |
| Scrap (c) | 224 | 527 | (a) 8 | (a) 8 | 112 | 136 |
| New Zealand (c)— | | | | | | |
| Pig-iron | 6,336 | 8,362 | 7,142 | 6,794 | 5,612 | 8,800 |
| Ferro-manganese | 524 | 525 | 840 | 742 | 429 | n.a. |
| Other ferro-alloys | 352 | 281 | 576 | 622 | 360 | n.a. |
| Billets and blooms | 47 | 97 | 240 | 41 | 44 | 1,187 |
| Solomon Islands— | | | | | | |
| Billets and blooms | — | — | 1,094 | 806 | 1,098 | 942 |

(a) Excess of re-exports.

(b) Years ended March 31 following that stated.

(c) Years ended June 30 of that stated.

IMPORTS OF PIG-IRON, FERRO-ALLOYS, STEEL INGOTS AND CASTINGS, ETC. (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|---------|---------|-------------|-------------|-------------|-------------|
| Irish Republic— | | | | | | |
| Pig-iron and sponge iron | 27,158 | 20,965 | 19,998 | 27,490 | 21,188 | 21,713 |
| Ferro-alloys | 950 | 1,053 | 884 | 646 | 1,351 | 585 |
| Ingots, blooms, billets, etc. | 20,096 | 51,027 | 10,503 | 1,703 | 8,497 | 5,768 |
| OTHER COUNTRIES | | | | | | |
| Albania— | | | | | | |
| Pig-iron | 2,642 | 1,806 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Austria— | | | | | | |
| Pig-iron | 188,679 | 230,527 | 151,170 | 94,954 | 108,074 | 98,065 |
| Spiegeleisen | 2,654 | 3,063 | 2,485 | 1,765 | 2,650 | 2,768 |
| Ferro-manganese | 11,784 | 11,230 | 12,095 | 11,291 | 13,842 | 19,271 |
| Ferro-silicon | 8,410 | 9,151 | 9,130 | 9,400 | 11,022 | 13,937 |
| Other ferro-alloys | 20,097 | 25,027 | 25,186 | 20,262 | 24,394 | 33,026 |
| Ingots and blooms | 5,647 | 27,893 | 47,894 | 88,626 | 153,886 | 57,580 |
| Scrap | 141,326 | 106,150 | 53,719 | 12,366 | 60,443 | 94,701 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Pig-iron | 281,271 | 227,560 | 206,274 | 167,748 | 193,034 | 210,513 |
| Sponge-iron | 30 | 572 | 1,348 | 3,152 | 1,758 | 1,386 |
| Spiegeleisen | 18,284 | 13,768 | 12,672 | 14,749 | 19,382 | 21,076 |
| Ferro-chrome, etc. | 6,950 | 6,325 | 6,571 | 6,721 | 7,077 | 8,727 |
| Ferro-manganese | 74,556 | 67,986 | 67,754 | 73,062 | 74,031 | 83,434 |
| Ferro-silico-manganese | 4,488 | 7,523 | 4,643 | 5,924 | 10,066 | 11,631 |
| Ferro-molybdenum | 379 | 152 | 100 | 83 | 85 | 122 |
| Ferro-silicon | 17,808 | 20,028 | 20,574 | 17,631 | 26,159 | 30,771 |
| Ferro-tungsten | 57 | 14 | 22 | 33 | 10 | 25 |
| Other ferro-alloys | 1,771 | 1,034 | 2,033 | 2,273 | 3,222 | 3,044 |
| Ingots | 196,335 | 145,147 | 182,553 | 219,193 | 110,287 | 150,003 |
| Blooms, billets, etc. | 167,059 | 89,124 | 99,827 | 150,920 | 149,705 | 169,048 |
| Old and scrap | 61,962 | 56,747 | 190,389 | 193,770 | 278,861 | 568,953 |
| Bulgaria— | | | | | | |
| Pig-iron | 131,990 | 162,247 | 142,710 | 157,781 | 245,029 | <i>n.a.</i> |
| Czechoslovakia— | | | | | | |
| Pig iron | 116,000 | 116,000 | 106,000 | 200,000 | 413,000 | 694,000 |
| Denmark— | | | | | | |
| Pig-iron | 117,078 | 106,421 | 92,401 | 30,555 | 20,754 | 22,715 |
| Ferro-chrome | 347 | 414 | 480 | 401 | 593 | 798 |
| Ferro-manganese, etc. | 2,896 | 2,760 | 4,159 | 2,197 | 5,704 | 9,988 |
| Ferro-silicon | 3,756 | 3,328 | 4,275 | 3,967 | 5,694 | 4,145 |
| Other ferro-alloys | 37 | 84 | 104 | 126 | 122 | 216 |
| Ingots, blooms, billets | 36,362 | 65,813 | 47,307 | 91,470 | 153,782 | 148,596 |
| Old and scrap | 2,212 | 271 | 583 | 593 | 1,018 | 41,423 |
| Finland— | | | | | | |
| Pig-iron | 13,063 | 1,241 | 2,730 | 4,720 | 714 | 1,535 |
| Billets | 36,024 | 59,495 | 65,167 | 50,354 | 20,023 | 34,896 |
| Ferro-manganese and spiegeleisen | 1,530 | 1,789 | 1,258 | 2,153 | 3,194 | 3,623 |
| Other ferro-alloys | 5,576 | 9,056 | 8,111 | 8,588 | 6,836 | 16,910 |
| Old and scrap | 138,641 | 136,709 | 120,548 | 108,873 | 66,789 | 91,463 |
| France— | | | | | | |
| Pig-iron—hematite | 158,757 | 90,765 | 120,169 | 132,084 | 205,635 | 193,987 |
| do. other | 30,815 | 22,658 | 25,280 | 24,205 | 23,732 | 27,761 |
| Sponge-iron | 2,674 | 3,685 | 1,629 | 7,381 | 1,823 | 1,584 |
| Spiegeleisen | 2,046 | 1,387 | 2,262 | 4,303 | 2,395 | 3,329 |
| Ferro-manganese | 10,098 | 8,819 | 16,421 | 21,546 | 20,128 | 24,786 |
| Ferro-silicon | 545 | 356 | 834 | 687 | 1,415 | 2,695 |
| Ferro-chrome | 1,218 | 449 | 356 | 3,061 | 4,311 | 10,165 |
| Ferro-nickel | 22,349 | 32,388 | 28,202 | 44,100 | 49,470 | 65,616 |
| Other ferro-alloys | 3,083 | 3,672 | 2,755 | 1,965 | 3,037 | 2,378 |
| Ingots | 154,117 | 109,695 | 132,133 | 129,311 | 81,119 | 219,244 |
| Blooms, billets, etc. | 499,818 | 448,246 | 449,057 | 481,273 | 463,191 | 552,299 |
| Old and scrap | 575,246 | 485,875 | 502,989 | 456,607 | 366,314 | 456,922 |

IMPORTS OF PIG-IRON, FERRO-ALLOYS, STEEL INGOTS AND CASTINGS, ETC. (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|-----------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Germany (Federal)— | | | | | | |
| Pig-iron | 253,542 | 124,034 | 133,805 | 105,910 | 162,259 | 139,273 |
| Spiegeleisen | 16,002 | 9,859 | 10,013 | 3,331 | 3,159 | 766 |
| Ferro-alloys | 274,844 | 276,378 | 182,007 | 250,946 | 366,948 | 421,382 |
| Rough blooms, ingots, bars, etc. | 503,911 | 351,255 | 425,374 | 342,746 | 646,436 | 845,431 |
| Old and scrap | 1,736,761 | 1,070,560 | 659,187 | 1,086,015 | 1,617,604 | 1,188,902 |
| Germany (East)— | | | | | | |
| Pig-iron | 779,700 | 757,200 | 638,800 | 708,600 | <i>n.a.</i> | <i>n.a.</i> |
| Greece— | | | | | | |
| Pig-iron | 15,128 | 26,247 | 26,960 | 27,310 | 32,464 | 25,706 |
| Spiegeleisen | 60 | 147 | <i>n.a.</i> | 572 | 80 | <i>n.a.</i> |
| Ferro-alloys | 1,170 | 1,425 | 1,920 | 1,866 | 1,923 | 2,038 |
| Ingots, blooms, slabs, etc. | 41,875 | 70,674 | 79,488 | 48,216 | 124,233 | 57,338 |
| Old and scrap | 1,100 | 1,155 | 635 | 732 | 10,807 | 10,111 |
| Hungary— | | | | | | |
| Pig iron | 76,289 | 103,000 | 129,000 | 160,426 | 192,800 | 202,544 |
| Ferro-chrome | 4,215 | 4,556 | 10,254 | 9,303 | 8,108 | 6,837 |
| Ferro-manganese | 11,651 | 11,774 | 14,634 | 12,233 | 25,454 | 23,917 |
| Ferro-silicon | 2,647 | 3,024 | 2,393 | 2,371 | 2,406 | 2,947 |
| Other ferro-alloys | 343 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 4,409 |
| Ingots | 370,803 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 207,420 |
| Italy— | | | | | | |
| Pig-iron | 526,675 | 641,875 | 799,585 | 1,030,248 | 830,254 | 746,953 |
| Spiegeleisen | 6,524 | 5,223 | 13,716 | 24,861 | 29,025 | 31,537 |
| Ferro-chrome | 16,711 | 14,673 | 24,291 | 23,336 | 19,607 | 25,525 |
| Ferro-manganese | 53,145 | 77,451 | 76,652 | 85,550 | 86,054 | 111,672 |
| Ferro-molybdenum | 453 | 616 | 722 | 797 | 625 | 870 |
| Ferro-silicon | 7,241 | 9,554 | 13,956 | 19,979 | 25,477 | 30,343 |
| Ferro-silico-manganese | 3,203 | 5,914 | 6,710 | 12,005 | 15,638 | 21,234 |
| Ferro-titanium | 528 | 866 | 607 | 502 | 626 | 987 |
| Ferro-tungsten | 107 | 96 | 178 | 165 | 596 | 367 |
| Ferro-vanadium | 179 | 334 | 334 | 616 | 254 | 352 |
| Other ferro-alloys | 1,000 | 2,708 | 5,825 | 6,664 | 4,023 | 15,414 |
| Ingots | 1,372,133 | 843,731 | 281,136 | 460,633 | 368,489 | 612,192 |
| Blooms, billets, etc. | | | | | | |
| Old and scrap | | | | | | |
| | 3,103,493 | 4,520,086 | 4,035,596 | 4,891,020 | 5,014,093 | 5,052,207 |
| Netherlands— | | | | | | |
| Pig-iron | 84,425 | 32,112 | 70,154 | 19,408 | 23,184 | 37,757 |
| Sponge iron | 1,730 | 2,144 | 2,928 | 2,456 | 2,856 | 3,725 |
| Spiegeleisen | 708 | 458 | 915 | 317 | 201 | 373 |
| Ferro-manganese | 16,649 | 19,824 | 17,236 | 23,255 | 24,020 | 33,614 |
| Ferro-chrome | 820 | 2,207 | 2,551 | 1,106 | 2,294 | 2,286 |
| Ferro-silicon | 5,964 | 6,922 | 6,900 | 6,460 | 7,824 | 10,228 |
| Ferro-silico-manganese | 372 | 252 | 323 | 899 | 1,147 | 1,155 |
| Ferro-molybdenum | 50 | 87 | 87 | 55 | 34 | 61 |
| Other ferro-alloys | 1,142 | 1,464 | 1,990 | 979 | 708 | 1,772 |
| Ingots, blooms, billets | 219,732 | 134,003 | 214,439 | 420,298 | 318,033 | 264,132 |
| Old and scrap | 42,920 | 96,763 | 50,250 | 161,518 | 150,761 | 311,340 |
| Norway— | | | | | | |
| Pig-iron | 8,679 | 12,100 | 17,505 | 15,400 | 15,991 | 12,432 |
| Ferro-alloys | 274 | 2,101 | 486 | 2,461 | 1,651 | 10,689 |
| Ingots, blooms, billets | 77,808 | 80,932 | 68,898 | 55,722 | 62,965 | 71,222 |
| Old and scrap | 26,885 | 60,471 | 38,486 | 23,642 | 12,750 | 20,522 |
| Poland— | | | | | | |
| Pig-iron | 308,500 | 780,541 | 763,184 | 683,136 | 928,826 | 1,192,515 |
| Ferro-alloys | 2,504 | 1,819 | 3,855 | 5,836 | 7,838 | 10,242 |
| Scrap | 1,690 | 2,811 | 3,787 | 2,999 | 3,732 | 4,381 |
| Portugal— | | | | | | |
| Iron and steel ingots | 131 | 1,105 | 3,228 | 39 | 800 | 708 |
| Old and scrap | 1,371 | 4,597 | 4,246 | 4,501 | 3,675 | 5,020 |

IMPORTS OF PIG-IRON, FERRO-ALLOYS, STEEL INGOTS AND CASTINGS, ETC. (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Roumania— | | | | | | |
| Ferro-alloys | 42,300 | 51,800 | 50,600 | 67,418 | 74,800 | 87,600 |
| Spain— | | | | | | |
| Pig-iron | 1,801 | 15,242 | 14,167 | 13,474 | 12,744 | 11,865 |
| Ferro-manganese | 1,610 | 1,558 | 1,324 | 949 | 950 | 2,178 |
| Other ferro-alloys | 5,252 | 5,322 | 6,099 | 4,161 | 7,450 | 13,776 |
| Ingots and blooms | 271,775 | 936,868 | 597,585 | 677,387 | 531,175 | 537,280 |
| Old and scrap | 303,755 | 423,961 | 376,939 | 345,758 | 587,595 | 1,217,376 |
| Sweden— | | | | | | |
| Pig-iron | 225,753 | 330,193 | 418,530 | 230,830 | 273,640 | 257,485 |
| Sponge iron | — | — | 49 | — | — | — |
| Spiegeleisen | 167 | 492 | — | 108 | — | — |
| Ferro-manganese | 12,347 | 16,052 | 22,727 | 20,834 | 30,458 | 26,291 |
| Ferro-chrome | 7,516 | 23,407 | 16,889 | 13,744 | 18,643 | 30,108 |
| Ferro-silico | 5,769 | 6,806 | 6,989 | 8,056 | 8,721 | 14,119 |
| Ferro-silico-manganese | 6,214 | 8,626 | 8,567 | 7,382 | 11,847 | 10,278 |
| Ferro-tungsten | 402 | 693 | 709 | 380 | 272 | 655 |
| Other ferro-alloys | 6,775 | 12,770 | 15,897 | 10,910 | 14,406 | 16,389 |
| Blooms, billets, etc. | 5,497 | 23,361 | 11,622 | 9,796 | 14,126 | 56,110 |
| Old and scrap | 235,680 | 244,348 | 215,562 | 92,963 | 77,402 | 419,520 |
| Switzerland— | | | | | | |
| Pig-iron | 53,483 | 61,656 | 59,698 | 51,881 | 56,903 | 63,249 |
| Ferro-alloys | 12,798 | 12,971 | 16,266 | 10,930 | 17,690 | 16,879 |
| Ingots, blooms, billets | 214,904 | 185,767 | 166,442 | 156,999 | 178,725 | 193,585 |
| Old, filings and scrap | 5,307 | 4,923 | 52,107 | 22,436 | 26,491 | 21,370 |
| U.S.S.R.— | | | | | | |
| Pig-iron | 192,300 | 145,600 | 136,300 | 151,568 | 62,399 | 47,000 |
| Ferro-alloys | 2,900 | 5,900 | 7,200 | 7,086 | 8,464 | 7,000 |
| Ingots | 76,000 | 30,100 | — | — | — | — |
| Yugoslavia— | | | | | | |
| Pig-iron | 187,952 | 221,336 | 240,579 | 138,700 | 141,414 | 208,833 |
| Ferro-alloys | 1,449 | 1,971 | 1,559 | 1,597 | 4,378 | 3,417 |
| Ingots, blooms, billets | 3,723 | 26,078 | 44,406 | 84,016 | 107,819 | 140,565 |
| Scrap | 118,572 | 97,495 | 118,487 | 32,427 | 105,159 | 138,136 |
| Egypt— | | | | | | |
| Pig-iron and spiegeleisen | 46,253 | 129,182 | 73,294 | 24,811 | 84,442 | 51,942 |
| Ferro-alloys | 3,751 | 7,277 | 4,461 | 13,730 | 9,862 | 6,180 |
| Ingots, billets, etc. | 105,045 | 40,038 | 104,442 | 89,236 | 38,022 | 29,829 |
| Scrap | 43,653 | 29,767 | 139,465 | 51,055 | 34,904 | 31,952 |
| Morocco— | | | | | | |
| Pig-iron | 1,046 | 880 | 1,034 | 923 | 1,417 | 940 |
| Ferro-alloys | 222 | 289 | 240 | 193 | 179 | 231 |
| Scrap, etc. | 44 | 75 | 81 | 5 | — | 60 |
| South Africa— | | | | | | |
| Pig-iron (b) | <i>n.a.</i> | 22 | 10 | 87,348 | 144,991 | 32 |
| Ferro-silicon | 1,822 | 1,335 | 1,393 | 1,560 | 3,509 | 1,566 |
| Ingots, blooms, etc. | 16,933 | 20,612 | 19,757 | 36,053 | 80,923 | 15,157 |
| Other ferro-alloys | 234 | 265 | 308 | 335 | 3,895 | 4,047 |
| Sudan— | | | | | | |
| Crude iron and steel | <i>n.a.</i> | 56 | <i>n.a.</i> | 39 | 12 | 77 |
| Tunisia— | | | | | | |
| Pig-iron | 480 | 605 | 72 | 104 | 190 | 791 |
| Old and scrap | 103 | 104 | 36 | 64 | 122 | 543 |
| Cuba— | | | | | | |
| Pig-iron | 25,700 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ferro-alloys | 304 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Honduras— | | | | | | |
| Ingots, blooms, etc. | 1,865 | 3,953 | 5,884 | 10,636 | 7,279 | <i>n.a.</i> |
| Mexico— | | | | | | |
| Pig-iron | 546 | (a) 29,792 | (a) 34,480 | (a) 9,787 | (a) 3,520 | <i>n.a.</i> |
| Ferro-manganese | 424 | 326 | 308 | 423 | 410 | <i>n.a.</i> |
| Other ferro-alloys | 2,547 | 1,186 | 972 | 2,743 | 1,448 | <i>n.a.</i> |
| Ingots, blooms, billets | 1 | 29,085 | (a) 58,273 | (a) 113,993 | (a) 137,651 | <i>n.a.</i> |

(a) Owing to reclassification not strictly comparable with earlier years.

(b) Including cast iron.

IMPORTS OF PIG-IRON, FERRO-ALLOYS, STEEL INGOTS AND CASTINGS, ETC. (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Mexico (cont.)— | | | | | | |
| Scrap | 696,494 | } 751,477 | 709,296 | 686,227 | 451,042 | <i>n.a.</i> |
| Tin-plate scrap | 13,108 | | | | | |
| Salvador— | | | | | | |
| Ingots, blooms, billets | 1,378 | 5,326 | 19,457 | 24,845 | 35,749 | 29,716 |
| Scrap | 106 | 667 | 706 | 1,003 | 1,462 | 123 |
| United States— | | | | | | |
| Pig-iron | 657,564 | 787,524 | 1,059,589 | 540,388 | 701,695 | 363,007 |
| Ferro-chrome | 23,321 | 49,216 | 59,151 | 34,350 | 53,406 | 37,040 |
| Ferro-manganese | 189,847 | 229,767 | 173,717 | 149,596 | 142,043 | 209,429 |
| Ferro-silicon | 11,751 | 14,726 | 11,726 | 13,695 | 9,484 | 15,127 |
| Ferro-titanium | 25 | 15 | 27 | 137 | 178 | 492 |
| Ferro-tungsten | 108 | 172 | 169 | 151 | — | <i>n.a.</i> |
| Sponge iron | 11,138 | 15,292 | 46,558 | r 4,689 | 7,246 | 7,323 |
| Bar-iron, slabs, blooms, etc. | 222 | } 185,078 | 200,300 | r 131,845 | 183,551 | 131,020 |
| Steel ingots, blooms, etc. | 307,822 | | | | | |
| Scrap | 231,409 | 172,752 | 348,397 | r 182,791 | 227,737 | 256,371 |
| Tin-plate scrap | 20,143 | 16,954 | 14,687 | 12,078 | 15,827 | 21,293 |
| Argentina— | | | | | | |
| Pig-iron | 22,937 | 139,686 | 105,692 | 94,593 | 201,846 | 131,772 |
| Ferro-manganese | 292 | 2,294 | 474 | 298 | 624 | 398 |
| Ferro-silicon | 1,143 | 2,593 | 878 | 207 | 131 | 31 |
| Ingots | 149,160 | 599,146 | 1,336 | 146,505 | 4,909 | 208 |
| Blooms and billets | 312,691 | 422,915 | 302,176 | 349,209 | 323,542 | <i>n.a.</i> |
| Old and scrap | 141 | 156 | 24,980 | 29,413 | 182 | 195 |
| Brazil— | | | | | | |
| Ferro-manganese | 24 | 37 | 319 | 479 | 142 | <i>n.a.</i> |
| Ferro-silicon | 85 | 44 | 538 | 353 | 186 | <i>n.a.</i> |
| Ferro-chrome | 472 | 243 | 1,174 | 777 | 1,573 | <i>n.a.</i> |
| Other ferro-alloys | 210 | 243 | 677 | 188 | 518 | <i>n.a.</i> |
| Chile— | | | | | | |
| Pig-iron | } 74 | 939 | <i>n.a.</i> | 1,991 | <i>n.a.</i> | <i>n.a.</i> |
| Ferro-alloys | | | | | | |
| Colombia— | | | | | | |
| Pig-iron | — | 633 | 1,302 | 1,327 | 1,569 | <i>n.a.</i> |
| Ingots, etc. | — | } 16,682 | 35,046 | <i>n.a.</i> | 984 | <i>n.a.</i> |
| Blooms, billets, etc. | 44,658 | | | | | |
| Ferro-alloys | 3,447 | 2,609 | 3,322 | 2,628 | 5,552 | <i>n.a.</i> |
| Peru— | | | | | | |
| Pig-iron | 1,053 | 168 | <i>n.a.</i> | 214 | <i>n.a.</i> | <i>n.a.</i> |
| Ferro-alloys | 620 | 1,049 | 1,454 | 1,218 | 1,400 | <i>n.a.</i> |
| Uruguay— | | | | | | |
| Ingots etc. | <i>n.a.</i> | 26,094 | 35,422 | 23,246 | 53,449 | 40,669 |
| Ferro-alloys | <i>n.a.</i> | 233 | 154 | 195 | 199 | 277 |
| Venezuela— | | | | | | |
| Pig-iron | 97 | 1,263 | 161 | 62 | 89 | 105 |
| Ferro-alloys | 3,959 | 8,939 | 5,850 | 3,527 | 8,249 | 7,446 |
| Scrap | <i>n.a.</i> | 5,781 | 4,008 | 4,635 | 30,603 | 47,098 |
| Ingots, blooms and billets | 1,007 | 1,976 | 363 | 5,222 | 6,608 | 6,445 |
| Formosa— | | | | | | |
| Blooms, billets, etc. | 3,007 | 6,234 | 14,298 | 48,814 | 20,696 | 38,208 |
| Ferro-alloys | 240 | 178 | 329 | 253 | 782 | 776 |
| Old and scrap | 246,196 | 432,437 | 268,138 | 200,221 | 196,061 | 213,626 |
| Iran (a)— | | | | | | |
| Pig-iron | 19,045 | 20,796 | 9,210 | 22,305 | 25,104 | <i>n.a.</i> |
| Old and scrap | 5,547 | 5,972 | 4,307 | 5,088 | 5,935 | <i>n.a.</i> |
| Israel— | | | | | | |
| Pig-iron | 42,748 | 11,376 | 9,918 | 3,994 | 16,600 | 13,768 |
| Spiegeleisen | 980 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 246 |
| Ferro-alloys | 2,106 | 1,091 | 475 | 546 | 1,337 | 1,311 |

(a) Years ended March 20 of year following that stated.

IMPORTS OF PIG-IRON, FERRO-ALLOYS, STEEL INGOTS AND CASTINGS, ETC. (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-----------|-----------|-------------|-----------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Japan— | | | | | | |
| Pig-iron | 3,305,559 | 2,582,652 | 2,814,460 | 6,347,989 | 4,385,734 | 3,319,030 |
| Ferro-alloys | 25,303 | 8,932 | 3,056 | 72,165 | 12,040 | 83,535 |
| Ingots, blooms, billets.. | 7,299 | 1,977 | 4,452 | 278,554 | 95,256 | 103,763 |
| Old and scrap | 5,018,222 | 3,352,764 | 3,478,335 | 6,602,009 | 3,877,196 | 4,801,132 |
| Jordan— | | | | | | |
| Ingots, blooms, billets.. | 43,122 | 49,301 | 64,613 | 66,981 | 40,086 | 81,869 |
| Korea (South)— | | | | | | |
| Pig iron | 18,488 | 9,106 | 50,418 | 45,682 | 77,753 | 57,498 |
| Ferro-alloys | 3,081 | 417 | 170 | 10,424 | <i>n.a.</i> | <i>n.a.</i> |
| Scrap | 43,779 | 75,911 | 192,534 | 308,129 | 384,753 | 689,809 |
| Ingots, blooms, etc. .. | 25,207 | 13,146 | 56,965 | 41,642 | <i>n.a.</i> | 310,786 |
| Lebanon— | | | | | | |
| Pig-iron | 7,037 | 10,697 | 10,207 | 5,110 | 11,575 | 10,522 |
| Ferro-alloys | 1,274 | 552 | 69 | 18 | 130 | 14 |
| Old and scrap | 11,406 | 5,261 | 689 | 2,133 | 4,823 | 3,358 |
| Ingots, blooms, etc. .. | 29,139 | 31,975 | 72,311 | 85,049 | 98,475 | 100,192 |
| Philippine Republic— | | | | | | |
| Pig-iron | 20,758 | 14,325 | 14,133 | 12,463 | <i>n.a.</i> | <i>n.a.</i> |
| Ferro-alloys | 1,959 | 1,428 | | | 1,959 | <i>n.a.</i> |
| Ingots, blooms, billets.. | 65,265 | 102,157 | <i>n.a.</i> | 181,032 | <i>n.a.</i> | <i>n.a.</i> |
| Syria— | | | | | | |
| Pig-iron | 1,913 | 311 | 1,308 | 1,038 | 1,412 | 2,095 |
| Scrap | 1,626 | 1,560 | 931 | 312 | <i>n.a.</i> | <i>n.a.</i> |
| Thailand— | | | | | | |
| Pig-iron | — | 90 | 694 | 950 | 91 | 61 |
| Ferro-alloys | 1,122 | 1,000 | 1,829 | 1,706 | 3,432 | 3,443 |
| Turkey— | | | | | | |
| Pig-iron | 27,040 | 25,237 | 21,453 | 20,977 | 25,670 | 31,444 |
| Ferro-alloys | 6,258 | 8,359 | 10,376 | 7,615 | 8,634 | 13,653 |
| Blooms, billets, etc. .. | 88,333 | 99,919 | 175,036 | 124,463 | 164,621 | 162,323 |
| Scrap | 25,384 | 28,577 | 31,476 | 38,411 | 63,357 | 38,304 |

LEAD
PRODUCTION OF LEAD ORE
(Metal content)

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | 1,500 | 2,400 | 2,900 | 3,200 | 3,200 | 3,000 |
| Nigeria (a) | — | 700 | 690 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Zambia (b) | 12,953 | 21,008 | 18,464 | 19,100 | 23,745 | 22,644 |
| Canada (d) | 181,890 | 260,542 | 267,520 | 283,984 | 303,728 | 283,515 |
| India | 4,421 | 3,918 | 3,675 | 3,932 | 3,510 | 3,248 |
| Australia | 374,856 | 362,137 | 364,898 | 375,779 | 381,250 | 444,121 |
| TOTAL | 575,600 | 650,700 | 657,500 | 685,700 | 722,300 | 757,200 |
| Irish Republic | — | 2,311 | 37,481 | 58,704 | 59,722 | 57,760 |
| OTHER COUNTRIES | | | | | | |
| Austria | 5,830 | 5,798 | 5,595 | 5,549 | 6,673 | 6,023 |
| Bulgaria | 89,800 | 89,600 | 88,000 | 85,000 | 84,800 | 29,437 |
| Czechoslovakia (e) | 13,300 | 14,000 | 14,000 | 14,000 | 14,000 | 14,000 |
| Finland (f) | 1,860 | 6,207 | 4,560 | 4,711 | 4,453 | 4,481 |
| France | 11,997 | 17,766 | 26,331 | 26,924 | 26,689 | 29,800 |
| Germany— | | | | | | |
| Federal Republic | 48,164 | 47,880 | 54,804 | 58,704 | 51,936 | 38,921 |
| East (g) | 10,000 | 10,000 | 10,000 | 11,000 | 10,000 | 10,000 |
| Greece | 7,261 | 8,609 | 8,649 | 8,128 | 8,551 | 8,170 |
| Hungary | 1,200 | 1,400 | (e) 1,400 | 1,400 | <i>n.a.</i> | <i>n.a.</i> |
| Italy | 30,622 | 31,951 | 32,209 | 33,398 | 34,889 | 36,300 |
| Norway | 3,522 | 3,448 | 3,470 | 3,268 | 3,475 | 3,458 |
| Poland | 37,700 | 40,500 | 44,400 | 44,000 | 48,000 | 53,600 |
| Portugal | 193 | 150 | 1,688 | 1,569 | 1,895 | 1,774 |
| Roumania (b) (g) | 12,000 | 15,000 | 20,000 | 20,000 | 30,000 | 40,000 |
| Spain | 57,363 | 55,745 | 62,431 | 62,685 | 72,876 | 70,616 |
| Sweden | 66,404 | 67,861 | 69,766 | 72,456 | 70,894 | 78,696 |
| U.S.S.R. (b) (g) | 400,000 | 410,000 | 410,000 | 400,000 | 400,000 | 400,000 |
| Yugoslavia | 111,319 | 104,571 | 100,980 | 106,371 | 110,002 | 116,179 |
| Algeria | 9,514 | 10,275 | 4,872 | 3,523 | 3,170 | 7,700 |
| Congo (Republic of) | 2,135 | (e) 2,800 | (e) 3,500 | (e) 3,500 | (g) 3,500 | 3,500 |
| Egypt (e) | — | — | 15 | <i>n.a.</i> | <i>n.a.</i> | — |
| Morocco | 70,164 | 75,893 | 78,360 | 76,466 | 78,800 | 75,452 |
| South Africa | — | 3 | — | 18 | — | — |
| South West Africa | 94,730 | 86,000 | 85,000 | (g) 70,000 | (g) 60,000 | (g) 75,000 |
| Tunisia | 12,450 | 15,620 | 13,965 | 12,665 | 14,254 | 22,467 |
| Guatemala (f) | 1,188 | 908 | 887 | 1,142 | 464 | 280 |
| Honduras | 7,366 | 9,502 | 10,899 | 11,500 | 12,967 | 13,839 |
| Mexico (f) | 172,063 | 167,406 | 179,195 | 165,048 | 171,416 | 168,193 |
| United States (f) | 255,366 | 268,880 | 292,293 | 282,974 | 320,675 | 448,100 |
| Argentina | 25,515 | 29,178 | 29,017 | 31,789 | 26,130 | 34,362 |
| Bolivia (c) | 16,951 | 16,404 | 19,826 | 19,636 | 21,600 | 24,600 |
| Brazil (e) | 14,500 | 14,500 | 22,000 | 23,088 | 20,850 | 21,800 |
| Chile | 989 | 1,000 | 1,000 | 400 | 970 | 819 |
| Colombia | 476 | 453 | 588 | 1,068 | <i>n.a.</i> | 409 |
| Ecuador | 137 | 112 | 68 | — | <i>n.a.</i> | <i>n.a.</i> |

(a) Excluding native production.

(b) Smelter.

(c) Exports of ore (metal content) and metal.

(d) Lead in base bullion plus recoverable lead in ores exported.

(e) United States Bureau of Mines' estimate.

(f) Amount estimated as recoverable.

(g) Estimated.

PRODUCTION OF LEAD ORE (cont.)

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|----------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Peru (a) | 148,294 | 151,906 | r 158,970 | r 157,193 | 165,141 | 160,350 |
| Burma | 18,500 | 19,700 | 18,200 | 14,800 | 16,964 | 18,000 |
| China (c) | 100,000 | 100,000 | 100,000 | 90,000 | 100,000 | 100,000 |
| Iran (c) (d) | 10,472 | 11,496 | 14,448 | 14,554 | 14,700 | 12,600 |
| Japan | 53,218 | 54,062 | 62,099 | 62,473 | 61,900 | 62,500 |
| Korea (South) | 3,300 | 4,400 | 6,800 | 8,700 | 9,178 | 9,450 |
| Korea (North) (b) | 55,000 | 60,000 | 60,000 | 65,000 | 70,000 | 70,000 |
| Philippine Republic | 102 | 102 | 90 | 88 | 83 | 66 |
| Thailand | 3,600 | 5,500 | 6,600 | 3,500 | 2,900 | 1,874 |
| Turkey | 1,600 | 1,655 | 921 | r 1,144 | 4,814 | 1,411 |
| TOTAL | 2,000,000 | 2,000,000 | 2,100,000 | 2,200,000 | 2,200,000 | 2,300,000 |
| WORLD'S TOTAL | 2,500,000 | 2,700,000 | 2,800,000 | 2,900,000 | 3,000,000 | 3,100,000 |

(a) Amount estimated as recoverable.

(b) Estimated.

(c) United States Bureau of Mines' estimate.

(d) Years ended March 20 of year following that stated.

METAL PRODUCTION OF LEAD

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom (h) .. | 24,428 | 22,594 | 15,890 | 26,400 | 31,386 | 38,439 |
| Zambia | 12,953 | 21,008 | 18,464 | r 19,100 | 23,745 | 22,644 |
| Canada | 135,154 | 166,504 | 165,063 | 172,530 | 180,446 | 167,092 |
| India | 3,567 | 2,347 | 2,599 | 2,435 | 1,347 | 2,200 |
| Australia (c) .. | 281,404 | 260,213 | 267,423 | 292,030 | 291,870 | 338,462 |
| TOTAL | 457,506 | 472,666 | 469,243 | 511,123 | 528,794 | 568,840 |
| OTHER COUNTRIES | | | | | | |
| Austria (b) | 11,962 | 11,648 | 9,509 | 10,544 | 11,156 | 11,600 |
| Belgium (b) | 82,001 | 109,008 | 91,196 | 106,097 | 108,324 | 108,797 |
| Bulgaria | 86,118 | 91,946 | 91,380 | 95,000 | 91,200 | 93,000 |
| Czechoslovakia (a) .. | 15,000 | 20,000 | 20,000 | r 17,249 | 17,591 | 18,000 |
| France | 88,372 | 96,803 | 106,922 | 112,209 | 98,356 | 106,200 |
| Germany—Federal | 105,805 | 102,388 | 107,894 | 134,152 | 118,123 | 123,821 |
| do. East (a) (b) .. | 25,000 | 25,000 | 25,000 | 25,000 | 25,000 | 25,000 |
| Greece | r 4,063 | r 5,233 | r 5,314 | 6,400 | 8,220 | 11,800 |
| Hungary | 200 | 200 | (d) 200 | n.a. | n.a. | n.a. |
| Italy | 37,576 | 38,803 | 52,709 | 59,544 | 56,645 | 61,340 |
| Norway | 4,000 | 1,700 | n.a. | 1,400 | 1,300 | n.a. |
| Poland | 40,800 | 40,700 | 42,800 | 43,600 | 41,300 | 49,900 |
| Portugal | 1,344 | 1,287 | 1,041 | 1,056 | 1,208 | 1,111 |
| Roumania (a) | 12,000 | 15,000 | 20,000 | 40,000 | 40,000 | 40,000 |
| Spain | 57,078 | 52,965 | 64,860 | 51,730 | 63,112 | 80,410 |
| Sweden | 39,725 | 39,614 | 43,010 | 41,000 | 43,000 | n.a. |
| U.S.S.R. (a) | 400,000 | 410,000 | 410,000 | 410,000 | 410,000 | 410,000 |
| Yugoslavia | 115,373 | 114,331 | 110,155 | 100,281 | 106,998 | 107,000 |
| Morocco | 18,541 | 16,960 | 18,479 | 21,021 | 23,784 | 26,408 |
| South West Africa .. | 47,040 | 64,992 | 74,087 | r 69,300 | 54,600 | 68,400 |
| Tunisia | 11,890 | 14,000 | 14,000 | 14,000 | 14,000 | 14,000 |
| Guatemala | 74 | 112 | 212 | 70 | 196 | 221 |
| Mexico | 167,321 | 169,677 | 178,238 | 165,712 | 177,420 | 173,075 |
| United States (e) .. | 401,276 | 373,430 | 393,513 | 339,191 | 417,241 | 558,000 |
| Argentina | 22,637 | 31,495 | 21,652 | 21,652 | 24,643 | 21,652 |
| Bolivia (f) | 1 | 67 | 11 | 13 | — | — |
| Brazil | 12,995 | 5,232 | 9,781 | 4,085 | n.a. | n.a. |
| Peru | 88,307 | 85,436 | 87,360 | 80,523 | 82,054 | 76,300 |
| Burma | 17,768 | (d) 16,000 | (d) 14,000 | (d) 13,000 | (d) 8,000 | (d) 10,000 |
| China (a) (b) | 100,000 | 100,000 | 100,000 | 90,000 | 100,000 | 100,000 |
| Iran (g) | 369 | (d) 400 | (d) 400 | n.a. | n.a. | n.a. |
| Japan | 106,256 | 106,637 | 116,710 | 147,604 | 161,974 | 200,000 |
| Korea (North) (a) .. | 45,000 | 50,000 | 50,000 | 55,000 | 55,000 | 55,000 |
| Turkey | 1,929 | 904 | 500 | 500 | 1,600 | 1,200 |
| TOTAL | 2,100,000 | 2,200,000 | 2,300,000 | 2,200,000 | 2,400,000 | 2,600,000 |
| WORLD'S TOTAL .. | 2,600,000 | 2,600,000 | 2,700,000 | 2,700,000 | 2,900,000 | 3,200,000 |

(a) Estimated.

(b) Including secondary metal.

(c) Including lead in base bullion as follows:

| Year | Long tons | Year | Long tons |
|--------------|-----------|--------------|-----------|
| 1964 | 78,304 | 1967 | 101,167 |
| 1965 | 66,907 | 1968 | 116,638 |
| 1966 | 74,295 | 1969 | 151,920 |

(d) United States Bureau of Mines' estimate.

(e) In addition the recovery of secondary lead was as follows:

| Year | Long tons | Year | Long tons |
|--------------|-----------|--------------|-----------|
| 1964 | 483,555 | 1967 | 494,439 |
| 1965 | 514,214 | 1968 | 491,856 |
| 1966 | 511,459 | 1969 | 509,000 |

(f) Exports.

(g) Years ended March 20 of year following that stated.

(h) Source: World Bureau of Metal Statistics.

EXPORTS OF LEAD, ETC.*

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|---------|---------|---------|---------|---------|-----------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Unwrought | 35,781 | 37,599 | 34,959 | 61,028 | 90,931 | 124,561 |
| do. alloys | 3,729 | 4,810 | 8,013 | 10,153 | 10,202 | 16,004 |
| Semi-manufactures (a) | 1,887 | 1,827 | 1,740 | 1,901 | 1,897 | 2,553 |
| White lead | 1,510 | 1,146 | 1,171 | 920 | 1,209 | 1,112 |
| Red lead, etc. | 4,269 | 4,699 | 4,757 | 5,145 | 5,001 | 6,116 |
| Nigeria— | | | | | | |
| Ore and concentrates .. | 938 | 1,575 | 1,282 | 908 | 51 | — |
| Zambia— | | | | | | |
| Unwrought | 13,177 | 15,401 | 24,265 | 17,141 | 16,096 | 25,482 |
| Canada— | | | | | | |
| Ore (Pb content) | 71,747 | 95,504 | 100,834 | 112,673 | 128,440 | 125,157 |
| Unwrought | 85,596 | 115,237 | 95,061 | 118,143 | 123,912 | 95,616 |
| Scrap (a) | 4,712 | 8,214 | 4,005 | 5,387 | 5,115 | 5,636 |
| Hong Kong— | | | | | | |
| Scrap | 4 | 110 | 379 | 892 | 549 | 603 |
| Singapore— | | | | | | |
| Semi-manufactures (a) | 193 | 214 | 368 | 238 | 234 | 175 |
| Australia (b)— | | | | | | |
| Ores and concentrates (Pb content) | 95,928 | 74,104 | 69,464 | 81,830 | 89,158 | 85,403 |
| Base bullion (Pb content) | 82,715 | 56,380 | 89,140 | 80,889 | 106,075 | 120,490 |
| Unwrought | 169,035 | 151,211 | 159,811 | 152,145 | 151,042 | 115,415 |
| do. alloys | 6,829 | 2,701 | 4,370 | 3,311 | 3,420 | 4,203 |
| Scrap (a) | 2,547 | 2,575 | 1,642 | 97 | 210 | 120 |
| Semi-manufactures .. | 2,226 | 2,881 | 1,248 | (a) 287 | (a) 634 | (a) 2,575 |
| Red and white lead, etc. | 1,981 | 2,503 | 2,072 | 1,419 | 1,304 | 1,674 |
| Irish Republic— | | | | | | |
| Ore and concentrates .. | — | — | 87,178 | 133,435 | 153,966 | 145,966 |
| Scrap | 310 | 871 | 796 | 401 | 318 | 208 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Unwrought (a) | 3,751 | 2,719 | 1,950 | 2,690 | 1,568 | 2,422 |
| Scrap | 14 | 19 | 1 | 66 | — | — |
| Red and white lead, etc. | 655 | 170 | 1,522 | 1,310 | 1,404 | 1,147 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Ore | 590 | 259 | 6,418 | 1,034 | 15 | 1,302 |
| Unwrought | 41,769 | 61,598 | 49,832 | 48,254 | 52,601 | 42,407 |
| do. alloys | 7,061 | 9,078 | 6,219 | 8,899 | 10,488 | 10,304 |
| Scrap | 3,298 | 2,204 | 2,228 | 2,226 | 5,209 | 11,882 |
| Semi-manufactures (a) | 6,209 | 7,739 | 7,986 | 7,164 | 6,676 | 6,288 |
| Red and white lead, etc. | 3,682 | 3,605 | 5,147 | 5,718 | 7,063 | 6,040 |
| Denmark— | | | | | | |
| Unwrought | 2,623 | 3,209 | 2,882 | 2,247 | 2,728 | 2,149 |
| do. alloys | 2,188 | 1,403 | 2,762 | 3,341 | 2,921 | 2,316 |
| Scrap | — | 5 | — | 20 | — | 56 |
| Semi-manufactures (a) | 303 | 272 | 144 | 39 | 76 | 114 |

*In these tables the description "unwrought" lead corresponds to item 685.1 of the Standard International Trade Classification (Revised) and comprises base bullion, pigs, unwrought bars, etc. "Semi-manufactures" corresponds to S.I.T.C.(R). 685.2 and includes foil and powder as well as wrought bars, wire, sheets, tubes, pipes, etc.

(a) Including alloys.

(b) Years ended June 30 of that stated.

EXPORTS OF LEAD, ETC. (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|--------|---------|--------|--------|--------|--------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Finland— | | | | | | |
| Unwrought (a) .. | 67 | — | 1 | 1 | 82 | 32 |
| France— | | | | | | |
| Ore | 4,976 | 3,130 | 1,613 | 3,833 | 3,555 | 4,265 |
| Unwrought | 3,316 | 10,532 | 6,229 | 15,171 | 13,864 | 13,474 |
| do. alloys | 2,570 | 4,156 | 2,849 | 2,567 | 2,645 | 5,319 |
| Scrap | 9,568 | 11,939 | 2,240 | 9,463 | 10,369 | 14,438 |
| Semi-manufactures (a) | 1,376 | 1,137 | 988 | 886 | 1,118 | 925 |
| Red and white lead, etc. | 6,334 | 5,784 | 7,073 | 7,661 | 8,082 | 9,284 |
| Germany (Federal)— | | | | | | |
| Ore | 941 | 6,918 | 3,870 | 5,548 | 5,312 | 7,478 |
| Unwrought (a) .. | 21,251 | 12,629 | 40,897 | 79,081 | 43,584 | 31,765 |
| Scrap (a) | 9,215 | 14,639 | 25,620 | 19,854 | 10,003 | 7,507 |
| Semi-manufactures (a) | 3,855 | 5,432 | 8,678 | 7,070 | 7,286 | 7,188 |
| Red and white lead .. | 9,334 | 8,147 | 7,963 | 9,325 | 8,507 | 9,628 |
| Greece— | | | | | | |
| Ore | 6,800 | 10,273 | 10,088 | 10,937 | 12,959 | 11,434 |
| Italy— | | | | | | |
| Ore | 5,321 | 4,588 | 2,860 | 3,403 | 3,245 | 7,409 |
| Unwrought (a) .. | 190 | 125 | 101 | 18 | 3 | 18 |
| Semi-manufactures (a) | 53 | 61 | 153 | 245 | 65 | 695 |
| Red and white lead .. | 1,371 | 1,546 | 1,678 | 258 | 1,425 | 552 |
| Netherlands— | | | | | | |
| Unwrought | 7,243 | 7,595 | 7,912 | 6,291 | 6,356 | 3,458 |
| do. alloys | 1,827 | 2,088 | 3,516 | 4,914 | 9,990 | 10,912 |
| Scrap (a) | 8,297 | 7,484 | 4,599 | 6,545 | 8,024 | 8,483 |
| Semi-manufactures (a) | 1,817 | 1,230 | 2,006 | 1,981 | 1,594 | 1,311 |
| Red and white lead .. | 1,502 | 1,467 | 2,406 | 2,947 | 3,792 | 4,206 |
| Norway— | | | | | | |
| Ore | 7,338 | 5,810 | 7,293 | 7,006 | 6,317 | 7,186 |
| Unwrought (a) .. | 171 | 354 | 576 | 524 | 513 | 184 |
| Semi-manufactures (a) | 338 | 275 | 255 | 192 | 396 | 39 |
| Scrap | 3,297 | 2,898 | 2,944 | 3,952 | 4,733 | 4,626 |
| Poland— | | | | | | |
| Concentrates | 6,042 | 12,170 | 16,025 | 18,604 | 9,092 | 6,389 |
| Portugal— | | | | | | |
| Unwrought (a) .. | 13 | 34 | 31 | 29 | 35 | 62 |
| Semi-manufactures (a) | 52 | 88 | 100 | 157 | 184 | 266 |
| Red and white lead .. | 133 | 72 | 98 | 99 | 10 | 13 |
| Spain— | | | | | | |
| Ore | — | — | — | — | — | 10 |
| Unwrought (a) .. | 1,879 | 312 | 153 | 16 | — | 151 |
| Semi-manufactures (a) | 32 | 20 | 19 | 20 | 71 | 97 |
| Sweden— | | | | | | |
| Ore | 48,282 | 40,814 | 44,141 | 35,355 | 47,742 | 46,130 |
| Unwrought | 6,396 | 8,109 | 9,795 | 13,579 | 12,484 | 9,082 |
| do. alloys | 1,766 | 905 | 200 | 37 | 869 | 3,498 |
| Scrap | 238 | 158 | 91 | 49 | 83 | 54 |
| Semi-manufactures (a) | 19 | 25 | 38 | 4 | 20 | 34 |
| Red and white lead .. | 1,879 | 1,572 | 1,506 | 1,932 | 2,557 | 1,121 |
| Switzerland— | | | | | | |
| Unwrought | 854 | 345 | 36 | 19 | 376 | 117 |
| Scrap | 6,929 | 10,452 | 5,396 | 5,203 | 5,321 | 8,235 |
| Semi-manufactures .. | 83 | 133 | 160 | 252 | 607 | 359 |
| U.S.S.R.— | | | | | | |
| Unwrought | 94,600 | 100,900 | 86,500 | 85,528 | 89,460 | 96,400 |
| Yugoslavia— | | | | | | |
| Unwrought | 52,577 | 53,289 | 51,591 | 45,393 | 47,773 | 65,137 |
| do. alloys | 4,437 | 4,907 | 6,587 | 8,189 | 6,502 | 1,062 |
| Semi-manufactures (a) | 4,971 | 2,921 | 2,309 | 1,525 | 609 | 1,768 |
| Red lead | 736 | 704 | 1,012 | 351 | 657 | 1,306 |

(a) Including alloys.

EXPORTS OF LEAD, ETC. (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Algeria— | | | | | | |
| Ore | 10,868 | 12,594 | 8,210 | 6,531 | 4,049 | 9,900 |
| Congo (Republic of)— | | | | | | |
| Ore | <i>n.a.</i> | — | — | 5 | — | — |
| Morocco— | | | | | | |
| Ore | 94,272 | 140,943 | 90,545 | 85,066 | 86,697 | 74,310 |
| Unwrought | 16,806 | 13,930 | 15,331 | 19,744 | 22,388 | 24,684 |
| do. alloys | — | 48 | — | — | — | — |
| Scrap | 20 | 40 | — | — | — | — |
| South Africa— | | | | | | |
| Unwrought | 37,181 | 57,076 | 58,908 | 64,552 | 48,131 | 53,631 |
| Semi-manufactures | 96 | 65 | 27 | 50 | 170 | 154 |
| South West Africa— | | | | | | |
| Complex concentrates | | | | | | |
| <i>(Pb content)</i> | 34,977 | 36,143 | 20,287 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Lead-vanadium | | | | | | |
| concentrates | 10,548 | 9,762 | 12,286 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Tunisia— | | | | | | |
| Unwrought (a) | 10,653 | 14,076 | 12,797 | 12,036 | 12,442 | 14,501 |
| Scrap | | | | | | |
| Guatemala— | | | | | | |
| Ore | 902 | 29 | 851 | 198 | 266 | 652 |
| Honduras— | | | | | | |
| Ore and concentrates | 10,223 | 15,452 | 8,236 | 10 | 19,878 | 12,569 |
| Mexico— | | | | | | |
| Ores and concentrates | 3,125 | <i>n.a.</i> | 2,454 | 905 | 1,270 | <i>n.a.</i> |
| Unwrought— | | | | | | |
| Refined | 91,943 | 95,199 | 97,003 | 83,440 | 83,400 | <i>n.a.</i> |
| Base bullion | 10,983 | 10,202 | 14,991 | 11,893 | 12,950 | <i>n.a.</i> |
| Antimonial | 363 | <i>n.a.</i> | 127 | 16 | — | <i>n.a.</i> |
| Semi-manufactures | 375 | <i>n.a.</i> | — | — | — | <i>n.a.</i> |
| Red and white lead | 32,131 | 32,836 | 31,048 | 33,393 | 36,053 | <i>n.a.</i> |
| United States— | | | | | | |
| Ore, mattes and base | | | | | | |
| bullion (<i>Pb content</i>) | 17 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 7 | <i>n.a.</i> |
| Unwrought (a) | 9,470 | 5,143 | 3,114 | 3,806 | 4,363 | 2,308 |
| Scrap | 11,739 | 3,387 | 444 | 351 | 837 | 2,089 |
| Semi-manufactures (a) | 1,189 | 1,830 | 1,739 | 2,030 | 3,031 | 2,127 |
| Red and white lead, etc. | 1,500 | 2,041 | 2,321 | 1,705 | 1,676 | 1,507 |
| Argentina— | | | | | | |
| Ore | 309 | 150 | 215 | 56 | 623 | 1,701 |
| Bolivia— | | | | | | |
| Ore, etc. (<i>Pb content</i>) | 16,950 | 16,337 | 19,815 | 19,623 | 21,600 | 24,600 |
| Unwrought | 1 | 67 | 11 | 13 | — | — |
| Brazil— | | | | | | |
| Ore | <i>n.a.</i> | 12,721 | 4,921 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Chile— | | | | | | |
| Ore and concentrates | 1,601 | 433 | <i>n.a.</i> | 2,046 | <i>n.a.</i> | <i>n.a.</i> |
| Colombia— | | | | | | |
| Ore | 216 | 714 | 1,117 | 423 | <i>n.a.</i> | <i>n.a.</i> |
| Ecuador— | | | | | | |
| Concentrates | 2,455 | 696 | 660 | 1,336 | <i>n.a.</i> | <i>n.a.</i> |
| Peru— | | | | | | |
| Ore and concentrates | | | | | | |
| <i>(Pb content)</i> | 63,604 | 64,523 | 64,865 | 138,478 | 152,174 | 84,000 |
| Unwrought (<i>Pb content</i>) | | | | | | |
| Refined | 100,451 | 84,052 | 79,553 | 77,932 | 77,402 | 159,000 |
| Unrefined | 48 | 53 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | |
| Burma— | | | | | | |
| Ore | 360 | 162 | 144 | 756 | 360 | <i>n.a.</i> |
| Unwrought | 11,263 | 11,778 | 16,081 | 9,038 | 10,715 | <i>n.a.</i> |
| do. alloys | 854 | 227 | | | | |

(a) Including alloys.

EXPORTS OF LEAD, ETC. (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|--------|--------|--------|--------|--------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Iran (b)— | | | | | | |
| Ore | 43,590 | 50,737 | 44,225 | 46,735 | 35,606 | <i>n.a.</i> |
| Japan— | | | | | | |
| Unwrought (a) .. | 313 | 8,406 | 7,430 | 867 | 3,053 | 2,352 |
| Semi-manufactures (a) .. | 968 | 2,947 | 325 | 6,986 | 1,693 | 467 |
| Red lead .. | 12 | 219 | 283 | 21 | 234 | 114 |
| Korea (South)— | | | | | | |
| Ore | 10,817 | 6,978 | 11,586 | 12,619 | 19,615 | 17,591 |
| Thailand— | | | | | | |
| Ore | 7,022 | 10,367 | 12,209 | 9,074 | 7,633 | 3,455 |
| Turkey— | | | | | | |
| Ore | 2,500 | 1,476 | 4,489 | 3,476 | 8,232 | 16,951 |

(a) Including alloys.

(b) Years ended March 20 following that stated.

IMPORTS OF LEAD, ETC.*

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|-------------|---------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ore and concentrates (Pb content) (c) .. | 29,258 | 20,829 | 21,983 | 24,551 | 48,223 | 46,725 |
| Unwrought (a) | 189,767 | 169,170 | 203,863 | 176,913 | 210,848 | 225,866 |
| Scrap (a) | 4,173 | 2,672 | 2,821 | 2,679 | 1,884 | 1,428 |
| Semi-manufactures (a) .. | 202 | 17 | 77 | 424 | 1,006 | 875 |
| Channel Islands— | | | | | | |
| Unwrought and semi-manufactures (a) .. | 1,262 | 184 | 111 | 1,581 | 202 | 1,740 |
| Ghana— | | | | | | |
| Unwrought (a) | 3 | 10 | 4 | 1 | 40 | 1 |
| Semi-manufactures (a) .. | 36 | 455 | 1,330 | 379 | 117 | 269 |
| Kenya— | | | | | | |
| Unwrought (a) | 94 | 200 | 197 | 299 | 247 | 281 |
| Semi-manufactures (a) .. | 10 | 1 | 10 | 9 | 28 | 29 |
| Mauritius— | | | | | | |
| Unwrought (a) | 28 | 13 | 24 | 6 | 12 | 14 |
| Semi-manufactures (a) .. | 29 | 28 | 36 | 57 | 7 | 26 |
| Nigeria— | | | | | | |
| Unwrought and semi-manufactures (a) .. | 1,123 | 519 | 149 | 456 | 365 | 894 |
| Rhodesia— | | | | | | |
| Semi-manufactures (a) .. | 728 | 836 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sierra Leone— | | | | | | |
| Semi-manufactures (a) .. | 30 | 44 | 44 | 62 | 26 | <i>n.a.</i> |
| Tanzania— | | | | | | |
| Unwrought (a) | 22 | 55 | 26 | 24 | 54 | 64 |
| Semi-manufactures (a) .. | 6 | 3 | 11 | 5 | 10 | 20 |
| Uganda— | | | | | | |
| Unwrought (a) | 43 | 56 | 105 | 118 | 29 | 67 |
| Semi-manufactures (a) .. | 12 | 14 | 12 | 2 | 10 | 10 |
| Barbados— | | | | | | |
| Unwrought (a) | 10 | (b) 56 | (b) 25 | — | 6 | — |
| Semi-manufactures (a) .. | 63 | 107 | 117 | 145 | 84 | 103 |
| Jamaica— | | | | | | |
| Unwrought (a) | 156 | 111 | 47 | 29 | (b) 6 | 335 |
| Semi-manufactures (a) .. | 85 | 93 | 76 | 53 | <i>n.a.</i> | 248 |
| Trinidad and Tobago— | | | | | | |
| Unwrought (a) | 4 | 7 | 2 | 60 | — | 19 |
| Semi-manufactures (a) .. | 108 | 39 | 56 | 19 | 36 | 33 |
| Red and white lead, etc. | 13 | 13 | 11 | 30 | 10 | 13 |
| Canada— | | | | | | |
| Unwrought | 65 | 63 | 559 | 391 | 136 | 116 |
| Semi-manufactures, etc. | <i>n.a.</i> | 230 | 203 | 271 | 355 | 365 |
| Red and white lead, etc. | 1,357 | 1,058 | 1,342 | 2,179 | 2,352 | 2,912 |
| Guyana— | | | | | | |
| Semi-manufactures (a) .. | 17 | 34 | 47 | 40 | 46 | 25 |
| Ceylon— | | | | | | |
| Unwrought (a) | 243 | 543 | 364 | 525 | 429 | 342 |
| Semi-manufactures (a) .. | 34 | 128 | 17 | 22 | 71 | 53 |
| Cyprus— | | | | | | |
| Semi-manufactures (a) .. | 81 | 62 | 277 | 96 | 103 | 141 |
| Hong Kong— | | | | | | |
| Unwrought (a) | (b) 355 | 52 | 366 | 321 | 88 | 507 |
| Scrap | 19 | 16 | 20 | 3 | 158 | 372 |
| Semi-manufactures (a) .. | 227 | 117 | 190 | 103 | 36 | 124 |
| Red and white lead | 77 | 132 | 123 | 104 | 111 | 179 |

*See footnote on p. 178 concerning the descriptions "unwrought" lead and "semi-manufactures" used in these tables.

(a) Including alloys.

(b) Excess of re-exports.

(c) Source: World Bureau of Metal Statistics.

IMPORTS OF LEAD, ETC. (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| India (b)— | | | | | | |
| Ore | 6 | 27 | 17 | 27 | 27 | 95 |
| Unwrought | 32,514 | 33,833 | 47,750 | 33,923 | 31,820 | 27,738 |
| do. alloys | 732 | 324 | 1,225 | 221 | 130 | 375 |
| Semi-manufactures (a) | 322 | 499 | 323 | 249 | 331 | 553 |
| Malaysia (West)— | | | | | | |
| Unwrought (a) | <i>n.a.</i> | 185 | 184 | 153 | 152 | 179 |
| Semi-manufactures (a) | <i>n.a.</i> | 867 | 440 | 301 | 530 | 1,096 |
| Pakistan— | | | | | | |
| Ore | 333 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Unwrought (a) | 6,063 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Semi-manufactures (a) | 96 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Litharge, red and white lead, etc. | 90 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sabah— | | | | | | |
| Semi-manufactures (a) | 31 | 45 | 38 | 52 | 59 | 45 |
| Singapore— | | | | | | |
| Semi-manufactures (a) | 88 | 135 | 177 | 191 | 248 | 282 |
| Australia (c)— | | | | | | |
| Unwrought and semi-manufactures (a) | 235 | 440 | (d) 69 | (d) 43 | (d) 504 | (d) 126 |
| Red and white lead, etc. | 108 | 170 | 167 | 13 | 33 | 19 |
| Fiji— | | | | | | |
| Unwrought and semi-manufactures (a) | 89 | 79 | 52 | 68 | 59 | <i>n.a.</i> |
| New Zealand (c)— | | | | | | |
| Unwrought (a) | 5,773 | 6,110 | 7,280 | 5,616 | 4,391 | <i>n.a.</i> |
| Semi-manufactures (a) | 179 | 28 | 56 | 23 | 19 | <i>n.a.</i> |
| Red and white lead, etc. | 502 | 487 | 955 | 870 | 480 | <i>n.a.</i> |
| Irish Republic— | | | | | | |
| Unwrought (a) | 420 | 364 | 330 | 334 | 996 | 943 |
| Semi-manufactures (a) | 92 | 97 | 100 | 82 | 134 | 318 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Ore | 5,354 | 4,458 | 2,559 | 3,051 | 2,553 | 3,198 |
| Unwrought (a) | 12,027 | 12,244 | 12,700 | 12,791 | 14,449 | 14,406 |
| Scrap | 449 | 489 | 1,101 | 953 | 1,017 | 1,736 |
| Semi-manufactures (a) | 389 | 198 | 222 | 515 | 809 | 641 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Ore | 100,008 | 194,331 | 181,622 | 128,103 | 177,869 | 128,223 |
| Unwrought | 16,210 | 13,860 | 13,112 | 6,683 | 11,318 | 9,897 |
| do. alloys | 773 | 544 | 436 | 1,331 | 3,984 | 4,782 |
| Scrap | 17,441 | 20,634 | 13,289 | 8,443 | 11,715 | 10,658 |
| Semi-manufactures (a) | 823 | 900 | 1,327 | 908 | 875 | 902 |
| Red and white lead, etc. | 1,268 | 1,627 | 2,318 | 2,086 | 2,659 | 3,233 |
| Denmark— | | | | | | |
| Unwrought | 13,819 | 13,679 | 12,699 | 10,546 | 10,759 | 9,919 |
| do. alloys | 1,199 | 592 | 1,424 | 623 | 327 | 738 |
| Scrap | 4,574 | 5,411 | 5,705 | 7,824 | 5,920 | 9,644 |
| Semi-manufactures (a) | 794 | 719 | 526 | 621 | 577 | 675 |
| Red and white lead | 1,485 | 513 | 517 | 360 | 404 | 308 |

(a) Including alloys.

(c) Years ended June 30 of that stated.

(b) Years ended March 31 following that stated. (d) Owing to reclassification not strictly comparable with earlier years.

IMPORTS OF LEAD, ETC. (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|---------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Finland— | | | | | | |
| Unwrought (a) .. | 10,853 | 10,063 | 14,165 | 8,394 | 8,352 | 10,366 |
| Semi-manufactures (a) .. | 643 | 541 | 1,213 | 912 | 1,571 | 1,936 |
| Red and white lead, etc. | 514 | 570 | 530 | 473 | 509 | 686 |
| France— | | | | | | |
| Ore | 141,813 | 128,328 | 119,109 | 126,427 | 126,356 | 121,781 |
| Unwrought | 54,729 | 26,121 | 32,679 | 35,403 | 42,130 | 51,470 |
| do. alloys | 2,516 | 1,543 | 2,162 | 3,575 | 4,171 | 6,05 |
| Scrap | 1,425 | 2,902 | 4,082 | 4,444 | 3,232 | 4,902 |
| Semi-manufactures (a) .. | 343 | 475 | 687 | 737 | 722 | 456 |
| Red and white lead, etc. | 2,172 | 2,605 | 2,129 | 2,133 | 2,530 | 2,801 |
| Germany (Federal)— | | | | | | |
| Ore | 107,333 | 137,294 | 185,610 | 219,687 | 245,967 | 228,087 |
| Unwrought (a) | 98,468 | 114,835 | 86,638 | 80,187 | 80,948 | 110,472 |
| Scrap (a) | 10,184 | 5,470 | 1,571 | 2,581 | 8,843 | 20,499 |
| Semi-manufactures (a) .. | 2,115 | 2,025 | 2,090 | 1,569 | 1,823 | 1,848 |
| Red and white lead, etc. | 3,613 | 3,739 | 2,817 | 2,548 | 3,206 | 3,371 |
| Greece— | | | | | | |
| Ore | 3,887 | 6,823 | 6,951 | 8,158 | 9,316 | 14,484 |
| Unwrought | 286 | 967 | 2,644 | 1,842 | 2,115 | 4,191 |
| Semi-manufactures (a) .. | 90 | 345 | 104 | 132 | 152 | <i>n.a.</i> |
| Red and White lead | 595 | 474 | 822 | 923 | 805 | 212 |
| Hungary— | | | | | | |
| Unwrought | 12,231 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 12,772 | 13,664 |
| Iceland— | | | | | | |
| Unwrought | 262 | 232 | 142 | 155 | 74 | 56 |
| Semi-manufactures (a) .. | 85 | 72 | 100 | 90 | 69 | 86 |
| Red and white lead | 14 | 7 | 6 | 6 | <i>n.a.</i> | (b) 15 |
| Italy— | | | | | | |
| Ore | 9,218 | 32,244 | 19,677 | 20,521 | 53,450 | 30,462 |
| Unwrought (a) | 36,047 | 29,778 | 45,113 | 58,652 | 24,640 | 64,118 |
| Scrap | 15,969 | 30,384 | 24,598 | 29,752 | 10,414 | 19,891 |
| Semi-manufactures (a) .. | 3,251 | 3,177 | 2,578 | 1,758 | 6,499 | 1,695 |
| Red and white lead | 4,251 | 3,677 | 2,894 | 4,864 | 5,005 | 11,245 |
| Netherlands— | | | | | | |
| Ore | — | 707 | 5 | 11 | 5 | 7 |
| Unwrought | 35,948 | 42,145 | 39,441 | 41,085 | 36,407 | 39,336 |
| do. alloys | 12,270 | 12,681 | 11,539 | 13,685 | 13,147 | 20,915 |
| Scrap (a) | 5,098 | 3,402 | 2,930 | 5,135 | 4,464 | 2,346 |
| Semi-manufactures (a) .. | 3,037 | 3,063 | 2,992 | 3,474 | 3,449 | 6,368 |
| Red and white lead | 4,414 | 4,291 | 4,180 | 4,708 | 3,827 | 4,574 |
| Norway— | | | | | | |
| Unwrought | 8,017 | 7,617 | 8,699 | 9,377 | 7,427 | 7,554 |
| do. alloys | 2,129 | 1,720 | 2,507 | 2,172 | 2,870 | 2,964 |
| Semi-manufactures (a) .. | 1,096 | 1,272 | 1,416 | 1,012 | 1,187 | 1,185 |
| Red and white lead | 785 | 936 | 1,025 | 1,013 | 1,004 | 749 |
| Poland— | | | | | | |
| Unwrought | 20,532 | 19,163 | 17,122 | 16,819 | 18,382 | 14,668 |
| Portugal— | | | | | | |
| Unwrought (a) | 8,909 | 6,665 | 8,277 | 7,509 | 7,487 | 8,889 |
| Scrap | 94 | 73 | 131 | 88 | 44 | 67 |
| Semi-manufactures (a) .. | 26 | 72 | 77 | 17 | 40 | 29 |
| Red and white lead, etc. | 86 | 93 | 59 | 82 | 51 | 86 |
| Spain— | | | | | | |
| Ore | — | 210 | 3,708 | — | 11 | — |
| Unwrought | 1,632 | 22,706 | 13,601 | 456 | 39 | 62 |
| Scrap | 29 | 415 | 887 | 35 | 13 | 51 |
| Red and white lead | 495 | 223 | 95 | 158 | 62 | (b) 22 |
| Sweden— | | | | | | |
| Unwrought | 6,382 | 6,711 | 6,079 | 6,498 | 4,865 | 5,836 |
| do. alloys | 680 | 836 | 774 | 1,076 | 507 | 1,223 |
| Scrap | 409 | 655 | — | 18 | 896 | 882 |
| Semi-manufactures (a) .. | 2,160 | 1,973 | 1,828 | 1,492 | 1,868 | 1,304 |
| Red and white lead | 1,569 | 2,302 | 1,787 | 1,655 | 1,746 | 1,328 |

(a) Including alloys.

(b) White lead only.

IMPORTS OF LEAD, ETC. (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Switzerland— | | | | | | |
| Unwrought | 21,063 | 23,547 | 20,593 | 19,918 | 19,903 | 25,555 |
| Semi-manufactures | 439 | 329 | 509 | 558 | 607 | 769 |
| Red and white lead | 770 | 823 | 318 | 552 | 564 | 825 |
| U.S.S.R.— | | | | | | |
| Unwrought | 49,100 | 47,100 | 30,600 | 31,789 | 38,483 | 24,408 |
| Yugoslavia— | | | | | | |
| Ore | <i>n.a.</i> | <i>n.a.</i> | 12,536 | 6,676 | 12,066 | 2,788 |
| Unwrought | 1,546 | 312 | 1,564 | 1,351 | 8,411 | 4,543 |
| Scrap | 2,194 | 2,225 | 3,413 | 1,740 | 150 | 460 |
| Angola— | | | | | | |
| Semi-manufactures | 85 | 138 | 124 | 179 | 216 | 292 |
| Red and white lead | 50 | 39 | 48 | 49 | 62 | 73 |
| Egypt— | | | | | | |
| Unwrought and scrap | 5,529 | 1,357 | 2,795 | 6,138 | 4,643 | 8,001 |
| Red and white lead | 1,104 | 1,269 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Malagasy Republic— | | | | | | |
| Unwrought (a) | 112 | 123 | 211 | 135 | 246 | 247 |
| Semi-manufactures (a) | 33 | 51 | 48 | 64 | 49 | 52 |
| Red and white lead | 17 | 11 | 10 | 15 | 11 | 14 |
| Morocco— | | | | | | |
| Semi-manufactures (a) | 48 | 36 | 36 | 47 | 59 | 60 |
| Red and white lead | 105 | 173 | 144 | 145 | 173 | 160 |
| Mozambique— | | | | | | |
| Semi-manufactures (a) | 120 | 144 | 148 | 153 | <i>n.a.</i> | <i>n.a.</i> |
| Red and white lead | 35 | 24 | 37 | 39 | <i>n.a.</i> | <i>n.a.</i> |
| South Africa— | | | | | | |
| Unwrought | 9,624 | 8,471 | 4,631 | 5,412 | 4,207 | 7,152 |
| Semi-manufactures | 98 | 1,408 | 2,610 | 1,287 | 2,620 | 3,506 |
| Red and white lead | (b) 72 | (b) 74 | (b) 47 | (b) 83 | <i>n.a.</i> | (b) 84 |
| Sudan— | | | | | | |
| Semi-manufactures (a) | 300 | 129 | 144 | 63 | 200 | 250 |
| Tunisia— | | | | | | |
| Ore | 6 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Costa Rica— | | | | | | |
| Unwrought (a) | 40 | 79 | 34 | 30 | 82 | 65 |
| Cuba— | | | | | | |
| Ore | 2,536 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Semi-manufactures | 166 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Honduras— | | | | | | |
| Unwrought | 40 | 56 | 79 | 23 | 49 | <i>n.a.</i> |
| Semi-manufactures | 4 | 5 | 13 | 33 | 13 | <i>n.a.</i> |
| Mexico— | | | | | | |
| Unwrought | 10 | 14 | 9 | 38 | 12 | <i>n.a.</i> |
| Nicaragua— | | | | | | |
| Unwrought | 90 | 133 | 210 | 109 | 117 | 91 |
| Salvador— | | | | | | |
| Unwrought | 56 | 46 | 113 | 150 | 48 | 121 |
| Semi-manufactures | 135 | 223 | 213 | 219 | 194 | 178 |
| United States— | | | | | | |
| Ore, matte and flue dust | | | | | | |
| (Pb content) | 114,345 | 115,119 | 57,009 | 128,711 | 86,807 | 102,843 |
| Bullion and base bullion | | | | | | |
| (Pb content) | 6,371 | 505 | r 1,692 | r 508 | 56 | 13 |
| Unwrought (Pb content) | 183,530 | 199,519 | r 245,266 | r 310,452 | 292,584 | 239,232 |
| do. alloys (Pb content) | 4,988 | | r 9,902 | r 14,189 | 8,843 | 9,757 |
| Scrap (Pb content) | 1,674 | | 3,182 | r 3,102 | r 7,931 | 3,470 |
| Semi-manufactures | 2,890 | 1,828 | 1,888 | 1,971 | 2,019 | 1,792 |
| Red and white lead, etc. | 19,085 | 21,753 | r 26,493 | r 26,982 | 28,026 | 26,338 |

(a) Including alloys.

(b) Red lead only.

IMPORTS OF LEAD, ETC. (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Argentina— | | | | | | |
| Unwrought | 869 | 3 | 20 | 543 | 1,840 | — |
| Brazil— | | | | | | |
| Unwrought | 4,149 | 2,136 | 5,466 | 6,405 | 11,575 | <i>n.a.</i> |
| do. alloys | | | | | | <i>n.a.</i> |
| Red and white lead .. | 425 | 266 | 520 | 874 | 1,099 | <i>n.a.</i> |
| Chile— | | | | | | |
| Unwrought | 1,774 | 1,756 | <i>n.a.</i> | 842 | <i>n.a.</i> | <i>n.a.</i> |
| Bars and sheets | 57 | — | <i>n.a.</i> | 658 | <i>n.a.</i> | <i>n.a.</i> |
| Red and white lead .. | 41 | 97 | <i>n.a.</i> | 30 | <i>n.a.</i> | <i>n.a.</i> |
| Colombia— | | | | | | |
| Unwrought (a) | 1,383 | 468 | 2,301 | 1,442 | 1,760 | <i>n.a.</i> |
| Semi-manufactures (a) .. | 30 | 109 | 194 | 12 | 6 | <i>n.a.</i> |
| Red and white lead .. | 1,102 | 638 | 1,130 | 1,081 | 1,064 | <i>n.a.</i> |
| Ecuador— | | | | | | |
| Unwrought | 162 | 209 | 291 | 253 | <i>n.a.</i> | <i>n.a.</i> |
| Red and white lead .. | 126 | 123 | 190 | 165 | <i>n.a.</i> | <i>n.a.</i> |
| Peru— | | | | | | |
| Semi-manufactures (a) .. | 51 | 30 | 33 | 37 | 48 | <i>n.a.</i> |
| Red and white lead .. | 12 | 34 | 7 | 4 | 21 | <i>n.a.</i> |
| Uruguay— | | | | | | |
| Unwrought | <i>n.a.</i> | 907 | 809 | 1,092 | 716 | 1,018 |
| Red and white lead, etc. | <i>n.a.</i> | 164 | 270 | 115 | 86 | 187 |
| Venezuela— | | | | | | |
| Unwrought | 2,721 | 1,666 | 4,352 | 4,896 | 4,560 | 2,337 |
| Semi-manufactures | 315 | 490 | 711 | 544 | 447 | 337 |
| Red and white lead .. | 656 | 1,075 | 697 | 970 | 836 | 292 |
| Burma— | | | | | | |
| Semi-manufactures (a) .. | 5 | — | 2 | 13 | — | <i>n.a.</i> |
| Formosa— | | | | | | |
| Unwrought (a) | 2,443 | 3,129 | 3,656 | 5,328 | 3,951 | 2,634 |
| Semi-manufactures (a) .. | 142 | 74 | 23 | 35 | 122 | 263 |
| Red and white lead, etc. | 25 | 50 | 51 | 93 | <i>n.a.</i> | 107 |
| Iran (b)— | | | | | | |
| Unwrought | 367 | 1,047 | 2,658 | 3,315 | 3,513 | <i>n.a.</i> |
| Semi-manufactures | 59 | 43 | 29 | 29 | 42 | <i>n.a.</i> |
| Red and white lead .. | 692 | 662 | 840 | 593 | 1,313 | <i>n.a.</i> |
| Iraq— | | | | | | |
| Semi-manufactures | 7 | <i>n.a.</i> | 2 | 28 | 21 | 64 |
| Israel— | | | | | | |
| Unwrought | 1,131 | 1,111 | 1,284 | 1,178 | 2,285 | 1,727 |
| Scrap | 65 | 24 | 9 | — | 57 | 190 |
| Semi-manufactures | 125 | 695 | 389 | 408 | 234 | 296 |
| Red and white lead .. | 691 | 683 | <i>n.a.</i> | 606 | 733 | 766 |
| Japan— | | | | | | |
| Ore | 50,886 | 66,185 | 79,753 | 128,072 | 141,880 | 177,006 |
| Unwrought | 67,896 | 37,665 | 22,655 | 17,854 | 11,411 | 8,286 |
| Scrap | 1,409 | 2,911 | 470 | 1,108 | 768 | 1,981 |
| Semi-manufactures (a) .. | — | 34 | 21 | 3 | 4 | 21 |
| Red and white lead .. | 5 | 4 | 7 | 14 | 22 | 29 |
| Jordan— | | | | | | |
| Unwrought | <i>n.a.</i> | 222 | 772 | 423 | 441 | 874 |
| Red lead | <i>n.a.</i> | 117 | 158 | 175 | 264 | 685 |
| Korea (South)— | | | | | | |
| Unwrought and semi-manufactures | 527 | 1,492 | 3,551 | 655 | <i>n.a.</i> | <i>n.a.</i> |
| Lebanon— | | | | | | |
| Unwrought | 499 | 655 | 953 | 1,252 | 1,394 | 1,187 |
| Semi-manufactures (a) .. | 40 | 31 | 73 | 53 | 22 | 16 |
| Philippine Republic— | | | | | | |
| Unwrought (a) | 1,972 | 3,181 | } 5,000 | { 4,264 | <i>n.a.</i> | <i>n.a.</i> |
| Semi-manufactures (a) .. | 421 | 409 | | | 299 | <i>n.a.</i> |
| Red and white lead .. | 96 | 525 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |

(a) Including alloys.

(b) Years ended March 20 of year following that stated.

IMPORTS OF LEAD, ETC. (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--------------------------------------|-------|------|-------|-------|-------|-------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Syria— | | | | | | |
| Unwrought | 351 | 263 | 218 | 374 | 814 | 425 |
| Red and white lead .. | 112 | 114 | 120 | 56 | 147 | 203 |
| Thailand— | | | | | | |
| Unwrought (a) .. | 816 | 969 | 1,340 | 1,598 | 2,884 | 2,757 |
| Semi-manufactures (a) | 100 | 216 | 102 | 71 | 251 | 282 |
| Turkey— | | | | | | |
| Unwrought (a) .. | 1,432 | 16 | 2,517 | 4,495 | 4,273 | 3,481 |
| Scrap | 49 | 65 | 156 | 277 | 236 | 163 |
| Semi-manufactures (a) | 5 | 6 | 18 | 10 | 1 | 148 |
| Red and white lead .. | 289 | 119 | 377 | 1,236 | 223 | 118 |

(a) Including alloys.

LITHIUM MINERALS
PRODUCTION OF LITHIUM MINERALS

Long tons

| Producing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|--------|------------|-------|-----------|------|------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Rhodesia— | | | | | | |
| Eucryptite | 720 | (b) 476 | n.a. | n.a. | n.a. | n.a. |
| Lepidolite | 20,485 | (b) 11,867 | n.a. | n.a. | n.a. | n.a. |
| Petalite | 32,544 | (b) 20,034 | n.a. | n.a. | n.a. | n.a. |
| Spodumene | 6,219 | (b) 10,278 | n.a. | n.a. | n.a. | n.a. |
| Uganda— | | | | | | |
| Amblygonite | — | 75 | — | (a) 50 | 44 | 6 |
| Canada— | | | | | | |
| Lithium minerals (Li ₂ O content) | 472 | 452 | 113 | 195 | — | — |
| Australia— | | | | | | |
| Petalite | 208 | 310 | 933 | } 667 | 738 | 710 |
| Amblygonite | — | — | — | | | |
| Spodumene | 52 | — | — | | | |
| OTHER COUNTRIES | | | | | | |
| Mozambique— | | | | | | |
| Amblygonite | n.a. | n.a. | n.a. | 5 | 5 | 1 |
| Lepidolite | — | 75 | n.a. | 246 | 591 | 385 |
| Rwanda and Burundi— | | | | | | |
| Amblygonite | 290 | — | n.a. | n.a. | n.a. | n.a. |
| South Africa— | | | | | | |
| Spodumene | 160 | 855 | 301 | — | 36 | 35 |
| South West Africa— | | | | | | |
| Amblygonite | 12 | 35 | 27 | n.a. | n.a. | n.a. |
| Lepidolite | 363 | 266 | 326 | n.a. | n.a. | n.a. |
| Petalite | 712 | 1,189 | 1,200 | n.a. | n.a. | n.a. |
| Argentina— | | | | | | |
| Lithium minerals | 713 | 612 | 266 | 243 | 125 | n.a. |
| Brazil— | | | | | | |
| Amblygonite (a) | — | 25 | — | (c) 6,022 | — | n.a. |
| Spodumene (a) | — | 6,707 | 98 | 49 | — | n.a. |

Lithium minerals are also produced in the United States and lithium chemicals recovered from Searles Lake brines in California.

(a) Exports.

(b) January to September only.

(c) Lithium minerals other than spodumene.

EXPORTS OF LITHIUM MINERALS

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|--------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Rhodesia— | | | | | | |
| Lithium minerals | 66,325 | 49,932 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Uganda— | | | | | | |
| Amblygonite | 20 | — | — | 50 | — | 50 |
| Australia (b)— | | | | | | |
| Lithium minerals | — | — | 345 | — | — | — |
| OTHER COUNTRIES | | | | | | |
| Germany (Federal)— | | | | | | |
| Lithium minerals | 621 | 606 | 243 | 148 | 126 | 79 |
| Mozambique— | | | | | | |
| Lepidolite | <i>n.a.</i> | 75 | <i>n.a.</i> | <i>r</i> 99 | 547 | 502 |
| South Africa— | | | | | | |
| Lithium minerals | 335 | 409 | 486 | — | — | — |
| South West Africa— | | | | | | |
| Amblygonite | — | 597 | 12 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Lepidolite | 484 | 152 | 534 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Petalite | 1,028 | 991 | 1,185 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Brazil— | | | | | | |
| Amblygonite | — | 25 | — | (a) 6,022 | — | <i>n.a.</i> |
| Spodumene | — | 6,707 | 98 | 49 | — | <i>n.a.</i> |

(a) Lithium minerals other than spodumene.

(b) Years ended June 30 of that stated.

IMPORTS OF LITHIUM MINERALS*

Long tons

| Importing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom (a) | 10,300 | 7,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg E.U. | 90 | 227 | 311 | 635 | 753 | 1,307 |
| France | <i>n.a.</i> | <i>n.a.</i> | 4,602 | 2,498 | 2,559 | 2,989 |
| Germany (Federal) | 14,701 | 10,766 | 9,667 | 6,207 | 10,621 | 7,554 |
| Italy | 2,347 | 3,551 | 12,796 | 992 | 4,851 | 5,105 |
| Netherlands (a) | 4,400 | 6,500 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Spain | 60 | 130 | 241 | 360 | 419 | 347 |
| United States | 24,123 | 10,040 | 8,268 | 23,154 | 10,172 | 1,239 |
| Japan (a) | 7,000 | 3,500 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |

*Imports of lithium minerals are not separately recorded in the trade returns of most importing countries.

(a) Figures represent exports to the country stated from the principal producing countries and are not necessarily complete.

MAGNESITE AND DOLOMITE
PRODUCTION OF MAGNESITE AND DOLOMITE

Long tons

| Producing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|------------|------------|------------|------------|------------|------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Dolomite, crude (a) .. | 3,700,000 | 3,800,000 | 4,200,000 | 4,700,000 | 4,900,000 | 5,700,000 |
| Kenya— | | | | | | |
| Magnesite, crude .. | 167 | 66 | 667 | 415 | 67 | 495 |
| Rhodesia— | | | | | | |
| Magnesite, crude .. | 37,867 | 35,037 | (e) 29,000 | (e) 39,000 | n.a. | n.a. |
| Tanzania— | | | | | | |
| Magnesite, crude .. | (c) 487 | 1,404 | 4,488 | 2,006 | 1,424 | 1,522 |
| Canada— | | | | | | |
| Magnesitic dolomite (b) | n.a. | 69,441 | n.a. | n.a. | n.a. | n.a. |
| | £1,184,739 | £1,330,810 | £1,312,306 | £1,355,090 | £1,173,971 | £1,156,248 |
| Ceylon— | | | | | | |
| Dolomite | n.a. | 5,004 | n.a. | 13,194 | 7,773 | 5,610 |
| India— | | | | | | |
| Magnesite, crude .. | 204,652 | 234,936 | 228,000 | 242,000 | 249,000 | 288,500 |
| Dolomite | 512,901 | 953,000 | 1,037,354 | 1,125,932 | 1,240,000 | 1,253,000 |
| Pakistan— | | | | | | |
| Magnesite | 607 | 515 | (e) 724 | (e) 2,010 | 1,605 | (a) 2,000 |
| Australia— | | | | | | |
| Magnesite, crude .. | 31,250 | 26,362 | 19,556 | 23,653 | 23,821 | 23,172 |
| Dolomite | 236,068 | 258,661 | 256,008 | 290,659 | 316,731 | 284,973 |
| New Zealand— | | | | | | |
| Magnesite, crude .. | 603 | 837 | 557 | 568 | 792 | — |
| Dolomite | 9,164 | 7,556 | 13,251 | 8,310 | 8,116 | 9,917 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Magnesite— | | | | | | |
| Crude | 1,630,411 | 1,786,933 | 1,589,135 | 1,511,061 | 1,522,254 | 1,583,018 |
| Caustic (d) | 133,355 | 133,530 | 135,663 | 125,099 | 114,724 | n.a. |
| do. powder (d) .. | 55,332 | 61,690 | 60,330 | 48,455 | 58,072 | n.a. |
| Dead-burned (d) .. | 513,756 | 556,958 | 483,533 | 442,498 | 474,464 | n.a. |
| Bricks (d) | 272,472 | 277,978 | 265,125 | 234,704 | 275,062 | n.a. |
| Belgium— | | | | | | |
| Dolomite— | | | | | | |
| Crude | 894,140 | 854,020 | 827,678 | 939,275 | 1,133,274 | 1,330,000 |
| Calcined | 332,160 | 312,840 | 314,075 | 299,199 | 365,381 | n.a. |
| France— | | | | | | |
| Dolomite, crude .. | 1,102,505 | 1,279,800 | 1,363,674 | 1,444,989 | 1,422,700 | n.a. |
| Germany (Federal)— | | | | | | |
| Dolomite | 133,478 | 276,360 | 159,128 | 179,259 | 243,842 | 258,086 |
| Greece— | | | | | | |
| Magnesite— | | | | | | |
| Crude | 354,513 | 310,226 | 336,723 | 363,093 | 439,000 | 570,000 |
| Caustic (d) | 53,977 | 48,700 | 35,952 | 34,194 | 35,000 | 50,200 |
| Dead-burned (d) .. | 46,048 | 63,241 | 89,235 | 96,394 | 131,000 | 166,000 |
| Hungary— | | | | | | |
| Dolomite | 474,500 | 551,000 | 612,000 | 640,000 | 627,000 | n.a. |
| Italy— | | | | | | |
| Magnesite, crude .. | 6,209 | 3,480 | 2,560 | 4,864 | n.a. | n.a. |
| Dolomite— | | | | | | |
| Metallurgical .. | 80,222 | 68,474 | 64,568 | n.a. | n.a. | n.a. |
| Refractory, etc. .. | 821,303 | 898,714 | 950,982 | n.a. | n.a. | n.a. |
| Norway— | | | | | | |
| Dolomite | 444,512 | 307,000 | 360,400 | 433,645 | 382,697 | 415,654 |

(a) Estimated.

(b) Including brucite, dead-burned magnesitic dolomite and serpentine.

(c) Exports.

(d) Derived from crude shown and not additional.

(e) United States Bureau of Mines' estimate.

PRODUCTION OF MAGNESITE AND DOLOMITE (cont.)

Long tons

| Producing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-----------------|-----------------|------------------|-----------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Poland— | | | | | | |
| Magnesite, crude .. | 37,400 | 41,300 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Portugal— | | | | | | |
| Dolomite | 5,285 | 2,928 | 4,466 | 5,256 | 12,003 | 2,854 |
| Spain— | | | | | | |
| Magnesite | 91,852 | 99,057 | 108,000 | 121,000 | 247,000 | 225,462 |
| Sweden— | | | | | | |
| Dolomite— | | | | | | |
| Crude | 72,443 | 89,983 | 181,318 | 200,384 | 275,086 | 278,727 |
| Calcined (c) | 58,066 | 62,665 | 61,698 | 49,400 | 49,998 | 43,994 |
| Yugoslavia— | | | | | | |
| Magnesite, crude .. | 489,564 | 517,634 | 518,367 | 418,053 | 393,993 | 469,466 |
| South Africa— | | | | | | |
| Magnesite, crude .. | 83,431 | 85,526 | 91,828 | 78,749 | 58,853 | 47,361 |
| United States— | | | | | | |
| Magnesite— | | | | | | |
| Caustic (a) (b) .. | 143,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Dead-burned (a) (b) | 751,797 | 800,966 | 760,829 | 614,022 | 590,081 | <i>n.a.</i> |
| Dolomite— | | | | | | |
| Dead-burned (b) .. | 1,935,288 | 1,942,679 | 1,958,069 | 1,679,000 | 1,637,000 | <i>n.a.</i> |
| Argentina— | | | | | | |
| Dolomite | <i>n.a.</i> | 97,074 | 137,362 | 194,891 | 126,214 | <i>n.a.</i> |
| Brazil— | | | | | | |
| Magnesite | 92,260 | 122,673 | 125,064 | 107,528 | 135,643 | <i>n.a.</i> |
| Dolomite | 325,169 | 219,684 | 197,363 | 221,419 | 347,514 | <i>n.a.</i> |
| Colombia— | | | | | | |
| Magnesite | 217 | 190 | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Dolomite | 3,166 | 11,519 | 6,378 | 11,373 | 12,000 | 12,705 |
| Peru— | | | | | | |
| Dolomite | 1,470 | 2,169 | 2,896 | 4,700 | <i>n.a.</i> | <i>n.a.</i> |
| Uruguay— | | | | | | |
| Dolomitic limestone .. | 26,512 | 20,091 | 28,483 | 14,683 | 16,815 | 33,668 |
| Formosa— | | | | | | |
| Dolomite | 32,168 | 49,778 | 45,399 | 56,072 | 73,023 | 58,138 |
| Japan— | | | | | | |
| Dolomite | 1,805,922 | 1,647,000 | 1,684,000 | 2,110,500 | 2,186,235 | 2,314,900 |
| Philippine Republic— | | | | | | |
| Dolomite | 5,138 | 5,068 | 4,070 | 6,687 | 6,100 | 4,750 |
| Turkey— | | | | | | |
| Magnesite | <i>r</i> 59,513 | <i>r</i> 84,983 | <i>r</i> 126,185 | <i>r</i> 90,107 | 115,841 | 215,574 |
| Dolomite | 14,812 | 289,000 | <i>r</i> 426,000 | 197,000 | <i>n.a.</i> | <i>n.a.</i> |
| New Caledonia— | | | | | | |
| Magnesite | 991 | 743 | 625 | 1,533 | 654 | 189 |

Magnesite is known to have been produced in Bulgaria, Czechoslovakia, U.S.S.R., Iran, Chile, Mexico, Korea and Manchuria. Dolomite is known to have been produced in other countries. Magnesia is extracted from sea-water in the United Kingdom.

(a) Derived partly from crude shown and partly from other sources, e.g. sea-water, brucite, dolomite.

(b) Sold or used by producers.

(c) Derived partly from crude shown.

PRODUCTION OF MAGNESIUM

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom (a) .. | 4,700 | 5,300 | 3,700 | 4,000 | 3,500 | 4,000 |
| Canada | 8,351 | 9,025 | 6,003 | 8,062 | 8,865 | 9,361 |
| OTHER COUNTRIES | | | | | | |
| France | 973 | 2,780 | 3,300 | 4,133 | 4,407 | 5,807 |
| Germany (Federal) (b) .. | 500 | 500 | 200 | — | — | — |
| Italy | 5,933 | 6,213 | 6,412 | 6,217 | 6,489 | 6,594 |
| Norway | 20,604 | 23,526 | 25,388 | 29,973 | 30,792 | 31,495 |
| U.S.S.R. (b) | 31,000 | 33,000 | 34,000 | 35,000 | 40,000 | 44,000 |
| United States | 70,971 | 72,644 | 71,245 | 86,970 | 87,835 | 89,184 |
| Japan | 2,891 | 3,700 | 5,200 | 6,642 | 5,568 | 6,200 |
| WORLD'S TOTAL* .. | 146,000 | 157,000 | 155,000 | 181,000 | 188,000 | 197,000 |

*Excluding magnesium known to have been produced in China.

(a) Including re-melt alloys.

(b) "Metallgesellschaft" estimate.

EXPORTS OF MAGNESITE, ETC.*

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Magnesium and alloys.. | (d) 2,324 | 1,740 | 1,208 | 1,109 | 908 | 1,052 |
| Rhodesia— | | | | | | |
| Crude and calcined | 23,395 | 33,563 | n.a. | n.a. | n.a. | n.a. |
| Dolomite | 115 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Tanzania— | | | | | | |
| Crude | 487 | 1,025 | 1,079 | 1,177 | 1,062 | 1,345 |
| Canada— | | | | | | |
| Magnesium | (£1,311,446) | (£1,478,028) | (£1,144,942) | (£1,247,637) | (£1,642,257) | (£1,821,000) |
| India (c)— | | | | | | |
| Crude and calcined | 37,466 | 50,149 | 29,871 | 17,796 | 23,798 | 28,474 |
| Chloride | — | — | 5 | — | — | — |
| Malaysia (West)— | | | | | | |
| Dolomite | n.a. | 1,853 | 2,150 | 2,381 | 2,516 | 1,291 |
| Singapore— | | | | | | |
| Crude | 638 | 998 | 988 | 1,308 | 1,461 | 2,215 |
| Australia (b)— | | | | | | |
| Crude and calcined | 731 | 2,573 | 2,270 | 1,889 | 1,874 | 1,975 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Crude | 754 | 567 | 406 | 379 | 627 | 944 |
| Caustic | 99,766 | 97,854 | 90,084 | 78,365 | 71,320 | 72,765 |
| Dead-burned | 233,223 | 270,915 | 220,432 | 180,415 | 174,854 | 161,643 |
| Bricks | 117,249 | 100,427 | 95,479 | 80,774 | 96,959 | 117,739 |
| Dolomite | 33,241 | 41,266 | 38,136 | 31,786 | 8,409 | 16,473 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Crude | — | 12 | 8 | — | — | — |
| Calcined | 43 | 8 | 218 | 1 | 23 | 55 |
| Carbonate | — | 63 | 31 | 63 | 13 | 8 |
| Chloride | — | 1 | 6 | 5 | 7 | — |
| Oxide and hydroxide | 1 | 81 | 2 | 7 | 52 | 454 |
| Sulphate | 30 | 22 | 158 | 323 | 61 | 262 |
| Dolomite, crude | 313,567 | 369,675 | 276,291 | 422,671 | 593,125 | 675,250 |
| do. calcined | 175,390 | 173,073 | 191,538 | 190,328 | 178,461 | 184,675 |
| Czechoslovakia | 142,000 | 190,000 | 204,000 | 213,000 | 259,000 | 346,000 |
| France— | | | | | | |
| Crude and calcined | 216 | 734 | 225 | 328 | 2,517 | 592 |
| Magnesium metal (a) | 148 | 132 | 140 | 148 | 338 | 660 |
| Carbonate | 1,391 | 1,147 | 1,175 | 1,160 | 999 | 1,394 |
| Chloride | 1,394 | 1,017 | 567 | 2,703 | 2,760 | 3,654 |
| Oxide and hydroxide | 1,491 | 1,429 | 1,593 | 1,928 | 2,118 | 3,706 |
| Sulphate | 386 | 100 | 165 | 210 | 167 | 99 |
| Dolomite, crude | 21,108 | 19,575 | 23,347 | 52,903 | 60,243 | 69,673 |
| do. calcined | 3,750 | 3,821 | 4,108 | 4,306 | 15,370 | 20,253 |
| Germany (Federal)— | | | | | | |
| Crude and calcined | 8,132 | 5,542 | 6,519 | 8,821 | 9,527 | 11,866 |
| Magnesium metal | 900 | 1,135 | 1,008 | 304 | 1,026 | 2,211 |
| Carbonate | 456 | 348 | 298 | 244 | 254 | 215 |
| Chloride | 72,706 | 70,920 | 77,484 | 82,531 | 96,824 | 103,804 |
| Oxide and hydroxide | 1,874 | 2,242 | 2,727 | 1,956 | 1,998 | 2,600 |
| Sulphate | 39,188 | 39,169 | 39,727 | 34,142 | 34,227 | 35,726 |
| Dolomite | 72,729 | 89,165 | 98,338 | 84,564 | 72,648 | 49,241 |
| Kieserite | 195,824 | 206,839 | 230,344 | 234,407 | 233,453 | 270,946 |
| Germany (East)— | | | | | | |
| Sulphate | 21,438 | 24,402 | 28,414 | 27,717 | n.a. | n.a. |

* Magnesite unless otherwise stated.

(a) Including alloys and scrap.

(d) Including scrap.

(b) Years ended June 30 of that stated.

(c) Years ended March 31 following that stated.

EXPORTS OF MAGNESITE, ETC. (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|-------------|---------|---------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Greece— | | | | | | |
| Crude | 20,602 | 17,887 | 12,448 | 16,722 | 15,821 | 19,020 |
| Calcined | 94,053 | 115,634 | 130,549 | 129,160 | 172,068 | 212,973 |
| Italy— | | | | | | |
| Crude | 20 | 20 | 11 | 9 | 6 | 71 |
| Calcined | 40 | 70 | 250 | 70 | 19 | 50 |
| Magnesium metal including alloyed | 5,626 | 5,826 | 4,558 | 3,117 | 6,999 | 4,854 |
| Carbonate | 147 | 109 | 74 | 51 | 66 | 67 |
| Chloride | 16 | 5 | 36 | 48 | 27 | 6 |
| Oxide | 348 | 9,191 | 23,563 | 21,947 | 15,722 | 387 |
| Dolomite, crude | 1,526 | 8,649 | 15,068 | 14,851 | 14,469 | 18,636 |
| do. calcined | 8,889 | | | | | |
| Netherlands— | | | | | | |
| Crude | 1,073 | 1,185 | 1,318 | 875 | 973 | 991 |
| Magnesium metal | 239 | 289 | 273 | 262 | 319 | 622 |
| Calcined | 37,150 | 31,033 | 27,165 | 16,840 | 15,670 | 18,248 |
| Chloride | 672 | 383 | 284 | 984 | 1,426 | 1,078 |
| Sulphate | 425 | 493 | 550 | 282 | 283 | 244 |
| Norway— | | | | | | |
| Crude | — | 1 | — | — | — | — |
| Magnesium metal | 22,748 | 24,608 | 29,946 | 29,636 | <i>n.a.</i> | <i>n.a.</i> |
| Dolomite, crude | 76,303 | 76,547 | 89,905 | 89,645 | 93,966 | 79,913 |
| Poland— | | | | | | |
| Dolomite | 2,426 | 2,557 | 2,796 | 3,300 | 3,181 | <i>n.a.</i> |
| Spain— | | | | | | |
| Crude and calcined | 28,620 | 30,382 | 15,793 | 10,263 | 12,446 | 35,790 |
| Dolomite, crude | 614 | 2,050 | 3,597 | 24,986 | 10,880 | 16,597 |
| Sweden— | | | | | | |
| Crude and calcined | 156 | 202 | 114 | 61 | 92 | 4 |
| Dolomite | 4,373 | 3,662 | 3,923 | 4,576 | 9,272 | 3,319 |
| Bricks | 12 | 14 | 4 | 204 | 6 | 25 |
| U.S.S.R.— | | | | | | |
| Magnesium metal | 2,800 | 3,400 | 8,000 | 8,400 | 14,271 | 14,800 |
| Yugoslavia— | | | | | | |
| Crude | 6,055 | 1,770 | — | — | 248 | 863 |
| Ground and dead-burned | 119,744 | 117,396 | 101,385 | 83,141 | 105,867 | 81,789 |
| Bricks | 25,904 | 47,054 | 21,409 | 22,673 | 29,230 | 44,858 |
| South Africa— | | | | | | |
| Crude and calcined | 7,612 | 2,309 | 3,302 | 3,021 | 1,905 | 129 |
| United States— | | | | | | |
| Crude and calcined | <i>n.a.</i> | 5,145 | 6,359 | 6,953 | 6,414 | 7,796 |
| Dead-burned | 70,821 | 63,972 | 65,420 | 57,472 | 51,033 | 50,076 |
| Magnesium metal (a) | 15,010 | 16,357 | 13,275 | 10,705 | 16,430 | 24,407 |
| Dolomite | <i>n.a.</i> | 226,282 | 90,394 | 100,884 | 90,802 | 83,256 |
| Brazil | 1,935 | 12,166 | 4,580 | 4,626 | 4,506 | <i>n.a.</i> |
| Uruguay— | | | | | | |
| Dolomite, crude | 13,717 | 4,724 | 14,833 | <i>n.a.</i> | 12,007 | 28,719 |
| Formosa— | | | | | | |
| Carbonate | 477 | 672 | 633 | 875 | 243 | 307 |
| Japan— | | | | | | |
| Dolomite | 2,279 | 2,241 | 41,689 | 3,568 | 2,832 | 4,093 |
| Magnesium metal | 22 | 72 | 119 | 72 | 76 | 958 |
| Carbonate | 2,448 | 3,414 | 3,433 | 4,339 | 5,060 | 5,517 |
| Chloride and sulphate | 136 | 185 | 451 | 221 | 265 | <i>n.a.</i> |
| Korea (South)— | | | | | | |
| Dolomite | 11,810 | 19,401 | 12,996 | 11,404 | 10,680 | 15,610 |
| Turkey— | | | | | | |
| Carbonate | 28,482 | 34,183 | 66,008 | 36,243 | 54,600 | 58,949 |
| Oxide | 97 | 98 | 49 | 315 | 128 | <i>n.a.</i> |

(a) Including alloys and scrap.

IMPORTS OF MAGNESITE, ETC.*

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| <i>Outside</i> | | | | | | |
| United Kingdom— | | | | | | |
| Crude and calcined .. | 85,728 | 107,745 | 109,004 | 60,945 | 76,048 | 121,630 |
| Magnesium (c) | 3,157 | 4,506 | 4,777 | 6,060 | 6,089 | 5,592 |
| Chloride | 6,826 | 5,079 | 3,832 | 4,088 | 4,527 | 4,746 |
| Dolomite | 12,061 | 13,768 | 19,322 | 21,763 | 22,636 | 26,623 |
| Zambia— | | | | | | |
| Crude | <i>n.a.</i> | 253 | 762 | <i>n.a.</i> | <i>n.a.</i> | 143 |
| Salts | <i>n.a.</i> | 75 | 340 | 632 | 387 | 224 |
| Canada— | | | | | | |
| Calcined and dead-burned | 27,482 | 32,161 | 31,087 | 34,145 | 37,878 | 42,213 |
| Magnesium metal | 1,425 | 1,465 | 2,685 | 1,333 | 2,146 | 1,806 |
| do. alloys | 165 | 148 | 294 | 184 | 270 | 385 |
| Oxide | 3,237 | 812 | 1,070 | 887 | 1,239 | <i>n.a.</i> |
| Bricks | (£276,825) | (£359,803) | (£545,937) | (£465,501) | (£822,863) | (£701,000) |
| Dolomite, calcined .. | 13,387 | 26,568 | 15,382 | 9,318 | 8,845 | 6,839 |
| Trinidad and Tobago— | | | | | | |
| Crude | 80 | 83 | 27 | 76 | 99 | 45 |
| Hong Kong— | | | | | | |
| Crude | 220 | 236 | 100 | 161 | 56 | 92 |
| Magnesium carbonate | 681 | 570 | 827 | 1,302 | 1,542 | 1,859 |
| India (b)— | | | | | | |
| Crude and calcined .. | — | 343 | — | 71 | 103 | 6 |
| Magnesium metal | 157 | 79 | 100 | 123 | 64 | 184 |
| Carbonate | 550 | 425 | 144 | 231 | 80 | 47 |
| Chloride | — | 9 | 4 | — | 4 | — |
| Oxides | 53 | 136 | 81 | 40 | 51 | 378 |
| Other salts | 34 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Malaysia (West)— | | | | | | |
| Crude | <i>n.a.</i> | 72 | 154 | 204 | 200 | 319 |
| Dolomite | <i>n.a.</i> | 128 | 126 | 145 | 42 | 76 |
| Pakistan— | | | | | | |
| Chloride | 140 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sulphate | 3 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Other salts | 41 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Singapore— | | | | | | |
| Crude | 301 | 527 | 299 | 93 | 13 | 93 |
| Dolomite | 2,322 | 1,912 | 2,185 | 2,831 | 3,791 | 4,111 |
| Australia (a)— | | | | | | |
| Crude and calcined .. | 50,054 | 41,673 | 22,524 | 17,218 | 26,301 | 20,282 |
| Magnesium metal and powder | 489 | 455 | 872 | 1,028 | 603 | 1,009 |
| Oxide | 255 | 234 | 312 | 3,347 | 453 | 2,050 |
| Carbonate | 201 | 257 | 175 | 187 | 195 | 209 |
| Sulphate | 218 | 211 | 383 | — | — | — |
| Dolomite | <i>n.a.</i> | <i>n.a.</i> | 411 | 448 | 673 | 862 |
| New Zealand (a)— | | | | | | |
| Crude | 174 | 167 | 279 | 267 | 397 | <i>n.a.</i> |
| Magnesium metal | 21 | 84 | 14 | 2 | 7 | <i>n.a.</i> |
| Sulphate | 596 | 705 | 506 | 613 | 528 | <i>n.a.</i> |
| Carbonate | 87 | 99 | 190 | 107 | 178 | <i>n.a.</i> |

* Magnesite unless otherwise stated.

(a) Years ended June 30 of that stated.

(b) Years ended March 31 following that stated.

(c) Unwrought including alloys.

IMPORTS OF MAGNESITE, ETC. (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|---------|---------|---------|---------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Crude | 25,751 | 19,905 | 31,803 | 3,925 | 7,421 | 21,003 |
| Caustic and dead burned | 1,857 | 17,393 | 23,046 | 23,411 | 35,003 | 43,402 |
| Magnesium metal .. | 506 | 532 | 502 | 536 | 886 | 2,731 |
| Chloride | 1,685 | 1,468 | 1,403 | 1,228 | 1,102 | 1,340 |
| Dolomite | 3,084 | 3,058 | 3,243 | 3,254 | 3,451 | 3,242 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Crude | 481 | 244 | 428 | 210 | 203 | 1,161 |
| Calcined | 3,569 | 6,064 | 3,244 | 3,334 | 4,325 | 8,444 |
| Magnesium metal .. | 714 | 706 | 1,074 | 627 | 880 | 1,068 |
| Carbonate | 284 | 300 | 247 | 224 | 245 | 161 |
| Chloride | 668 | 849 | 889 | 2,076 | 4,395 | 7,801 |
| Oxide and hydroxide .. | 734 | 913 | 985 | 1,026 | 1,450 | 1,498 |
| Sulphate | 2,076 | 1,911 | 2,153 | 1,622 | 1,589 | 1,440 |
| Dolomite, crude .. | 9,503 | 6,997 | 10,674 | 24,695 | 40,999 | 15,853 |
| do. calcined .. | 6,874 | 11,720 | 12,441 | 14,438 | 4,467 | 4,922 |
| Denmark— | | | | | | |
| Crude | 3,756 | 4,640 | 5,466 | 4,062 | 5,109 | 6,275 |
| Carbonate | 107 | 104 | 77 | 62 | 53 | 51 |
| Chloride | 445 | 707 | 587 | 1,007 | <i>n.a.</i> | <i>n.a.</i> |
| Sulphate | 4,760 | 2,488 | 1,812 | 1,577 | 885 | 1,127 |
| Dolomite | 17,823 | 15,373 | 19,287 | 21,253 | 21,722 | 21,588 |
| Finland— | | | | | | |
| Crude and calcined .. | 1,546 | 1,998 | 2,006 | 2,027 | 2,924 | 2,344 |
| Bricks | 3,960 | 4,755 | 4,427 | 8,813 | 5,480 | 8,785 |
| Carbonate | 63 | 113 | 98 | 214 | 129 | 111 |
| Chloride | 263 | 288 | 307 | 800 | 1,204 | <i>n.a.</i> |
| Sulphate | 370 | 1,202 | 609 | 3,733 | 2,386 | <i>n.a.</i> |
| France— | | | | | | |
| Crude | 1,689 | 767 | 1,369 | 1,044 | 55 | 487 |
| Calcined | 33,114 | 41,516 | 40,121 | 37,954 | 41,911 | 47,453 |
| Bricks | 32,540 | 36,313 | 31,629 | 31,724 | 34,299 | 49,952 |
| Magnesium metal (a) .. | 2,622 | 1,183 | 1,029 | 1,126 | 1,296 | 945 |
| Carbonate | 234 | 221 | 272 | 246 | 302 | 232 |
| Chloride | 121 | 370 | 1,839 | 2,832 | 3,675 | 4,461 |
| Oxide and hydroxide .. | 472 | 311 | 265 | 785 | 951 | 790 |
| Sulphate | 1,974 | 3,041 | 2,630 | 2,975 | 3,798 | 3,734 |
| Dolomite, crude .. | 50,063 | 49,470 | 58,778 | 51,052 | 56,274 | 61,038 |
| do. calcined .. | 131,113 | 125,815 | 121,592 | 118,996 | 122,320 | 123,726 |
| Germany (Federal)— | | | | | | |
| Crude | 8,745 | 3,018 | 1,124 | 1,484 | 1,437 | 1,330 |
| Caustic | 113,603 | 121,437 | 119,658 | 98,257 | 100,235 | 102,768 |
| Dead-burned | 174,708 | 220,402 | 189,379 | 199,228 | 293,217 | 355,532 |
| Magnesium metal (a) .. | 33,963 | 40,398 | 35,295 | 32,264 | 41,185 | 49,291 |
| Carbonate | 783 | 949 | 1,068 | 793 | 1,001 | 1,029 |
| Chloride | 15 | 17 | 17 | 26 | 104 | 133 |
| Oxide and hydroxide .. | 2,361 | 2,081 | 2,014 | 1,686 | 2,929 | 2,484 |
| Sulphate | 41 | 50 | 67 | 131 | 114 | 162 |
| Dolomite | 116,361 | 118,524 | 145,671 | 237,515 | 300,451 | 423,343 |
| Greece— | | | | | | |
| Crude and calcined .. | 409 | 496 | 334 | 388 | 323 | <i>n.a.</i> |
| Magnesium metal .. | 27 | 4 | 13 | 55 | 160 | 77 |
| Chloride | 79 | 88 | 76 | 97 | 72 | <i>n.a.</i> |
| Sulphate | 312 | 263 | 251 | 266 | 223 | <i>n.a.</i> |
| Dolomite | 106 | 194 | 142 | 758 | 1,086 | <i>n.a.</i> |
| Hungary— | | | | | | |
| Dead-burned | 58,037 | 62,375 | 76,945 | 74,580 | 77,588 | 80,064 |
| Italy— | | | | | | |
| Crude | 15,282 | 12,780 | 9,359 | 15,236 | 13,199 | 13,612 |
| Calcined | 29,363 | 35,996 | 35,363 | 36,906 | 39,683 | 33,929 |
| Chloride | 4,204 | 4,060 | 3,946 | 5,103 | 6,653 | 5,191 |
| Oxide | 312 | 331 | 620 | 813 | 838 | 1,239 |
| Sulphate | 4,956 | 5,834 | 6,733 | 7,985 | 7,773 | 8,812 |
| Dolomite | 1,070 | 429 | 1,123 | 1,397 | 1,233 | 1,617 |

(a) Including alloys and scrap.

IMPORTS OF MAGNESITE, ETC. (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|---------|---------|---------|---------|---------|---------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Netherlands— | | | | | | |
| Crude | 2,519 | 2,808 | 2,930 | 1,747 | 2,509 | 3,452 |
| Calcined | 48,778 | 40,123 | 33,394 | 20,247 | 32,265 | 34,864 |
| Magnesium metal | 485 | 388 | 397 | 480 | 494 | 958 |
| Carbonate | 6,576 | 458 | 403 | 423 | 441 | 496 |
| Oxide and hydroxide | 410 | 444 | 533 | 366 | 458 | 615 |
| Sulphate | 7,285 | 6,562 | 6,549 | 4,890 | 4,921 | 5,038 |
| Chloride | 2,688 | 2,888 | 2,870 | 3,477 | 4,016 | 4,559 |
| Dolomite, crude | 260,935 | 361,519 | 315,309 | 380,798 | 427,712 | 632,516 |
| do. calcined | 47,650 | 53,840 | 60,485 | 51,189 | 32,265 | 42,664 |
| Norway— | | | | | | |
| Crude and calcined | 7,643 | 3,895 | 3,964 | 2,311 | 5,048 | 5,429 |
| Chloride | 51,500 | 51,890 | 54,418 | 55,319 | 60,708 | 61,997 |
| Sulphate | 381 | 268 | 333 | 236 | n.a. | 83 |
| Dolomite | 12,326 | 15,580 | 4,619 | 2,930 | 2,539 | 2,298 |
| Poland— | | | | | | |
| Calcined and caustic | 120,600 | 157,095 | 152,248 | 102,502 | 150,344 | 134,658 |
| Magnesium metal | 276 | 295 | 394 | 464 | 394 | 681 |
| Chloride | 5,867 | 6,376 | 6,929 | 7,097 | 6,311 | 5,846 |
| Portugal— | | | | | | |
| Crude and calcined | 533 | 245 | 1,016 | 361 | 467 | 435 |
| Carbonate | 123 | 117 | 142 | 91 | 125 | 144 |
| Oxide | 73 | 245 | 48 | 168 | 29 | 14 |
| Sulphate | 1,728 | 1,836 | 496 | 1,128 | 914 | 1,139 |
| Spain— | | | | | | |
| Crude and calcined | 3,859 | 11,547 | 7,096 | 6,318 | 18,728 | 23,132 |
| Magnesium metal | 205 | 298 | 339 | 321 | 325 | 688 |
| Dolomite, crude | 1,809 | 687 | 925 | 1,386 | 1,631 | 1,920 |
| do. calcined | 163 | 146 | 122 | 72 | 10 | 354 |
| Sweden— | | | | | | |
| Crude and calcined | 9,204 | 7,872 | 15,673 | 7,135 | 5,905 | 7,104 |
| Bricks | 28,568 | 38,804 | 41,961 | 35,922 | 37,401 | 46,189 |
| Magnesium metal | 582 | 471 | 380 | 695 | 647 | 677 |
| Carbonate | 201 | 188 | 226 | 156 | 187 | 192 |
| Chloride | 1,154 | 2,157 | 3,704 | 4,091 | 7,254 | 7,885 |
| Sulphate | 11,976 | 9,372 | 10,004 | 13,023 | 14,311 | 275 |
| Dolomite | 31,187 | 27,443 | 22,781 | 23,996 | 25,755 | 23,830 |
| Switzerland— | | | | | | |
| Magnesium metal | 745 | 510 | 644 | 1,018 | 773 | 1,121 |
| Calcined | 4,242 | 3,867 | 4,049 | 3,309 | 3,283 | 3,724 |
| Carbonate | 283 | 191 | 236 | 169 | 187 | 205 |
| Chloride | 5,729 | 4,650 | 4,315 | 3,255 | 3,276 | 3,092 |
| Sulphate | 641 | 747 | 734 | 682 | 737 | 697 |
| Dolomite, calcined | 8,870 | 11,670 | 12,882 | 12,476 | 12,430 | 12,867 |
| U.S.S.R.— | | | | | | |
| Crude (a) | 78,800 | 135,700 | 104,700 | 156,390 | 208,061 | 271,800 |
| Yugoslavia— | | | | | | |
| Bricks | — | 7 | 318 | 622 | 12 | 1,899 |
| Magnesium metal | 487 | 651 | 491 | 468 | 413 | 605 |
| Carbonate | n.a. | 203 | 91 | 43 | 82 | 107 |
| Dolomite | 663 | 1,217 | 2,275 | 2,307 | 3,687 | 5,491 |
| Angola— | | | | | | |
| Sulphate | 1,032 | 49 | 81 | 58 | 80 | 56 |
| Egypt— | | | | | | |
| Magnesite and dolomite | 623 | 3,518 | 2,664 | n.a. | n.a. | n.a. |
| Morocco— | | | | | | |
| Crude | n.a. | 54 | 6 | 63 | 53 | 57 |
| Chloride | 262 | 228 | 190 | 937 | 3 | 4 |
| Sulphate | 168 | 362 | 220 | 265 | 426 | 707 |
| Dolomite | n.a. | 154 | 492 | 647 | 560 | 1,435 |

(a) Magnesite "powder", mainly from North Korea.

IMPORTS OF MAGNESITE, ETC. (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|--------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| South Africa— | | | | | | |
| Crude | 25,745 | 35,615 | 34,681 | 54,262 | 77,999 | 77,850 |
| Carbonate | 25,744 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 214 |
| Mexico— | | | | | | |
| Crude | 53 | 22 | 993 | 31,296 | <i>n.a.</i> | <i>n.a.</i> |
| Magnesium metal .. | 476 | 466 | 639 | 332 | 768 | <i>n.a.</i> |
| Oxide | 1,011 | 295 | 376 | 592 | 600 | <i>n.a.</i> |
| Sulphate | 289 | 127 | 92 | 73 | 148 | <i>n.a.</i> |
| United States— | | | | | | |
| Crude | 2 | 45 | 278 | 292 | 10,525 | 5,968 |
| Calcined | 8,379 | 10,625 | 11,876 | 8,187 | | |
| Dead-burned | 53,657 | 64,261 | 115,135 | 67,898 | 77,102 | 72,024 |
| Bricks | 16,439 | 18,694 | 17,977 | 20,338 | 15,270 | 20,593 |
| Magnesium metal, etc. | 1,988 | 2,278 | 945 | 6,483 | 2,096 | 2,030 |
| Oxide | 113 | 132 | 68 | 57 | 478 | 92 |
| Carbonate, precipitated | 993 | 1,116 | 973 | 804 | 1,133 | 747 |
| Chloride | 671 | 327 | 157 | 403 | 519 | 573 |
| Sulphate | 8,526 | 5,929 | 8,273 | 28,316 | 39,519 | <i>n.a.</i> |
| Kieserite | 37,478 | 44,966 | 41,682 | | | |
| Argentina— | | | | | | |
| Crude | 4,712 | 4,992 | 2,153 | 3,275 | 4,488 | <i>n.a.</i> |
| Carbonate | 536 | 108 | 211 | 373 | 229 | 498 |
| Chloride | 113 | 124 | 207 | 152 | 275 | 380 |
| Oxide | 44 | 37 | 75 | 57 | 84 | 87 |
| Brazil— | | | | | | |
| Magnesium metal .. | 1,478 | 1,309 | 2,772 | 1,954 | 3,021 | <i>n.a.</i> |
| Carbonate | 170 | 168 | 324 | 263 | 401 | <i>n.a.</i> |
| Chloride | 64 | 54 | 46 | 64 | 131 | <i>n.a.</i> |
| Oxide | 102 | 79 | 123 | 106 | 153 | <i>n.a.</i> |
| Sulphate | 410 | 112 | 193 | 146 | 432 | <i>n.a.</i> |
| Chile— | | | | | | |
| Crude | 44 | 42 | <i>n.a.</i> | 431 | <i>n.a.</i> | <i>n.a.</i> |
| Calcined | 10,281 | 7,291 | <i>n.a.</i> | 7,174 | <i>n.a.</i> | <i>n.a.</i> |
| Dolomite, crude .. | 36,179 | 11,265 | <i>n.a.</i> | 33,590 | <i>n.a.</i> | <i>n.a.</i> |
| do, calcined | 12,635 | 5,938 | <i>n.a.</i> | 50,413 | <i>n.a.</i> | <i>n.a.</i> |
| Colombia— | | | | | | |
| Crude and calcined .. | 47 | 52 | 75 | 69 | 116 | <i>n.a.</i> |
| Carbonate | 9 | 14 | 23 | 5 | 12 | <i>n.a.</i> |
| Chloride | 64 | 97 | 115 | 98 | 95 | <i>n.a.</i> |
| Oxide | 127 | 155 | 767 | 121 | 317 | <i>n.a.</i> |
| Sulphate | 296 | 197 | 752 | 191 | 243 | <i>n.a.</i> |
| Dolomite | 4,524 | 1,966 | 3,320 | 3,203 | 4,642 | <i>n.a.</i> |
| Peru— | | | | | | |
| Crude and calcined .. | 990 | 1,187 | 1,253 | 3,183 | 1,004 | <i>n.a.</i> |
| Carbonate | 55 | 63 | 35 | <i>n.a.</i> | 12 | <i>n.a.</i> |
| Oxide | 26 | — | 115 | 93 | 78 | <i>n.a.</i> |
| Hydroxide | 73 | 227 | | | | |
| Sulphate | 128 | 285 | 171 | 630 | 301 | <i>n.a.</i> |
| Chloride | 27 | 17 | 9 | 13 | 28 | <i>n.a.</i> |
| Venezuela— | | | | | | |
| Crude | 804 | 2,146 | 2,868 | 1,771 | 3,402 | 3,630 |
| Sulphate | 329 | 766 | 362 | 255 | 260 | 135 |
| Iran (a)— | | | | | | |
| Sulphate | 319 | 451 | 144 | 220 | 473 | <i>n.a.</i> |
| Israel— | | | | | | |
| Crude | 1,443 | 2,276 | 1,278 | 1,118 | 1,603 | 1,495 |
| Japan— | | | | | | |
| Crude | 4,408 | 4,442 | 3,950 | 3,957 | 4,711 | 3,981 |
| Dead-burn | 19,220 | 21,316 | 19,806 | 30,487 | 19,608 | 22,919 |

(a) Years ended March 20 of year following that stated.

IMPORTS OF MAGNESITE, ETC. (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|--------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Japan <i>cont.</i> — | | | | | | |
| Magnesium metal .. | 917 | 560 | 1,030 | 828 | 436 | 100 |
| Dolomite | 12,471 | 20,323 | 11,691 | 11,912 | 10,998 | 16,295 |
| Korea (South)— | | | | | | |
| Crude | 1,972 | 1,250 | 294 | — | <i>n.a.</i> | <i>n.a.</i> |
| Philippine Republic— | | | | | | |
| Crude and calcined .. | 387 | 274 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sulphate | 584 | 200 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Dolomite | 2,656 | 3,225 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Syria— | | | | | | |
| Sulphate | 40 | <i>n.a.</i> | <i>n.a.</i> | 69 | <i>n.a.</i> | <i>n.a.</i> |
| Thailand— | | | | | | |
| Chloride | 67 | 59 | 117 | 87 | 268 | 77 |
| Sulphate | 677 | 396 | 617 | 561 | 733 | 410 |
| Turkey— | | | | | | |
| Crude | 3 | 7 | 68 | 1 | 3 | 63 |
| Carbonate | 56 | 64 | 68 | 213 | 151 | 216 |
| Chloride | 205 | 169 | 182 | 248 | 444 | 240 |
| Oxide | 27 | 28 | 21 | 23 | 82 | 22 |
| Sulphate | 381 | 408 | 629 | 415 | 552 | 504 |

MANGANESE
PRODUCTION OF MANGANESE ORE
(including Ferruginous Manganese Ore)

Long tons

| Producing Country | Estimated Manganese Content | | | | | | | | | | | |
|-------------------------------|-----------------------------|-----------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
| COMMONWEALTH COUNTRIES | | | | | | | | | | | | |
| Botswana .. | 27,356 | 8,676 | — | 4,186 | 9,840 | n.a. | 218,000 | 284,000 | 273,000 | 245,000 | n.a. | n.a. |
| Ghana .. | 454,800 | 592,500 | 568,100 | 490,500 | 407,000 | 327,500 | n.a. | n.a. | — | n.a. | 200,000 | 157,000 |
| Rhodesia .. | 143 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Zambia .. | 37,410 | 30,326 | 26,280 | 24,955 | 24,999 | 25,254 | 20,200 | 16,400 | 14,200 | 13,000 | 13,500 | 14,000 |
| Guyana .. | 116,881 | 166,194 | 180,000 | 175,724 | 128,695 | n.a. | 49,000 | 70,000 | 76,000 | 74,000 | 54,000 | n.a. |
| India .. | 1,282,969 | 1,512,000 | 1,571,000 | 1,512,725 | 1,526,400 | 1,263,200 | 540,000 | 640,000 | 660,000 | 640,000 | 641,000 | 530,600 |
| Goa .. | 100,024 | 109,375 | 72,000 | 42,106 | 50,600 | 170,400 | 34,000 | 37,000 | 24,000 | 15,000 | 18,000 | 60,500 |
| Malaysia (West) .. | — | 2,666 | 82,127 | 84,000 | 45,000 | 10,171 | — | n.a. | n.a. | n.a. | n.a. | n.a. |
| Pakistan .. | 980 | — | — | n.a. | — | — | 300 | — | — | n.a. | — | — |
| Australia .. | 61,109 | 100,369 | 312,540 | 559,967 | 737,742 | 907,979 | 30,800 | 49,900 | 149,108 | 258,553 | 342,836 | 439,962 |
| Fiji .. | 897 | 5,392 | 5,242 | 5,845 | 8,705 | n.a. | 400 | 2,600 | 2,500 | 2,800 | 4,100 | n.a. |
| New Hebrides (b) .. | 54,082 | 76,534 | 82,629 | 71,072 | 41,807 | — | 16,000 | 23,000 | 25,000 | 18,000 | 13,000 | — |
| TOTAL .. | 2,136,700 | 2,604,000 | 2,900,000 | 2,960,000 | 2,962,000 | 2,853,000 | — | — | — | — | — | — |
| OTHER COUNTRIES | | | | | | | | | | | | |
| Bulgaria .. | 51,200 | 41,000 | 29,500 | 43,000 | 40,000 | 40,000 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Czechoslovakia .. | 83,000 | 79,000 | 89,000 | 79,000 | 85,000 | 82,000 | 15,000 | 15,000 | 15,000 | 15,000 | 15,000 | 14,000 |
| France .. | 1,257 | 1,378 | 1,788 | 2,268 | 2,561 | n.a. | 277 | 303 | 394 | 501 | 563 | n.a. |
| Greece .. | 18,188 | 16,953 | 14,269 | 7,590 | 7,200 | 6,280 | 8,000 | 7,500 | 7,000 | 3,500 | 3,500 | 3,100 |
| Hungary .. | 168,492 | 210,000 | 207,000 | 206,000 | 153,000 | 153,000 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Italy .. | 47,126 | 47,055 | 43,289 | 46,354 | 50,018 | 52,132 | 14,100 | 14,100 | 13,000 | 14,800 | 16,000 | 16,000 |
| Portugal .. | 6,885 | 7,642 | 8,471 | 9,677 | 9,512 | 6,819 | 2,616 | 3,179 | 3,262 | 3,503 | 3,681 | 2,973 |
| Roumania .. | a 100,000 | 124,000 | (a) 134,000 | a 256,000 | n.a. | n.a. | 35,000 | 43,000 | 47,000 | 90,000 | n.a. | n.a. |
| Spain .. | 15,859 | 17,185 | 18,636 | r 8,332 | 12,696 | 22,538 | 5,000 | 5,500 | 5,933 | 2,700 | 4,100 | n.a. |
| Sweden .. | 5,850 | 25,539 | 21,308 | 18,516 | 11,500 | 8,661 | 860 | 831 | 2,834 | 2,426 | 1,700 | 1,280 |
| U.S.S.R. .. | 6,984,000 | 7,456,000 | 7,584,000 | 7,062,000 | 6,460,000 | 6,875,000 | 3,140,000 | 3,360,000 | 3,410,000 | 3,180,000 | 2,925,000 | 3,114,000 |
| Yugoslavia .. | 7,661 | 7,969 | 8,480 | 9,643 | 13,913 | 12,136 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Angola .. | — | — | 18,257 | 32,656 | 9,005 | 28,611 | — | — | 8,000 | 14,000 | 4,000 | 12,000 |

(a) United States Bureau of Mines' estimate.

(b) Production of ore as mined. Production of sintered ore (about 50% Mn) was as follows (long tons): 1964—59,312; 1965—65,066; 1966—75,036; 1967—70,272; 1968—48,576; 1969—n.a.

PRODUCTION OF MANGANESE ORE (cont.)

Long tons

| Producing Country | Estimated Manganese Content | | | | | | | | | | | |
|-------------------------|-----------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
| OTHER COUNTRIES—(cont.) | | | | | | | | | | | | |
| Congo Republic .. | 304,808 | 371,612 | 236,000 | 267,000 | 316,700 | 306,510 | 150,000 | 180,000 | 110,000 | 130,000 | 152,000 | 147,000 |
| Egypt .. | 322,831 | 179,268 | 183,341 | 73,978 | 3,894 | 4,000 | 95,000 | 55,000 | 55,000 | 22,000 | 1,000 | 1,000 |
| Gabon .. | 944,421 | 1,260,174 | 1,253,407 | 1,128,885 | 1,233,801 | 1,370,930 | 482,000 | 643,000 | 639,000 | 600,000 | 637,000 | 693,000 |
| Ivory Coast .. | 134,407 | 165,688 | 173,138 | 147,037 | 114,897 | 125,000 | 65,000 | 80,000 | 83,000 | 71,000 | 56,000 | 60,000 |
| Morocco .. | 335,691 | 369,944 | 356,696 | 281,619 | 157,681 | 128,514 | 150,000 | 170,000 | 160,000 | 127,000 | 71,000 | 64,000 |
| South Africa .. | 1,444,512 | 1,747,395 | 1,950,981 | 2,087,294 | 2,388,857 | 2,601,466 | 574,800 | 713,700 | 777,400 | 800,000 | 955,000 | 1,040,600 |
| South West Africa .. | — | 5,989 | 22,650 | 27,000 | 13,000 | n.a. | — | 2,900 | 10,900 | 12,000 | 6,000 | n.a. |
| Sudan .. | (a) 8,500 | 1,000 | 1,500 | r 2,455 | (a) 4,900 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Mexico .. | a 188,000 | a 183,000 | a 113,000 | a 109,000 | n.a. | 839 | 63,077 | 57,882 | 30,608 | 32,093 | 26,284 | 59,186 |
| United States (c) .. | 208,734 | 290,298 | 298,940 | 269,415 | 228,543 | 384,500 | 34,707 | 46,271 | 43,964 | 41,614 | 35,000 | 53,600 |
| Argentina .. | 36,679 | 28,314 | 27,331 | 35,958 | 36,000 | n.a. | 16,000 | 12,000 | 7,600 | 8,000 | 10,000 | n.a. |
| Brazil .. | 1,327,764 | 1,374,013 | 1,431,919 | 1,336,916 | 1,914,000 | n.a. | 597,000 | 618,000 | 644,000 | 602,000 | 861,000 | n.a. |
| Chile .. | 19,547 | 16,326 | 17,638 | 14,620 | 23,467 | 23,325 | 9,000 | 7,000 | 8,000 | 7,000 | 11,000 | 10,000 |
| Peru .. | 366 | 974 | 840 | 1,056 | 7,040 | 7,162 | 200 | 400 | 400 | 400 | 3,000 | 3,000 |
| China (a) .. | 980,000 | 980,000 | 980,000 | 690,000 | 890,000 | 1,000,000 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Indonesia .. | 6,667 | 1,186 | — | (a) 11,000 | (a) 11,000 | (a) 11,000 | n.a. | — | — | n.a. | n.a. | n.a. |
| Iran (b) .. | 31,000 | 33,000 | (a) 37,000 | (a) 40,000 | 12,000 | 34,800 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Japan .. | 280,202 | 298,170 | 315,834 | 333,636 | 307,364 | 297,000 | 94,000 | 100,000 | 100,000 | 110,000 | 100,000 | 100,000 |
| Korea (South) .. | 4,244 | 6,585 | 5,879 | 7,127 | 3,383 | 2,278 | 1,700 | 2,600 | 2,400 | 2,900 | 1,400 | 900 |
| Philippine Republic .. | 7,879 | 50,927 | 55,207 | 78,923 | 65,000 | 20,000 | 3,500 | 23,000 | 25,000 | 41,435 | 34,000 | 9,000 |
| Thailand .. | 10,880 | 32,901 | 69,487 | 77,324 | 40,419 | 29,463 | 5,800 | 17,400 | 36,800 | 40,900 | 21,400 | 15,300 |
| Turkey .. | r 29,393 | r 27,488 | r 23,382 | r 41,207 | 25,000 | 13,473 | r 11,000 | r 11,000 | r 8,000 | r 12,000 | 9,000 | 5,000 |
| TOTAL .. | 14,100,000 | 15,400,000 | 15,800,000 | 15,000,000 | 18,000,000 | 15,800,000 | 15,000,000 | 15,000,000 | 15,000,000 | 15,000,000 | 18,000,000 | 18,600,000 |
| WORLD'S TOTAL .. | 16,200,000 | 18,000,000 | 18,700,000 | 18,000,000 | 18,000,000 | 18,600,000 | 18,000,000 | 18,000,000 | 18,000,000 | 18,000,000 | 18,000,000 | 18,600,000 |

Manganese ore is also produced in Cuba and North Vietnam.

(a) United States Bureau of Mines' estimate.

(b) Years ended March 20 following that stated.

(c) Shipments.

EXPORTS OF MANGANESE ORE, ETC.

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-----------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Spiegeleisen | 60 | 93 | — | 10 | 31 | 96 |
| Ferro-manganese | 10,036 | 13,076 | 22,101 | 17,794 | 22,463 | 340 |
| Ghana— | | | | | | |
| Ore | 497,993 | 564,797 | 589,506 | 445,310 | 438,856 | 324,198 |
| Zambia— | | | | | | |
| Ore | 26,546 | 32,113 | 25,695 | 24,325 | 17,211 | <i>n.a.</i> |
| Canada— | | | | | | |
| Ferro-manganese | 2,999 | 3,408 | 5,109 | 3,874 | 909 | 4,921 |
| Guyana— | | | | | | |
| Ore and concentrates | 136,124 | 157,607 | 194,050 | 191,668 | 97,593 | — |
| India (b)— | | | | | | |
| Ore | 1,011,827 | 630,936 | 688,955 | 451,018 | 556,430 | 465,176 |
| Ferruginous manganese ore | 533,795 | 699,593 | 478,503 | 578,363 | 737,273 | 676,132 |
| Ferro-manganese | 86,768 | 55,532 | 10,127 | 28,833 | 69,150 | 113,618 |
| Malaysia (West)— | | | | | | |
| Ore | — | 1,100 | 68,220 | 59,329 | 40,102 | 44,948 |
| Singapore— | | | | | | |
| Ore | 1,057 | 817 | 1,485 | 1,739 | 2,049 | 2,413 |
| Australia (a)— | | | | | | |
| Ore | 27,157 | 54,737 | 69,031 | 271,524 | 393,725 | 629,531 |
| Fiji— | | | | | | |
| Ore | 761 | 4,809 | 5,089 | 4,360 | 10,407 | 11,117 |
| New Hebrides— | | | | | | |
| Concentrates— | | | | | | |
| Unsintered | 4,630 | 7,854 | 1,370 | — | — | — |
| Sintered | 64,703 | 70,276 | 62,762 | 73,429 | 58,241 | — |
| Papua (a)— | | | | | | |
| Ore | 6 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Ore | 1,987 | 7,397 | 1,202 | 2,545 | 2,971 | 11,170 |
| Ferro-manganese | 36,731 | 43,021 | 63,070 | 64,106 | 60,164 | 65,715 |
| Spiegeleisen | 4,080 | 1,076 | 2,066 | 3,150 | 2,542 | 2,923 |
| France— | | | | | | |
| Ore (c) | 1,731 | 1,567 | 751 | 1,118 | 495 | 585 |
| Metal | 1,027 | 1,565 | 3,389 | 3,270 | 4,600 | 6,374 |
| Ferro-manganese | 192,878 | 200,471 | 184,815 | 167,227 | 204,910 | 227,058 |
| Spiegeleisen | 15,821 | 16,872 | 12,073 | 7,492 | 7,162 | 2,436 |
| Germany (Federal)— | | | | | | |
| Ore | 7,197 | 8,869 | 5,766 | 601 | 5,811 | 4,352 |
| Metal | 2,118 | 2,589 | 1,460 | 12 | 31 | 68 |
| Ferro-manganese | 61,279 | 54,904 | 90,111 | 39,852 | 74,306 | 44,194 |
| Spiegeleisen | 10,034 | 9,214 | 11,533 | 12,278 | 13,804 | 11,156 |
| Greece— | | | | | | |
| Ore | 13,179 | 21,261 | 23,662 | 6,019 | 5,579 | 4,937 |
| Italy— | | | | | | |
| Ore (c) | 668 | 1,035 | 548 | 295 | 221 | 38 |
| Ferro-manganese | 7,497 | 6,969 | 9,125 | 8,478 | 17,042 | 7,758 |
| Netherlands— | | | | | | |
| Ore (c) | 8,452 | 8,589 | 10,596 | 18,436 | 21,439 | 24,686 |
| Norway— | | | | | | |
| Ore | 4,300 | 8,237 | 3,000 | 2,000 | 1,600 | 200 |
| Ferro-manganese | 72,177 | 100,190 | 112,460 | 118,611 | 141,483 | 185,147 |
| Ferro-silico-manganese | 105,999 | 116,953 | 106,830 | 111,466 | 129,789 | 141,217 |

(a) Years ended June 30 of that stated.

(c) Including manganiferous iron ore.

(b) Years ended March 31 following that stated.

EXPORTS OF MANGANESE ORE, ETC. (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Portugal— | | | | | | |
| Ore | 8,326 | 2,839 | 7,705 | 6,333 | 5,703 | 9,112 |
| Roumania— | | | | | | |
| Ore | 72,700 | 78,600 | 47,700 | 58,659 | 65,548 | <i>n.a.</i> |
| Sweden— | | | | | | |
| Ore | 581 | 24,495 | 23,385 | 4,256 | 3,040 | 2,358 |
| Metal | 129 | 62 | 37 | 9 | 28 | 79 |
| Ferro-manganese | 2,913 | 3,129 | 8,028 | 12,561 | 15,052 | 25,440 |
| Ferro-silico-manganese | 1,004 | 25 | 15 | 494 | 27 | 2,459 |
| U.S.S.R.— | | | | | | |
| Ore | 963,500 | 1,004,000 | 1,198,800 | 1,230,258 | 1,131,830 | 1,178,000 |
| do. (dioxide) | 12,900 | 15,600 | 16,600 | 16,700 | 18,600 | 17,900 |
| Ferro-manganese | 58,700 | 66,200 | 86,000 | 85,600 | 95,600 | 105,800 |
| Yugoslavia— | | | | | | |
| Ferro-manganese | 4,631 | 3,038 | 701 | 389 | 20 | 1,344 |
| Silico-manganese | 1,812 | 2,105 | 8,960 | 11,216 | 16,484 | 14,866 |
| Angola— | | | | | | |
| Ore | 9,484 | 848 | 5,674 | 12,895 | 37,308 | 27,043 |
| Congo Republic— | | | | | | |
| Ore (a) | 228,900 | 306,200 | 230,400 | 271,500 | 171,600 | 330,000 |
| Egypt— | | | | | | |
| Ore | 179,566 | 160,505 | 120,297 | 30,510 | — | <i>n.a.</i> |
| Gabon— | | | | | | |
| Ore | 867,823 | 1,131,308 | 1,162,374 | 1,207,049 | 1,142,503 | 1,524,235 |
| Ivory Coast— | | | | | | |
| Ore | 114,530 | 166,907 | 173,420 | 103,919 | 130,889 | 53,058 |
| Morocco— | | | | | | |
| Ore | 281,109 | 315,869 | 299,608 | 211,171 | 166,127 | 130,367 |
| South Africa— | | | | | | |
| Ore | 870,787 | 993,244 | 1,482,352 | 1,425,916 | 1,716,764 | 1,881,488 |
| Metal | 4,749 | 5,023 | 5,883 | 7,870 | 7,912 | 9,181 |
| Ferro-manganese | 120,310 | 155,110 | 154,400 | 125,816 | 127,603 | 249,937 |
| South West Africa— | | | | | | |
| Ore | <i>n.a.</i> | — | 24,329 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Cuba— | | | | | | |
| Ore | 901 | 2,273 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Mexico— | | | | | | |
| Ore | 118,316 | 86,865 | 39,965 | 10,284 | 6,532 | <i>n.a.</i> |
| <i>Mn content</i> | 53,749 | 42,287 | 18,227 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| United States— | | | | | | |
| Ore | 12,896 | 12,634 | 14,721 | 13,728 | 16,518 | <i>n.a.</i> |
| Metal | 3,124 | 2,167 | 1,698 | 1,239 | 1,891 | 2,206 |
| Ferro-manganese | 3,485 | 2,922 | 487 | 1,662 | 3,312 | 1,570 |
| Spiegeleisen | 701 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Brazil— | | | | | | |
| Ore | 819,763 | 1,050,899 | 941,450 | 533,453 | 1,106,158 | <i>n.a.</i> |
| Ferro-manganese | — | 7,145 | 764 | 305 | 79 | <i>n.a.</i> |
| Chile— | | | | | | |
| Ore | 3,412 | 12,641 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ferro-manganese | 5,526 | 2,796 | <i>n.a.</i> | 1,436 | <i>n.a.</i> | <i>n.a.</i> |
| Silico-manganese | — | 1,614 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Peru— | | | | | | |
| Ore | 831 | 463 | — | 188 | <i>n.a.</i> | <i>n.a.</i> |
| Iran (b)— | | | | | | |
| Ore | 26,431 | 34,459 | 39,171 | 10,654 | 32,282 | <i>n.a.</i> |
| Japan— | | | | | | |
| Ore | 50 | 356 | 386 | 924 | 1,334 | 2,241 |
| Ferro-manganese | 8,724 | 15,072 | 14,808 | 4,736 | 7,044 | 11,149 |
| Ferro-silico-manganese | 427 | 712 | 589 | 343 | 1,275 | 1,231 |
| Korea (South)— | | | | | | |
| Ore | 1,097 | 2,766 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |

(a) Estimated.

(b) Years ended March 20 following that stated.

EXPORTS OF MANGANESE ORE, ETC. (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|--------|--------|--------|--------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Philippine Republic— | | | | | | |
| Ore | 16,276 | 59,041 | 63,802 | 74,634 | <i>n.a.</i> | <i>n.a.</i> |
| Thailand— | | | | | | |
| Ore | 6,629 | 18,319 | 65,404 | 79,084 | 9,680 | 8,480 |
| Turkey— | | | | | | |
| Ore | 17,854 | 14,707 | 6,605 | 5,738 | 8,154 | 8,480 |

IMPORTS OF MANGANESE ORE, ETC.

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|-------------|---------|---------|---------|---------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ore | 524,393 | 494,188 | 364,962 | 404,526 | 473,650 | 430,918 |
| Metal | 3,135 | 2,135 | 1,861 | 2,494 | 2,246 | 3,491 |
| Ferro-manganese | 62,037 | 80,387 | 75,849 | 73,324 | 66,381 | 94,366 |
| Spiegeleisen | 35 | 151 | 49 | — | — | — |
| Silico-manganese | 35,837 | 32,722 | 27,847 | 24,390 | 26,632 | 30,147 |
| Canada— | | | | | | |
| Ores and concentrates (Mn content) | 56,083 | 79,893 | 164,377 | 73,803 | 61,795 | 96,388 |
| Metal | 2,082 | 2,861 | 2,376 | 1,986 | 2,922 | 2,755 |
| Ferro-manganese and spiegeleisen | 19,491 | 30,859 | 43,855 | 14,325 | 24,947 | 21,896 |
| Silico-manganese and silico-spiegel | 1,557 | 703 | 1,724 | 3,752 | 1,200 | 4,071 |
| Hong Kong— | | | | | | |
| Ore | 406 | 151 | 311 | 10 | 1 | 132 |
| India (c)— | | | | | | |
| Ore | 4,706 | 761 | 8,740 | 3,147 | 6,958 | 7,592 |
| Ferro-manganese | 462 | 534 | 539 | 317 | 114 | 34 |
| Malaysia (West)— | | | | | | |
| Ore | <i>n.a.</i> | 817 | 1,382 | 1,622 | 1,836 | 2,252 |
| Singapore— | | | | | | |
| Ore | 3,387 | 3,424 | 5,576 | 4,032 | 8,919 | 3,699 |
| Australia (b)— | | | | | | |
| Ore | 49,542 | 73,340 | 34,340 | 7,370 | 8,260 | 6,849 |
| Metal | 346 | 327 | (d) 241 | (d) 353 | (d) 330 | (d) 438 |
| Ferro-manganese | 11,672 | 9,575 | 11,122 | 2,775 | 10,459 | 9,998 |
| New Zealand (b)— | | | | | | |
| Ferro-manganese | 524 | 525 | 840 | 742 | 429 | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Ore | 621 | 949 | 1,285 | 580 | 794 | 780 |
| Spiegeleisen | 2,654 | 3,063 | 2,485 | 1,765 | 2,650 | 2,745 |
| Ferro-manganese | 11,784 | 11,230 | 12,095 | 11,291 | 15,327 | 19,271 |
| Belgium-Luxemburg E.U.— | | | | | | |
| Ore (a) | 266,806 | 304,467 | 254,802 | 280,990 | 301,653 | 356,797 |
| Ferro-manganese | 74,556 | 67,986 | 67,754 | 73,062 | 74,031 | 83,434 |
| Ferro-silico-manganese | 4,488 | 7,523 | 4,643 | 5,924 | 10,066 | 11,631 |
| Spiegeleisen | 18,284 | 13,768 | 12,672 | 14,749 | 19,382 | 21,076 |
| Czechoslovakia— | | | | | | |
| Ore | 314,000 | 329,000 | 282,000 | 301,000 | 405,000 | 379,000 |
| Denmark— | | | | | | |
| Ore | 8,450 | 6,260 | 8,056 | 8,517 | 9,203 | 8,962 |
| Ferro-manganese | 945 | 508 | 1,665 | 2,197 | 5,704 | 5,879 |
| Ferro-silico-manganese | 1,951 | 2,252 | 2,494 | 2,855 | 2,785 | 4,109 |
| Finland— | | | | | | |
| Ferro-manganese and spiegeleisen | 1,530 | 1,789 | 1,258 | 2,153 | 3,194 | 3,623 |
| France— | | | | | | |
| Ore (a) | 778,700 | 841,229 | 826,816 | 678,933 | 875,903 | 960,429 |
| Metal | 603 | 714 | 547 | 665 | 337 | 404 |
| Ferro-manganese | 10,098 | 8,819 | 16,421 | 21,546 | 20,128 | 24,786 |
| Spiegeleisen | 2,046 | 1,387 | 2,262 | 4,303 | 2,395 | 3,329 |
| Germany (Federal)— | | | | | | |
| Ore | 679,792 | 626,248 | 607,071 | 347,500 | 572,725 | 313,890 |
| do. (ferruginous) | 71,865 | 93,905 | 246,627 | 314,234 | 373,837 | 385,425 |
| Metal | 2,711 | 2,380 | 1,831 | 2,615 | 4,225 | 4,810 |
| Ferro-manganese | 88,867 | 86,762 | 87,323 | 71,605 | 109,118 | 142,177 |
| Spiegeleisen | 16,002 | 9,859 | 10,013 | 3,331 | 3,159 | 766 |

(a) Including manganiferous iron ore.
 (b) Years ended June 30 of that stated.

(c) Years ended March 31 following that stated.
 (d) Excluding waste and scrap.

IMPORTS OF MANGANESE ORE, ETC. (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Germany (East)— | | | | | | |
| Ore (b) | 70,919 | 84,000 | 72,613 | 75,236 | 49,317 | 72,889 |
| Greece— | | | | | | |
| Ore | 7,636 | 67 | 56 | 8 | 171 | — |
| Hungary— | | | | | | |
| Ferro-manganese .. | 11,651 | 11,774 | 14,634 | 12,233 | 25,454 | 23,917 |
| Italy— | | | | | | |
| Ore (a) | 104,179 | 104,553 | 90,339 | 150,549 | 166,829 | 158,035 |
| Metal | 559 | 500 | 1,104 | 1,384 | 1,874 | 1,997 |
| Spiegeleisen | 6,524 | 5,223 | 13,716 | 24,861 | 29,025 | 21,537 |
| Ferro-manganese .. | 53,145 | 77,451 | 76,652 | 85,550 | 86,054 | 111,672 |
| Ferro-silico-manganese | 3,203 | 5,914 | 6,710 | 12,005 | 15,638 | 31,234 |
| Netherlands— | | | | | | |
| Ore (a) | 16,561 | 16,309 | 26,829 | 42,095 | 35,564 | 57,007 |
| Ferro-manganese .. | 16,649 | 19,824 | 17,236 | 23,255 | 24,020 | 33,614 |
| Ferro-silico-manganese | 372 | 252 | 323 | 899 | 1,147 | 1,155 |
| Spiegeleisen | 708 | 458 | 915 | 317 | 201 | 373 |
| Norway— | | | | | | |
| Ore | 354,317 | 502,055 | 480,844 | 526,259 | 640,356 | 617,122 |
| Poland— | | | | | | |
| Ore | 374,200 | 342,215 | 391,293 | 348,434 | 345,530 | 387,621 |
| Spain— | | | | | | |
| Ore | 147,304 | 85,257 | 140,683 | 132,715 | 181,277 | 139,834 |
| Ferro-manganese .. | 1,610 | 1,580 | 1,324 | 949 | 950 | 2,178 |
| Sweden— | | | | | | |
| Ore | 56,085 | 94,459 | 45,230 | 106,621 | 86,033 | 67,097 |
| Metal | 1,120 | 1,052 | 1,256 | 1,193 | 1,486 | 2,477 |
| Ferro-manganese .. | 12,347 | 16,052 | 22,727 | 20,834 | 30,458 | 26,291 |
| Spiegeleisen | 167 | 492 | — | 108 | — | n.a. |
| Ferro-silico-manganese | 6,214 | 8,265 | 8,567 | 7,382 | 11,847 | 10,278 |
| Yugoslavia— | | | | | | |
| Ore | 40,038 | 43,417 | 34,502 | 48,218 | 34,981 | 52,490 |
| Metal | 98 | 75 | 110 | 50 | 64 | 151 |
| Ferro-manganese .. | 362 | 434 | 267 | 2,075 | 2,489 | 166 |
| South Africa— | | | | | | |
| Ore | 617 | 509 | 930 | 419 | n.a. | 653 |
| Mexico— | | | | | | |
| Ferro-manganese .. | 424 | 326 | 308 | 423 | 410 | n.a. |
| United States— | | | | | | |
| Ore (over 35% Mn) .. | 2,700,211 | 3,442,497 | 2,367,784 | 1,844,547 | 1,630,000 | 1,733,067 |
| <i>Mn content</i> | 1,277,171 | 1,630,097 | 1,126,325 | 871,215 | 776,822 | 876,865 |
| Ore (10% to 35% Mn) .. | 9,862 | 33,061 | 38,187 | 4,881 | 34,732 | 5,570 |
| <i>Mn content</i> | n.a. | 10,087 | 11,088 | 1,556 | 10,526 | 640 |
| Metal | 784 | 1,235 | 1,803 | 1,998 | 2,842 | 1,224 |
| Ferro-manganese .. | 189,847 | 229,767 | 230,270 | 192,660 | 182,455 | 269,612 |
| <i>Mn content</i> | 144,710 | 176,887 | 173,717 | 149,596 | 142,043 | 209,429 |
| Silico-manganese | | | | | | |
| <i>Mn content</i> | 6,133 | 10,358 | 21,470 | 20,907 | 15,076 | 19,050 |
| Argentina— | | | | | | |
| Ferro-manganese .. | 292 | 2,294 | 474 | 298 | 624 | 398 |
| Brazil— | | | | | | |
| Ferro-manganese .. | 24 | 37 | 319 | 479 | 142 | n.a. |
| Chile— | | | | | | |
| Ferro-manganese .. | 14 | — | n.a. | 1,462 | n.a. | n.a. |
| Silico-manganese .. | 1 | 13 | n.a. | 5 | n.a. | n.a. |
| Japan— | | | | | | |
| Ore | 550,123 | 1,048,021 | 1,122,356 | 1,482,975 | 1,725,459 | 1,992,972 |
| Manganiferous iron ore | 68,851 | 213,868 | 239,632 | 324,889 | 221,134 | 153,855 |
| Ferro-manganese .. | — | 2 | — | 9,243 | 2,355 | 24,171 |
| Turkey— | | | | | | |
| Ferro-manganese .. | 4,977 | 6,977 | 8,507 | 5,478 | 4,807 | 9,123 |

(a) Including manganiferous iron ore.

(b) Mn content.

MERCURY
PRODUCTION OF MERCURY

Lb. avdp.

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Canada | 5,548 | 1,520 | — | — | 327,940 | 308,788 |
| OTHER COUNTRIES | | | | | | |
| Italy | 4,332,000 | 4,354,000 | 4,070,000 | 3,653,440 | 4,052,160 | 3,702,720 |
| Roumania | 14,780 | 14,520 | 14,440 | 14,440 | (c) 15,000 | (c) 15,000 |
| Spain | 5,952,000 | 5,674,263 | 5,324,104 | 3,724,000 | 4,352,000 | 4,895,000 |
| U. S. S. R. (c) | 2,700,000 | 3,000,000 | 3,000,000 | 3,400,000 | 3,400,000 | 3,600,000 |
| Yugoslavia | 1,316,160 | 1,248,000 | 1,208,000 | 1,201,536 | 1,124,357 | 1,089,083 |
| Tunisia | — | 13,200 | 19,300 | 22,156 | 23,479 | 20,283 |
| Mexico | 953,748 | 1,458,440 | 1,680,000 | 1,095,360 | 1,306,000 | 1,710,000 |
| United States | 1,074,800 | 1,488,200 | 1,672,600 | 1,807,600 | 2,194,400 | 2,231,400 |
| Bolivia (a) | <i>n.a.</i> | 4,489 | <i>n.a.</i> | 11,000 | 10,000 | 5,000 |
| Chile | 20,310 | 32,498 | 7,295 | 13,995 | 39,013 | 21,771 |
| Colombia | 265 | 3,520 | 6,395 | 14,492 | 24,990 | 23,734 |
| Peru | 248,902 | 236,873 | <i>r</i> 233,859 | <i>r</i> 228,399 | 237,500 | 255,000 |
| China (c) | 2,000,000 | 2,000,000 | 2,000,000 | 1,500,000 | 1,500,000 | 1,500,000 |
| Japan | 788,695 | 717,000 | 690,000 | 660,000 | 583,400 | 497,300 |
| Philippine Republic | 189,700 | 181,200 | 185,700 | 198,400 | 269,344 | 264,328 |
| Turkey | <i>r</i> 198,636 | <i>r</i> 213,628 | 260,000 | <i>r</i> 340,614 | 355,399 | 497,363 |
| WORLD'S TOTAL (b) .. | 20,000,000 | 20,000,000 | 21,000,000 | 18,000,000 | 20,000,000 | 21,000,000 |

Mercury is also produced in Czechoslovakia; an allowance has been made for this in the total.

(a) Exports.

(b) Estimated.

(c) United States Bureau of Mines' estimate.

EXPORTS OF MERCURY, ETC.

Lb. avdp.

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-----------|-------------|-------------|-------------|-------------|
| Austria— | | | | | | |
| Mercury | 18,290 | 11,900 | 22,300 | 24,900 | 37,250 | 24,470 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Mercury | 22,000 | 24,900 | 30,000 | 15,400 | 38,600 | 40,000 |
| Mercury compounds .. | 25,800 | 1,100 | 200 | 200 | 200 | 400 |
| Denmark— | | | | | | |
| Mercury oxide | 6,614 | 2,000 | — | — | — | — |
| France— | | | | | | |
| Mercury | 11,000 | 8,800 | 11,000 | 20,000 | 22,000 | 9,000 |
| Mercury compounds .. | 13,200 | 50,700 | — | 4,000 | 2,200 | 2,200 |
| Germany (Federal)— | | | | | | |
| Mercury | 102,500 | 134,700 | 125,700 | 87,300 | 73,900 | 39,000 |
| Italy— | | | | | | |
| Mercury | 6,348,232 | 3,883,000 | 3,452,000 | 2,809,600 | 2,681,400 | 2,588,700 |
| Mercury compounds .. | 33 | — | — | 661 | 220 | 1,323 |
| Netherlands— | | | | | | |
| Mercury | 15,400 | 46,000 | 49,000 | 85,980 | 50,706 | 22,046 |
| Mercury oxide | 6,614 | 7,000 | 4,000 | — | — | 2,200 |
| Spain— | | | | | | |
| Mercury | 5,376,789 | 4,923,360 | 3,999,829 | 3,839,764 | 3,266,121 | 3,187,884 |
| Mercury compounds .. | 111,567 | 133,721 | 64,177 | 415,238 | 465,308 | 471,789 |
| Sweden— | | | | | | |
| Mercury | 20,000 | 35,000 | 51,000 | 18,000 | 24,250 | 17,637 |
| Switzerland— | | | | | | |
| Mercury | 32,809 | 2,410 | 7,476 | 7,161 | 10,276 | 4,647 |
| U.S.S.R.— | | | | | | |
| Mercury | 220,000 | 53,000 | 44,000 | 46,000 | <i>n.a.</i> | <i>n.a.</i> |
| Yugoslavia— | | | | | | |
| Mercury | 824,348 | 1,049,014 | 1,088,005 | 1,115,766 | 1,077,057 | 1,122,862 |
| Mercury compounds .. | 181,855 | 89,728 | 44,101 | 56,859 | 91,807 | <i>n.a.</i> |
| Mexico— | | | | | | |
| Mercury | 1,017,819 | 1,468,000 | 1,485,000 | 965,000 | 1,072,000 | <i>n.a.</i> |
| United States— | | | | | | |
| Mercury | 14,288 | 573,268 | 27,132 | 199,682 | 569,696 | 38,497 |
| Bolivia— | | | | | | |
| Mercury | <i>n.a.</i> | 4,489 | <i>n.a.</i> | 11,000 | 10,000 | 5,000 |
| Chile— | | | | | | |
| Mercury | 2,637 | 7,450 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Colombia— | | | | | | |
| Mercury | — | — | 2,191 | — | — | <i>n.a.</i> |
| Peru— | | | | | | |
| Mercury | 293,918 | 124,762 | 210,369 | 225,595 | 267,087 | <i>n.a.</i> |
| Japan— | | | | | | |
| Mercury | 58,956 | 199,304 | 120,359 | 65,832 | 36,978 | 83,260 |
| Philippine Republic— | | | | | | |
| Mercury | 110,194 | 167,919 | 156,000 | 187,000 | <i>n.a.</i> | <i>n.a.</i> |
| Turkey— | | | | | | |
| Mercury | 245,700 | 176,300 | 236,602 | 340,523 | 231,666 | 496,371 |

IMPORTS OF MERCURY, ETC.

Lb. avdp.

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Mercury | 1,689,576 | 1,381,274 | 1,140,702 | 1,101,330 | 1,118,482 | 1,450,886 |
| Canada— | | | | | | |
| Mercury | 293,900 | 1,071,900 | 404,600 | 356,300 | 197,900 | 133,600 |
| Hong Kong— | | | | | | |
| Mercury | 31,428 | 19,704 | 25,438 | 24,006 | 34,751 | 31,911 |
| India (b)— | | | | | | |
| Mercury | 407,540 | 484,635 | 242,012 | 582,814 | 417,315 | 435,442 |
| Mercury compounds .. | 38,287 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Malaysia (West)— | | | | | | |
| Mercury | <i>n.a.</i> | 27,526 | 9,066 | 3,758 | 2,558 | 4,626 |
| Pakistan— | | | | | | |
| Mercury | 11,648 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Australia (a)— | | | | | | |
| Mercury | 114,316 | 203,742 | 102,215 | 141,970 | 113,380 | 77,023 |
| Mercury compounds .. | 18,327 | 6,551 | 13,390 | 3,356 | 4,463 | <i>n.a.</i> |
| New Zealand (a)— | | | | | | |
| Mercury | 15,563 | 7,294 | 9,933 | 10,864 | 8,100 | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Mercury | 29,321 | 51,600 | 44,300 | 24,700 | 15,653 | 16,755 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Mercury | 126,500 | 271,400 | 103,800 | 310,000 | 205,000 | 548,290 |
| Mercury compounds .. | 15,200 | 14,600 | 20,300 | 10,400 | 16,755 | 27,116 |
| Denmark— | | | | | | |
| Mercury | 77,200 | 46,000 | 46,000 | 39,683 | 28,660 | 44,092 |
| Mercury compounds .. | 57,320 | 37,000 | 13,000 | 15,432 | 15,432 | 13,228 |
| Finland— | | | | | | |
| Mercury | 33,069 | 117,000 | 77,000 | 48,502 | 37,479 | 136,687 |
| France— | | | | | | |
| Mercury | 754,000 | 983,300 | 637,000 | 739,000 | 696,600 | 718,700 |
| Mercury compounds .. | 70,500 | 68,300 | 64,000 | 55,000 | 55,100 | 64,900 |
| Germany (Federal)— | | | | | | |
| Mercury | 1,849,000 | 1,745,800 | 1,479,100 | 945,600 | 1,148,600 | 1,708,300 |
| Greece— | | | | | | |
| Mercury | 1,828 | 3,488 | 81,952 | 22,000 | 6,600 | 19,200 |
| Italy— | | | | | | |
| Mercury | 22,688 | 83,300 | 79,600 | 87,083 | 49,824 | 48,722 |
| Mercury compounds .. | 12,641 | 8,200 | 27,100 | 19,400 | 18,959 | 18,299 |
| Netherlands— | | | | | | |
| Mercury | 152,000 | 439,000 | 269,000 | 101,413 | 99,208 | 152,119 |
| Mercury compounds .. | 143,000 | 119,000 | 146,000 | 125,663 | 158,730 | 147,710 |
| Norway— | | | | | | |
| Mercury | 77,000 | 51,000 | 46,000 | 46,000 | 57,000 | 75,000 |
| Poland— | | | | | | |
| Mercury | 366,600 | 692,000 | 622,000 | 769,400 | 509,268 | 504,858 |
| Portugal— | | | | | | |
| Mercury | 51,600 | 19,000 | 58,000 | 15,873 | 17,637 | 63,934 |
| Mercury compounds .. | 5,700 | 3,500 | 2,000 | 4,409 | 2,204 | 3,306 |
| Sweden— | | | | | | |
| Mercury | 139,000 | 161,000 | 185,000 | 90,400 | 302,033 | 121,254 |
| Switzerland— | | | | | | |
| Mercury | 118,759 | 73,224 | 54,820 | 23,239 | 60,102 | 57,025 |
| Yugoslavia— | | | | | | |
| Mercury | 235,288 | — | 26 | 650 | 54,875 | 120,422 |
| Mercury compounds .. | 40,512 | 922 | 2,465 | 26,660 | 77,287 | 44,348 |

(a) Years ended June 30 of that stated.

(b) Years ended March 31 following that stated.

IMPORTS OF MERCURY, ETC. (cont.)

Lb. avdp.

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-----------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Angola— | | | | | | |
| Mercury | 137 | 7,948 | 522 | 1,245 | 1,144 | 333 |
| Mercury compounds .. | 483 | 14,482 | 24,260 | 20 | 223 | 13,040 |
| Morocco— | | | | | | |
| Mercury | 580 | 518 | 1,054 | 267 | 935 | 1,126 |
| Mozambique— | | | | | | |
| Mercury | 104 | 104 | 251 | 55 | <i>n.a.</i> | <i>n.a.</i> |
| South Africa— | | | | | | |
| Mercury | 48,354 | 61,531 | 255,025 | 85,519 | 93,699 | 98,921 |
| Tunisia— | | | | | | |
| Mercury | 661 | 216 | 3,071 | 683 | 2,641 | 655 |
| United States— | | | | | | |
| Mercury | 3,127,629 | 1,234,088 | 2,383,747 | 1,824,885 | 1,722,860 | 2,379,857 |
| Mercury compounds .. | 8,625 | 12,452 | <i>n.a.</i> | 69 | 169 | 9,022 |
| Argentina— | | | | | | |
| Mercury | 216,113 | 28,894 | 54,168 | 18,867 | 12,531 | 41,921 |
| Mercury compounds .. | 6,920 | 11,184 | 6,027 | 293 | 2,619 | 7,650 |
| Brazil— | | | | | | |
| Mercury | 228,231 | 131,519 | 122,820 | 54,476 | 185,179 | <i>n.a.</i> |
| Chile— | | | | | | |
| Mercury | 1,250 | 254 | <i>n.a.</i> | 413 | <i>n.a.</i> | <i>n.a.</i> |
| Mercury compounds .. | 1,995 | 1,733 | <i>n.a.</i> | 4,995 | <i>n.a.</i> | <i>n.a.</i> |
| Colombia— | | | | | | |
| Mercury | 16,133 | 6,413 | 10,029 | 15,159 | 3,508 | <i>n.a.</i> |
| Mercury compounds .. | 10,357 | 2,389 | 14,561 | 5,875 | 4,019 | <i>n.a.</i> |
| Peru— | | | | | | |
| Mercury | 2,355 | 2,319 | 1,197 | 2,533 | 150 | <i>n.a.</i> |
| Mercury compounds .. | 547 | 1,093 | 4,037 | 1,614 | 2,152 | <i>n.a.</i> |
| Uruguay— | | | | | | |
| Mercury | <i>n.a.</i> | 132 | 1,750 | — | <i>n.a.</i> | 5,732 |
| Venezuela— | | | | | | |
| Mercury | 3,296 | 8,854 | 11,449 | 4,204 | 6,493 | 3,787 |
| Mercury compounds .. | 11,942 | 19,571 | 11,956 | 15,646 | 11,576 | 11,449 |
| Formosa— | | | | | | |
| Mercury | 97,228 | 151,109 | 69,845 | 71,670 | 107,037 | 83,928 |
| Iran (a)— | | | | | | |
| Mercury | 3,386 | 3,314 | 8,056 | 981 | 96,904 | <i>n.a.</i> |
| Japan— | | | | | | |
| Mercury | 3,849,145 | 2,087,709 | 1,748,184 | 2,443,456 | 1,981,254 | 1,943,081 |
| Korea (South)— | | | | | | |
| Mercury | 74,784 | 41,724 | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Philippine Republic— | | | | | | |
| Mercury | 1,462 | 666 | <i>n.a.</i> | 1,129 | <i>n.a.</i> | <i>n.a.</i> |
| Thailand— | | | | | | |
| Mercury | 7,068 | 3,702 | 27,302 | 1,208 | 19,460 | 531,308 |
| Mercury compounds .. | 3,777 | 3,239 | 5,298 | 4,601 | 5,505 | 11,023 |
| Turkey— | | | | | | |
| Mercury compounds .. | 5,172 | 6,312 | 4,559 | 5,822 | 6,605 | 13,702 |

(a) Years ended March 20 of year following that stated.

MICA
PRODUCTION OF MICA

Lb. avdp.

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Kenya— | | | | | | |
| Block and sheet | — | — | — | — | 818 | — |
| Rhodesia— | | | | | | |
| Crude | 156,355 | 180,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Block and sheet | 74,910 | 64,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Tanzania— | | | | | | |
| Sheet | 211,500 | 228,500 | 199,000 | 170,900 | 157,800 | 212,800 |
| Waste | 323,790 | 371,240 | 880,700 | 276,800 | 526,800 | 253,120 |
| Uganda | — | 30 | 360 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Zambia— | | | | | | |
| Sheet | 3,305 | 8,731 | — | — | <i>n.a.</i> | <i>n.a.</i> |
| Canada (a)— | | | | | | |
| Trimmed | 20,454 | 1,261 | — | — | — | — |
| Sold for mechanical | | | | | | |
| splitting | 68,100 | 10,800 | 4,000 | — | — | — |
| Ground | 615,968 | 299,500 | 339,800 | — | — | — |
| Scrap | 493,640 | 236,050 | 200,000 | — | — | — |
| By varieties— | | | | | | |
| Phlogopite and | | | | | | |
| biotite | 1,198,114 | <i>n.a.</i> | <i>n.a.</i> | — | — | — |
| Muscovite and schist | | | | | | |
| | 48 | <i>n.a.</i> | <i>n.a.</i> | — | — | — |
| India— | | | | | | |
| Crude | 50,287,428 | 52,558,188 | 50,518,913 | 40,018,298 | 38,949,057 | 38,858,667 |
| Waste | 19,374,218 | 18,232,224 | 15,449,991 | 11,177,434 | 9,861,274 | 11,724,180 |
| Pakistan (c) | 9,000 | 15,000 | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Australia (b)— | | | | | | |
| Scrap | 32,032 | — | — | — | — | — |
| OTHER COUNTRIES | | | | | | |
| France | 646,000 | 430,000 | 492,000 | 630,560 | 550,000 | <i>n.a.</i> |
| Germany (Federal) | 18,000 | 26,000 | — | — | — | — |
| Norway— | | | | | | |
| Crude | } 8,818,000 | 6,614,000 | f 6,610,000 | 9,885,000 | 10,613,000 | 8,393,000 |
| Waste | | | | | | |
| Sweden (a)— | | | | | | |
| Ground | 46,000 | — | — | — | <i>n.a.</i> | <i>n.a.</i> |
| Yugoslavia | 26,000 | 118,807 | 120,439 | 261,598 | 316,315 | <i>n.a.</i> |
| Malagasy Republic— | | | | | | |
| Phlogopite (block and | | | | | | |
| splittings) | 1,500,000 | 1,390,000 | 1,580,000 | 1,633,000 | 1,776,000 | 1,827,632 |
| Mozambique | — | 22,000 | <i>n.a.</i> | 220,000 | 375,540 | 768,999 |
| South Africa— | | | | | | |
| Sheet | 103,633 | 2,000 | 1,068 | 9,331 | 20,386 | 220,229 |
| Waste | 6,764,000 | 5,000,000 | 4,926,000 | 10,180,000 | 17,456,000 | 13,998,000 |
| South West Africa | 832,000 | 260,000 | 56,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Mexico | — | — | 873,000 | 1,949,000 | 1,625,000 | 1,426,000 |
| United States (d)— | | | | | | |
| Sheet (uncut) | 242,662 | 716,086 | 4,000 | 20,000 | 15,000 | <i>n.a.</i> |
| Scrap (e) | 229,458,000 | 240,509,000 | 226,266,000 | 237,006,000 | 250,646,000 | 266,116,480 |
| Argentina— | | | | | | |
| Sheet | 241,191 | 205,510 | 290,279 | 299,488 | 208,320 | } 1,500,000 |
| Waste | 456,760 | 259,420 | 2,111,451 | 2,210,656 | 1,317,120 | |
| Brazil | 3,241,000 | 3,089,000 | 2,244,000 | 2,295,000 | 3,677,000 | 3,000,000 |
| TOTAL* | 314,000,000 | 347,000,000 | 288,000,000 | 310,000,000 | 336,000,000 | 349,000,000 |

* Excluding mica known to have been produced in Roumania, U.S.S.R. and China.

(a) Sales.

(b) The following amounts of damourite were also produced (lb. avdp.): 1964—1,270,000; 1965—1,510,000; 1966—1,380,000; 1967—1,091,000; 1968—1,088,640; 1969—*n.a.*

(c) West Pakistan.

(d) Sold or used by producers.

(e) Including mica recovered from kaolin and mica schists.

(f) United States Bureau of Mines' estimate.

EXPORTS OF MICA

Lb. avdp.

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Unmanufactured (d) .. | 9,538,000 | 5,593,000 | 5,472,000 | 1,693,000 | 1,136,016 | 11,778,928 |
| Rhodesia— .. | | | | | | |
| Unmanufactured (a) .. | 777,053 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Tanzania— | | | | | | |
| Unmanufactured (a) .. | 535,800 | 598,080 | 1,097,300 | 587,000 | 572,400 | 438,600 |
| Zambia— | | | | | | |
| Block or sheet .. | 5,760 | 887 | <i>n.a.</i> | 2,808 | <i>n.a.</i> | <i>n.a.</i> |
| Waste | 960 | — | <i>n.a.</i> | 4,383 | <i>n.a.</i> | <i>n.a.</i> |
| Hong Kong— | | | | | | |
| Manufactured | 560 | 1,120 | — | — | 336 | — |
| India— | | | | | | |
| Blocks | 4,263,740 | 3,179,065 | 3,639,831 | 3,553,851 | 3,816,053 | 3,945,000 |
| Splittings | 19,378,630 | 20,780,770 | 14,138,243 | 12,184,948 | 13,596,627 | 14,740,599 |
| Condenser Films .. | 198,416 | 176,370 | 211,644 | 200,621 | 188,826 | 236,752 |
| Powder, scrap, waste | 42,057,580 | 58,605,476 | 49,178,511 | 30,736,845 | 31,276,631 | 26,863,874 |
| Manufactured (c) .. | 532,485 | r 242,506 | r 322,834 | 503,018 | 398,860 | 474,432 |
| Singapore— | | | | | | |
| Unmanufactured (a) .. | 400 | — | 1,300 | — | 22 | — |
| Manufactured | 511 | 287 | 845 | 721 | 641 | 128 |
| Australia (b)— | | | | | | |
| Unmanufactured .. | 68,418 | 73,564 | 64,991 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Manufactured | (£23,813) | (£20,153) | (£19,898) | (£21,600) | (£15,770) | (£18,666) |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Unmanufactured .. | 11,000 | 21,800 | 23,400 | 4,600 | 70,300 | 6,600 |
| Manufactured | 24,000 | 20,300 | 32,000 | 21,200 | 22,900 | 52,700 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Unmanufactured (a) .. | 50,900 | 30,400 | 73,200 | 193,600 | 162,040 | 153,900 |
| Manufactured | 435,200 | 381,400 | 442,700 | 655,900 | 873,700 | 105,800 |
| Denmark— | | | | | | |
| Ground | 2,200 | 7,000 | 51,000 | 66,138 | 81,571 | 48,501 |
| Manufactured | 1,100 | — | 2,000 | — | — | — |
| Finland— | | | | | | |
| Unmanufactured (a) .. | 110,000 | 110,000 | 55,000 | 55,000 | 97,000 | 123,000 |
| France— | | | | | | |
| Unmanufactured (a) .. | 390,200 | 136,700 | 62,000 | 86,000 | 146,000 | 174,000 |
| Ground | 388,000 | 1,135,400 | 1,550,000 | 1,905,000 | 3,159,000 | 2,273,000 |
| Manufactured | 716,500 | 623,900 | 547,000 | 721,000 | 930,300 | 1,019,000 |
| Germany (Federal)— | | | | | | |
| Unmanufactured (a) .. | 1,218,700 | 1,065,900 | 1,350,000 | 1,506,000 | 1,444,000 | 2,000,000 |
| Manufactured | 277,300 | 265,900 | 202,360 | 298,200 | 445,600 | 680,100 |
| Italy— | | | | | | |
| Ground | 131,219 | { 170,400 | 968,000 | 567,200 | 782,600 | 214,700 |
| Waste | | { 113,300 | 315,000 | 155,600 | 105,600 | 1,652,400 |
| Manufactured | 69,856 | { 69,000 | 76,000 | 58,860 | 42,900 | 53,900 |
| Netherlands— | | | | | | |
| Unmanufactured .. | 392,000 | 229,000 | 168,000 | 220,500 | 211,600 | 198,400 |
| Manufactured | — | — | 4,000 | 6,600 | 4,400 | 4,400 |
| Norway— | | | | | | |
| Unmanufactured .. | 8,768,000 | 9,074,000 | 9,458,000 | 9,886,000 | 10,613,052 | 8,417,248 |
| Waste | 71,000 | 77,000 | — | — | — | 93,000 |
| Spain— | | | | | | |
| Manufactured | 24,467 | 16,149 | 31,802 | 46,425 | 63,963 | 50,706 |
| Sweden— | | | | | | |
| Unmanufactured .. | 20,000 | 57,000 | — | — | 6,600 | 13,200 |

(a) Including waste.

(d) Including splittings sand waste.

(b) Years ended June 30 of that stated.

(c) Years ended March 31 following that stated.

EXPORTS OF MICA (cont.)

Lb. avdp.

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-----------|-------------|--------------|--------------|--------------|--------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Switzerland— | | | | | | |
| Unmanufactured (a) .. | 25,904 | 10,293 | 11,643 | 131,537 | 235,749 | 204,543 |
| Manufactured .. | 434,456 | 335,872 | 354,406 | 459,972 | 371,567 | 477,100 |
| U.S.S.R.— | | | | | | |
| Unmanufactured .. | 7,000 | — | — | — | — | <i>n.a.</i> |
| Angola— | | | | | | |
| Unmanufactured .. | } | } | } | } | } | <i>n.a.</i> |
| Waste .. | | | | | | |
| Malagasy Republic— | | | | | | |
| Unmanufactured .. | 2,125,805 | 2,099,050 | 2,109,698 | 2,242,736 | 3,120,017 | 5,112,132 |
| Mozambique— | | | | | | |
| Unmanufactured .. | — | 22,000 | 13,000 | 109,528 | 225,315 | 396,828 |
| South Africa— | | | | | | |
| Unmanufactured (a) .. | 5,402,000 | 3,936,000 | 3,446,000 | 16,510,416 | 20,712,000 | 21,296,000 |
| Mexico— | | | | | | |
| Unmanufactured .. | — | 227 | — | — | — | <i>n.a.</i> |
| United States— | | | | | | |
| Unmanufactured .. | 542,516 | } 7,802,539 | } 10,810,194 | } 14,301,524 | } 27,014,321 | } 11,810,008 |
| Ground .. | 8,263,497 | | | | | |
| Manufactured .. | 281,131 | | | | | |
| Manufactured .. | 281,131 | 523,338 | 537,556 | 526,690 | 474,509 | 638,830 |
| Argentina— | | | | | | |
| Unmanufactured .. | 2,011,037 | 1,087,573 | 732,856 | 690,600 | 1,156,126 | <i>n.a.</i> |
| Brazil— | | | | | | |
| Unmanufactured .. | 3,837,220 | 4,989,404 | 4,172,724 | 1,317,542 | 1,345,638 | <i>n.a.</i> |
| Manufactured .. | 22,540 | 12,763 | 9,233 | 12,070 | 28,274 | <i>n.a.</i> |
| Japan— | | | | | | |
| Unmanufactured (a) .. | 126,000 | 88,200 | 379,000 | 224,872 | 229,281 | 218,257 |
| Manufactured .. | 32,952 | 91,717 | 77,640 | 201,573 | 49,743 | 95,100 |

(a) Including waste.

IMPORTS OF MICA

Lb. avdp.

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|------------|------------|-------------|------------|------------|------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Block | 867,000 | (c) 16,000 | (c) 999,000 | 264,000 | 565,152 | 831,040 |
| Splittings | 2,589,000 | 3,011,000 | 1,516,000 | 898,000 | 1,647,744 | 2,082,528 |
| Ground and waste | 10,940,000 | 22,118,000 | 13,104,000 | 11,101,000 | 15,967,504 | 22,206,800 |
| Manufactured | 164,000 | 210,000 | 279,000 | 321,000 | 567,280 | 562,128 |
| Kenya— | | | | | | |
| Unmanufactured (a) | 20,200 | 74,300 | 33,700 | 48,400 | 71,100 | 50,300 |
| Malawi— | | | | | | |
| Manufactured | n.a. | n.a. | 8,160 | 12,240 | 12,160 | 11,565 |
| Mauritius— | | | | | | |
| Unmanufactured | — | — | 110 | 481 | 569 | 1,797 |
| Manufactured | — | (c) 143 | 172 | 11 | 218 | 761 |
| Tanzania— | | | | | | |
| Unmanufactured (a) | 8,800 | — | 21,800 | 21,800 | 51,900 | 28,600 |
| Zambia— | | | | | | |
| Block or sheet | 42,540 | 6,020 | 13,250 | 28 | — | — |
| Canada— | | | | | | |
| Unmanufactured | 5,884,000 | 6,235,600 | 6,368,300 | 6,984,700 | 6,570,300 | 7,601,400 |
| Manufactured | (£246,135) | (£200,788) | (£227,000) | (£245,072) | (£205,812) | (£166,000) |
| Jamaica— | | | | | | |
| Unmanufactured | 203,120 | 230,320 | 225,781 | 412,084 | 247,246 | 185,992 |
| Manufactured | 270 | 152 | 697 | 1,933 | 1,418 | 1,419 |
| Trinidad and Tobago— | | | | | | |
| Unmanufactured (a) | 21,000 | 59,500 | 55,700 | 55,600 | 58,900 | 24,300 |
| Manufactured | 85 | 325 | 432 | 29 | 508 | 306 |
| Hong Kong— | | | | | | |
| Unmanufactured (a) | 4,400 | 3,800 | (c) 89,824 | (c) 16,800 | (c) 6,608 | (c) 97,776 |
| Manufactured | 22,000 | 17,800 | 27,000 | 36,064 | 12,992 | 20,832 |
| India— | | | | | | |
| Manufactured | — | 2,240 | 9,389 | 1,874 | 2,586 | 2,892 |
| Malaysia (West)— | | | | | | |
| Unmanufactured (a) | n.a. | 4,210 | 11,600 | 3,450 | 16,643 | 21,952 |
| Manufactured | n.a. | 8,584 | 10,441 | 4,570 | 8,702 | 11,407 |
| Sarawak— | | | | | | |
| Unmanufactured (a) | 22 | — | 38,640 | — | — | n.a. |
| Singapore— | | | | | | |
| Unmanufactured (a) | 1,100 | 14,700 | 6,030 | 14,358 | 87,091 | 736,960 |
| Manufactured | 4,905 | 2,992 | 4,682 | 2,860 | 2,539 | 2,680 |
| Australia (b)— | | | | | | |
| Block or sheet | 74,571 | 97,900 | 75,225 | 42,903 | 40,232 | 26,734 |
| Splittings | 246,699 | 316,491 | 223,749 | 172,071 | 199,200 | 208,355 |
| Ground | 567,760 | 768,639 | 725,289 | 757,220 | 719,259 | 380,243 |
| Waste | 718,587 | 1,528,894 | 872,844 | 867,047 | 1,409,001 | 1,261,910 |
| Manufactured | (£6,094) | (£11,990) | (£10,000) | (£14,000) | (£22,431) | (£31,000) |
| New Zealand (b)— | | | | | | |
| Unmanufactured (a) | (£12,325) | (£11,236) | (£11,175) | (£12,246) | (£13,285) | n.a. |
| Manufactured | (£37,081) | (£38,417) | (£29,049) | (£30,161) | (£19,803) | n.a. |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Unmanufactured (a) | 744,900 | 571,200 | 842,400 | 522,900 | 964,302 | 661,607 |
| Manufactured | 63,000 | 38,800 | 59,700 | 71,000 | 70,327 | 81,791 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Unmanufactured (a) | 2,330,300 | 3,021,900 | 2,650,600 | 2,958,400 | 4,016,381 | 6,523,257 |
| Manufactured | 109,100 | 89,100 | 88,200 | 37,700 | 93,917 | 67,992 |

(a) Including waste.

(b) Years ended June 30 of that stated.

(c) Excess of re-exports. United Kingdom imports, before deduction of re-exports, were (lb. avdp.): 1965—1,187,000; 1966—1,140,000.

IMPORTS OF MICA (cont.)

Lb. avdp.

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|------------|------------|-------------|------------|------------|------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Denmark— | | | | | | |
| Unmanufactured .. | 8,800 | 97,000 | 22,000 | 13,228 | } 888,463 | 776,019 |
| Ground | 412,300 | 538,000 | 650,000 | 751,776 | | |
| Manufactured | 128,000 | 161,000 | 112,000 | 138,891 | | |
| Finland— | | | | | 255,736 | 487,217 |
| Unmanufactured (a) .. | 801,400 | 1,052,910 | 1,638,059 | 1,095,543 | 1,386,646 | 1,532,197 |
| Manufactured | 53,000 | 68,000 | 46,000 | 52,911 | 61,729 | 68,342 |
| France— | | | | | | |
| Unmanufactured (a) .. | 8,474,600 | 7,209,100 | 12,577,000 | 8,051,000 | 6,355,900 | 7,171,600 |
| Ground | 3,785,300 | 3,388,500 | 4,063,000 | 4,259,000 | 5,041,900 | 3,650,900 |
| Manufactured | 94,800 | 502,700 | 120,000 | 123,000 | 152,000 | 185,200 |
| Germany (Federal)— | | | | | | |
| Unmanufactured (a) .. | 14,050,500 | 15,114,500 | 12,075,000 | 12,474,000 | 17,858,000 | 18,864,700 |
| Manufactured | 318,800 | 450,000 | 330,300 | 414,990 | 639,000 | 1,010,800 |
| Greece— | | | | | | |
| Unmanufactured .. | 62,576 | 49,547 | 65,389 | 48,713 | 94,775 | 95,936 |
| Manufactured | 12,483 | 17,666 | 20,507 | 18,924 | 9,288 | n.a. |
| Italy— | | | | | | |
| Unmanufactured .. | 1,110,823 | 751,100 | } 4,184,600 | 6,124,882 | 5,734,822 | 5,635,008 |
| Ground | 2,061,999 | 1,827,900 | | | | |
| Waste | 903,329 | 2,294,600 | | | | |
| Manufactured | 219,814 | 163,600 | 256,398 | 300,049 | 357,590 | 509,267 |
| Netherlands— | | | | | | |
| Unmanufactured (a) .. | 1,748,000 | 2,110,000 | 1,810,000 | 2,061,322 | 3,721,402 | 2,400,833 |
| Manufactured | 4,000 | 132,000 | 123,000 | 119,050 | 125,663 | 141,096 |
| Norway— | | | | | | |
| Unmanufactured .. | 754,000 | 2,769,000 | 337,000 | 148,000 | 723,000 | 2,873,000 |
| Waste | 7,416,000 | 11,510,000 | 10,644,000 | 10,598,000 | 11,675,000 | 5,406,000 |
| Manufactured | 77,000 | 86,000 | 44,000 | 86,000 | 79,000 | 115,000 |
| Poland— | | | | | | |
| Unmanufactured .. | 2,100,800 | 2,429,000 | 2,282,000 | 2,332,000 | 2,482,400 | 2,621,200 |
| Portugal— | | | | | | |
| Unmanufactured .. | 289,500 | 323,400 | 190,700 | 203,928 | 122,079 | 308,647 |
| Manufactured | 16,800 | 21,800 | 90,610 | 16,535 | 13,228 | 30,865 |
| Spain | 1,037,292 | 2,031,910 | 1,461,885 | 1,553,323 | 1,647,177 | 2,548,544 |
| Sweden— | | | | | | |
| Unmanufactured (a) .. | 2,324,000 | 2,709,000 | 2,710,000 | 2,097,000 | 2,473,586 | 2,303,830 |
| Manufactured | 108,000 | 88,000 | 93,000 | 84,000 | 136,687 | 116,844 |
| Switzerland— | | | | | | |
| Unmanufactured (a) .. | 1,519,957 | 1,884,698 | 1,381,818 | 1,411,020 | 1,407,576 | 1,668,054 |
| Manufactured | 265,756 | 356,807 | 206,763 | 471,749 | 415,847 | 276,782 |
| U.S.S.R.— | | | | | | |
| Unmanufactured .. | 529,000 | 829,000 | 194,000 | 341,700 | 352,700 | 919,300 |
| Yugoslavia— | | | | | | |
| Unmanufactured .. | — | 1,323 | 14,090 | 1,182,238 | 153,872 | 189,419 |
| Manufactured | 101,911 | 84,210 | 82,124 | 78,026 | 67,565 | 169,150 |
| Malagasy Republic— | | | | | | |
| Unmanufactured .. | 4,411 | 77 | 478 | 5,710 | n.a. | 18,949 |
| Morocco— | | | | | | |
| Ground | 3,300 | 3,300 | 11,000 | 13,283 | 37,712 | 36,338 |
| Manufactured | 2,354 | — | — | — | 337 | 2,024 |
| South Africa— | | | | | | |
| Unmanufactured .. | 1,003,600 | 497,900 | 838,100 | 421,500 | 468,700 | 390,748 |
| Manufactured | 377,532 | (£271,000) | (£217,211) | (£231,314) | (£202,698) | (£221,003) |
| Mica and micanite sheets | (b) | (b) | (b) | (b) | (b) | (b) |
| Sudan— | | | | | | |
| Unmanufactured .. | 11,000 | 2,000 | 7,000 | n.a. | 2,200 | 35,274 |
| Manufactured | 9,004 | 22,159 | 29 | 22 | 44 | 974 |
| Tunisia— | | | | | | |
| Unmanufactured .. | } 37,593 | 302,069 | 18,490 | 33,770 | n.a. | 31,696 |
| Ground | | | | | | |
| Manufactured | | | | | | |
| | 1,000 | 1,528 | 2,211 | 1,594 | 2,130 | 9,857 |

(a) Including waste.

(b) Included with "manufactured"

IMPORTS OF MICA (cont.)

Lb. avdp.

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|------------|--------------------|--------------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Guatemala— | | | | | | |
| Unmanufactured | 17,379 | 19,427 | 21,208 | 35,554 | 57,524 | 15,254 |
| Manufactured | 227 | 260 | 225 | 68 | 212 | 282 |
| Mexico— | | | | | | |
| Unmanufactured | 124,035 | } 360,617 | 527,520 | 412,181 | 725,320 | <i>n.a.</i> |
| Waste | 77,329 | | | | | |
| United States— | | | | | | |
| Unmanufactured | 942,547 | 653,734 | <i>r</i> 727,148 | <i>r</i> 592,243 | 361,952 | 348,415 |
| Ground | 23,000 | 87,000 | <i>r</i> 148,246 | <i>r</i> 226,501 | 113,600 | 55,115 |
| Waste | 5,465,748 | 3,043,355 | <i>r</i> 3,642,348 | <i>r</i> 1,016,097 | 3,097,165 | 3,077,850 |
| Films and splittings | 9,830,594 | 11,117,748 | 9,318,008 | 6,025,548 | 5,937,108 | 6,347,084 |
| Other manufactures | 244,495 | 384,026 | 298,460 | <i>r</i> 271,104 | 272,832 | 286,082 |
| Argentina | 42,443 | 43,297 | 18,894 | 27,084 | 44,983 | 48,301 |
| Bolivia | 18 | — | — | — | — | <i>n.a.</i> |
| Brazil— | | | | | | |
| Unmanufactured | 500 | 701 | 3,955 | 220 | 65,206 | <i>n.a.</i> |
| Manufactured | 14,654 | 48,264 | 49,582 | 49,134 | 19,978 | <i>n.a.</i> |
| Chile— | | | | | | |
| Unmanufactured | 10,540 | 14,559 | <i>n.a.</i> | 42,329 | <i>n.a.</i> | <i>n.a.</i> |
| Manufactured | 11,047 | 20,681 | <i>n.a.</i> | 13,854 | <i>n.a.</i> | <i>n.a.</i> |
| Colombia— | | | | | | |
| Unmanufactured | 259,841 | 186,876 | 319,121 | 261,819 | 472,142 | <i>n.a.</i> |
| Manufactured | 21,272 | 24,690 | 38,638 | 40,605 | 38,420 | <i>n.a.</i> |
| Peru— | | | | | | |
| Ground and waste | 285,307 | 302,620 | 296,143 | 354,371 | 156,834 | <i>n.a.</i> |
| Venezuela— | | | | | | |
| Unmanufactured | 657,489 | 846,740 | 863,182 | 1,075,565 | 792,473 | 445,798 |
| Manufactured | 7,553 | 5,280 | 14,974 | 12,341 | 8,014 | 20,590 |
| Iran (a)— | | | | | | |
| Unmanufactured | 453,650 | 1,072,300 | } 601,483 | 324,884 | 558,082 | <i>n.a.</i> |
| Manufactured | 64,137 | 202,984 | | | | |
| Japan— | | | | | | |
| Unmanufactured | } 9,301,000 | 11,105,000 | 5,483,000 | 10,523,000 | 35,033,653 | 10,295,587 |
| Ground | | | | | | |
| Waste | | | | | | |
| Manufactured | 3,018,000 | 3,472,000 | 4,475,000 | 6,283,000 | 5,262,000 | 6,005,391 |
| Waste | 840 | 637 | 952 | 8,574 | <i>n.a.</i> | 31,660 |
| Lebanon— | | | | | | |
| Unmanufactured | 54,611 | 71,564 | 55,281 | 13,977 | 19,773 | 34,031 |
| Philippine Republic— | | | | | | |
| Unmanufactured | 82,642 | 143,772 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Thailand— | | | | | | |
| Unmanufactured | 10,911 | 20,049 | 22,048 | 37,479 | 79,408 | 72,751 |
| Manufactured | 4,969 | 10,190 | 12,233 | 16,581 | 11,107 | 13,312 |
| Turkey— | | | | | | |
| Unmanufactured | 116,845 | 72,753 | 18,023 | 98,822 | 58,202 | 36,171 |
| Manufactured | 356,024 | 18,435 | 39,110 | 55,126 | 31,405 | 38,821 |

(a) Years ended March 20 of year following that stated.

MOLYBDENUM
PRODUCTION OF MOLYBDENUM ORE
(MoS₂ content or equivalent)

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|---------------|---------------|----------------|----------------|----------------|----------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Nigeria | — | 3 | 2 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Canada (a) | 912 | 7,116 | 15,336 | 15,905 | 16,727 | 22,555 |
| Australia | — | 19 | 2 | — | — | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Norway | 375 | 393 | 398 | 479 | 393 | 472 |
| U.S.S.R. (b) | 9,800 | 10,200 | 10,600 | 11,000 | <i>n.a.</i> | <i>n.a.</i> |
| Mexico | 88 | 80 | 147 | 103 | 130 | 110 |
| United States | 48,849 | 57,611 | 67,410 | 67,037 | 69,529 | 74,261 |
| Chile | 6,323 | 7,702 | 7,016 | 7,781 | 6,325 | 7,941 |
| Peru | 648 | 1,116 | 1,243 | 1,517 | 1,302 | 275 |
| China (b) | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 |
| Japan | 460 | 455 | 465 | 473 | 461 | 440 |
| Korea (South) | 200 | 334 | 491 | 457 | 331 | 163 |
| Philippine Republic | 173 | 130 | 80 | 70 | 70 | 25 |
| TOTAL* | 70,300 | 87,700 | 105,700 | 107,300 | 106,900 | 119,700 |

*Excluding molybdenum ore known to have been produced in Roumania, Spain, Argentina, North Korea and Turkey.

(a) Shipments.

(b) United States Bureau of Mines' estimate.

EXPORTS OF MOLYBDENUM ORE, ETC.

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— Ferro-molybdenum .. | 130 | 277 | 478 | 209 | 671 | 1,272 |
| Canada— Ore and concentrates (MO content) (a) .. | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 10,622 | 10,136 | 11,461 |
| OTHER COUNTRIES | | | | | | |
| France— Ferro-molybdenum .. | 618 | 467 | 507 | 318 | 446 | 718 |
| Oxide and molybdates .. | 38 | 61 | 73 | 31 | 78 | 62 |
| Germany (Federal)— Ore | 114 | 83 | 35 | 25 | 3 | 105 |
| Metal | 80 | 83 | 94 | 74 | 112 | 163 |
| Italy— Ferro-molybdenum .. | 13 | 1 | 1 | 1 | 129 | 859 |
| Netherlands— Metal | 65 | 123 | 153 | 90 | 86 | 112 |
| Norway— Ore | 400 | 417 | 426 | 494 | 410 | 487 |
| Sweden— Ferro-molybdenum .. | 308 | 420 | 607 | 684 | 591 | 802 |
| U.S.S.R.— Ferro-molybdenum .. | 5,300 | 4,600 | 1,100 | — | — | — |
| Mexico— Ore and concentrates (MoS ₂ content) .. | 88 | 107 | 64 | 11 | 151 | <i>n.a.</i> |
| United States— Ore and concentrates (MoS ₂ content) .. | 18,570 | 16,388 | 13,289 | 13,393 | 12,949 | 25,778 |
| Metal, alloys and scrap .. | 627 | 49 | 26 | 22 | 131 | 10 |
| Ferro-molybdenum .. | 779 | 1,001 | 982 | 684 | 385 | 650 |
| Wire, powder and semi- fabricated | 128 | 309 | 94 | 253 | 88 | 479 |
| Chile— Ore | 7,559 | 5,574 | 7,261 | 7,201 | <i>n.a.</i> | <i>n.a.</i> |
| Peru— Ore (MoS ₂ content) .. | 773 | 579 | 825 | 1,917 | 1,156 | 300 |
| Korea (South)— Ore | 358 | 524 | 1,012 | 506 | 501 | 362 |
| Philippine Republic— Concentrates | 271 | 148 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |

(a) Not recorded as a separate export item prior to 1967.

IMPORTS OF MOLYBDENUM ORE, ETC.

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------|-------------|-------------|-------------|--------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ore | 6,398 | 7,823 | 8,997 | 8,880 | 8,189 | 12,675 |
| Metal | 81 | 120 | 67 | 84 | 105 | 107 |
| Canada— | | | | | | |
| Oxide | 219 | 339 | 297 | 202 | 607 | 34 |
| Australia (a)— | | | | | | |
| Oxide | 90 | 146 | 84 | 74 | 192 | 30 |
| Ferro-molybdenum .. | 260 | 182 | 244 | 193 | 182 | 85 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Oxide | 296 | 393 | 529 | 332 | 488 | 789 |
| Ferro-molybdenum .. | 37 | 10 | 10 | 5 | 30 | 20 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Oxide | 86 | 15 | 15 | 29 | 7 | 42 |
| Ferro-molybdenum .. | 379 | 152 | 100 | 83 | 85 | 122 |
| Denmark— | | | | | | |
| Ferro-molybdenum .. | 29 | 34 | 47 | 27 | 15 | 25 |
| Finland— | | | | | | |
| Ferro-molybdenum .. | 67 | 76 | 124 | 102 | 103 | 143 |
| France— | | | | | | |
| Ore | 4,785 | 4,105 | 5,576 | 5,350 | 4,446 | 7,583 |
| Metal and alloys .. | 73 | 86 | 84 | 81 | 82 | 103 |
| Oxide and molybdates .. | 7 | 18 | 79 | 32 | 82 | 128 |
| Germany (Federal)— | | | | | | |
| Ore | 7,847 | 8,886 | 9,802 | 9,420 | 11,770 | 18,730 |
| Metal | 438 | 311 | 381 | 245 | 222 | 438 |
| Hungary— | | | | | | |
| Ferro-molybdenum .. | 116 | — | <i>n.a.</i> | <i>n.a.</i> | 199 | 340 |
| Italy— | | | | | | |
| Ore | 1,273 | 1,501 | 1,974 | 2,479 | 2,401 | 3,353 |
| Metal | 40 | 121 | 28 | 1 | 2 | 44 |
| Ferro-molybdenum .. | 453 | 616 | 722 | 797 | 625 | 870 |
| Netherlands— | | | | | | |
| Metal | 12 | 34 | 91 | 8 | 15 | 27 |
| Ferro-molybdenum .. | 50 | 86 | 87 | 55 | 34 | 61 |
| Oxide and molybdates .. | 218 | 207 | 78 | 88 | 233 | 221 |
| Poland— | | | | | | |
| Concentrates | 324 | 105 | 244 | 156 | 437 | 590 |
| Sweden— | | | | | | |
| Ore | 3,022 | 3,400 | 3,950 | 3,414 | 2,085 | <i>n.a.</i> |
| Metal | 69 | 44 | 70 | 23 | 28 | 35 |
| Ferro-molybdenum .. | 405 | 592 | 1,611 | 932 | 1,191 | 1,615 |
| United States— | | | | | | |
| Metal | 110 | <i>n.a.</i> | <i>r</i> 35 | <i>r</i> 1 | 1 | — |
| Semi-fabricated .. | 5 | 15 | <i>r</i> 12 | <i>r</i> 5 | 9 | 11 |
| Japan— | | | | | | |
| Ore and concentrates .. | 4,998 | 4,962 | 7,220 | 8,648 | 9,388 | 12,044 |
| Molybdenum metal .. | 111 | 61 | 25 | 33 | 51 | 104 |

(a) Years ended June 30 of that stated.

NICKEL
PRODUCTION OF NICKEL ORE
(Metal content)

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|----------------|----------------|----------------|------------------|----------------|----------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Rhodesia | 231 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 1,480 | 3,940 |
| Canada (b) | 204,015 | 231,413 | 199,652 | 222,006 | 236,034 | 190,469 |
| Australia | — | — | — | 2,061 | 4,573 | 10,892 |
| TOTAL | 204,246 | 232,000 | 200,000 | r 224,000 | 240,600 | 205,300 |
| OTHER COUNTRIES | | | | | | |
| Finland (c) | 3,260 | 3,060 | 3,087 | 3,560 | 3,349 | 3,600 |
| Greece | — | 635 | 1,466 | 2,124 | 3,676 | 8,138 |
| Poland | 1,186 | 1,804 | (a) 1,300 | (a) 1,500 | 1,500 | 1,500 |
| U.S.S.R. (d) | 80,000 | 80,000 | 90,000 | 90,000 | 100,000 | 105,000 |
| Morocco | 331 | 354 | 384 | (a) 370 | 300 | (a) 13 |
| Cuba (a) (e) | 22,061 | 27,000 | 26,000 | r 30,357 | 33,170 | 34,643 |
| United States (f) | 10,879 | 12,062 | 11,819 | 13,049 | 13,530 | 13,943 |
| Brazil (f) | (a) 1,000 | 1,096 | (a) 1,362 | 1,054 | 1,060 | 1,100 |
| Burma (g) | 70 | 50 | 70 | 50 | 30 | 25 |
| Indonesia | 1,700 | 2,800 | (a) 4,000 | 5,900 | 8,200 | 6,900 |
| Korea (South) | 18 | 1 | — | — | <i>n.a.</i> | <i>n.a.</i> |
| New Caledonia (h) | 61,000 | 61,000 | 66,000 | 81,000 | 112,000 | 115,200 |
| TOTAL* | 180,000 | 190,000 | 200,000 | 230,000 | 263,000 | 290,000 |
| WORLD'S TOTAL* | 380,000 | 420,000 | 400,000 | 450,000 | 500,000 | 495,000 |

*Ores containing nickel are also produced in Albania, East Germany and South Africa. Totals are approximate.

(a) United States Bureau of Mines' estimate.

(b) Refined nickel and nickel in oxide and salts plus nickel in matte exported.

(c) Nickel content of concentrates and nickel sulphate.

(d) Estimated. Source: Metallgesellschaft.

(e) Estimated nickel content of nickel oxide and sulphide.

(f) Metal from domestic ore plus nickel produced as a by-product in the electrolytic refining of copper (partly from *imported* blister copper).

Secondary metal was recovered in the United States as follows:

| | Long tons | | | | Long tons | | | |
|------------|-----------|----|----|--------|------------|----|----|--------|
| 1964 | .. | .. | .. | 20,637 | 1967 | .. | .. | 18,510 |
| 1965 | .. | .. | .. | 17,328 | 1968 | .. | .. | 12,554 |
| 1966 | .. | .. | .. | 23,908 | 1969 | .. | .. | 16,763 |

(g) Nickel content of nickel speiss.

(h) Content of dry ore mined. The estimated content of matte and ferro-nickel produced was:

| | Long tons | | | | Long tons | | | |
|------------|-----------|----|----|--------|------------|----|----|--------|
| 1964 | .. | .. | .. | 26,167 | 1967 | .. | .. | 33,951 |
| 1965 | .. | .. | .. | 30,873 | 1968 | .. | .. | 37,123 |
| 1966 | .. | .. | .. | 33,881 | 1969 | .. | .. | 39,166 |

(i) Content of ferro-nickel.

EXPORTS OF NICKEL*

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|---------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Unwrought (a) | 26,882 | 27,783 | 25,385 | 30,203 | 33,483 | 23,114 |
| Semi-manufactures | 3,072 | 2,979 | 3,822 | 4,494 | } 11,575 | 11,933 |
| do. alloys | 4,441 | 3,745 | 4,206 | 4,973 | | |
| Scrap (a) | 3,237 | 3,398 | 2,995 | 2,407 | 3,289 | 3,417 |
| Nickel oxide | 149 | 38 | 11 | 126 | 285 | 46 |
| Rhodesia— | | | | | | |
| Ore | 698 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Canada— | | | | | | |
| Matte or speiss (Ni content) | 66,755 | 73,506 | 74,631 | 74,698 | 85,292 | 68,728 |
| Unwrought | 114,580 | 120,712 | 118,493 | 114,874 | 113,479 | 93,074 |
| Scrap (a) | 965 | 934 | 1,056 | 1,797 | 3,684 | 4,499 |
| Semi-manufactures (a) | 2,284 | 2,839 | 3,461 | 3,964 | 3,482 | 2,936 |
| Nickel oxide (Ni content) | 31,965 | 36,568 | 30,028 | 30,539 | 37,552 | 25,901 |
| Hong Kong— | | | | | | |
| Scrap | 56 | 20 | 43 | 94 | 26 | 29 |
| Australia (c) | | | | | | |
| Unwrought and semi-manufactures (a) | 192 | 252 | 255 | <i>n.a.</i> | 63 | 142 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Unwrought | 2 | 9 | 172 | 23 | 46 | 265 |
| do. alloys | 28 | — | 15 | — | 13 | 455 |
| Scrap | 494 | 454 | 463 | 589 | 799 | 845 |
| Semi-manufactures (a) (b) | 116 | 163 | 259 | 266 | 205 | 835 |
| Denmark— | | | | | | |
| Unwrought | — | — | 5 | — | — | 1 |
| Scrap (a) | 201 | 173 | 405 | 245 | 192 | 309 |
| Finland— | | | | | | |
| Unwrought | 3,122 | 2,508 | 2,585 | 2,604 | 2,881 | 3,490 |
| France— | | | | | | |
| Matte and speiss | 656 | 55 | 22 | 252 | 160 | 153 |
| Unwrought | 3,041 | 4,704 | 7,010 | 8,382 | 5,677 | 3,981 |
| do. alloys | 14 | 27 | 26 | 27 | 57 | 97 |
| Scrap (a) | 828 | 1,357 | 1,565 | 2,267 | 1,819 | 1,614 |
| Semi-manufactures (a) | 1,114 | 1,729 | 1,921 | 2,574 | 2,417 | 2,926 |
| Germany (Federal)— | | | | | | |
| Unwrought and scrap (a) | 1,085 | 1,194 | 2,571 | 3,011 | 2,418 | 2,698 |
| Semi-manufactures (a) | 4,307 | 5,047 | 5,964 | 6,621 | 6,749 | 7,638 |
| Greece— | | | | | | |
| Unwrought | 45 | 56 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Italy— | | | | | | |
| Semi-manufactures (a) | 777 | 1,071 | 1,020 | 803 | 620 | 638 |
| Netherlands— | | | | | | |
| Scrap (a) | 1,534 | 1,167 | 1,270 | 2,136 | 2,202 | 2,022 |
| Semi-manufactures (a) | 106 | 123 | 195 | 196 | 188 | 841 |
| Norway— | | | | | | |
| Unwrought | 33,330 | 30,745 | 30,138 | 28,753 | 29,965 | 34,860 |
| Scrap | 150 | 64 | 130 | 84 | 178 | 199 |
| Semi-manufactures (a) | 498 | 266 | 216 | 235 | 197 | 201 |

*In these tables the description "unwrought" nickel corresponds to item 683.1 of the Standard International Trade Classification (Revised) which excludes all electro-plating anodes. "Semi-manufactures" corresponds to S.I.T.C. (R) 683.2 and includes electro-plating anodes as well as sheets, bars, rods, etc.

(a) Including alloys.

(b) Excluding anodes.

(c) Years ended June 30 of that stated.

EXPORTS OF NICKEL (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------------|-----------|-------------|--------------|--------------|-------------|-------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Sweden— | | | | | | |
| Unwrought | — | 70 | 33 | 434 | 482 | 157 |
| Scrap | 74 | 343 | 364 | 721 | 639 | 497 |
| Semi-manufactures (a) | 763 | 812 | 1,008 | 1,275 | 1,267 | 1,620 |
| Switzerland— | | | | | | |
| Unwrought and scrap (a) | 589 | 802 | 675 | 583 | 647 | 1,197 |
| Semi-manufactures (a) | 773 | 1,061 | 994 | 935 | 1,279 | 1,397 |
| South Africa— | | | | | | |
| Unwrought | 740 | 1,077 | 1,266 | 3,517 | 8,531 | 5,085 |
| United States— | | | | | | |
| Ore, concentrates and matte | 7 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Unwrought (a) | 10,661 | 4,739 | 10,208 | 6,655 | 5,802 | 1,653 |
| Semi-manufactures (a) | 2,130 | 5,676 | 5,285 | 6,027 | 6,323 | 10,076 |
| Scrap (a) | 48,364 | 6,003 | 5,247 | 12,404 | 14,949 | 16,097 |
| Burma— | | | | | | |
| Unwrought | 615 | — | <i>r</i> 199 | <i>r</i> 181 | 127 | <i>n.a.</i> |
| Japan— | | | | | | |
| Ferro-nickel | — | 3 | 186 | 5 | 616 | 2,264 |
| Unwrought | } 7 | } 1 | } 1 | } 5 | } 1 | } — |
| do. alloys | | | | | | |
| Semi-manufactures (a) | 240 | 388 | 3,059 | 1,857 | 498 | 390 |
| New Caledonia— | | | | | | |
| Ore | 1,066,559 | 879,821 | 1,069,493 | 1,484,452 | 2,450,075 | 3,016,017 |
| Matte | 16,901 | 18,107 | 19,372 | 16,411 | 19,684 | 19,684 |
| Ferro-nickel | 46,591 | 54,543 | 71,112 | 72,419 | 81,099 | 98,420 |

(a) Including alloys.

IMPORTS OF NICKEL*

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ore, concentrates and matte | 56,183 | 63,038 | 55,270 | 57,487 | 57,461 | 45,094 |
| Unwrought | 18,612 | 16,592 | 23,763 | 23,286 | 23,368 | 15,400 |
| do. alloys | 121 | 124 | 361 | 690 | 218 | 399 |
| Semi-manufactures (a) | 4,818 | 2,015 | 1,721 | 1,169 | 1,303 | 1,870 |
| Scrap (a) | 3,722 | 3,091 | 2,883 | 4,576 | 4,246 | 5,345 |
| Nickel oxide | 1,674 | 97 | 643 | 608 | 512 | 374 |
| Rhodesia— | | | | | | |
| Semi-manufactures (a) | 17 | 48 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Canada— | | | | | | |
| Ore, concentrates and Scrap (Ni content) | <i>n.a.</i> | <i>n.a.</i> | 23,819 | 12,781 | 14,271 | 9,278 |
| Unwrought and semi-manufactures (a) | 11,257 | 13,437 | 28,256 | 11,630 | 13,434 | 15,016 |
| Cyprus— | | | | | | |
| Semi-manufactures (a) | 2 | — | 2 | 9 | 5 | 5 |
| Hong Kong— | | | | | | |
| Semi-manufactures (a) | 143 | 125 | 116 | 79 | 195 | 150 |
| India (c)— | | | | | | |
| Unwrought | 1,249 | 634 | 265 | 390 | 529 | 160 |
| do. alloys | 60 | 480 | 113 | 339 | 401 | 456 |
| Scrap | 752 | 799 | 298 | (a) 580 | (a) 542 | (a) 226 |
| Semi-manufactures (a) | 396 | 676 | 567 | 1,234 | 1,524 | 638 |
| Australia (b)— | | | | | | |
| Matte, speiss, etc. | 82 | 1,409 | 456 | 136 | 315 | 584 |
| Unwrought | 947 | 1,252 | 972 | 980 | 1,602 | 1,642 |
| do. alloys | (d) 213 | (d) 318 | 319 | 707 | 684 | 289 |
| Semi-manufactures (a) | 996 | 1,104 | (e) 793 | (e) 1,141 | (e) 965 | (e) 890 |
| New Zealand (b)— | | | | | | |
| Unwrought (a) | 31 | 41 | 53 | 46 | 24 | <i>n.a.</i> |
| Semi-manufactures (a) | 164 | 176 | 228 | 368 | 181 | <i>n.a.</i> |
| Irish Republic— | | | | | | |
| Unwrought (a) | 23 | 32 | 13 | 28 | 41 | 14 |
| Semi-manufactures (a) | 116 | 61 | 101 | 270 | 406 | 442 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Matte and speiss | 385 | 363 | 726 | 700 | 746 | 2,055 |
| Unwrought | 2,788 | 2,488 | 2,210 | 1,862 | 2,359 | 2,035 |
| Scrap | 9 | 23 | 117 | 123 | 225 | 80 |
| Semi-manufactures (a) | 423 | 431 | 559 | 516 | 551 | 931 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Unwrought | 1,143 | 1,030 | 1,194 | 1,020 | 1,267 | 1,288 |
| do. alloys | 176 | 138 | 167 | 273 | 183 | 490 |
| Scrap | 349 | 523 | 550 | 1,232 | 1,945 | 2,150 |
| Semi-manufactures (a) | 689 | 678 | 657 | 968 | 1,050 | 1,554 |
| Denmark— | | | | | | |
| Unwrought | 65 | 100 | 110 | 82 | 114 | 65 |
| do. alloys | 18 | 17 | 13 | 16 | 10 | 23 |
| Semi-manufactures (a) | 574 | 684 | 792 | 519 | 464 | 595 |

*See footnote on p. 221 concerning the descriptions "unwrought" nickel and "semi-manufactures" used in these tables.

(a) Including alloys.

(b) Years ended June 30 of that stated.

(c) Years ended March 31 following that stated.

(d) Including scrap.

(e) Owing to reclassification not strictly comparable with earlier years.

IMPORTS OF NICKEL (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|------------------------------------|--------|---------|---------|---------|--------|--------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Finland— | | | | | | |
| Unwrought (a) .. | 227 | 263 | 249 | 238 | 128 | 101 |
| France— | | | | | | |
| Matte and speiss .. | 11,079 | 16,556 | 12,963 | 18,322 | 13,173 | 12,996 |
| Ferro-nickel | 22,349 | 32,388 | 28,202 | 44,100 | 49,470 | 65,616 |
| Unwrought | 8,236 | 8,005 | 8,363 | 8,619 | 9,596 | 8,280 |
| do. alloys | 57 | 122 | 58 | 92 | 96 | 508 |
| Scrap (a) | 1,324 | 476 | 578 | 375 | 234 | 403 |
| Semi-manufactures (a) | 2,488 | 2,083 | 2,607 | 2,446 | 2,572 | 2,550 |
| Germany (Federal)— | | | | | | |
| Ore | 119 | 521 | 5 | 239 | 1 | 184 |
| Matte and speiss .. | 3,622 | 4,067 | 6,069 | 3,978 | 2,555 | 2,208 |
| Unwrought (a) | 23,033 | 23,555 | 23,439 | 27,809 | 30,865 | 27,966 |
| Scrap (a) | 3,158 | 1,865 | 2,700 | 6,486 | 8,581 | 15,085 |
| Semi-manufactures (a) | 1,354 | 1,824 | 1,736 | 1,877 | 3,100 | 3,263 |
| Italy— | | | | | | |
| Matte and speiss .. | 999 | 620 | 1,717 | 1,776 | 4,292 | 4,481 |
| Unwrought (a) | 7,114 | 8,322 | 10,983 | 11,870 | 13,336 | 10,595 |
| Scrap | 179 | 602 | 957 | 1,538 | 1,314 | 68 |
| Semi-manufactures (a) | 1,060 | 981 | 1,571 | 1,768 | 1,842 | 2,510 |
| Nickel oxide | 182 | 113 | 131 | 139 | 180 | 196 |
| Netherlands— | | | | | | |
| Unwrought | 628 | 749 | 1,590 | n.a. | 1,736 | 1,597 |
| do. alloys | 102 | 63 | 64 | 231 | 166 | 188 |
| Scrap (a) | 896 | 733 | 1,042 | 1,502 | 1,369 | 1,467 |
| Semi-manufactures (a) | 1,875 | 1,908 | 1,892 | 2,181 | 2,827 | 3,499 |
| Nickel oxide | 228 | 127 | 65 | 71 | 209 | 898 |
| Norway— | | | | | | |
| Matte (copper-nickel) .. | 50,009 | 59,760 | 60,405 | 52,673 | 76,488 | 68,734 |
| Scrap (a) | 1,397 | 2,727 | 1,845 | 187 | 686 | 657 |
| Semi-manufactures (a) | 264 | 243 | 266 | 344 | 301 | 299 |
| Portugal— | | | | | | |
| Unwrought and semi-manufactures .. | 151 | 201 | 238 | 203 | 432 | 325 |
| Spain— | | | | | | |
| Matte and speiss .. | 326 | 434 | 463 | 241 | 529 | 481 |
| Unwrought (a) | 888 | 1,191 | 1,153 | 1,392 | 1,521 | 2,040 |
| Semi-manufactures (a) | 698 | 1,103 | 1,089 | 1,049 | 1,425 | 1,682 |
| Sweden— | | | | | | |
| Matte and speiss .. | 375 | 575 | 2,276 | 964 | 1,015 | 1,240 |
| Unwrought | 11,352 | 12,795 | 12,072 | 12,127 | 13,433 | 12,392 |
| do. alloys | 246 | 181 | 302 | 347 | 347 | 451 |
| Scrap (a) | 620 | 824 | 1,277 | 1,358 | 2,126 | 3,336 |
| Semi-manufactures (a) | 815 | 782 | 936 | 872 | 971 | 1,791 |
| Switzerland— | | | | | | |
| Unwrought and scrap (a) | 1,317 | 972 | 1,387 | 1,307 | 1,605 | 2,263 |
| Semi-manufactures (a) | 741 | 1,397 | 1,088 | 1,095 | 947 | 1,258 |
| Yugoslavia— | | | | | | |
| Unwrought | 576 | 562 | 354 | 396 | 710 | 788 |
| Semi-manufactures (a) | 92 | 96 | 121 | 522 | 708 | 552 |
| Mexico— | | | | | | |
| Unwrought | 222 | 204 | 93 | 70 | 180 | n.a. |
| Semi-manufactures .. | 214 | 817 | 898 | 1,310 | 920 | n.a. |
| United States— | | | | | | |
| Ore and matte | — | 72 | — | — | 1 | 3 |
| Unwrought and scrap .. | 95,241 | 121,066 | 101,586 | 102,945 | 98,333 | 91,821 |
| Semi-manufactures .. | 3,014 | 2,304 | 4,129 | 1,165 | 3,329 | 3,073 |
| Nickel oxide | 15,056 | 12,136 | 6,884 | 5,472 | 5,646 | 3,479 |
| Argentina— | | | | | | |
| Unwrought | 177 | 202 | 201 | 130 | 319 | 287 |
| Semi-manufactures .. | 331 | 307 | 280 | 236 | 227 | 130 |

(a) Including alloys.

IMPORTS OF NICKEL (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-----------|---------|-------------|-----------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Brazil— | | | | | | |
| Unwrought (a) .. | 352 | 273 | 468 | 381 | 445 | <i>n.a.</i> |
| Semi-manufactures (a) | 142 | 230 | 397 | 358 | 640 | <i>n.a.</i> |
| Chile— | | | | | | |
| Unwrought | 37 | 74 | <i>n.a.</i> | 43 | <i>n.a.</i> | <i>n.a.</i> |
| Colombia— | | | | | | |
| Unwrought (a) .. | 37 | 7 | 18 | 6 | 22 | <i>n.a.</i> |
| Semi-manufactures (a) | 616 | 108 | 170 | 86 | 116 | <i>n.a.</i> |
| Formosa— | | | | | | |
| Unwrought (a) .. | 101 | 106 | 129 | 143 | 365 | 204 |
| Iran— | | | | | | |
| Semi-manufactures .. | 196 | 132 | 160 | 218 | 121 | <i>n.a.</i> |
| Japan— | | | | | | |
| Ore | 1,125,173 | 951,474 | 1,249,886 | 1,634,360 | 2,669,371 | 3,341,793 |
| Matte | 5,343 | 4,288 | 4,974 | 9,620 | 12,398 | 16,484 |
| Scrap (a) | 12 | — | 4,839 | 10,650 | 572 | 1,302 |
| Ferro-nickel | 6,495 | 6,601 | 670 | 2,782 | 1,129 | 308 |
| Unwrought (a) .. | 2,438 | 2,615 | 3,034 | 12,082 | 3,597 | 6,730 |
| Semi-manufactures (a) | 1,351 | 654 | 629 | 2,016 | 1,261 | 1,223 |
| Philippine Republic— | | | | | | |
| Semi-manufactures (a) | 58 | 39 | <i>n.a.</i> | 46 | <i>n.a.</i> | <i>n.a.</i> |
| Turkey— | | | | | | |
| Semi-manufactures (a) | 87 | 68 | 77 | 211 | 144 | 84 |

(a) Including alloys.

NITROGEN COMPOUNDS
PRODUCTION OF NITROGEN COMPOUNDS*

Long tons

| Producing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|------------|------------|-----------|-------------|-----------|---------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom (a)— | | | | | | |
| Nitrogenous fertilizers expressed as 25% NH ₃ | 2,784,400 | 2,952,000 | 3,188,300 | r 3,683,900 | 3,986,900 | (e) 3,985,000 |
| Actual ammonium sulphate | 1,170,000 | 990,000 | 913,600 | 824,400 | 776,800 | 716,400 |
| Canada— | | | | | | |
| Ammonium sulphate | 284,504 | 260,437 | 307,125 | 258,444 | 266,025 | n.a. |
| Ammonium nitrate | 380,441 | 462,882 | 553,735 | 628,871 | 670,000 | n.a. |
| Trinidad (b)— | | | | | | |
| (N content) | | | | | | |
| Nitrogen fertilizers | (e) 30,000 | (e) 30,000 | 37,200 | 45,800 | 49,000 | (e) 74,000 |
| India— | | | | | | |
| Ammonium sulphate | 421,110 | 431,658 | n.a. | n.a. | n.a. | n.a. |
| do. (N content) | 84,200 | 81,600 | 85,000 | 82,300 | 109,000 | 136,354 |
| Pakistan (c)— | | | | | | |
| Ammonium sulphate | 40,002 | 37,931 | 40,456 | 45,058 | 45,815 | n.a. |
| Ammonium nitrate | 61,199 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Australia— | | | | | | |
| Ammonium sulphate | 97,370 | 107,830 | 111,000 | 77,680 | 86,720 | n.a. |
| OTHER COUNTRIES | | | | | | |
| Austria (b)— | | | | | | |
| (N content) | | | | | | |
| Nitrogen fertilizers | 167,100 | 181,800 | 207,736 | 230,816 | 248,561 | 251,546 |
| Belgium— | | | | | | |
| (N content) | | | | | | |
| Synthetic ammonia, etc. | 351,610 | 391,660 | 393,655 | 404,887 | 447,759 | n.a. |
| Ammonium sulphate | 15,930 | 14,700 | 13,819 | 13,121 | 11,905 | n.a. |
| Mixed fertilizers | 59,540 | 67,950 | 70,471 | 78,670 | 91,720 | n.a. |
| Technical products | 23,690 | 18,790 | 17,563 | 17,326 | 45,884 | n.a. |
| Bulgaria— | | | | | | |
| (N content) | | | | | | |
| Nitrogen fertilizers | 202,150 | 241,951 | 292,700 | 348,000 | 496,000 | n.a. |
| Czechoslovakia— | | | | | | |
| Nitrogen fertilizers (N content) | 155,881 | 216,313 | 246,566 | 241,000 | 257,000 | 294,000 |
| Denmark— | | | | | | |
| Lime ammonium nitrate | 14,566 | 70,161 | n.a. | n.a. | n.a. | n.a. |
| Finland (b)— | | | | | | |
| (N content) | | | | | | |
| Cyanamide | 135 | 143 | 86 | 50 | 33 | 29 |
| Ammonium nitrate | 19,783 | 23,239 | 28,261 | 28,895 | 29,808 | 30,908 |
| Calcium nitrate | 1,312 | 1,929 | 3,368 | 3,536 | 4,654 | 5,322 |
| Other nitrogen fertilizers | 29,296 | 38,972 | 43,351 | 43,863 | 24,098 | 21,542 |
| Mixed fertilizers | 8,858 | 8,619 | 17,044 | 28,951 | 40,998 | 52,934 |
| France (d)— | | | | | | |
| (N content) | | | | | | |
| Ammonium sulphate | 86,300 | 87,400 | 84,500 | 80,400 | 67,700 | n.a. |
| Cyanamide | 2,347 | 2,573 | 2,350 | 3,070 | 3,430 | n.a. |
| Sodium nitrate | 80 | 3 | 800 | 900 | 700 | n.a. |
| Calcium nitrate | 41,700 | 35,100 | 32,100 | n.a. | n.a. | n.a. |
| Ammonium nitrate | 508,600 | 611,400 | n.a. | n.a. | n.a. | n.a. |
| Ammonium phosphate | 1,500 | 500 | n.a. | n.a. | n.a. | n.a. |
| Other nitrogen fertilizers | 64,100 | 84,800 | n.a. | n.a. | n.a. | n.a. |
| Mixed fertilizers | 193,400 | 233,600 | n.a. | n.a. | n.a. | n.a. |

*Includes by-product ammonium sulphate which is separately recorded as far as available on pages 84-86.

(a) Source: British Sulphate of Ammonia Federation.

(c) West Pakistan.

(b) Years ended June 30 of the year stated.

(d) Years ended April 30 of the year stated.

(e) Estimated.

PRODUCTION OF NITROGEN COMPOUNDS (cont.)

Long tons

| Producing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-----------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Germany (Federal)— | | | | | | |
| Chemical nitrogen | | | | | | |
| <i>(N content)</i> | | | | | | |
| Fertilizer | 1,244,842 | 1,339,555 | 1,426,323 | 1,538,145 | 1,542,511 | 1,586,385 |
| Technical use | 330,800 | 356,399 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Germany (East)— | | | | | | |
| <i>(N content)</i> | | | | | | |
| Ammonium sulphate | 168,705 | 168,717 | 161,251 | 157,731 | 163,955 | 150,223 |
| Cyanamide | 17,854 | 17,215 | 16,685 | 15,502 | 11,996 | <i>n.a.</i> |
| Lime ammonium | | | | | | |
| nitrate | 119,436 | 121,073 | 123,427 | 117,643 | 143,021 | 153,028 |
| Potassium ammonium | | | | | | |
| nitrate | 5,324 | 15,800 | 17,658 | 15,595 | <i>n.a.</i> | <i>n.a.</i> |
| Hungary— | | | | | | |
| Nitrogen fertilizers .. | 441,674 | 711,000 | 803,000 | 903,000 | 1,177,000 | 1,441,000 |
| Iceland (a)— | | | | | | |
| Ammonium nitrate | | | | | | |
| <i>(N content)</i> | 6,600 | 6,400 | 8,392 | 7,993 | 8,024 | <i>n.a.</i> |
| Italy— | | | | | | |
| Ammonium sulphate .. | 1,313,346 | 1,468,058 | 1,609,749 | 1,699,476 | 1,475,561 | 1,410,181 |
| Ammonium sulpho- | | | | | | |
| nitrate | 43,109 | 48,703 | 59,211 | 31,040 | 97,337 | 42,436 |
| Cyanamide | 81,181 | 84,976 | 121,439 | 114,638 | 100,315 | 92,776 |
| Sodium nitrate | 8,728 | 8,781 | 6,951 | 8,667 | 8,357 | 10,269 |
| Potassium nitrate .. | 71,160 | 11,546 | 13,144 | 25,812 | 21,757 | 11,458 |
| Calcium nitrate .. | 354,159 | 336,605 | 315,769 | 324,590 | 297,271 | 238,805 |
| Ammonium nitrate .. | 584,634 | 770,889 | 654,364 | 745,202 | 846,512 | 665,806 |
| Di-ammonium phos- | | | | | | |
| phate | 491,722 | 456,831 | 487,161 | 417,321 | 450,638 | 468,049 |
| Ammonium phosphate | | | | | | |
| Netherlands (a)— | | | | | | |
| <i>(N content)</i> | | | | | | |
| Ammonium sulphate .. | 69,900 | 68,600 | 77,756 | 79,144 | 91,308 | 93,315 |
| Ammonium nitrate .. | 269,900 | 304,300 | 258,751 | 302,810 | 352,094 | 352,544 |
| Calcium nitrate .. | 24,600 | 22,900 | 22,047 | 23,274 | 22,488 | 24,601 |
| Other nitrogen fertilizers | 72,800 | 98,200 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Mixed fertilizers | 30,800 | 24,900 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Norway— | | | | | | |
| Cyanamide | 4,713 | 4,261 | 4,392 | 4,496 | 3,753 | 3,383 |
| Ammonium nitrate .. | 18,455 | 19,596 | 22,270 | 23,053 | 24,692 | 31,906 |
| Calcium nitrate .. | 1,160,136 | 1,154,272 | 1,166,284 | 785,444 | 778,381 | 866,639 |
| Sodium nitrate .. | 1,775 | 1,401 | — | — | — | — |
| Lime ammonium nitrate | 118,356 | 147,101 | 39,821 | 109,181 | 112,965 | 81,915 |
| Poland— | | | | | | |
| Ammonium sulphate .. | 194,000 | 217,000 | 246,000 | 254,000 | 277,000 | <i>n.a.</i> |
| Cyanamide | 179,000 | 165,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| "Saletrzak" | 634,000 | 601,000 | 675,000 | 726,000 | 780,000 | <i>n.a.</i> |
| Portugal— | | | | | | |
| Cyanamide | 8,724 | 8,174 | 9,850 | 10,036 | 11,672 | 11,392 |
| Ammonium sulphate .. | 240,856 | 273,301 | 247,649 | 205,433 | 231,894 | 199,082 |
| Ammonium nitrate .. | 195,646 | 194,329 | 200,200 | 225,023 | 223,267 | 279,183 |
| Calcium nitrate .. | 20,367 | 22,859 | 14,271 | 5,033 | 7,567 | 21,786 |
| Roumania— | | | | | | |
| Nitrogen fertilizers | | | | | | |
| <i>(N content)</i> | 106,276 | 163,680 | 260,063 | 366,383 | 414,069 | <i>n.a.</i> |
| Spain— | | | | | | |
| <i>(N content)</i> | | | | | | |
| Cyanamide | 764 | 1,353 | 850 | 1,597 | 1,570 | 1,870 |
| Lime ammonium nitrate | 74,685 | 90,264 | 104,400 | 114,444 | 131,936 | 125,683 |
| Ammonium sulphate .. | 128,382 | 135,100 | 151,836 | 182,285 | 200,477 | 111,314 |
| Ammonium nitrate .. | <i>n.a.</i> | 7,176 | 13,133 | 19,191 | 18,946 | <i>n.a.</i> |
| Ammonium sulpho- | | | | | | |
| nitrate | <i>n.a.</i> | 12,270 | 23,419 | 26,179 | 34,946 | 36,416 |

(a) Years ended June 30 of the year stated.

PRODUCTION OF NITROGEN COMPOUNDS (cont.)

Long tons

| Producing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|-------------|-----------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Sweden— | | | | | | |
| Ammonium nitrate .. | 16,987 | 13,389 | 18,750 | 22,655 | <i>n.a.</i> | <i>n.a.</i> |
| Ammonium sulphate .. | 8,446 | 8,160 | 8,761 | 10,275 | <i>n.a.</i> | <i>n.a.</i> |
| Cyanamide | 714 | 8,297 | 16,305 | 20,960 | <i>n.a.</i> | <i>n.a.</i> |
| Lime ammonium nitrate | 187,197 | 175,813 | 202,814 | 212,343 | <i>n.a.</i> | <i>n.a.</i> |
| Mixed fertilizers .. | 176,029 | 220,484 | 235,369 | 323,550 | <i>n.a.</i> | <i>n.a.</i> |
| Switzerland (a)— | | | | | | |
| <i>(N content)</i> | | | | | | |
| Cyanamide | 2,000 | 2,200 | 2,400 | 3,200 | 3,400 | 3,400 |
| Ammonium sulphate | 5,200 | 5,300 | 9,300 | 9,300 | 7,900 | 6,400 |
| Ammonium nitrate .. | 8,100 | 8,500 | 10,000 | 13,400 | 14,800 | 14,300 |
| Calcium nitrate .. | 3,500 | 3,500 | 3,700 | 3,500 | 3,500 | 3,000 |
| Mixed fertilizers .. | 4,000 | 2,600 | 2,800 | 3,000 | 3,400 | 3,700 |
| U.S.S.R.— | | | | | | |
| Nitrogen fertilizers | | | | | | |
| <i>(N content)</i> | 2,066,000 | 2,670,000 | 3,050,000 | 3,700,000 | 3,800,000 | <i>n.a.</i> |
| Yugoslavia— | | | | | | |
| Ammonium nitrate .. | 9,603 | 7,248 | 7,000 | 7,366 | 8,557 | 8,484 |
| Ammonium sulphate .. | 12,220 | 11,981 | 12,251 | 12,598 | 11,986 | <i>n.a.</i> |
| Cyanamide | 874 | 1,854 | 5,016 | 7,290 | 4,796 | <i>n.a.</i> |
| Lime ammonium nitrate | 400,000 | 429,000 | 474,000 | 477,000 | 572,800 | <i>n.a.</i> |
| Egypt— | | | | | | |
| Ammonium nitrate .. | 428,788 | 370,770 | 385,461 | 420,560 | 433,051 | <i>n.a.</i> |
| Calcium nitrate .. | 251,288 | 273,258 | 256,614 | 188,973 | 165,471 | 25,300 |
| Ammonium sulphate .. | 90,205 | 58,768 | 96,260 | 73,259 | 48,296 | 9,277 |
| South Africa— | | | | | | |
| Nitrogen fertilizers | | | | | | |
| <i>(N content)</i> | (b) 71,000 | 75,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Mexico— | | | | | | |
| Ammonium sulphate .. | <i>n.a.</i> | 185,867 | 210,856 | 225,609 | 330,874 | 396,906 |
| Ammonium nitrate .. | <i>n.a.</i> | 92,554 | 143,859 | 157,078 | <i>n.a.</i> | <i>n.a.</i> |
| Netherlands Antilles— | | | | | | |
| Nitrogen compounds .. | 102,168 | 129,077 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Mixed fertilisers .. | 38,840 | 46,015 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| United States— | | | | | | |
| Sulphate equivalent of ammonia produced (coke-ovens) | 708,846 | 717,641 | 769,649 | 745,000 | 685,000 | <i>n.a.</i> |
| Actual ammonium sulphate (coke-ovens) | 607,935 | 619,011 | 681,938 | 658,000 | 626,000 | <i>n.a.</i> |
| Actual ammonium sulphate (synthetic plants) | 1,452,000 | 1,784,000 | 1,886,000 | 1,730,000 | 1,787,000 | 1,724,000 |
| Anhydrous ammonia (synthetic plants) .. | 6,816,332 | 7,919,162 | 9,484,364 | 10,893,000 | 10,797,000 | <i>n.a.</i> |
| Ammonium nitrate, original | 4,056,000 | 4,128,000 | 4,479,000 | 5,096,000 | 5,122,000 | 4,994,000 |
| Ammonium phosphate | 2,764,000 | 2,601,000 | 3,313,000 | 5,088,000 | 3,687,000 | 4,011,000 |
| Brazil— | | | | | | |
| Ammonium sulphate .. | 10,032 | 11,646 | 12,205 | 12,281 | 10,231 | 7,298 |
| Lime ammonium nitrate | 24,738 | 57,707 | 18,954 | 25,431 | 26,104 | 18,008 |
| Chile— | | | | | | |
| Sodium and potassium nitrate (natural) .. | 1,154,386 | 1,140,152 | 1,047,081 | 860,000 | 668,143 | 769,332 |
| Peru (a)— | | | | | | |
| Nitrogen fertilizers | | | | | | |
| <i>(N content)</i> (c) .. | 46,300 | 46,300 | 42,700 | (b) 59,000 | 28,000 | 25,000 |
| Formosa— | | | | | | |
| Cyanamide | 50,648 | 26,267 | 11,440 | 5,695 | <i>n.a.</i> | <i>n.a.</i> |
| Ammonium sulphate .. | 221,757 | 288,983 | 283,037 | 325,587 | 376,168 | <i>n.a.</i> |
| Nitro-phosphate .. | 3,521 | 7,898 | 5,118 | 3,809 | <i>n.a.</i> | <i>n.a.</i> |
| Nitro-chalk | 62,148 | 47,843 | 42,382 | 63,188 | 74,119 | <i>n.a.</i> |
| Israel— | | | | | | |
| Ammonium sulphate .. | 78,520 | 76,522 | 75,958 | 66,660 | 77,642 | 79,731 |

(a) Years ended June 30 of the year stated.

(b) Estimated.

(c) Including guano.

PRODUCTION OF NITROGEN COMPOUNDS (cont.)

Long tons

| Producing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-----------------|-----------------|-----------------|-----------------|------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Japan— | | | | | | |
| Ammonium sulphate .. | 2,256,000 | 2,449,000 | 2,612,000 | 2,678,000 | 2,672,000 | 2,524,988 |
| Cyanamide | 329,000 | 339,000 | 372,000 | 343,502 | 326,923 | <i>n.a.</i> |
| Ammonium nitrate .. | 55,133 | 66,234 | 76,400 | 78,359 | 94,951 | <i>n.a.</i> |
| Ammonium chloride .. | 472,398 | 494,490 | 549,540 | 611,076 | 771,822 | 835,672 |
| Philippine Republic (a)— | | | | | | |
| <i>(N content)</i> | | | | | | |
| Ammonium sulphate | } (b) 8,000 | (b) 9,000 | (b) 16,000 | (b) 25,000 | (b) 40,000 | (b) 45,000 |
| Ammonium phosphate | | | | | | |
| Turkey— | | | | | | |
| Ammonium sulphate .. | <i>r</i> 91,750 | 90,200 | <i>r</i> 91,011 | 84,900 | 79,224 | <i>n.a.</i> |
| Ammonium nitrate .. | <i>r</i> 66,052 | <i>r</i> 65,964 | <i>r</i> 69,977 | <i>r</i> 73,276 | 63,777 | <i>n.a.</i> |

In addition, natural nitrate of potash is known to have been produced in India and Spain and nitrified earth in China.

(a) Years ended June 30 of the year stated.

(b) Estimated.

EXPORTS OF NITROGEN COMPOUNDS

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|--------------|--------------|--------------|--------------|--------------|---------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ammonium sulphate .. | 366,239 | 417,976 | 339,010 | 290,834 | 330,437 | 291,907 |
| Ammonium chloride .. | 13,938 | 11,232 | 11,818 | 9,601 | 12,504 | 13,515 |
| Other manufactured nitrogen fertilizers .. | 11,621 | 14,326 | 17,544 | 75,988 | 8,971 | 4,713 |
| Anhydrous and liquid ammonia | 3,954 | 5,697 | 6,306 | 15,263 | 24,606 | 30,003 |
| Canada— | | | | | | |
| Anhydrous ammonia .. | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 54,865 | 74,618 | 134,991 |
| Ammonium sulphate .. | (£2,010,432) | (£2,965,482) | (£2,747,264) | (£2,275,520) | (£3,014,723) | (£2,858,000) |
| Ammonium nitrate .. | (£3,654,737) | (£3,381,919) | (£2,986,401) | (£3,259,519) | (£4,701,688) | (£5,026,000) |
| Nitrogen-phosphate fertilizers | (£3,403,812) | (£6,453,415) | (£7,558,541) | (£8,978,193) | (£9,930,240) | (£11,338,000) |
| Other nitrogen fertilizers | (£5,150,709) | (£4,940,746) | (£4,591,045) | (£5,331,488) | (£7,271,641) | (£9,012,000) |
| Trinidad and Tobago— | | | | | | |
| Ammonium sulphate .. | 78,825 | 91,837 | 115,054 | 108,173 | 46,271 | 49,346 |
| India (a)— | | | | | | |
| Potassium nitrate .. | 3 | 3 | 6 | — | 9 | 19 |
| Sodium nitrate .. | 3 | — | — | — | — | — |
| Malaysia (West)— | | | | | | |
| Nitrogen fertilizers .. | <i>n.a.</i> | 1,291 | 841 | 276 | 107 | 1,081 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Potassium nitrate .. | 1 | 1 | — | — | — | 40 |
| Sodium nitrate .. | 8 | 26 | 18 | 43 | 422 | 154 |
| Calcium nitrate .. | — | 1 | 2 | 27 | 394 | 945 |
| Ammonium sulphate .. | 259,044 | 402,245 | (b) 48,366 | (b) 55,567 | (b) 76,076 | (b) 71,993 |
| Ammonium chloride .. | 35 | 46 | 77 | 18 | 26 | 15 |
| Ammonium nitrate .. | 208,985 | 281,521 | (b) 23,776 | (b) 10,320 | (b) 13,867 | (b) 22,036 |
| Cyanamide .. | 6,597 | 17,534 | (b) 4,368 | (b) 3,149 | (b) 3,828 | (b) 3,436 |
| Anhydrous ammonia .. | 45,952 | 49,138 | 53,692 | 60,205 | 145,276 | 222,944 |
| Bulgaria— | | | | | | |
| Nitrogen fertilizers .. | 98,599 | 57,054 | 18,668 | 44,634 | 127,224 | <i>n.a.</i> |
| France— | | | | | | |
| Potassium nitrate .. | 2,076 | 1,935 | 1,939 | 2,773 | 2,426 | 4,365 |
| Sodium nitrate .. | 571 | 756 | 686 | 1,011 | 1,527 | 1,022 |
| Calcium nitrate .. | 30,551 | 95,825 | 31,202 | 28,590 | 29,682 | 28,129 |
| Ammonium sulphate .. | 210,348 | 215,837 | 238,641 | 259,910 | 114,820 | 73,905 |
| Ammonium chloride .. | 47 | 52 | 176 | 1,215 | 2,483 | 3,022 |
| Ammonium nitrate .. | 44,005 | 53,364 | 63,790 | 63,121 | 79,574 | 112,802 |
| Cyanamide .. | 30 | 1,661 | 1,111 | 705 | 1,393 | 3,199 |
| Anhydrous ammonia .. | 7,858 | 27,289 | 34,468 | 12,428 | 7,075 | 50,945 |
| Germany (Federal)— | | | | | | |
| Potassium nitrate .. | 14,305 | 13,949 | 14,033 | 16,688 | 14,949 | } 28,955 |
| Sodium nitrate .. | 9,918 | 5,319 | 2,358 | 1,314 | 2,097 | |
| Calcium nitrate .. | 122,481 | 129,820 | 94,796 | 58,972 | 13,007 | 40,820 |
| Ammonium nitrates .. | 700,956 | 448,740 | 563,366 | 688,020 | 702,608 | 692,104 |
| Other nitrogen fertilizers | 728,474 | 759,463 | 711,342 | 911,942 | 809,375 | 785,651 |
| Germany (East)— | | | | | | |
| Nitrogen fertilizers (b) | 65,620 | 72,014 | 47,503 | 69,732 | <i>n.a.</i> | <i>n.a.</i> |
| Anhydrous ammonia .. | 811 | 873 | 977 | 904 | <i>n.a.</i> | <i>n.a.</i> |
| Greece— | | | | | | |
| Anhydrous ammonia .. | <i>n.a.</i> | <i>n.a.</i> | 6,086 | 17,336 | 14,426 | 34,288 |

(a) Years ended March 31 following that stated.

(b) N content.

EXPORTS OF NITROGEN COMPOUNDS (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Italy— | | | | | | |
| Potassium nitrate .. | 80 | 999 | 2,476 | 1,504 | 1,690 | <i>n.a.</i> |
| Sodium nitrate .. | 65 | 135 | 111 | 275 | 25 | 25 |
| Calcium nitrate .. | 4,669 | 1,986 | 396 | 1,482 | <i>n.a.</i> | — |
| Ammonium nitrate .. | 197,956 | 352,112 | 206,249 | 237,289 | 233,859 | 145,221 |
| Ammonium sulphate .. | 728,796 | 746,339 | 754,055 | 900,260 | 543,321 | 656,974 |
| Cyanamide .. | 1,769 | 6,826 | <i>n.a.</i> | 49 | — | — |
| Netherlands— | | | | | | |
| Potassium nitrate .. | 104 | 421 | 639 | 302 | 83 | 47 |
| Sodium nitrate .. | 240 | 372 | 610 | 948 | 2,615 | 1,690 |
| Calcium nitrate .. | 48,750 | 45,422 | 7,621 | 6,714 | 9,330 | 9,670 |
| Ammonium sulphate .. | 277,931 | 354,270 | 47,552 | 89,952 | 91,977 | 88,286 |
| Ammonium chloride .. | 30 | 129 | 156 | 116 | 31 | 67 |
| Ammonium nitrate .. | 120,442 | 172,137 | 37,773 | 58,312 | 83,834 | 83,021 |
| Lime ammonium nitrate | | | | | | |
| Anhydrous ammonia .. | 2,283 | 5,013 | 37,845 | 80,979 | 125,856 | 192,254 |
| Norway— | | | | | | |
| Sodium nitrate .. | 1,901 | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Calcium nitrate .. | 1,138,565 | 1,231,470 | 1,005,686 | 707,423 | <i>n.a.</i> | <i>n.a.</i> |
| Ammonium nitrate .. | 8,549 | 6,813 | 5,412 | 5,196 | <i>n.a.</i> | <i>n.a.</i> |
| Cyanamide .. | 1,215 | 1,471 | 1,241 | 1,573 | <i>n.a.</i> | <i>n.a.</i> |
| Anhydrous ammonia .. | 737 | 2,798 | 9 | 2 | — | — |
| Poland— | | | | | | |
| Ammonium chloride .. | 3,614 | 3,595 | 4,326 | 4,001 | 3,980 | 3,626 |
| Nitrogen fertilizers .. | 25,500 | 44,000 | 41,000 | 84,000 | 156,000 | 319,000 |
| Portugal— | | | | | | |
| Ammonium sulphate .. | 44,808 | 25,233 | 37,106 | 43,903 | 17,754 | 3,217 |
| Ammonium nitrate .. | 56,754 | 34,055 | 30,240 | 43,581 | 32,905 | 54,990 |
| Sodium nitrate .. | 140 | 245 | — | 1 | — | 52 |
| Calcium nitrate .. | 10,257 | 9,198 | 3,614 | 4,814 | 5,117 | 4,654 |
| Sweden— | | | | | | |
| Ammonium nitrate .. | 1,370 | 648 | 1,520 | 3,019 | 1,639 | 1,986 |
| Switzerland— | | | | | | |
| Potassium and sodium nitrates (purified) .. | — | — | 4 | 4 | 5 | 8 |
| Ammonium sulphate, etc. .. | 26,519 | 28,589 | 31,271 | 21,904 | 21,354 | 9,345 |
| U.S.S.R.— | | | | | | |
| Ammonium nitrate .. | 41,800 | 8,200 | 71,000 | 125,486 | 194,774 | 774,500 |
| Ammonium sulphate .. | 220,300 | 325,200 | 488,000 | 682,843 | 737,269 | 149,000 |
| Yugoslavia— | | | | | | |
| Ammonium nitrate .. | <i>n.a.</i> | 415 | 1,057 | <i>n.a.</i> | <i>n.a.</i> | 10 |
| Lime ammonium nitrate | <i>n.a.</i> | <i>n.a.</i> | 4,921 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Cyanamide .. | 46 | 262 | 975 | 1,044 | 774 | <i>n.a.</i> |
| United States— | | | | | | |
| Sodium nitrate .. | 848 | 416 | 562 | 246 | 1,030 | 629 |
| Ammonium nitrate .. | 78,783 | 92,604 | 77,675 | 36,564 | 79,396 | 99,591 |
| Ammonium sulphate .. | 431,950 | 858,572 | 1,437,553 | 935,053 | 1,245,610 | 724,929 |
| Other nitrogen fertilizers .. | 53,953 | 30,857 | 22,000 | 24,355 | 22,776 | 26,976 |
| Nitrogen phosphatic fertilizers .. | 324,211 | 285,404 | 689,000 | 1,134,000 | 1,133,929 | 841,071 |
| Anhydrous ammonia (a) | 132,571 | 164,467 | 201,753 | 386,486 | 714,469 | 274,310 |
| Chile— | | | | | | |
| Sodium nitrate .. | 870,154 | 907,664 | 792,481 | 623,757 | <i>n.a.</i> | <i>n.a.</i> |
| Potassium nitrate .. | | | | | | |
| Israel— | | | | | | |
| Anhydrous ammonia .. | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 18 | 6 |
| Japan— | | | | | | |
| Cyanamide .. | 19,807 | 44,406 | 48,025 | 160 | 2,682 | 1,119 |
| Ammonium nitrate .. | 8,300 | 20,572 | 13,587 | 11,530 | 17,666 | 29,697 |
| Ammonium chloride .. | 234,773 | 176,910 | 302,097 | 379,794 | 425,505 | 474,766 |
| Ammonium sulphate .. | 833,218 | 1,242,930 | 1,172,469 | 1,591,605 | 1,439,697 | 1,027,715 |
| Anhydrous ammonia .. | 253 | 595 | 5,760 | 7,781 | 12,229 | 170 |
| Other nitrogen fertilizers | 37,350 | 31,742 | 62,001 | 27,968 | 78,343 | 2,119 |

(a) Ammonia content.

IMPORTS OF NITROGEN COMPOUNDS

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--------------------------------------|-------------|---------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Natural sodium nitrate .. | 14,952 | 17,915 | 19,143 | 13,414 | 14,094 | 12,570 |
| Manufactured fertilizers— | | | | | | |
| Nitrogenous | 292,196 | 272,183 | 180,518 | 389,896 | 373,440 | 278,921 |
| Ammonium phosphate | 11,557 | 3,429 | 3,222 | 10,451 | 30,118 | 5,174 |
| Potassium nitrate .. | 3,029 | 3,026 | 4,004 | 3,965 | <i>n.a.</i> | <i>n.a.</i> |
| Anhydrous and liquid ammonia | 1,677 | 4,303 | 66,166 | 155,045 | 272,678 | 363,505 |
| Malta— | | | | | | |
| Ammonium sulphate .. | 2,118 | 931 | 561 | 1,087 | 1,754 | 1,717 |
| Gambia— | | | | | | |
| Ammonium sulphate .. | — | — | — | 16 | — | — |
| Ghana— | | | | | | |
| Ammonium sulphate .. | 757 | 855 | 5,018 | 105 | 1,057 | 3,790 |
| Other nitrogen fertilizers | 7 | 4 | — | 41 | 58 | 854 |
| Kenya— | | | | | | |
| Ammonium sulphate .. | 12,157 | 20,586 | 8,531 | 8,659 | 6,258 | 8,882 |
| Other nitrogen fertilizers | 19,502 | 26,552 | 21,668 | 20,145 | 31,059 | 20,692 |
| Malawi— | | | | | | |
| Ammonium sulphate .. | 6,097 | 7,806 | 14,071 | 17,777 | 12,957 | 12,991 |
| Ammonium nitrate .. | 41 | 200 | 48 | 6 | 13 | 50 |
| Mauritius— | | | | | | |
| Nitrogen fertilizers .. | 26,908 | 20,393 | 14,415 | 18,668 | 15,638 | 18,571 |
| Nigeria— | | | | | | |
| Nitrogen fertilizers .. | 8,821 | 14,601 | 10,948 | 28,914 | 12,718 | 4,184 |
| Rhodesia— | | | | | | |
| Ammonium sulphate .. | 53,522 | 53,996 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Other nitrogen fertilizers | 61,565 | 71,713 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sierra Leone— | | | | | | |
| Ammonium sulphate .. | 1 | 43 | 388 | 260 | 119 | <i>n.a.</i> |
| Tanzania— | | | | | | |
| Ammonium sulphate .. | 8,077 | 8,679 | 7,976 | 6,820 | 7,354 | 10,297 |
| Other nitrogen fertilizers | 5,118 | 5,981 | 5,941 | 4,247 | 5,929 | 6,224 |
| Uganda— | | | | | | |
| Ammonium sulphate .. | 5,015 | 5,457 | 5,356 | 4,761 | 3,357 | 610 |
| Other nitrogen fertilizers | 1,195 | 858 | 447 | 2,920 | 2,754 | 2,381 |
| Zambia— | | | | | | |
| Ammonium sulphate .. | 2,111 | 11,052 | 1,134 | 12,101 | 2,361 | 4,369 |
| Ammonium nitrate .. | 472 | 616 | 3,987 | 7,108 | 8,306 | 15,501 |
| Canada— | | | | | | |
| Potassium nitrate .. | 789 | 1,308 | 1,443 | 1,517 | 2,384 | 3,425 |
| Sodium nitrate | 18,044 | 19,958 | 22,997 | 18,610 | 12,916 | 8,242 |
| Ammonium sulphate .. | 15,739 | 13,814 | 15,278 | 20,952 | 16,476 | 26,178 |
| Other nitrogen fertilizers | 20,296 | 14,771 | 16,273 | 12,471 | 23,319 | 14,315 |
| Antigua— | | | | | | |
| Nitrogen fertilizers .. | 3 | — | 1 | 85 | 16 | <i>n.a.</i> |
| Barbados— | | | | | | |
| Nitrogen fertilizers .. | 13,683 | 8,567 | 10,225 | 9,540 | 6,984 | 4,426 |
| Grenada— | | | | | | |
| Ammonium sulphate .. | 392 | 372 | 283 | 285 | 251 | <i>n.a.</i> |
| Other nitrogen fertilizers | 176 | 490 | 77 | 420 | 699 | <i>n.a.</i> |
| Jamaica— | | | | | | |
| Ammonium sulphate | 33,485 | 23,188 | 14,364 | 26,323 | 25,282 | 17,943 |
| Other nitrogen fertilizers | 2,139 | 1,651 | 6,529 | 7,043 | 3,405 | 4,484 |
| St. Kitts— | | | | | | |
| Nitrogen fertilizers .. | 2,616 | 2,433 | 2,370 | 99 | 840 | <i>n.a.</i> |
| St. Lucia— | | | | | | |
| Nitrogen fertilizers .. | 849 | 442 | 311 | 1,387 | 230 | <i>n.a.</i> |
| St. Vincent— | | | | | | |
| Ammonium sulphate .. | 205 | 871 | 799 | 2,985 | 716 | <i>n.a.</i> |
| Trinidad and Tobago— | | | | | | |
| Ammonium sulphate .. | <i>n.a.</i> | 200 | <i>n.a.</i> | 50 | — | <i>n.a.</i> |

IMPORTS OF NITROGEN COMPOUNDS (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|---------|---------|---------|---------|-----------|---------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Guyana— | | | | | | |
| Ammonium sulphate .. | 16,923 | 21,431 | 23,617 | 28,052 | 25,017 | 23,101 |
| Ceylon— | | | | | | |
| Natural sodium nitrate .. | 61 | 270 | 12 | — | — | 546 |
| Ammonium sulphate .. | 179,036 | 182,490 | 175,528 | 129,640 | 161,449 | n.a. |
| Ammonium nitrate .. | 334 | 206 | 7,899 | 5,349 | 295 | n.a. |
| Cyanamide .. | — | 25 | — | — | 50 | n.a. |
| Cyprus— | | | | | | |
| Ammonium sulphate .. | 14,872 | 17,419 | 28,528 | 17,950 | 29,108 | 24,611 |
| Other nitrogen fertilizers | 11,543 | 13,423 | 15,082 | 8,701 | 16,555 | 15,481 |
| Hong Kong— | | | | | | |
| Potassium nitrate .. | 423 | 404 | 341 | 634 | 742 | 609 |
| Sodium nitrate .. | 723 | 826 | 947 | 675 | 916 | 694 |
| Ammonium sulphate .. | 892 | 659 | 727 | 1,015 | 720 | 593 |
| Synthetic nitrates .. | 45 | 255 | 608 | 494 | 903 | 543 |
| Ammonium chloride .. | 1,055 | 932 | 1,044 | 1,360 | 1,264 | 1,498 |
| India (a)— | | | | | | |
| Potassium nitrate .. | 2 | — | 5 | — | — | — |
| Sodium nitrate .. | 9,398 | 15,545 | 14,718 | 2,652 | 6,991 | 9,086 |
| Ammonium sulphate .. | 445,983 | 826,596 | 983,123 | 865,755 | 1,280,100 | 553,560 |
| Ammonium nitrate .. | 1,032 | 863 | 33,201 | 129,748 | 78,133 | 57,511 |
| Ammonium phosphate | 35,632 | 46,636 | 128,902 | 459,136 | 353,524 | 126,906 |
| Ammonium chloride .. | 2 | 2,977 | 6,957 | 46,298 | 46,835 | — |
| Other nitrogen fertilizers | 6,553 | 22,856 | 65,301 | 174,320 | 78,136 | 51,303 |
| Malaysia (West)— | | | | | | |
| Nitrogen fertilizers .. | n.a. | 139,140 | 152,759 | 120,642 | 56,855 | 43,824 |
| Anhydrous ammonia .. | n.a. | 6,197 | 6,588 | 6,271 | 2,095 | n.a. |
| Sabah— | | | | | | |
| Nitrogen fertilizers .. | 1,979 | 2,076 | 1,236 | 2,339 | 325 | 1,661 |
| Sarawak— | | | | | | |
| Ammonium sulphate .. | n.a. | 7,069 | 5,731 | 5,717 | 4,246 | n.a. |
| Other nitrogen fertilizers | 6,680 | | | | | |
| Australia (b)— | | | | | | |
| Potassium nitrate .. | 403 | 470 | 422 | 1,602 | 603 | 368 |
| Sodium nitrate .. | 8,939 | 7,215 | 6,506 | 4,938 | 9,041 | 5,845 |
| Sodium and potassium nitrate .. | 1,500 | 4,499 | 1,120 | 95 | 213 | 192 |
| Ammonium chloride .. | 1,517 | 2,039 | 1,475 | 1,723 | 1,684 | 4,038 |
| Ammonium sulphate .. | 117,593 | 71,406 | 52,558 | 75,013 | 113,231 | 69,650 |
| Ammonium nitrate .. | | | | | | |
| Cal. ammonium nitrate | 9,054 | 7,845 | 13,003 | 13,817 | 15,286 | 19,473 |
| Other nitrogen fertilizers | n.a. | n.a. | 1,055 | 2,444 | 1,393 | 681 |
| Fiji— | | | | | | |
| Nitrogen fertilizers .. | 29,014 | 28,518 | 18,105 | 19,728 | 26,391 | 22,497 |
| New Zealand (b)— | | | | | | |
| Potassium nitrate .. | 166 | 184 | 185 | 517 | 230 | n.a. |
| Sodium nitrate .. | 121 | 3,790 | 3,923 | 2,600 | 735 | 1,060 |
| Calcium nitrate .. | 644 | 1,362 | 1,393 | 1,853 | 877 | n.a. |
| Ammonium sulphate .. | 6,745 | 13,723 | 12,557 | 12,834 | 10,487 | 18,763 |
| Ammonium nitrate .. | 1,025 | 771 | 1,886 | 996 | 1,572 | n.a. |
| Other nitrogen fertilizers | 6,752 | 4,051 | 4,641 | 7,279 | 5,449 | n.a. |
| Anhydrous ammonia .. | 92 | 147 | 127 | 128 | 223 | n.a. |
| Cyanamide .. | 376 | 267 | 5 | 5 | 4 | n.a. |
| Irish Republic— | | | | | | |
| Sodium nitrate .. | 2,166 | 973 | 917 | 736 | 724 | 630 |
| Ammonium sulphate .. | 120,327 | 81,960 | 13,589 | 23,005 | 13,378 | 138 |
| Anhydrous ammonia .. | 133 | 14,398 | 3,843 | 15,054 | 31,205 | 38,364 |
| Ammonium nitrate .. | 28,996 | 27,407 | 8,363 | 10,785 | 30,879 | 10,681 |
| Other nitrogen fertilizers | 8,879 | 4,714 | 3,164 | 939 | 542 | 623 |

(a) Years ended March 31 following that stated.

(b) Years ended June 30 of that stated.

IMPORTS OF NITROGEN COMPOUNDS (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|---------|---------|------------|-----------|-----------|------------|
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Calcium nitrate .. | 807 | 610 | 440 | 383 | 487 | 304 |
| Potassium nitrate .. | 385 | 507 | 547 | 487 | 499 | 640 |
| Cyanamide .. | 2,211 | 1,775 | 1,629 | 1,677 | 2,497 | 3,864 |
| Anhydrous ammonia .. | 4 | 3,097 | 4,979 | 9,383 | 4,344 | 7,889 |
| Belgium-Luxembourg | | | | | | |
| E.U.— | | | | | | |
| Potassium nitrate .. | 2,809 | 2,607 | 2,519 | 2,614 | 2,433 | 1,873 |
| Sodium nitrate .. | 33,514 | 17,913 | 29,152 | 17,913 | 22,739 | 23,110 |
| Calcium nitrate .. | 8,890 | 9,571 | (a) 1,090 | (a) 2,156 | (a) 2,636 | (a) 3,129 |
| Cyanamide .. | 501 | 2,082 | (a) 992 | (a) 95 | (a) 163 | (a) 162 |
| Ammonium sulphate .. | 15,729 | 22,603 | (a) 6,569 | (a) 6,260 | (a) 5,484 | (a) 4,170 |
| Ammonium chloride .. | 2,567 | 2,449 | 3,131 | 2,720 | 3,000 | 3,340 |
| Ammonium nitrate .. | 82,477 | 108,210 | (a) 10,097 | (a) 2,993 | (a) 6,771 | (a) 13,960 |
| Anhydrous ammonia .. | 1,759 | 5,241 | 13,892 | 52,882 | 203,234 | 273,043 |
| Bulgaria— | | | | | | |
| Nitrogen fertilizers .. | 5,400 | 100 | 62,694 | n.a. | n.a. | n.a. |
| Czechoslovakia— | | | | | | |
| Nitrogen fertilizers (a) | 49,000 | 49,000 | 40,000 | 52,000 | 84,000 | 84,000 |
| Denmark— | | | | | | |
| Potassium nitrate .. | 1,335 | 1,295 | 1,314 | 1,477 | 1,410 | 1,399 |
| Sodium nitrate .. | 37,275 | 32,067 | 18,258 | 13,940 | 7,699 | 22,412 |
| Calcium nitrate .. | 580,497 | 539,356 | 424,969 | 292,569 | 258,974 | 193,524 |
| Ammonium sulphate .. | 9,689 | 7,047 | 6,212 | 4,631 | 4,366 | 5,387 |
| Ammonium chloride .. | 954 | 1,215 | 1,453 | 1,262 | 1,461 | 1,453 |
| Ammonium nitrates .. | 58,368 | 44,449 | 11,988 | 20,821 | 26,757 | 9,125 |
| Cyanamide .. | 141 | 116 | 59 | 54 | 136 | 120 |
| Finland— | | | | | | |
| Potassium nitrate .. | 528 | 552 | 461 | 278 | 926 | 551 |
| Sodium nitrate .. | 2,244 | 360 | 643 | 476 | 531 | 615 |
| Calcium nitrate .. | 86,283 | 65,344 | 52,117 | 43,514 | 42,914 | 40,102 |
| Ammonium nitrate .. | 7,508 | 31,053 | 5,035 | 4,446 | 4,082 | 4,499 |
| Ammonium sulphate .. | 38,158 | 50,364 | 62,431 | 27,800 | 20,541 | 12,597 |
| Ammonium chloride .. | 1,153 | 1,517 | 1,055 | 1,318 | 602 | 584 |
| France— | | | | | | |
| Sodium nitrate .. | 64,820 | 45,591 | 30,920 | 24,088 | 26,894 | 30,012 |
| Calcium nitrate .. | 660 | 1,419 | 594 | 1,374 | 3,942 | 6,983 |
| Ammonium sulphate .. | 49,008 | 38,465 | 50,306 | 34,118 | 40,192 | 45,621 |
| Ammonium nitrate .. | 8,329 | 3,335 | 4,226 | 8,450 | 3,424 | 8,878 |
| Ammonium chloride .. | 2,171 | 1,890 | 1,835 | 1,826 | 1,891 | 1,888 |
| Anhydrous ammonia .. | 39,959 | 41,759 | 51,642 | 60,586 | 147,851 | 170,903 |
| Cyanamide .. | 4,171 | 5,251 | 6,448 | 8,694 | 10,278 | 11,659 |
| Germany (Federal)— | | | | | | |
| Potassium nitrate .. | 2,202 | 3,019 | 4,577 | 4,235 | 4,387 | 3,860 |
| Sodium nitrate .. | 11,173 | 464 | 897 | 34 | 64 | 25 |
| Ammonium nitrates .. | 117,580 | 146,335 | 196,745 | 373,177 | 238,707 | 281,811 |
| Ammonium chloride .. | 860 | 1,504 | n.a. | n.a. | n.a. | 1,412 |
| Other nitrogen fertilizers | 791 | 9,213 | 35,865 | 8,918 | 4,975 | 5,903 |
| Greece— | | | | | | |
| Potassium nitrate .. | 104 | 167 | 79 | 91 | 124 | 101 |
| Sodium nitrate .. | 5,597 | 5,110 | 13,913 | 5,846 | 199 | 265 |
| Ammonium nitrate .. | 38,671 | 54,587 | 11,367 | 60,251 | 91,996 | 78,762 |
| Ammonium sulphate .. | 125,699 | 105,746 | 104,788 | 26,499 | 15,446 | 16,573 |
| Ammonium chloride .. | 171 | 123 | 212 | 247 | 271 | 356 |
| Lime ammonium nitrate | 64,034 | 30,435 | 28,186 | 19,557 | 21,693 | 18,083 |
| Other nitrogen fertilizers | | | | | | |
| Anhydrous ammonia .. | 1,759 | 5,600 | 5,856 | 14,871 | 10,455 | 8,055 |
| Hungary— | | | | | | |
| Nitrogen fertilizers .. | 475,095 | 310,000 | 265,000 | 209,636 | 495,056 | 504,094 |

(a) N content.

IMPORTS OF NITROGEN COMPOUNDS (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------------|---------|---------|---------|---------|---------|---------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Iceland— | | | | | | |
| Calcium nitrate | 5 | 1 | — | — | — | — |
| Lime ammonium nitrate | 10,266 | 11,303 | 6,842 | 1,777 | 3,598 | 3,706 |
| Nitrophoska | 4,486 | — | — | — | — | — |
| Italy— | | | | | | |
| Potassium nitrate .. | 2,081 | 1,501 | 1,523 | 1,744 | 1,846 | 2,322 |
| Sodium nitrate .. | 140 | 85 | 1,365 | 23,576 | 234 | 104 |
| Ammonium chloride .. | 1,398 | 1,059 | 1,005 | 1,567 | 1,610 | 1,969 |
| Ammonium nitrate .. | 2,616 | 1,743 | 2,535 | 3,201 | 5,134 | 12,685 |
| Ammonium sulphate .. | 112 | 115 | 219 | 1,423 | 1,033 | 861 |
| Cyanamide | — | — | — | 674 | 3,898 | 4,144 |
| Netherlands— | | | | | | |
| Potassium nitrate .. | 2,914 | 3,146 | 3,282 | 3,680 | 3,339 | 4,415 |
| Sodium nitrate .. | 19,711 | 32,075 | 30,753 | 54,859 | 7,704 | 32,860 |
| Calcium nitrate .. | 1 | 1 | — | — | 37 | 13 |
| Ammonium sulphate .. | 455 | 650 | 230 | 136 | 121 | 302 |
| Ammonium chloride .. | 1,779 | 2,043 | 1,797 | 2,143 | 2,418 | 2,645 |
| Ammonium nitrate .. | 379 | 303 | 198 | 897 | 998 | 2,365 |
| Lime ammonium nitrate | 2,273 | 4,855 | 636 | 563 | 423 | 362 |
| Cyanamide | | | | | | |
| Anhydrous ammonia .. | 19,021 | 27,078 | 3,436 | 1,794 | 48,990 | 200,210 |
| Other nitrogen fertilizers | 35 | 681 | 1,835 | 309 | 140 | 181 |
| Norway— | | | | | | |
| Potassium nitrate .. | 164 | 240 | 234 | 663 | 136 | 213 |
| Ammonium chloride .. | 416 | 467 | 554 | 448 | 495 | 581 |
| Ammonium sulphate .. | 407 | 407 | 466 | 260 | 571 | 449 |
| Anhydrous ammonia .. | 36,801 | 20,325 | 24,098 | 5,413 | 66,784 | 65,022 |
| Poland— | | | | | | |
| Nitrogen fertilizers .. | 50,200 | 280,000 | 86,000 | 67,000 | 51,000 | n.a. |
| Portugal— | | | | | | |
| Potassium nitrate .. | 286 | 430 | 459 | 394 | 427 | 436 |
| Sodium nitrate .. | 3,100 | 604 | 524 | 3,967 | 3,583 | 4,043 |
| Calcium nitrate .. | — | — | — | 475 | 260 | 169 |
| Ammonium sulphate .. | 24 | 4,472 | 50 | 68 | 83 | 117 |
| Ammonium chloride .. | 153 | 143 | 173 | 176 | 298 | 326 |
| Ammonium nitrate .. | 10 | 10 | 49 | 39 | 252 | 668 |
| Cyanamide | — | 1,947 | — | — | — | — |
| Nitrophoska | 8,326 | n.a. | n.a. | n.a. | n.a. | 1,609 |
| Anhydrous ammonia .. | — | 1,982 | — | 6 | 8,403 | 3,947 |
| Roumania— | | | | | | |
| Nitrogen fertilizers (a) | 1,900 | — | 100 | 295 | 1,772 | n.a. |
| Spain— | | | | | | |
| Sodium nitrate .. | 123,170 | 120,295 | 118,715 | 70,677 | 60,098 | 74,668 |
| Ammonium sulphate .. | 519,116 | 469,619 | 193,778 | 100,402 | 106,439 | 80,409 |
| Calcium nitrate .. | 143,124 | 126,056 | 149,497 | 55,891 | 101,987 | 81,383 |
| Other nitrogen fertilizers | 40,637 | 61,110 | 33,876 | 7,595 | 41,987 | 112,910 |
| Anhydrous ammonia .. | 1,627 | 5,405 | 14,892 | 3,739 | 1,993 | 36,352 |
| Sweden— | | | | | | |
| Potassium nitrate .. | 1,122 | 1,206 | 1,636 | 1,213 | 1,441 | 1,580 |
| Sodium nitrate .. | 31,160 | 33,523 | 27,361 | 23,054 | 27,343 | 28,181 |
| Calcium nitrate .. | 376,481 | 403,984 | 457,808 | 384,212 | 480,933 | 491,966 |
| Ammonium nitrate .. | 325 | 357 | 22 | — | 1,247 | 1,918 |
| Ammonium sulphate .. | 14,233 | 7,828 | 4,224 | 487 | 656 | 508 |
| Ammonium chloride .. | 1,265 | 1,521 | 1,191 | 1,491 | 1,391 | 1,390 |
| Switzerland— | | | | | | |
| Potassium and sodium nitrates | 925 | 944 | 1,093 | 1,122 | 2,771 | 1,235 |
| Ammonium sulphate, etc. | 683 | 827 | 827 | 903 | 1,237 | 887 |
| Ammonium chloride .. | 993 | 1,080 | 832 | 970 | 1,140 | 1,193 |
| Ammonium and calcium nitrates .. | 264 | 176 | 446 | 3,022 | 1,200 | 1,774 |

(a) N content.

IMPORTS OF NITROGEN COMPOUNDS (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|---------|---------|---------|---------|---------|---------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Yugoslavia— | | | | | | |
| Sodium nitrate .. | 28,276 | 4,529 | 1,350 | 725 | 1,160 | 1,603 |
| Ammonium sulphate .. | 97,250 | 101,813 | 134,346 | 110,590 | 150,214 | 118,805 |
| Ammonium nitrate .. | 9,428 | 1,798 | 497 | 3,465 | 922 | 11,315 |
| Lime ammonium nitrate | 327,259 | 129,848 | 251,618 | 271,365 | 185,256 | 157,676 |
| Anhydrous ammonia .. | n.a. | 1 | 220 | 295 | 4,021 | 45,504 |
| Other nitrogen fertilizers | 28,009 | 1,798 | n.a. | 3,789 | 9,412 | 315 |
| Angola— | | | | | | |
| Sodium nitrate .. | 273 | 35 | 190 | 375 | 30 | 48 |
| Ammonium nitrate .. | 1,284 | 816 | 1,257 | 929 | 482 | 302 |
| Ammonium sulphate .. | 6,309 | 8,666 | 9,888 | 9,514 | 8,516 | 12,909 |
| Cameroun— | | | | | | |
| Nitrogen fertilizers .. | 32,859 | 22,037 | n.a. | n.a. | n.a. | n.a. |
| Canary Islands— | | | | | | |
| Ammonium sulphate .. | 62,396 | 55,495 | 43,432 | 45,579 | 66,362 | 52,782 |
| Calcium nitrate .. | 1,034 | 747 | 936 | 767 | 1,140 | 264 |
| Other nitrogen fertilizers | 3,246 | 2,117 | 6,784 | 4,852 | 5,954 | 7,189 |
| Central African Republic | 803 | 1,937 | 436 | 2,122 | 1,049 | 944 |
| Congo, Republic of .. | 1,141 | 1,059 | 1,265 | 46 | 1,594 | 4,073 |
| Egypt— | | | | | | |
| Sodium nitrate .. | 139 | 71 | n.a. | n.a. | n.a. | n.a. |
| Ammonium sulphate .. | 267,793 | 387,378 | 416,170 | 106,135 | n.a. | n.a. |
| Ammonium nitrate .. | 32,173 | 51,446 | 9,844 | 27,050 | n.a. | n.a. |
| Ammonium sulpho- nitrate .. | 26,083 | 10,779 | n.a. | n.a. | n.a. | n.a. |
| Other nitrogen fertilizers | 78,275 | 98,515 | 82,773 | 28,785 | n.a. | n.a. |
| Malagasy Republic— | | | | | | |
| Nitrogen fertilizers .. | 1,803 | 1,776 | 2,862 | 3,675 | 4,859 | 5,815 |
| Morocco— | | | | | | |
| Potassium nitrate .. | 254 | 216 | 172 | 328 | 506 | 445 |
| Sodium nitrate .. | 133 | 71 | 222 | 215 | 265 | 328 |
| Calcium nitrate .. | 458 | 220 | 253 | 49 | 146 | 147 |
| Ammonium nitrate .. | 3,626 | 6,861 | 18,649 | 13,581 | 23,741 | 23,574 |
| Ammonium sulphate .. | 31,378 | 29,359 | 42,522 | 50,088 | 76,704 | 57,271 |
| Other nitrogen fertilizers | 11,192 | 9,296 | 1,983 | 11,364 | 8,712 | 13,478 |
| Reunion— | | | | | | |
| Nitrogen fertilizers .. | 10,688 | 10,147 | 4,912 | 5,702 | 5,293 | 4,299 |
| South Africa— | | | | | | |
| Sodium nitrate .. | n.a. | n.a. | 1,043 | 945 | 1,430 | 1,559 |
| Ammonium sulphate .. | 131,247 | 42,197 | 24,326 | 10,339 | 5,480 | 3,159 |
| Ammonium chloride .. | 820 | 1,636 | 1,783 | 2,829 | 2,356 | 3,832 |
| Ammonium nitrate .. | 738 | 3,044 | 993 | 17,140 | n.a. | n.a. |
| Sudan— | | | | | | |
| Sodium, calcium and ammonium nitrates (synthetic) .. | 25,484 | 59,815 | 30,573 | 12,167 | 7,301 | 551 |
| Other nitrogen fertilizers | | | | | | |
| Tunisia— | | | | | | |
| Nitrogen fertilizers .. | 24,613 | 16,253 | 19,814 | 21,165 | 27,905 | 41,873 |
| Costa Rica— | | | | | | |
| Nitrogen fertilizers .. | 11,948 | 82,496 | 29,245 | 28,059 | 55,556 | 66,787 |
| Cuba— | | | | | | |
| Ammonium nitrate .. | 71,617 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Ammonium sulphate .. | 165,895 | n.a. | n.a. | n.a. | n.a. | n.a. |
| French West Indies— | | | | | | |
| Guadeloupe— | | | | | | |
| Nitrogen fertilizers .. | 2,248 | 2,887 | 2,059 | 1,484 | 2,425 | 1,564 |
| Martinique— | | | | | | |
| Nitrogen fertilizers .. | 7,605 | 6,648 | 7,157 | 6,736 | 5,876 | 4,461 |
| Guatemala— | | | | | | |
| Sodium nitrate .. | 153 | 60 | 1 | 148 | 181 | 100 |
| Other nitrogen fertilizers | 16,907 | 33,087 | 31,191 | 24,469 | 29,298 | 33,642 |

IMPORTS OF NITROGEN COMPOUNDS (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|---------|---------|-----------|-----------|---------|----------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Honduras— | | | | | | |
| Nitrogen fertilizers .. | 14,565 | 20,728 | 15,647 | 19,326 | 25,028 | n.a. |
| Mexico— | | | | | | |
| Sodium nitrate .. | 356 | 13,183 | 14,415 | 15,004 | 17,283 | n.a. |
| Ammonium chloride .. | 1 | 332 | 45 | 249 | 1 | n.a. |
| Ammonium sulphate .. | 8,264 | 69,039 | 55,637 | 69,386 | 84,693 | n.a. |
| Ammonium nitrate .. | 18,834 | 41,870 | 24,387 | 4,194 | 15,204 | n.a. |
| Anhydrous ammonia .. | 73,150 | 102,383 | 126,228 | 189,718 | 173,484 | n.a. |
| Nicaragua— | | | | | | |
| Sodium nitrate .. | 423 | 124 | — | — | — | } 12,002 |
| Other nitrogen fertilizers | 3,831 | 27,163 | 18,562 | 25,681 | 44,116 | |
| Panama Republic— | | | | | | |
| Nitrogen fertilizers .. | 19,007 | 22,691 | r 12,395 | r 15,606 | 17,784 | n.a. |
| Salvador— | | | | | | |
| Sodium nitrate .. | 267 | 12 | 248 | — | 198 | — |
| Other nitrogen fertilizers | 100,810 | 73,646 | 56,936 | 69,731 | 92,278 | 98,660 |
| United States— | | | | | | |
| Potassium and sodium nitrates, crude .. | 12,052 | 6,615 | r 35,803 | r 40,022 | 25,403 | 32,665 |
| Potassium nitrate .. | 2,824 | 4,377 | 24,617 | 13,799 | 14,287 | 10,102 |
| Sodium nitrate .. | 324,300 | 349,949 | 286,841 | 194,693 | 183,285 | 164,729 |
| Calcium nitrate .. | 48,875 | 29,643 | 34,131 | 28,795 | 37,360 | 44,378 |
| Ammonium sulphate .. | 185,682 | 161,490 | r 142,735 | r 149,963 | 116,800 | 124,600 |
| Ammonium chloride .. | n.a. | 2,916 | r 4,096 | r 3,833 | 3,973 | 3,406 |
| Ammonium nitrate .. | 212,552 | 159,796 | r 138,377 | r 158,266 | 202,600 | 208,464 |
| Ammonium phosphates | 85,845 | 155,768 | r 159,704 | 189,081 | 220,554 | 244,078 |
| Cyanamide .. | 21,428 | 16,713 | 16,904 | 15,874 | 15,444 | 12,889 |
| Argentina— | | | | | | |
| Potassium nitrate .. | — | — | 97 | 57 | 6 | 10 |
| Sodium nitrate .. | 10,667 | 10,590 | 8,935 | 10,118 | 8,891 | 10,472 |
| Ammonium sulphate .. | 38,110 | 45,081 | 2,172 | 29,988 | 12,646 | 19,887 |
| Ammonium chloride .. | 2,576 | 1,589 | 1,516 | 1,954 | 2,567 | 2,453 |
| Brazil— | | | | | | |
| Potassium nitrate .. | 750 | 894 | 739 | 442 | 353 | n.a. |
| Sodium nitrate .. | 25,304 | 30,628 | 27,649 | 26,737 | 24,965 | n.a. |
| Potassium and sodium nitrates .. | 7,171 | 21,296 | 18,411 | 9,562 | 6,240 | n.a. |
| Ammonium chloride .. | 2,078 | 1,104 | 2,540 | 2,586 | 3,315 | n.a. |
| Ammonium nitrate .. | 7,577 | 100 | — | 148 | — | n.a. |
| Ammonium sulphate .. | 141,295 | 206,667 | 234,346 | 298,590 | 412,243 | n.a. |
| Cyanamide .. | 90 | 41 | 104 | 59 | 197 | n.a. |
| Other nitrogen fertilizers | 9,483 | 4,294 | 9,999 | 10,870 | 13,519 | n.a. |
| Chile— | | | | | | |
| Ammonium chloride .. | 587 | 57 | n.a. | 636 | n.a. | n.a. |
| Ammonium sulphate .. | 475 | 525 | n.a. | 408 | n.a. | n.a. |
| Ammonium nitrate .. | 20,212 | 20,029 | n.a. | 15,176 | n.a. | n.a. |
| Anhydrous ammonia .. | 131 | 93 | n.a. | 116 | n.a. | n.a. |
| Colombia— | | | | | | |
| Potassium nitrate .. | 196 | 87 | 498 | 208 | 192 | n.a. |
| Sodium nitrate .. | 20 | 20 | 10 | 133 | 172 | n.a. |
| Ammonium chloride .. | 606 | 229 | 375 | 37 | 312 | n.a. |
| Ammonium sulphate .. | 491 | — | 4,020 | 1,865 | 4,824 | n.a. |
| Other nitrogen fertilizers | 6,745 | 203 | 2,076 | 711 | 2,172 | n.a. |
| Anhydrous ammonia .. | 2 | 5 | 5 | 16 | 7 | n.a. |
| Ecuador— | | | | | | |
| Nitrogen fertilizers .. | 8,857 | 11,633 | 9,062 | 5,353 | n.a. | n.a. |
| Peru— | | | | | | |
| Potassium nitrate .. | 95 | 156 | 141 | 200 | 163 | n.a. |
| Sodium nitrate .. | 6,508 | 5,430 | 2,416 | 2,544 | 1,765 | n.a. |
| Anhydrous ammonia .. | 65 | 16 | 28 | 4 | 93 | n.a. |
| Other nitrogen fertilizers | 85,678 | 109,833 | 34,830 | 92,069 | 24,095 | n.a. |
| Uruguay— | | | | | | |
| Potassium nitrate .. | n.a. | 7 | 11 | 31 | 15 | 5 |
| Sodium nitrate .. | n.a. | 19 | 510 | 216 | 98 | 260 |
| Ammonium sulphate .. | n.a. | 5,303 | 8,351 | 1,563 | 3,887 | 1,397 |

IMPORTS OF NITROGEN COMPOUNDS (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|---------|---------|---------|---------|---------|---------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Venezuela— | | | | | | |
| Potassium nitrate .. | 177 | 140 | 414 | 3,562 | 1,961 | 1,800 |
| Sodium nitrate .. | 215 | 184 | 182 | 327 | 167 | 312 |
| Calcium nitrate .. | — | 3 | — | — | — | 2,070 |
| Ammonium sulphate .. | 2,267 | — | 10,000 | 27,512 | 11,953 | 15,439 |
| Anhydrous ammonia .. | 716 | 148 | — | 2 | 6,866 | 12,600 |
| Cyanamide .. | 49 | — | — | — | — | — |
| Burma— | | | | | | |
| Nitrogen fertilizers .. | 13,911 | 8,934 | 14,517 | 15,943 | 61,734 | n.a. |
| Formosa— | | | | | | |
| Sodium nitrate .. | 707 | 1,245 | 1,241 | 1,231 | 1,516 | 1,813 |
| Ammonium chloride .. | 400 | 589 | 741 | 853 | 1,312 | 1,151 |
| Ammonium sulphate .. | 171,009 | 108,988 | 22,981 | 169,219 | 62,990 | 195,976 |
| Other nitrogen fertilizers | 75,341 | 71,394 | 45,668 | n.a. | n.a. | n.a. |
| Iran (a)— | | | | | | |
| Ammonium chloride .. | 258 | 105 | 286 | 293 | 490 | n.a. |
| Nitrogen fertilizers .. | 4,706 | 7,987 | 7,173 | 6,870 | 20,157 | n.a. |
| Iraq— | | | | | | |
| Nitrogen fertilizers .. | 9,117 | n.a. | 11,644 | 25,074 | 40,000 | 50,146 |
| Israel— | | | | | | |
| Nitrogen fertilizers .. | 2,116 | 2,517 | 1,932 | 1,749 | n.a. | 3,847 |
| Japan— | | | | | | |
| Sodium nitrate .. | 20,408 | 22,243 | 21,659 | 26,896 | 24,283 | 25,379 |
| Jordan— | | | | | | |
| Nitrogen fertilizers .. | 2,523 | 3,617 | 6,840 | 8,965 | 4,162 | 3,813 |
| Korea (South)— | | | | | | |
| Ammonium sulphate .. | 204,738 | 339,828 | 79,732 | 100,593 | 263,927 | 78,480 |
| Ammonium nitrate .. | 1,968 | 2,693 | 4,114 | 6,163 | n.a. | n.a. |
| Other nitrogen fertilizers | 144,791 | 51,833 | 112,521 | 35,695 | 17,705 | 23,499 |
| Lebanon— | | | | | | |
| Nitrogen fertilizers .. | 52,744 | 50,005 | 59,334 | 21,312 | 33,840 | 23,095 |
| Philippine Republic— | | | | | | |
| Potassium nitrate .. | 218 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Sodium nitrate .. | 289 | 69 | n.a. | n.a. | n.a. | n.a. |
| Ammonium phosphate .. | 15,966 | 27,711 | n.a. | 4,432 | n.a. | n.a. |
| Ammonium sulphate .. | 85,553 | 95,943 | n.a. | 94,570 | n.a. | n.a. |
| Other nitrogen fertilizers | 60,380 | 27,818 | n.a. | 66,517 | n.a. | n.a. |
| Syria— | | | | | | |
| Nitrogen fertilizers .. | 18,192 | 44,405 | 59,066 | 34,009 | 83,362 | 61,355 |
| Thailand— | | | | | | |
| Potassium nitrate .. | 855 | 866 | 1,198 | 976 | 1,334 | 1,315 |
| Ammonium chloride .. | 2,016 | 1,998 | 1,991 | 2,319 | 2,153 | 2,365 |
| Ammonium sulphate .. | 32,311 | 26,525 | 39,181 | 40,923 | 26,749 | 2,767 |
| Other nitrogen fertilizers | 1,735 | 2,163 | 1,949 | 1,023 | 3,032 | 3,521 |
| Turkey— | | | | | | |
| Potassium nitrate .. | 211 | 267 | 587 | 322 | 316 | 167 |
| Sodium nitrate .. | 1,688 | 4,144 | 1,868 | 7,503 | 12,697 | 2,226 |
| Ammonium chloride .. | 511 | 584 | 646 | 844 | 776 | 1,096 |
| Ammonium sulphate .. | 31,979 | 129,711 | 259,482 | 294,335 | 296,133 | 372,145 |
| Ammonium nitrate .. | 146 | 9,957 | 48,026 | 32,018 | 130,934 | 146,661 |
| Calcium nitrate .. | n.a. | — | — | 11,744 | 42,449 | 11,600 |

PETROLEUM AND ALLIED PRODUCTS
PRODUCTION OF CRUDE PETROLEUM*

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|-------------------|-------------------|--------------------|--------------------|--------------------|--------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Crude petroleum .. | 127,400 | 82,400 | 76,800 | 87,400 | 79,900 | 76,000 |
| Nigeria (b) .. | 6,027,000 | 13,564,000 | 20,881,000 | 15,962,000 | 6,900,000 | 25,600,000 |
| Canada (b) .. | 36,612,711 | 39,437,267 | 42,856,000 | 46,838,978 | 50,586,170 | 54,333,157 |
| Trinidad (b) .. | 7,103,495 | 6,979,848 | 7,943,355 | 9,284,320 | 8,557,000 | 8,204,000 |
| Abu Dhabi (c) .. | 5,928,853 | 9,010,743 | 12,053,582 | 12,165,510 | 14,917,600 | 16,814,871 |
| Bahrain Islands (c) .. | 2,402,000 | 2,789,000 | 3,021,000 | 3,396,000 | 3,696,000 | 3,719,000 |
| Brunei .. | 3,488,000 | 3,874,000 | 4,619,000 | 5,095,000 | 5,884,000 | 6,005,000 |
| India .. | 2,177,240 | 2,980,000 | 4,570,000 | 5,577,000 | 5,761,000 | 6,616,000 |
| Pakistan (b) .. | 504,400 | 520,000 | 500,000 | 425,000 | 480,000 | 470,000 |
| Qatar (c) .. | 8,802,292 | 9,013,660 | 8,915,387 | 9,069,839 | 9,018,000 | (d)9,500,000 |
| Sarawak .. | 48,243 | 48,125 | 47,336 | 45,104 | 200,187 | 439,888 |
| Australia .. | 274,258 | 329,041 | 425,437 | 978,077 | 1,790,500 | 2,257,857 |
| New Zealand .. | 581 | 616 | 521 | 360 | 322 | 430 |
| TOTAL .. | 73,496,000 | 88,629,000 | 105,909,000 | 109,422,000 | 109,396,000 | 134,036,000 |
| OTHER COUNTRIES | | | | | | |
| Albania .. | 751,661 | 805,000 | 861,000 | 1,070,000 | 1,134,900 | <i>n.a.</i> |
| Austria .. | 2,620,829 | 2,809,460 | 2,713,568 | 2,642,506 | 2,770,000 | 2,714,700 |
| Bulgaria .. | 157,000 | 225,000 | 398,000 | 491,000 | 467,000 | 520,000 |
| Czechoslovakia .. | 192,000 | 189,000 | 187,000 | 200,000 | 180,000 | 200,000 |
| France .. | 2,792,152 | 2,930,890 | 2,879,131 | 2,781,172 | 2,645,220 | 2,456,579 |
| Germany (Federal)— | | | | | | |
| Crude petroleum .. | 7,551,440 | 7,759,378 | 7,743,949 | 7,801,994 | 7,856,069 | 7,751,341 |
| Hungary .. | 1,772,522 | 1,775,000 | 1,679,000 | 1,659,000 | 1,778,000 | 1,726,000 |
| Italy .. | 2,627,143 | 2,171,990 | 1,783,263 | 1,663,523 | 1,520,000 | 1,495,908 |
| Netherlands .. | 2,230,000 | 2,357,400 | 2,331,000 | 2,229,227 | 2,100,000 | 2,000,000 |
| Poland .. | 277,500 | 333,400 | 394,100 | 443,000 | 467,300 | 431,000 |
| Roumania .. | 12,199,000 | 12,372,000 | 12,622,000 | 12,997,000 | 13,075,000 | 13,037,000 |
| Sweden— | | | | | | |
| Shale oil .. | 79,763 | 56,465 | 26,574 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| U.S.S.R. .. | 220,072,000 | 239,052,000 | 260,938,000 | 283,451,000 | 305,000,000 | 350,000,000 |
| Yugoslavia .. | 1,770,194 | 2,030,497 | 2,187,075 | 2,336,506 | 2,455,000 | 2,656,000 |
| Algeria .. | 25,817,000 | 25,614,000 | 32,736,000 | 37,770,000 | 41,479,000 | 43,149,000 |
| Angola .. | 890,468 | 645,014 | 621,348 | 528,668 | 737,676 | 2,418,700 |
| Congo (Republic of) .. | 31,987 | 70,000 | 61,013 | 49,210 | 41,947 | 23,833 |
| Egypt .. | 6,251,000 | 6,379,000 | 6,165,000 | 5,626,000 | 7,900,000 | 11,000,000 |
| Gabon .. | 1,041,650 | 1,244,474 | 1,424,000 | 3,424,054 | 4,569,000 | 4,948,039 |
| Libya .. | 40,913,000 | 57,550,000 | 71,100,000 | 82,100,000 | 123,000,000 | 148,000,000 |
| Morocco .. | 117,877 | 101,265 | 101,344 | 95,626 | 87,238 | 57,635 |
| Cuba (b) (d) .. | 33,000 | 51,000 | 61,000 | 101,000 | 60,000 | 60,000 |
| Mexico (b) .. | 16,278,000 | 16,610,000 | 17,700,000 | 18,721,000 | 20,019,000 | 21,080,000 |
| United States (b) .. | 371,576,300 | 379,801,900 | 403,701,700 | 428,860,000 | 443,872,000 | 447,404,000 |
| Argentina (b) .. | 14,112,500 | 13,831,100 | 14,728,400 | 16,138,800 | 17,661,000 | 18,312,000 |
| Bolivia (b) .. | 381,700 | 404,800 | 738,453 | 1,780,000 | 1,864,000 | 1,805,000 |
| Brazil (b) .. | 4,268,000 | 4,400,000 | 5,438,000 | 6,856,000 | 7,700,000 | 9,000,000 |
| Chile .. | 1,756,000 | 1,630,000 | 1,594,000 | 1,583,000 | 1,760,000 | 1,907,000 |
| Colombia (b) .. | 8,816,324 | 10,312,856 | 10,129,089 | 9,941,128 | 8,934,444 | 10,845,070 |
| Ecuador (b) .. | 372,810 | 379,835 | 345,100 | 293,108 | 229,000 | 214,349 |
| Peru .. | 3,131,000 | 3,032,000 | 3,026,000 | 3,094,000 | 3,555,000 | 3,272,000 |
| Venezuela .. | 175,415,532 | 179,528,577 | 173,631,463 | 182,559,869 | 186,242,000 | 187,283,000 |
| Burma .. | 562,282 | 549,000 | 474,000 | 608,000 | 779,000 | 800,000 |

*Excluding Natural Gasoline. See page 241.

(a) Years ended June 30 of that stated.

(b) The following conversion rates have been used: 35 gallons=1 barrel, and the undermentioned barrels=1 ton—Nigeria 7·3, Canada 7·5, Trinidad 7·0, Burma 7·4, Pakistan 7·4, Cuba 6·8, Mexico 7·1, United States 7·5, Argentina 7·1, Bolivia 8·2, Brazil 7·8, Columbia 7·1, Ecuador 7·5, Venezuela 7·1, Indonesia 7·5.

(c) British Protected State.

(d) Estimated.

PRODUCTION OF CRUDE PETROLEUM (cont.)

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| China (a) | (d)6,000,000 | (d)8,000,000 | (d)8,500,000 | (d)7,500,000 | (d)8,500,000 | (d)9,000,000 |
| Formosa | 8,040 | 17,295 | 29,805 | 32,357 | 55,580 | 76,700 |
| Indonesia | 23,257,000 | 24,247,000 | 23,359,000 | 25,498,000 | 30,118,000 | 37,000,000 |
| Iran (b) | 81,114,000 | 88,473,000 | 98,829,000 | 120,919,000 | 132,901,000 | 152,200,000 |
| Iraq | 60,350,313 | 63,150,413 | 66,679,542 | 58,938,981 | 72,620,000 | 73,309,000 |
| Israel | 202,713 | 206,905 | 184,000 | 138,000 | 117,000 | 102,000 |
| Japan | 642,096 | 660,000 | 765,000 | 771,000 | 780,364 | 717,000 |
| Kuwait | 105,033,846 | 107,322,975 | 112,500,000 | 113,355,644 | 120,162,473 | 127,502,203 |
| Mongolia | 18,000 | 16,000 | 12,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Saudi Arabia | 84,442,667 | 99,436,852 | 117,568,598 | 127,262,215 | 138,776,535 | 146,494,684 |
| Turkey | 906,864 | 1,510,000 | 2,008,884 | 2,685,033 | 3,055,400 | 3,568,813 |
| Neutral Zone (c) .. | 18,918,000 | 19,043,000 | 22,087,000 | 22,263,000 | 22,546,000 | 23,751,000 |
| TOTAL | 1,307,000,000 | 1,388,000,000 | 1,492,000,000 | 1,508,000,000 | 1,742,000,000 | 1,871,000,000 |
| WORLD'S TOTAL .. | 1,381,000,000 | 1,477,000,000 | 1,600,000,000 | 1,617,000,000 | 1,851,000,000 | 2,005,000,000 |

(a) Including oil from shale and coal.

(b) 1954 Oil Agreement Area only.

(c) Neutral Zone of Kuwait and Saudi Arabia.

(d) Estimated.

PRODUCTION OF NATURAL GASOLINE

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Trinidad (a) | 22,696 | 22,361 | 21,359 | 21,818 | 19,000 | <i>n.a.</i> |
| Brunei | 65,000 | 56,000 | 55,000 | 57,000 | 55,000 | 50,500 |
| New Zealand | 405 | 23 | — | — | <i>n.a.</i> | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Austria | 2,000 | 2,000 | 2,000 | 1,000 | 2,000 | <i>n.a.</i> |
| France | 281,240 | 290,445 | 285,899 | 308,843 | 313,292 | <i>n.a.</i> |
| Germany (Federal) .. | 10,000 | 8,000 | 8,000 | 8,000 | 8,000 | <i>n.a.</i> |
| Italy | 62,126 | 67,000 | 90,745 | 105,115 | 118,000 | <i>n.a.</i> |
| Poland | 20,000 | 23,200 | 26,100 | 24,000 | 24,000 | <i>n.a.</i> |
| Roumania | 346,000 | 375,000 | 391,000 | 404,000 | 389,000 | <i>n.a.</i> |
| Yugoslavia | 10,000 | 15,000 | 17,000 | 18,000 | 22,200 | <i>n.a.</i> |
| Algeria | 254,000 | 547,000 | 600,000 | 676,000 | 732,000 | 915,000 |
| Egypt | 7,000 | 5,000 | 5,000 | 4,000 | 5,000 | <i>n.a.</i> |
| Mexico | 1,612,000 | 1,642,000 | 1,605,000 | 1,955,000 | 2,088,000 | <i>n.a.</i> |
| United States | 14,174,460 | 14,621,880 | 14,911,880 | 15,638,000 | 16,664,000 | 17,726,000 |
| Argentina | 11,000 | 13,000 | 13,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Chile | 59,000 | 55,000 | 58,000 | 56,000 | 58,000 | <i>n.a.</i> |
| Colombia | 51,000 | 45,000 | 55,000 | 60,000 | 57,000 | <i>n.a.</i> |
| Ecuador | 13,604 | 13,624 | 13,667 | 14,311 | 13,000 | 15,662 |
| Peru | 106,000 | 105,000 | 90,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Venezuela | 411,000 | 425,000 | 408,000 | 423,000 | 400,000 | <i>n.a.</i> |
| Japan | 26,153 | 4,000 | 3,000 | 3,000 | 4,000 | <i>n.a.</i> |
| WORLD'S TOTAL (b) | 18,000,000 | 19,000,000 | 19,000,000 | 20,000,000 | 21,000,000 | 22,000,000 |

(a) Incomplete, as about half the production is blended with crude petroleum at field storage.

(b) Totals refer only to those countries reported above.

PRODUCTION OF NATURAL GAS*

Million cubic feet

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|-------------|-------------|-------------|------------|-------------|--------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | 200 | 449 | 123 | 16,664 | 71,351 | 178,673 |
| Nigeria | 1,766 | 3,531 | 6,357 | 5,424 | 5,190 | <i>n.a.</i> |
| Canada | 1,407,098 | 1,445,354 | 1,341,833 | 1,471,598 | 1,692,301 | 1,979,309 |
| Barbados | 80 | 102 | 96 | 108 | 97 | 108 |
| Trinidad | 38,452 | 41,456 | 48,691 | 53,747 | 56,402 | 56,686 |
| Brunei | 6,297 | 7,450 | 7,100 | 8,899 | 8,474 | 123,267 |
| India | 6,427 | 11,477 | 13,172 | 16,457 | 21,330 | 25,744 |
| Pakistan | 59,102 | 66,000 | 76,000 | 83,288 | 91,525 | <i>n.a.</i> |
| Australia | 106 | 143 | 143 | 152 | 216 | 9,375 |
| New Zealand | 5 | 5 | 4 | 4 | 3 | 2 |
| OTHER COUNTRIES | | | | | | |
| Austria | 62,290 | 60,873 | 66,163 | 63,469 | 57,600 | 52,379 |
| Bulgaria | <i>n.a.</i> | <i>n.a.</i> | 3,846 | 11,605 | 17,876 | <i>n.a.</i> |
| Czechoslovakia | 33,000 | 30,100 | 33,300 | 31,900 | <i>n.a.</i> | <i>n.a.</i> |
| France | 280,354 | 279,768 | 285,899 | 302,011 | 307,238 | 345,377 |
| Germany (Federal) | 61,375 | 91,399 | 114,183 | 148,476 | 223,841 | 310,531 |
| Hungary | 27,702 | 39,130 | 54,810 | 72,219 | 95,032 | 114,243 |
| Italy | 271,376 | 275,540 | 311,652 | 330,330 | 367,590 | 422,828 |
| Netherlands | 29,500 | 61,600 | 123,400 | 246,900 | 496,400 | 771,700 |
| Poland | 43,470 | 48,660 | 48,590 | 55,440 | 90,300 | 138,575 |
| Roumania | 546,800 | 610,300 | 657,400 | 731,000 | 774,600 | 842,900 |
| U.S.S.R. | 3,834,000 | 4,508,500 | 5,048,700 | 5,593,800 | 6,000,000 | (a)6,000,000 |
| Yugoslavia | 9,675 | 11,655 | 14,208 | 16,280 | 20,624 | 25,784 |
| Algeria (Sahara) | 45,700 | 73,240 | 72,250 | 78,790 | 93,660 | 109,970 |
| Gabon | 334 | 376 | 406 | 611 | 883 | 742 |
| Morocco | 420 | 390 | 460 | 379 | 382 | 1,484 |
| Tunisia | 277 | 288 | 296 | 326 | 334 | 328 |
| Mexico | 485,050 | 493,300 | 529,300 | 571,674 | 576,759 | 608,119 |
| United States | 15,462,143 | 16,039,753 | 17,206,628 | 18,171,000 | 19,322,400 | 20,646,000 |
| Argentina | 132,642 | 149,169 | 161,459 | 169,087 | 188,580 | 188,157 |
| Brazil | 18,777 | 24,125 | 27,848 | 30,888 | 34,700 | 44,069 |
| Chile | 62,900 | 61,060 | 55,940 | 60,000 | 68,000 | 80,000 |
| Colombia | 26,900 | 32,000 | 35,990 | 40,640 | 41,500 | 47,250 |
| Peru | 37,100 | <i>n.a.</i> | <i>n.a.</i> | 56,904 | <i>n.a.</i> | <i>n.a.</i> |
| Venezuela | 180,206 | 227,709 | 237,868 | 265,233 | 272,800 | 281,810 |
| Formosa | 5,982 | 10,936 | 15,509 | 18,616 | 24,878 | 31,554 |
| Indonesia | 96,440 | 86,380 | 56,540 | 98,000 | 115,000 | <i>n.a.</i> |
| Iran | 42,100 | 43,400 | 51,000 | 51,000 | 54,600 | 98,300 |
| Israel | 1,041 | 2,559 | 3,371 | 3,860 | 5,001 | 4,980 |
| Japan | 65,641 | 62,862 | 64,510 | 66,735 | 72,620 | <i>n.a.</i> |
| Kuwait | 59,190 | 63,350 | 66,110 | 69,920 | (a) 87,000 | <i>n.a.</i> |

*So far as possible the figures represent only that part of the gas produced which is actually utilized.

NOTE.—Production and shipments of helium in the United States were as follows (million cubic feet)

Production: 1964—4,027; 1965—4,365; 1966—4,606; 1967—4,712; 1968—4,855; 1969—*n.a.*

Shipments from Bureau of Mines plants: 1964—667; 1965—699; 1966—809; 1967—607;

1968—478; 1969—*n.a.*

(a) Estimated.

PRODUCTION OF ASPHALT ROCK

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---------------------------|-----------|-------------|-------------|-------------|-------------|-------------|
| France | 102,549 | 114,761 | 126,632 | 125,495 | 112,297 | <i>n.a.</i> |
| Germany (Federal) | 120,054 | 100,178 | 85,757 | 80,318 | 74,152 | 68,380 |
| Italy | 340,816 | 264,129 | 287,691 | 302,089 | 274,952 | 209,517 |
| Angola | 43,645 | 22,513 | 29,444 | 26,600 | 30,100 | 38,664 |
| United States (a) | 1,289,500 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Indonesia | 5,231 | <i>n.a.</i> | 7,153 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |

(a) Shipments.

PRODUCTION OF NATURAL ASPHALT, ETC.

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------|-------------|-------------|---------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Trinidad | 193,304 | 166,588 | 157,226 | 142,444 | 136,041 | 122,495 |
| OTHER COUNTRIES | | | | | | |
| Spain | 9,500 | 13,119 | 18,755 | 18,960 | 17,712 | 18,759 |
| Argentina— | | | | | | |
| Grahamite ("Rafaelite") (a) | 1,052 | 348 | 829 | 681 | 555 | <i>n.a.</i> |
| Impsonite | 2,400 | 3,152 | 4,880 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Turkey | <i>n.a.</i> | <i>n.a.</i> | 10,672 | 11,186 | 25,441 | <i>n.a.</i> |

NOTE.—This table is incomplete owing to the fact that official statistics of production of natural asphalt are published by only a few countries.

(a) Exports.

PRODUCTION OF OIL-SHALE

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---------------------------|-----------|-----------|-----------|-------------|-------------|-------------|
| Austria | 44 | 571 | 315 | 589 | 394 | 502 |
| France | 3,359 | 4,119 | 2,544 | 3,000 | 4,000 | 4,000 |
| Germany (Federal) | 107,385 | 136,973 | 110,563 | 108,303 | 108,434 | 115,154 |
| Spain | 701,139 | 620,283 | 220,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sweden (a) | 3,536,385 | 1,880,165 | 2,242,370 | 715,398 | 714,866 | 435,966 |

NOTE.—Oil-shale is known to have been produced in U.S.S.R. and Manchuria.

(a) Alum shale. The amounts used as retort shale were as follows (long tons): 1964—3,174,128; 1965—1,419,707; 1966—1,476,310; 1967—*n.a.*; 1968—*n.a.*; 1969—*n.a.*

PRODUCTION OF PETROLEUM REFINERY PRODUCTS IN CERTAIN COUNTRIES*

Long tons

| Producing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | |
|------------------------------------|------------|------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | | |
| United Kingdom (a)— | | | | | | | |
| Aviation and motor spirit | 8,656,000 | 9,431,000 | 9,297,000 | 9,272,000 | 9,809,000 | 10,377,000 | |
| Other spirit | 163,000 | 152,000 | 172,000 | 154,000 | 247,000 | 195,000 | |
| Kerosine | 3,169,000 | 3,375,000 | 3,791,000 | 3,980,000 | 4,652,000 | 5,366,000 | |
| Gas oil and diesel oil .. | 11,993,000 | 13,423,000 | 14,663,000 | 14,005,000 | 16,874,000 | 19,170,000 | |
| Fuel oil | 22,810,000 | 25,873,000 | 28,668,000 | 30,282,000 | 33,718,000 | 37,661,000 | |
| Fuel used in refineries.. | 3,972,000 | 4,143,000 | 4,568,000 | 4,673,000 | 5,073,000 | 5,547,000 | |
| Lubricating oil .. . | 1,036,000 | 1,001,000 | 1,073,000 | 994,000 | 1,019,000 | 1,183,000 | |
| Bitumen | 1,458,000 | 1,422,000 | 1,577,000 | 1,722,000 | 1,726,000 | 1,695,000 | |
| Paraffin wax | 59,000 | 53,000 | 57,000 | 56,000 | 56,000 | 58,000 | |
| Ghana— | | | | | | | |
| Motor spirit | 141,436 | 128,049 | 121,158 | 136,484 | 137,489 | 175,830 | |
| Kerosine | 46,148 | 55,631 | 46,982 | 39,989 | 58,315 | 64,828 | |
| Gas oil | 260,561 | 261,983 | 198,101 | 201,952 | 196,485 | 239,344 | |
| Fuel oil | 255,616 | 250,335 | 252,388 | 264,608 | 266,877 | 416,819 | |
| Kenya— | | | | | | | |
| Motor spirit | 215,000 | 260,000 | 252,000 | 265,000 | 253,000 | 288,000 | |
| Kerosine | 115,000 | 180,000 | 172,000 | 214,000 | 202,000 | 267,000 | |
| Gas and diesel oil .. | 230,000 | 291,000 | 311,000 | 381,000 | 400,000 | <i>n.a.</i> | |
| Fuel oil | 629,000 | 676,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | |
| Asphalt | 11,000 | 28,000 | 36,000 | 49,000 | 40,000 | <i>n.a.</i> | |
| Barbados— | | | | | | | |
| Motor spirit | 3,076 | 7,022 | 11,271 | 19,816 | 25,933 | 28,154 | |
| Kerosine | 3,010 | 3,693 | 9,184 | 13,137 | 12,829 | 13,353 | |
| Gas oil | — | 592 | 2,923 | 3,979 | 2,776 | 2,834 | |
| Diesel oil | 9,228 | 11,819 | 22,748 | 29,591 | 29,201 | 42,546 | |
| Fuel oil | 14,547 | 17,446 | 19,000 | 20,565 | 21,698 | 24,673 | |
| Asphalt | 2,803 | 4,529 | 4,960 | 6,080 | 5,724 | 5,488 | |
| Canada (b)— | | | | | | | |
| Aviation spirit | 162,561 | 157,432 | 158,212 | 153,454 | 164,740 | <i>n.a.</i> | |
| Motor spirit | 13,929,830 | 14,574,753 | 15,588,628 | 16,120,783 | 16,981,395 | | |
| Naphtha | 245,726 | 275,491 | 282,788 | 290,769 | 286,002 | | |
| Kerosine | 2,334,603 | 2,362,426 | 2,303,135 | 2,360,522 | 2,340,912 | | |
| Aviation turbine fuel .. | 899,853 | 867,756 | 1,030,905 | 1,001,648 | 1,245,000 | | |
| Gas oil, etc. | 7,804,947 | 8,163,654 | 8,664,550 | 8,276,930 | 8,893,411 | | |
| Diesel oil | 4,943,335 | 5,337,146 | 5,982,641 | 6,103,025 | 6,609,122 | | |
| Fuel oil | 8,620,484 | 8,689,147 | 9,393,627 | 9,849,580 | 10,811,396 | | |
| Lubricating oil and grease | 243,422 | 240,662 | 229,877 | 273,783 | 309,916 | | |
| Coke | 169,205 | 196,141 | 185,330 | 211,401 | 204,516 | | |
| Asphalt | 1,691,706 | 1,796,629 | 1,947,483 | 1,996,847 | 2,025,421 | | |
| Jamaica— | | | | | | | |
| Motor spirit | 120,198 | 187,707 | 231,646 | 175,871 | 182,000 | | 241,000 |
| Kerosine and jet fuel .. | 68,398 | 127,819 | 139,405 | 96,802 | 125,000 | 170,000 | |
| Diesel oil | 170,082 | 248,978 | 265,849 | 197,819 | 206,700 | 941,000 | |
| Fuel oil | 555,685 | 666,471 | 641,868 | 487,557 | 580,000 | | |
| Asphalt | 3,624 | 16,110 | 28,529 | 18,118 | <i>n.a.</i> | | <i>n.a.</i> |
| Trinidad— | | | | | | | |
| Aviation spirit | 108,562 | 95,965 | 223,958 | 178,831 | 54,451 | 61,262 | |
| Motor spirit | 2,087,839 | 2,024,964 | 2,088,016 | 2,310,045 | 2,392,654 | 2,490,658 | |
| White spirit | 7,260 | 4,023 | 34,715 | 23,770 | 892 | 1,264 | |
| Kerosine | 302,046 | 390,790 | 407,068 | 464,512 | 468,232 | 320,011 | |
| Aviation turbine fuel .. | 1,201,118 | 1,808,290 | 1,719,014 | 1,483,213 | 1,941,371 | 1,922,455 | |
| Gas and diesel oil .. . | 2,692,921 | 2,664,524 | 2,764,360 | 2,668,836 | 2,509,363 | 2,255,757 | |
| Fuel oil | 10,967,287 | 11,606,922 | 12,255,514 | 11,542,084 | 12,387,013 | 12,874,834 | |

*This table refers to the more important products obtained and does not include in some cases items classified as "other products". It follows, therefore, that the sum of the products shown for a particular country does not necessarily represent the total refinery production.

(a) Including distillation plants.

(b) Including the amount used in the refineries.

PRODUCTION OF PETROLEUM REFINERY PRODUCTS IN CERTAIN COUNTRIES (cont.)

Long tons

| Producing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---------------------------------------|-------------|---------------|---------------|---------------|-----------|-----------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Trinidad (cont.)— | | | | | | |
| Lubricating oil and greases | 67,640 | 139,140 | 168,785 | 205,229 | 152,880 | 205,280 |
| Bitumen | | | | | | |
| Other products | 116,940 | 169,849 | 266,115 | 272,646 | n.a. | n.a. |
| Bahrain Islands (b)— | | | | | | |
| Motor spirit | 1,662,000 | 1,272,000 | 1,155,000 | 963,000 | 797,000 | 920,000 |
| Kerosine | 437,000 | 399,000 | 346,000 | 295,000 | 237,000 | 145,000 |
| Jet fuel | 823,000 | 1,055,000 | 1,182,000 | 1,671,000 | 1,904,000 | 1,754,000 |
| Gas oil and diesel oil | 2,081,000 | 1,683,000 | 1,683,000 | 1,761,000 | 1,802,000 | 2,191,000 |
| Fuel oil | 4,069,000 | 4,050,000 | 4,335,000 | 5,567,000 | 5,159,000 | 5,339,000 |
| Lubricating oil | 77,000 | 115,000 | 84,000 | 94,000 | 157,000 | 132,000 |
| Bitumen | 33,000 | — | 3,000 | 3,000 | 6,000 | 10,000 |
| India— | | | | | | |
| Motor and other spirits | 1,328,000 | 1,339,000 | 1,231,000 | 1,305,000 | 1,356,000 | } n.a. |
| Kerosine | 1,589,000 | 1,402,000 | 1,663,000 | 1,992,000 | 2,409,000 | |
| Gas and diesel oils | 2,062,000 | 2,393,000 | 3,280,000 | 3,916,000 | n.a. | |
| Fuel oil, etc. | 2,511,000 | 2,673,000 | 3,150,000 | 3,606,000 | n.a. | |
| Lubricating oils | 40,000 | 41,000 | 57,000 | 63,000 | 61,000 | |
| Bitumen | 487,000 | 540,000 | 529,000 | 525,000 | 567,000 | |
| Pakistan— | | | | | | |
| Motor spirit | 54,000 | 113,000 | 103,000 | 102,000 | 110,000 | } n.a. |
| Kerosine | 16,000 | 37,000 | 40,000 | 41,000 | 43,000 | |
| Diesel oil | 61,000 | 140,000 | 133,000 | 128,000 | 138,000 | |
| Fuel oil | 75,000 | 154,000 | 136,000 | 136,000 | 130,000 | |
| Lubricating oil | 6,000 | 15,000 | 18,000 | 15,000 | 16,000 | |
| Bitumen | 16,000 | 23,000 | 24,000 | 20,000 | 21,000 | |
| Sarawak— | | | | | | |
| Motor spirit | 6,800 | 7,900 | 218,500 | 494,000 | 596,400 | 718,000 |
| Gas and diesel oils | 419,300 | 1,400,600 | 368,000 | 379,900 | 164,400 | 195,000 |
| Fuel oil | 48,600 | 26,600 | 13,800 | 90,500 | 77,800 | 71,000 |
| Feedstocks(c) | 1,849,900 | 839,500 | 1,741,000 | 1,680,100 | 2,049,100 | 2,123,000 |
| Singapore and Malaysia (West)— | | | | | | |
| Motor spirit | 1,153,000 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Kerosine | 416,000 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Gas and diesel oils | 1,745,000 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Fuel oil | 3,274,000 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Australia— | | | | | | |
| Aviation spirit | 30,354 | 41,001 | 34,664 | 37,465 | 34,550 | 24,333 |
| Motor spirit | 4,621,548 | 4,966,106 | 5,292,876 | 5,983,011 | 6,400,000 | 6,738,476 |
| Kerosine | 273,799 | 325,860 | 358,487 | 420,909 | 507,316 | 566,872 |
| Aviation turbine fuel | 346,112 | 304,087 | 508,777 | 671,319 | 782,109 | 860,873 |
| Gas and diesel oils | 2,462,321 | 2,608,253 | 2,858,383 | 3,155,132 | 2,469,805 | 3,976,876 |
| Fuel oil | 4,904,359 | 5,069,289 | 5,560,503 | 5,936,630 | 6,517,000 | 5,674,811 |
| do. (used in refineries) | 1,495,332 | 1,666,603 | 1,802,304 | 2,066,043 | 2,228,938 | 2,237,083 |
| Lubricating oil | 194,848 | 252,773 | 261,655 | 321,749 | 337,373 | 316,120 |
| Bitumen | 355,531 | 384,765 | 395,596 | 401,445 | 405,488 | 428,274 |
| New Zealand— | | | | | | |
| Motor spirit | (a) 794,000 | (a) 1,133,000 | (a) 1,036,000 | (a) 1,040,000 | 1,138,000 | } n.a. |
| Diesel oil | (a) 343,000 | (a) 482,000 | (a) 441,000 | (a) 546,000 | 664,000 | |
| Fuel oil | (a) 883,000 | (a) 731,000 | (a) 803,000 | (a) 788,000 | 822,000 | |
| Irish Republic— | | | | | | |
| Motor spirit | 376,000 | 418,000 | 343,000 | 439,000 | 460,000 | } n.a. |
| Jet fuel | n.a. | n.a. | n.a. | 25,000 | 87,000 | |
| Gas and diesel oils | 531,000 | 610,000 | 458,000 | 705,000 | 620,000 | |
| Fuel oil | 740,000 | 865,000 | 609,000 | 926,000 | 900,000 | |

(a) Year beginning 1 April of that stated.

(b) British Protected State.

(c) Mainly gasoline-type and fuel oil-type feedstocks, previously included with motor spirit and fuel oil

PRODUCTION OF PETROLEUM REFINERY PRODUCTS IN CERTAIN COUNTRIES (cont.)

Long tons

| Producing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|------------|------------|-------------|------------|------------|-------------|
| OTHER COUNTRIES | | | | | | |
| Albania— | | | | | | |
| Motor spirit | 51,430 | 44,000 | 43,000 | 45,000 | 46,850 | } n.a. |
| Kerosine | 2,302 | n.a. | n.a. | n.a. | 11,300 | |
| Diesel oil | 79,196 | 77,000 | 90,000 | 99,000 | 109,000 | |
| Austria— | | | | | | |
| Motor spirit | 505,653 | 633,794 | 690,341 | 836,273 | 851,025 | 908,000 |
| Kerosine | 68,269 | 50,510 | 91,809 | 76,620 | 88,438 | 128,000 |
| Gas oil | 845,773 | 836,980 | 847,007 | 881,284 | 1,003,533 | 1,079,000 |
| Fuel oil | 1,565,966 | 1,755,219 | 1,819,897 | 1,963,689 | 2,216,418 | 2,400,000 |
| Lubricating oil .. | 189,040 | 182,404 | 203,485 | 185,427 | 253,857 | n.a. |
| Bitumen | 156,360 | 184,060 | 211,623 | 240,570 | 236,364 | n.a. |
| Belgium— | | | | | | |
| Aviation spirit and aviation turbine gasoline .. | 244,030 | 271,960 | 201,227 | 201,227 | 252,924 | 414,495 |
| Motor spirit | 1,590,977 | 1,899,821 | 1,923,903 | 1,922,002 | 2,501,711 | 3,021,429 |
| White spirit, etc. .. | 59,110 | 75,360 | 113,031 | 99,314 | 162,892 | n.a. |
| Kerosine, including aviation kerosine | 421,230 | 485,505 | 553,840 | 589,544 | 604,235 | 736,659 |
| Gas oil | 2,462,830 | 2,651,050 | 2,773,301 | 2,564,574 | 4,410,470 | 6,188,594 |
| Diesel oil | 1,634,530 | 2,032,394 | 1,930,682 | 2,128,815 | 2,379,236 | 2,728,292 |
| Fuel oil | 4,215,265 | 5,266,032 | 5,593,005 | 5,385,400 | 7,095,671 | 8,587,165 |
| Lubricating oil .. | 36,825 | 41,537 | 38,000 | 41,000 | n.a. | n.a. |
| Bitumen | 504,150 | 404,240 | 455,888 | 505,000 | 611,883 | n.a. |
| Bulgaria— | | | | | | |
| Motor spirit | 302,000 | 365,000 | 411,000 | 586,000 | 595,000 | } n.a. |
| Kerosine | 41,000 | 73,000 | 84,000 | 92,000 | 98,000 | |
| Diesel oil | 486,000 | 615,000 | 813,000 | 925,000 | 994,000 | |
| Fuel oil | 984,572 | 1,079,804 | 1,343,000 | 1,425,000 | 1,700,000 | |
| Lubricating oil .. | 44,000 | 46,000 | 47,000 | 46,000 | 49,000 | |
| Czechoslovakia— | | | | | | |
| Motor spirit | 529,000 | 567,000 | 572,000 | 551,000 | 733,000 | n.a. |
| Kerosine | 108,000 | 135,000 | 132,000 | 213,000 | 207,000 | 220,000 |
| Diesel oil | 1,751,000 | 2,039,000 | 2,207,000 | n.a. | n.a. | n.a. |
| Denmark— | | | | | | |
| Motor spirit | 584,486 | 780,457 | } 766,866 | 1,092,894 | 1,100,721 | } 6,600,000 |
| Kerosine and gas oil .. | 459,416 | 534,519 | | | | |
| Diesel oil | 182,726 | 352,086 | } 3,229,907 | 4,532,273 | 4,969,886 | |
| Fuel oil | 1,296,415 | 1,437,855 | | | | |
| Lubricating oil .. | 2,739 | 2,159 | 4,151 | 4,024 | 7,000 | |
| Grease | 1,817 | 2,414 | 2,054 | 1,810 | n.a. | |
| Asphalt | 24,553 | 25,427 | 37,892 | 61,572 | 106,805 | |
| France— | | | | | | |
| Motor spirit | 8,598,000 | 9,422,000 | 10,135,000 | 10,947,000 | 11,335,000 | 12,064,000 |
| Kerosine and jet fuel .. | 1,771,000 | 1,901,000 | 1,985,000 | 2,371,000 | 2,298,000 | 2,488,000 |
| Gas and diesel oil .. | 4,665,000 | 5,801,000 | 6,446,000 | 5,713,000 | 5,861,000 | 8,869,000 |
| Fuel oils | 26,251,000 | 30,800,000 | 34,420,000 | 39,335,000 | 42,998,000 | 47,937,000 |
| Lubricating oil .. | 841,000 | 797,000 | 875,000 | 904,000 | 899,000 | n.a. |
| Other products (a) .. | 3,947,000 | 4,352,000 | 4,827,000 | 6,024,000 | n.a. | n.a. |
| Germany (Federal)— | | | | | | |
| Aviation spirit | 1,328,879 | 1,398,294 | 1,523,581 | 1,589,165 | 1,651,248 | n.a. |
| Motor spirit | 8,957,683 | 9,720,428 | 11,044,838 | 11,460,374 | 12,432,909 | 12,704,203 |
| White spirit | 143,571 | 144,173 | 147,688 | 128,122 | 139,272 | 126,493 |
| Kerosine | 669,029 | 675,517 | 805,930 | 986,698 | 1,167,340 | 1,042,573 |
| Diesel oil | 6,680,977 | 6,801,165 | 7,995,434 | 8,191,482 | 9,082,837 | 8,869,346 |
| Fuel oil | 31,585,781 | 37,341,837 | 42,163,934 | 44,071,482 | 49,702,020 | 54,318,241 |
| Lubricating oil .. | 815,479 | 854,407 | 886,265 | 918,671 | 1,146,311 | 1,227,138 |
| Grease | 52,277 | 56,356 | 52,628 | 44,691 | 48,467 | 50,723 |
| Paraffin wax | 87,207 | 91,148 | 100,115 | 100,434 | 112,923 | 128,838 |
| Coke | 436,773 | 414,943 | 444,244 | 447,017 | 562,562 | 565,579 |
| Bitumen | 2,776,008 | 3,183,632 | 3,458,583 | 3,762,346 | 4,280,429 | 4,433,571 |

(a) Other than butane and propane.

PRODUCTION OF PETROLEUM REFINERY PRODUCTS IN CERTAIN COUNTRIES (cont.)
Long tons

| Producing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|---------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Greece— | | | | | | |
| Motor spirit | 248,182 | 235,861 | 230,938 | 251,049 | 277,539 | } <i>n.a.</i> |
| Kerosine | 143,043 | 131,220 | 119,264 | 101,885 | 84,912 | |
| Aviation turbine fuel | 30,963 | 31,501 | 69,469 | 70,418 | 36,673 | |
| Diesel oil | 575,752 | 585,789 | 545,331 | 569,431 | 575,697 | |
| Fuel oil | 698,405 | 698,405 | 658,893 | 657,342 | 543,699 | |
| Asphalt | 62,332 | 62,332 | 51,875 | 56,611 | 63,879 | |
| Hungary— | | | | | | |
| Motor spirit | 364,204 | 389,000 | 427,000 | 472,000 | 568,000 | <i>n.a.</i> |
| Kerosine | 37,778 | 20,694 | 18,485 | 2,000 | 1,000 | <i>n.a.</i> |
| Diesel oil | 944,649 | 1,028,000 | 1,115,000 | 1,241,000 | 1,369,000 | 1,501,000 |
| Fuel oil | 1,616,987 | 1,698,000 | 1,695,000 | 1,773,000 | 1,938,000 | 2,043,000 |
| Lubricating oils | 109,482 | 114,211 | 118,418 | 144,000 | 144,000 | <i>n.a.</i> |
| Grease | 18,516 | 18,837 | 18,660 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Bitumen | 448,470 | 478,000 | 506,000 | 571,000 | 560,000 | <i>n.a.</i> |
| Italy— | | | | | | |
| Motor spirit | 8,377,303 | 10,141,324 | 11,687,624 | 11,508,450 | 12,394,239 | 12,153,370 |
| White spirit | 42,852 | 39,276 | 38,654 | 43,398 | 32,193 | 23,499 |
| Kerosine | 1,597,528 | 2,302,303 | 2,879,580 | 3,420,145 | 4,257,133 | 4,779,104 |
| Gas oil | 10,171,158 | 12,109,050 | 14,023,230 | 15,706,783 | 17,494,987 | 19,573,311 |
| Fuel oil and diesel oil | 30,104,155 | 36,104,917 | 41,630,758 | 42,570,224 | 44,117,416 | 48,528,696 |
| Lubricating oil | 255,077 | 342,074 | 435,636 | 437,508 | 484,705 | 516,482 |
| Bitumen | 1,207,710 | 1,208,832 | 1,278,431 | 1,459,616 | 1,677,352 | 2,003,328 |
| Other products | 1,524,789 | 1,937,448 | 2,683,517 | 1,986,815 | 1,921,264 | 2,406,711 |
| Netherlands— | | | | | | |
| Motor spirit | 2,725,000 | 2,703,000 | 2,214,000 | 2,154,000 | 3,331,000 | 4,033,000 |
| Kerosine | 940,000 | 1,109,000 | 1,058,000 | 913,000 | 1,153,000 | 1,073,000 |
| Aviation fuels | 961,000 | 765,000 | 1,269,000 | 1,012,000 | 1,239,000 | 1,921,000 |
| Gas and diesel oil | 5,930,000 | 6,463,000 | 7,713,000 | 7,947,000 | 9,414,000 | 13,373,000 |
| Residual fuel oil | 10,770,000 | 12,684,000 | 13,201,000 | 14,051,000 | 15,891,000 | 21,011,000 |
| Lubricating oil | 247,000 | 327,000 | 333,000 | 316,000 | 274,000 | 494,000 |
| Norway— | | | | | | |
| Aviation and motor spirit | 377,100 | 695,600 | 805,300 | 995,200 | 1,456,400 | 1,475,300 |
| Kerosine | 15,700 | 30,800 | 20,000 | 18,700 | 41,100 | 49,200 |
| Gas and diesel oil | 579,000 | 901,400 | 1,080,600 | 1,243,600 | 1,661,300 | 1,910,000 |
| Fuel oil | 463,000 | 1,249,200 | 1,090,800 | 1,097,100 | 1,727,400 | <i>n.a.</i> |
| Lubricating oil | 168,400 | 180,600 | 180,500 | 187,800 | 173,600 | <i>n.a.</i> |
| Grease | 23,800 | 26,800 | 30,700 | 29,700 | 31,100 | <i>n.a.</i> |
| Paraffin wax | 10,200 | 11,700 | 13,200 | 13,800 | 13,900 | <i>n.a.</i> |
| Bitumen | 200,600 | 237,200 | 299,500 | 343,600 | 401,600 | <i>n.a.</i> |
| Portugal— | | | | | | |
| Motor spirit | 372,554 | 384,929 | 392,920 | 400,979 | 396,581 | 454,375 |
| Kerosine | 181,174 | 195,542 | 182,076 | 187,192 | 199,675 | 200,106 |
| Jet fuel | 28,687 | 38,674 | 73,447 | 94,500 | 62,933 | 60,843 |
| Gas and diesel oil | 316,749 | 325,766 | 364,829 | 362,123 | 362,811 | 452,662 |
| Fuel oil | 560,832 | 586,977 | 558,356 | 609,194 | 597,258 | 754,063 |
| Romania— | | | | | | |
| Motor spirit | 2,472,000 | 2,419,000 | 2,312,000 | 2,260,000 | 2,594,000 | 2,577,000 |
| Kerosine and white spirit | 974,000 | 950,000 | 905,000 | 908,000 | 934,000 | <i>n.a.</i> |
| Gas oil | 3,333,000 | 3,543,000 | 3,687,000 | 3,961,000 | 4,299,000 | 4,520,000 |
| Fuel oil | 3,770,000 | 3,713,000 | 3,890,000 | 3,884,000 | 3,567,000 | <i>n.a.</i> |
| Bitumen | 316,000 | 336,000 | 364,000 | 385,000 | 431,000 | <i>n.a.</i> |
| Spain (a)— | | | | | | |
| Motor spirit | r 1,185,000 | r 1,431,000 | r 1,696,000 | r 2,107,000 | 2,734,000 | 2,796,000 |
| Kerosine and jet fuel | r 387,000 | r 314,000 | 476,000 | 292,000 | 362,000 | 343,000 |
| Gas oil | r 2,400,000 | r 2,602,000 | 3,197,000 | 4,501,000 | 5,915,000 | 6,303,000 |
| Diesel oil | r 280,000 | r 217,000 | 250,000 | 228,000 | 251,000 | 231,000 |
| Fuel oil | r 5,533,000 | r 6,609,000 | 7,758,000 | 10,360,000 | 13,002,000 | 14,612,000 |
| Lubricating oil | r 128,000 | r 127,000 | 110,000 | 123,000 | 137,000 | <i>n.a.</i> |

(a) Includes "Canary Islands" production.

PRODUCTION OF PETROLEUM REFINERY PRODUCTS IN CERTAIN COUNTRIES (cont.)

Long ton:

| Producing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-----------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Sweden— | | | | | | |
| Motor spirit | 492,732 | 494,145 | 483,074 | 757,847 | 1,160,000 | <i>n.a.</i> |
| White spirit etc. .. | 10,333 | 10,346 | 26,685 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Kerosine | 3,000 | <i>n.a.</i> | <i>n.a.</i> | 26,573 | 31,495 | <i>n.a.</i> |
| Fuel oil, etc. | 2,439,000 | 2,714,000 | 3,144,000 | 4,230,000 | 6,293,997 | <i>n.a.</i> |
| Lubricating oil .. | 57,010 | 67,909 | 71,123 | 73,500 | <i>n.a.</i> | <i>n.a.</i> |
| Asphalt | 428,667 | 468,502 | 506,769 | 583,298 | <i>n.a.</i> | <i>n.a.</i> |
| Yugoslavia— | | | | | | |
| Motor spirit | 379,471 | 537,377 | 775,554 | 872,006 | 920,000 | 987,000 |
| White spirit | 15,830 | 15,372 | 15,982 | 16,604 | 17,600 | 18,500 |
| Kerosine | 96,648 | 80,406 | 92,185 | 92,579 | 117,000 | 139,000 |
| Gas oil | 690,317 | 875,752 | 1,124,155 | 1,367,063 | 1,358,000 | 1,696,000 |
| Fuel oil | 672,656 | 1,129,916 | 1,736,284 | 1,787,319 | 1,819,000 | 1,937,000 |
| Lubricating oil .. | 124,321 | 132,031 | 155,309 | 135,820 | 101,000 | 87,000 |
| Bitumen | 148,468 | 110,666 | 138,000 | 168,000 | 241,000 | 309,000 |
| Other products .. | 10,679 | 15,767 | 17,762 | 19,453 | <i>n.a.</i> | <i>n.a.</i> |
| Angola— | | | | | | |
| Motor spirit | 72,663 | 54,864 | 59,166 | 54,997 | 64,841 | 60,722 |
| Kerosine | 22,815 | 6,843 | 6,930 | 7,197 | 8,124 | 7,399 |
| Jet fuel | — | 36,420 | 43,371 | 41,729 | 46,120 | 46,117 |
| Gas and diesel oil .. | 122,195 | 116,029 | 128,838 | 105,439 | 133,313 | 96,835 |
| Fuel oil | 284,843 | 286,580 | 336,488 | 356,896 | 348,844 | 383,117 |
| Asphalt | 7,514 | 10,313 | 10,697 | 7,458 | 11,108 | 10,516 |
| Canary Islands— | | | | | | |
| Motor spirit | 552,320 | 702,401 | 584,586 | 610,785 | 707,951 | 639,270 |
| Kerosine | 182,680 | 208,777 | 267,425 | 129,848 | 184,747 | 104,869 |
| Jet fuel | 3,873 | 15,055 | <i>n.a.</i> | <i>n.a.</i> | 24,505 | <i>n.a.</i> |
| Gas oil | 339,586 | 860,002 | 896,163 | 1,079,443 | 1,137,219 | 1,165,928 |
| Diesel oil | 269,026 | 198,264 | 230,819 | 203,581 | 104,251 | 224,773 |
| Fuel oil | 2,722,368 | 3,439,980 | 3,546,668 | 3,864,101 | 3,883,070 | 4,382,867 |
| Lubricating oil .. | 36,642 | 53,430 | 58,545 | 57,454 | 62,280 | <i>n.a.</i> |
| Asphalt | 227,020 | 219,701 | 189,533 | 137,980 | 129,454 | <i>n.a.</i> |
| Egypt— | | | | | | |
| Motor spirit | 744,814 | 845,243 | 835,472 | 724,590 | 754,000 | 436,000 |
| Kerosine | 968,134 | 839,278 | 908,823 | 808,831 | 619,000 | 405,000 |
| Jet fuel | 11,629 | 38,049 | 23,475 | | | |
| Gas and diesel oil .. | 1,180,372 | 1,216,104 | 1,429,559 | 1,139,713 | 956,000 | 476,700 |
| Fuel oil | 4,170,900 | 4,606,845 | 4,129,710 | 3,185,494 | 2,997,000 | 1,405,700 |
| Asphalt | 148,394 | 131,398 | 131,843 | 96,850 | 141,000 | 40,000 |
| Morocco— | | | | | | |
| Motor spirit | 165,000 | 240,000 | 240,000 | 248,000 | 280,000 | 306,639 |
| Kerosine | 62,000 | 66,000 | 66,000 | 65,000 | 73,000 | 114,545 |
| Gas and fuel oils .. | 639,000 | 692,000 | 880,000 | 840,000 | 848,000 | 918,000 |
| Mozambique— | | | | | | |
| Motor spirit | 100,022 | 102,789 | 115,692 | 130,391 | 140,183 | 140,579 |
| Gas oil | 131,706 | 145,903 | 189,466 | 220,994 | 246,916 | 215,574 |
| Fuel oil | 242,372 | 237,870 | 293,917 | 342,364 | 361,066 | 347,119 |
| South Africa— | | | | | | |
| Motor spirit | 1,394,000 | 1,304,000 | 1,562,000 | 1,897,000 | 1,817,000 | <i>n.a.</i> |
| Kerosine | 158,000 | 135,000 | 155,000 | 153,000 | 120,000 | |
| Jet fuel | 74,000 | 88,000 | 111,000 | 117,000 | 68,000 | |
| Gas and diesel oil .. | 1,209,000 | 1,208,000 | 1,361,000 | 1,849,000 | 1,737,000 | |
| Fuel oil | 1,899,000 | 1,523,000 | 1,939,000 | 2,714,000 | 2,749,000 | |
| Costa Rica— | | | | | | |
| Motor spirit | — | — | — | 20,554 | 55,351 | 58,506 |
| Diesel oil | — | — | — | 36,559 | 117,342 | 122,199 |
| Fuel oil | — | — | — | 23,066 | 67,104 | 83,093 |
| Kerosine | — | — | — | 3,619 | 15,921 | 18,382 |

PRODUCTION OF PETROLEUM REFINERY PRODUCTS IN CERTAIN COUNTRIES (cont.)

Long tons

| Producing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | |
|-----------------------------------|-------------|---------------|-------------|-------------|-------------|---------------|-------------|
| OTHER COUNTRIES | | | | | | | |
| <i>(cont.)</i> | | | | | | | |
| Guatemala— | | | | | | | |
| Motor spirit | <i>n.a.</i> | 102,421 | 136,064 | 135,125 | 150,602 | 146,945 | |
| Kerosine | <i>n.a.</i> | 26,689 | 40,227 | 39,568 | 43,971 | 46,050 | |
| Aviation turbine fuel | <i>n.a.</i> | 2,124 | 22,645 | 22,184 | 25,674 | 27,711 | |
| Diesel oil | <i>n.a.</i> | 96,868 | 155,564 | 167,965 | 204,765 | 216,900 | |
| Fuel oil | <i>n.a.</i> | 149,739 | 194,550 | 220,788 | 225,126 | 256,660 | |
| Mexico— | | | | | | | |
| Aviation spirit | 77,158 | 87,834 | 70,715 | 70,988 | 58,000 | 61,154 | |
| Motor spirit | 3,201,917 | 3,256,798 | 2,838,710 | 3,113,000 | 3,300,685 | 3,468,303 | |
| Kerosine | 1,544,313 | 1,533,429 | 1,575,214 | 1,697,975 | 1,689,133 | 1,712,465 | |
| Gas and diesel oil | 3,910,210 | 4,116,314 | 4,535,570 | 5,115,221 | 5,838,066 | 6,076,640 | |
| Fuel oil | 5,821,877 | 6,102,767 | 5,875,307 | 6,328,194 | 6,300,000 | 6,500,000 | |
| Lubricating oil | 171,854 | 190,893 | 182,030 | 187,941 | 176,000 | 191,780 | |
| Grease | 6,546 | 6,963 | 6,317 | 8,605 | 8,859 | 8,128 | |
| Paraffin wax | 46,251 | 45,767 | 45,424 | 49,909 | 41,000 | 51,034 | |
| Asphalt | 369,000 | 504,000 | 959,000 | 999,824 | 1,088,128 | 1,268,015 | |
| Netherlands Antilles (a)— | | | | | | | |
| Aviation spirit | 1,558,000 | 1,504,000 | 1,138,000 | 1,062,000 | 714,534 | } <i>n.a.</i> | |
| Motor spirit | 2,825,000 | 3,031,000 | 3,109,000 | 3,248,000 | 3,089,424 | | |
| White spirit | 74,000 | 72,000 | 50,000 | 61,000 | 34,447 | | |
| Kerosine | 724,000 | 642,000 | 444,000 | 530,000 | 726,344 | | |
| Aviation turbine fuel | 2,882,000 | 3,008,000 | 3,641,000 | 4,168,000 | 4,053,946 | | |
| Gas oil | 3,488,000 | 2,836,000 | 3,701,000 | 2,790,000 | 1,715,472 | | |
| Diesel oil | 1,678,000 | 1,245,000 | 1,396,000 | 1,466,000 | 1,853,261 | | |
| Fuel oil | 21,858,000 | 21,860,000 | 19,453,000 | 20,579,000 | 21,469,470 | | |
| Lubricating oil | 809,000 | 939,000 | 654,000 | 420,000 | 483,245 | | |
| Asphalt | 898,000 | 865,000 | 934,000 | 999,000 | 1,080,659 | | |
| Nicaragua— | | | | | | | |
| Motor spirit | 79,000 | 77,000 | 85,000 | 92,000 | 100,000 | 75,000 | |
| Kerosine | 21,000 | 19,000 | 22,000 | 28,000 | 28,000 | 28,000 | |
| Gas and diesel oil | 55,000 | 64,000 | 69,000 | 82,000 | 101,000 | 91,000 | |
| Fuel oil | 67,000 | 45,000 | 66,000 | 82,000 | 99,000 | <i>n.a.</i> | |
| Panama— | | | | | | | |
| Motor spirit | 235,000 | 307,000 | 335,000 | 322,000 | 351,000 | } <i>n.a.</i> | |
| Kerosine | 75,000 | 94,000 | 75,000 | 110,000 | 51,000 | | |
| Jet fuel | 48,000 | 43,000 | 65,000 | 165,000 | 102,000 | | |
| Gas and diesel oil | 614,000 | 689,000 | 861,000 | 662,000 | 660,000 | | |
| Fuel oil | 976,000 | 1,047,000 | 1,268,000 | 1,490,000 | 1,473,000 | | |
| Salvador— | | | | | | | |
| Motor spirit | 117,441 | 113,669 | 114,000 | 122,810 | 108,000 | 66,000 | |
| Kerosine | 46,556 | 54,577 | <i>n.a.</i> | 64,954 | 46,000 | 29,000 | |
| Diesel oil | 119,117 | 232,826 | 146,000 | 150,322 | 145,000 | 75,000 | |
| Lubricating oil | 169,662 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | |
| United States— | | | | | | | |
| Aviation spirit | 14,203,000 | } 199,000,000 | 209,000,000 | 212,000,000 | 223,872,000 | 234,802,000 | |
| Motor spirit | 178,973,000 | | | | | | |
| Kerosine (b) | 21,575,000 | } 36,352,000 | 40,418,000 | 47,556,000 | 53,009,000 | 53,800,000 | |
| Jet fuels (military) | 13,745,000 | | | | | | |
| Distillate fuel oil | 100,738,000 | 103,858,000 | 106,628,000 | 109,198,000 | 114,068,000 | 115,499,000 | |
| Residual fuel oil | 38,912,000 | 39,166,000 | 38,494,000 | 40,244,000 | 40,223,000 | 39,528,000 | |
| Lubricating oil | 8,914,000 | 8,810,000 | 9,157,000 | 9,082,000 | 9,196,000 | 8,932,000 | |
| Paraffin wax | 669,000 | 682,000 | 722,000 | 715,000 | 736,000 | 756,000 | |
| Coke | 15,058,000 | 15,364,000 | 15,724,000 | 16,238,000 | 16,998,000 | 17,145,000 | |
| Asphalt | 18,649,000 | 20,066,000 | 21,036,000 | 20,741,000 | 21,990,000 | 22,028,000 | |
| Road oil | 1,014,000 | 1,044,000 | 1,153,000 | 1,110,000 | 1,086,000 | 1,445,000 | |
| Argentina— | | | | | | | |
| Aviation spirit | 42,700 | 21,200 | 50,800 | 60,800 | 38,758 | } 3,900,000 | |
| Motor spirit | 2,730,900 | 3,092,900 | 3,300,000 | 3,409,500 | 3,476,403 | | |
| Kerosine | 1,140,000 | 982,690 | 907,900 | 853,900 | 798,790 | | <i>n.a.</i> |
| Gas oil | 1,382,900 | 1,940,600 | 2,402,600 | 2,518,200 | 2,675,600 | | <i>n.a.</i> |
| Diesel oil | 1,048,800 | 1,082,900 | 1,187,900 | 1,169,700 | 1,223,400 | | <i>n.a.</i> |
| Fuel oil | 6,829,700 | 7,691,700 | 7,876,700 | 7,727,700 | 7,896,500 | | <i>n.a.</i> |
| Lubricating oil | 126,400 | 141,500 | 128,800 | 115,000 | 105,900 | <i>n.a.</i> | |

(a) Exports.

(b) Including commercial jet fuel.

PRODUCTION OF PETROLEUM REFINERY PRODUCTS IN CERTAIN COUNTRIES (cont.)
Long tons

| Producing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Bolivia— | | | | | | |
| Motor spirit | 129,095 | 135,476 | 155,070 | 173,000 | 189,000 | 211,681 |
| Kerosine | 59,409 | 65,145 | 72,663 | 83,000 | 89,000 | 94,389 |
| Diesel oil | 61,213 | 72,083 | 74,222 | 91,000 | 85,000 | 83,608 |
| Fuel oil | 115,127 | 119,324 | 125,775 | 118,000 | 150,000 | 139,684 |
| Brazil— | | | | | | |
| Motor spirit | 4,068,000 | 4,201,000 | 4,756,000 | 4,798,000 | 5,371,000 | 6,144,915 |
| Kerosine | 582,000 | 524,000 | 608,000 | 767,000 | 983,957 | 1,195,039 |
| Diesel oil | 3,560,000 | 3,784,000 | 3,891,000 | 4,058,000 | 4,794,936 | 5,194,919 |
| Fuel oil | 5,780,000 | 5,144,000 | 5,635,000 | 5,882,000 | 6,844,107 | 8,228,278 |
| Lubricating oil | 400 | 5,000 | — | — | 5,000 | <i>n.a.</i> |
| Paraffin wax | 572 | 6,135 | 3,231 | 131 | 5,000 | <i>n.a.</i> |
| Asphalt | 203,601 | 287,225 | 394,533 | 495,389 | 662,395 | 638,393 |
| Chile— | | | | | | |
| Aviation spirit | 45,660 | 769,000 | 860,000 | 975,000 | 1,007,900 | 1,138,000 |
| Motor spirit | 695,820 | | 860,000 | 975,000 | 1,007,900 | 1,138,000 |
| Kerosine | 242,920 | 165,000 | 258,270 | 293,500 | 315,190 | 325,640 |
| Diesel oil | 418,410 | 940,000 | 1,320,000 | 1,530,000 | 1,759,900 | 1,795,000 |
| Fuel oil | 591,390 | | 1,320,000 | 1,530,000 | 1,759,900 | 1,795,000 |
| Colombia— | | | | | | |
| Aviation spirit | 60,016 | 87,293 | 131,000 | 82,847 | 76,049 | 68,813 |
| Motor spirit | 1,257,750 | 1,375,405 | 1,525,000 | 1,475,979 | 1,537,472 | 1,581,712 |
| Other spirit | 63,600 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Kerosine | 228,143 | 246,918 | 268,000 | 323,274 | 376,479 | 400,478 |
| Jet fuel | 24,862 | 31,000 | 50,000 | 66,892 | 106,264 | 138,036 |
| Gas oil | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 40,322 | 37,853 | 23,508 |
| Diesel oil | 563,666 | 605,562 | 647,000 | 728,702 | 984,240 | 897,992 |
| Fuel oil | 1,274,819 | 1,462,791 | 1,669,000 | 2,110,210 | 2,406,399 | 2,279,776 |
| Lubricating oil and grease | 52,722 | 58,529 | 60,600 | 58,107 | 59,161 | 65,444 |
| Coke | 96,487 | <i>n.a.</i> | <i>n.a.</i> | 125,463 | 160,069 | 147,329 |
| Asphalt | 67,591 | 66,194 | 68,900 | 94,032 | 122,512 | 110,582 |
| Ecuador— | | | | | | |
| Motor spirit | 233,739 | 247,521 | 248,000 | 261,251 | 319,000 | 296,568 |
| Kerosine | 53,841 | 57,239 | 60,600 | 63,412 | 123,000 | 79,432 |
| Aviation turbine fuel | 6,937 | 23,041 | 28,710 | 38,942 | | 55,249 |
| Diesel oil | 117,493 | 131,672 | 143,000 | 164,055 | 204,000 | 208,717 |
| Residual fuel oil | 189,018 | 215,846 | 219,000 | 226,516 | 277,000 | 339,622 |
| Peru— | | | | | | |
| Aviation spirit | 5,000 | 6,000 | 4,000 | 4,000 | 5,000 | <i>n.a.</i> |
| Motor spirit | 659,000 | 686,000 | 791,000 | 837,000 | 1,182,000 | |
| Kerosine | 398,000 | 416,000 | 439,000 | 463,000 | 490,000 | |
| Aviation turbine fuel | 92,000 | 100,000 | 131,000 | 150,000 | <i>n.a.</i> | |
| Diesel oil | 808,000 | 855,000 | 803,000 | 780,000 | 890,000 | |
| Fuel oil | 735,000 | 792,000 | 841,000 | 897,000 | 1,210,000 | |
| Lubricating oil and grease | 11,000 | 12,000 | 11,000 | 11,000 | <i>n.a.</i> | |
| Uruguay— | | | | | | |
| Motor spirit | 257,373 | 255,675 | 263,815 | 261,064 | 229,996 | 260,358 |
| Kerosine | 175,300 | 161,996 | 165,992 | 159,522 | 133,205 | 158,779 |
| Aviation turbine fuel | 15,585 | 14,006 | 16,459 | 18,894 | 17,076 | 23,024 |
| Gas oil | 239,142 | 230,589 | 234,297 | 234,927 | 210,029 | 270,904 |
| Diesel oil | 62,390 | 63,527 | 70,219 | 59,437 | 48,146 | 52,003 |
| Fuel oil | 625,405 | 720,875 | 701,573 | 701,059 | 567,666 | 675,293 |
| Lubricating oil | 766 | 355 | 470 | 144 | 286 | 344 |
| Asphalt | 12,800 | 13,200 | 20,100 | 13,000 | 23,315 | 30,170 |
| Venezuela— | | | | | | |
| Motor spirit | 5,469,000 | 5,998,000 | 5,808,000 | 5,923,000 | 6,664,000 | 6,912,000 |
| Kerosine | 1,490,000 | 1,218,000 | 772,000 | 641,000 | 603,000 | 714,000 |
| Gas and diesel oils | 10,534,000 | 9,982,000 | 9,766,000 | 8,253,000 | 9,357,000 | 7,489,000 |
| Fuel oil | 34,092,000 | 37,444,000 | 37,777,000 | 37,300,000 | 37,700,000 | 37,553,000 |
| Lubricating oil | 649,600 | 521,000 | 524,000 | 530,000 | 588,000 | 501,000 |
| Asphalt | 865,000 | 877,000 | 787,000 | 870,000 | 870,000 | 767,000 |

PRODUCTION OF PETROLEUM REFINERY PRODUCTS IN CERTAIN COUNTRIES (cont.)

Long tons

| Producing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | |
|-----------------------------------|------------|---------------|---------------|-------------|------------|------------|------------|
| OTHER COUNTRIES (cont.) | | | | | | | |
| Burma— | | | | | | | |
| Motor spirit | 139,450 | 151,000 | 155,000 | 168,000 | 154,000 | 163,000 | |
| Kerosine | 117,330 | 139,000 | 188,000 | 178,000 | 231,000 | 237,000 | |
| Jet fuel (b) | 20,000 | 18,000 | 9,000 | 29,000 | 14,000 | n.a. | |
| Diesel oil | 181,380 | 201,000 | 223,000 | 219,000 | 237,000 | n.a. | |
| Paraffin wax | 13,824 | n.a. | n.a. | n.a. | n.a. | n.a. | |
| Formosa— | | | | | | | |
| Aviation spirit | } 249,000 | 257,000 | 314,000 | 332,000 | 348,000 | 437,000 | |
| Motor spirit | | 213,000 | n.a. | n.a. | n.a. | n.a. | |
| Kerosine | | 31,300 | 24,100 | 27,100 | 20,600 | 21,800 | 15,900 |
| Jet fuel | | 177,000 | 213,000 | n.a. | n.a. | n.a. | n.a. |
| Diesel oil | | 234,200 | 295,900 | 321,600 | 415,500 | 456,000 | 734,000 |
| Fuel oil | | 573,700 | 852,900 | 1,080,400 | 1,127,600 | 1,635,300 | 2,167,600 |
| Lubricating oil | | — | 4,100 | 17,100 | 17,300 | 22,500 | 27,400 |
| Asphalt | 39,852 | 52,716 | 78,384 | 96,892 | 116,777 | 122,100 | |
| Indonesia— | | | | | | | |
| Aviation spirit | 33,000 | 21,000 | 16,000 | 16,000 | n.a. | n.a. | |
| Motor spirit | 1,345,000 | 1,531,000 | 1,229,000 | 1,304,000 | n.a. | n.a. | |
| Kerosine | 1,386,000 | 1,306,000 | 1,262,000 | 1,399,000 | n.a. | n.a. | |
| Fuel oil | 2,956,000 | 2,255,000 | 2,086,000 | 2,580,000 | n.a. | n.a. | |
| Jet fuel | 72,000 | 134,000 | 177,000 | 143,000 | n.a. | n.a. | |
| Gas and diesel oils | 2,343,000 | 1,647,000 | 1,489,000 | 1,539,000 | n.a. | n.a. | |
| Iran (a)— | | | | | | | |
| Aviation spirit | 563,000 | 710,000 | 725,000 | 722,000 | 728,000 | 721,000 | |
| Motor spirit | 1,904,000 | 1,882,000 | 1,996,000 | 2,025,000 | 2,192,000 | 2,278,000 | |
| Kerosine | 2,217,000 | 1,823,000 | 1,805,000 | 1,865,000 | 1,981,000 | 2,039,000 | |
| Aviation turbine fuel | 925,000 | 1,197,000 | 1,292,000 | 1,263,000 | 1,547,000 | 1,621,000 | |
| Gas and diesel oils | 2,741,000 | 2,866,000 | 3,034,000 | 3,019,000 | 3,272,000 | 3,221,000 | |
| Fuel oil | 8,189,000 | 8,377,000 | 8,462,000 | 8,925,000 | 8,497,000 | 8,878,000 | |
| Lubricating oil | 35,000 | 44,000 | 52,000 | 46,000 | 51,000 | 50,000 | |
| Bitumen | 193,000 | 174,000 | 222,000 | 310,000 | 269,000 | 289,000 | |
| Iraq— | | | | | | | |
| Motor spirit | 278,298 | 292,000 | 310,000 | 265,000 | 376,000 | } n.a. | |
| Kerosine | 459,133 | 451,000 | 462,000 | 400,000 | 561,000 | | |
| Aviation turbine fuel | 43,614 | 44,000 | n.a. | n.a. | 59,000 | | |
| Gas oil | 310,342 | } 576,000 | 719,000 | 541,000 | 769,000 | | |
| Diesel oil | 218,842 | | 849,000 | 1,225,000 | 1,218,000 | | |
| Fuel oil | 1,142,536 | 1,145,000 | 849,000 | 1,225,000 | 1,218,000 | | |
| Israel— | | | | | | | |
| Motor spirit | 347,000 | (b) 379,000 | (b) 477,000 | 557,000 | 688,000 | } n.a. | |
| Kerosine | 308,000 | n.a. | (b) 252,000 | (b) 282,000 | 636,000 | | |
| Gas and diesel oils | 791,000 | (b) 1,310,000 | (b) 903,000 | 1,146,000 | 1,041,000 | | |
| Fuel oil | 1,241,000 | (b) 1,376,000 | (b) 1,424,000 | 1,963,000 | 1,789,000 | | |
| Japan— | | | | | | | |
| Aviation spirit | 68,141 | } 7,870,000 | 9,080,000 | 10,413,000 | 11,824,000 | 13,328,880 | |
| Motor spirit | 7,096,906 | | 4,440,000 | 5,062,000 | 6,918,000 | 8,383,000 | 10,328,242 |
| Kerosine | 3,571,549 | | 1,030,000 | 1,198,000 | 1,951,000 | 2,381,450 | 2,678,375 |
| Jet fuel | 806,754 | | 5,155,000 | 6,068,000 | 6,853,000 | 7,897,000 | 8,832,572 |
| Gas oil | 4,627,000 | | 2,516,000 | 3,368,000 | 4,167,000 | 5,390,000 | n.a. |
| Diesel oil | 2,116,674 | | 38,260,000 | 45,630,000 | 55,683,000 | 63,000,000 | 75,115,000 |
| Fuel oil | 32,887,532 | | 1,017,000 | 1,152,000 | 1,308,000 | 1,496,000 | 1,748,000 |
| Lubricating oil | 945,000 | 68,000 | 82,000 | 78,725 | 88,000 | n.a. | |
| Paraffin wax | 63,556 | n.a. | n.a. | 1,800,391 | 2,035,000 | n.a. | |
| Asphalt | 920,744 | n.a. | n.a. | 1,800,391 | 2,035,000 | n.a. | |
| Jordan— | | | | | | | |
| Motor spirit | 52,259 | 60,223 | 76,153 | 70,707 | 70,569 | 88,278 | |
| Kerosine | 64,915 | 66,760 | 69,505 | 68,882 | 64,784 | 73,183 | |
| Gas oil | 106,488 | 130,130 | 133,772 | 117,505 | 119,850 | 128,430 | |
| Fuel oil | 75,147 | 80,529 | 89,527 | 89,532 | 87,616 | 115,948 | |
| Asphalt | 26,474 | 28,492 | 40,498 | 29,895 | 33,053 | 38,173 | |

(a) Abadan Refinery only.

(b) Estimated.

PRODUCTION OF PE

PRODUCTS IN CERTAIN COUNTRIES (cont.)

Long tons

| Producing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-------------|-----------|-------------|------------|------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Korea (South)— | | | | | | |
| Motor spirit | 66,810 | 161,768 | r 233,000 | r 316,000 | 444,000 | 552,000 |
| Kerosine | 40,133 | 65,105 | 93,437 | 172,897 | 251,364 | 281,000 |
| Jet fuel | — | 53,592 | 94,117 | 106,897 | 250,000 | n.a. |
| Diesel oil | 157,170 | 420,173 | 527,598 | 557,787 | 1,057,000 | 1,266,000 |
| Fuel oil | 396,563 | 675,491 | 762,947 | 1,061,478 | 2,361,000 | 3,618,000 |
| Kuwait— | | | | | | |
| Motor spirit | 186,000 | 193,000 | 218,000 | 260,000 | 276,000 | 264,000 |
| Kerosine | 67,000 | 69,000 | 85,000 | 92,000 | 97,000 | 120,000 |
| Gas and diesel oils .. | 2,623,000 | 2,561,000 | 2,739,000 | 2,401,000 | 2,646,000 | 2,348,000 |
| Fuel oil | 6,181,000 | 6,252,000 | 6,312,000 | 6,301,000 | 6,619,000 | 6,215,000 |
| Bitumen | 19,000 | 13,000 | 26,000 | 35,000 | 33,000 | 19,000 |
| Lebanon— | | | | | | |
| Motor spirit | 221,054 | 280,000 | 248,000 | 298,000 | 342,000 | 341,000 |
| Kerosine | 119,920 | 126,500 | 153,000 | 177,000 | 187,000 | 203,500 |
| Gas oil | 216,146 | 230,000 | 226,000 | 265,000 | 276,000 | 312,700 |
| Fuel oil | 617,714 | 755,000 | 725,810 | 877,000 | 355,000 | 869,700 |
| Philippine Republic— | | | | | | |
| Motor spirit | 1,050,000 | 1,087,000 | 1,193,000 | 1,427,000 | 1,574,000 | 1,671,000 |
| Kerosine | 292,900 | 279,100 | 426,000 | } 364,000 | 392,000 | } 731,000 |
| Jet fuel | 94,600 | 133,000 | n.a. | | 303,000 | |
| Gas and diesel oil .. | 968,000 | 976,000 | 1,060,000 | 1,293,000 | 1,540,000 | 1,744,000 |
| Fuel oil | 1,401,000 | 1,617,700 | 1,991,000 | 2,420,000 | 3,002,000 | 3,112,000 |
| Saudi Arabia— | | | | | | |
| Aviation spirit | 40,853 | 27,099 | 36,279 | 13,000 | 16,098 | 17,637 |
| Motor spirit | 1,519,692 | 1,956,815 | 2,025,421 | 2,340,000 | 2,805,294 | 2,915,673 |
| Kerosine | 415,685 | 278,760 | 244,537 | 364,000 | 392,097 | 405,941 |
| Jet fuel | 748,920 | 1,062,143 | 1,307,877 | 1,200,000 | 1,677,024 | 1,777,012 |
| Diesel oil | 1,898,714 | 1,741,322 | 2,191,489 | 2,216,000 | 2,561,858 | 3,497,233 |
| Fuel oil | 8,270,362 | 9,305,802 | 8,798,702 | 9,421,000 | 11,137,972 | 11,703,309 |
| Asphalt, etc. | 59,811 | 44,663 | 104,010 | n.a. | 130,699 | 141,684 |
| Southern Yemen— | | | | | | |
| Motor spirit etc. | 390,000 | 394,000 | 488,000 | 327,000 | 340,000 | n.a. |
| Kerosine | 764,000 | 681,000 | 732,000 | 532,000 | 566,000 | n.a. |
| Gas and diesel oil .. | 1,281,000 | 1,254,000 | 1,246,000 | 996,000 | 590,000 | n.a. |
| Fuel oil | 3,520,000 | 3,730,000 | 3,557,000 | 2,915,000 | 2,600,000 | n.a. |
| Other products | 570,000 | 608,000 | 612,000 | 405,000 | 602,000 | n.a. |
| Syria— | | | | | | |
| Motor spirit | (a) 140,000 | 154,000 | 163,000 | 165,000 | 157,000 | n.a. |
| Kerosine | (a) 118,000 | 135,000 | 142,000 | 169,000 | 161,000 | n.a. |
| Gas and diesel oil .. | (a) 290,000 | 276,000 | 277,000 | 250,000 | 238,000 | n.a. |
| Fuel oil | (a) 369,000 | 383,000 | 407,000 | 448,000 | 475,000 | n.a. |
| Turkey— | | | | | | |
| Motor spirit | 626,000 | 687,000 | 750,000 | 784,324 | 898,340 | 907,000 |
| Kerosine | 469,000 | 417,000 | 415,000 | r 386,011 | 466,100 | n.a. |
| Jet fuel | 14,000 | 65,000 | 80,000 | 172,605 | 157,634 | n.a. |
| Diesel oil | r 1,072,780 | r 1,086,179 | 1,282,000 | r 1,249,759 | 1,480,384 | 1,375,000 |
| Fuel oil | 1,640,000 | 1,670,000 | 1,900,000 | 2,266,277 | 2,694,395 | 2,900,000 |
| Asphalt | 99,000 | 131,000 | 137,000 | 182,929 | 183,440 | n.a. |

(a) United States Bureau of Mines' estimate.

EXPORTS OF PETROLEUM AND ALLIED PRODUCTS*

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|-------------|-------------|-----------|-----------|-------------|-----------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Crude petroleum .. | 338,542 | 267,809 | 125,485 | 189,316 | 328,251 | 435,849 |
| Aviation spirit .. | 116,719 | 134,957 | 143,471 | 146,856 | 144,153 | 68,445 |
| Aviation turbine fuel (d) | 380,122 | 455,554 | 373,776 | 288,820 | 256,561 | 90,260 |
| Motor spirit .. | 774,103 | 979,663 | 1,000,728 | 994,414 | 919,095 | 868,685 |
| Other spirit .. | 157,662 | 113,841 | 150,725 | 163,282 | 147,407 | 262,364 |
| Kerosine (e) | 560,870 | 654,757 | 724,566 | 739,497 | 924,172 | 997,058 |
| Gas oil .. | 2,964,586 | 3,333,104 | 3,482,086 | 3,445,056 | } 4,653,007 | 4,999,113 |
| Diesel oil .. | 285,984 | 480,128 | 488,367 | 362,247 | | |
| Fuel oil .. | 3,155,000 | 3,869,586 | 4,753,153 | 4,568,421 | 6,153,546 | 5,903,538 |
| Lubricating oil .. | 519,037 | 478,961 | 538,668 | 503,843 | 553,686 | 580,287 |
| Greases (c) .. | 34,966 | 33,391 | 30,873 | 30,878 | 32,926 | 34,924 |
| Other heavy oils .. | 190 | 7,065 | 3,053 | 1,914 | — | — |
| Petroleum jelly .. | 530 | 635 | 1,072 | 706 | 790 | 1,356 |
| Petroleum waxes .. | 6,077 | 4,561 | 3,428 | 3,883 | 3,041 | 3,314 |
| Malta (bunkers) (b)— | | | | | | |
| Aviation spirit .. | 5,003 | 8,719 | 9,066 | 5,157 | 4,638 | 5,104 |
| Aviation turbine fuel .. | 1,793 | 40,736 | 66,630 | 56,772 | 74,559 | 59,010 |
| Gas oil .. | 12,048 | 8,209 | 4,968 | 7,488 | 10,612 | 12,787 |
| Diesel oil .. | — | 5,215 | 8,772 | 10,583 | 14,743 | 9,877 |
| Fuel oil .. | 10,507 | 8,876 | 21,506 | 45,549 | 25,153 | 23,875 |
| Ghana— | | | | | | |
| Gas oil (bunkers) .. | 13,198 | 7,425 | 10,563 | 14,555 | 27,070 | 27,254 |
| do. do. (b) .. | 2,780 | 16 | 722 | 467 | — | 13 |
| Diesel oil (bunkers) (b) .. | 23,673 | 435 | 7,016 | 6,606 | 132 | 238 |
| Fuel oil .. | 196,634 | 183,536 | 206,257 | 233,331 | 200,994 | 265,386 |
| do. (bunkers) (b) .. | 3,201 | 550 | — | 149 | — | — |
| Lubricating oil (bunkers) (b) .. | 282 | 209 | 262 | 403 | 695 | 840 |
| Kenya— | | | | | | |
| Aviation spirit (bunkers) (b) .. | 2,964 | 2,287 | 2,091 | 1,374 | 400 | 584 |
| Motor spirit .. | 4,540 | 5,322 | 27,503 | 28,526 | 219,374 | 17,933 |
| do. (bunkers) .. | 2 | 1 | 13 | 1 | 3 | 43 |
| Aviation turbine fuel (bunkers) .. | (b) 41,649 | 81,271 | 78,959 | 83,995 | 56,845 | 153,639 |
| Kerosine .. | 2,186 | 3,512 | 7,713 | 7,888 | 5,808 | 5,643 |
| Gas, diesel and fuel oils do. bunkers .. | 306,323 | 362,196 | 391,742 | 271,857 | 171,655 | 204,038 |
| Lubricating oil (bunkers) (b) .. | (a) 134,614 | (a) 135,768 | 171,183 | 518,828 | 542,497 | 427,960 |
| Asphalt and bitumen .. | 375 | 468 | 616 | 1,252 | 1,224 | 950 |
| Mauritius (bunkers) (b)— | 2,583 | 10,048 | 16,107 | 17,074 | 13,057 | 9,765 |
| Aviation spirit .. | n.a. | 2,243 | 2,111 | 1,074 | 132 | 43 |
| Aviation turbine fuel .. | n.a. | 2,627 | 3,150 | 8,071 | 12,076 | 12,379 |
| Fuel oils .. | n.a. | 20,331 | 25,707 | 74,216 | 114,729 | 88,129 |

*Excluding the United Kingdom, the following rates have been used for converting Imperial gallons to long tons: Aviation spirit 315, Motor spirit 305, White spirit 280, Aviation turbine fuel 275, Kerosine 275, Gas oil 260, Diesel oil 256, Fuel oil 240, Lubricating oil 250, Asphalt 220, Road oil 220, Crude petroleum 245 (except for countries mentioned in footnote (b) on page 239).

(a) Including foreign produce.

(e) Including kerosine jet type fuel.

(b) Foreign produce. See imports.

(c) Including cable impregnating compounds.

(d) Wide cut gasoline.

EXPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|------------|------------|------------|------------|------------|------------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Nigeria— | | | | | | |
| Crude petroleum .. | 5,782,608 | 13,019,779 | 18,945,374 | 14,773,521 | 6,889,548 | 26,550,577 |
| Motor spirit .. | — | — | 51,520 | 15,511 | 9,845 | 103 |
| do. (bunkers) .. | — | — | 743 | — | — | — |
| Aviation spirit .. | — | — | 1,415 | 5,269 | 2,233 | 5 |
| do. (bunkers) .. | — | — | 96 | 237 | — | — |
| do. do. (a) .. | 71 | 300 | 992 | 421 | — | — |
| Aviation turbine fuel .. | — | — | 3,066 | 2,943 | 3,550 | 22 |
| do. (bunkers) .. | — | — | 365 | 713 | — | — |
| do. do. (a) .. | 24,173 | 493 | 1,743 | 291 | 4,678 | 13,495 |
| Kerosine .. | — | — | 745 | 7,707 | 1,261 | — |
| do. (bunkers) .. | — | 169 | 29 | 65 | — | — |
| Gas oil .. | — | — | 22,709 | 9,702 | 3,683 | 6 |
| do. (bunkers) .. | — | — | 2,275 | 3,009 | 463 | — |
| do. do. (a) .. | (e) | (e) | (e) | (e) | (e) | (e) |
| Diesel oil .. | — | — | 4,601 | 9,375 | 3,869 | — |
| do. (bunkers) .. | — | — | 374 | 201 | — | — |
| do. do. (a) .. | 132 | 1,550 | 77 | — | 4,360 | 9,725 |
| Fuel oil .. | — | 11 | 74,267 | 59,239 | 3,569 | 1,190 |
| do. (bunkers) .. | — | 625 | 5,695 | 8,139 | 163 | 1,950 |
| do. do. (a) .. | (b) 13,865 | (b) 16,065 | (b) 6,720 | (b) 3,328 | 6,065 | 11,135 |
| Asphalt and bitumen .. | — | 10 | 8,435 | 3,942 | 1,448 | 1,043 |
| Tanzania— | | | | | | |
| Motor spirit .. | — | — | 3,649 | 91,237 | 124,260 | 132,166 |
| Aviation spirit bunkers (a) .. | 2,322 | 1,590 | — | — | — | — |
| Aviation turbine fuel .. | (a) 5,911 | — | (a) 9,529 | 12,907 | 14,790 | 18,322 |
| do. (bunkers) .. | — | — | n.a. | 10,082 | 19,943 | 4,402 |
| Kerosine .. | — | — | 620 | 9,097 | 12,004 | 14,522 |
| Gas, diesel and fuel oils (a) .. | (a) 512 | (a) 2,224 | 41,624 | 210,103 | 366,476 | 343,804 |
| do. (bunkers) .. | — | — | 3,443 | 6,559 | 9,149 | 5,141 |
| Uganda (bunkers) (a)— | | | | | | |
| Aviation spirit .. | 2,466 | 1,123 | 1,237 | 480 | 84 | 388 |
| Aviation turbine fuel .. | 11,300 | — | — | — | — | — |
| Canada— | | | | | | |
| Crude petroleum .. | 13,501,180 | 14,401,380 | 17,670,192 | 20,045,942 | 22,331,729 | 26,312,099 |
| Motor spirit .. | 119,423 | 29,217 | 49,553 | 48,894 | 47,262 | 50,602 |
| Fuel oil .. | 337,289 | 297,737 | 345,683 | 495,403 | 686,755 | 878,608 |
| Lubricating oil (c) .. | 4,546 | 4,801 | 5,877 | 6,331 | 3,823 | 2,597 |
| Liquified petroleum gas .. | 384,801 | 625,941 | 822,613 | 988,373 | 1,074,810 | 1,265,756 |
| Petroleum coke (d) .. | 18,951 | 15,269 | 8,632 | 16,644 | 7,532 | 2,327 |
| Natural gas (million cu.ft.) .. | 404,143 | 403,908 | 426,223 | 505,165 | 607,355 | 669,816 |
| Barbados (bunkers)— | | | | | | |
| Aviation spirit (a) .. | 1,443 | 2,005 | 1,320 | 3,271 | 794 | 2,079 |
| Aviation turbine fuel (a) .. | 7,635 | 9,566 | 22,062 | 14,281 | 7,461 | 7,838 |
| Gas, diesel and fuel oils .. | 118 | 559 | 7,638 | 4,157 | 3,164 | 614 |
| Do. do. (a) .. | 98,881 | 131,201 | 278,732 | 156,185 | 94,811 | 64,359 |
| Bermuda (bunkers) (a)(f) | | | | | | |
| Aviation spirit .. | 28,443 | 24,868 | 7,191 | 6,400 | 14,516 | 4,031 |
| Motor spirit .. | 2,426 | 2,350 | 2,924 | 3,167 | 1,534 | 1,314 |
| Aviation turbine fuel .. | 68,021 | 60,340 | 74,829 | 85,561 | 92,495 | 103,878 |
| Kerosine .. | 377 | 330 | 220 | 171 | 164 | 146 |
| Fuel and Diesel oil .. | 33,541 | 25,980 | 31,718 | 21,419 | 21,829 | 33,413 |
| Lubricating oil .. | 36 | 29 | 16 | 9 | 34 | 9 |

(a) Foreign produce. See imports.

(b) Gas and fuel oils.

(c) Including grease.

(d) Including pitch coke.

(e) Included with fuel oil.

(f) Including bunkers for military forces.

EXPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|-------------|-------------|-------------|-------------|-------------|------------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Jamaica— | | | | | | |
| Aviation spirit (bunkers) | (b) 6,927 | (b) 4,861 | (a) 267 | n.a. | (b) 4,385 | (a) 13,834 |
| Motor spirit | 33,564 | 75,774 | 112,898 | 56,321 | 31,061 | 45,665 |
| Kerosine | 10,086 | 21,118 | 21,216 | 9,770 | 4,359 | 7,669 |
| do. (bunkers) .. | (b) 42,176 | (b) 65,956 | (a) 53,515 | n.a. | n.a. | 5,526 |
| Gas oil | 2,163 | 3,602 | 1 | (e) | 520 | 6,799 |
| do. (bunkers) .. | (b) 7,473 | (b) 7,520 | (a) 1,718 | n.a. | (b) 14,933 | 5,526 |
| Diesel oil | 65,544 | 87,588 | 83,167 | (e) | 40,927 | 52,205 |
| do. (bunkers) .. | (b) 21,362 | (b) 22,034 | 20,467 | n.a. | (b) 19,869 | 13,916 |
| Fuel oil | 13,796 | 29,269 | 17,548 | 107,297 | 49,342 | 36,951 |
| do. (bunkers) .. | (b) 107,095 | (b) 146,260 | (a) 128,985 | n.a. | (a) 129,294 | 106,822 |
| Lubricating oil .. | — | 10,987 | 18,252 | 10,572 | 19,609 | 17,932 |
| Trinidad and Tobago— | | | | | | |
| Crude petroleum .. | 1,337,201 | r 1,347,980 | r 1,449,325 | r 1,752,295 | 1,942,362 | 2,492,908 |
| Aviation spirit (d) | 1,628,647 | 2,165,429 | 2,152,296 | 2,038,187 | 2,533,868 | 2,095,973 |
| do. (bunkers) .. | 37,296 | 27,541 | 32,620 | 28,323 | 35,635 | 39,842 |
| Motor spirit | 1,045,728 | 813,285 | 1,002,936 | 1,156,517 | 1,096,978 | 900,477 |
| do. (bunkers) .. | 28 | 11 | 437 | 941 | 24 | n.a. |
| Kerosine | 155,196 | 112,076 | 18,962 | 7,168 | 12,582 | 14,781 |
| do. (bunkers) .. | 149 | 18 | 136 | 81 | 46 | 65 |
| Gas oil | 1,487,506 | 942,268 | 584,101 | 434,902 | 120,762 | 173,901 |
| do. (bunkers) .. | 37,615 | 37,644 | 45,971 | 54,773 | 54,218 | 40,167 |
| Diesel oil | 936,228 | 1,394,654 | 1,803,173 | 1,833,187 | 2,120,591 | 1,875,277 |
| do. (bunkers) .. | 187,445 | 152,723 | 131,697 | 165,959 | 155,617 | 149,721 |
| Fuel oil | 9,269,922 | 9,888,972 | 9,536,221 | 9,757,602 | 11,073,309 | 11,715,297 |
| do. (bunkers) .. | 1,627,337 | 1,329,922 | 1,152,768 | 1,049,038 | 1,388,553 | 1,231,997 |
| Lubricating oil .. | 51,128 | 95,742 | 154,277 | 141,246 | 171,488 | 190,983 |
| Road oil | 8,428 | 12,518 | 9,224 | 7,697 | 6,908 | 6,141 |
| Asphalt— | | | | | | |
| Dried | 79,080 | 58,544 | 63,935 | 59,284 | 54,216 | 44,916 |
| Asphalt cement .. | 4,100 | 2,812 | 1,766 | 545 | 465 | 2,070 |
| Bituminous asphalt | 26,170 | 18,015 | 15,367 | 22,173 | 17,228 | 16,524 |
| Falkland Islands (bunkers) (a)— | | | | | | |
| Fuel oil | 5,605 | 2,581 | n.a. | n.a. | n.a. | n.a. |
| Guyana (a)— | | | | | | |
| Aviation spirit (bunkers) | 926 | 149 | 4 | — | — | — |
| Abu Dhabi (c)— | | | | | | |
| Crude petroleum .. | 5,919,230 | 8,928,097 | 12,135,404 | 12,157,754 | 14,758,077 | 16,781,085 |
| Bahrain Islands (c)— | | | | | | |
| Aviation and motor spirit | 1,793,000 | 1,245,000 | 1,152,000 | 942,000 | 790,000 | 839,000 |
| Aviation turbine fuel .. | 596,000 | 848,000 | 1,049,000 | 1,399,000 | 1,585,000 | 1,477,000 |
| Kerosine | 557,000 | 502,000 | 431,000 | 406,000 | 447,000 | 154,000 |
| Diesel oil | 2,014,000 | 1,587,000 | 1,703,000 | 1,628,000 | 1,710,000 | 1,944,000 |
| Fuel oil | 3,126,000 | 3,125,000 | 3,299,000 | 4,255,000 | 4,150,000 | 4,835,000 |
| do. (bunkers) .. | 1,014,000 | 961,000 | 1,027,000 | 1,300,000 | 1,053,000 | 962,000 |
| Asphalt | 30,000 | 8,000 | 2,000 | 1,000 | 1,000 | 5,000 |
| Brunei— | | | | | | |
| Crude petroleum (f) .. | 3,463,277 | 3,868,849 | 4,544,422 | 4,973,838 | 5,842,863 | 5,965,564 |
| Ceylon (bunkers) (a)— | | | | | | |
| Aviation spirit | 5,886 | 1,455 | — | 22,274 | 11,978 | 7 |
| Gas oil | 3,679 | 2,860 | 4,181 | 9,788 | 5,865 | 4,123 |
| Diesel oil | 29,045 | 24,408 | 27,266 | 31,580 | 61,159 | 59,233 |
| Fuel oil | 210,985 | 230,679 | 203,505 | 456,700 | 499,043 | 280,166 |
| Cyprus (bunkers) (a)— | | | | | | |
| Aviation spirit | 1,737 | 2,189 | 1,478 | 1,357 | 1,308 | 785 |

(a) Foreign produce. See imports.

(c) British Protected State.

(e) Included with fuel oil.

(f) Exported to Sarawak for refining. Some, however, is re-exported from Sarawak and shown as exports from that country.

(b) Including foreign produce.

(d) Including J.P.4 type aviation turbine fuel.

EXPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| India (a)— | | | | | | |
| Motor spirit | 369,862 | n.a. | n.a. | n.a. | n.a. | 155,352 |
| Other spirit | | | | | | |
| Malaysia (West)— | | | | | | |
| Crude petroleum | n.a. | 223,016 | 259,866 | 313,807 | 493,897 | 434,340 |
| Aviation spirit | n.a. | 609 | 117 | 2,725 | 89 | 1,248 |
| do. do. (bunkers) | n.a. | 10,198 | 16,158 | 12,113 | 14,322 | n.a. |
| Motor spirit | n.a. | 96,621 | 104,741 | 92,219 | 167,988 | 94,640 |
| Aviation turbine fuel | n.a. | 17,701 | 22,675 | 40,622 | 5,209 | 47 |
| Kerosine | n.a. | 21,645 | 32,271 | 20,090 | 104,540 | 95,509 |
| Gas oil | n.a. | 54,722 | 36,031 | 72,299 | 70,176 | 110,008 |
| Diesel oil | n.a. | 75,524 | 71,789 | 62,336 | 38,606 | 17,834 |
| Fuel oil | n.a. | 242,780 | 309,915 | 246,188 | 188,296 | 154,627 |
| Fuel and diesel oil (bunkers) | n.a. | 35,619 | 44,578 | 57,149 | 52,570 | n.a. |
| Petroleum coke | n.a. | 40,031 | 53,336 | — | — | — |
| Asphalt and bitumen | n.a. | 4,256 | 4,400 | 12,519 | 12,401 | 4,716 |
| Qatar (e)— | | | | | | |
| Crude petroleum | 8,754,450 | 8,903,998 | 8,936,394 | 8,909,704 | 9,058,678 | 9,211,244 |
| Sabah— | | | | | | |
| (bunkers) (b)— | | | | | | |
| Aviation spirit | 11,027 | 4,526 | 458 | 6,548 | 9,248 | 8,682 |
| Fuel oil | 8,259 | 9,964 | 400 | 11,798 | 10,801 | 9,228 |
| Sarawak— | | | | | | |
| Crude petroleum (c) | 1,736,481 | 1,898,056 | 2,374,797 | 2,716,03 | 3,512,411 | n.a. |
| Motor spirit (d) | 376,058 | 256,287 | 373,402 | 93,927 | 90,678 | n.a. |
| Kerosine | 137,516 | 135,875 | 141,097 | 208,621 | 111,646 | n.a. |
| Aviation turbine fuel | 6,408 | 172,065 | 138,291 | 477,603 | 578,887 | n.a. |
| Gas oil | 121,482 | 142,350 | 138,899 | 138,542 | 128,243 | n.a. |
| Diesel oil | 358,459 | 91,491 | 9,615 | 13,087 | 15,304 | n.a. |
| Fuel oil | 708,362 | 1,100,749 | 1,314,507 | 1,327,893 | 1,400,178 | n.a. |
| do. (bunkers) (f) | 37,828 | 23,312 | 23,959 | 20,882 | 15,438 | n.a. |
| Singapore— | | | | | | |
| Crude petroleum | — | — | 9,782 | 5 | 11,355 | 124 |
| Aviation spirit | 170,009 | 207,868 | 269,114 | 287,206 | 317,247 | 411,443 |
| do. (bunkers) | 54,190 | 73,009 | 66,712 | 65,273 | 73,082 | 87,863 |
| Motor spirit | 750,451 | 680,611 | 889,708 | 851,307 | 1,102,998 | 1,149,607 |
| White spirit | 44,016 | 22,046 | 29,050 | 103,762 | 25,575 | 49,778 |
| Aviation turbine fuel | 235,259 | 553,257 | 1,242,362 | 1,681,216 | 1,922,616 | 2,311,394 |
| Kerosine | 232,617 | 225,421 | 267,891 | 340,052 | 340,518 | 525,509 |
| Gas oil | 756,997 | 663,525 | 1,065,994 | 1,220,614 | 1,811,756 | 1,825,626 |
| Diesel oil | 300,227 | 401,057 | 461,577 | 492,696 | 482,098 | 459,670 |
| Fuel oil | 1,747,173 | 2,619,309 | 2,788,929 | 3,211,728 | 4,104,655 | 4,654,974 |
| Fuel and diesel oil (bunkers) | 2,470,657 | 2,854,708 | 3,022,486 | 3,519,190 | 4,065,527 | 3,984,078 |
| Lubricating oil | 58,355 | 74,011 | 95,104 | 98,170 | 113,372 | 138,687 |
| Asphalt and bitumen | 57,139 | 41,137 | 50,271 | 55,212 | 80,915 | 73,861 |

(a) Years ended March 31 following that stated.

(b) Foreign produce. See imports.

(c) Including crude petroleum imported from Brunei as well as enriched waxy crude.

(d) Excluding motor spirit blended with crude petroleum and exported as enriched waxy crude.

(e) British Protected State.

(f) Including diesel oil bunkers.

EXPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---------------------------------------|-----------|-----------|---------|---------|-----------|-----------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Australia (a)— | | | | | | |
| Aviation spirit | 1,344 | 736 | 5,626 | 3,360 | 11,572 | 376 |
| do. do. (bunkers) .. | 5,828 | 3,315 | 13,619 | 605 | 906 | 15 |
| do. do. do. (d) .. | 5,873 | 3,585 | 3,316 | 822 | 260 | 706 |
| Motor spirit | 141,515 | 52,813 | 46,336 | 128,540 | 217,962 | 197,586 |
| Kerosine | 3,650 | 8,773 | 11,413 | 12,539 | 22,360 | 5,527 |
| Aviation turbine fuel .. | 23,734 | 51,672 | 70,559 | 45,516 | 101,579 | 65,595 |
| do. (bunkers) .. | 32,881 | 72,183 | 112,942 | 24,787 | 58,335 | 69,591 |
| do. do. (d) .. | 2,400 | 11,802 | 13,887 | 82,799 | 109,378 | 115,855 |
| Lubricating oil | 50,610 | 52,227 | 62,046 | 90,669 | 94,679 | 99,216 |
| Diesel and fuel oils .. | 1,671,995 | 1,037,107 | 744,030 | 878,803 | 688,037 | 479,144 |
| Fuel oil (bunkers)— | | | | | | |
| Domestic produce .. | 752,493 | 718,586 | 785,614 | 878,028 | 1,281,811 | 1,216,532 |
| Foreign produce .. | 8,845 | 4,614 | 2,506 | 3,230 | 9,256 | 20,077 |
| Fiji (bunkers)(d)— | | | | | | |
| Aviation spirit | 2,085 | 1,669 | 1,574 | 3,079 | 1,028 | 352 |
| Aviation turbine fuel .. | 39,193 | 50,932 | 53,681 | 60,076 | 81,627 | 69,380 |
| Diesel oil | 9,574 | 9,378 | 11,755 | 12,856 | 14,623 | 10,052 |
| Gas oil | 1,460 | 3,008 | 2,797 | 2,387 | 4,379 | 5,057 |
| Fuel oil | 6,863 | 5,133 | 11,574 | 761 | 2,208 | 15,488 |
| New Zealand (a)— | | | | | | |
| Diesel oil | — | 4,129 | 1,340 | 309 | 3,451 | 507 |
| do. (bunkers) .. | — | 47,092 | 90,809 | 99,576 | 106,918 | 118,735 |
| do. (bunkers) (d) .. | 23,826 | 29,319 | 13,484 | 6,942 | 2,891 | 921 |
| Fuel oil | 28,986 | 222,144 | 288,731 | 137,245 | 53,569 | 155,577 |
| do. (bunkers) .. | — | 14,256 | 58,729 | 100,040 | 112,597 | 88,293 |
| do. (bunkers) (d) .. | 40,911 | 43,232 | 13,734 | 5,789 | 4,094 | 904 |
| Lubricating oil (bunkers) (d) .. | 1,848 | 1,921 | 1,934 | 2,295 | 2,073 | 2,075 |
| Irish Republic— | | | | | | |
| Aviation spirit (d) (b) .. | 3,801 | 3,859 | 3,837 | 1,964 | 1,040 | 787 |
| do. (d) (c) | 15,857 | 14,478 | 11,065 | 10,795 | 8,745 | 9,342 |
| Motor spirit | 6,527 | 9,862 | 8,180 | 41,937 | 9,696 | 8,246 |
| Aviation turbine fuel (b) | — | — | — | 2,985 | 51,937 | 59,818 |
| do. (c) | — | — | — | 4 | 2,711 | 52,647 |
| do. (d) (b) | 15,399 | 6,111 | 38,691 | 47,197 | — | — |
| do. (d) (c) | 91,631 | 97,077 | 98,562 | 119,699 | 164,026 | 176,503 |
| Gas and diesel oils .. | 144,111 | 211,183 | 86,391 | 314,900 | 111,099 | 52,498 |
| do. (bunkers) (d)(b) .. | — | 5,864 | 8,909 | 11,492 | 12,668 | 17,948 |
| do. do. (b) | 11,036 | 10,542 | 5,964 | 8,252 | 6,826 | 8,029 |
| Fuel oil | 21,204 | 62,378 | 12,221 | 322,295 | 210,407 | 319,557 |
| do. (bunkers) (b) .. | 93,248 | 101,646 | 91,970 | 125,096 | 106,296 | 91,654 |
| OTHER COUNTRIES | | | | | | |
| Albania— | | | | | | |
| Crude petroleum | 289,700 | 280,000 | n.a. | n.a. | n.a. | n.a. |
| Natural asphalt | 10,000 | 11,000 | n.a. | n.a. | n.a. | n.a. |
| Other asphalt | 238,400 | 264,000 | n.a. | n.a. | n.a. | n.a. |

(a) Years ended June 30 of that stated.

(b) Bunkers for foreign going ships or aircraft only.

(c) Exports to Shannon Free Airport.

(d) Foreign produce. See imports.

EXPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-----------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Austria— | | | | | | |
| Crude petroleum .. | 1 | 1 | 1 | 1 | — | 1 |
| Motor spirit | 59 | 21 | 184 | 294 | 252 | 2,962 |
| Gas oil | 128,922 | 123,974 | 24,562 | 7,981 | 770 | 300 |
| Fuel oil | 2 | 6 | 16 | 23 | 27 | 43 |
| Lubricating oil, etc. .. | 75,865 | 71,964 | 54,449 | 77,717 | 98,795 | 131,108 |
| Belgium-Luxemburg | | | | | | |
| E. U.— | | | | | | |
| Crude petroleum .. | 28 | — | 157,143 | 271,482 | 148,174 | 31,973 |
| Motor spirit | 613,902 | 848,683 | 878,642 | 1,010,007 | 1,675,912 | 2,341,253 |
| Kerosine | 396,171 | 434,780 | 461,470 | 500,891 | 553,466 | 736,029 |
| Gas oil | 1,303,896 | 1,295,950 | 1,082,749 | 3,644,964 | 1,700,990 | 3,071,362 |
| do. (bunkers) (a) .. | 109,033 | 208,020 | 260,239 | 230,490 | 207,751 | 233,609 |
| Fuel oil, etc. .. . | 730,742 | 521,286 | 847,546 | 859,378 | 1,444,441 | 2,139,279 |
| do. (bunkers) (a) .. | 1,412,951 | 1,592,888 | 1,529,519 | 1,556,793 | 1,792,148 | 2,401,090 |
| Lubricating oil .. | 129,520 | 154,133 | 154,196 | 162,374 | 192,467 | 191,047 |
| do. (bunkers) (a) .. | 9,872 | 7,006 | 6,877 | 6,642 | 10,442 | 9,379 |
| Other heavy oils .. | 29,885 | 2,576 | 1,888 | — | 1,134 | 1,475 |
| Petroleum jelly .. | 804 | 354 | 234 | 140 | 46 | 70 |
| Paraffin wax .. . | 93 | 67 | 161 | 232 | 517 | 223 |
| Ozokerite and ceresin (c) | 28 | 44 | 40 | 20 | 25 | 19 |
| Petroleum coke .. | 40,410 | 25,228 | 26,836 | 31,447 | 26,855 | 76,856 |
| Natural asphalt .. | 255 | 254 | 368 | 193 | 132 | 111 |
| Pitch | 234,859 | 194,920 | 220,997 | 226,184 | 259,584 | 284,252 |
| Bulgaria— | | | | | | |
| Crude petroleum .. | 40,177 | 3,871 | 24,310 | 1,464 | 4,330 | <i>n.a.</i> |
| Denmark— | | | | | | |
| Aviation spirit .. . | 3,070 | 5,925 | 1,498 | 1,628 | 8,021 | — |
| Motor spirit | 171,466 | 259,965 | 319,570 | 287,386 | 310,598 | 322,780 |
| White spirit | 482 | 28 | 6 | 957 | 1,823 | 11,819 |
| Kerosine | 6,835 | 4,559 | 24,166 | 12,740 | 9,260 | 16,217 |
| Gas oil | 44,591 | 63,269 | (b) 322,552 | 364,063 | 282,789 | 344,310 |
| Diesel oil | 65,087 | 146,981 | (b) — | 1,693 | 6,710 | 17 |
| Fuel oil | 308,744 | 193,071 | (b) 32,761 | 110,925 | 227,636 | 636,732 |
| Gas oil (bunkers) .. | } 352,949 | } 376,058 | } 446,632 | } 477,208 | } 444,749 | <i>n.a.</i> |
| Diesel oil (bunkers) .. | | | | | | |
| Fuel oil (bunkers) .. | | | | | | |
| Lubricating oil .. | 7,998 | 10,690 | 16,743 | 15,653 | 7,844 | 17,567 |
| Grease | 933 | 910 | 1,308 | 799 | 1,219 | 1,873 |
| France— | | | | | | |
| Aviation spirit .. . | (b) 11,788 | 2 | 7,371 | 399 | 359 | 808 |
| Motor spirit | (b) 1,752,649 | 1,575,749 | 1,608,622 | 1,595,203 | 1,103,573 | 972,857 |
| White spirit | (b) 23,262 | 21,386 | 22,320 | 27,207 | 30,703 | 32,591 |
| Kerosine | (b) 220,200 | 202,247 | 49,123 | 26,801 | 12,057 | 2,284 |
| Gas oil | } (b) 2,514,422 | } 3,373,771 | } 4,203,045 | } 2,820,975 | } 2,575,585 | } 2,856,598 |
| do. (bunkers)— | | | | | | |
| Domestic produce .. | | | | | | |
| Fuel oil | } (b) 3,025,240 | } 3,129,967 | } 4,935,240 | } 5,020,027 | } 4,193,721 | } 4,214,678 |
| do. (bunkers)— | | | | | | |
| Domestic produce .. | | | | | | |
| Lubricating oil .. | } (b) 252,438 | } 232,993 | } 264,147 | } 296,347 | } 265,502 | } 373,630 |
| do. (bunkers)— | | | | | | |
| Domestic produce .. | (b) 1,876 | 1,996 | 1,098 | 1,412 | 1,794 | 2,330 |
| Petroleum jelly .. | (b) 10,391 | 7,975 | 11,256 | 16,746 | 13,007 | 12,131 |
| Paraffin wax .. . | (b) 639 | 28 | 35 | 30 | 46 | 47 |
| Ozokerite, ceresin, etc. | (b) <i>n.a.</i> | 34 | 11 | 1 | 21 | 7 |
| Petroleum coke .. | (b) 20,106 | 18,926 | 23,603 | 17,014 | 20,908 | 15,926 |
| Natural asphalt and bitumen | (b) 3,160 | 1,949 | 2,475 | 2,585 | 4,860 | 4,557 |
| Mastic asphalt .. | (b) 235,651 | 267,377 | 3,66,088 | 401,194 | 372,596 | 326,233 |
| Bitumen | | | | | | |

(a) Bunkers for foreign going ships or aircraft only.

(b) Owing to reclassification not strictly comparable with details shown for 1965 and 1969.

(c) Including montan wax.

EXPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-----------|------------|------------|------------|------------|------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Germany (Federal)— | | | | | | |
| Crude Petroleum .. | 27 | 21,499 | 138,621 | 80,397 | 31,966 | 119,039 |
| Aviation spirit | | | | | | |
| (bunkers) (a) .. | 57,340 | 65,410 | 50,331 | 24,558 | 11,000 | 11,972 |
| Motor spirit (b) .. | 1,105,860 | 1,062,878 | 1,156,711 | 1,090,323 | 1,714,457 | 2,157,270 |
| White spirit .. | 10,272 | 9,057 | 6,232 | 8,094 | 5,999 | 9,990 |
| Kerosine .. | 16,477 | 4,515 | 11,936 | 24,248 | 28,994 | 13,900 |
| Aviation turbine fuel | 104,652 | 11,543 | 23,392 | 16,359 | 33,382 | n.a. |
| do. (bunkers) (a) .. | 290,209 | 335,965 | 453,519 | 563,584 | 624,232 | 686,794 |
| Gas and diesel oil | 964,552 | 342,260 | 321,815 | 377,864 | 491,394 | 598,047 |
| do. (bunkers) (a) .. | 254,410 | 220,702 | 256,558 | 248,255 | 287,848 | 290,814 |
| Fuel oil .. | 2,735,669 | 2,732,093 | 2,737,497 | 3,551,802 | 3,910,547 | 4,675,420 |
| do. (bunkers) (a) .. | 1,222,496 | 1,286,208 | 1,332,908 | 1,108,016 | 1,297,899 | 1,492,582 |
| Lubricating oil .. | 97,296 | 98,917 | 153,096 | 191,272 | 256,863 | 302,295 |
| do. (bunkers) (a) .. | 9,901 | — | — | — | — | — |
| Petroleum jelly .. | 10,648 | 13,340 | 13,521 | 14,141 | 15,474 | 15,886 |
| Paraffin wax .. | 34,925 | 417,829 | 47,588 | 48,952 | 57,364 | 70,908 |
| Ozokerite, etc. .. | 36 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Natural asphalt and | | | | | | |
| bitumen .. | 2,055 | 1,627 | 847 | 1,329 | 1,529 | 1,949 |
| Bitumen .. | 177,352 | 222,349 | 220,830 | 251,592 | 321,616 | 355,347 |
| Petroleum coke .. | 148,452 | 161,075 | 150,956 | 148,502 | 184,294 | 199,376 |
| Germany (East)— | | | | | | |
| Motor spirit .. | 418,138 | 465,532 | 114,188 | 492,215 | 539,510 | 412,276 |
| Diesel oil .. | 435,901 | 665,578 | 505,527 | 420,636 | 518,441 | 489,849 |
| Greece— | | | | | | |
| Diesel and fuel oils .. | 20,326 | 2,869 | 46,596 | 121,279 | 74,156 | 119,747 |
| Hungary— | | | | | | |
| Motor spirit .. | 121,638 | 148,000 | 160,000 | 209,636 | 240,032 | 293,341 |
| Kerosine .. | 208 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Gas oil .. | 164,198 | 153,000 | 157,000 | 213,573 | 236,253 | 245,093 |
| Fuel oil .. | 258,571 | 175,000 | 311,000 | 444,861 | 550,834 | 471,330 |
| Lubricating oil .. | 13,546 | 13,523 | 13,492 | 13,925 | 11,226 | 11,508 |
| Paraffin wax and ceresin | 512 | n.a. | n.a. | n.a. | n.a. | 5,178 |
| Bitumen .. | 165,822 | 167,000 | 198,000 | 178,141 | 147,239 | 76,524 |
| Italy— | | | | | | |
| Crude petroleum .. | 331 | 81 | 59 | 36 | 17 | 21 |
| Aviation and motor | | | | | | |
| spirits .. | 1,852,096 | 2,572,511 | 3,482,393 | 4,209,041 | 2,286,435 | 5,731,299 |
| do. (bunkers) (a) .. | 305,687 | 63,519 | 103,000 | 37,187 | 72,763 | 37,505 |
| White spirit .. | 13,295 | (c) | (c) | (c) | (c) | (c) |
| Kerosine .. | 792,613 | 1,249,745 | 1,322,649 | 1,603,324 | 2,007,975 | 2,336,396 |
| Lubricating oil .. | 80,165 | 142,055 | 235,469 | 220,334 | 257,643 | 242,948 |
| Fuel oil and gas oil | 7,677,762 | 14,789,304 | 15,639,935 | 15,516,411 | 19,563,940 | 21,652,642 |
| do. (bunkers) (a) .. | 3,897,546 | 1,836,740 | 4,789,793 | 3,812,235 | 3,332,246 | 3,444,867 |
| Paraffin wax .. | 1,246 | 749 | 1,954 | 1,728 | 1,383 | 1,655 |
| Natural asphalt and | | | | | | |
| bitumen .. | 6,859 | 6,858 | 6,221 | 7,305 | 4,199 | 1,105 |
| Pitch .. | 132,350 | 113,820 | 122,864 | 186,686 | 211,434 | 204,876 |
| Netherlands— | | | | | | |
| Aviation spirit | | | | | | |
| (bunkers) (a) .. | 3,443 | 9,743 | 8,835 | 21,101 | 5,858 | 13,000 |
| Motor spirit .. | 2,940,537 | 3,132,500 | 3,766,313 | 3,436,552 | 3,559,065 | 4,900,000 |
| Kerosine .. | 647,964 | 735,480 | 735,739 | 615,041 | 712,643 | 903,000 |
| Gas oil .. | 2,085,516 | 2,893,940 | 3,615,192 | 3,804,952 | 4,104,821 | 6,490,724 |
| do. (bunkers) (a) .. | 352,607 | 502,628 | 502,666 | 599,617 | 646,991 | 747,263 |
| Fuel oil .. | 3,511,260 | 3,558,226 | 3,943,932 | 4,786,932 | 4,661,146 | 7,299,014 |
| do. (bunkers) (a) .. | 2,778,157 | 2,753,230 | 2,921,736 | 3,806,257 | 4,630,595 | 5,868,818 |
| Lubricating oil .. | 309,681 | 301,269 | 291,350 | 384,215 | 492,136 | 466,594 |

(a) Bunkers for foreign ships or aircraft only.

(c) Included with aviation and motor spirits.

(b) Including aviation spirit.

EXPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Netherlands <i>(cont.)</i> | | | | | | |
| Petroleum jelly .. | 7,620 | 8,379 | 7,368 | 7,350 | 10,160 | 10,580 |
| Paraffin wax .. | 13,890 | 13,429 | 12,529 | 21,438 | 25,227 | 62,909 |
| Ozokerite and ceresin (d) .. | 221 | 58 | 126 | 124 | 127 | 111 |
| Pitch .. | 377,831 | 341,067 | 356,127 | 251,573 | 163,001 | 154,216 |
| Natural asphalt .. | — | 51 | 81 | 77 | 36 | 7 |
| Petroleum coke .. | 56,681 | 57,443 | 51,402 | 7,659 | 496 | 395 |
| Norway— | | | | | | |
| Motor spirit .. | 227,004 | 143,655 | 151,167 | 190,017 | 250,472 | 292,568 |
| Kerosine .. | 2,651 | 22 | 7 | — | 31 | 406 |
| Fuel oil and solar oil .. | 1,183,648 | 1,063,147 | 923,849 | 960,263 | 860,089 | 929,813 |
| Lubricating oil .. | 20,581 | 45,762 | 22,544 | 20,364 | 22,086 | 12,776 |
| Poland— | | | | | | |
| Kerosine .. | 576,700 | 1,010,874 | 510,489 | 662,081 | 1,449,742 | 1,667,990 |
| Fuel oils .. | | | | | | |
| Lubricating oil .. | | | | | | |
| Paraffin wax .. | | | | | | |
| Asphalt .. | | | | | | |
| Portugal (b)— | | | | | | |
| Motor spirit .. | 57,204 | 42,885 | 47,883 | 26,342 | 24,298 | 13,788 |
| Kerosine .. | 18,742 | 13 | 132,338 | 168 | 315 | 531 |
| Fuel oil .. | 151,212 | 126,282 | 48,501 | 36,263 | 138,371 | 31,694 |
| do. (bunkers) (a) .. | 26,734 | 57,569 | 44,298 | 22,323 | 12,921 | 16,100 |
| Lubricating oil, etc. .. | 2,693 | 4,115 | 5,131 | 6,740 | 8,603 | 11,874 |
| Bitumen .. | 204 | 7 | 30 | 145 | 787 | 1,233 |
| Natural asphalt .. | 487 | 332 | 48 | 301 | 74 | 10 |
| Roumania— | | | | | | |
| Motor spirit(c) .. | 1,629,200 | 1,421,300 | 1,162,700 | 942,181 | 973,085 | 839,134 |
| Kerosine .. | 332,400 | 275,700 | 272,500 | 211,998 | 177,354 | 198,318 |
| Gas oil .. | 1,869,800 | 1,947,800 | 1,918,900 | 2,058,172 | 2,252,356 | 2,125,393 |
| Fuel oil .. | 1,864,500 | 1,612,700 | 1,928,700 | 1,762,025 | 1,651,104 | 1,378,282 |
| Lubricating oil .. | 298,300 | 289,200 | 269,800 | 365,436 | 352,051 | 373,703 |
| Paraffin wax .. | 20,600 | 19,500 | 20,000 | 24,310 | 21,849 | 17,913 |
| Petroleum coke .. | 55,400 | 50,700 | 36,300 | 44,781 | 40,648 | 53,049 |
| Bitumen .. | 103,200 | 104,500 | 68,600 | 56,592 | 37,105 | 34,939 |
| Spain— | | | | | | |
| Motor spirit .. | 117 | 100 | 13 | 351,033 | 1,012,791 | 961,686 |
| Diesel oil .. | 2,023 | 89,463 | 163,077 | 433,087 | 1,626,587 | 1,047,711 |
| Fuel oil .. | — | 39 | 233,683 | 979,296 | 2,138,738 | 3,019,539 |
| Sweden— | | | | | | |
| Motor spirit, etc. .. | 172,440 | 127,591 | 143,763 | 287,728 | 506,570 | 595,318 |
| White spirit .. | 505 | 5 | — | 10 | 104 | 31 |
| Kerosine .. | 7,664 | 7,967 | 13,746 | 72,447 | 113,503 | 100,430 |
| Fuel oil and gas oil .. | 147,738 | 151,029 | 194,068 | 471,724 | 980,082 | 863,145 |
| Lubricating oil and grease .. | 47,649 | 46,809 | 47,283 | 48,567 | 62,456 | 59,429 |
| Paraffin wax .. | 3 | 39 | 16 | 93 | 42 | 187 |
| Asphalt .. | 26 | 38 | — | 9 | 9 | 17 |
| Pitch .. | 40,482 | 46,141 | 40,666 | 51,637 | 44,785 | 60,954 |
| Switzerland— | | | | | | |
| Motor spirit .. | 11,521 | 21,606 | 15,637 | 10,589 | 12,195 | 27,751 |
| Fuel oil .. | 62,230 | 104,587 | 116,516 | 161,089 | 182,850 | 213,583 |
| Lubricating oil and grease .. | 1,379 | 843 | 1,157 | 2,612 | 6,171 | 1,948 |
| Petroleum coke .. | 17,568 | 9,430 | 7,081 | 10,746 | 10,050 | 11,486 |
| Asphalt and bitumen .. | 3,533 | 2,634 | 2,973 | 2,395 | 998 | 1,120 |

(a) Bunkers for foreign ships or aircraft only.

(d) Including montan wax.

(b) See imports for amounts imported for bunkering national ships.

(c) Including white spirit and special kerosine.

EXPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|------------------------------------|------------|------------|------------|------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| J.S.S.R.— | | | | | | |
| Crude petroleum | 36,111,200 | 42,746,000 | 49,519,700 | 45,555,652 | 58,280,500 | 62,878,500 |
| Motor spirit | 2,703,800 | 2,315,600 | 2,660,000 | 3,224,654 | 3,298,600 | 3,271,900 |
| Kerosine | 875,500 | 1,146,700 | 1,232,800 | 1,162,052 | 1,300,600 | 1,449,800 |
| Diesel oil | 6,743,200 | 7,244,500 | 8,157,600 | 8,479,528 | 9,929,000 | 9,792,000 |
| Fuel oil | 8,913,300 | 9,556,200 | 10,469,200 | 10,989,845 | 11,497,600 | 11,405,900 |
| Lubricating oil and grease | 290,000 | 271,400 | 265,600 | 262,585 | 301,100 | 318,900 |
| Paraffin wax | 32,900 | 27,500 | 29,300 | 24,113 | 23,400 | 27,500 |
| Bitumen | 23,100 | 22,900 | 29,700 | 32,184 | 37,300 | 36,800 |
| Yugoslavia— | | | | | | |
| Crude petroleum | 310,843 | 142,442 | 318,900 | 316,720 | 287,585 | 212,815 |
| Aviation spirit | 17 | 1,261 | 1,001 | 871 | 747 | 321 |
| Motor spirit | 21,026 | 22,120 | 161,626 | 88,814 | 125,483 | 92,201 |
| White spirit | 379 | 143 | 293 | 17 | 165 | 10 |
| Aviation turbine fuel | — | — | 12,804 | 13,515 | 17,445 | 23,561 |
| Gas oil | 1,735 | 19,695 | 184,822 | 265,030 | 32,496 | 54,860 |
| Fuel oil | 73,660 | 132,492 | 409,443 | 273,266 | 80,738 | 24,812 |
| Lubricating oil | 44,757 | 51,895 | 42,863 | 54,298 | 15,524 | 92 |
| Algeria— | | | | | | |
| Crude petroleum | n.a. | 27,027,830 | 34,057,108 | 35,483,667 | 39,027,260 | n.a. |
| Angola— | | | | | | |
| Crude petroleum | 355,348 | 122,378 | 1 | 3 | 16,499 | 1,478,653 |
| Fuel oil | 196,979 | 203,199 | 186,500 | 46,932 | 253,046 | 246,837 |
| Canary Islands— | | | | | | |
| Motor spirit (a) | 246,218 | 292,170 | 172,197 | 124,140 | 173,220 | 248,477 |
| Kerosine (a) | 122,899 | 108,042 | 167,149 | 131,269 | 65,394 | n.a. |
| Diesel (a) (b) | 154,187 | 196,898 | 134,972 | 134,375 | 94,232 | 26,209 |
| do. (bunkers) (b) | 92,134 | 8,463 | 57,776 | 70,945 | 55,953 | 55,691 |
| Fuel oil (a) (b) | 592,709 | 699,500 | 396,689 | 92,563 | 85,389 | 88,412 |
| do. (bunkers) (b) | 319,201 | 33,577 | 297,156 | 480,190 | 385,409 | 483,287 |
| Paraffin wax (a) | — | 339 | 9 | 454 | — | — |
| Asphalt (a) | 37,304 | 33,735 | 76,529 | 57,768 | 48,600 | 36,133 |
| Ceuta (c)— | | | | | | |
| Diesel oil (bunkers) | 21,118 | 24,285 | 28,597 | 36,686 | 28,601 | 20,817 |
| Fuel oil (bunkers) | 122,857 | 157,590 | 175,780 | 149,872 | 98,700 | 93,111 |
| Congo (Republic of)— | | | | | | |
| Crude petroleum | 77,951 | 69,880 | 64,153 | 37,793 | 54,459 | 31,343 |
| Egypt— | | | | | | |
| Crude petroleum | 2,982,145 | 1,592,062 | 1,509,830 | 503,217 | 743,507 | 1,549,914 |
| Motor spirit | 470,451 | 431,176 | 588,759 | 383,974 | 366,577 | n.a. |
| Kerosine | 12,795 | 15,340 | 44,462 | 43,157 | 38,678 | 34,693 |
| Gas and diesel oils | 1,127,705 | 1,733,455 | 1,077,438 | 583,621 | 177,878 | 51,094 |
| Fuel oil | | | | | | |
| do. (bunkers) (d) | | | | | | |
| Gabon— | | | | | | |
| Crude petroleum | 1,051,237 | 1,260,982 | 1,364,557 | 3,136,002 | 3,781,172 | 4,322,521 |
| Libya— | | | | | | |
| Crude petroleum | 44,901,448 | 63,304,220 | 71,084,574 | 81,446,489 | 122,745,990 | 145,500,000 |
| Morocco— | | | | | | |
| Gas oil | n.a. | 39,728 | 325 | 7,610 | 26,905 | 9,859 |
| South Africa— | | | | | | |
| Motor spirit | 4,030 | 2,784 | 50,446 | 70,233 | 58,823 | 20,574 |
| do. (bunkers) (c) | 1,272 | | | | | |
| Kerosine | 22,796 | 23,415 | 75,956 | 75,487 | 29,938 | 66,784 |
| Diesel oil | 64,688 | 100,391 | 215,602 | 350,488 | 238,723 | 226,021 |
| do. (bunkers) | 52,816 | | | | | |
| do. (bunkers) (c) | 8,191 | | | | | |
| Fuel oil | 587,379 | 984,725 | 1,212,175 | 2,319,479 | 2,217,771 | 2,717,288 |
| do. (bunkers) | 732,558 | | | | | |
| do. (bunkers) (c) | 18,946 | | | | | |
| Asphalt and bitumen | 6,095 | n.a. | n.a. | n.a. | n.a. | 7,046 |

(a) Excluding exports to Spain and other Spanish Dependencies.

(b) Including foreign produce.

(c) Foreign produce. See imports.

(d) Bunkers of foreign produce.

EXPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|-------------|------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Tunisia (bunkers)— | | | | | | |
| Aviation spirit | 5,698 | — | — | — | <i>n.a.</i> | <i>n.a.</i> |
| Fuel oil | 254 | 3,976 | 1,821 | 851 | 975 | 3,110 |
| Lubricating oil and grease | 143 | 193 | 194 | 176 | 725 | 545 |
| Mexico— | | | | | | |
| Crude petroleum | 1,113,693 | 1,037,149 | 1,453,597 | 1,413,367 | <i>n.a.</i> | <i>n.a.</i> |
| Motor spirit | 4,739 | 873 | 9,601 | 36,472 | 2,930 | <i>n.a.</i> |
| Fuel oil | 1,378,775 | 1,482,139 | 1,022,564 | 1,121,445 | 2,050,999 | <i>n.a.</i> |
| do. (bunkers) | 24,679 | 22,912 | 34,630 | 4,386 | 12,041 | <i>n.a.</i> |
| Gas oil | 302 | 22 | 225 | 2,993 | 84 | <i>n.a.</i> |
| Paraffin wax | 1,794 | 2,783 | 949 | 1,224 | 1,582 | <i>n.a.</i> |
| Natural gas (<i>million cu. ft.</i>) (a) | 59,510 | 54,327 | 16,096 | 54,365 | 49,317 | <i>n.a.</i> |
| Netherlands Antilles— | | | | | | |
| Crude petroleum | 478,000 | 369,000 | 339,000 | 348,000 | 162,000 | <i>n.a.</i> |
| Aviation spirit | 1,558,000 | 1,504,000 | 1,138,000 | 1,062,000 | 714,000 | <i>n.a.</i> |
| Motor spirit | 2,825,000 | 3,031,000 | 3,109,000 | 3,248,000 | 3,089,000 | <i>n.a.</i> |
| White spirit | 74,000 | 72,000 | 50,000 | 61,000 | 34,000 | <i>n.a.</i> |
| Kerosine | 724,000 | 642,000 | 444,000 | 530,000 | 726,000 | <i>n.a.</i> |
| Aviation turbine fuel | 2,882,000 | 3,008,000 | 3,641,000 | 4,168,000 | 4,053,000 | <i>n.a.</i> |
| Gas oil | 3,488,000 | 2,836,000 | 3,701,000 | 2,790,000 | 1,715,000 | <i>n.a.</i> |
| Diesel oil | 1,678,000 | 1,245,000 | 1,396,000 | 1,466,000 | 1,853,000 | <i>n.a.</i> |
| Fuel oil | 21,858,000 | 21,860,000 | 19,453,000 | 20,570,000 | 21,469,000 | <i>n.a.</i> |
| Lubricating oil | 809,000 | 939,000 | 654,000 | 420,000 | 483,000 | <i>n.a.</i> |
| Asphalt | 898,000 | 865,000 | 934,000 | 999,000 | 1,080,000 | <i>n.a.</i> |
| United States— | | | | | | |
| Crude petroleum | 181,480 | 224,071 | 521,432 | 3,829,808 | 754,636 | 282,782 |
| Natural gasoline | 1,661 | (b) | (b) | (b) | (b) | (b) |
| Aviation spirit | 97,177 | 96,747 | 139,134 | 210,779 | 67,763 | 49,353 |
| Motor spirit | 51,278 | 65,843 | 61,923 | 152,110 | 63,007 | 66,677 |
| Other finished light products | <i>n.a.</i> | 261,456 | 66,325 | 42,199 | 60,490 | 97,392 |
| Kerosine | 20,319 | 21,163 | 31,636 | 20,034 | 77,774 | 19,275 |
| Aviation turbine fuel | 21,597 | 19,625 | 15,028 | 36,331 | 32,100 | 41,534 |
| Gas oil and distillate fuel oil | 910,949 | 592,233 | 522,030 | 587,017 | 300,862 | 271,224 |
| Residual fuel oil | 2,790,584 | 2,187,049 | 1,931,417 | 3,225,123 | 2,912,090 | 2,441,083 |
| Fuel oil (bunkers) | 9,205,000 | 8,520,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Lubricating oil | 2,410,537 | 1,986,713 | 2,067,445 | 2,400,000 | 2,100,000 | 1,910,000 |
| Transformer oil | 57,372 | 50,882 | 51,819 | 42,293 | 49,364 | 42,367 |
| Greases | 52,362 | 50,686 | 49,911 | 46,779 | 38,734 | 34,921 |
| Paraffin wax | 179,597 | 174,514 | 198,689 | 175,007 | 159,906 | 164,619 |
| Petroleum jelly | 31,624 | 29,378 | 26,544 | 24,328 | 25,237 | 22,249 |
| Natural asphalt and bitumen | 34,161 | 37,826 | 36,252 | 34,125 | 34,771 | 25,277 |
| Other asphalt, etc. | 99,635 | 55,292 | 60,615 | 44,616 | 50,486 | 58,367 |
| Petroleum coke | 2,431,794 | 2,114,689 | 2,588,429 | 2,925,923 | 3,483,701 | 4,112,066 |
| Liquefied petroleum gases | 452,705 | 633,744 | 689,406 | 554,090 | 580,657 | 615,926 |
| Natural gas (<i>million cu. ft.</i>) | 17,275 | 23,891 | 51,754 | 91,145 | 100,716 | 68,272 |
| Argentina— | | | | | | |
| Crude petroleum | 15,960 | — | 3,039 | 9,093 | 185,001 | 59,684 |
| Kerosine | — | 1,033 | 191 | 38 | 4 | 657 |
| Gas oil | — | 5 | 154,547 | 46 | 183 | 3,178 |
| Fuel oil | 469,865 | 878,065 | 985,792 | 669,911 | 907,417 | <i>n.a.</i> |
| Paraffin wax | 974 | 758 | 1,354 | 1,593 | 3,550 | 3,297 |
| Asphalt | 2,068 | 1,351 | 5,723 | 6,495 | 4,050 | 2,039 |
| Grahamite ("Rafaelite") | 1,052 | 443 | 150 | 314 | 137 | 261 |

(a) Imports into the United States.

(b) Included with motor spirit.

EXPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Bolivia— | | | | | | |
| Crude petroleum .. | 39,995 | 36,104 | r 289,000 | r 1,502,000 | 1,529,000 | 1,604,000 |
| Motor spirit | n.a. | n.a. | 5 | n.a. | n.a. | n.a. |
| Kerosine | n.a. | n.a. | 6 | n.a. | n.a. | n.a. |
| Brazil— | | | | | | |
| Fuel oil | 728 | n.a. | n.a. | 85,145 | 46,000 | n.a. |
| Colombia— | | | | | | |
| Crude petroleum .. | 4,181,307 | 5,521,144 | 4,816,877 | 4,243,239 | 2,635,000 | n.a. |
| Fuel oil | 686,455 | 701,951 | 904,405 | 1,166,024 | 1,091,000 | n.a. |
| Ecuador— | | | | | | |
| Crude petroleum .. | 76,000 | 76,147 | 61,700 | 37,400 | 40,100 | n.a. |
| Peru— | | | | | | |
| Crude petroleum .. | 393,550 | 338,623 | 274,495 | 333,630 | 481,264 | n.a. |
| Natural gasoline .. | — | 6 | — | 378 | n.a. | n.a. |
| Aviation spirit .. | 225 | — | — | 7 | n.a. | n.a. |
| Motor spirit | 1 | — | 362 | — | n.a. | n.a. |
| Kerosine | 40 | 61 | 36 | 88 | 9 | n.a. |
| Gas oil (a) | 6,508 | 6,000 | 8,685 | 32,569 | n.a. | n.a. |
| Fuel oil and diesel oil .. | 62,964 | 75,743 | 41,573 | 66,322 | 49,489 | n.a. |
| do. (bunkers) .. | 26,371 | 40,577 | 38,770 | 31,648 | 47,499 | n.a. |
| Lubricating oil and grease | 1,365 | 3,686 | 1,988 | 748 | 992 | n.a. |
| Asphalt | 2 | — | — | — | — | n.a. |
| Venezuela— | | | | | | |
| Crude petroleum .. | 120,452,116 | 119,472,921 | 116,117,048 | 124,245,602 | 127,075,154 | 127,390,372 |
| Motor spirit | 2,187,050 | 2,984,333 | 2,326,263 | 2,055,951 | 2,731,607 | 2,501,486 |
| Kerosine | 1,524,263 | 1,924,508 | 2,090,325 | 2,736,613 | 2,609,130 | 2,419,659 |
| Aviation turbine fuel .. | 305,882 | 270,875 | 177,971 | 352,639 | 131,752 | 82,632 |
| Gas oil | 4,013,734 | 3,252,247 | 41,877,901 | 42,284,214 | 40,526,700 | 42,049,308 |
| Diesel oil | 2,467,774 | 2,308,104 | | | | |
| Fuel oil | 34,196,501 | 36,775,054 | 255,380 | 287,061 | 381,018 | 417,562 |
| Lubricating oil .. | 233,360 | 274,689 | — | 26 | 20 | 20 |
| Paraffin wax | — | 1,707 | — | — | — | — |
| Asphalt | 478,564 | 517,804 | 495,596 | 552,653 | 420,179 | 362,515 |
| Burma— | | | | | | |
| Paraffin wax | 6,555 | 4,608 | r 7,739 | r 4,743 | 8,168 | n.a. |
| Formosa— | | | | | | |
| Motor spirit, etc. .. | 1,267 | 4,104 | 4,242 | 9,936 | 1,712 | 30,318 |
| Fuel oil | 80,384 | 36,524 | n.a. | n.a. | 15,668 | 129,819 |
| Lubricating oil .. | 30 | 480 | 23,938 | 48,876 | 44,707 | 41,168 |
| Asphalt | 12,776 | 12,221 | 17,957 | 27,047 | 28,373 | 29,208 |
| Indonesia— | | | | | | |
| Crude petroleum .. | 8,392,000 | 8,128,000 | 8,007,000 | 9,508,000 | 12,274,000 | n.a. |
| Motor spirit | 5,246,000 | 5,985,000 | 5,605,000 | 5,396,000 | 5,526,000 | n.a. |
| White spirit | | | | | | |
| Kerosine | | | | | | |
| Gas and diesel oils do. do. (bunker oil) | | | | | | |
| Fuel oil | | | | | | |
| do. (bunker oil) .. | | | | | | |
| Lubricating oil .. | | | | | | |
| Paraffin wax | | | | | | |
| Iran (b)— | | | | | | |
| Crude petroleum .. | 57,128,588 | 74,122,716 | 74,774,554 | 119,379,493 | 117,003,307 | n.a. |
| Motor spirit | 2,805,275 | 3,002,058 | 3,705,045 | 2,982,303 | 4,040,605 | n.a. |
| Kerosine | 826,136 | 565,977 | 497,150 | 466,756 | 783,473 | n.a. |
| Gas oil | 1,183,547 | 1,120,734 | 1,217,418 | 799,408 | 1,246,425 | n.a. |
| Diesel oil | 386,888 | 289,941 | 319,437 | 365,184 | 303,532 | n.a. |
| Fuel oil | 7,990,372 | 7,802,112 | 7,776,523 | 9,308,964 | 10,858,112 | n.a. |
| Pitch | 88,182 | 37,439 | 72,295 | 91,132 | 67,416 | n.a. |

(a) Including bunkers.

(b) Years ended March 20 following that stated

EXPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|------------|------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Iraq— | | | | | | |
| Crude petroleum .. | 58,246,932 | 60,674,147 | 62,014,787 | 56,120,790 | 51,973,014 | 52,330,986 |
| Japan— | | | | | | |
| Motor spirit | 260,413 | 393,580 | 369,613 | 323,065 | 125,443 | 77,294 |
| Kerosine | 175,850 | 178,905 | 294,266 | 302,666 | 193,161 | 554,652 |
| Gas oil | 163,658 | 178,561 | 194,680 | 174,259 | 114,429 | 79,807 |
| Lubricating oils .. | 90,317 | 76,361 | 220,880 | 82,700 | 151,710 | 223,220 |
| Paraffin wax | 11,696 | 12,737 | 18,219 | 14,405 | 17,781 | 24,478 |
| Asphalt and pitch .. | 94,569 | 91,804 | 61,086 | 97,796 | 127,853 | 154,803 |
| Jordan— | | | | | | |
| Asphalt and bitumen .. | 6,350 | 15,037 | 20,224 | 7,985 | 7,880 | 4,845 |
| Kuwait— | | | | | | |
| Crude petroleum .. | 94,443,539 | 96,261,808 | 101,684,739 | 102,313,966 | 107,452,430 | 113,324,522 |
| Light distillate .. | 1,017,000 | 6,669,724 | 6,551,509 | 6,738,000 | 10,584,562 | 9,710,727 |
| Gas oil | 2,446,000 | | | | | |
| Diesel oil | 34,000 | 3,673,359 | 3,664,397 | n.a. | n.a. | n.a. |
| do. (bunkers) .. | (b) | | | | | |
| Fuel oil | 2,291,000 | | | | | |
| do. (bunkers) .. | 3,991,854 | | | | | |
| Neutral Zone (a)— | | | | | | |
| Crude petroleum .. | 15,527,000 | 15,575,000 | 18,644,000 | 19,700,000 | 18,750,000 | 20,286,000 |
| Fuel oil | 2,622,000 | 1,458,000 | 646,000 | n.a. | n.a. | n.a. |
| Saudi Arabia— | | | | | | |
| Crude petroleum .. | 70,832,950 | 84,213,009 | 102,459,954 | 110,729,266 | 119,503,878 | 126,290,281 |
| Aviation spirit .. | 16,000 | 10,000 | n.a. | n.a. | n.a. | n.a. |
| Motor spirit | 1,234,200 | 1,771,000 | n.a. | n.a. | n.a. | n.a. |
| Kerosine | 280,100 | 136,000 | n.a. | n.a. | n.a. | n.a. |
| Aviation turbine fuel .. | 752,600 | 1,040,000 | n.a. | n.a. | n.a. | n.a. |
| Diesel oil | 1,557,200 | 1,527,000 | n.a. | n.a. | n.a. | n.a. |
| Fuel oil | 5,922,700 | 6,438,000 | n.a. | n.a. | n.a. | n.a. |
| Southern Yemen (d) (c) | | | | | | |
| Aviation and motor spirits | 946,288 | 1,046,853 | 1,053,213 | 730,217 | 705,608 | n.a. |
| Kerosine | 684,838 | 620,220 | 656,209 | 557,036 | 500,991 | n.a. |
| Gas, diesel and fuel oils | 2,475,113 | 2,522,760 | 2,245,863 | 3,058,156 | 3,010,455 | n.a. |
| Fuel oils (bunkers) .. | 3,875,597 | 3,215,970 | 3,615,681 | 1,374,883 | 424,370 | n.a. |
| Syria— | | | | | | |
| Natural asphalt .. | 100 | 551 | 296 | 285 | 98 | 10 |
| Turkey— | | | | | | |
| Motor spirit | 46,261 | 17,615 | 28,297 | 5,925 | n.a. | n.a. |
| Fuel oil | 679,382 | 490,006 | 381,768 | 33,009 | 146,307 | 296,422 |

(a) Neutral Zone of Kuwait and Saudi Arabia.

(b) Included with fuel oil.

(c) Domestic and foreign produce.

(d) Previously Aden.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS*
(Less Re-exports)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|---------------|--------------|------------|------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Crude petroleum .. | 59,339,000 | 65,653,203 | 70,152,881 | 72,667,395 | 81,177,261 | 92,751,047 |
| Aviation spirit .. | 145,257 | 131,192 | 132,604 | 153,849 | 152,583 | 122,696 |
| Aviation turbine fuel .. | 39,081 | 32,171 | 12,199 | 76,728 | 85,510 | 48,828 |
| Motor spirit .. | 3,151,744 | 3,163,714 | 3,462,064 | 4,427,020 | 4,394,127 | 3,933,788 |
| Other spirit .. | 1,762,400 | 2,091,415 | 2,922,502 | 4,104,008 | 4,502,485 | 4,955,303 |
| Kerosine .. | 572,547 | 633,259 | 666,755 | 624,426 | 633,495 | 578,153 |
| Aviation jet fuel .. | 242,715 | 358,350 | 355,182 | 541,277 | 587,670 | 520,361 |
| Fuel oil .. | 8,852,982 | 10,258,862 | 9,958,374 | 9,216,054 | 7,040,996 | 6,053,417 |
| Diesel oil .. | 226,710 | 219,980 | 337,479 | 224,991 | } 3,463,495 | 2,932,914 |
| Gas oil .. | 2,711,069 | 2,246,371 | 2,735,003 | 3,332,459 | | |
| Lubricating oil .. | 532,319 | 560,608 | 603,118 | 639,136 | 626,790 | 525,638 |
| Greases .. | 752 | 450 | 487 | 347 | 487 | 1,135 |
| Other oils .. | 2,532 | 1,752 | 2,204 | 2,629 | 2,747 | 2,893 |
| Mineral jelly .. | 3,920 | 3,097 | 3,116 | 2,851 | 2,714 | 1,583 |
| Paraffin wax .. | 10,719 | 11,969 | 35,611 | 14,629 | 12,287 | 13,280 |
| Other petroleum wax .. | 159,074 | 105,696 | 75,299 | 180,433 | 171,021 | 168,408 |
| Petroleum coke .. | 94,884 | 92,685 | 93,197 | 83,229 | 72,151 | 90,153 |
| Asphalt and bitumen (d) | 98,060 | 81,151 | 76,888 | 66,827 | 64,516 | 48,850 |
| Natural gas (Million cu. ft.) .. | 3,200 | 22,700 | 22,200 | 26,800 | 34,800 | 36,500 |
| Channel Islands— | | | | | | |
| Aviation spirit .. | 3,514 | 2,734 | 2,021 | 1,314 | 905 | (b) 978 |
| Motor spirit .. | 19,432 | 31,387 | 23,116 | 35,043 | 36,755 | (b) 23,887 |
| Other spirit (b) .. | 51 | 128 | 132 | 145 | 147 | 124 |
| Kerosine (g) .. | 14,425 | 18,513 | 22,137 | 25,850 | 22,098 | (b) 21,148 |
| Gas and fuel oil .. | 174,609 | 201,906 | 75,074 | 239,961 | 253,770 | (b) 100,071 |
| Lubricating oil .. | 1,831 | 1,745 | 2,470 | 1,685 | 1,429 | (b) 624 |
| Greases (b) .. | 164 | 23 | 30 | 47 | 35 | 28 |
| Gibraltar— | | | | | | |
| Aviation spirit (e) (g) .. | 5,000 | 9,033 | 10,118 | 10,070 | 3,446 | 4,067 |
| Motor spirit .. | 10,000 | 3,375 | 3,354 | 2,913 | 3,085 | 3,089 |
| Diesel oil .. | } (e) 179,000 | } (c) 11,181 | (c) 20,399 | 13,991 | 9,463 | (c) 7,075 |
| Fuel oil .. | | | | | | |
| Lubricating oil .. | 2,250 | 1,709 | 1,595 | 2,561 | 646 | 225 |
| Kerosine .. | 90 | 31 | 33 | 22 | 8 | — |
| Malta— | | | | | | |
| Aviation spirit (a) .. | 12,044 | 9,080 | 2,131 | 5,400 | 5,960 | 3,357 |
| Motor spirit .. | 19,238 | 23,979 | 20,264 | 29,701 | 27,235 | 32,917 |
| Aviation turbine fuel (a) | 38,831 | 40,505 | 44,818 | 24,038 | 11,019 | 15,851 |
| Kerosine .. | 30,026 | 19,953 | 28,367 | 22,455 | 27,471 | 25,450 |
| Fuel oil (a) .. | 91,040 | 89,835 | 75,724 | 130,715 | 139,850 | 145,630 |
| Gas oil (a) .. | 22,596 | 33,494 | 36,441 | 31,697 | 36,152 | 40,316 |
| Diesel oil (a) .. | 8,379 | 1,112 | 1,540 | 9,796 | 16,057 | 7,046 |
| Lubricating oil .. | 1,536 | 1,339 | 1,851 | 1,789 | 1,712 | 2,087 |
| Paraffin wax .. | 400 | 15 | 215 | 421 | 232 | 272 |
| Bitumen .. | 1,721 | 1,999 | 1,993 | 3,306 | 2,344 | 2,854 |
| Gambia— | | | | | | |
| Motor spirit .. | 3,690 | 3,857 | 4,785 | 4,869 | 5,549 | 6,988 |
| Kerosine .. | 737 | 860 | 913 | 1,190 | 1,011 | 1,642 |
| Aviation turbine fuel .. | — | — | — | 2 | (c) 6 | — |
| Gas oil .. | 1,554 | } 3,966 | 4,684 | 4,572 | 5,000 | 6,362 |
| Diesel oil .. | 1,856 | | | | | |
| Lubricating oil .. | 251 | 203 | 3,326 | 517 | 313 | 381 |
| Asphalt and bitumen .. | 827 | — | 11 | 6 | 1 | 15 |

*Excluding the United Kingdom, the following rates have been used for converting Imperial gallons to long tons: Aviation spirit 315, Motor spirit 305, Aviation turbine fuel 275, Kerosine 275, Gas oil 260, Diesel oil 256, Fuel oil 240, Lubricating oil 250, Crude petroleum 245, Asphalt 220, Road oil 220.

(a) Including imports for bunkering purposes.

See exports.

(b) Jersey only.

(c) Excess of re-exports.

(d) Natural.

(e) Total imports before deduction of re-exports.

(f) Including white spirit.

(g) Including aviation turbine fuel.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------------|------------|-----------|-------------|-----------|-----------|-----------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Ghana— | | | | | | |
| Crude petroleum .. | 549,593 | 604,293 | 487,215 | 814,973 | 895,049 | 780,327 |
| Aviation spirit .. | 4,937 | 1,236 | 2,055 | 1,063 | 8,636 | 1,745 |
| Motor spirit .. | 1,225 | 1,079 | 6,295 | 75 | 16 | 43 |
| White spirit .. | 345 | 406 | 269 | 383 | 613 | 492 |
| Kerosine .. | 20 | — | 1 | — | — | — |
| Aviation turbine fuel .. | 12,288 | 20,390 | 8,347 | 25,232 | 18,023 | 41,669 |
| Fuel oil (b) .. | 7,002 | 7,673 | — | — | 3 | 6 |
| Gas oil (b) .. | 222 | 3,040 | — | — | 4 | 14 |
| Diesel oil .. | 750 | 2 | 1 | 4,110 | 636 | 11 |
| Lubricating oil (b) .. | 15,095 | 20,759 | 10,718 | 15,176 | 13,869 | 14,367 |
| Greases .. | 954 | 986 | 796 | 3,433 | 856 | 1,421 |
| Petroleum jelly .. | 259 | 606 | 1,255 | 1,145 | 929 | 1,407 |
| Asphalt and bitumen .. | 9,489 | 12,008 | 9,282 | 4,320 | 10,484 | 4,584 |
| Kenya— | | | | | | |
| Crude petroleum .. | 1,476,566 | 1,814,865 | 1,819,368 | 1,892,312 | 1,931,922 | 2,034,243 |
| Aviation spirit (b) .. | 11,319 | 5,830 | 9,861 | 6,243 | 5,591 | 5,967 |
| Motor spirit .. | 14,689 | 821 | 12,507 | 4,550 | 39,996 | 10,795 |
| Kerosine (c) .. | (b) 38,628 | 5,350 | 86,022 | 31,877 | 80,111 | 79,973 |
| Gas, diesel, fuel oils (b) | 53,227 | 97,819 | 15,494 | 93,065 | 40,964 | 35,675 |
| Lubricating oil (b) .. | 8,529 | 14,547 | 8,812 | 12,307 | 18,188 | 7,143 |
| Greases .. | 134 | 723 | 463 | 616 | 1,484 | 505 |
| Petroleum jelly and paraffin wax .. | 447 | 903 | 772 | 701 | 1,070 | 1,164 |
| Asphalt .. | 4,244 | 842 | 1,000 | 2,598 | 2,203 | 1,513 |
| Malawi— | | | | | | |
| Aviation spirit .. | 21,102 | n.a. | 1,598 | 1,500 | 1,441 | 1,355 |
| Motor-spirit .. | 17,895 | 15,709 | 20,251 | 20,089 | 27,637 | 27,915 |
| Kerosine .. | 6,203 | 6,132 | 7,925 | 8,904 | 10,258 | 10,813 |
| Aviation turbine fuel .. | 556 | 436 | 2,468 | 2,669 | 3,424 | 4,112 |
| White spirit .. | 15 | 2 | 26 | 104 | 154 | 139 |
| Gas oil .. | 21,568 | 23,086 | 28,567 | 31,370 | 46,500 | 47,112 |
| Diesel oil .. | 111 | 1,933 | 2,326 | | | |
| Fuel oil .. | 1,390 | | 3,484 | 2,751 | 2,133 | |
| Lubricating oil .. | 1,354 | 1,690 | | | | 2,705 |
| Grease .. | 58 | 81 | 121 | 93 | 112 | 97 |
| Asphalt and bitumen .. | 744 | 1,501 | 1,318 | 2,029 | 2,256 | 2,328 |
| Mauritius— | | | | | | |
| Aviation spirit (b) .. | 1,202 | 2,607 | 2,004 | 851 | 843 | — |
| Motor spirit .. | 21,692 | 23,159 | 20,266 | 27,009 | 20,007 | 21,519 |
| Aviation turbine fuel (b) | 3,019 | 3,453 | 1,724 | 8,904 | 13,678 | 14,445 |
| Kerosine .. | 7,668 | 13,549 | 12,226 | 17,112 | 12,353 | 15,326 |
| Lubricating oils .. | 2,130 | 2,292 | 1,581 | 2,260 | 3,257 | 2,044 |
| Gas, diesel, fuel oils (b) | 68,393 | 58,138 | 52,689 | 116,127 | 169,644 | 143,495 |
| Grease .. | 130 | 114 | 108 | 131 | 190 | 128 |
| Asphalt and pitch .. | 4,455 | 5,867 | 1,795 | 1,792 | 2,137 | 1,871 |
| Asphalt, natural .. | 512 | 1,433 | 559 | 1,340 | 734 | — |
| Nigeria— | | | | | | |
| Aviation spirit (b) .. | 50,661 | 6,719 | (a) 178 | 14,751 | 8,461 | 6,454 |
| Motor spirit .. | 270,871 | 245,782 | (a) 3,459 | 117,615 | 248,103 | 278,319 |
| White spirit .. | 1,336 | 746 | 1,613 | 1,870 | 718 | 2,047 |
| Aviation turbine fuel (b) | 77,987 | 64,928 | 2,754 | 19,141 | 67,376 | 95,741 |
| Kerosine .. | 411,782 | 84,678 | 13,895 | 57,810 | 122,810 | 129,387 |
| Gas oil (b) .. | 320,850 | 340,225 | 16,858 | 129,420 | 324,078 | 305,261 |
| Diesel oil (b) .. | (a) 2,613 | (a) 862 | (a) 2,405 | 8,803 | 1,089 | 132 |
| Fuel oil (b) .. | 229,817 | 255,080 | (a) 124,689 | 137,829 | 261,488 | 267,215 |
| Lubricating oil .. | 24,352 | 23,000 | 30,492 | 33,088 | 20,024 | 28,265 |
| Petroleum jelly .. | 1,372 | 960 | 1,996 | 2,361 | 1,703 | 2,211 |
| Asphalt and bitumen .. | 8,698 | 23,440 | (a) 2,354 | (a) 7,970 | 9,947 | 5,093 |

(a) Excess of re-exports.

(c) Including aviation turbine fuel.

 (b) Including imports for bunkering purposes.
 See exports.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|--------------|--------------|------------|-----------|---------|---------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Rhodesia— | | | | | | |
| Aviation spirit | 4,333 | 4,802 | n.a. | n.a. | n.a. | n.a. |
| Motor spirit | 148,162 | 53,682 | n.a. | n.a. | n.a. | n.a. |
| Kerosine | 30,157 | 32,473 | n.a. | n.a. | n.a. | n.a. |
| Aviation jet fuel | 32,319 | 10,110 | n.a. | n.a. | n.a. | n.a. |
| White spirit | 1,853 | 976 | n.a. | n.a. | n.a. | n.a. |
| Other oils | 1,064 | 1,218 | n.a. | n.a. | n.a. | n.a. |
| Gas oil | 148,703 | 46,425 | n.a. | n.a. | n.a. | n.a. |
| Fuel oil | 955 | 210 | n.a. | n.a. | n.a. | n.a. |
| Lubricating oil | 12,329 | 13,754 | n.a. | n.a. | n.a. | n.a. |
| Greases (c) | 1,286 | 1,634 | n.a. | n.a. | n.a. | n.a. |
| Paraffin wax | 2,095 | 1,671 | n.a. | n.a. | n.a. | n.a. |
| Asphalt and bitumen | 15,009 | 5,212 | n.a. | n.a. | n.a. | n.a. |
| St. Helena— | | | | | | |
| Motor spirit | 295 | 292 | 313 | 404 | 221 | 475 |
| Kerosine | 105 | 134 | 92 | 238 | 135 | 268 |
| Fuel oils | 264 | 614 | 397 | 364 | 512 | 387 |
| Lubricating oil | 19 | 16 | 12 | 6 | 13 | 6 |
| Seychelles— | | | | | | |
| Motor spirit | 639 | 773 | 920 | 1,044 | 1,161 | n.a. |
| Kerosine | 445 | 531 | 604 | 777 | 937 | n.a. |
| Fuel oil | 2,538 | 2,885 | 3,500 | 4,081 | 7,263 | n.a. |
| Sierra Leone— | | | | | | |
| Aviation spirit (a) | 2,065 | 2,494 | 1,499 | 3,173 | 4,249 | n.a. |
| Motor spirit | 20,973 | 25,748 | 24,647 | 18,818 | 34,535 | n.a. |
| Aviation turbine fuel (a) | n.a. | 6,157 | 3,069 | 2,135 | — | n.a. |
| Kerosine | 15,615 | 9,830 | 10,131 | 14,723 | 27,126 | n.a. |
| Gas oil (a) | 244,060 | 3,392 | 149,449 | 132,569 | 114,335 | n.a. |
| Diesel oil (a) | | | | | | |
| Fuel oil (a) | 16,218 | 25,085 | 9,833 | 13,663 | 24,674 | n.a. |
| Lubricating oil | 3,557 | 2,174 | 2,141 | 2,479 | 3,085 | n.a. |
| Asphalt and bitumen | 2,947 | 3,500 | n.a. | 108 | 80 | n.a. |
| Tanzania— | | | | | | |
| Crude petroleum | — | — | 281,468 | 658,102 | 737,397 | 614,575 |
| Aviation spirit (a) | 3,777 | 4,669 | 3,073 | 5,133 | 1,663 | 4,226 |
| Motor spirit | 43,446 | 11,587 | (d) 32,672 | 21,353 | 47,708 | 71,256 |
| Aviation turbine fuel (a) | 6,232 | n.a. | 14,783 | 5,997 | 12,616 | 6,524 |
| Kerosine | 32,543 | 18,972 | 10,424 | 2,751 | 1,648 | 13,278 |
| Gas, diesel, fuel oils (a) | 66,499 | 45,553 | (d) 26,239 | 60,031 | 125,304 | 197,926 |
| Lubricating oil | 6,622 | 6,567 | 9,202 | 10,417 | 11,833 | 11,699 |
| Greases | 348 | 473 | 541 | 460 | 763 | 646 |
| Petroleum jelly and paraffin wax | 81 | 116 | 200 | 151 | 341 | 355 |
| Asphalt | 910 | 140 | 810 | 819 | 424 | n.a. |
| Uganda— | | | | | | |
| Aviation spirit (a) | 3,336 | 3,604 | 2,984 | 4,603 | 1,131 | 1,403 |
| Motor spirit | 24,449 | 37,515 | — | — | — | — |
| Kerosine | (a)(b)19,499 | (a)(b)22,152 | 314 | (b) 4,976 | 521 | 808 |
| Gas, diesel, fuel oils | 19,998 | 23,731 | 12 | — | — | — |
| Lubricating oil | 4,059 | 4,440 | 4,405 | 5,005 | 5,528 | 6,107 |
| Greases | 317 | 299 | 329 | 378 | 377 | 436 |
| Petroleum jelly and paraffin wax | 193 | 177 | 166 | 244 | 185 | 274 |
| Asphalt | 626 | 289 | 51 | (d) 68 | 412 | 374 |
| Zambia— | | | | | | |
| Aviation spirit | 2,528 | 3,183 | 1,255 | 3,835 | 3,237 | 2,969 |
| Motor spirit | 72,769 | 93,293 | 69,920 | 88,174 | 89,405 | 124,509 |
| Aviation turbine fuel | 2,141 | 4,141 | 12,430 | 13,972 | 20,994 | 19,761 |
| Kerosine | 11,177 | 14,208 | 7,632 | 14,025 | 16,954 | 7,468 |
| White spirit | 123 | 530 | 36 | 58 | 548 | 1,268 |

(a) Including imports for bunkering purposes. See exports.

(d) Excess of re-exports.

(b) Including aviation turbine fuel.

(c) Including mineral jelly.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|------------|------------|------------|------------|------------|------------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Zambia (cont.)— | | | | | | |
| Gas oil | 50,529 | 65,741 | 78,293 | } 140,916 | 179,177 | 214,994 |
| Diesel oil | 815 | 2,088 | 4,009 | | | |
| Fuel oil | 816 | 2,116 | 4,276 | | | |
| Lubricating oil and grease | 6,862 | 10,837 | 11,317 | 12,820 | 17,579 | 24,091 |
| Paraffin wax | 381 | 716 | 1,390 | 2,528 | 1,082 | 1,225 |
| Canada— | | | | | | |
| Crude petroleum | 19,137,461 | 19,224,555 | 20,868,127 | 22,771,331 | 23,698,478 | 25,749,979 |
| Aviation spirit | 38,279 | 19,008 | 17,357 | 40,185 | 14,986 | 21,825 |
| Motor spirit | 236,183 | 252,221 | 276,032 | 475,491 | 478,359 | 690,583 |
| Aviation turbine fuel | 166,594 | 261,089 | 265,885 | 417,594 | 618,407 | 601,975 |
| Kerosine, etc. | 22,525 | 34,946 | 51,946 | 234,895 | 272,257 | 200,736 |
| Lubricating oils | 187,759 | 225,931 | 256,473 | 228,788 | 232,443 | 235,734 |
| Diesel oil | 418,501 | 866,260 | 852,732 | 635,768 | 829,903 | 704,464 |
| Fuel oil | 4,193,310 | 6,210,475 | 5,979,186 | 7,048,184 | 7,026,868 | 6,674,573 |
| Liquefied petroleum gas | 7,135 | 7,965 | 6,680 | 22,361 | 32,740 | 61,512 |
| Grease | 6,331 | 6,814 | 5,984 | 5,746 | 5,962 | 5,927 |
| Petroleum jelly | 1,478 | 1,476 | 2,084 | 2,266 | 2,443 | 4,297 |
| Paraffin wax | 15,510 | 14,971 | 6,701 | 7,000 | 10,155 | 6,521 |
| Refined asphalt and road oils | 39,918 | 55,784 | 25,463 | 51,301 | 51,706 | 57,164 |
| Natural asphalt | 5,968 | 4,432 | 11,616 | 4,627 | 3,015 | 2,261 |
| Petroleum coke (c) | 391,381 | 366,308 | 445,673 | 505,211 | 501,256 | 628,198 |
| Natural gas (million cubic feet) | 8,046 | 15,673 | 43,551 | 52,872 | 88,228 | 37,733 |
| Antigua— | | | | | | |
| Aviation spirit | 4,096 | 3,266 | 4,874 | 7,397 | 13,445 | n.a. |
| Motor spirit | 1,856 | 3,433 | 5,747 | 63,125 | 4,816 | n.a. |
| Kerosine | 10,626 | 18,635 | 35,105 | 20,579 | 10,463 | n.a. |
| Fuel oils | 5,314 | 10,377 | 117,090 | 7,821 | 4,302 | n.a. |
| Lubricating oil | 229 | 322 | 2,798 | 1,423 | 855 | n.a. |
| Bahamas— | | | | | | |
| Motor spirit | 46,056 | 49,046 | 47,600 | 60,682 | 65,797 | 80,585 |
| Kerosine | 5,822 | 5,764 | 8,898 | 18,440 | 31,582 | 72,208 |
| Fuel oils | 113,587 | 103,820 | 107,896 | 139,025 | 150,971 | 156,646 |
| Lubricating oil | 1,680 | 1,768 | 1,912 | 6,856 | 2,100 | 14,253 |
| Barbados— | | | | | | |
| Crude petroleum | 24,589 | 39,036 | 72,276 | 91,892 | 93,227 | 74,260 |
| Aviation spirit (b) | 1,880 | 2,108 | 3,259 | 13 | 521 | 2,647 |
| Motor spirit | 20,411 | 12,675 | 14,557 | 2,790 | 36 | 3,530 |
| Kerosine (a) (b) | 17,997 | 19,811 | 13,108 | 14,389 | 33,354 | 46,644 |
| Gas oil and diesel oil (b) | } 93,853 | 147,956 | 275,091 | 241,302 | } 90,430 | 73,700 |
| Fuel oil (b) | | | | | | |
| Lubricating oil | | | | | | |
| Bermuda (b)— | | | | | | |
| Aviation and motor spirits | 55,053 | 49,206 | 40,552 | 33,162 | 16,169 | 25,871 |
| Aviation turbine fuel | 20,711 | 46,023 | 30,635 | 46,288 | 99,260 | 64,781 |
| Kerosine | 27,398 | 34,045 | 35,664 | 28,856 | 13,720 | 31,216 |
| Diesel oil | 41,819 | 22,713 | 844,453 | 806,867 | 42,758 | 24,469 |
| Fuel oil | 29,610 | 34,509 | 12,916 | 33,373 | 25,507 | 48,548 |
| Lubricating oil | 941 | 718 | 945 | 1,150 | 1,095 | 1,025 |
| Asphalt | 1,832 | 1,157 | 1,130 | 2,580 | 2,920 | 2,731 |

(a) Including aviation turbine fuel.

(b) Including imports for bunkering purposes. See exports.

(c) Including pitch coke.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---------------------------------------|-------------|------------|-------------|---------|-------------|-----------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| British Honduras— | | | | | | |
| Aviation spirit | 143 | 30 | — | 1,208 | — | — |
| Motor spirit | 9,288 | 7,873 | 9,385 | 10,746 | 8,365 | 12,590 |
| Kerosine | 3,633 | 3,748 | 4,435 | 3,897 | 3,811 | 7,566 |
| Diesel and fuel oils .. | 8,620 | 14,335 | 12,873 | 19,255 | 17,330 | 22,279 |
| Lubricating oil | 522 | 770 | 948 | 809 | 884 | 992 |
| Asphalt, etc. | 42 | 14 | 731 | 1,174 | 2,386 | 65 |
| Cayman Islands— | | | | | | |
| Aviation and motor spirits | 2,295 | 1,780 | 2,479 | 3,123 | 2,209 | 2,730 |
| Kerosine | 1,083 | 925 | 885 | 514 | 140 | 379 |
| Diesel oil | 1,321 | 908 | 1,823 | 1,820 | 2,294 | 3,372 |
| Dominica— | | | | | | |
| Aviation and motor spirits | 2,665 | 3,093 | 3,407 | 3,816 | 4,076 | 3,372 |
| Kerosine | 1,185 | 1,312 | 1,180 | 1,471 | 1,475 | 1,449 |
| Fuel oil and diesel oil .. | 1,166 | 1,299 | 1,356 | 1,855 | 1,724 | 2,099 |
| Lubricating oil | 107 | 130 | 133 | 160 | 112 | 188 |
| Road oil | 496 | 1,535 | 550 | 574 | 535 | 407 |
| Grenada— | | | | | | |
| Aviation and motor spirits | 3,878 | 4,231 | 4,873 | 5,373 | 6,202 | n.a. |
| Kerosine | 1,947 | 2,285 | 2,479 | 2,704 | 2,786 | n.a. |
| Fuel oils | 708 | 1,468 | 2,285 | 3,759 | 3,765 | n.a. |
| Lubricating oil | 108 | 178 | 133 | 177 | 499 | n.a. |
| Road oil | 605 | 6,451 | 446 | 16,493 | 1,434 | n.a. |
| Jamaica— | | | | | | |
| Crude Petroleum | 548,332 | 1,563,971 | 1,326,919 | 951,574 | 1,130,507 | 1,336,909 |
| Aviation spirit | (a) 11,207 | (a) 6,576 | (a) 3,657 | 8,833 | (a) 2,620 | (a) 5,952 |
| Motor spirit | 36,731 | 750 | 109 | 12,408 | 12,582 | 737 |
| Kerosine | 48,530 | 1,559 | (a) 5,516 | 34,907 | (a) 39,625 | 3,748 |
| Gas oil | (a) 30,463 | (a) 18,695 | (a) 659 | 53,580 | (a) 37,871 | 30,989 |
| Diesel oil | (a) 35,127 | (a) 12,629 | (a) 15,177 | 76,735 | (a) 57,218 | 7,251 |
| Fuel oil | (a) 427,901 | (a) 47,467 | (a) 127,880 | 318,813 | (a) 262,694 | 199,400 |
| Lubricating oil | 5,818 | 6,456 | 8,591 | 4,990 | 7,319 | 5,008 |
| Grease | 324 | 8 | 338 | 365 | 395 | 569 |
| Petroleum jelly | 296 | 230 | 322 | 333 | 290 | 252 |
| Paraffin wax | 57 | 101 | 82 | 176 | 316 | 231 |
| Natural asphalt | 6,589 | 1,804 | 792 | 1,439 | 6,496 | 1,292 |
| Montserrat— | | | | | | |
| Motor spirit | 517 | 28 | n.a. | 1,001 | n.a. | n.a. |
| Kerosine | 326 | 222 | n.a. | 279 | n.a. | n.a. |
| Fuel oils | 517 | 917 | n.a. | 1,167 | n.a. | n.a. |
| Lubricating oil | 61 | 31 | n.a. | 95 | n.a. | n.a. |
| St. Kitts— | | | | | | |
| Motor spirit | 1,707 | 1,983 | 2,295 | 2,320 | 2,263 | n.a. |
| Kerosine | 1,983 | 2,079 | 2,284 | 1,987 | 3,370 | n.a. |
| Fuel oils | 1,679 | 2,801 | 2,949 | r 3,156 | 5,786 | n.a. |
| Lubricating oil | 161 | 154 | 173 | 333 | 191 | n.a. |
| St. Lucia— | | | | | | |
| Motor spirit | 3,067 | 3,550 | 4,165 | 4,408 | 4,741 | n.a. |
| Kerosine | 1,187 | 1,296 | 1,481 | 1,557 | 1,533 | n.a. |
| Fuel oil | 3,181 | 3,351 | 3,738 | 4,756 | 5,114 | n.a. |
| Lubricating oil | 128 | 229 | 189 | 207 | 174 | n.a. |
| Road oil | 1,056 | 10 | r 321 | 2,493 | 1,339 | n.a. |
| St. Vincent— | | | | | | |
| Aviation and motor spirits | 2,708 | 2,484 | 2,987 | 2,973 | 2,870 | n.a. |
| Kerosine | 1,643 | 1,503 | 1,718 | 1,721 | 1,667 | n.a. |
| Gas, diesel and fuel oils | 982 | 810 | 1,025 | 899 | 1,611 | n.a. |

(a) Including imports for bunkering purposes.
See exports.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---------------------------------------|-------------|------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| St. Vincent (cont.)— | | | | | | |
| Lubricating oil | 296 | 87 | 86 | 64 | 79 | <i>n.a.</i> |
| Road oil | 585 | 804 | 833 | 623 | 728 | <i>n.a.</i> |
| Asphalt | <i>n.a.</i> | 19 | 20 | 28 | 12 | <i>n.a.</i> |
| Trinidad and Tobago— | | | | | | |
| Crude petroleum | 11,998,998 | 12,832,504 | 12,761,889 | 11,180,069 | 12,642,930 | 14,645,638 |
| Aviation and motor spirits | 46,484 | 128 | 31,028 | 77,543 | 13,819 | 80,977 |
| Fuel oil | (c) 1 | 5 | 29,931 | 61,021 | 9,091 | 3,375 |
| Lubricating oil | 8,048 | 4,452 | 4,114 | 3,821 | 4,263 | 3,873 |
| Greases | 232 | 297 | 265 | 265 | 242 | 427 |
| Petroleum jelly | 126 | 108 | 157 | 100 | 189 | 173 |
| Paraffin wax | 96 | 217 | 438 | 615 | 550 | 684 |
| Virgin Islands— | | | | | | |
| Motor spirit | 1,241 | 1,320 | 1,522 | 183 | 2,993 | 2,782 |
| Kerosine | 317 | 386 | 638 | 472 | 559 | 559 |
| Diesel oil | 578 | 791 | 1,397 | 926 | 823 | 1,928 |
| Lubricating oil | 31 | 64 | 106 | 293 | 542 | 1,615 |
| Falkland Islands— | | | | | | |
| Motor spirit | 303 | 201 | 268 | 317 | 272 | 240 |
| Kerosine | 24 | 8 | 14 | 18 | 8 | 3 |
| Gas and diesel oils | 4,127 | 2,612 | 3,238 | 5,783 | 169 | 383 |
| Fuel oil (b) | 5,705 | 3,127 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Lubricating oil | 40 | 23 | 20 | 32 | 29 | 91 |
| Guyana— | | | | | | |
| Aviation spirit (b) | 3,472 | 3,739 | 2,460 | 4,075 | 4,329 | 2,609 |
| Motor spirit | 21,329 | 22,178 | 27,614 | 25,638 | 35,872 | 40,853 |
| Kerosine | 18,681 | 22,369 | 35,130 | 25,698 | 25,658 | 25,554 |
| Gas, diesel and fuel oils | 480,647 | 317,086 | 324,948 | 366,485 | 365,083 | 355,691 |
| Lubricating oil | 2,263 | 3,259 | 3,486 | 3,896 | 4,316 | 2,504 |
| Grease | 237 | 349 | 360 | 491 | 436 | 261 |
| Paraffin wax | 33 | 21 | 40 | 27 | 24 | 23 |
| Petroleum jelly | 54 | 56 | 89 | 66 | 117 | 82 |
| Road oil | 652 | 1,201 | 3,108 | 355 | 348 | 190 |
| Asphalt and bitumen | 1,548 | 3,922 | 10,071 | 11,371 | 10,708 | 4,427 |
| Asphalt natural | 191 | 351 | 153 | 798 | 127 | 1 |
| Bahrain Islands (a)— | | | | | | |
| Crude petroleum | 7,666,000 | 6,740,000 | 6,753,000 | 8,459,000 | 7,552,000 | 8,079,000 |
| Brunei— | | | | | | |
| Aviation and motor spirits | 509 | 1,023 | 2,124 | 2,729 | 2,905 | 5,662 |
| Kerosine | 1,557 | 717 | 1,764 | 1,309 | 2,331 | 3,430 |
| Diesel oil | (c) 8 | (c) 16 | 8 | 15 | 2 | 1,423 |
| Fuel oil | (c) 3 | (c) 1 | 4 | — | 179 | 20 |
| Lubricating oil | 1,019 | 1,292 | 1,813 | 1,623 | 1,863 | 2,390 |
| Grease | 95 | 25 | 53 | 35 | 58 | 70 |
| Ceylon— | | | | | | |
| Aviation spirit (b) | 929 | 9,327 | 13,334 | 12,791 | 13,410 | } 80,929 |
| Motor spirit | 102,780 | 161,813 | 159,313 | 159,266 | 219,506 | |
| Kerosine | 151,694 | 180,783 | 291,577 | 224,329 | 260,772 | 184,212 |
| Gas oil (b) | 111,428 | 186,450 | 138,080 | 193,525 | 260,773 | 211,840 |
| Diesel oil (b) | 136,650 | 141,058 | 165,925 | 168,234 | 171,120 | 183,691 |
| Fuel oil (b) | 305,286 | 287,568 | 549,078 | 457,181 | 447,858 | 784,960 |
| Lubricating oil | 9,857 | 14,463 | 15,259 | 12,498 | 12,056 | 10,069 |
| Other oils and greases | 117 | 399 | 653 | 250 | 688 | 650 |
| Paraffin wax | 642 | 615 | 1,735 | 803 | 612 | 687 |
| Asphalt (incl. natural) | 10,314 | 5,777 | 21,161 | 18,602 | 4,380 | <i>n.a.</i> |

(a) British Protected State.

(c) Excess of re-exports.

(b) Including imports for bunkering purposes. See exports.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---------------------------------------|-----------|-----------|-----------|-----------|------------|------------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Cyprus— | | | | | | |
| Aviation spirit (a) .. | 6,392 | 6,211 | 2,253 | 1,544 | 2,064 | 2,364 |
| Motor spirit .. | 54,782 | 63,870 | 68,336 | 75,637 | 77,034 | 92,235 |
| Aviation turbine fuel .. | 20,734 | 4,393 | 3,624 | — | (d) | (d) |
| Kerosine, etc. .. | 26,560 | 18,766 | 30,360 | 34,597 | 63,382 | 37,194 |
| Gas oil .. | 82,122 | 86,365 | 86,436 | 99,896 | 134,118 | 132,182 |
| Other fuel oils .. | 99,707 | 162,584 | 189,224 | 192,040 | 228,249 | 228,812 |
| Lubricating oil .. | 2,715 | 4,382 | 4,354 | 4,898 | 5,299 | 5,969 |
| Paraffin wax .. | 206 | 111 | 126 | 152 | n.a. | n.a. |
| Asphalt and bitumen .. | 10,480 | 10,600 | 12,156 | 15,215 | (e) 13,698 | (e) 18,122 |
| Hong Kong— | | | | | | |
| Aviation spirit .. | 3,273 | 4,977 | 11,019 | 11,502 | 3,729 | 4,872 |
| Motor spirit .. | 64,359 | 65,285 | 74,777 | 80,600 | 83,093 | 100,638 |
| White spirit .. | 9,690 | 14,866 | 20,869 | 31,406 | 28,117 | 35,074 |
| Aviation turbine fuel .. | 98,127 | 159,299 | 161,536 | 201,869 | 244,270 | 327,405 |
| Kerosine .. | 130,675 | 130,538 | 169,500 | 178,538 | 173,563 | 197,677 |
| Diesel oil and gas oil .. | 264,440 | 300,774 | 377,854 | 389,758 | 460,656 | 532,970 |
| Fuel oil .. | 1,225,510 | 1,356,817 | 1,389,896 | 1,754,796 | 1,872,851 | 2,209,029 |
| Lubricating oil .. | 19,708 | 13,828 | 16,761 | 15,624 | 24,306 | 23,467 |
| Greases .. | 849 | 1,060 | 979 | 848 | 974 | 1,231 |
| Petroleum jelly .. | 376 | 183 | 290 | 310 | 303 | 260 |
| Paraffin wax .. | 1,141 | 1,120 | 7,132 | 5,727 | 4,248 | 4,679 |
| Asphalt and bitumen .. | 13,547 | 12,542 | 12,469 | 12,621 | 12,650 | 11,964 |
| Asphalt (natural) .. | 325 | 357 | 323 | 215 | 185 | 177 |
| India (b)— | | | | | | |
| Crude petroleum .. | 4,161,948 | 5,427,392 | 5,067,363 | 9,788,560 | 5,969,060 | 10,875,214 |
| Aviation and motor spirits .. | 63,114 | n.a. | n.a. | n.a. | n.a. | 48,319 |
| Other spirit .. | | | | | | |
| Kerosine .. | 848,808 | n.a. | n.a. | n.a. | n.a. | 681,379 |
| Diesel oil .. | 3,721,319 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Fuel oil .. | 296,173 | n.a. | n.a. | n.a. | n.a. | 172,240 |
| Lubricating oil and grease .. | 281,209 | n.a. | n.a. | n.a. | n.a. | 324,673 |
| Petroleum jelly .. | 3,622 | n.a. | n.a. | n.a. | n.a. | 261 |
| Paraffin wax .. | 2 | n.a. | n.a. | n.a. | n.a. | |
| Asphalt and bitumen .. | 3,056 | 642 | 310 | 2,366 | 498 | 466 |
| Malaysia (West)— | | | | | | |
| Crude petroleum .. | n.a. | 2,224,834 | 2,645,259 | 2,856,612 | 3,082,882 | 3,169,024 |
| Aviation spirit .. | n.a. | 1,866 | 4,159 | 349 | 155 | 365 |
| Motor spirit .. | n.a. | 96,897 | 82,464 | 92,436 | 91,940 | 88,795 |
| White spirit .. | n.a. | 8,969 | 5,755 | 10,955 | 8,159 | 6,876 |
| Aviation turbine fuel .. | n.a. | 14,033 | 21,052 | 9,409 | (c) 2,447 | 2,882 |
| Kerosine .. | n.a. | 43,543 | 41,458 | 41,240 | 49,114 | 77,792 |
| Gas oil .. | n.a. | 223,253 | 286,927 | 342,530 | 376,012 | 369,378 |
| Diesel oil .. | n.a. | 30,671 | 37,594 | 41,509 | 38,642 | 64,763 |
| Fuel oil .. | n.a. | 16,578 | 35,865 | 20,526 | 45,740 | 32,540 |
| Lubricating oil .. | n.a. | 21,917 | 22,534 | 24,078 | 22,998 | 25,502 |
| Paraffin wax .. | n.a. | 3,087 | 2,521 | 2,409 | 2,945 | 4,763 |
| Petroleum jelly .. | n.a. | 349 | 391 | 452 | 389 | 346 |
| Grease .. | n.a. | 1,392 | 1,244 | 1,389 | 1,094 | 1,064 |
| Asphalt and bitumen .. | n.a. | 10,773 | 9,901 | 8,411 | 9,910 | 8,545 |
| Natural asphalt .. | n.a. | 144 | 264 | 1,084 | 405 | 1,101 |
| Pakistan— | | | | | | |
| Motor spirit .. | 31,782 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Kerosine .. | 1,026,625 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Diesel oil .. | 1,039,519 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Fuel oil .. | | | | | | |
| Lubricating oil .. | 52,903 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Paraffin wax .. | 2,293 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Asphalt .. | 53,809 | n.a. | n.a. | n.a. | n.a. | n.a. |

(a) Including imports for bunkering purposes. See exports.

(b) Years ended March 31 following that stated.

(c) Excess of re-exports.

(d) Included with kerosine.

(e) Including natural.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|------------|------------|------------|------------|------------|------------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Sabah— | | | | | | |
| Aviation and motor spirits (a) | 21,584 | 20,762 | 42,988 | 27,997 | 47,522 | 45,824 |
| Kerosine | 11,115 | (c) 24,389 | (c) 20,092 | (c) 23,056 | (c) 33,897 | (c) 33,934 |
| Diesel oil (a) | 49,016 | 54,665 | 66,862 | 66,454 | 98,556 | 89,736 |
| Fuel oil (a) | 8,819 | 10,492 | 11,878 | 13,654 | 14,028 | 13,375 |
| Lubricating oil | 3,323 | 4,691 | 5,082 | 4,970 | 5,981 | 5,896 |
| Sarawak— | | | | | | |
| Crude petroleum (d) .. | 3,494,507 | 3,826,614 | 4,519,558 | 4,924,312 | 5,818,018 | n.a. |
| Aviation spirit | 1,921 | 4,062 | 2,463 | 526 | 550 | n.a. |
| Motor spirit | 15,447 | 22,005 | 22,775 | 22,725 | 28,652 | n.a. |
| Kerosine | 13,874 | 9,423 | 9,516 | 9,847 | 17,248 | n.a. |
| Aviation turbine fuel .. | 3,392 | 20,641 | 18,945 | 13,070 | 6,533 | n.a. |
| Gas oil | 28,777 | 21,981 | 25,132 | 25,167 | 28,554 | n.a. |
| Diesel oil | 7,130 | 22,288 | 19,878 | 15,343 | 18,417 | n.a. |
| Fuel oil | 310 | 999 | 4,985 | 2,614 | 3,778 | n.a. |
| Lubricating oil | 2,024 | 3,746 | 4,061 | 4,206 | 4,380 | n.a. |
| Paraffin wax | 11 | 5 | 5 | 7 | 8 | n.a. |
| Mineral jelly | 22 | 32 | 19 | 19 | 24 | n.a. |
| Singapore— | | | | | | |
| Crude petroleum | 2,298,787 | 2,611,311 | 3,616,063 | 5,427,414 | 8,894,082 | 9,388,706 |
| Aviation spirit | 150,415 | 221,543 | 270,271 | 318,957 | 351,439 | 429,249 |
| Motor spirit | 573,634 | 443,463 | 584,147 | 521,547 | 513,677 | 588,941 |
| White spirit | 48,312 | 38,684 | 38,721 | 35,710 | 39,524 | 39,398 |
| Aviation turbine fuel .. | 173,903 | 542,677 | 980,487 | 1,364,987 | 897,038 | 1,333,532 |
| Kerosine | 293,804 | 443,462 | 353,304 | 294,688 | 271,128 | 294,120 |
| Gas oil | 655,721 | 677,199 | 819,726 | 900,700 | 1,172,689 | 1,292,219 |
| Diesel oil | 358,887 | 201,630 | 238,024 | 206,812 | 144,259 | 138,291 |
| Fuel oil | 3,428,784 | 4,165,714 | 3,466,158 | 3,581,234 | 3,735,555 | 4,339,527 |
| Lubricating oil | 63,912 | 88,181 | 120,708 | 117,406 | 148,969 | 183,682 |
| Petroleum jelly | 298 | 347 | 232 | 388 | 386 | 339 |
| Grease | 505 | 736 | 690 | 881 | 702 | 717 |
| Asphalt and bitumen .. | 4,879 | 5,888 | 6,062 | 3,163 | 6,259 | 6,625 |
| Petroleum coke | 3 | 26,065 | 21,048 | 76,522 | 3,004 | 3 |
| Australia (b)— | | | | | | |
| Crude petroleum (e) .. | 15,573,406 | 16,855,183 | 18,049,343 | 20,228,316 | 20,397,361 | 21,108,923 |
| Aviation spirit (a) | 63,736 | 68,573 | 63,711 | 60,763 | 51,005 | 39,613 |
| Motor spirit | 704,752 | 688,752 | 714,006 | 370,863 | 317,848 | 245,269 |
| White spirit | 49,279 | 25,130 | (f) 6,207 | (f) 4,180 | (f) 4,815 | (f) 4,413 |
| Kerosine | 166,176 | 92,450 | 87,425 | 50,921 | 57,458 | 47,918 |
| Aviation turbine fuel (a) | 87,207 | 150,619 | 177,143 | 83,164 | 47,316 | 58,649 |
| Lubricating oil | 183,843 | 119,769 | 73,524 | 57,039 | 50,469 | 42,780 |
| Gas, diesel and fuel oils (a) (e) | 220,561 | 300,963 | 309,953 | 212,896 | 191,570 | 780,668 |
| Other oils | 10,725 | 7,776 | n.a. | n.a. | n.a. | n.a. |
| Petroleum jelly | 1,711 | 1,748 | 2,043 | 901 | 1,479 | 1,528 |
| Paraffin wax | 10,764 | 8,700 | 13,040 | 10,825 | 11,747 | 13,148 |
| Natural asphalt | 1,494 | 486 | 3,711 | 644 | 1,068 | 647 |
| Bitumen and pitch | 1,610 | 2,207 | 190 | 230 | 205 | 5,052 |
| Fiji— | | | | | | |
| Aviation spirit (a) | 3,472 | 3,253 | 3,698 | 2,287 | 2,519 | 1,995 |
| Motor spirit | 27,865 | 26,944 | 22,462 | 24,430 | 25,415 | 24,686 |
| Aviation turbine fuel (a) | 43,009 | 55,310 | 53,285 | 63,223 | 66,928 | 87,374 |
| Kerosine | 9,552 | 10,995 | 7,922 | 8,186 | 10,284 | 9,815 |
| Gas oil (a) | 19,066 | 24,075 | 16,332 | 23,208 | 23,097 | 29,734 |
| Diesel oil (a) | 50,453 | 41,482 | 46,594 | 40,067 | 50,652 | 49,374 |
| Fuel oil (a) | 38,405 | 16,599 | 23,081 | 19,989 | 25,651 | 34,832 |
| Lubricating oil | 2,242 | 1,967 | 2,187 | 2,082 | 2,131 | 2,387 |
| Greases | 188 | 217 | 150 | 190 | 169 | 178 |
| Bitumen | 1,793 | 2,832 | 1,665 | 1,956 | 1,124 | 963 |

(a) Including imports for bunkering purposes. See exports. (b) Years ended June 30 of that stated
 (c) Including aviation turbine fuel. (d) Total imports before deduction of re-exports
 (e) Revised series up to 1967. "Topped crudes" (f) Owing to reclassification not strictly
 previously included with "Gas, diesel and comparable with earlier years.
 fuel oils," now included with "Crude petroleum".

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|-----------|-----------|-----------|-----------|------------|------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| New Guinea (c)— | | | | | | |
| Aviation and motor spirits | 25,955 | 26,042 | 32,477 | 37,161 | 42,413 | 47,281 |
| Kerosine | 4,647 | 6,739 | 5,477 | 5,273 | (d) 12,584 | 13,717 |
| Fuel oils | 26,122 | 30,703 | 43,750 | 55,051 | 66,210 | 75,028 |
| Lubricating oil | 1,342 | 1,892 | 2,597 | 2,332 | 2,511 | 3,243 |
| New Hebrides— | | | | | | |
| Aviation spirit | 257 | 258 | 307 | 402 | 471 | 123 |
| Motor spirit | 1,992 | 1,748 | 2,227 | 1,921 | 2,785 | 2,638 |
| Kerosine | 593 | 712 | 730 | 520 | 1,136 | 847 |
| Lubricating oil | 268 | 438 | 333 | 496 | 335 | 375 |
| Other oils | 6,469 | 8,084 | 8,099 | 11,053 | 14,714 | 11,503 |
| New Zealand (c)— | | | | | | |
| Crude petroleum | 189,467 | 2,599,763 | 2,732,753 | 2,907,971 | 2,450,180 | 2,703,091 |
| Aviation spirit and motor spirit | 1,021,616 | 512,473 | 101,123 | 242,003 | 233,331 | 212,689 |
| White spirit | 20,740 | 26,528 | 20,864 | 23,189 | 16,616 | 32,692 |
| Aviation turbine fuel | 59,242 | 84,904 | 93,272 | 115,837 | 108,124 | 125,777 |
| Kerosine | 48,431 | 37,633 | 31,766 | 33,243 | 27,068 | 36,487 |
| Gas oil | 391,742 | 204,988 | 74,589 | 165,056 | 124,841 | 166,556 |
| Diesel oil (a) | 106,976 | | | | | |
| Fuel oil (a) | 379,428 | 67,709 | n.a. | 5,239 | — | 268 |
| Lubricating oil (a) | 41,071 | 47,174 | 5,472 | 49,319 | 46,453 | 48,820 |
| Transformer oil | 2,198 | 2,089 | 389 | 247 | 296 | n.a. |
| Petroleum jelly | 353 | 385 | 387 | 388 | 255 | n.a. |
| Paraffin wax | 1,738 | 2,169 | 3,045 | 1,937 | 1,576 | 2,223 |
| Asphalt and bitumen | 62,203 | 31,908 | 911 | 671 | 301 | n.a. |
| do. natural | 436 | 368 | 446 | 352 | 202 | 286 |
| Papua (c)— | | | | | | |
| Aviation and motor spirits | 18,814 | 14,265 | 13,314 | 21,621 | 19,432 | 22,884 |
| Kerosine | 2,401 | (d) 5,398 | (d) 6,872 | (d) 8,094 | (d) 9,046 | (d) 15,152 |
| Fuel oil | 7,947 | 18,111 | 15,482 | 15,880 | 18,529 | 25,141 |
| Lubricating oil | 834 | 885 | 1,018 | 973 | 975 | 945 |
| Solomon Islands— | | | | | | |
| Aviation spirit | 269 | 404 | 401 | 349 | 315 | 1,063 |
| Aviation turbine fuel | | | 56 | 16 | 114 | |
| Motor spirit | 1,020 | 1,218 | 1,268 | 1,545 | 1,937 | 1,938 |
| Kerosine | 708 | 771 | 758 | 837 | 951 | 914 |
| Fuel oils | 4,210 | 5,078 | 5,243 | 7,642 | 8,702 | 8,741 |
| Lubricating oil | 189 | 300 | 287 | 367 | 445 | 490 |
| Western Samoa— | | | | | | |
| Motor spirit | 4,575 | 4,383 | 4,386 | 4,583 | 4,306 | 4,680 |
| Kerosine | 1,000 | 1,021 | 1,013 | 1,091 | 1,154 | 1,012 |
| Fuel oil | 1,961 | 2,675 | 2,163 | 2,569 | 2,919 | 2,877 |
| Lubricating oil | 175 | 200 | 155 | 207 | 185 | 687 |
| Irish Republic— | | | | | | |
| Crude petroleum | 1,861,734 | 2,167,718 | 1,669,114 | 2,681,472 | 2,445,050 | 2,463,764 |
| Aviation spirit (a) | 22,503 | 15,883 | 17,265 | 11,567 | 11,527 | 4,521 |
| Motor spirit | 25,055 | 14,790 | 91,638 | 50,238 | 43,810 | 63,674 |
| White spirit | 4,539 | 3,925 | 3,293 | 3,720 | 3,583 | 4,185 |
| Kerosine | 83,867 | 77,865 | 87,697 | 70,096 | 86,401 | 70,743 |
| Aviation turbine fuel (a) | 124,715 | 129,881 | 139,499 | 162,949 | 156,971 | 219,355 |
| Gas and diesel oils (a) | 10,597 | 25,712 | 85,976 | 46,614 | 63,805 | 115,066 |
| Fuel oil (a) | 277,448 | 394,628 | 623,516 | 763,130 | 763,242 | 1,108,872 |
| Lubricating oil | 26,846 | 23,831 | 28,916 | 29,286 | 32,100 | 35,237 |
| Greases | 352 | 267 | 276 | 317 | 549 | 1,110 |
| Other oils | 2,341 | 3,188 | 11,464 | 40,118 | 48,002 | 61,535 |
| Paraffin wax (b) | 1,930 | 1,817 | 2,897 | 2,386 | 2,374 | 3,276 |
| Asphalt and bitumen | 5,089 | 2,657 | 3,227 | 11,896 | 66,513 | 3,628 |
| do. natural | 3,198 | 12 | 781 | 580 | 3,101 | 16,908 |

(a) Including imports for bunkering purposes. See exports. (c) Years ended June 30 of that stated

(b) Including other mineral jellies and waxes.

(d) Including aviation turbine fuel.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|------------|------------|--------------|--------------|--------------|--------------|
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Crude petroleum .. | 775,394 | 651,219 | 1,143,989 | 1,073,627 | 1,471,914 | 1,323,877 |
| Motor spirit .. | 468,158 | 459,211 | 592,388 | 578,517 | 703,012 | 784,762 |
| White spirit .. | 6,589 | 7,013 | 7,263 | 6,251 | 4,929 | 5,988 |
| Gas oil .. | 79,937 | 102,391 | 110,526 | 113,381 | 104,692 | 101,584 |
| Fuel oil .. | 1,222,641 | 1,177,398 | 1,196,339 | 1,208,651 | 1,657,194 | 1,796,660 |
| Lubricating oil, etc. .. | 48,044 | 49,104 | 69,879 | 54,562 | 56,531 | 61,587 |
| Petroleum jelly .. | 293 | 295 | 320 | 308 | 355 | 418 |
| Paraffin wax .. | 6,856 | 7,205 | 7,068 | 7,237 | 8,073 | 8,367 |
| Ozokerite and ceresin (a) | 205 | 143 | 118 | 175 | 93 | 115 |
| Natural asphalt .. | 1,921 | 1,817 | 1,312 | 1,074 | 865 | 499 |
| Petroleum coke .. | 10,794 | 6,601 | 15,560 | 15,871 | 10,272 | 20,584 |
| Bitumen, etc. .. | 112,647 | 131,762 | 157,975 | 188,801 | 193,815 | 255,231 |
| Belgium-Luxemburg | | | | | | |
| E. U.— | | | | | | |
| Crude petroleum .. | 13,074,070 | 15,222,247 | 16,325,827 | 17,309,891 | 23,024,873 | 28,003,420 |
| Motor spirit, etc. .. | 269,138 | 324,763 | 362,132 | 418,734 | 614,226 | 678,285 |
| Kerosine .. | 28,607 | 16,981 | 17,142 | 55,702 | 144,450 | 61,540 |
| Gas oil .. | 1,146,457 | 1,507,141 | 1,863,925 | 2,238,959 | 2,031,746 | 1,704,501 |
| Fuel oil .. | 2,793,024 | 2,150,607 | 2,510,756 | 2,513,771 | 2,835,255 | 2,860,801 |
| Lubricating oil .. | 220,214 | 208,609 | 263,043 | 274,770 | 291,897 | 292,577 |
| Other heavy oils .. | 13,096 | 36,164 | 21,789 | 16,310 | 15,367 | 13,610 |
| Petroleum jelly .. | 1,204 | 1,196 | 1,289 | 982 | 935 | 1,176 |
| Paraffin wax .. | 8,007 | 7,067 | 7,063 | 7,974 | 8,232 | 9,706 |
| Ozokerite and ceresin (a) | 109 | 318 | 339 | 198 | 150 | 328 |
| Petroleum coke .. | 81,684 | 84,624 | 96,694 | 89,062 | 107,053 | 149,011 |
| Natural asphalt .. | 4,972 | 3,399 | 7,354 | 7,583 | 4,188 | 8,414 |
| Pitch .. | 26,967 | 33,139 | 39,483 | 41,269 | 52,925 | 52,211 |
| Bulgaria— | | | | | | |
| Crude petroleum .. | 1,782,000 | 2,165,000 | 2,562,873 | 2,758,730 | 3,257,700 | <i>n.a.</i> |
| Denmark— | | | | | | |
| Crude petroleum .. | 2,924,240 | 3,296,634 | 4,571,483 | 6,434,807 | 6,646,697 | 9,023,399 |
| Aviation spirit .. | 58,450 | 63,751 | 57,405 | 51,027 | 45,718 | 29,227 |
| Motor spirit .. | 983,904 | 1,112,099 | 1,017,074 | 781,043 | 891,031 | 795,470 |
| White spirit .. | 17,758 | 13,312 | 10,618 | 11,886 | 12,954 | 10,491 |
| Kerosine .. | 150,999 | 144,582 | 146,544 | 110,227 | 116,341 | 130,396 |
| Gas oil .. | 1,201,468 | 1,004,792 | (b)3,075,648 | (b)2,659,224 | (b)2,952,453 | (b)3,193,684 |
| Diesel oil .. | 1,251,575 | 1,736,059 | (b) 159,931 | (b) 46,543 | (b) 62,075 | (b) 31,385 |
| Fuel oil .. | 2,653,885 | 2,725,151 | 2,696,835 | 2,160,704 | 2,787,653 | 3,511,905 |
| Lubricating oil .. | 85,701 | 80,994 | 103,692 | 85,481 | 97,418 | 82,877 |
| Grease .. | 1,320 | 1,788 | 1,759 | 1,333 | 1,428 | 1,161 |
| Petroleum jelly .. | 450 | 511 | 525 | 582 | 507 | 485 |
| Ozokerite, etc. .. | 1,164 | 799 | 1,008 | 1,247 | 1,036 | 1,677 |
| Paraffin wax .. | 6,328 | 7,283 | 7,958 | 8,011 | 8,545 | 10,467 |
| Natural asphalt .. | 2,473 | 1,434 | 1,407 | 1,384 | 1,703 | 1,679 |
| Other asphalt .. | 149,529 | 177,851 | 187,780 | 207,964 | 202,191 | 233,056 |
| Faroe Islands— | | | | | | |
| Motor spirit .. | 2,302 | 2,950 | 3,217 | 3,644 | 4,009 | 4,516 |
| Kerosine .. | 3,398 | 3,860 | 2,363 | 3,357 | 2,554 | 3,617 |
| Fuel oils .. | 30,280 | 34,421 | 36,478 | 45,144 | 51,680 | 55,345 |
| Lubricating oil, etc. .. | 530 | 615 | 600 | 559 | 640 | 677 |
| Finland— | | | | | | |
| Crude petroleum .. | 3,040,341 | 2,271,436 | 2,600,668 | 4,891,801 | 5,722,367 | 6,953,831 |
| Motor spirit .. | 12,210 | 26,457 | <i>n.a.</i> | 83,141 | 48,093 | 26,972 |
| White spirit .. | 5,189 | 8,194 | 5,698 | 4,587 | 6,057 | 7,002 |
| Kerosine .. | 17,300 | 23,183 | 25,433 | 20,729 | 23,201 | 14,580 |
| do. Power .. | 35 | 2 | 39 | — | 2 | 41 |
| Fuel oil .. | 2,192,472 | 3,131,687 | 1,591,760 | 2,968,904 | 2,831,357 | 2,750,833 |
| Lubricating oil .. | 59,540 | 64,440 | 77,011 | 65,665 | 65,094 | 77,657 |
| Petroleum jelly .. | 330 | 337 | 394 | 318 | 329 | 428 |
| Paraffin wax .. | 7,157 | 8,553 | 8,103 | 7,106 | 7,404 | 6,210 |
| Asphalt, etc. .. | 18,446 | 17,720 | 19,812 | 24,827 | 28,339 | 35,561 |

(a) Including montan wax.

(b) Owing to reclassification not strictly comparable with earlier years.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|------------|------------|------------|------------|------------|------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| France— | | | | | | |
| Crude petroleum .. | 48,496,711 | 57,631,540 | 61,760,699 | 71,205,103 | 75,957,091 | 84,942,576 |
| Aviation spirit .. | 95,643 | 43,283 | 77,561 | 75,113 | 43,084 | 40,542 |
| Motor spirit .. | 499,056 | 422,244 | 433,651 | 432,820 | 608,817 | 399,532 |
| White spirit .. | 8,725 | 10,776 | 11,660 | 14,964 | 17,861 | 26,612 |
| Kerosine .. | 5,227 | 6,555 | 7,011 | 9,742 | 9,971 | 18,085 |
| Lubricating oil .. | 25,898 | 28,521 | 45,574 | 28,502 | 16,243 | 29,699 |
| Fuel oil .. | 2,588,116 | 2,259,213 | 225,457 | 1,210,171 | 1,020,055 | 909,833 |
| Gas oil .. | 632,382 | 516,782 | 2,275,057 | 2,523,082 | 2,771,952 | 2,762,698 |
| Petroleum coke .. | 386,727 | 196,674 | 174,183 | 120,460 | 116,269 | 130,694 |
| Paraffin wax .. | 4,379 | 5,097 | 2,776 | 2,789 | 4,504 | 5,051 |
| Ozokerite and ceresin .. | 9,097 | 130 | 90 | 72 | 89 | 104 |
| Petroleum jelly .. | 706 | 564 | 512 | 581 | 757 | 629 |
| Natural asphalt and bitumen .. | 1,629 | 2,136 | 3,052 | 2,281 | 2,750 | 1,574 |
| Bitumen .. | 313 | 656 | 3,730 | 7,212 | 7,446 | 8,953 |
| Natural gas (mill. cu. ft.) | n.a. | 11 | 22 | 12 | 10 | n.a. |
| Germany (Federal)— | | | | | | |
| Crude petroleum .. | 50,466,543 | 58,135,270 | 66,617,607 | 70,862,200 | 82,743,329 | 88,136,987 |
| Aviation spirit .. | 177,076 | 990,978 | 1,401,074 | 170,981 | 198,600 | 163,728 |
| Motor spirit .. | 646,571 | | | 3,051,432 | 3,284,551 | 1,878,415 |
| White spirit .. | 21,990 | 25,037 | 31,111 | 35,347 | 41,471 | 51,053 |
| Kerosine .. | 32,613 | 15,276 | 13,020 | 23,236 | 45,849 | 25,746 |
| Aviation turbine fuel .. | 190,925 | 216,711 | 265,989 | 350,118 | 371,959 | 401,618 |
| Gas and diesel oil .. | 2,137,570 | 2,475,567 | 1,415,487 | 1,153,249 | 1,432,161 | 1,350,691 |
| Fuel oil .. | 8,882,234 | 10,019,372 | 11,760,103 | 12,451,914 | 13,701,558 | 16,349,499 |
| Lubricating oil, etc. .. | 242,406 | 189,533 | 189,373 | 149,805 | 171,880 | 171,206 |
| Petroleum jelly .. | 1,741 | 1,564 | 1,437 | 1,359 | 1,893 | 1,827 |
| Paraffin wax .. | 24,839 | 21,083 | 28,565 | 32,891 | 31,583 | 36,952 |
| Ozokerite, etc. .. | 3 | — | — | — | — | — |
| Natural asphalt and bitumen .. | 18,118 | 16,437 | 20,913 | 18,483 | 19,628 | 17,830 |
| Bitumen .. | 671,130 | 488,400 | 528,359 | 314,397 | 271,252 | 286,765 |
| Petroleum coke .. | 194,787 | 278,803 | 368,761 | 317,573 | 318,555 | 444,225 |
| Germany (East)— | | | | | | |
| Crude petroleum .. | 4,193,000 | 5,051,000 | 6,338,000 | 6,535,000 | 7,912,000 | 9,126,000 |
| Greece— | | | | | | |
| Crude petroleum .. | 1,678,770 | 2,548,843 | 3,064,299 | 3,929,393 | 3,791,407 | 4,527,699 |
| Aviation spirit .. | 11,690 | 11,927 | 8,956 | 10,700 | 13,452 | 12,919 |
| Motor spirit .. | 15,202 | 102,142 | 153,978 | 82,652 | 79,749 | 70,984 |
| White spirit .. | 1,866 | 2,476 | 2,915 | 3,746 | 3,400 | 2,157 |
| Kerosine .. | 1,359 | 3,938 | 3,744 | 7,513 | 833 | 698 |
| Fuel oil and diesel oil .. | 1,220,547 | 1,978,947 | 1,275,318 | 1,031,261 | 976,434 | 1,238,627 |
| Lubricating oil, etc. .. | 31,839 | 37,746 | 36,815 | 41,725 | 47,117 | 54,001 |
| Petroleum jelly .. | 107 | 130 | 108 | 104 | 118 | 193 |
| Paraffin wax .. | 448 | 332 | 354 | 265 | 272 | 342 |
| Asphalt and bitumen .. | 16,083 | 6,605 | 991 | 1,518 | 832 | 1,174 |
| Hungary— | | | | | | |
| Crude petroleum .. | 1,994,252 | 2,215,000 | 2,865,000 | 2,909,314 | 3,169,144 | 3,704,332 |
| Motor spirit .. | 120,656 | 106,000 | 55,000 | 69,879 | 71,483 | 98,556 |
| Kerosine .. | 29,320 | — | — | — | — | — |
| Gas oil .. | 221,783 | 157,000 | 129,000 | 127,947 | 144,735 | 164,719 |
| Fuel oil .. | 201,134 | 100,000 | 258,000 | 340,535 | 327,830 | 354,581 |
| Iceland— | | | | | | |
| Aviation spirit .. | 14,991 | 15,265 | 4,720 | 11,311 | 3,301 | 2,338 |
| Motor spirit .. | 42,154 | 47,247 | 50,922 | 52,273 | 52,000 | 49,191 |
| White spirit .. | 833 | 15 | 485 | 484 | 910 | 20 |
| Kerosine .. | 3,868 | 490 | 835 | 741 | 1,369 | 2,971 |
| Gas oil and fuel oil .. | 346,170 | 374,813 | 403,481 | 386,985 | 332,939 | 336,621 |
| Lubricating oil .. | 4,380 | 4,707 | 5,204 | 4,413 | 4,557 | 4,843 |
| Greases .. | | | | | | |
| Paraffin wax .. | 203 | 152 | 174 | 107 | 111 | 450 |
| Petroleum jelly .. | 6 | 16 | 10 | 7 | 14 | 8 |
| Asphalt .. | 416 | 827 | 2,174 | 1,356 | 2,705 | 2,026 |

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|------------|------------|------------|------------|------------|------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Italy— | | | | | | |
| Crude petroleum .. | 54,241,053 | 66,225,989 | 74,937,863 | 85,074,155 | 86,183,840 | 99,576,512 |
| Aviation and motor spirits .. | 144,256 | 279,956 | 375,110 | 518,075 | 168,425 | 241,236 |
| Kerosine .. | 9,632 | 6,647 | 6,071 | 25,469 | 22,508 | 106,213 |
| Gas oil .. | 1,733,178 | 1,906,575 | 2,454,650 | 2,910,669 | 3,340,273 | 3,124,326 |
| Fuel oil .. | | | | | | |
| Lubricating oil .. | 145,004 | 93,198 | 92,664 | 117,168 | 159,453 | 117,474 |
| Petroleum jelly .. | 2,121 | 1,788 | 1,646 | 1,718 | 1,928 | 1,928 |
| Paraffin wax .. | 29,175 | 12,864 | 34,609 | 37,530 | 39,681 | 43,740 |
| Pitch .. | 1,895 | 330 | 437 | 2,697 | 31,459 | 41,015 |
| Petroleum coke .. | 238,427 | 220,682 | 266,364 | 264,906 | 267,778 | 335,948 |
| Ozokerite and ceresin .. | (a) | (a) | (a) | (a) | (a) | (a) |
| Natural asphalt and bitumen .. | 2,697 | 2,541 | 2,569 | 3,300 | 2,127 | 2,621 |
| Netherlands— | | | | | | |
| Crude petroleum .. | 23,067,690 | 25,962,556 | 29,174,723 | 31,367,387 | 35,230,537 | 47,600,046 |
| Motor spirit, etc. .. | 277,575 | 389,719 | 302,675 | 502,368 | 344,861 | 588,000 |
| Kerosine .. | 369,995 | 374,078 | 296,709 | 423,885 | 566,341 | 509,000 |
| Gas oil .. | 1,365,985 | 1,280,555 | 1,776,059 | 1,769,166 | 1,808,224 | 1,689,593 |
| Fuel oil .. | 3,688,683 | 4,017,995 | 3,854,840 | 4,040,041 | 2,363,260 | 1,595,690 |
| Lubricating oil .. | 175,801 | 123,483 | 346,038 | 311,731 | 363,035 | 401,473 |
| Petroleum jelly .. | 2,570 | 2,401 | 1,936 | 2,164 | 2,336 | 1,983 |
| Paraffin wax .. | 25,577 | 16,059 | 17,419 | 17,247 | 16,102 | 18,209 |
| Ozokerite and ceresin (b) | 166 | 196 | 195 | 158 | 244 | 293 |
| Pitch .. | 115,106 | 116,099 | 145,862 | 189,534 | 244,332 | 220,524 |
| Petroleum coke .. | 51,592 | 53,351 | 97,201 | 116,697 | 124,687 | 138,931 |
| Natural asphalt .. | 1,336 | 1,494 | 953 | 1,463 | 1,936 | 1,266 |
| Norway— | | | | | | |
| Crude petroleum .. | 2,655,006 | 2,710,089 | 2,887,864 | 3,141,973 | 4,847,957 | 5,026,470 |
| Aviation spirit .. | 36,874 | 45,340 | 29,880 | 43,657 | 28,734 | 21,030 |
| Motor spirit .. | 399,795 | 444,463 | 473,503 | 543,019 | 443,296 | 552,476 |
| White spirit .. | 19,013 | 17,254 | 19,908 | 19,765 | 22,988 | 19,183 |
| Kerosine .. | 111,214 | 134,467 | 202,092 | 193,112 | 188,406 | 173,976 |
| Aviation turbine fuel .. | 93,579 | 67,222 | 112,688 | 106,622 | 73,034 | 65,462 |
| Diesel oil .. | 295,300 | 295,781 | 321,923 | 314,328 | 137,067 | 142,816 |
| Gas oil .. | 777,961 | 855,565 | 1,018,095 | 1,060,722 | 954,485 | 1,015,754 |
| Fuel oil .. | 1,498,522 | 1,156,662 | 1,542,826 | 1,402,718 | 1,050,526 | 1,080,467 |
| Lubricating oil .. | 44,548 | 21,157 | 51,152 | 52,893 | 53,986 | 56,478 |
| Petroleum jelly .. | 299 | 339 | 410 | 344 | 714 | 792 |
| Paraffin wax .. | 3,149 | 4,020 | 4,017 | 4,124 | 3,749 | 4,386 |
| Greases .. | 1,791 | 2,024 | 1,770 | 1,722 | 1,757 | 1,759 |
| Pitch .. | 41,908 | 51,892 | 49,679 | 76,203 | 99,834 | 107,487 |
| Petroleum coke .. | 144,290 | 173,943 | 169,530 | 190,371 | 246,092 | 264,462 |
| Asphalt, etc. .. | 1,889 | 1,524 | 1,607 | 1,323 | 1,259 | 364 |
| Poland— | | | | | | |
| Crude petroleum .. | 1,680,900 | 3,164,788 | 3,293,857 | 3,551,100 | 5,493,357 | 6,407,183 |
| Motor spirit .. | 2,883,060 | 2,212,454 | 2,304,654 | 2,739,971 | 2,494,898 | 2,358,874 |
| Kerosine .. | | | | | | |
| Fuel oils .. | | | | | | |
| Lubricating oil .. | | | | | | |
| Paraffin wax .. | | | | | | |
| Asphalt .. | | | | | | |
| Petroleum coke .. | | | | | | |

(a) Included with paraffin wax.

(b) Including montan wax.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|------------------------------------|------------|------------|------------|------------|------------|------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Portugal— | | | | | | |
| Crude petroleum .. | 1,495,275 | 1,689,700 | 1,532,394 | 1,723,699 | 1,781,116 | 2,202,831 |
| Motor spirit | 51,366 | 89,855 | 100,821 | 129,848 | 195,981 | 271,855 |
| Kerosine | 18,446 | 11,548 | 18,037 | 17,640 | 12,474 | 12,395 |
| Aviation turbine fuel .. | 4,551 | 11,348 | 7,154 | 6,927 | 12,708 | 16,443 |
| Gas oil and diesel oil .. | 316,220 | 282,578 | 262,135 | 331,165 | 398,994 | 351,367 |
| Fuel oil | 266,167 | 343,815 | 340,242 | 353,000 | 401,444 | 351,511 |
| Lubricating oil | 39,059 | 45,843 | 46,527 | 48,425 | 52,050 | 57,547 |
| Petroleum jelly | 118 | 140 | 144 | 142 | 243 | 152 |
| Paraffin wax | 3,582 | 3,134 | 3,340 | 5,097 | 3,985 | 3,411 |
| Ozokerite and ceresin .. | 167 | 67 | 105 | 87 | 162 | 315 |
| Bitumen | 40,960 | 25,475 | 41,720 | 35,767 | 31,885 | 41,864 |
| Natural asphalt | 615 | 3,015 | 1,218 | 1,581 | 1,943 | 1,149 |
| Spain— | | | | | | |
| Crude petroleum | 7,392,403 | 7,941,114 | 9,975,330 | 14,391,362 | 20,269,613 | 27,412,395 |
| Motor spirit (a) | 40,520 | 50,406 | 38,391 | 45,770 | 61,072 | 45,907 |
| Kerosine (a) | 16,798 | 3,924 | 46,461 | 65,376 | 77,806 | 10,062 |
| Aviation turbine fuel .. | 67,690 | 87,353 | 102,841 | 56,802 | 85,414 | 33,090 |
| Diesel oil (a) | 27,535 | 3,880 | 7,168 | 6,990 | 36,422 | 21,544 |
| Lubricating oil (a) | 32,902 | 12,593 | 35,394 | 14,739 | 13,626 | 43,175 |
| Fuel oil (a) | 28,241 | 132,774 | 145,101 | 54,662 | 79,302 | 71,567 |
| Petroleum jelly (a) | 1,400 | 1,274 | 1,308 | 1,328 | 1,388 | 1,598 |
| Paraffin wax (a) | 4,326 | 3,261 | 7,428 | 9,052 | 2,889 | 5,337 |
| Asphalt (a) | 834 | 1,407 | 17,951 | 34,323 | 18,202 | 21,100 |
| Sweden— | | | | | | |
| Crude petroleum | 3,440,800 | 3,665,812 | 3,497,967 | 5,874,998 | 8,770,385 | 10,116,000 |
| Motor spirit, etc. | 2,199,336 | 2,378,378 | 2,480,620 | 2,525,072 | 2,489,852 | 2,548,234 |
| White spirit | 67,702 | 68,078 | 60,022 | 66,093 | 38,635 | 27,616 |
| Kerosine | 354,271 | 348,161 | 420,475 | 312,830 | 346,330 | 309,956 |
| Fuel oil and gas oil .. | 11,452,297 | 12,078,102 | 15,373,951 | 12,994,579 | 13,698,608 | 14,909,096 |
| Lubricating oil and grease | 151,360 | 154,603 | 151,604 | 172,458 | 183,682 | 183,143 |
| Petroleum jelly | 979 | 836 | 723 | 839 | 980 | 962 |
| Paraffin wax | 7,956 | 7,080 | 7,597 | 6,398 | 6,285 | 7,328 |
| Ozokerite, ceresin, etc. | 2,129 | 1,997 | 1,792 | 1,687 | 1,833 | 2,398 |
| Asphalt | 920 | 1,021 | 1,095 | 713 | 897 | 597 |
| Pitch | 9,545 | 10,473 | 21,778 | 38,755 | 50,816 | 41,609 |
| Petroleum coke | 10,053 | 24,824 | 18,966 | 18,932 | 31,443 | 69,504 |
| Switzerland— | | | | | | |
| Crude petroleum | 824,788 | 1,190,104 | 2,315,440 | 3,873,852 | 4,506,002 | 4,880,647 |
| Motor spirit | 1,274,386 | 1,313,958 | 1,319,360 | 1,121,731 | 1,209,635 | 1,330,395 |
| White spirit | 8,501 | 9,490 | 9,280 | 9,392 | 11,060 | 13,241 |
| Kerosine | 16,235 | 15,954 | 16,201 | 10,762 | 11,520 | 9,411 |
| Gas and diesel oils | 544,227 | 583,021 | 488,924 | 303,341 | 335,077 | 461,239 |
| Fuel oil | 3,905,578 | 4,617,356 | 4,180,938 | 3,543,772 | 4,126,988 | 4,318,806 |
| Lubricating oil and grease | 73,660 | 73,345 | 74,189 | 80,787 | 81,716 | 84,239 |
| Petroleum jelly | 742 | 829 | 781 | 781 | 818 | 799 |
| Paraffin wax and ceresin | 6,720 | 7,413 | 6,465 | 7,271 | 7,843 | 9,096 |
| Asphalt and bitumen .. | 215,752 | 230,619 | 264,506 | 264,238 | 229,203 | 218,787 |
| Petroleum coke | 49,363 | 53,550 | 49,449 | 10,672 | 53,746 | 49,930 |
| U.S.S.R.— | | | | | | |
| Motor spirit | 1,363,800 | 1,202,100 | 922,200 | 741,304 | 682,700 | 633,300 |
| Kerosine | 148,800 | 166,300 | 46,900 | 12,007 | 6,900 | 104,500 |
| Diesel oil | 226,500 | 223,000 | 142,000 | 238,276 | 182,900 | 172,300 |
| Fuel oil | 51,700 | 49,600 | 324,300 | 158,260 | 31,200 | 20,900 |
| Lubricating oil and grease | 152,100 | 146,400 | 132,000 | 134,344 | 94,500 | 112,000 |
| Paraffin wax | 17,500 | 11,800 | 9,800 | 7,874 | 6,300 | 7,200 |
| Bitumen | 71,700 | 65,100 | 40,100 | 25,100 | 21,500 | 23,500 |

(a) Excluding imports from Canary Islands.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-----------|-----------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Yugoslavia— | | | | | | |
| Crude petroleum | 748,243 | 1,089,520 | 2,167,417 | 2,506,361 | 2,640,801 | 3,168,556 |
| Aviation spirit | 23,186 | 27,191 | 27,760 | 19,204 | 19,883 | 16,671 |
| Motor spirit | — | 1 | 1,523 | 7,209 | 13,638 | 6,730 |
| Kerosine | 5,549 | 2,527 | 8,573 | 12,992 | 23,893 | 3,369 |
| Aviation turbine fuel .. | 4 | — | — | 19 | 1,076 | — |
| Fuel oils | 258,315 | 134,896 | 181,658 | 567,208 | 818,300 | 390,658 |
| Lubricating oil | 49,722 | 14,070 | 42,880 | 31,368 | 21,946 | 46,918 |
| Greases | 639 | 160 | 508 | 368 | 303 | 461 |
| Paraffin wax | 3,856 | 5,035 | 5,905 | 3,400 | 2,859 | 4,485 |
| Petroleum jelly | 691 | 273 | 288 | 260 | 334 | 304 |
| Ozokerite and ceresin .. | 570 | 489 | 416 | 266 | 194 | 62 |
| Petroleum coke | 18,553 | 21,150 | 25,992 | 22,988 | 22,938 | 13,810 |
| Pitch | 76,349 | 59,823 | 17,640 | 39,022 | 56,769 | 44,697 |
| Algeria— | | | | | | |
| Motor spirit | <i>n.a.</i> | 15,836 | 31,672 | 10,069 | 30,043 | <i>n.a.</i> |
| Kerosine | <i>n.a.</i> | 1,651 | — | 159 | 9,692 | <i>n.a.</i> |
| Gas oil | <i>n.a.</i> | 5,687 | 4,521 | 2,450 | 2,397 | <i>n.a.</i> |
| Fuel oil and diesel oil .. | <i>n.a.</i> | 4,229 | 3,500 | 3,777 | <i>n.a.</i> | <i>n.a.</i> |
| Lubricating oil | <i>n.a.</i> | 31,080 | 26,880 | 30,907 | 36,516 | <i>n.a.</i> |
| Angola— | | | | | | |
| Crude petroleum | — | — | — | 34,853 | 57,139 | 75,542 |
| Motor spirit | 10,140 | 6,450 | 6,688 | 7,227 | 7,165 | 8,838 |
| Kerosine | 6,019 | 4,705 | 6,109 | 7,231 | 7,935 | 10,897 |
| Gas oil and fuel oil | 11,960 | 21,720 | 32,246 | 70,096 | 144,559 | 162,505 |
| Lubricating oil | 9,463 | 11,168 | 13,199 | 12,812 | 15,137 | 15,077 |
| Paraffin wax | 32 | 73 | 78 | 170 | 326 | 170 |
| Petroleum jelly | 41 | 33 | 20 | 32 | 43 | 47 |
| Asphalt and bitumen | 34 | 22 | 4,928 | 1 | 1,000 | 233 |
| Cameroun— | | | | | | |
| Motor spirit, etc. | 58,358 | 48,895 | 53,070 | 70,930 | 78,392 | <i>n.a.</i> |
| Kerosine | 30,008 | 25,189 | 29,760 | 39,990 | 47,340 | <i>n.a.</i> |
| Gas and fuel oil | 44,640 | 39,710 | 41,840 | 63,130 | 67,999 | <i>n.a.</i> |
| Lubricating oil | 8,171 | 4,942 | 3,890 | 6,160 | 6,634 | <i>n.a.</i> |
| Canary Islands— | | | | | | |
| Crude petroleum | 5,044,962 | 5,243,457 | 6,051,080 | 6,490,223 | 7,580,247 | 7,638,649 |
| Motor spirit | 16,157 | 21,248 | 23,670 | 31,995 | 38,787 | 7,373 |
| Diesel (b) | — | — | 6,889 | — | 19,541 | <i>n.a.</i> |
| Cape Verde Islands— | | | | | | |
| Motor spirit | 629 | 958 | 700 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Kerosine | 2,212 | 2,360 | 2,618 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Central African Republic— | | | | | | |
| Aviation spirit | 88 | 3,499 | 2,442 | 2,110 | 892 | 2,217 |
| Motor spirit | 11,414 | 12,941 | 10,865 | 11,888 | 11,692 | 1,917 |
| Kerosine | 4,202 | 4,760 | 4,282 | 4,888 | 5,579 | 963 |
| Gas oil | 8,872 | 10,855 | 10,135 | 12,250 | 13,174 | 2,479 |
| Diesel oil | 835 | 1,007 | 200 | 894 | 383 | — |
| Ceuta (a)— | | | | | | |
| Kerosine | 84 | — | — | — | — | — |
| Diesel (b) | 47,924 | 37,639 | 41,471 | 22,305 | 28,102 | 20,817 |
| Fuel oil (b) | 44,762 | 62,477 | 56,996 | 38,654 | 32,148 | 8,000 |
| Lubricating oil | 3,212 | 3,632 | 3,424 | 3,363 | 3,335 | 2,650 |
| Congo (Republic of)— | | | | | | |
| Aviation spirit | 10,635 | 3,344 | 2,562 | 1,809 | 2,148 | 1,853 |
| Motor spirit | 19,519 | 15,843 | 19,044 | 17,493 | 2,662 | 1,332 |
| Kerosine | 21,572 | 7,889 | 19,080 | 13,736 | 1,373 | 1,304 |
| Gas oil | 39,276 | 39,766 | 45,743 | 50,866 | 24,877 | 35,218 |
| Fuel oil | 4,273 | 7,615 | 18,851 | 19,324 | 714 | — |
| Lubricating oil | 3,498 | 3,786 | 3,574 | 5,823 | 4,148 | 7,144 |

(a) Excluding imports from Spain and Canary Islands.

(b) Imported chiefly for bunkering purposes. See exports.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Jahomey— | | | | | | |
| Aviation spirit | 478 | 492 | 176 | 332 | <i>n.a.</i> | <i>n.a.</i> |
| Motor spirit | 15,140 | 16,722 | 13,094 | 15,242 | 12,200 | <i>n.a.</i> |
| Kerosine | 13,664 | 13,398 | 10,056 | 11,194 | 7,000 | <i>n.a.</i> |
| Gas oil | 15,124 | 16,211 | 13,263 | 16,299 | <i>n.a.</i> | <i>n.a.</i> |
| Fuel oils | 729 | 1,145 | 844 | 943 | <i>n.a.</i> | <i>n.a.</i> |
| Lubricating oil | 1,264 | 1,398 | 1,215 | 1,031 | 1,130 | <i>n.a.</i> |
| Egypt— | | | | | | |
| Crude petroleum | 4,674,980 | 3,918,497 | 3,827,174 | 2,433,075 | 1,230,452 | 975,534 |
| Motor spirit | 8,743 | 11,059 | 16,568 | 11,058 | 10,099 | 2,024 |
| Kerosine | 21,713 | 35,367 | 139,518 | 74,210 | 264,895 | 275,460 |
| Fuel oil | 88,800 | 1,388 | 333 | 467 | <i>n.a.</i> | <i>n.a.</i> |
| Gas oil | 34,677 | 11,378 | 2,272 | 31,648 | <i>n.a.</i> | <i>n.a.</i> |
| Diesel oil | 12,290 | 2,684 | 148 | 3,161 | 11,192 | 47,409 |
| Lubricating oil | 57,036 | 44,985 | 84,654 | 59,349 | 67,628 | 49,387 |
| Paraffin wax | | | | | | |
| Ozokerite and ceresin | <i>n.a.</i> | 3,240 | 2,474 | 1,237 | 2,192 | 2,643 |
| Asphalt and bitumen | 2 | 491 | 3 | 65 | 389 | 5,290 |
| Ethiopia (a)— | | | | | | |
| Aviation spirit | 6,489 | <i>n.a.</i> | 10,586 | 8,235 | 3,156 | 2,384 |
| Motor spirit | 90,942 | <i>n.a.</i> | 58,690 | 43,871 | 15,457 | 26,521 |
| Kerosine | 3,758 | <i>n.a.</i> | 5,223 | 6,265 | 2,944 | 882 |
| Gas and fuel oils | 21,420 | <i>n.a.</i> | 77,272 | 148,718 | 22,292 | 23,285 |
| Lubricating oil and grease | 4,368 | <i>n.a.</i> | 5,066 | 6,652 | 7,390 | 4,512 |
| French Somaliland— | | | | | | |
| Motor spirit | 4,651 | | 6,803 | 4,966 | 11,683 | 6,076 |
| Kerosine | 1,493 | 16,250 | 2,472 | 1,964 | 2,123 | 2,181 |
| Fuel oil, etc. | 8,928 | | 17,790 | 10,027 | 14,975 | 15,206 |
| Lubricating oil | 585 | | 467 | 548 | 1,206 | 8,868 |
| Gabon— | | | | | | |
| Aviation spirit | 3,313 | 3,080 | 2,972 | 2,545 | 3,941 | 5,706 |
| Motor spirit | 11,793 | 13,275 | 14,197 | 14,299 | 203 | 46 |
| Kerosine | 4,621 | 4,236 | 4,841 | 1,595 | 687 | 615 |
| Gas oil | 35,620 | 40,765 | 53,136 | 50,768 | 3,149 | 1,058 |
| Fuel oil | 142 | 207 | 212 | 210 | 19 | — |
| Lubricating oil | 3,142 | 2,825 | 3,736 | 3,295 | 2,192 | 2,491 |
| Ivory Coast— | | | | | | |
| Crude petroleum | <i>n.a.</i> | <i>n.a.</i> | 606,560 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Aviation spirit | 1,222 | 1,938 | 896 | 1,422 | 1,440 | 1,460 |
| Motor spirit | 107,574 | 98,599 | 2,663 | 58 | 80,111 | 3,714 |
| Kerosine | 32,951 | 30,125 | 674 | 26 | 27,578 | 1,822 |
| Gas oil | 69,090 | 66,497 | 237 | 21 | 79,755 | 13,824 |
| Fuel oils | 51,722 | 41,221 | 286 | — | 28,150 | 386 |
| Lubricating oil | 10,541 | 9,832 | 10,509 | 11,321 | 12,436 | 12,270 |
| Liberia— | | | | | | |
| Motor spirit | 23,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Kerosine | 8,100 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Diesel oil, etc. | 58,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Lubricating oil | 4,500 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Libya— | | | | | | |
| Motor spirit | 96,029 | 100,428 | 108,007 | 131,461 | 132,917 | 151,200 |
| Kerosine, etc. | 37,615 | 41,272 | 77,089 | 22,428 | 19,836 | 12,020 |
| Gas oil and diesel oil | 158,373 | 151,608 | 206,746 | 197,376 | 236,090 | 253,200 |
| Fuel oil | 24,237 | 32,674 | 59,290 | 41,285 | 49,044 | 43,600 |
| Lubricating oil, etc. | 12,170 | 9,245 | 9,991 | 12,029 | 17,159 | 26,200 |
| Malagasy Republic— | | | | | | |
| Aviation spirit | 5,985 | 5,865 | 5,511 | 5,583 | 7,714 | 6,295 |
| Motor spirit | 60,557 | 61,573 | 61,951 | 10,042 | 5,677 | 7,711 |
| Kerosine | 20,236 | 20,196 | 17,801 | 5,027 | 2,424 | 737 |
| Gas oil | 50,523 | 72,290 | 63,190 | 9,927 | 7,579 | 15,234 |

(a) Years ended September 10.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-----------|-------------|----------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Malagasy Republic (cont.) | | | | | | |
| Fuel oils | 1,357 | 2,810 | 2,350 | 9,348 | 864 | 163 |
| Lubricating oil | 6,372 | 5,892 | 5,653 | 7,111 | 6,987 | 9,256 |
| Road oil, etc. | 6,063 | 6,395 | 8,407 | 7,574 | 9,555 | 10,021 |
| Paraffin wax | 1,427 | 1,743 | 2,337 | 2,397 | 3,120 | 2,620 |
| Petroleum jelly | 16 | 22 | 41 | 34 | 55 | 25 |
| Asphalt and bitumen | 347 | 24 | 38 | 113 | 2,959 | 982 |
| Mali— | | | | | | |
| Aviation spirit | 69,142 | 1,874 | 1,219 | 863 | 612 | <i>n.a.</i> |
| Motor spirit | | 31,326 | 34,540 | 40,012 | 33,229 | <i>n.a.</i> |
| Kerosine | | 10,132 | 8,953 | 10,981 | 10,929 | <i>n.a.</i> |
| Gas and fuel oil | | 23,651 | 20,865 | 23,840 | 22,234 | <i>n.a.</i> |
| Lubricating oil | | 2,149 | 1,955 | 2,142 | 2,434 | <i>n.a.</i> |
| Morocco— | | | | | | |
| Crude petroleum | 1,094,507 | 1,103,106 | 1,100,303 | 1,079,796 | 1,217,329 | 1,283,721 |
| Aviation spirit | 3,873 | 4,520 | 6,514 | 9,149 | 6,020 | 7,622 |
| Motor spirit | 1,304 | 1,811 | 1,252 | 1,368 | 2,494 | 2,042 |
| White spirit | 1,444 | 2,354 | 2,911 | 5,848 | 2,412 | 3,094 |
| Kerosine | 21,883 | 21,135 | 23,468 | 23,028 | 42,346 | 49,794 |
| Gas oil | 9,185 | 6,559 | 187 | 19,476 | 18,344 | 16,339 |
| Fuel oil | 4,827 | 3,434 | 706 | 19,647 | 7,997 | 14,759 |
| Lubricating oil, etc. | 13,866 | 15,443 | 19,272 | 20,895 | 23,023 | 26,599 |
| Paraffin wax | 7,522 | 5,119 | 7,791 | 2,938 | 3,200 | 2,160 |
| Asphalt, bitumen, etc. | 33,047 | 37,082 | 18,914 | 22,818 | 30,723 | 5,060 |
| Mozambique— | | | | | | |
| Motor spirit | 27,488 | 22,067 | 27,842 | 29,100 | 30,958 | <i>n.a.</i> |
| Kerosine | 25,168 | 18,603 | 21,186 | 19,800 | 21,118 | <i>n.a.</i> |
| Fuel oil | 50,402 | 40,319 | 49,980 | 62,100 | 93,211 | <i>n.a.</i> |
| Lubricating oil | 9,243 | 8,848 | 9,769 | 9,700 | 10,225 | <i>n.a.</i> |
| Paraffin wax | 76 | 35 | 2 | <i>r</i> 6 | <i>n.a.</i> | <i>n.a.</i> |
| Petroleum jelly | 44 | 8 | 5 | <i>r</i> 4 | <i>n.a.</i> | <i>n.a.</i> |
| Asphalt and bitumen (a) | 8,014 | 6,435 | 3,999 | <i>r</i> 1,477 | <i>n.a.</i> | <i>n.a.</i> |
| Niger— | | | | | | |
| Aviation spirit | 1,757 | 1,292 | <i>n.a.</i> | 1,447 | 1,481 | 400 |
| Motor spirit | 14,366 | 11,759 | 13,779 | 11,301 | 13,039 | 11,620 |
| Kerosine | 4,747 | 4,532 | — | 6,274 | 5,799 | 2,540 |
| Gas oil | <i>n.a.</i> | 2,704 | — | 14,774 | 15,797 | 1,101 |
| Fuel oils | 3,251 | 3,961 | — | 5,783 | 8,037 | 7,179 |
| Lubricating oil | 1,077 | 1,062 | — | 1,166 | 1,877 | 1,816 |
| Reunion— | | | | | | |
| Motor spirit, etc. | 25,549 | 27,635 | 29,264 | 32,187 | 35,362 | 38,589 |
| Kerosine | 4,490 | 6,508 | 8,268 | 8,878 | 10,484 | 11,890 |
| Fuel oil, etc. | 9,153 | 11,470 | 16,623 | 22,267 | 18,738 | 17,207 |
| Lubricating oil | 1,083 | 1,303 | 1,625 | 1,505 | 1,485 | 1,868 |
| S. Tome and Principe— | | | | | | |
| Motor spirit | 1,168 | 1,287 | 1,419 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Gas and diesel oils | 1,275 | 1,369 | 1,489 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Senegal— | | | | | | |
| Aviation spirit | 4,696 | 2,717 | 1,980 | 1,954 | 2,862 | <i>n.a.</i> |
| Motor spirit | 37,865 | 42,776 | 72,342 | 64,354 | 2,784 | <i>n.a.</i> |
| Kerosine | 6,043 | 6,937 | 13,441 | 11,076 | 1,095 | <i>n.a.</i> |
| Gas oil | 9,775 | 10,849 | 17,197 | 18,463 | 1,435 | <i>n.a.</i> |
| Fuel oils | 51,348 | 77,247 | 79,001 | 120,053 | 2,168 | <i>n.a.</i> |
| Lubricating oil | 4,022 | 4,151 | 4,914 | 39,156 | 5,104 | <i>n.a.</i> |
| Somali Republic (b)— | | | | | | |
| Aviation and motor spirit | 6,052 | 3,849 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Kerosine | 1,114 | 970 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Gas oil | 4,437 | 3,586 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Lubricating oil | 454 | 133 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |

(a) Including coal tar and pitch.

(b) Former British Protectorate only.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|--------------|--------------|--------------|-------------|--------------|--------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| South Africa— | | | | | | |
| Crude petroleum .. | (c)5,105,000 | (c)5,361,429 | (c)5,737,106 | c10,468,210 | (c)7,807,228 | (c)8,018,537 |
| Motor spirit (b) .. | 656,839 | 698,243 | 774,626 | 365,420 | 642,236 | 500,907 |
| Other spirit .. | 6 | — | n.a. | n.a. | n.a. | n.a. |
| White spirit .. | 36,979 | 39,925 | 35,207 | 26,657 | 24,114 | 25,817 |
| Kerosine .. | 411,669 | 340,309 | 421,913 | 428,721 | 394,793 | 386,775 |
| Gas oil (b) .. | } 357,188 | } 459,223 | } 608,160 | } 436,648 | } 411,672 | } 533,855 |
| Diesel oil (b) .. | | | | | | |
| Fuel oil (b) .. | 3,858 | 85,013 | 18,988 | 618,296 | 165,162 | 218,772 |
| Lubricating oil .. | 149,892 | 195,092 | 187,184 | 203,000 | 148,120 | 130,455 |
| Transformer oil .. | n.a. | n.a. | n.a. | n.a. | n.a. | 14,835 |
| Other oils .. | 129,604 | n.a. | n.a. | n.a. | n.a. | 923,774 |
| Paraffin wax .. | 18,724 | 10,777 | 10,223 | 17,025 | 14,347 | 19,144 |
| Asphalt and bitumen .. | 6,087 | 4,961 | 14,502 | 8,254 | 8,685 | 10,088 |
| Petroleum jelly .. | 3,471 | 3,924 | 4,038 | 4,077 | 4,169 | 4,047 |
| Sudan— | | | | | | |
| Aviation spirit (b) .. | 10,463 | 5,740 | 3,575 | 14,059 | n.a. | 21,636 |
| Motor spirit .. | 76,849 | 42,596 | (a) 9,348 | 15,048 | n.a. | 104,208 |
| Kerosine .. | 64,173 | 31,126 | 4,909 | 23,275 | n.a. | 82,455 |
| Gas oil .. | 113,564 | 80,413 | 22,896 | 62,909 | 50,817 | 147,150 |
| Diesel oil .. | 60,737 | 10,491 | 2,160 | 13,345 | 79,232 | 126,808 |
| Fuel oil .. | 158,034 | 44,039 | (a) 9,923 | 66,744 | 123,194 | 258,759 |
| Lubricating oil, etc. .. | 11,902 | 11,306 | (a) 6,600 | 12,701 | 19,929 | 54,241 |
| Petroleum jelly .. | 19 | 38 | 63 | 77 | 84 | 82 |
| Paraffin wax .. | 36 | 76 | 125 | 74 | 64 | 119 |
| Asphalt and bitumen .. | 7,455 | 3,847 | 2,155 | 1,339 | n.a. | 558 |
| Togo— | | | | | | |
| Motor spirit .. | 7,868 | 8,321 | 9,710 | 10,587 | 10,600 | n.a. |
| Kerosine .. | 8,490 | 8,605 | 10,071 | 13,221 | 11,290 | n.a. |
| Fuel oil .. | 25,251 | 26,514 | 37,966 | 39,923 | 40,228 | n.a. |
| Lubricating oil .. | 1,155 | 1,084 | 1,273 | 930 | 1,288 | n.a. |
| Tunisia— | | | | | | |
| Aviation spirit .. | } 18,070 | } 1,782 | } 1,356 | } 674 | } n.a. | } 787 |
| Motor spirit .. | | | | | | |
| White spirit .. | 577 | 566 | 597 | 784 | 1,857 | 705 |
| Kerosine .. | 18,324 | 2,127 | 3,783 | 481 | 653 | 1,900 |
| Fuel oil .. | 68,393 | n.a. | 3,193 | 15,882 | 9,573 | 22,901 |
| Gas oil .. | 25,164 | 1,920 | 225 | — | n.a. | n.a. |
| Lubricating oil .. | 12,718 | 10,677 | 13,488 | 10,541 | 12,804 | 10,817 |
| Petroleum jelly .. | 39 | 44 | 25 | 28 | 36 | 81 |
| Paraffin wax .. | 81 | 180 | 218 | 273 | 270 | 280 |
| Upper Volta— | | | | | | |
| Aviation spirit .. | } 34,672 | } 29,905 | } n.a. | } n.a. | } { 173 | } n.a. |
| Motor spirit .. | | | | | | |
| Kerosine .. | | | | | | |
| Gas oil .. | | | | | | |
| Fuel oils .. | | | | | | |
| Lubricating oil .. | | | | | | |
| Costa Rica— | | | | | | |
| Motor spirit .. | 61,982 | 65,992 | 69,357 | 42,928 | 19,386 | 17,335 |
| Kerosine .. | 12,143 | 14,214 | 14,870 | 14,654 | 8,197 | 9,192 |
| Diesel oil, etc. .. | 136,016 | 170,828 | 177,817 | 100,594 | 27,408 | 24,132 |
| Fuel oil .. | — | — | 17,201 | 105,372 | 254,196 | 304,925 |
| Lubricating oil .. | 10,601 | 10,318 | 10,210 | 9,308 | 11,845 | 11,832 |
| Grease .. | 293 | 364 | 294 | 360 | 356 | 537 |
| Petroleum jelly .. | 128 | 198 | 133 | 258 | 102 | 192 |
| Paraffin wax .. | 1,634 | 1,751 | 1,947 | 1,740 | 1,762 | 1,983 |
| Asphalt .. | 7,119 | 10,033 | 7,511 | 10,366 | 8,826 | 7,438 |

(a) Excess of re-exports.

(b) Including imports for bunkering purposes. See exports.

(c) Including partly-refined.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|----------|----------|---------|---------|--------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Cuba— | | | | | | |
| Crude Petroleum .. | 1,414,836 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Aviation fuel .. | 36,233 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Motor spirit .. | 83,582 | 72,831 | r 60,730 | 37,000 | n.a. | n.a. |
| Gas, oil .. | 183,234 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Lubricating oil .. | 62,474 | } 66,926 | 67,910 | 68,100 | n.a. | n.a. |
| Lubricating greases .. | 1,652 | | | | | |
| Petroleum jelly .. | 1,054 | | | | | |
| Dominican Republic— | | | | | | |
| Aviation spirit .. | 3,000 | — | n.a. | n.a. | n.a. | n.a. |
| Motor spirit .. | 140,000 | 70,200 | 167,300 | 175,900 | 172,465 | n.a. |
| Kerosine .. | 23,000 | 10,596 | 27,800 | 32,050 | n.a. | n.a. |
| Diesel oil .. | 58,000 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Fuel oil .. | 235,000 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Lubricating oil, etc. .. | 9,281 | 9,304 | 8,848 | 7,529 | 9,997 | n.a. |
| French West Indies— | | | | | | |
| Guadeloupe— | | | | | | |
| Motor spirit, etc. .. | 29,089 | 31,588 | 35,092 | 43,544 | 38,974 | 41,741 |
| Kerosine .. | 16,891 | 12,026 | 12,481 | 13,915 | 13,062 | 11,765 |
| Gas and fuel oil .. | 20,523 | 20,353 | 29,046 | 32,790 | 33,184 | 41,480 |
| Lubricating oil .. | 2,252 | 2,516 | 2,012 | 2,111 | 2,211 | 3,558 |
| Martinique— | | | | | | |
| Motor spirit, etc. .. | 28,581 | 30,584 | 30,394 | 36,781 | 38,312 | 44,566 |
| Kerosine .. | 11,704 | 11,395 | 12,288 | 13,474 | 12,824 | 12,797 |
| Gas and fuel oil .. | 33,535 | 32,948 | 37,868 | 39,269 | 42,289 | 48,107 |
| Lubricating oil .. | 2,586 | 3,521 | 3,383 | 3,842 | 3,630 | 4,341 |
| Greenland— | | | | | | |
| Motor spirit .. | 3,314 | 4,710 | 5,152 | 5,418 | 8,077 | 8,619 |
| Kerosine .. | 3,389 | 8,002 | 5,323 | 5,061 | 11,595 | 6,043 |
| Fuel oil .. | 66,478 | 72,765 | 79,743 | 84,700 | 120,761 | 90,888 |
| Lubricating oil .. | 613 | 1,392 | 1,343 | 1,114 | 1,164 | 915 |
| Guatemala— | | | | | | |
| Crude petroleum, etc. .. | 188,765 | 210,911 | 239,227 | 202,848 | n.a. | n.a. |
| Aviation spirit .. | } 89,915 | 260,023 | 11,731 | 13,594 | 16,604 | 16,197 |
| Motor spirit .. | | | | | | |
| Kerosine .. | | | | | | |
| Diesel oil .. | } 271,035 | 99,887 | 123,000 | 112,000 | 89,000 | 60,745 |
| Fuel oil .. | | | | | | |
| Lubricating oil .. | | | | | | |
| Grease .. | 9,347 | 10,210 | 6,666 | 7,484 | 9,392 | 8,942 |
| Asphalt .. | 510 | 729 | 619 | 745 | 992 | 884 |
| Paraffin wax, etc. .. | n.a. | 4 | 3 | 5 | 3 | 6 |
| | 7,133 | 6,196 | 7,117 | 7,640 | 7,364 | 5,869 |
| Honduras— | | | | | | |
| Crude petroleum .. | 68,514 | 68,809 | 131,356 | 90,536 | 336,049 | n.a. |
| Motor spirit .. | 50,651 | 48,677 | 53,745 | 56,319 | 57,070 | n.a. |
| Kerosine .. | 15,230 | 16,790 | 19,540 | 18,819 | 18,707 | n.a. |
| Gas, diesel and fuel oils .. | 83,545 | 90,051 | 97,834 | 235,630 | 208,972 | n.a. |
| Lubricating oil .. | } 4,073 | 4,028 | } 3,352 | 3,605 | 6,141 | n.a. |
| Greases .. | | | | | | |
| Pitch, asphalt, etc. .. | | | | | | |
| | 702 | 2,305 | 1,973 | 2,189 | 4,211 | n.a. |
| Mexico— | | | | | | |
| Crude petroleum .. | (a) 82,290 | 33 | 18 | — | 80 | n.a. |
| Aviation spirit .. | (a) 3,715 | 6,238 | 23,633 | 14,154 | 37,198 | n.a. |
| Motor spirit .. | (a) 9,632 | 2,786 | 116,225 | 12,282 | n.a. | n.a. |
| Kerosine .. | (a) 113 | 218 | 88 | 126 | 506 | n.a. |
| Gas oil .. | (a) 26,716 | 10,747 | 44 | 177 | 954 | n.a. |
| Fuel oil .. | (a) 207,153 | n.a. | 46,259 | 71,882 | 466,659 | n.a. |
| Lubricating oil .. | (a) 7,776 | 22,096 | 27,083 | 56,153 | 69,498 | n.a. |
| Grease .. | (a) 2,597 | 1,763 | 985 | 2,912 | 1,751 | n.a. |
| Paraffin wax .. | 19,967 | 20,733 | 23,421 | 27,148 | 19,753 | n.a. |
| Petroleum jelly .. | 1,641 | 2,002 | 1,382 | 919 | 201 | n.a. |
| Asphalt .. | 505 | 157 | 442 | 607 | 435 | n.a. |
| Asphalt rock .. | 252 | 352 | 585 | 1,102 | 32 | n.a. |
| Natural gas (million cu. ft.) | 9,299 | 8,252 | 8,809 | 9,669 | 11,016 | n.a. |

(a) Owing to reclassification not strictly comparable.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|------------|--------------|---------------------|---------------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Netherlands Antilles— | | | | | | |
| Crude petroleum .. | 40,252,000 | 40,223,000 | 39,133,000 | 40,781,000 | 38,671,000 | <i>n.a.</i> |
| Aviation spirit .. | 700,000 | 589,000 | 287,000 | 201,000 | <i>n.a.</i> | <i>n.a.</i> |
| Motor spirit .. | 215,000 | 366,000 | 251,000 | 349,000 | 300,000 | <i>n.a.</i> |
| Kerosine .. | 100,000 | 230,000 | 241,000 | 156,000 | 175,000 | <i>n.a.</i> |
| Fuel oil .. | 2,542,000 | 899,000 | 760,000 | 1,333,000 | 2,010,000 | <i>n.a.</i> |
| Diesel oil .. | 3,000 | 91,000 | 104,000 | 213,000 | 68,800 | <i>n.a.</i> |
| Gas oil .. | 64,000 | 123,000 | 191,000 | 262,000 | <i>n.a.</i> | <i>n.a.</i> |
| Lubricating oil, etc. .. | 2,000 | 10,000 | 7,000 | — | 10,800 | <i>n.a.</i> |
| Asphalt .. | — | 10,000 | 3,000 | 2,000 | <i>n.a.</i> | <i>n.a.</i> |
| Nicaragua— | | | | | | |
| Crude petroleum .. | 268,983 | 273,166 | 206,265 | 335,210 | 337,331 | 306,166 |
| Aviation spirit .. | } 14,173 | 11,891 | 14,648 | 11,952 | 22,811 | 24,444 |
| Motor spirit .. | | | | | | |
| Kerosine .. | 10,480 | 2,113 | 4,182 | 12,049 | 9,413 | 8,690 |
| Fuel oil .. | 8,525 | 8,781 | 14,122 | 13,360 | 19,814 | 27,478 |
| Lubricating oil .. | 6,287 | 5,713 | 5,389 | 7,172 | 7,312 | 5,590 |
| Paraffin wax .. | } 1,107 | 913 | 1,358 | 1,133 | 1,295 | 1,560 |
| Petroleum jelly .. | | | | | | |
| Natural asphalt .. | — | 3 | 3 | — | 27 | <i>n.a.</i> |
| Panama Republic— | | | | | | |
| Motor spirit .. | 459 | 493 | <i>r</i> 401 | <i>r</i> 346 | <i>n.a.</i> | <i>n.a.</i> |
| Kerosine .. | 770 | 1,055 | <i>r</i> 507 | <i>r</i> 289 | <i>n.a.</i> | <i>n.a.</i> |
| Diesel oil .. | 13,010 | 16,362 | <i>r</i> 15,113 | <i>r</i> 12,555 | 23,968 | <i>n.a.</i> |
| Fuel oil .. | 30,758 | 19,902 | <i>r</i> 4,248 | <i>r</i> 22,408 | 24,292 | <i>n.a.</i> |
| Lubricating oil .. | 4,200 | 6,126 | <i>r</i> 4,611 | <i>r</i> 5,505 | 5,496 | <i>n.a.</i> |
| Grease .. | 249 | 370 | <i>r</i> 348 | <i>r</i> 378 | 443 | <i>n.a.</i> |
| Paraffin wax, etc. .. | 628 | 622 | 604 | 1,046 | 1,023 | <i>n.a.</i> |
| St. Pierre and Miquelon— | | | | | | |
| Motor spirit .. | 645 | 701 | 733 | 832 | 909 | 1,011 |
| Gas oil and fuel oil .. | 20,194 | 16,534 | 22,145 | 36,338 | 47,083 | 57,599 |
| Lubricating oil .. | 365 | 370 | 453 | 457 | 650 | 587 |
| Salvador— | | | | | | |
| Motor spirit .. | 18,218 | 6,751 | 5,818 | 4,699 | 1,488 | 2,277 |
| Kerosine .. | 26,491 | 10,338 | 1,840 | 2,477 | 2,030 | 1,823 |
| Gas oil and diesel oil .. | 8,915 | 1,140 | 1,424 | 1,861 | 225 | 210 |
| Fuel oil .. | 467,183 | 305,327 | 484,815 | 472,373 | 490,302 | 343,534 |
| Lubricating oil .. | 4,301 | 4,958 | 4,958 | 4,784 | 4,562 | 3,751 |
| Grease .. | 384 | 503 | 523 | 503 | 737 | 541 |
| Paraffin wax, etc. .. | 1,242 | 1,633 | 1,795 | 1,485 | 1,679 | 1,575 |
| Petroleum jelly .. | 193 | 277 | 198 | 195 | 238 | 351 |
| Asphalt .. | 6,202 | 5,431 | 6,228 | 7,359 | 6,405 | 5,459 |
| United States— | | | | | | |
| Crude petroleum .. | 68,882,069 | 71,641,242 | <i>r</i> 70,875,201 | <i>r</i> 67,181,510 | 74,732,448 | 81,040,653 |
| Aviation spirit .. | } 387,799 | 270,509 | 584,257 | <i>r</i> 248,808 | 333,259 | 259,356 |
| Motor spirit, etc. .. | | | | | | |
| Naphtha, etc. .. | 2,721,273 | <i>n.a.</i> | 3,798,084 | 3,463,460 | 4,752,434 | 5,366,694 |
| Kerosine .. | 18,967 | 64,031 | 200 | 277,433 | 241,258 | 496,169 |
| Aviation turbine fuel .. | 3,102,997 | 4,051,197 | 4,220,937 | 4,102,932 | 5,223,774 | 5,955,707 |
| Fuel oil .. | 43,300,000 | } 51,082,146 | <i>r</i> 55,747,845 | <i>r</i> 57,920,400 | 62,957,039 | 69,757,009 |
| Gas oil and diesel oil .. | 1,600,000 | | | | | |
| Lubricating oil, etc. .. | 5,223 | 4,451 | 4,480 | 5,600 | 4,653 | 22,541 |
| Paraffin wax, etc. .. | 1,331 | 1,499 | 777 | <i>r</i> 6,799 | 22,301 | 20,302 |
| Asphalt (petroleum) .. | } 995,000 | 1,049,700 | 1,028,051 | 1,301,014 | 1,068,279 | 948,698 |
| Natural asphalt and bitumen .. | | | | | | |
| Natural gas (<i>million cu. ft.</i>) .. | 427,641 | 453,199 | 480,000 | <i>r</i> 548,600 | 627,900 | 796,203 |

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Argentina— | | | | | | |
| Crude petroleum | 1,454,214 | 3,495,878 | 3,646,397 | 2,251,675 | 1,753,685 | 2,510,107 |
| Motor spirit | 27,466 | 62,783 | 24,972 | 10,409 | 79,629 | <i>n.a.</i> |
| Kerosine | 16,151 | 13,051 | 84 | 7,820 | — | — |
| Gas oil | 753,379 | 530,187 | 434,230 | 150,464 | 360,003 | 672,818 |
| Fuel oil | — | — | 15,796 | — | — | 569,783 |
| Diesel oil | 277,531 | 46,149 | — | 3,856 | 12,388 | 104,693 |
| Lubricating oil | 67,956 | 104,547 | 93,923 | 72,369 | 64,008 | 148,298 |
| Grease | 337 | 353 | 139 | 99 | 29 | 85 |
| Paraffin wax | 53 | 59 | 2 | 1 | — | — |
| Petroleum jelly | 234 | 69 | 65 | — | 48 | — |
| Bolivia— | | | | | | |
| Aviation spirit | 12,530 | 10,567 | 14,402 | 13,248 | 14,600 | 11,600 |
| Motor spirit | 22 | 43 | 30 | — | — | — |
| Kerosine | 53 | 88 | 82 | <i>n.a.</i> | — | — |
| Fuel oil | 411 | 211 | 207 | 334 | — | — |
| Lubricating oil and grease | 1,052 | 1,290 | 2,191 | 934 | 809 | 700 |
| Paraffin wax, etc. | 1,989 | 2,117 | 2,550 | 2,953 | <i>n.a.</i> | <i>n.a.</i> |
| Tar, pitch, etc. | 5 | 26 | 17 | 26 | <i>n.a.</i> | <i>n.a.</i> |
| Brazil— | | | | | | |
| Crude petroleum | 10,632,724 | 10,085,482 | 11,143,663 | 10,392,489 | 12,326,904 | <i>n.a.</i> |
| Aviation spirit | 145,817 | 159,987 | 128,930 | 143,741 | 107,506 | <i>n.a.</i> |
| Motor spirit | 145,522 | <i>n.a.</i> | <i>n.a.</i> | 233,765 | 524,071 | <i>n.a.</i> |
| White spirit | 2 | <i>n.a.</i> | 3 | 24 | — | <i>n.a.</i> |
| Kerosine | 245,129 | 271,738 | 263,836 | 219,891 | <i>n.a.</i> | <i>n.a.</i> |
| Diesel oil | <i>n.a.</i> | — | — | 19,375 | — | <i>n.a.</i> |
| Fuel oil | <i>n.a.</i> | 19,157 | 17,071 | 52,783 | 490,072 | <i>n.a.</i> |
| Lubricating oil | 260,651 | 206,339 | 272,834 | 275,720 | 328,812 | <i>n.a.</i> |
| Transformer oil | 7,335 | 5,928 | 9,743 | 10,276 | 10,242 | <i>n.a.</i> |
| Petroleum jelly | 1,610 | 1,053 | 1,561 | 1,360 | 1,769 | <i>n.a.</i> |
| Greases | 16 | 23 | 83 | 37 | 80 | <i>n.a.</i> |
| Paraffin wax | 14,161 | 12,267 | 19,747 | 21,779 | 26,810 | <i>n.a.</i> |
| Ozokerite and ceresin | 317 | 125 | 558 | 93 | 116 | <i>n.a.</i> |
| Asphalt and bitumen | 498 | 365 | 711 | 335 | 542 | <i>n.a.</i> |
| Chile— | | | | | | |
| Aviation spirit | 824 | 343 | 9,682 | <i>n.a.</i> | 94,300 | <i>n.a.</i> |
| Motor spirit | 14,126 | 9,759 | 2,309 | 21,230 | | <i>n.a.</i> |
| Kerosine | 44,536 | 66,353 | 72,605 | 52,265 | <i>n.a.</i> | <i>n.a.</i> |
| Diesel oil | 277,147 | 114,266 | 117,992 | 122,815 | 52,852 | <i>n.a.</i> |
| Residual fuel oil (a) | 888,813 | 1,200,269 | 2,403,942 | 2,422,303 | <i>n.a.</i> | <i>n.a.</i> |
| Lubricating oil | 9,482 | 9,611 | <i>n.a.</i> | 6,639 | <i>n.a.</i> | <i>n.a.</i> |
| Petroleum jelly | 222 | 271 | <i>n.a.</i> | 134 | <i>n.a.</i> | <i>n.a.</i> |
| Greases | 1,629 | 1,911 | <i>n.a.</i> | 1,090 | <i>n.a.</i> | <i>n.a.</i> |
| Paraffin wax | 7,789 | 11,186 | 9,601 | 10,781 | 6,500 | <i>n.a.</i> |
| Natural asphalt | 433 | 358 | 501 | 291 | <i>n.a.</i> | <i>n.a.</i> |
| Colombia— | | | | | | |
| Aviation spirit | 42,308 | 11,838 | 9,841 | 2 | 1 | <i>n.a.</i> |
| Motor spirit | 1,100 | 22 | 31,510 | 54,474 | 9 | <i>n.a.</i> |
| Kerosine | 55 | 41 | 187 | 8,003 | 430 | <i>n.a.</i> |
| Gas oil and diesel oil | 28 | 9 | 264 | 6,964 | — | <i>n.a.</i> |
| Fuel oils | — | 333 | — | — | — | <i>n.a.</i> |
| Lubricating oil | 15,672 | 9,663 | 4,426 | 5,956 | 2,655 | <i>n.a.</i> |
| Petroleum jelly | 409 | 300 | 974 | 415 | 502 | <i>n.a.</i> |
| Paraffin wax | 27,860 | 19,871 | 30,685 | 22,217 | 24,493 | <i>n.a.</i> |
| Natural asphalt | 12 | 61 | 257 | 58 | 186 | <i>n.a.</i> |
| Ecuador— | | | | | | |
| Motor spirit | <i>n.a.</i> | 15,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Lubricating oil and greases | 9,995 | 6,580 | 6,959 | 13,239 | <i>n.a.</i> | <i>n.a.</i> |
| Petroleum jelly | 103 | 113 | 132 | 126 | <i>n.a.</i> | <i>n.a.</i> |
| Paraffin wax | 3,894 | 3,979 | 3,717 | 4,301 | <i>n.a.</i> | <i>n.a.</i> |
| Natural asphalt | 2,021 | 9,309 | <i>n.a.</i> | 4,516 | <i>n.a.</i> | <i>n.a.</i> |

(a) Including crude petroleum.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-------------|-----------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| French Guiana— | | | | | | |
| Motor spirit, etc. .. | 4,236 | 4,653 | 4,923 | 6,980 | 8,201 | 10,424 |
| Kerosine | 655 | 955 | 948 | 994 | 1,813 | 887 |
| Fuel oil, etc. .. | 4,803 | 6,126 | 6,655 | 13,901 | 18,036 | 16,163 |
| Lubricating oil .. | 210 | 481 | 186 | 685 | 978 | 516 |
| Paraguay— | | | | | | |
| Motor spirit | 41,000 | 41,000 | 31,000 | 10,000 | 6,800 | <i>n.a.</i> |
| Kerosine | 17,000 | 24,000 | 14,000 | 800 | 600 | <i>n.a.</i> |
| Fuel oil, etc. .. | 76,000 | 108,000 | 72,000 | 24,000 | 23,000 | <i>n.a.</i> |
| Lubricating oil .. | 2,500 | 4,200 | 5,200 | 2,800 | 4,000 | <i>n.a.</i> |
| Peru— | | | | | | |
| Aviation spirit .. | 29,018 | 42,878 | 40,531 | 15,038 | 39,870 | <i>n.a.</i> |
| Motor spirit | 74,149 | 133,044 | 239,505 | 111,974 | <i>n.a.</i> | <i>n.a.</i> |
| Diesel oil and fuel oil .. | 534,835 | 470,729 | 625,913 | 29,424 | 402,069 | <i>n.a.</i> |
| Lubricating oil .. | 13,883 | 30,668 | 31,560 | 6,886 | 26,774 | <i>n.a.</i> |
| Petroleum jelly .. | 197 | 283 | 332 | 302 | 263 | <i>n.a.</i> |
| Paraffin wax | 10,259 | 12,168 | 11,295 | 11,353 | 12,663 | <i>n.a.</i> |
| Asphalt and bitumen .. | 2,397 | 928 | 689 | 194 | 169 | <i>n.a.</i> |
| Greases | 1,886 | 2,404 | 1,898 | 4,849 | 1,847 | <i>n.a.</i> |
| Ozokerite | 22 | 46 | 104 | 36 | 9 | <i>n.a.</i> |
| Surinam— | | | | | | |
| Motor spirit | 18,739 | 16,038 | 19,068 | 20,931 | 22,000 | <i>n.a.</i> |
| Kerosine | 5,310 | 5,534 | 5,771 | 6,658 | 6,000 | <i>n.a.</i> |
| Gas oil | 78,292 | 77,962 | 76,412 | 95,921 | <i>n.a.</i> | <i>n.a.</i> |
| Diesel oil | | | | | | |
| Fuel oil | 97,119 | 147,216 | 229,307 | 363,068 | <i>n.a.</i> | <i>n.a.</i> |
| Lubricating oil .. | 3,204 | 4,200 | 3,443 | 4,536 | 4,400 | <i>n.a.</i> |
| Asphalt | 1,250 | 1,452 | 1,301 | 5,102 | <i>n.a.</i> | <i>n.a.</i> |
| Uruguay— | | | | | | |
| Crude petroleum .. | 1,522,000 | 1,180,993 | 1,769,276 | 1,523,146 | <i>n.a.</i> | <i>n.a.</i> |
| Motor spirit, etc. .. | 7,000 | 18,805 | 2,185 | 10,003 | 2,287 | 3,847 |
| Kerosine | 15,000 | <i>n.a.</i> | 7,300 | 4,683 | 18,363 | 9,575 |
| Gas oil | 23,000 | 7,601 | 9,929 | 9,310 | 16,303 | 16,289 |
| Diesel oil | | | | | | |
| Fuel oil | 36,968 | 99,921 | 16,831 | 17,450 | 17,450 | 30,469 |
| Lubricating oil and greases | | | | | | |
| Paraffin wax | 13,300 | 10,841 | 11,584 | 10,886 | 17,055 | 10,318 |
| Asphalt | <i>n.a.</i> | 289 | 350 | 300 | 296 | 340 |
| Venezuela— | | | | | | |
| Motor spirit | 16,075 | 3,630 | 4,393 | 22,877 | 5,870 | 4,697 |
| White spirit | 1,215 | 1,101 | 1,383 | 716 | 1,306 | 686 |
| Gas and fuel oils .. | 62 | 10 | 13 | 13 | 16 | 14 |
| Lubricating oil and grease | 8,059 | 5,528 | 3,890 | 5,089 | 5,961 | 5,474 |
| Paraffin wax | 9,128 | 5,034 | 2,906 | 248 | 201 | 262 |
| Petroleum jelly .. | 625 | 759 | 714 | 716 | 928 | 1,010 |
| Asphalt | 236 | 161 | 85 | 241 | 614 | 87 |
| Bitumen, pitch, etc. .. | <i>n.a.</i> | 1,517 | 1,081 | 1,479 | 1,000 | 10,733 |
| Burma— | | | | | | |
| Crude petroleum .. | 156,615 | 200,499 | 262,313 | 401,545 | <i>n.a.</i> | <i>n.a.</i> |
| Motor spirit | — | 3 | — | — | — | <i>n.a.</i> |
| Kerosine | — | — | — | — | — | <i>n.a.</i> |
| Gas and diesel oils .. | 21,442 | 24,008 | 7,810 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Lubricating oil .. | 15,230 | 13,709 | 25,232 | 13,950 | <i>n.a.</i> | <i>n.a.</i> |
| Grease | 511 | 657 | 826 | 713 | 532 | <i>n.a.</i> |
| Paraffin wax | — | 2 | 1 | 2 | 45 | <i>n.a.</i> |
| Petroleum jelly .. | 234 | 443 | — | 111 | 81 | <i>n.a.</i> |
| Asphalt | 21,304 | 14,692 | 3,363 | 5,428 | 14,190 | <i>n.a.</i> |
| Formosa— | | | | | | |
| Crude petroleum .. | 1,265,815 | 1,377,198 | 2,554,553 | 1,300,029 | <i>n.a.</i> | 2,958,496 |
| Motor spirit | 4 | — | 6 | 1 | — | — |
| Lubricating oil .. | 23,490 | 25,388 | 27,967 | 26,393 | 26,686 | 34,272 |
| Grease | 1,316 | 1,469 | 1,585 | 2,082 | 1,673 | 1,620 |
| Paraffin wax | 1,965 | 2,291 | 3,427 | 3,176 | <i>n.a.</i> | 4,287 |
| Asphalt | 3,961 | 3,561 | 5,295 | 2,383 | 2,238 | 2,809 |

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Indonesia— | | | | | | |
| Motor spirit | 126,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Lubricating oil | 70,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Iran (a)— | | | | | | |
| Lubricating oil | 3,975 | 1,408 | 3,329 | 2,638 | 6,629 | <i>n.a.</i> |
| Paraffin wax | 1,287 | 651 | 969 | 900 | 1,136 | <i>n.a.</i> |
| Petroleum jelly | 327 | 753 | 434 | 417 | 747 | <i>n.a.</i> |
| Iraq— | | | | | | |
| Lubricating oil | 1,400 | 4,733 | 3,309 | 5,773 | 2,942 | 2,530 |
| Israel (b)— | | | | | | |
| Lubricating oils | 18,386 | 17,196 | 8,608 | 2,140 | 6,571 | 10,383 |
| Paraffin wax | 2,143 | 2,193 | 944 | 556 | 826 | 702 |
| Petroleum jelly | 117 | 169 | 176 | 131 | 216 | 176 |
| Asphalt | 204 | 128 | 256 | 259 | 204 | 147 |
| Japan— | | | | | | |
| Crude petroleum | 64,806,881 | 75,548,739 | 89,189,290 | 108,301,570 | 125,545,036 | 150,327,613 |
| Aviation spirit | 37,982 | 36,093 | 14,891 | 1,061 | 40 | 36 |
| Motor spirit | 367,120 | 473,284 | 933,682 | 1,311,725 | 2,480,834 | 3,247,410 |
| Kerosine | 13,425 | 25,730 | 31,164 | 41,148 | 142,064 | 196,028 |
| Aviation turbine fuel | 14,410 | | | | | |
| Gas oil | 26,878 | 29,607 | 1,962 | 124,869 | 171,489 | 173,953 |
| Fuel oil | 11,147,377 | 13,022,633 | 11,269,248 | 12,924,290 | 15,801,211 | 15,639,495 |
| Lubricating oil | 431,289 | 282,986 | 340,463 | 519,387 | 399,684 | 396,656 |
| Grease | 7,124 | 2,502 | 2,758 | 4,803 | 4,449 | 2,513 |
| Petroleum jelly | 3,846 | 3,617 | 3,634 | 3,401 | 4,259 | 3,494 |
| Paraffin wax | 5,252 | 4,851 | 6,335 | 10,178 | 9,465 | 8,227 |
| Gilsonite | 3,882 | 3,214 | 2,800 | 3,074 | 2,845 | 2,533 |
| Asphalt and bitumen | 327 | 340 | 2,735 | 112 | 83 | 8 |
| Petroleum coke | 875,447 | 945,625 | 1,080,842 | 1,278,957 | 1,727,493 | 1,914,215 |
| Jordan— | | | | | | |
| Crude petroleum | 353,597 | 403,231 | 462,185 | 408,587 | 410,127 | 497,879 |
| Motor spirit | 5,109 | 9,850 | 5,550 | 4,295 | 1,354 | 3,731 |
| Kerosine | 10,787 | 22,790 | 19,450 | 16,951 | 29,578 | 25,478 |
| Fuel oil, etc. | 6,411 | <i>n.a.</i> | <i>n.a.</i> | 2,000 | <i>n.a.</i> | <i>n.a.</i> |
| Lubricating oil | 5,776 | 5,905 | 5,931 | 5,367 | 6,407 | 7,754 |
| Korea (South)— | | | | | | |
| Crude petroleum | 396,349 | 709,378 | 2,019,000 | 2,624,000 | 5,000,000 | <i>n.a.</i> |
| Aviation spirit | 1 | 1,000 | 3,206 | <i>n.a.</i> | 3,000 | <i>n.a.</i> |
| Motor spirit | 26 | 2,000 | 15,552 | 13,000 | 20,000 | <i>n.a.</i> |
| Kerosine, etc. | 7 | — | — | 50,000 | 23,000 | <i>n.a.</i> |
| Gas, diesel and fuel oils | 113,956 | 129,000 | 304,691 | 907,000 | 477,000 | <i>n.a.</i> |
| Lubricating oils | 2,898 | 4,081 | 22,960 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Greases | 309 | 97 | 181 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Petroleum jelly | 174 | 260 | 142 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Paraffin wax | 2,655 | 4,594 | 2,867 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Asphalt and pitch | 28,279 | 39,089 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Laos— | | | | | | |
| Aviation spirit | 15,000 | 12,000 | 26,000 | <i>n.a.</i> | 5,400 | 7,400 |
| Motor spirit | 17,000 | 22,000 | 24,000 | <i>n.a.</i> | 22,600 | 26,500 |
| Kerosine | 3,000 | 5,000 | 7,000 | <i>n.a.</i> | 7,300 | 10,598 |
| Gas oil | 9,000 | 13,000 | 11,000 | <i>n.a.</i> | 14,200 | 37,000 |
| Fuel oil | 4,000 | 5,000 | 6,000 | <i>n.a.</i> | 2,700 | 11,000 |
| Lubricating oil | 3,000 | 2,000 | 3,000 | <i>n.a.</i> | 1,200 | 2,900 |
| Lebanon— | | | | | | |
| Crude petroleum | 1,366,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Motor spirit | 230,974 | 265,613 | 296,610 | 296,291 | 332,814 | 341,753 |
| Kerosine | 47,065 | 41,406 | 44,178 | 47,568 | 46,102 | 44,110 |
| Fuel oil | 454,011 | 511,585 | 539,192 | 548,529 | 605,413 | 619,630 |
| Lubricating oil | 8,386 | 10,575 | 12,515 | 1,308 | 15,536 | 17,203 |
| Paraffin wax | 578 | 364 | 401 | 494 | 620 | 576 |
| Natural asphalt | 1,600 | 149 | 6 | 24 | 14 | 80 |

(a) Years ended March 20 of year following that stated.

(b) Figures include amounts obtained from imported crude petroleum.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-----------|-----------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Philippine Republic— | | | | | | |
| Crude petroleum .. | 4,148,988 | 4,461,889 | 5,227,000 | 6,218,000 | 7,565,000 | <i>n.a.</i> |
| Aviation spirit .. | 29,359 | 26,902 | 142,200 | 34,839 | 30,412 | 19,783 |
| Motor spirit .. | 6,950 | 32,500 | | | | |
| Kerosine .. | 850 | 19,422 | 52,300 | 9,882 | <i>n.a.</i> | <i>n.a.</i> |
| Diesel oil .. | 9,301 | 25,532 | <i>n.a.</i> | 21,810 | <i>n.a.</i> | <i>n.a.</i> |
| Fuel oils .. | 111 | 101 | <i>n.a.</i> | 326 | <i>n.a.</i> | <i>n.a.</i> |
| Lubricating oils .. | 83,859 | 78,863 | 83,700 | 100,693 | 107,082 | <i>n.a.</i> |
| Grease .. | 3,694 | 2,612 | | | | |
| Petroleum jelly .. | 1,181 | 1,910 | <i>n.a.</i> | 1,713 | <i>n.a.</i> | <i>n.a.</i> |
| Paraffin wax .. | 7,286 | 7,910 | <i>n.a.</i> | 8,126 | <i>n.a.</i> | <i>n.a.</i> |
| Asphalt .. | 2,124 | 1,199 | <i>n.a.</i> | 327 | <i>n.a.</i> | <i>n.a.</i> |
| Southern Yemen (b) | | | | | | |
| Crude petroleum .. | 6,758,120 | 6,895,912 | 6,840,415 | 5,761,180 | 4,811,743 | <i>n.a.</i> |
| Motor spirit .. | 75,569 | 114,508 | 89,886 | 28,288 | 131,685 | <i>n.a.</i> |
| Kerosine .. | 10,881 | 7,310 | — | — | 3,945 | <i>n.a.</i> |
| Gas and fuel oils (a) .. | 1,603,304 | 919,467 | 1,086,884 | 328,464 | 151,673 | <i>n.a.</i> |
| Lubricating oil and greases .. | 7,198 | 5,775 | 8,295 | 6,464 | 3,118 | <i>n.a.</i> |
| Syria— | | | | | | |
| Crude petroleum .. | 998,843 | 1,001,359 | 1,038,142 | 896,962 | 1,047,320 | 1,304,869 |
| Motor spirit .. | 17,236 | 9,982 | 8,110 | 4,097 | 3,987 | 15,345 |
| Kerosine .. | 8,109 | 8,827 | 7,392 | 7,822 | 23,709 | 21,070 |
| Fuel oil and diesel oil .. | 33,780 | 129,583 | 985,993 | 408,794 | 574,358 | 518,464 |
| Lubricating oil .. | 10,709 | 17,437 | 22,928 | 11,371 | 30,455 | 30,148 |
| Natural asphalt .. | 2,122 | 609 | 92 | 1,359 | 2,818 | 33 |
| Thailand— | | | | | | |
| Aviation spirit .. | 45,696 | 36,162 | 73,297 | 78,889 | 14,566 | 9,265 |
| Motor spirit .. | 337,535 | 132,053 | 120,960 | 161,969 | 107,229 | 121,950 |
| Kerosine .. | 223,642 | 382,604 | 1,271,115 | 770,134 | 114,176 | 67,969 |
| Gas, diesel and fuel oils | 1,009,916 | 645,040 | 644,794 | 810,485 | 1,202,042 | 1,248,656 |
| Lubricating oil .. | 52,411 | 58,768 | 75,326 | 95,737 | 86,818 | 93,029 |
| Grease .. | 3,028 | 2,986 | 3,952 | 5,617 | 4,146 | 5,866 |
| Paraffin wax .. | 3,123 | 1,942 | 4,229 | 3,681 | 3,453 | 4,591 |
| Petroleum jelly .. | 757 | 1,090 | 1,139 | 1,077 | 977 | 884 |
| Asphalt .. | 42,202 | 9,642 | 1,047 | 4,245 | 45,829 | 8,490 |
| Turkey— | | | | | | |
| Crude petroleum .. | 3,375,961 | 3,003,288 | 2,763,059 | 2,441,205 | 2,921,669 | 2,517,530 |
| Motor spirit .. | 2,530 | 4,599 | 1,482 | 19,319 | 35,171 | 40,176 |
| Kerosine .. | 26,518 | 33,230 | 22,331 | 43,643 | 47,143 | 50,189 |
| Gas and diesel oils .. | — | 1 | 57,633 | 154,309 | 166,750 | 304,835 |
| Fuel oil .. | — | — | 10,931 | 14,499 | 72,379 | 83,331 |
| Lubricating oils and grease .. | 59,737 | 50,844 | 83,712 | 88,654 | 122,681 | 97,507 |
| Paraffin wax .. | 1,420 | 2,124 | 2,572 | 2,667 | 2,960 | 3,166 |
| Petroleum jelly .. | 201 | 304 | 496 | 240 | 184 | 142 |
| Asphalt .. | 1 | 2 | 18 | — | 11 | 47 |
| Vietnam (South)— | | | | | | |
| Aviation spirit .. | 121 | 83 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Motor spirit .. | 124,154 | 158,222 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Kerosine .. | 72,845 | 92,271 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Gas oil .. | 80,612 | 88,832 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Fuel oils .. | 293,542 | 384,842 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| French Polynesia— | | | | | | |
| Motor spirit, etc. .. | 10,044 | 16,743 | 22,839 | 28,421 | 29,431 | 27,059 |
| Kerosine .. | 3,783 | 4,156 | 9,713 | 9,562 | 11,125 | 5,153 |
| Other oils .. | 19,897 | 45,337 | 49,829 | 86,360 | 96,620 | 69,440 |
| New Caledonia— | | | | | | |
| Motor spirit, etc. .. | 18,923 | 21,095 | 21,695 | 21,740 | <i>n.a.</i> | <i>n.a.</i> |
| Kerosine .. | 3,542 | 4,438 | 3,737 | 4,008 | <i>n.a.</i> | <i>n.a.</i> |
| Gas and fuel oils .. | 16,971 | 133,798 | 193,671 | 193,303 | <i>n.a.</i> | <i>n.a.</i> |
| Lubricating oil, etc. .. | 11,669 | 8,226 | 2,226 | 2,542 | <i>n.a.</i> | <i>n.a.</i> |

(a) Including imports for bunkering purposes. See exports.

(b) Previously Aden.

PHOSPHATES

PRODUCTION OF PHOSPHATE ROCK (Including Apatite)

Long tons

| Producing Country | Estimated Tribasic Phosphate of Lime Content or equivalent | | | | | | | | | | | |
|-------------------------------|--|------------------|------------------|------------------|------------------|------------------|------------------|-----------|-----------|-----------|-----------|-----------|
| | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
| COMMONWEALTH COUNTRIES | | | | | | | | | | | | |
| Kenya (a) | — | — | 318 | 341 | n.a. | 40 | 354 | — | — | 70 | 75 | 78 |
| Rhodesia (d) | 1,964 | n.a. | n.a. | n.a. | n.a. | n.a. | (c)100,000 | 1,300 | n.a. | n.a. | n.a. | n.a. |
| Seychelles (a) (b) | 3,787 | 5,904 | 3,805 | 3,480 | 5,929 | 5,929 | n.a. | 2,000 | 2,000 | 2,000 | 4,000 | n.a. |
| Uganda (d) | 9,393 | 16,123 | 15,548 | 10,668 | 9,322 | 9,322 | (c)12,000 | 8,500 | 14,000 | 14,000 | 9,600 | 11,000 |
| Christmas Island (b)(g) | 774,801 | 739,568 | 950,517 | 984,125 | 1,123,269 | 1,043,750 | 1,043,750 | 659,000 | 629,000 | 808,000 | 837,000 | 887,000 |
| India— | | | | | | | | | | | | |
| Apatite | 3,985 | 6,964 | 15,980 | 11,447 | 6,300 | 6,300 | 9,196 | 1,000 | 2,000 | 6,000 | 4,000 | 3,200 |
| Phosphate rock | — | — | — | — | — | — | 68,082 | — | — | — | — | n.a. |
| Australia— | | | | | | | | | | | | |
| Phosphate rock | 5,689 | 4,504 | 5,715 | 11,770 | 5,744 | 5,744 | 18,258 | 2,500 | 2,000 | 2,500 | 5,300 | 8,000 |
| Guano | — | 15 | — | — | — | — | — | — | 10 | — | — | — |
| Nauru Island (b) | 1,820,066 | 1,456,535 | 2,004,592 | 1,766,567 | 2,218,549 | 2,163,100 | 2,163,100 | 1,565,000 | 1,253,000 | 1,724,000 | 1,519,000 | 1,860,000 |
| Ocean Island (b) | 322,848 | 359,322 | 374,030 | 445,150 | 519,407 | 519,407 | 555,100 | 278,000 | 309,000 | 322,000 | 383,000 | 477,000 |
| TOTAL | 2,943,000 | 2,591,000 | 3,372,000 | 3,236,000 | 3,891,000 | 3,891,000 | 3,878,000 | | | | | |
| OTHER COUNTRIES | | | | | | | | | | | | |
| Belgium (e) | 21,707 | (c)20,000 | 25,000 | 26,600 | (c)29,500 | n.a. | n.a. | 4,000 | 4,000 | 5,000 | 5,000 | n.a. |
| France (e) | 42,000 | 34,000 | 36,000 | 63,000 | 31,600 | (f)30,000 | (f)30,000 | 10,000 | 7,500 | 7,700 | 15,000 | 7,000 |
| Poland | 88,000 | 92,000 | f 92,000 | r 94,000 | f 94,000 | (f)98,000 | (f)98,000 | 26,000 | 27,600 | 27,600 | 28,200 | 29,400 |
| U.S.S.R. (f)— | | | | | | | | | | | | |
| Apatite | 6,279,000 | 7,430,000 | 7,873,000 | 8,661,000 | 9,546,000 | 10,334,000 | 10,334,000 | 5,350,000 | 6,331,000 | 6,709,000 | 7,380,000 | 8,806,000 |
| Phosphate rock | 4,285,000 | 5,955,000 | 6,642,000 | 7,384,000 | 7,875,000 | 8,612,000 | 8,612,000 | 2,340,000 | 3,250,000 | 3,630,000 | 4,030,000 | 4,649,000 |
| Algeria | 71,726 | 84,813 | 63,631 | 198,000 | 360,000 | 394,000 | 394,000 | 48,000 | 57,000 | 43,000 | 133,000 | 264,000 |
| Egypt | 603,552 | 584,322 | 650,398 | 672,414 | 1,418,089 | 650,000 | 650,000 | 370,000 | 360,000 | 400,000 | 430,000 | 400,000 |
| Morocco | 9,938,045 | 9,669,209 | 9,290,173 | 10,378,490 | 10,345,770 | 10,493,992 | 10,493,992 | 7,310,000 | 7,110,000 | 6,800,000 | 7,693,000 | 7,761,000 |

(g) In addition, the following amounts of phosphate dust were exported (long tons): 1964—72,416; 1965—90,033; 1966—89,453; 1967—89,773; 1968—70,635; 1969—118,094.

(d) Apatite.
(e) Including phosphatic chalk.
(f) United States Bureau of Mines' estimate.

(a) Phosphatic guano.
(b) Exports.
(c) Estimated.

PRODUCTION OF PHOSPHATE ROCK (cont.)

| Producing Country | 1964-1969 | | | | | | Estimated Tribasic Phosphate of Lime Content or equivalent | | | | Long tons | |
|----------------------------|------------|------------|------------|------------|------------|------------|--|------------|------------|------------|------------|------------|
| | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | 1964 | 1965 | 1966 | 1967 | | 1968 |
| OTHER COUNTRIES | | | | | | | | | | | | |
| <i>(cont.)</i> | | | | | | | | | | | | |
| Senegal— | | | | | | | | | | | | |
| Phosphate rock .. | 666,387 | 889,106 | 974,000 | 1,100,000 | 1,090,000 | 1,019,000 | 553,000 | 738,000 | 808,000 | 913,000 | 905,000 | 846,000 |
| Aluminum phosphates.. | 119,029 | 132,809 | 142,494 | 158,735 | 157,865 | 162,000 | 75,000 | 84,000 | 90,000 | 94,000 | 101,000 | 102,000 |
| South Africa— | | | | | | | | | | | | |
| Phosphate rock (h) | 569,754 | 600,142 | 1,046,539 | 1,330,606 | 1,540,692 | 1,651,994 | 394,000 | 434,000 | 566,000 | 67,923 | 767,881 | 806,173 |
| Guano .. | 4,279 | 3,307 | 3,303 | 3,396 | 3,186 | 3,780 | 1,000 | 800 | 800 | 800 | 800 | 900 |
| South West Africa (f) | 412 | 1,384 | 1,804 | n.a. | n.a. | n.a. | 100 | 300 | 400 | n.a. | n.a. | n.a. |
| Togo .. | 755,400 | 958,268 | 1,134,000 | 1,122,000 | 1,353,000 | 1,450,000 | 611,000 | 776,000 | 919,000 | 909,000 | 1,096,000 | 1,175,000 |
| Tunisia .. | 2,707,492 | 2,991,826 | 3,165,407 | 2,841,000 | 3,389,248 | 2,642,298 | 1,760,000 | 1,945,000 | 2,058,000 | 1,847,000 | 2,203,000 | 1,717,000 |
| Mexico .. | 27,454 | (a) 39,000 | (a) 54,000 | 48,000 | 42,000 | (c) 40,000 | 17,800 | 25,300 | 35,100 | 31,200 | 27,300 | 26,000 |
| Netherlands Antilles (b) | 117,666 | 113,075 | 145,140 | 99,648 | 91,667 | n.a. | 86,000 | 83,000 | 106,000 | 73,000 | 67,000 | n.a. |
| United States (e) | 22,960,000 | 26,282,000 | 34,866,000 | 35,509,000 | 36,831,250 | 33,683,000 | 15,797,000 | 17,815,000 | 23,628,000 | 24,316,000 | 25,054,000 | 22,793,000 |
| Argentina (f) | 177 | 118 | 64 | 232 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Brazil— | | | | | | | | | | | | |
| Apatite (c) | r 117,900 | r 119,500 | r 148,100 | r 219,000 | 247,000 | n.a. | r 86,000 | r 87,000 | r 112,000 | r 171,000 | 172,000 | n.a. |
| Phosphate rock (c) | r 27,700 | r 62,900 | r 63,500 | r 52,000 | 59,000 | n.a. | r 18,000 | r 41,000 | r 42,000 | r 34,000 | 38,000 | n.a. |
| Chile— | | | | | | | | | | | | |
| Apatite .. | 12,931 | 10,111 | — | — | — | — | 8,000 | 6,000 | — | — | — | — |
| Guano .. | 15,000 | 21,000 | 15,000 | 16,000 | 22,000 | 31,000 | 6,000 | 8,000 | 6,000 | 6,000 | 9,000 | 12,000 |
| Peru (f) | 201,860 | 167,214 | r 54,628 | r 63,175 | 74,000 | n.a. | 50,000 | 40,000 | 14,000 | 16,000 | 19,000 | n.a. |
| China (a) (d) | 800,000 | 900,000 | 1,000,000 | 1,000,000 | 1,000,000 | 1,100,000 | 600,000 | 700,000 | 750,000 | 750,000 | 750,000 | 800,000 |
| Indonesia (g) | (c) 30,000 | (c) 30,000 | (c) 30,000 | (c) 30,000 | n.a. | — | 13,000 | 13,000 | 13,000 | 13,000 | n.a. | — |
| Israel .. | 236,000 | 382,000 | a 394,000 | a 590,000 | 765,000 | 971,000 | 155,000 | 250,000 | 260,000 | 390,000 | 500,000 | 630,000 |
| Jordan .. | 555,539 | 814,865 | 1,019,576 | 1,065,244 | 1,138,035 | 1,299,753 | 406,000 | 595,000 | 744,000 | 778,000 | 830,000 | 949,000 |
| Philippine Republic— | | | | | | | | | | | | |
| Phosphate rock .. | 2,812 | 10 | 98 | 1 | 513 | — | 1,100 | 4 | 40 | — | 200 | — |
| Guano .. | 1,172 | 4,106 | 526 | 1,295 | 646 | — | 280 | 1,000 | 130 | 320 | 160 | — |
| Vietnam (North) (d) (a) | 980,000 | 980,000 | 980,000 | 980,000 | 980,000 | 980,000 | 850,000 | 850,000 | 850,000 | 850,000 | 850,000 | 850,000 |
| French Polynesia (Makatea) | 382,292 | 303,364 | 174,188 | — | — | — | 313,000 | 249,000 | 143,000 | — | — | — |
| TOTAL | 54,000,000 | 60,000,000 | 70,000,000 | 74,000,000 | 79,000,000 | 76,000,000 | — | — | — | — | — | — |
| World's TOTAL | 57,000,000 | 63,000,000 | 73,000,000 | 77,000,000 | 83,000,000 | 80,000,000 | — | — | — | — | — | — |

Phosphate rock is also known to have been produced in Venezuela, North Korea and North Vietnam. Guano is known to have been produced in Sarawak and the Somali Republic.

(a) United States Bureau of Mines' estimate. (b) Exports. (c) Estimated. (d) Apatite. (e) Marketable production. (f) Phosphatic guano. (g) Source: International Superphosphate Manufacturers' Association. (h) Including apatite and aluminum phosphate.

PRODUCTION OF SUPERPHOSPHATES

Long tons

| Producing Country | Estimated P ₂ O ₅ Content | | | | | | | | | | | |
|-------------------------------|---|--------------|--------------|--------------|--------------|--------------|-----------|-----------|-------------|-------------|-----------|-------------|
| | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
| COMMONWEALTH COUNTRIES | | | | | | | | | | | | |
| United Kingdom— | | | | | | | | | | | | |
| Single | 505,687 | 437,989 | 379,829 | 344,194 | 334,835 | 292,686 | 101,100 | 87,600 | 76,000 | 69,000 | 67,000 | 59,000 |
| Concentrated* .. . | 73,688 | 85,733 | 95,400 | 70,862 | 97,213 | 104,500 | 32,400 | 37,800 | 42,000 | 31,200 | 43,247 | 46,000 |
| Uganda— | | | | | | <i>n.a.</i> | 2,700 | 5,200 | 5,300 | 3,700 | 3,200 | <i>n.a.</i> |
| Single | 12,209 | 23,849 | 24,220 | 16,752 | 14,769 | <i>n.a.</i> | | | | | | |
| Canada*— | | | | | | <i>n.a.</i> | 53,100 | 59,700 | 58,000 | 55,000 | 49,000 | <i>n.a.</i> |
| Single | 266,300 | 298,900 | r 290,000 | r 276,000 | 246,000 | <i>n.a.</i> | 70,000 | 70,000 | 30,000 | 40,000 | 54,000 | <i>n.a.</i> |
| Concentrated (c) .. . | 160,000 | 160,000 | r 64,000 | r 89,000 | 118,000 | <i>n.a.</i> | | | | | | |
| India— | | | | | | 634,100 | 116,100 | 113,000 | 116,200 | 139,000 | 116,000 | 101,800 |
| Single | c 700,000 | c 680,000 | c 700,000 | 820,000 | 723,000 | | | | | | | |
| Pakistan (a)— | | | | | | <i>n.a.</i> | 1,300 | 1,600 | 1,000 | 900 | 3,300 | <i>n.a.</i> |
| Single | 7,160 | 8,940 | 5,780 | 5,182 | 18,537 | | | | | | | |
| Australia— | | | | | | (<i>e</i>) | 806,900 | 819,600 | 958,300 | 1,004,100 | 918,300 | 830,700 |
| Single | (<i>e</i>) | (<i>e</i>) | (<i>e</i>) | (<i>e</i>) | (<i>e</i>) | (<i>e</i>) | | | | | | |
| Concentrated (d) .. . | 3,667,501 | 3,725,436 | 4,356,000 | 4,566,000 | 4,174,000 | 3,776,000 | | | | | | |
| New Zealand— | | | | | | 1,682,000 | 291,000 | 317,000 | 322,000 | 267,000 | 302,000 | 336,400 |
| Single (b) | 1,455,000 | 1,585,000 | 1,611,000 | 1,337,000 | 1,509,000 | 1,682,000 | | | | | | |
| TOTAL | | | | | | | 1,475,000 | 1,512,000 | r 1,609,000 | r 1,610,000 | 1,556,000 | 1,483,000 |
| OTHER COUNTRIES | | | | | | | | | | | | |
| Irish Republic*— | | | | | | | | | | | | |
| Single | 318,000 | 326,400 | 279,000 | 281,500 | 256,900 | 171,700 | 57,700 | 59,700 | 51,100 | 51,700 | 46,900 | 31,400 |
| Concentrated .. . | 29,700 | 34,338 | 48,600 | 76,800 | 117,300 | 82,900 | 12,900 | 15,200 | 21,300 | 33,500 | 47,800 | 33,800 |
| Austria*— | | | | | | | | | | | | |
| Single | 282,300 | 212,400 | 204,600 | 242,100 | 215,300 | 174,300 | 50,700 | 38,200 | 36,800 | 43,600 | 38,700 | 31,400 |
| Belgium*— | | | | | | | | | | | | |
| Single | 250,500 | 259,900 | 171,900 | 162,400 | 185,900 | 151,100 | 45,300 | 45,900 | 30,900 | 29,200 | 32,800 | 28,300 |
| Concentrated (c) .. . | 130,000 | 120,000 | 120,000 | 120,000 | 110,000 | 72,900 | 57,000 | 54,000 | 54,000 | 54,000 | 50,000 | 34,800 |
| Bulgaria— | | | | | | | | | | | | |
| Single | c 490,000 | c 510,000 | 487,000 | 274,000 | 402,000 | <i>n.a.</i> | 88,864 | 92,193 | 95,021 | 88,000 | 133,000 | <i>n.a.</i> |
| Czechoslovakia— | | | | | | | | | | | | |
| Single | 1,082,000 | 1,187,000 | 1,257,000 | 1,336,000 | <i>n.a.</i> | <i>n.a.</i> | 194,672 | 213,644 | 226,211 | 240,480 | 221,200 | 231,700 |

*Source: International Superphosphate Manufacturers' Association.

(a) West Pakistan.

(b) Superphosphate content of all fertilizers made.

(c) Estimated.

(d) Calculated as single superphosphate. (e) Including ammonium phosphate calculated as single superphosphate.

| Producing Country | Estimated P ₂ O ₅ Content | | | | | | | | | | | |
|-------------------------|---|-----------|-----------|-----------|-----------|-----------|---------|---------|---------|---------|---------|---------|
| | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
| OTHER COUNTRIES (cont.) | | | | | | | | | | | | |
| Denmark*— | | | | | | | | | | | | |
| Single (a) | 461,000 | 475,200 | 450,300 | 352,300 | 312,300 | 371,300 | 83,000 | 85,500 | 81,100 | 63,400 | 56,200 | 66,800 |
| Enriched | 34,000 | 37,600 | 24,600 | 24,600 | 23,800 | 22,800 | 10,900 | 12,000 | 7,900 | 7,900 | 7,600 | 7,300 |
| Finland*— | | | | | | | | | | | | |
| Single | 371,882 | 312,900 | 447,800 | 303,100 | 249,800 | n.a. | 70,700 | 59,500 | 85,100 | 59,100 | 49,900 | n.a. |
| Kotka-phosphate | 138,515 | 119,000 | 84,123 | 85,600 | 61,200 | n.a. | 26,300 | 27,400 | 16,000 | 19,700 | 14,100 | n.a. |
| France*— | | | | | | | | | | | | |
| Single | 1,478,052 | 1,579,400 | 1,456,700 | 1,402,500 | 1,495,200 | 1,373,600 | 277,300 | 301,700 | 279,700 | 277,100 | 290,000 | 276,500 |
| Concentrated | 143,800 | 185,543 | 224,600 | 332,700 | 282,700 | 356,000 | 61,100 | 83,900 | 101,100 | 149,800 | 127,100 | 160,200 |
| Germany (Federal)*— | | | | | | | | | | | | |
| Single | 360,072 | 419,900 | 369,600 | 320,900 | 214,500 | n.a. | 67,200 | 80,000 | 66,500 | 57,800 | 40,800 | n.a. |
| Germany (East)— | | | | | | | | | | | | |
| Single | 673,000 | 829,000 | 856,000 | n.a. | n.a. | n.a. | 121,100 | 149,300 | 154,000 | 165,000 | 183,000 | 190,000 |
| Greece*— | | | | | | | | | | | | |
| Single | 220,634 | 184,100 | 147,300 | 173,200 | 206,500 | 88,000 | 41,900 | 35,000 | 28,000 | 31,500 | 43,400 | 18,800 |
| Hungary— | | | | | | | | | | | | |
| Single | 530,693 | 605,711 | 700,000 | 811,000 | 833,000 | 903,000 | 97,000 | 114,000 | 128,000 | 150,000 | 154,000 | 167,000 |
| Italy— | | | | | | | | | | | | |
| Single | 1,236,000 | 1,367,603 | 1,645,066 | 1,532,897 | 1,584,419 | 1,391,722 | 245,000 | 264,000 | 310,000 | 290,000 | 300,000 | 260,000 |
| Concentrated | 23,000 | | | | | | | | | | | |
| Netherlands*— | | | | | | | | | | | | |
| Single | 451,013 | 325,500 | 259,900 | 303,100 | 282,400 | 301,800 | 83,500 | 59,800 | 48,600 | 55,400 | 53,700 | 55,400 |
| Concentrated | 155,300 | 148,340 | 163,500 | 183,100 | 203,400 | 158,600 | 69,000 | 64,200 | 73,600 | 80,800 | 91,500 | 72,000 |
| Norway— | | | | | | | | | | | | |
| Single (c) | 40,500* | 37,966* | 15,000* | 18,700* | 6,800* | 19,000* | 7,200 | 6,800 | 2,700 | 3,400 | 1,200 | 3,400 |
| Enriched*(d) | 29,674 | 24,000 | 22,400 | 16,700 | 10,400 | 5,600 | 8,900 | 7,000 | 6,900 | 5,400 | 3,800 | 1,900 |
| Poland (b)— | | | | | | | | | | | | |
| Single | 1,230,000 | 1,358,000 | 1,462,000 | 1,544,000 | 1,903,000 | 2,124,700 | 203,000 | 224,000 | 241,000 | 255,000 | 314,000 | 387,000 |
| Portugal— | | | | | | | | | | | | |
| Single | 424,524 | 423,031 | 401,458 | 483,000 | 481,000 | 346,500 | 76,000 | 76,000 | 72,000 | 81,000 | 80,000 | 79,000 |
| Concentrated (e) | | | | | | | | | | | | |

*Source: International Superphosphate Manufacturers' Association.

(a) The majority of this material was used to make potash superphosphate, production of which was as follows (long tons): 1964—703,092; 1965—743,637; 1966—566,197; 1967—489,865; 1968—426,565; 1969—n.a.

(b) The following amounts of "Supertomasyna" were produced (long tons): 1964—284,000; 1965—296,000; 1966—301,000; 1967—289,000; 1968—308,000; 1969—n.a.

(c) The majority of this material was used to make potash superphosphate, production of which was as follows (long tons): 1964—39,616; 1965—31,562; 1966—33,674; 1967—26,575; 1968—30,835; 1969—n.a.

(d) Including concentrated superphosphate.

(e) Calculated as single superphosphate.

PRODUCTION OF SUPERPHOSPHATES (cont.)

Long tons

| Producing Country | Estimated P ₂ O ₅ Content | | | | | | | | | | | |
|--------------------------------|---|-------------|-------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------|
| | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
| OTHER COUNTRIES (cont.) | | | | | | | | | | | | |
| Roumania— | | | | | | | | | | | | |
| Single | 690,000 | 780,000 | 960,000 | 1,010,000 | n.a. | n.a. | 110,000 | 124,000 | 153,000 | 162,000 | 179,000 | 218,000 |
| Spain (a)— | | | | | | | | | | | | |
| Single | 1,880,000 | 2,000,000 | 1,700,000 | 1,520,600 | 1,500,000 | 1,427,000 | 321,400 | 345,200 | 300,000 | 306,000 | 311,300 | 309,200 |
| Sweden*— | | | | | | | | | | | | |
| Single (b) .. . | 417,400 | 401,300 | 324,900 | 303,100 | 293,100 | 228,200 | 81,400 | 78,300 | 63,400 | 59,100 | 57,100 | 44,500 |
| Enriched .. . | 39,024 | 47,100 | 34,900 | 23,600 | 60,600 | 86,100 | 11,300 | 13,700 | 10,100 | 6,800 | 17,600 | 21,500 |
| Switzerland*— | | | | | | | | | | | | |
| Single | 13,000 | r 24,000 | r 25,000 | r 25,000 | 24,000 | n.a. | 2,300 | 4,300 | 4,400 | 4,400 | 4,300 | n.a. |
| U.S.S.R. | | | | | | | | | | | | |
| Single | 10,508,000 | 12,047,000 | 13,696,000 | n.a. | n.a. | n.a. | 2,000,000 | 2,290,000 | 2,600,000 | n.a. | n.a. | n.a. |
| Concentrated .. . | 953,000 | 788,000 | 996,000 | r 1,058,000 | 909,000 | 823,900 | 181,000 | 150,000 | 160,000 | r 169,000 | 145,000 | 136,000 |
| Yugoslavia— | | | | | | | | | | | | |
| Single | 87,000 | 94,000 | n.a. | 72,800 | 79,000 | 98,400 | 14,000 | 15,000 | n.a. | 11,600 | 13,000 | 15,800 |
| Algeria— | | | | | | | | | | | | |
| Single | 206,114 | 247,643 | 272,547 | 261,622 | 301,215 | 338,200 | 33,000 | 40,000 | 44,000 | n.a. | n.a. | n.a. |
| Morocco*— | | | | | | | | | | | | |
| Single | 97,300 | (c) 110,000 | 88,300 | 116,100 | 63,900 | 54,600 | 17,000 | 19,000 | 15,500 | 19,800 | 11,200 | 9,800 |
| South Africa*— | | | | | | | | | | | | |
| Single | 954,300 | 750,000 | r 1,004,800 | r 965,200 | 925,700 | n.a. | 181,300 | 143,000 | 191,000 | 183,300 | 175,900 | n.a. |
| Tunisia— | | | | | | | | | | | | |
| Single | 48,000* | r 30,000 | r 31,900 | r 31,000 | 33,900 | 32,700 | 7,300 | 5,000 | 5,100 | 4,900 | 5,400 | 5,200 |
| Concentrated .. . | 150,000 | 155,000 | 212,100* | 318,600* | 371,100 | n.a. | 65,000 | 67,000 | 98,000 | 147,000 | 171,000 | n.a. |
| Cuba*— | | | | | | | | | | | | |
| Single | 52,100 | 52,000 | (c) 60,000 | (c) 59,100 | n.a. | 15,100 | 9,300 | 9,000 | 10,000 | 10,600 | n.a. | 3,100 |
| Mexico— | | | | | | | | | | | | |
| Single | 121,290 | 129,792 | 159,777 | 179,176 | 257,954 | 380,770 | 21,800 | 23,400 | 28,800 | 32,300 | n.a. | n.a. |
| Concentrated .. . | 41,259 | 32,663 | 47,053 | 43,868 | 6,653 | 20,064 | 16,500 | 13,100 | 18,800 | 17,500 | n.a. | n.a. |
| Salvador— | | | | | | | | | | | | |
| Single | 7,701 | 6,124 | 12,353 | 15,473 | 6,653 | 20,064 | 1,500 | 1,200 | 2,500 | 3,000 | 1,300 | 4,000 |
| United States*— | | | | | | | | | | | | |
| Single | 5,980,100 | 5,533,900 | 5,079,400 | 5,284,700 | 4,078,500 | n.a. | 1,076,400 | 996,200 | 1,014,800 | 1,054,800 | 815,700 | n.a. |
| Concentrated .. . | 2,680,200 | 3,205,324 | 3,334,500 | 2,938,800 | 2,695,600 | n.a. | 1,206,100 | 1,442,400 | 1,500,500 | 1,322,500 | 1,240,000 | n.a. |

*Source: International Superphosphate Manufacturers' Association.

(a) Including Canary Islands.

(b) The majority of this material was used to make potash superphosphate, production of which was as follows (long tons): 1964—479,478; 1965—478,034; 1966—427,676; 1967—395,885; 1968—n.a. 1969—n.a.

(c) Estimated.

PRODUCTION OF SUPERPHOSPHATES (cont.)

Long tons

| Producing Country | Estimated P ₂ O ₅ Content | | | | | | | | | | | |
|--------------------------|---|-----------|-----------|-----------|-----------|---------|-----------|-----------|------------|------------|------------|------------|
| | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
| OTHER COUNTRIES | | | | | | | | | | | | |
| <i>(cont.)</i> | | | | | | | | | | | | |
| Brazil— | | | | | | | | | | | | |
| Single | 345,833 | 300,459 | 311,485 | 445,971 | 498,773 | 528,390 | 69,200 | 60,100 | 62,300 | 89,200 | 90,000 | 100,000 |
| Colombia— | | | | | | | | | | | | |
| Single | n.a. | 5,000* | 26,100* | 26,100* | 29,000* | 5,500* | n.a. | 900 | 5,200 | 5,200 | 5,800 | 800 |
| Peru*— | | | | | | | | | | | | |
| Single | 34,900 | 35,000 | 18,700 | 20,000 | 20,000 | 9,400 | 6,300 | 6,300 | 3,700 | 4,000 | 4,000 | 2,000 |
| Uruguay*— | | | | | | | | | | | | |
| Single | 29,500 | 34,000 | 39,000 | 46,800 | 50,000 | n.a. | 5,300 | 6,100 | 8,000 | 9,300 | 10,000 | n.a. |
| Venezuela*— | | | | | | | | | | | | |
| Single | n.a. | n.a. | 5,000 | 6,000 | 7,000 | 8,400 | n.a. | n.a. | 900 | 1,000 | 1,300 | 1,400 |
| Formosa— | | | | | | | | | | | | |
| Single | 181,931 | 192,757 | 208,652 | 200,286 | 200,700 | 193,400 | 33,000 | 35,000 | 38,000 | 36,000 | 36,000 | 35,000 |
| Israel*— | | | | | | | | | | | | |
| Single | 56,300 | 54,200 | 55,800 | 59,100 | 55,700 | 59,600 | 10,200 | 10,100 | 11,400 | 10,500 | 10,600 | 12,100 |
| Concentrated (b) | — | 5,800 | 4,900 | 3,900 | 3,200 | 3,300 | — | 1,900 | 1,900 | 1,500 | 1,000 | 1,100 |
| Japan*— | | | | | | | | | | | | |
| Single | 1,634,100 | 1,525,400 | 1,268,400 | 1,170,200 | 1,112,500 | 960,200 | 293,500 | 274,600 | 227,000 | 213,000 | 201,000 | 171,000 |
| Concentrated (b) | 49,300 | 63,580 | 77,200 | 78,800 | 94,000 | 105,700 | 18,000 | 24,000 | 28,900 | 28,300 | 35,100 | 39,800 |
| Jordan— | | | | | | | | | | | | |
| Single | 1,827 | 2,654 | 2,169 | 757 | — | n.a. | 300 | 400 | 300 | 130 | — | n.a. |
| Lebanon*— | | | | | | | | | | | | |
| Single | 47,000 | 75,400 | 76,600 | (a)78,700 | 78,700 | n.a. | 8,500 | 13,600 | 13,800 | 14,200 | 14,200 | n.a. |
| Philippine Republic*— | | | | | | | | | | | | |
| Single | 3,400 | 6,000 | r 6,000 | r 8,000 | r 12,000 | n.a. | 600 | 1,200 | 1,400 | 1,600 | 2,400 | n.a. |
| Turkey— | | | | | | | | | | | | |
| Single | 149,137 | 217,800 | 218,600 | 202,000 | 184,200 | n.a. | 23,900 | 34,800 | 35,000 | 32,000 | 29,500 | n.a. |
| TOTAL | | | | | | | 7,900,000 | 8,400,000 | 8,900,000 | 8,900,000 | 8,700,000 | 8,700,000 |
| WORLD'S TOTAL | | | | | | | 9,400,000 | 9,900,000 | 10,500,000 | 10,500,000 | 10,200,000 | 10,100,000 |

Single and concentrated superphosphates are also produced in Rhodesia but figures are not available for publication. Concentrated superphosphate is also produced in Australia, Germany (Federal) and Spain.

*Source: International Superphosphate Manufacturers' Association.

(a) Estimated.

(b) May include enriched superphosphate.

PRODUCTION OF BASIC SLAG

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|------------------------|-----------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom (b) .. | 920,322 | 638,875 | 655,700 | 655,670 | 597,980 | 590,350 |
| OTHER COUNTRIES | | | | | | |
| Belgium (a) (c) .. | 1,135,000 | 1,314,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Czechoslovakia (c) .. | 149,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| France | 2,533,159 | 2,505,966 | 2,519,475 | 2,477,369 | 2,634,429 | 2,774,909 |
| Germany (Federal) .. | 3,186,000 | 2,933,000 | 2,742,000 | 2,654,000 | 2,677,000 | 2,703,000 |
| Germany (East) (c) .. | 118,000 | 119,000 | 112,000 | 123,000 | 124,000 | 123,000 |
| Italy | 86,361 | 17,667 | — | — | — | — |
| Luxemburg | 805,427 | 823,502 | 764,561 | 774,623 | 804,170 | 809,244 |
| Poland (c) | 467,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sweden | 49,729 | 41,089 | 51,120 | 65,734 | <i>n.a.</i> | <i>n.a.</i> |
| Egypt | 29,014 | 31,309 | 27,527 | <i>n.a.</i> | 55,354 | <i>n.a.</i> |
| Colombia (a) (c) .. | 35,000 | 35,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |

Basic slag has also been produced in the U.S.S.R., South Africa and Japan.

(a) Years ended June 30 of that stated.

(b) Years ended May 31 of year following that stated.

(c) Estimated.

EXPORTS OF PHOSPHATES, ETC.

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|--------------|--------------|--------------|--------------|--------------|---------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Phosphatic fertilizers .. | 2,769 | 19,372 | 44,193 | 55,670 | 62,176 | 48,477 |
| Seychelles— | | | | | | |
| Phosphatic guano .. | 3,787 | 5,904 | 3,805 | 3,480 | 5,929 | <i>n.a.</i> |
| Uganda— | | | | | | |
| Phosphate rock .. | 365 | 193 | — | — | — | — |
| Canada— | | | | | | |
| Nitrogen-phosphate fertilizers .. | (£3,403,812) | (£6,453,415) | (£7,558,541) | (£8,978,193) | (£9,930,240) | (£11,338,000) |
| Christmas Island— | | | | | | |
| Phosphate rock .. | 774,801 | 739,568 | 950,517 | 984,125 | 1,123,269 | 1,043,750 |
| Phosphate dust .. | 72,416 | 90,033 | 89,453 | 89,773 | 70,635 | 118,094 |
| Malaysia (West)— | | | | | | |
| Natural phosphates .. | <i>n.a.</i> | 56 | 39 | 32 | 27 | 137 |
| New Zealand (a)— | | | | | | |
| Superphosphates .. | 250 | 196 | 428 | 405 | 488 | 336 |
| Nauru Island— | | | | | | |
| Phosphate rock .. | 1,820,066 | 1,456,535 | 2,004,592 | 1,766,567 | 2,218,549 | 2,163,100 |
| Ocean Island— | | | | | | |
| Phosphate rock .. | 322,848 | 359,322 | 374,030 | 445,150 | 519,407 | 555,100 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Phosphate rock .. | 28,629 | 30,710 | 30,410 | 20,762 | 10,715 | 11,810 |
| Superphosphates— | | | | | | |
| Single .. | } 277,817 | 216,478 | (b) 48,774 | (b) 46,067 | (b) 45,510 | (b) 31,793 |
| Concentrated .. | | | | | | |
| Basic slag .. | 1,768,548 | 1,843,036 | (b) 268,653 | (b) 276,623 | (b) 277,316 | (b) 278,875 |
| France— | | | | | | |
| Phosphate rock .. | 2,329 | 14,293 | 1,638 | 2,910 | 788 | 433 |
| Superphosphates .. | 49,705 | 38,017 | 28,264 | 43,030 | 30,471 | 29,104 |
| Basic slag .. | 337,678 | 331,999 | 337,142 | 344,742 | 306,780 | 275,156 |
| Di-calcium phosphates | 267 | 277 | 9,440 | 14,551 | 17,641 | 15,602 |
| Germany (Federal)— | | | | | | |
| Phosphate rock .. | 42,555 | 34,077 | 41,840 | 49,278 | 23,349 | 2,419 |
| Superphosphates .. | 18,411 | 21,656 | 31,800 | 8,203 | 34,402 | 14,944 |
| Basic slag .. | 348,782 | 281,959 | 220,510 | 199,990 | 211,914 | 226,027 |
| Other phosphatic fertilizers .. | 1,759 | 3,808 | 3,137 | 2,409 | 6,856 | 3,264 |
| Greece— | | | | | | |
| Phosphatic fertilizers .. | 30 | 1,014 | 10,184 | 25,122 | 83,025 | — |
| Hungary— | | | | | | |
| Superphosphates .. | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 7,414 |
| Italy— | | | | | | |
| Superphosphates .. | 31,417 | 1,794 | 2,230 | 1,085 | 18,922 | 6,619 |
| Netherlands— | | | | | | |
| Phosphate rock .. | 1,303 | 961 | 548 | 497 | 223 | 7,077 |
| Superphosphates .. | 457,518 | 371,682 | 106,020 | 138,518 | 115,379 | 96,856 |
| Basic slag .. | 187 | 7,671 | 757 | 220 | 26 | 2 |
| Norway— | | | | | | |
| Superphosphates .. | 18,070 | 23,952 | 6,206 | 4,213 | 8,278 | <i>n.a.</i> |
| Portugal— | | | | | | |
| Superphosphates .. | 78,795 | 43,401 | 63,895 | 105,649 | 96,924 | 44,159 |
| Spain— | | | | | | |
| Superphosphates, etc. .. | 123,814 | 56,683 | 62,980 | 70,714 | 31,023 | 66,047 |
| Di-calcium phosphates | 3,100 | 7,172 | 2,418 | 492 | 1,784 | 2,661 |
| Sweden— | | | | | | |
| Phosphate rock .. | — | — | — | 21 | 1,787 | — |
| Di-calcium phosphates | 13,479 | 18,127 | 16,426 | 25,644 | 26,873 | 41,664 |
| Basic slag .. | 22,166 | 20,031 | 20,190 | 24,328 | 32,164 | 26,147 |

(a) Years ended June 30 of that stated.

 (b) P₂O₅ content.

EXPORTS OF PHOSPHATES, ETC. (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-----------|-----------|-----------|-----------|------------|------------|
| OTHER COUNTRIES | | | | | | |
| (cont.) | | | | | | |
| U.S.S.R.— | | | | | | |
| Apatite ore | 63,900 | 80,300 | 77,600 | 88,977 | 59,500 | 46,600 |
| do. concentrates .. | 2,942,300 | 3,437,900 | 4,212,900 | 4,438,377 | 5,026,300 | 5,519,000 |
| Superphosphates .. | 223,300 | 192,100 | 280,300 | 372,226 | 438,500 | 436,100 |
| Yugoslavia— | | | | | | |
| Superphosphates .. | 87,571 | 210,771 | 348,287 | 282,157 | 340,468 | 109,161 |
| Algeria— | | | | | | |
| Phosphate rock .. | — | 56,115 | 12,578 | 86,681 | 240,700 | n.a. |
| Egypt— | | | | | | |
| Phosphate rock .. | 322,561 | 367,597 | 365,000 | 496,000 | 444,000 | 403,055 |
| Morocco— | | | | | | |
| Phosphate rock .. | 9,916,687 | 9,397,397 | 9,057,177 | 9,195,992 | 8,100,600 | 10,132,804 |
| Hyperphosphates .. | 4,309 | 1,237 | 3,573 | 7,559 | 13,656 | 1,851 |
| Superphosphates .. | 32,359 | 261 | 136,855 | 184,133 | 235,634 | 179,901 |
| Senegal— | | | | | | |
| Phosphate rock .. | 623,199 | 755,021 | 704,132 | 697,518 | 743,371 | n.a. |
| Aluminium phosphates | 86,845 | 98,322 | 94,135 | 74,436 | 53,796 | n.a. |
| Phosphate fertilizers .. | 22,687 | 3,977 | 21,468 | 17,287 | 25,900 | n.a. |
| South Africa— | | | | | | |
| Phosphate rock .. | 11,266 | 12,400 | 458 | 958 | n.a. | 206 |
| Super-phosphates .. | } 5,274 | } 5,523 | } 2,116 | } 2,157 | } 6,915 | } 5,734 |
| Other phosphatic fertilizers .. | | | | | | |
| South West Africa— | | | | | | |
| Phosphatic guano .. | — | 909 | 1,124 | n.a. | n.a. | n.a. |
| Togo— | | | | | | |
| Phosphate rock .. | 788,808 | 799,790 | 953,433 | 1,003,876 | 254,478 | 315,283 |
| Tunisia— | | | | | | |
| Phosphate rock .. | 2,179,736 | 2,225,031 | 2,347,200 | 2,263,560 | 2,421,000 | 1,791,803 |
| Hyperphosphates .. | 109,052 | 113,924 | 69,000 | 13,739 | 21,946 | 55,882 |
| Superphosphates .. | 122,850 | 253,044 | 166,660 | 376,264 | 341,828 | 297,000 |
| Mexico— | | | | | | |
| Phosphate rock .. | 27,455 | 30,824 | 36,468 | 33,874 | 28,339 | n.a. |
| Netherlands Antilles— | | | | | | |
| Phosphate rock .. | 117,666 | 113,075 | 145,140 | 101,679 | 91,667 | n.a. |
| United States— | | | | | | |
| Phosphate rock .. | 5,652,573 | 6,673,237 | 8,263,666 | 9,194,137 | 10,788,393 | 9,292,342 |
| Superphosphates— | | | | | | |
| Single | 172,215 | } 528,161 | 78,832 | 67,463 | 84,848 | 24,896 |
| Concentrated .. | 535,728 | | 570,558 | 564,276 | 1,034,277 | 700,392 |
| Sodium phosphates .. | 20,512 | 20,039 | 19,858 | 24,177 | 17,074 | 16,655 |
| Ammonium | 324,211 | 285,404 | 689,548 | 1,134,311 | 1,134,045 | 841,040 |
| Other phosphatic fertilizers .. | 19,381 | 35,179 | 31,921 | 31,875 | 32,346 | 31,692 |
| Venezuela— | | | | | | |
| Superphosphates .. | 55,133 | n.a. | n.a. | n.a. | n.a. | n.a. |
| French Polynesia (Makatea)— | | | | | | |
| Phosphate rock .. | 368,208 | 325,000 | 196,953 | n.a. | n.a. | n.a. |
| Israel— | | | | | | |
| Phosphate rock .. | 178,124 | 303,230 | 416,807 | 413,365 | 637,116 | 778,781 |
| Japan— | | | | | | |
| Phosphate rock .. | 701 | 121 | 898 | 591 | 1,349 | — |
| Superphosphates .. | 159,789 | 164,375 | 15,899 | 13,147 | 22,851 | 15,271 |
| Thermal phosphates .. | 35,914 | 9,444 | 17,131 | 11,146 | 9,996 | 12,032 |
| Ammonium phosphate | 345 | 6,389 | 719 | 8,395 | 892 | 327 |
| Ammonium sulphate phosphate .. | 49,330 | 35,842 | 18,975 | 45,614 | 59,634 | 48,363 |
| Other phosphatic fertilizers .. | 7,954 | 17,126 | 3,602 | 3,403 | 1,555 | 9,409 |
| Jordan— | | | | | | |
| Phosphate rock .. | 617,170 | 595,098 | 743,109 | 867,733 | 1,076,945 | 913,629 |
| Lebanon— | | | | | | |
| Superphosphates .. | 12,874 | 10,173 | 14,159 | 16,808 | 34,701 | 55,836 |

IMPORTS OF PHOSPHATES, ETC.

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Phosphate rock | 1,485,010 | 1,667,262 | 1,638,486 | 1,586,966 | 1,843,057 | 1,665,393 |
| Superphosphates | 16,069 | 11,478 | 2,666 | 46,681 | 31,512 | 5,559 |
| Basic slag | 76,343 | 46,217 | 42,240 | 41,977 | 40,141 | 42,434 |
| Ammonium phosphate | 11,557 | 3,429 | 3,222 | 10,451 | 30,118 | 5,174 |
| Ghana— | | | | | | |
| Superphosphates | 50 | 1,640 | 1 | — | 160 | 734 |
| Other phosphatic fertilizers | 192 | 2,477 | 1 | 6 | 227 | 210 |
| Kenya— | | | | | | |
| Superphosphates | 12,125 | 11,400 | 18,976 | 14,509 | 15,710 | 16,075 |
| Other phosphatic fertilizers | 45 | 122 | 1,591 | 640 | 3,335 | 1,414 |
| Mauritius— | | | | | | |
| Phosphatic guano | 7,295 | 11,460 | 5,780 | 9,545 | 10,501 | 10,071 |
| Phosphatic fertilizers | 7,093 | 5,689 | 1,378 | 2,941 | 3,851 | 2,435 |
| Nigeria— | | | | | | |
| Phosphatic fertilisers | 13,022 | 10,492 | 16,023 | 28,389 | 23,963 | 23,093 |
| Rhodesia— | | | | | | |
| Superphosphates | 5,735 | 2,379 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Other phosphatic fertilizers | 5,998 | 10,255 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sierra Leone— | | | | | | |
| Superphosphates | 6 | 50 | 556 | 418 | 420 | <i>n.a.</i> |
| Other phosphatic fertilizers | 200 | 675 | 1,449 | 10 | 562 | <i>n.a.</i> |
| Tanzania— | | | | | | |
| Superphosphates | 845 | 1,129 | 906 | 1,168 | 2,552 | 1,974 |
| Other phosphatic fertilizers | 13 | 60 | 4 | 1 | 82 | 1,007 |
| Uganda— | | | | | | |
| Superphosphates | 1,489 | 1,654 | 974 | 530 | 757 | 263 |
| Other phosphatic fertilizers | 2 | 15 | 2 | 401 | 44 | 178 |
| Zambia— | | | | | | |
| Phosphatic fertilizers | 922 | 1,822 | 1,767 | 3,265 | 919 | 492 |
| Canada— | | | | | | |
| Phosphate rock | 1,255,736 | 1,513,657 | 1,947,626 | 2,035,506 | 2,098,196 | 1,965,474 |
| Superphosphates, single | 100,527 | 80,603 | 63,113 | 31,688 | 12,854 | 4,803 |
| do. concentrated | 56,480 | 47,249 | 40,570 | 41,804 | 26,969 | 20,020 |
| Calcium phosphate | 17,106 | 17,499 | 19,297 | 18,726 | 18,129 | 19,464 |
| Sodium phosphates | <i>n.a.</i> | 6,301 | 7,450 | 8,801 | 6,361 | 5,757 |
| Antigua— | | | | | | |
| Phosphatic fertilizers | 1,051 | 203 | 14 | — | 11 | <i>n.a.</i> |
| Barbados— | | | | | | |
| Phosphatic fertilizers | 35 | 36 | 58 | 144 | 30 | 10 |
| Grenada— | | | | | | |
| Superphosphates | 20 | 423 | 381 | 944 | 692 | <i>n.a.</i> |
| Other phosphatic fertilizers | 46 | 705 | 910 | 766 | 550 | <i>n.a.</i> |
| Jamaica— | | | | | | |
| Phosphatic fertilizers | 3,546 | 3,313 | 2,327 | 13,724 | 2,756 | 9,346 |
| St. Kitts— | | | | | | |
| Phosphatic fertilizers | 310 | 221 | 145 | 1,751 | 977 | <i>n.a.</i> |
| St. Lucia— | | | | | | |
| Phosphatic fertilizers | 150 | 175 | 58 | — | 12 | <i>n.a.</i> |
| St. Vincent— | | | | | | |
| Superphosphates | 285 | 210 | 78 | — | 386 | <i>n.a.</i> |
| Trinidad and Tobago— | | | | | | |
| Superphosphates | 130 | <i>n.a.</i> | <i>n.a.</i> | 490 | 1,778 | 165 |

IMPORTS OF PHOSPHATES, ETC. (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---------------------------------------|-----------|-----------|-----------|-----------|-----------|------------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Guyana— | | | | | | |
| Superphosphates .. | 1,229 | 160 | 315 | 385 | 444 | 141 |
| Basic slag .. | 5 | 3 | — | — | 1 | — |
| Other phosphatic fertilizers .. | 1,400 | 3,146 | 2,340 | 2,321 | 3,114 | 2,386 |
| Ceylon— | | | | | | |
| Phosphate rock .. | 64,898 | 39,602 | 40,002 | 24,755 | — | — |
| Superphosphates .. | 2,128 | 1,115 | 582 | 2,291 | 7,009 | n.a. |
| Basic slag .. | 20 | 56 | — | — | 10 | n.a. |
| Other phosphatic fertilizers .. | 10 | 10,970 | 5,432 | 23,630 | 25,340 | 38,875 |
| Cyprus— | | | | | | |
| Superphosphates .. | 31,261 | 31,853 | 25,738 | 19,913 | 27,152 | 18,091 |
| Basic slag, etc. .. | — | 975 | 10 | — | — | — |
| Hong Kong— | | | | | | |
| Phosphatic fertilizers .. | 50 | 71 | 8 | 88 | 10 | — |
| India (b)— | | | | | | |
| Phosphate rock .. | 419,577 | 556,760 | 845,528 | 594,496 | 831,855 | 636,130 |
| Other natural phosphates .. | — | 8 | — | 4,843 | — | — |
| Superphosphates .. | 136 | 6,917 | 50 | 1,517 | 161 | 114 |
| Ammonium phosphate .. | 35,632 | 46,636 | 128,902 | 459,136 | 353,524 | 126,906 |
| Malaysia (West)— | | | | | | |
| Natural phosphates .. | n.a. | 88,652 | 111,066 | 100,193 | 84,282 | 79,358 |
| Phosphatic fertilizers .. | n.a. | 7,174 | 6,471 | 6,014 | 3,863 | 6,192 |
| Sabah— | | | | | | |
| Natural phosphates .. | 238 | 1,203 | 579 | 555 | 491 | 59 |
| Other phosphatic fertilizers .. | 1,251 | 742 | 185 | 296 | 137 | 802 |
| Sarawak— | | | | | | |
| Natural phosphates .. | 5,560 | 5,886 | 2,610 | 5,644 | 3,556 | n.a. |
| Phosphatic fertilizers .. | 849 | 947 | 1,945 | 107 | 147 | n.a. |
| Australia (a)— | | | | | | |
| Phosphate rock .. | 1,989,413 | 2,517,313 | 2,795,056 | 3,271,814 | 3,295,780 | 3,176,565 |
| Superphosphates .. | — | — | — | — | — | — |
| Calcium phosphates .. (r) | 1,625 | (r) 2,416 | (r) 1,954 | (r) 2,076 | 1,595 | 2,505 |
| Other phosphatic fertilizers .. | n.a. | n.a. | 266 | 35 | 30 | (c) 14,021 |
| Fiji— | | | | | | |
| Phosphatic fertilizers .. | 5,210 | 4,157 | 3,448 | 2,716 | 4,651 | 4,608 |
| New Zealand (a)— | | | | | | |
| Phosphate rock .. | 722,871 | 932,789 | 1,026,480 | 1,051,120 | 871,849 | 1,007,391 |
| Superphosphates .. | 99 | 28 | 66 | 11,340 | 50 | n.a. |
| Basic slag .. | 23,876 | 20,050 | 11,848 | 9,929 | 7,972 | 5,589 |
| Other phosphates .. | 1,723 | 2,959 | 2,928 | 2,791 | 13,742 | 4,890 |
| Irish Republic— | | | | | | |
| Phosphate rock .. | 235,691 | 239,813 | 255,149 | 351,901 | 418,772 | 333,207 |
| Superphosphates .. | 8,090 | 15,026 | 5,952 | 10,590 | 5,311 | 15,052 |
| Basic slag .. | 155,579 | 150,237 | 88,677 | 116,205 | 144,640 | 149,705 |
| Di-calcium phosphate .. | 365 | 1,155 | 2,279 | 1,615 | 395 | 505 |
| Other phosphatic fertilizers .. | 24,548 | 16,298 | 2,839 | 12 | 25 | 394 |

(a) Years ended June 30 of that stated.

(b) Years ended March 31 following that stated.

(c) Owing to reclassification not comparable with earlier years.

IMPORTS OF PHOSPHATES, ETC. (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Phosphate rock.. .. | 265,880 | 228,513 | 260,544 | 270,378 | 316,766 | 301,035 |
| Superphosphates (b) .. | 10,327 | 14,180 | 6,115 | 1,274 | 1,150 | 465 |
| Basic slag | 344,641 | 331,859 | 320,734 | 300,834 | 321,468 | 245,012 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Phosphate rock.. .. | 1,160,803 | 1,265,999 | 1,180,569 | 1,446,254 | 1,776,641 | 1,811,264 |
| Superphosphates | 1,616 | 382 | 873 | 200 | 1,333 | 8,720 |
| Basic slag | 23 | 22 | 3 | 134 | 76 | — |
| Bulgaria— | | | | | | |
| Phosphate rock | 505,300 | 497,800 | 691,011 | n.a. | n.a. | n.a. |
| Czechoslovakia— | | | | | | |
| Phosphatic fertilizers (a) | 256,000 | 286,000 | 266,000 | 292,000 | 286,000 | 322,000 |
| Denmark— | | | | | | |
| Phosphate rock.. .. | 279,362 | 337,285 | 301,167 | 276,423 | 270,039 | 324,582 |
| Superphosphates | 87,627 | 79,410 | 38,198 | 20,932 | 45,733 | 36,202 |
| Di-calcium phosphates .. | 33,785 | 33,199 | 34,346 | 34,562 | 33,013 | 35,268 |
| Basic slag | 9,118 | 9,324 | 4,087 | 2,857 | 2,681 | 822 |
| Finland— | | | | | | |
| Phosphate rock.. .. | 319,901 | 360,961 | 381,034 | 346,277 | 448,469 | 499,662 |
| Superphosphates | 35,533 | 134,142 | 1,573 | 295 | 339 | 884 |
| Basic slag | 9,873 | 15,207 | 11,170 | 13,173 | 10,993 | 10,364 |
| Di-calcium phosphates .. | 394 | 9,450 | n.a. | 3 | — | — |
| France— | | | | | | |
| Phosphate rock.. .. | 2,382,588 | 2,733,898 | 2,800,037 | 2,965,701 | 3,206,220 | 3,357,311 |
| Aluminium phosphates .. | 87,560 | 90,891 | 87,604 | 84,415 | 99,710 | 91,861 |
| Other phosphates | 12,620 | — | 5,195 | 10,553 | 37,418 | 17,952 |
| Superphosphates | 369,667 | 306,255 | 238,616 | 272,533 | 298,395 | 327,583 |
| Calcined phosphates | 20,009 | 24,251 | 25,004 | 35,737 | 34,451 | 39,718 |
| Basic slag | 775,525 | 725,218 | 671,942 | 732,778 | 827,485 | 927,578 |
| Di-calcium phosphates .. | 20,768 | 20,088 | 10,389 | 1,415 | 6,858 | 7,713 |
| Germany (Federal)— | | | | | | |
| Phosphate rock, etc. | 2,254,392 | 2,481,278 | 2,466,740 | 2,629,268 | 2,552,303 | 2,683,030 |
| Superphosphates | 22,680 | 22,256 | 16,917 | 26,868 | 26,915 | 28,030 |
| Basic slag | 416,930 | 520,726 | 576,801 | 527,400 | 508,257 | 417,647 |
| Other phosphatic fertilizers | 729 | 1,433 | 1,176 | 1,319 | 1,159 | 1,703 |
| Germany (East) (a)— | | | | | | |
| Phosphate rock | 320,000 | 315,300 | 305,800 | 347,400 | 449,000 | 438,267 |
| Other phosphatic fertilizers | 92,787 | 86,733 | 74,178 | 56,308 | 40,323 | 46,301 |
| Greece— | | | | | | |
| Phosphate rock.. .. | 25,409 | 155,160 | 223,844 | 326,531 | 387,842 | 314,072 |
| Basic slag | 296 | 93 | 98 | 49 | n.a. | n.a. |
| Other phosphatic fertilizers | 82,069 | 59,387 | 20,586 | 18,137 | n.a. | n.a. |
| Hungary— | | | | | | |
| Phosphate rock.. .. | 474,712 | 422,000 | 397,000 | 486,198 | 490,810 | 587,268 |
| Iceland— | | | | | | |
| Superphosphates | 3,865 | 8,134 | 10,280 | 8,519 | 8,254 | 9,342 |
| Italy— | | | | | | |
| Phosphate rock.. .. | 1,689,441 | 1,628,954 | 1,847,210 | 1,870,354 | 2,129,605 | 1,866,083 |
| Superphosphates | 1,988 | 8,805 | 39,862 | 17,335 | 25,700 | 23,006 |
| Basic slag | 1,685 | 67,596 | 105,660 | 111,686 | 99,492 | 108,174 |
| Netherlands— | | | | | | |
| Phosphate rock.. .. | 797,667 | 771,066 | 695,094 | 835,448 | 1,223,197 | 1,217,135 |
| Superphosphates | 98,949 | 57,452 | 48,558 | 47,978 | 29,124 | 28,675 |
| Basic slag | 230,553 | 249,506 | 29,839 | 24,464 | 22,153 | 20,618 |
| Di-calcium phosphates .. | 2,863 | 2,965 | 336 | 99 | 171 | 101 |
| Norway— | | | | | | |
| Phosphate-rock.. .. | 196,600 | 170,633 | 222,517 | 234,801 | 308,599 | 277,236 |
| Basic slag | 7,057 | 5,051 | 6,625 | 6,064 | 8,286 | 5,861 |

(a) P_2O_5 content.

(b) Including other phosphatic fertilisers.

IMPORTS OF PHOSPHATES, ETC. (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-----------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Poland— | | | | | | |
| Apatite concentrates .. | 425,200 | 548,200 | 620,000 | 428,000 | 524,000 | 586,000 |
| Phosphate rock .. | 549,400 | 635,000 | 588,000 | 602,000 | 940,000 | 1,251,000 |
| Portugal— | | | | | | |
| Phosphate rock .. | 252,341 | 270,635 | 220,398 | 292,074 | 294,992 | 298,482 |
| Basic slag .. | 14,311 | 10,471 | 9,949 | 9,199 | 8,813 | 10,901 |
| Roumania— | | | | | | |
| Phosphate rock (a) .. | 93,000 | 171,500 | 204,000 | 216,132 | 202,353 | 303,824 |
| Spain— | | | | | | |
| Phosphate rock .. | 1,084,069 | 1,069,482 | 1,134,671 | 1,135,684 | 1,220,922 | 1,321,923 |
| Superphosphates, etc. .. | 98 | 50 | 1,921 | 1,083 | 2,953 | 35,738 |
| Basic slag .. | 20,214 | 31,306 | 32,241 | 25,050 | 26,033 | 29,486 |
| Di-calcium phosphates | — | — | 3,528 | 6,499 | 2,039 | 11,117 |
| Sweden— | | | | | | |
| Phosphate rock .. | 420,019 | 480,742 | 418,128 | 503,748 | 519,637 | 513,100 |
| Superphosphates .. | 2,724 | 652 | 18,157 | 226 | 18,349 | 41,628 |
| Di-calcium phosphates | 3,638 | 2,771 | 2,448 | 3,002 | 2,522 | 5,278 |
| Switzerland— | | | | | | |
| Phosphate rock .. | 35,993 | 36,717 | 28,895 | 27,063 | 21,610 | 21,337 |
| Superphosphates, etc. .. | 14,471 | 12,503 | 14,593 | 16,172 | 17,602 | 16,861 |
| Basic slag .. | 189,590 | 191,258 | 191,253 | 197,363 | 195,645 | 190,595 |
| Di-calcium phosphates | 5,442 | 8,852 | 10,975 | 12,099 | 9,851 | 9,902 |
| Yugoslavia— | | | | | | |
| Phosphate rock .. | 634,749 | 464,391 | 677,410 | 683,283 | 784,387 | 715,866 |
| Superphosphates .. | 16,339 | <i>n.a.</i> | 3 | 5,999 | 4,921 | 28,594 |
| Basic slag .. | 116,044 | 6,939 | 11,122 | 61,931 | 18,798 | 26,081 |
| Angola— | | | | | | |
| Superphosphates .. | 2,689 | 2,540 | 3,262 | 3,937 | 3,732 | 4,420 |
| Cameroun— | | | | | | |
| Phosphatic fertilizers .. | 734 | 563 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Canary Islands— | | | | | | |
| Phosphate rock .. | 14,587 | 19,025 | 17,782 | 18,665 | 18,759 | 22,155 |
| Central African Republic— | | | | | | |
| Phosphate fertilizers .. | 75 | 187 | 30 | 723 | 2,640 | 224 |
| Congo—Republic of— | | | | | | |
| Phosphate fertilizers .. | 29 | 298 | 1,255 | 42 | 29 | 35 |
| Gabon | | | | | | |
| Phosphate fertilizers .. | 2 | 11 | 2 | 5 | 49 | 44 |
| Malagasy Republic— | | | | | | |
| Phosphatic fertilizers .. | 613 | 1,017 | 503 | 656 | 3,079 | 942 |
| Morocco— | | | | | | |
| Superphosphates .. | 166 | 974 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Di-calcium phosphates | 10 | 13 | 9 | 18 | 15 | 34 |
| Reunion— | | | | | | |
| Phosphate fertilizers .. | 882 | 642 | 282 | 279 | 1,296 | 638 |
| South Africa— | | | | | | |
| Phosphate rock .. | 297,976 | 172,356 | 154,797 | 86,188 | 75,957 | <i>n.a.</i> |
| Basic slag .. | 26,488 | 27,661 | 20,625 | 17,553 | 15,755 | 18,820 |
| Other phosphatic fertilizers .. | 51,235 | 4,772 | 63,665 | 77,851 | 1,083 | 9,539 |
| Sudan— | | | | | | |
| Superphosphates .. | 69 | 48 | 153 | 325 | 44 | 30 |
| Tunisia— | | | | | | |
| Phosphatic fertilizers .. | 70 | — | — | — | 6 | 1 |
| Costa Rica— | | | | | | |
| Phosphatic fertilizers .. | 2,555 | 57,146 | 15,267 | 14,905 | 19,974 | 12,908 |
| Cuba— | | | | | | |
| Superphosphates .. | 167,067 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| French West Indies— | | | | | | |
| Guadeloupe— | | | | | | |
| Phosphatic fertilizers .. | 98 | 1,198 | 469 | 670 | 459 | 615 |
| Martinique— | | | | | | |
| Phosphatic fertilizers .. | 1,616 | 679 | 1,020 | 1,441 | 1,007 | 558 |

 (a) P_2O_5 content.

IMPORTS OF PHOSPHATES, ETC. (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|---------|-------------|-----------------|----------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Guatemala— | | | | | | |
| Phosphatic fertilizers .. | 5,431 | 2,843 | 82 | 799 | 6,209 | 8,600 |
| Honduras— | | | | | | |
| Phosphatic fertilizers .. | 3,042 | 2,864 | 2,045 | 892 | 469 | <i>n.a.</i> |
| Mexico— | | | | | | |
| Phosphate rock | 200,445 | 224,586 | 285,195 | 323,155 | 321,580 | <i>n.a.</i> |
| Superphosphates | 744 | — | 3 | 13,960 | 19,329 | <i>n.a.</i> |
| Ammonium phosphates .. | 7,339 | 3,404 | — | 5 | — | <i>n.a.</i> |
| Nicaragua— | | | | | | |
| Phosphatic fertilizers .. | 4,547 | 13,900 | 14,670 | 23,652 | 14,438 | 8,531 |
| Panama Republic— | | | | | | |
| Phosphatic fertilizers .. | 1,000 | 1,652 | 1,898 | 1,336 | <i>n.a.</i> | <i>n.a.</i> |
| Salvador— | | | | | | |
| Phosphatic fertilizers .. | 3,449 | 15,472 | 23,705 | 16,615 | 16,110 | 31,481 |
| United States— | | | | | | |
| Phosphate rock | 155,819 | 132,263 | 158,721 | 123,796 | 103,142 | 124,847 |
| Superphosphates— | | | | | | |
| Single | 70,512 | 51,698 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Concentrated | | | | | | |
| Basic slag | — | 146 | <i>r</i> 97 | <i>r</i> 356 | <i>n.a.</i> | 21 |
| Di-calcium phosphates .. | 6,291 | 2,683 | <i>r</i> 19,799 | <i>r</i> 5,197 | 19,018 | 13,005 |
| Ammonium phosphates .. | 85,845 | 155,795 | 159,634 | 189,081 | 220,554 | 244,078 |
| Brazil— | | | | | | |
| Phosphate rock | 178,892 | 152,274 | 110,427 | 221,882 | 324,599 | <i>n.a.</i> |
| Superphosphates— | | | | | | |
| Single | 5,420 | 5,685 | 6,360 | 18,221 | 14,497 | <i>n.a.</i> |
| Concentrated | 48,488 | 48,945 | 51,511 | 81,792 | 99,888 | <i>n.a.</i> |
| Calcined phosphates .. | 4,353 | 2,092 | 1,985 | 1,158 | 98 | <i>n.a.</i> |
| Di-calcium phosphate .. | 1,673 | 591 | 1,417 | 789 | 5,926 | <i>n.a.</i> |
| Basic slag | 5,788 | 5,546 | 6,056 | 6,881 | 11,996 | <i>n.a.</i> |
| Chile— | | | | | | |
| Superphosphates | 68,781 | 93,439 | <i>n.a.</i> | 84,142 | <i>n.a.</i> | <i>n.a.</i> |
| Basic slag | 5,845 | 8,813 | <i>n.a.</i> | 7,935 | <i>n.a.</i> | <i>n.a.</i> |
| Di-calcium phosphates .. | 24,855 | 37,698 | <i>n.a.</i> | 19,465 | <i>n.a.</i> | <i>n.a.</i> |
| Other phosphatic fertilizers | 33,496 | 37,747 | <i>n.a.</i> | 27,737 | <i>n.a.</i> | <i>n.a.</i> |
| Colombia— | | | | | | |
| Phosphate rock | 26,370 | 6,449 | 17,083 | 19,472 | 20,473 | <i>n.a.</i> |
| Superphosphates | 27,464 | 26,635 | 24,231 | 16,282 | 36,973 | <i>n.a.</i> |
| Di-calcium phosphates .. | 2,477 | 451 | 12 | 20 | 10 | <i>n.a.</i> |
| Peru— | | | | | | |
| Phosphate rock | 14,114 | 2,746 | — | 6,045 | 6,841 | <i>n.a.</i> |
| Phosphatic fertilizers .. | 1,242 | 20,237 | 221 | 9,359 | 7,676 | <i>n.a.</i> |
| Uruguay— | | | | | | |
| Phosphate rock | 41,692 | 44,703 | 82,563 | 73,098 | 37,211 | 52,113 |
| Venezuela— | | | | | | |
| Calcium phosphates and superphosphates .. | 1,512 | 1,677 | 6,498 | 12,676 | 2,168 | 1,459 |
| Burma— | | | | | | |
| Phosphatic fertilizers .. | 16,500 | 24,540 | <i>r</i> — | <i>r</i> 650 | 9,522 | <i>n.a.</i> |
| Formosa— | | | | | | |
| Calcium phosphate | 786 | 1,108 | 45,290 | 1,441 | 1,427 | 1,309 |
| Other phosphatic fertilizers | 9,940 | <i>n.a.</i> | | | | |
| Iran (a)— | | | | | | |
| Phosphatic fertilizers .. | 13,878 | 18,897 | 37,302 | 50,480 | 28,262 | <i>n.a.</i> |
| Iraq— | | | | | | |
| Phosphatic fertilizers .. | 2,975 | <i>n.a.</i> | 5,136 | 4,096 | 1,483 | 1,664 |

(a) Years ended March 20 following that stated.

IMPORTS OF PHOSPHATES, ETC. (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Japan— | | | | | | |
| Phosphate rock | 2,279,150 | 2,380,063 | 2,518,555 | 2,589,960 | 3,363,099 | 2,916,823 |
| Other phosphatic fertilizers | 10 | 3,254 | 4,378 | 9,562 | 18,967 | 16,854 |
| Calcium phosphates .. | 4,445 | 5,377 | 6,851 | 2,765 | 4,785 | 5,068 |
| Ammonium phosphate .. | n.a. | n.a. | 1,852 | 99 | 571 | 578 |
| Jordan— | | | | | | |
| Phosphatic fertilizers .. | 2,523 | 2,362 | 5,025 | 4,192 | 6,035 | 7,342 |
| Korea (South)— | | | | | | |
| Superphosphates | 1,981 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Calcium phosphates .. | 10,122 | 78,445 | 18,414 | 90,211 | 5 | — |
| Other phosphatic fertilizers | 239,920 | 200,994 | 315,277 | 217,330 | 138,149 | — |
| Lebanon— | | | | | | |
| Phosphatic fertilizers .. | 21,714 | 43,862 | 1,942 | 2,420 | 3,144 | n.a. |
| Philippine Republic— | | | | | | |
| Phosphate rock | 18,457 | 56,884 | 23,621 | 104,443 | n.a. | n.a. |
| Superphosphates | 1,194 | 1,237 | n.a. | 979 | n.a. | n.a. |
| Ammonium phosphate .. | 15,966 | 27,111 | n.a. | 4,432 | n.a. | n.a. |
| Other phosphatic fertilizers | 24,087 | 18,777 | n.a. | n.a. | n.a. | n.a. |
| Syria— | | | | | | |
| Phosphatic fertilizers .. | 14,534 | 12,240 | 19,179 | 13,211 | 25,830 | 29,079 |
| Thailand— | | | | | | |
| Superphosphates | 2,013 | 1,987 | 2,751 | 2,638 | 1,612 | 1,368 |
| Phosphatic fertilizers .. | 36,755 | 21,732 | 45,810 | 84,565 | 128,938 | 120,282 |
| Turkey— | | | | | | |
| Phosphate rock | 91,056 | 98,941 | 145,750 | 93,602 | 103,529 | 123,536 |
| Superphosphates | 29,010 | 111,647 | 130,553 | 155,477 | 268,275 | 171,049 |
| Ammonium phosphate .. | 26 | 53 | 3,045 | 33 | 32 | 44 |
| Other phosphatic fertilizers | n.a. | 6,348 | 5,517 | 51,872 | 29,277 | 11,185 |
| Vietnam (South)— | | | | | | |
| Calcium phosphates .. | 45,925 | n.a. | n.a. | n.a. | n.a. | n.a. |

PLATINUM
PRODUCTION OF PLATINUM METALS

Troy ounces

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|------------------|------------------|------------------|------------------|------------------|------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Canada— | | | | | | |
| Recovered from Ontario nickel-copper ores (c)— | | | | | | |
| Platinum | 376,238 | 463,127 | 396,059 | 401,263 | 485,891 | 266,100 |
| Other platinum metals | | | | | | |
| Australia— | | | | | | |
| New South Wales— | | | | | | |
| Concentrates (Pt content) | — | — | 13 | — | — | — |
| New Guinea— | | | | | | |
| Platinum | 1 | 4 | — | — | — | — |
| OTHER COUNTRIES | | | | | | |
| U.S.S.R.— | | | | | | |
| Crude platinum (d) .. | 1,500,000 | 1,700,000 | 1,800,000 | 1,900,000 | 2,000,000 | 2,100,000 |
| Ethiopia— | | | | | | |
| Crude platinum .. (d) | 180 | 353 | (d) 318 | 282 | 322 | 343 |
| South Africa— | | | | | | |
| Crude and matte (Pt metals content) (d) | 600,000 | 750,000 | 780,000 | 825,000 | 850,000 | 950,000 |
| Osmiridium (crude) (b) | 4,135 | 3,820 | 3,400 | (d) 8,000 | (d) 14,000 | (d) 14,000 |
| United States (a)— | | | | | | |
| New platinum metals recovered by refineries from crude platinum and gold and copper ores of domestic origin | | | | | | |
| Platinum | 15,608 | 11,376 | 18,103 | 6,736 | 4,816 | 8,702 |
| Palladium | 22,863 | 22,500 | 29,907 | 8,142 | 5,275 | 8,224 |
| Iridium | 2,423 | 1,414 | 1,513 | 754 | 454 | 570 |
| Osmium | 366 | 315 | 219 | 151 | 95 | 135 |
| Rhodium | 2,757 | 2,156 | 2,361 | 57 | 36 | 70 |
| Ruthenium | 286 | 400 | 558 | 11 | 6 | 11 |
| Colombia (e)— | | | | | | |
| Crude platinum | 20,647 | 11,141 | 15,671 | 12,411 | 15,076 | n.a. |
| Japan— | | | | | | |
| Platinum | 2,199 | 2,466 | 2,733 | 3,072 | 2,785 | 3,140 |
| Palladium | 1,875 | 2,952 | 5,495 | 3,327 | 3,651 | 3,877 |
| WORLD'S TOTAL (f) | 2,500,000 | 3,000,000 | 3,000,000 | 3,000,000 | 3,400,000 | 3,400,000 |

(a) Secondary platinum metals recovered in the United States were as follows (troy ounces):

| | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------|--------|--------|--------|---------|---------|---------|
| Platinum | 66,043 | 53,562 | 49,563 | 126,377 | 115,587 | 126,822 |
| Palladium | 49,879 | 50,025 | 50,009 | 215,162 | 195,620 | 227,763 |
| Iridium | 764 | 960 | 402 | 7,748 | 2,127 | 2,250 |
| Osmium | 928 | 763 | 728 | 2,377 | 672 | 208 |
| Rhodium | 2,338 | 2,590 | 2,434 | 11,505 | 12,176 | 11,743 |
| Ruthenium | 195 | 625 | 185 | 2,630 | 3,273 | 2,873 |

(b) Sales.

(c) Metal content of concentrates produced from nickel-copper ores.

(d) United States Bureau of Mines' estimate.

(e) Exports. Total production may be very much greater

(f) Estimated.

EXPORTS OF PLATINUM*

Troy ounces

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|-------------|-------------|---------|------------|-----------|-----------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Platinum— | | | | | | |
| Ingots, grain and powder | 429,125 | 489,054 | 472,592 | 564,448 | 579,994 | 701,390 |
| Other kinds (a) .. | 79,084 | 88,777 | 111,286 | 115,304 | 199,269 | 152,610 |
| Other platinum metals and alloys | 273,418 | 323,918 | 378,853 | 422,785 | 454,235 | 459,037 |
| Canada— | | | | | | |
| Concentrates, etc. (b) .. | 404,891 | 497,572 | 434,021 | 457,098 | 569,416 | 433,747 |
| Platinum metals (b) .. | 3,901 | 53,450 | 7,604 | 18,757 | 15,526 | 29,753 |
| Scrap | <i>n.a.</i> | <i>n.a.</i> | 32,406 | 26,397 | 32,041 | 35,810 |
| Australia (c)— | | | | | | |
| Platinum and platinum group metals | 548 | 423 | 1,538 | (a) 56,181 | (a) 3,655 | (a) 7,508 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Unwrought platinum and platinum metals | 514 | 804 | 1,382 | 4,051 | 1,479 | 160 |
| Denmark— | | | | | | |
| Rods, sheets, wire, scrap, etc. | — | 482 | 32 | 836 | 418 | 417 |
| France— | | | | | | |
| Unwrought platinum and scrap (a) .. | 15,846 | 17,306 | 26,492 | 36,041 | 47,324 | 43,071 |
| Palladium (incl. scrap)(a) .. | 24,081 | 30,157 | 37,745 | 7,073 | 38,534 | 18,950 |
| Drawn or rolled platinum | 15,378 | 20,596 | 20,930 | 18,680 | 20,803 | 21,035 |
| Germany (Federal)— | | | | | | |
| Platinum metals (a) .. | 174,061 | 332,242 | 364,686 | 270,291 | 357,868 | 371,919 |
| Italy— | | | | | | |
| Unwrought platinum .. | 24,242 | 19,869 | 37,102 | 32,054 | 38,581 | 29,064 |
| Netherlands— | | | | | | |
| Unwrought platinum and platinum metals .. | 8,552 | 20,706 | 7,877 | 17,811 | 11,124 | 10,803 |
| Drawn or rolled | 25,335 | 22,892 | 19,323 | 6,623 | 8,841 | 5,241 |
| Norway— | | | | | | |
| Platinum (incl. scrap) .. | 18,551 | 18,004 | 14,564 | 19,901 | 21,670 | 20,544 |
| Switzerland— | | | | | | |
| Unwrought platinum .. | 40,285 | 35,752 | 38,195 | 42,182 | 73,239 | 100,696 |

*Official figures which, in many cases, do not include platinum sent by post.

(a) Including alloys.

(b) Platinum and platinum metals contained in concentrates and residues, exported for treatment. Of the refined and semi-processed platinum metals subsequently imported (see page 306), the following quantities were re-exported from Canada without change or alteration (troy ounces):

1966—199,152; 1967—164,033; 1968—83,228; 1969—52,694.

(c) Years ended June 30 of that stated.

EXPORTS OF PLATINUM (*cont.*)

Troy ounces

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|-------------|--------|---------|---------|---------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| U.S.S.R. | (a) | (a) | (a) | (a) | (a) | (a) |
| Yugoslavia— | | | | | | |
| Palladium | <i>n.a.</i> | 4,887 | 15,465 | 7,620 | 23,309 | 15,947 |
| United States— | | | | | | |
| Ores, etc. (<i>Pt content</i>) | 125,139 | 72,925 | 102,031 | 161,585 | 222,998 | 223,567 |
| Ingots, sheets, wire, etc. | | | | | | |
| Palladium, rhodium, etc. | | | | | | |
| and alloys | 21,167 | 30,172 | 103,425 | 118,017 | 172,159 | 277,495 |
| Colombia— | | | | | | |
| Platinum | 20,647 | 11,141 | 15,671 | 12,411 | 15,076 | <i>n.a.</i> |

(a) Exports of platinum metals from U.S.S.R. are not published, but imports into the under-mentioned countries from U.S.S.R. were as follows (troy ounces):

| | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------|---------|---------|---------|---------|---------|---------|
| United Kingdom | 28,332 | 68,658 | 52,777 | 52,437 | 27,528 | 44,625 |
| France | 67,034 | 17,755 | 20,364 | 15,462 | 63,763 | 93,800 |
| Germany (Federal) | 152,471 | 288,300 | 291,736 | 196,859 | 205,057 | 203,353 |
| Netherlands | 26,267 | 13,214 | 11,478 | 6,237 | 15,882 | 2,315 |
| United States | 145,519 | 504,812 | 389,482 | 129,915 | 429,730 | 285,954 |
| Japan | 167,339 | 299,323 | 382,003 | 417,311 | 638,953 | 577,359 |

IMPORTS OF PLATINUM*

Troy ounces

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|---------------|---------------|----------------|---------------|---------------|---------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— Ores and concentrates | (£17,176,633) | (£22,280,604) | (£24,146,847) | (£38,283,000) | (£44,563,018) | (£52,791,239) |
| Platinum and platinum group metals | 100,739 | 134,697 | 123,789 | 127,795 | 152,762 | 167,832 |
| Canada— Platinum and platinum group metals (c) .. | 221,557 | 233,603 | 197,853 | 212,889 | 207,961 | 118,946 |
| Nigeria— Platinum and platinum group metals .. | 2,356 | 9,976 | 37,209 | 22,348 | 2,117 | 2,985 |
| Hong Kong— Platinum and platinum group metals .. | 18,007 | 19,140 | 25,866 | 48,318 | 80,469 | 64,216 |
| India (a)— Platinum | 2,929 | 2,393 | 1,146 | 1,589 | 332 | 1,323 |
| Malaysia (West)— Unwrought platinum .. | <i>n.a.</i> | 102 | 62 | 233 | 15 | <i>n.a.</i> |
| Sarawak— Platinum | 1,197 | 584 | — | 1 | 29 | <i>n.a.</i> |
| Singapore— Unwrought platinum .. | 145 | 2,540 | 7,673 | 4,625 | 158 | 156 |
| Australia (b)— Platinum bars, rods, sheets, etc. | 410 | 802 | } (d)(e) 6,015 | (d)(e) 7,040 | (d)(e) 3,357 | (d)(e) 9,273 |
| Bars, rods, sheets, etc. of other platinum metals | 83 | 405 | | | | |
| Platinum metal powder | 3,850 | 2,585 | (d)(e) 701 | (d)(e) 1,021 | (d)(e) 8,332 | (d)(e) 14,237 |
| Wire | 1,636 | 1,592 | (d)(e) 11,123 | (d)(e) 1,307 | (d)(e) 1,586 | (d)(e) 2,489 |
| New Zealand (b)— Platinum and platinum group metals | 1,980 | 1,894 | 8,737 | 1,353 | 1,243 | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Austria— Unwrought platinum and platinum metals | 1,447 | 1,093 | 2,476 | 4,083 | 3,987 | 5,626 |
| Denmark— Rods, sheets, wire and scrap | 2,379 | 6,400 | 7,073 | 7,871 | 9,067 | 11,124 |
| Finland— Unwrought platinum etc. | <i>n.a.</i> | 4,662 | 5,276 | — | 1,993 | 10,578 |
| France— Unwrought platinum, alloys and scrap .. | 83,076 | 90,725 | 78,176 | 81,856 | 75,505 | 121,764 |
| Unwrought palladium, alloys and scrap .. | 66,648 | 64,129 | 66,884 | 55,589 | 91,221 | 107,257 |
| Drawn or rolled platinum | 4,921 | 9,679 | 15,938 | 16,879 | 26,505 | 41,847 |
| Germany (Federal)— Platinum metals and alloys | 358,687 | 507,093 | 540,872 | 491,135 | 584,050 | 724,870 |
| Italy— Unwrought platinum .. | 43,082 | 63,819 | 37,134 | 46,040 | 51,440 | 63,208 |
| Drawn or rolled .. | 5,916 | 4,630 | 9,484 | 9,806 | 3,215 | 10,931 |
| Other platinum metals | 21,284 | 5,048 | 23,663 | 25,624 | 25,721 | 36,973 |

*Official figures, which in many cases do not include platinum sent by post.

(a) Years ended March 31 following that stated.

(b) Years ended June 30 of that stated.

(c) Imports of refined and semi-processed platinum metals derived from Canadian concentrates and residues; mostly re-exported (see page 304).

(d) Including alloys.

(e) Owing to reclassification not strictly comparable with earlier years.

IMPORTS OF PLATINUM (cont.)

Troy ounces

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|---------|-------------|---------|---------|-----------|---------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Netherlands— | | | | | | |
| Unwrought platinum and platinum metals .. | 42,953 | 49,172 | 33,694 | 32,794 | 32,697 | 16,236 |
| Drawn or rolled .. | 22,827 | 32,548 | 31,186 | 27,489 | 37,327 | 35,108 |
| Norway— | | | | | | |
| Unwrought platinum .. | 547 | 739 | 1,222 | 1,125 | 354 | 386 |
| Drawn or rolled .. | 932 | 2,508 | 1,800 | 1,543 | 1,222 | 997 |
| Portugal— | | | | | | |
| Sheets, wire, etc. .. | 100 | 4,611 | 1,022 | 16,306 | 3,589 | 1,096 |
| Spain— | | | | | | |
| Bars, sheets, wire, etc. . . | 1,134 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Switzerland— | | | | | | |
| Unwrought platinum .. | 49,866 | 28,003 | 37,809 | 65,293 | 87,256 | 73,111 |
| Yugoslavia— | | | | | | |
| Unwrought platinum .. | 13,343 | 13,310 | 21,863 | 19,355 | 52,780 | 17,073 |
| South Africa— | | | | | | |
| Platinum | 1,533 | 4,118 | 3,663 | 3,651 | 6,653 | 3,808 |
| Mexico— | | | | | | |
| Platinum | 133 | n.a. | 64 | 249 | 14 | n.a. |
| Palladium | 4,968 | n.a. | 5,222 | 5,621 | 3,980 | n.a. |
| United States— | | | | | | |
| Ore (a) | n.a. | n.a. | 63,622 | 102,121 | 54,943 | 130,274 |
| Grains and nuggets (a) .. | 35,916 | 58,297 | 86,700 | 41,798 | 64,777 | 67,560 |
| Sponge and scrap (a) (b) .. | n.a. | (c) 210,560 | 192,486 | 257,703 | 304,624 | 212,794 |
| Ingots, bars, sheets(a) (b) .. | 114,174 | 132,139 | 78,862 | 64,344 | 68,718 | 58,404 |
| Iridium | 6,571 | 8,060 | 12,319 | 11,401 | 17,461 | 10,207 |
| Osmium and osmiridium .. | 3,947 | 4,257 | | | | |
| Palladium | 445,913 | 507,745 | 855,522 | 613,669 | 1,067,595 | 249,389 |
| Rhodium and ruthenium .. | 66,089 | 47,693 | 72,507 | 100,433 | 61,987 | 52,976 |
| Brazil— | | | | | | |
| Unwrought platinum .. | — | 1,061 | 3 | — | 579 | n.a. |
| Colombia— | | | | | | |
| Unwrought platinum .. | 129 | 64 | 64 | n.a. | n.a. | n.a. |
| Uruguay— | | | | | | |
| Platinum metals .. | n.a. | 192 | n.a. | n.a. | n.a. | n.a. |
| Venezuela— | | | | | | |
| Unwrought platinum .. | 12,603 | 3,697 | 3,054 | 86,839 | 52,020 | 4,726 |
| Japan— | | | | | | |
| Platinum | 165,718 | 180,636 | 185,018 | 234,324 | 210,492 | 272,216 |
| Palladium | 168,287 | 260,524 | 379,787 | 354,701 | 600,098 | 491,678 |
| Rhodium | 4,127 | 4,325 | 6,123 | 9,177 | 9,103 | 8,514 |
| Iridium, etc. | 1,816 | 1,852 | 2,359 | 2,226 | 2,043 | 7,473 |
| Lebanon— | | | | | | |
| Unwrought platinum .. | 2,780 | 5,153 | 3,311 | 4,060 | 3,834 | 3,729 |
| Turkey— | | | | | | |
| Sheets | 96 | 32 | 772 | 8,713 | 64 | 289 |

(a) Platinum content.

(b) As recorded in official trade returns. According to the U.S. Bureau of Mines, however, these items have been re-classified as follows:

| | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------|---------|---------|---------|-------------|-------------|---------|
| Sponge and scrap .. (d) | 5,127 | (d) 4 | (d) 851 | (c) 257,703 | (c) 303,561 | n.a. |
| Platinum metal .. | 281,922 | 317,000 | 272,482 | 322,764 | 372,238 | 331,103 |

(c) Sponge only.

(d) Scrap only.

POTASH MINERALS
PRODUCTION OF POTASH

| Producing Country and Description | K ₂ O Content or Equivalent | | | | | | | | | Long tons | | |
|--|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|-------------|
| | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | 1964 | 1965 | 1966 | | 1967 | 1968 |
| COMMONWEALTH COUNTRIES | | | | | | | | | | | | |
| Canada— Potash salts | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 766,385 | 1,331,519 | 1,776,833 | 2,127,904 | 2,605,010 | 3,346,000 |
| OTHER COUNTRIES | | | | | | | | | | | | |
| France (b)— Sylvinite, 12-22% K ₂ O Fertilizer salts | | | | | | | 36,553 | 53,741 | 26,586 | 7,294 | 8,578 | } 1,907,000 |
| 30-40% K ₂ O.. Chloride | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 126,631 | 137,415 | 106,358 | 118,257 | 115,446 | |
| 50% K ₂ O and over Germany— Federal Republic— Kainite, sylvinite, etc. Eastern— Potash salts | | | | | | | 1,614,844 | 1,666,698 | 1,621,002 | 1,663,288 | 1,567,500 | |
| Italy— Crude potash salts .. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 1,828,000 | 1,896,000 | 1,974,000 | 2,171,000 | a2,200,000 | a2,264,000 |
| | 1,446,846 | 1,695,806 | 1,833,000 | 1,784,643 | 1,800,000 | 2,100,000 | 190,000 | 220,000 | 240,000 | a 246,000 | 246,000 | 276,000 |

(a) United States Bureau of Mines' estimate.

(b) Crude salts as mined. The K₂O content by salts relates to the marketable product only.

PRODUCTION OF POTASH (cont.)

Long tons

| Producing Country and Description | K ₂ O Content or Equivalent | | | | | | | | | | | |
|-----------------------------------|--|-------------|-------------|-------------|-----------|-----------|------------|------------|------------|------------|------------|------------|
| | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
| OTHER COUNTRIES | | | | | | | | | | | | |
| <i>(cont.)</i> | | | | | | | | | | | | |
| Spain— | | | | | | | | | | | | |
| Carnallite, sylvinite, etc. | r 2,621,703 | r 3,252,046 | r 3,750,112 | r 4,328,068 | 4,612,564 | 4,907,000 | r 287,881 | r 376,259 | r 411,211 | r 497,859 | 534,619 | 545,000 |
| U.S.R. (a)— | | | | | | n.a. | | | | | | |
| Potash salts | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 2,165,000 | 2,330,000 | 2,585,000 | 2,822,000 | 3,100,000 | 3,130,000 |
| United States— | | | | | | | | | | | | |
| Potash salts (b) | 4,423,000 | 4,822,000 | 5,090,000 | 5,044,000 | 4,258,000 | 4,391,000 | 2,586,600 | 2,804,000 | 2,964,000 | 2,946,000 | 2,430,000 | 2,585,000 |
| Chile— | | | | | | | | | | | | |
| Nitrate | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 13,300 | (a) 14,000 | (a) 14,500 | (a) 14,300 | n.a. | n.a. |
| Israel— | | | | | | | | | | | | |
| Chloride | d 314,700 | 473,000 | 500,000 | 484,000 | 590,000 | 539,000 | 190,000 | 288,000 | c 305,000 | 295,000 | 350,000 | 318,000 |
| World's Total (c) | | | | | | | 12,400,000 | 13,800,000 | 14,600,000 | 15,400,000 | 15,700,000 | 16,900,000 |

(a) United States Bureau of Mines' estimate.

(b) Marketable production.

(c) Estimated.

(d) Years ended March 31 of year following that stated.

EXPORTS OF POTASH SALTS

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|-----------|-----------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— Fertilizer Salts | 104 | 143 | 156 | 449 | 535 | 373 |
| Canada (c)— Fertilizer salts (K ₂ O content) | 570,312 | 878,175 | 1,496,584 | 1,789,736 | 2,431,671 | 2,339,885 |
| India (a)— Nitrate | 3 | 3 | 6 | — | 9 | 19 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Fertilizer salts | 25 | 317 | 2,337 | 12 | 8 | 68 |
| Carbonate | 2,560 | 2,284 | 1,624 | 1,872 | 1,792 | 483 |
| Chloride | 701,649 | 594,241 | (b) 326,962 | (b) 391,076 | (b) 356,741 | (b) 191,556 |
| Chlorates | 10 | — | n.a. | n.a. | n.a. | n.a. |
| Nitrate | 1 | 1 | — | — | — | 40 |
| Sulphate | 262,756 | 314,030 | (b) 142,018 | (b) 155,992 | (b) 151,276 | (b) 156,940 |
| France— | | | | | | |
| Sylvinite, etc. | 90,037 | 90,698 | 69,509 | 68,652 | 55,848 | 58,563 |
| Carbonate | 20,638 | 19,461 | 21,775 | 28,620 | 30,290 | 31,400 |
| Caustic potash | 11,774 | 9,926 | 91,161 | 10,244 | 9,412 | 8,618 |
| Chlorate | 1,268 | 1,351 | 1,442 | 1,385 | 1,500 | 1,648 |
| Chloride | 1,187,890 | 1,008,291 | 973,842 | 1,147,427 | 1,051,055 | 944,247 |
| Sulphate | 5,795 | 1,362 | 898 | 1,138 | 733 | 754 |
| Nitrate | 2,076 | 1,935 | 1,939 | 2,773 | 2,423 | 4,317 |
| Germany (Federal)— | | | | | | |
| Fertilizer salts | 1,542,227 | 1,970,886 | 1,572,209 | 1,326,785 | 993,066 | 1,562,088 |
| Carbonate | 10,039 | 10,184 | 13,026 | 12,570 | 14,611 | 15,269 |
| Caustic potash | 12,108 | 12,173 | 11,304 | 10,585 | 10,322 | 10,217 |
| Chlorate | 545 | 497 | 439 | 364 | 45 | 223 |
| Nitrate | 14,305 | 13,949 | 14,033 | 16,688 | 14,949 | 28,955 |
| Germany (East)— | | | | | | |
| Fertilizer salts | | | | | | |
| (K ₂ O content) | 1,199,000 | 1,271,000 | 1,352,000 | 1,516,000 | 1,476,000 | 1,629,000 |
| Carbonate | 9,508 | 10,095 | 9,245 | 8,511 | 9,236 | 8,253 |
| Caustic potash | 7,156 | 8,326 | 7,108 | 7,505 | 7,316 | 8,982 |
| Italy— | | | | | | |
| Nitrate | 80 | 999 | 2,476 | 1,504 | 1,690 | n.a. |
| Caustic potash | 2,631 | 1,969 | 2,390 | 41 | — | 20 |
| Sulphate | 85,029 | 111,622 | 117,966 | 123,678 | 25,440 | 101,784 |
| Netherlands— | | | | | | |
| Carbonate | 844 | 401 | 1,172 | 1,642 | 1,720 | 2,609 |
| Caustic potash | 37 | 44 | 32 | — | — | — |
| Chloride | 461 | 766 | 428 | 833 | 451 | 471 |
| Nitrate | 104 | 421 | 639 | 302 | 83 | 47 |
| Sulphate | 497 | 767 | 411 | 231 | 211 | 294 |
| Poland— | | | | | | |
| Caustic potash | 899 | 820 | 961 | 705 | 495 | n.a. |
| Chlorate | 900 | 785 | 1,080 | 680 | 473 | n.a. |
| Portugal— | | | | | | |
| Caustic potash | 336 | 5 | 46 | 91 | 335 | 450 |
| Chloride | 253 | 249 | 272 | 422 | 306 | 579 |
| Sulphate | 255 | 1,192 | 643 | 641 | 127 | 364 |
| Spain— | | | | | | |
| Chloride | 305,150 | 388,981 | 438,121 | 502,491 | 634,711 | 506,222 |
| Nitrate | 990 | 951 | 709 | 883 | 1,268 | 1,644 |
| Sulphate | 12,012 | 7,352 | 7,332 | 15,856 | 23,380 | 21,229 |

(a) Years ended March 31 following that stated.

 (b) K₂O content.

(c) Years ended June 30th of that stated.

EXPORTS OF POTASH SALTS (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-----------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Sweden— | | | | | | |
| Carbonate | — | — | — | — | 24 | 88 |
| Caustic potash | 2,770 | 2,794 | 2,651 | 3,068 | 2,528 | 2,771 |
| S.S.R.— | | | | | | |
| Fertilizer salts | 742,300 | 812,500 | 1,072,000 | 1,343,737 | 1,694,300 | 1,651,900 |
| United States— | | | | | | |
| Chloride | 821,407 | 815,661 | 761,692 | 899,044 | 956,412 | 933,340 |
| Other fertilizer salts | 95,062 | 123,897 | 129,129 | 100,199 | 206,637 | 176,138 |
| Caustic potash | 5,233 | 5,040 | 3,442 | 5,289 | 4,132 | 2,567 |
| Other compounds | 14,017 | 36,289 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Chile— | | | | | | |
| Nitrate | <i>n.a.</i> | 96,221 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Israel— | | | | | | |
| Fertilizer salts | <i>n.a.</i> | (a) 6,542 | (b) 654 | 2,041 | (b) 1,404 | 3,779 |
| Japan— | | | | | | |
| Chlorate | 971 | 1,070 | 939 | 739 | 704 | 1,054 |
| Chloride | 10,005 | 11,276 | 3,121 | 3,945 | 8,048 | 8,071 |
| Sulphate | 297 | 5,973 | 2,101 | 7,196 | 6,231 | 3,601 |
| Caustic potash | 52 | 397 | 297 | 1,141 | 5,853 | 903 |
| Other fertilizer salts | 10 | 63 | — | 868 | 677 | 225 |

(a) Potassium sulphate only.

(b) Potassium carbonate only.

IMPORTS OF POTASH SALTS

Long ton

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|---------|---------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Fertilizer salts | 37,025 | 37,645 | 35,584 | 42,438 | 36,020 | 35,944 |
| Carbonate | 8,374 | 7,921 | 8,951 | 10,392 | 10,483 | 11,743 |
| Caustic potash and lyes | 2,327 | 2,027 | 2,482 | 2,122 | 2,300 | 2,068 |
| Chloride | 660,597 | 677,779 | 630,370 | 716,653 | 751,267 | 690,067 |
| Nitrate | 3,029 | 3,026 | 4,004 | 3,965 | <i>n.a.</i> | <i>n.a.</i> |
| Sulphate | 33,636 | 32,952 | 37,704 | 35,658 | 40,047 | 40,791 |
| Other compounds | 6,983 | 2,912 | 6,640 | 2,523 | 3,742 | 2,770 |
| Ghana— | | | | | | |
| Fertilizer salts | 1,301 | 263 | 279 | 4 | 208 | 225 |
| Kenya— | | | | | | |
| Fertilizer salts | 155 | 276 | 828 | 759 | 2,131 | 2,401 |
| Mauritius— | | | | | | |
| Fertilizer salts | 12,988 | 7,912 | 8,490 | 9,468 | 4,499 | 5,954 |
| Nigeria— | | | | | | |
| Fertilizer salts | 835 | 3,222 | 1,728 | 2,185 | 195 | 457 |
| Rhodesia— | | | | | | |
| Fertilizer salts | 37,342 | 29,013 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Compounds | 220 | 177 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sierra Leone— | | | | | | |
| Fertilizer compounds .. | 5 | — | 25 | 50 | 58 | <i>n.a.</i> |
| Tanzania— | | | | | | |
| Fertilizer salts | 898 | 1,344 | 1,336 | 1,441 | 1,426 | 1,658 |
| Uganda— | | | | | | |
| Fertilizer salts | 1,685 | 367 | 623 | 1,455 | 3,600 | 2,565 |
| Canada— | | | | | | |
| Caustic potash | 1,629 | 1,620 | 1,472 | 1,504 | 1,713 | 1,351 |
| Carbonate | 588 | 504 | 704 | 619 | 674 | 894 |
| Crude chloride | 59,855 | 48,047 | 25,130 | 24,482 | 21,382 | 14,627 |
| Nitrate | 789 | 1,308 | 1,443 | 1,517 | 2,384 | 3,425 |
| Crude sulphate | 17,463 | 16,601 | 22,639 | 27,030 | 22,271 | 27,745 |
| Other potassic fertilizers | 5,538 | 8,081 | 10,545 | 19,145 | 17,977 | 22,834 |
| Barbados— | | | | | | |
| Fertilizer salts | 7,763 | 3,122 | 4,475 | 4,164 | 4,011 | 3,010 |
| Grenada— | | | | | | |
| Fertilizer salts | 81 | 30 | 370 | 43 | 25 | <i>n.a.</i> |
| Jamaica— | | | | | | |
| Fertilizer salts | 10,151 | 6,639 | 8,032 | 10,243 | 11,580 | 13,763 |
| St. Kitts— | | | | | | |
| Potassic fertilizers .. | 985 | 1,001 | 1,010 | 547 | 852 | <i>n.a.</i> |
| St. Lucia— | | | | | | |
| Potassic fertilizers .. | 745 | 455 | 120 | 2,995 | 805 | <i>n.a.</i> |
| St. Vincent— | | | | | | |
| Chloride | 15 | 912 | 1,881 | 1,295 | 2,352 | <i>n.a.</i> |
| Trinidad and Tobago— | | | | | | |
| Chloride and sulphate .. | 2,668 | 3,175 | 1,491 | 1,560 | 2,670 | 4,212 |
| Guyana— | | | | | | |
| Fertilizer salts | 2,005 | 1,235 | 2,022 | 2,771 | 2,977 | 3,208 |
| Ceylon— | | | | | | |
| Kainite and sylvinite .. | 382 | — | — | — | — | 25 |
| Chloride | 47,879 | 57,050 | 53,896 | 50,550 | 55,096 | <i>n.a.</i> |
| Nitrate of potash refuse | 22 | — | 20 | — | — | <i>n.a.</i> |
| Sulphate | 2,135 | 428 | 2,270 | 295 | 263 | <i>n.a.</i> |
| Cyprus— | | | | | | |
| Fertilizer salts | 273 | 494 | 370 | 292 | 583 | 896 |
| Hong Kong— | | | | | | |
| Nitrate | 423 | 404 | 341 | 634 | 742 | 609 |
| Chlorate | 66 | 88 | 170 | (a) 80 | 65 | 55 |
| Other fertilizer salts .. | 18 | 16 | 57 | 27 | 13 | 34 |

(a) Excess of re-exports

IMPORTS OF POTASH SALTS (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|-----------|-----------|-------------|------------|------------|------------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| India (a)— | | | | | | |
| Carbonate | 1,224 | 1,086 | 1,270 | 1,912 | 893 | 378 |
| Caustic potash | 3,649 | 2,910 | 2,557 | 2,869 | 951 | 171 |
| Nitrate | 2 | — | 5 | — | — | — |
| Sulphate | 10,538 | 6,379 | 23,629 | 13,277 | 49,824 | 5,067 |
| Chlorate | — | 11 | 172 | — | — | 84 |
| Chloride | 75,315 | 123,224 | 147,481 | 314,851 | 235,234 | 135,421 |
| Malaysia (West)— | | | | | | |
| Fertilizer salts | n.a. | 32,651 | 45,796 | 55,434 | 53,215 | 73,021 |
| Pakistan— | | | | | | |
| Chlorate | 1,157 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Other compounds | 176 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Sabah— | | | | | | |
| Fertilizer salts | 657 | 353 | 567 | 1,172 | 2,252 | 2,562 |
| Sarawak— | | | | | | |
| Fertilizer salts | 898 | 1,434 | 1,065 | 1,450 | 770 | n.a. |
| Australia (c)— | | | | | | |
| Carbonate | 993 | 1,223 | 1,153 | 1,217 | 1,011 | 1,610 |
| Caustic potash | 1,099 | 1,426 | 1,148 | 1,340 | 1,503 | 1,061 |
| Chloride | 84,864 | 101,098 | 82,411 | 110,970 | 114,438 | 118,554 |
| Nitrate | 403 | 470 | 421 | 1,602 | 603 | 368 |
| Sulphate | 11,361 | 7,926 | 11,152 | 8,168 | 15,467 | 12,981 |
| Other fertilizer salts | n.a. | n.a. | 14,570 | 760 | 220 | 3,397 |
| Other compounds | 319 | 480 | 312 | 389 | 392 | 657 |
| New Zealand (c)— | | | | | | |
| Chloride | 96,862 | 143,223 | 172,249 | 152,637 | 115,340 | 127,210 |
| Nitrate | 166 | 184 | 185 | 517 | 230 | n.a. |
| Sulphate | 3,673 | 4,503 | 4,046 | 2,996 | 2,997 | 4,116 |
| Other fertilizer salts | 27,091 | 3,060 | 1,063 | 336 | 247 | 118 |
| Compounds other than fertilizer | 178 | 144 | 227 | 147 | 118 | n.a. |
| British Republic— | | | | | | |
| Fertilizer salts | 4,548 | 10,022 | 9,592 | 7,303 | 10,897 | 6,923 |
| Chloride | 154,772 | 147,820 | 148,190 | 190,283 | 218,887 | 182,983 |
| Other compounds | 192 | 244 | 241 | 250 | 329 | 454 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Fertilizer salts | 231,337 | 208,586 | 156,568 | 121,427 | 83,176 | 77,619 |
| Caustic potash | 418 | 378 | 415 | 444 | 443 | 510 |
| Carbonate | 1,050 | 816 | 962 | 895 | 809 | 1,278 |
| Chloride | 59,607 | 65,093 | 134,137 | 165,844 | 201,802 | 193,302 |
| Nitrate | 385 | 507 | 547 | 487 | 499 | 640 |
| Sulphate | 11,808 | 25,750 | 17,486 | 25,863 | 24,379 | 21,138 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Fertilizer salts | 78,293 | 85,284 | (d) 13,506 | (d) 13,302 | (d) 13,359 | (d) 14,713 |
| Carbonate | 974 | 1,263 | 1,521 | 1,179 | 4,179 | 4,124 |
| Chlorates | 522 | 470 | 409 | 401 | 584 | 471 |
| Chloride | 1,257,902 | 1,297,205 | (d) 679,322 | 686,065 | 709,388 | 622,216 |
| Nitrate | 2,809 | 2,607 | 2,519 | 2,614 | 2,433 | 1,873 |
| Sulphate (b) | 18,545 | 26,725 | (d) 7,259 | (d) 8,368 | (d) 13,483 | (d) 4,217 |
| Czechoslovakia— | | | | | | |
| Fertilizer salts (K_2O content) | 343,000 | 353,000 | 397,000 | 381,000 | 474,000 | 451,000 |

(a) Years ended March 31 following that stated.

(b) Including patent potash.

(c) Years ended June 30 of that stated

 (d) K_2O content.

IMPORTS OF POTASH SALTS (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|---------|---------|---------|---------|-----------|---------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Denmark— | | | | | | |
| Carbonate | 393 | 369 | 399 | 423 | 356 | 249 |
| Caustic potash | 1,106 | 997 | 1,064 | 1,094 | 1,381 | 1,188 |
| Chlorate | 110 | 108 | 117 | 106 | 145 | 122 |
| Chloride | 278,982 | 275,469 | 217,250 | 236,188 | 191,242 | 217,024 |
| Nitrate | 1,335 | 1,295 | 1,314 | 1,477 | 1,410 | 1,399 |
| Sulphate | 2,696 | 1,363 | 1,134 | 5,226 | 11,231 | 12,824 |
| Finland— | | | | | | |
| Fertilizer salts | 133,249 | 204,223 | 171,881 | 161,835 | 189,827 | 173,592 |
| Carbonate | 427 | 474 | 780 | 447 | 1,056 | 765 |
| Caustic potash | 266 | 274 | 275 | 298 | 264 | 250 |
| Nitrate | 528 | 552 | 461 | 278 | 926 | 551 |
| Sulphate | 9,725 | 16,139 | 13,968 | 16,328 | 9,303 | 11,273 |
| France— | | | | | | |
| Chloride | 69 | 4,658 | 18,866 | 35,214 | 201,762 | 120,848 |
| Sulphate | 55,622 | 60,392 | 34,315 | 51,167 | 53,022 | 57,438 |
| Caustic potash | 141 | 122 | 105 | 107 | 176 | 63 |
| Patent potash | 7,509 | 6,590 | 7,852 | 7,814 | 9,241 | 10,566 |
| Germany (Federal)— | | | | | | |
| Fertilizer salts | 47,437 | 48,408 | 37,160 | 81,580 | 47,636 | 85,472 |
| Carbonate | 5,273 | 5,594 | 4,681 | 3,249 | 3,417 | 3,391 |
| Caustic potash | 2,526 | 3,959 | 9,192 | 5,708 | 6,497 | 7,338 |
| Chlorate | 589 | 596 | 535 | 491 | 626 | 975 |
| Nitrate | 2,202 | 3,019 | 4,577 | 4,235 | 4,387 | 3,860 |
| Greece— | | | | | | |
| Carbonate | 1,071 | 1,052 | 3,102 | 1,800 | 2,070 | 856 |
| Caustic potash | 32 | 64 | 103 | 185 | 68 | 65 |
| Nitrate | 104 | 167 | 79 | 91 | 124 | 101 |
| Sulphate | 19,230 | 36,372 | 27,917 | 12,991 | 19,137 | 30,852 |
| Hungary— | | | | | | |
| Fertilizer salts | 200,103 | 196,000 | 281,000 | 330,693 | 380,888 | 450,180 |
| Iceland— | | | | | | |
| Fertilizer salts | 8,030 | 11,081 | 9,031 | 7,240 | 7,709 | 5,590 |
| Carbonate | 88 | 83 | 80 | 59 | 72 | 372 |
| Caustic potash | 71 | 59 | 26 | 30 | 6 | 99 |
| Italy— | | | | | | |
| Fertilizer salts | 39,822 | 35,765 | 40,986 | 44,052 | 50,497 | 47,019 |
| Carbonate | 3,202 | 4,199 | 5,652 | 5,380 | 6,529 | 6,278 |
| Caustic potash | 707 | 577 | 322 | 329 | 264 | 377 |
| Chloride | 167,962 | 157,903 | 215,912 | 197,718 | 204,006 | 174,962 |
| Nitrate | 2,081 | 1,501 | 1,523 | 1,744 | 1,846 | 2,322 |
| Sulphate | 9,878 | 5,802 | 3,965 | 4,602 | 3,862 | 5,095 |
| Netherlands— | | | | | | |
| Kainite | 40,753 | 40,058 | n.a. | n.a. | n.a. | n.a. |
| Fertilizer salts | | | | | | |
| (20% K ₂ O) | 37,948 | 45,570 | n.a. | n.a. | n.a. | n.a. |
| do. (40% K ₂ O) | 159,654 | 161,684 | n.a. | n.a. | n.a. | n.a. |
| Carbonate | 6,576 | 7,019 | 8,205 | 8,927 | 9,324 | 9,704 |
| Caustic potash | 55,689 | 60,622 | 75,575 | n.a. | n.a. | n.a. |
| Chloride | 123,585 | 128,540 | 126,542 | 98,641 | 123,460 | 124,242 |
| Nitrate | 2,914 | 3,146 | 3,282 | 3,680 | 3,339 | 4,415 |
| Sulphate | 66,567 | 72,007 | 47,896 | 39,809 | 36,219 | 38,797 |
| Patent potash | 45,857 | 42,257 | 10,452 | 12,725 | 10,652 | 10,656 |
| Norway— | | | | | | |
| Fertilizer salts | 295 | 352 | 226 | 258 | (a) 1,975 | 285 |
| Carbonate | 336 | 332 | 300 | 308 | 325 | 286 |
| Caustic potash | 1,325 | 1,301 | 1,211 | 1,196 | 966 | 899 |
| Chlorate | 126 | 142 | 145 | 168 | 104 | 151 |
| Chloride | 111,246 | 116,061 | 144,809 | 174,593 | 131,049 | 138,482 |
| Nitrate | 164 | 240 | 234 | 343 | 136 | 213 |
| Sulphate | 10,068 | 6,240 | 10,177 | 448 | 57,723 | 60,589 |

(a) Owing to reclassification not strictly comparable with earlier years.

IMPORTS OF POTASH SALTS (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-----------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Poland— | | | | | | |
| Fertilizer salts (b) .. | 970,500 | 1,253,000 | 1,519,000 | 1,673,000 | 1,768,000 | 1,867,000 |
| Carbonate | 2,030 | 5,342 | 3,199 | 2,945 | 3,246 | 5,830 |
| Portugal— | | | | | | |
| Carbonate | 170 | 84 | 104 | 264 | 486 | 388 |
| Caustic potash | 320 | 295 | 280 | 166 | 204 | 182 |
| Chlorate | 195 | 220 | 250 | 221 | 268 | 308 |
| Chloride | 21,975 | 30,767 | 22,723 | 27,460 | 23,825 | 29,149 |
| Nitrate | 286 | 430 | 457 | 394 | 427 | 436 |
| Sulphate | 2,177 | 2,581 | 15 | 2,335 | 2,787 | 2,936 |
| Roumania— | | | | | | |
| Fertilizer salts (a) .. | 8,700 | 13,100 | 21,700 | 14,566 | 10,925 | 33,168 |
| Sweden— | | | | | | |
| Fertilizer salts | | | | | | |
| (40% K ₂ O) | | | | | | |
| do. (other) | 838 | 503 | 449 | 467 | 786 | 456 |
| Carbonate | 1,012 | 962 | 1,165 | 1,026 | 1,036 | 1,238 |
| Caustic potash | 299 | 758 | 245 | 238 | 85 | 100 |
| Chloride | 144,780 | 171,941 | 142,348 | 178,541 | 179,820 | 196,879 |
| Nitrate | 1,122 | 1,206 | 1,636 | 1,213 | 1,441 | 1,580 |
| Sulphate | 29,660 | 19,095 | 24,714 | 33,029 | 37,288 | 37,725 |
| Switzerland— | | | | | | |
| Fertilizer salts | 108,571 | 116,106 | 101,781 | 96,671 | 103,598 | 106,759 |
| Carbonate | 2,520 | 2,505 | 2,053 | 2,319 | 1,771 | 1,693 |
| Caustic potash | 1,705 | 1,494 | 1,098 | 1,382 | 1,145 | 1,698 |
| Nitrate | 880 | 743 | 788 | 747 | 574 | <i>n.a.</i> |
| Sulphate | 921 | 866 | 691 | 695 | 694 | 947 |
| U.S.S.R.— | | | | | | |
| Caustic potash | 7,200 | 9,400 | 5,800 | 7,000 | 6,100 | 7,086 |
| Yugoslavia— | | | | | | |
| Fertilizer salts | 370,326 | 152,888 | 299,705 | 165,745 | 72,917 | 23,394 |
| Caustic potash | 746 | 635 | 712 | 604 | 995 | 2,074 |
| Chlorate | <i>n.a.</i> | 310 | 522 | 399 | 337 | 295 |
| Chloride | 17,000 | 16,922 | <i>n.a.</i> | <i>n.a.</i> | 108,598 | 169,070 |
| Sulphate | 2,011 | 4,408 | 5,034 | 6,940 | 6,731 | 3,730 |
| Angola— | | | | | | |
| Chloride | 865 | 343 | 462 | 394 | 235 | 491 |
| Sulphate | 103 | 1,113 | 657 | 1,168 | 631 | 1,047 |
| Cameroun— | | | | | | |
| Fertilizer salts | 4,049 | 7,013 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Canary Islands— | | | | | | |
| Fertilizer salts | — | 1,154 | 1,229 | 1,259 | 1,117 | 467 |
| Central African Republic— | | | | | | |
| Potassic fertilizers .. | 124 | — | — | 640 | 204 | 555 |
| Congo, Republic of— | | | | | | |
| Fertilizer salts | 2,395 | 705 | 6,685 | 146 | 2,576 | 3,914 |
| Malagasy Republic— | | | | | | |
| Fertilizer salts | 518 | 2,255 | 2,173 | 3,040 | 4,759 | 5,108 |
| Morocco— | | | | | | |
| Chloride | 4,264 | 4,193 | 6,284 | 13,448 | 18,750 | 8,569 |
| Sulphate | 6,639 | 10,127 | 8,230 | 14,408 | 17,078 | 17,394 |
| Reunion— | | | | | | |
| Fertilizer salts | 2,416 | 1,622 | 875 | 692 | 522 | 175 |
| South Africa— | | | | | | |
| Fertilizer salts | 121,361 | 77,627 | 68,089 | 159,504 | 135,292 | 124,219 |
| Caustic potash | 421 | 452 | 592 | 506 | 624 | 538 |
| Other compounds | <i>n.a.</i> | 609 | 65,577 | 52,363 | 33,804 | 27,352 |
| Sudan— | | | | | | |
| Caustic potash | 75 | 1 | 21 | 1 | 177 | 621 |

 (a) K₂O content.

(b) Including chloride and sulphates.

IMPORTS OF POTASH SALTS (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-----------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Tunisia— | | | | | | |
| Fertilizer salts | 6,411 | 1,722 | 3,491 | 3,424 | 3,307 | 6,728 |
| Caustic potash | 3,841 | 113 | 36 | 20 | 8 | — |
| Costa Rica— | | | | | | |
| Fertilizer salts | 2,732 | 11,140 | 13,293 | 18,731 | 22,589 | 24,737 |
| Cuba— | | | | | | |
| Caustic potash | 2,156 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Potassium chloride | 55,816 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Potassium sulphate | 8,273 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| French West Indies— | | | | | | |
| Guadeloupe— | | | | | | |
| Fertilizer salts | 3,409 | 373 | 122 | 84 | 113 | 145 |
| Martinique— | | | | | | |
| Fertilizer salts | 4,624 | 3,708 | 3,296 | 3,773 | 3,110 | 1,765 |
| Guatemala— | | | | | | |
| Fertilizer salts | 824 | 25,945 | 860 | 901 | 238 | 101 |
| Honduras— | | | | | | |
| Fertilizer salts | 5,896 | 6,166 | 7,726 | 9,710 | 6,055 | <i>n.a.</i> |
| Mexico— | | | | | | |
| Carbonate | 429 | 608 | 760 | 753 | 1,226 | <i>n.a.</i> |
| Chloride | 26,961 | 30,977 | 40,131 | 37,408 | 49,051 | <i>n.a.</i> |
| Caustic potash | 710 | 531 | 945 | 1,047 | 2,127 | <i>n.a.</i> |
| Sulphate | 12 | 6,485 | 7,173 | 99 | 10,498 | <i>n.a.</i> |
| Nicaragua— | | | | | | |
| Fertilizer salts | 759 | 4,369 | 2,591 | 1,456 | 2,381 | 16,625 |
| Panama Republic— | | | | | | |
| Fertilizer salts | 501 | 1,023 | 161 | 597 | <i>n.a.</i> | <i>n.a.</i> |
| Salvador— | | | | | | |
| Fertilizer salts | 431 | 3,832 | 3,943 | 3,131 | 1,795 | 3,241 |
| United States— | | | | | | |
| Carbonate | 425 | 55 | 1,279 | r 4,073 | 393 | — |
| Caustic potash | 824 | 868 | 1,945 | r 1,006 | 1,133 | 1,628 |
| Chlorates | 681 | 511 | r 572 | r 347 | 416 | 277 |
| Chloride | 1,067,604 | 1,589,537 | 2,131,447 | 2,420,179 | 3,175,555 | 3,418,952 |
| Cyanide | 942 | 988 | 1,040 | 915 | 803 | 924 |
| Nitrate | 5,294 | 4,377 | 24,617 | 13,799 | 14,287 | 10,102 |
| Potassium-sodium | | | | | | |
| nitrate mixtures | 12,052 | 6,615 | 35,804 | 40,022 | 25,403 | 32,665 |
| Sulphate | 60,029 | 47,619 | 51,631 | 54,424 | 38,900 | 44,042 |
| Argentina— | | | | | | |
| Carbonate | 649 | 419 | 493 | 589 | 643 | 440 |
| Caustic potash | 3,330 | 1,059 | 855 | 1,268 | 743 | 764 |
| Chlorate | 404 | 92 | 386 | 573 | 493 | 738 |
| Nitrate | 15 | — | — | 57 | 6 | 10 |
| Sulphate | 493 | 49 | 344 | 1,407 | 2,751 | 2,448 |
| Brazil— | | | | | | |
| Caustic potash | 733 | 577 | 1,388 | 976 | 846 | <i>n.a.</i> |
| Nitrate | 750 | 894 | 739 | 442 | 353 | <i>n.a.</i> |
| Nitrate of potash and | | | | | | |
| soda | 7,171 | 21,296 | 18,411 | 9,562 | 6,240 | <i>n.a.</i> |
| Chloride | 108,759 | 152,903 | 141,816 | 218,005 | 291,753 | <i>n.a.</i> |
| Sulphate | 4,218 | 5,996 | 8,238 | 5,006 | 10,012 | <i>n.a.</i> |
| Carbonate | 455 | 446 | 1,532 | 1,417 | 1,857 | <i>n.a.</i> |
| Chlorate | — | — | — | 9 | — | <i>n.a.</i> |
| Chile— | | | | | | |
| Caustic potash | 217 | 179 | <i>n.a.</i> | 128 | <i>n.a.</i> | <i>n.a.</i> |
| Chlorate | 105 | 14,394 | <i>n.a.</i> | 85 | <i>n.a.</i> | <i>n.a.</i> |
| Chloride | 978 | 1,153 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sulphate | 9,077 | 1,829 | <i>n.a.</i> | 5,660 | <i>n.a.</i> | <i>n.a.</i> |
| Other fertilizer salts | 779 | 1,675 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |

IMPORTS OF POTASH SALTS (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Colombia— | | | | | | |
| Chlorate | 280 | 194 | 265 | 376 | 289 | <i>n.a.</i> |
| Chloride | 38,432 | 30,968 | 30,307 | 41,816 | 51,891 | <i>n.a.</i> |
| Nitrate | 196 | 87 | 498 | 208 | 192 | <i>n.a.</i> |
| Sulphate | 4,361 | 5,076 | 17,465 | 4,332 | 6,439 | <i>n.a.</i> |
| Other fertilizer salts .. | — | 4,515 | 196 | 93 | 144 | <i>n.a.</i> |
| Peru— | | | | | | |
| Fertilizer salts | 1,780 | 9,830 | 2,379 | 7,554 | 3,662 | <i>n.a.</i> |
| Nitrate | 95 | 156 | 141 | 200 | 163 | <i>n.a.</i> |
| Carbonate | 20 | 32 | 45 | 55 | 51 | <i>n.a.</i> |
| Chloride | 96 | 60 | 2,036 | 70 | 3,182 | <i>n.a.</i> |
| Caustic potash | 28 | 21 | 31 | 20 | 41 | <i>n.a.</i> |
| Uruguay— | | | | | | |
| Nitrate | <i>n.a.</i> | 7 | 11 | 31 | 15 | 5 |
| Caustic potash | <i>n.a.</i> | 49 | 153 | 114 | 153 | 50 |
| Venezuela— | | | | | | |
| Carbonate | 47 | 46 | 65 | 50 | 61 | 34 |
| Chlorate | 239 | 247 | 260 | 258 | 157 | 218 |
| Chloride | 4,905 | 5,020 | 10,629 | 12,303 | 17,920 | 11,899 |
| Nitrate | 177 | 140 | 414 | 3,562 | 1,961 | 1,800 |
| Sulphate | 7,698 | 19,438 | 4,948 | 9,159 | 3,941 | 5,417 |
| Burma— | | | | | | |
| Fertilizer salts | 351 | — | — | 246 | 79 | <i>n.a.</i> |
| Formosa— | | | | | | |
| Fertilizer salts | 92,990 | 88,844 | 31,259 | 93,561 | 109,414 | 132,539 |
| Iran (a)— | | | | | | |
| Fertilizer salts | 689 | — | — | — | 295 | <i>n.a.</i> |
| Iraq— | | | | | | |
| Fertilizer salts | 311 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 49 |
| Japan— | | | | | | |
| Fertilizer salts | 16,513 | 19,203 | 15,000 | 23,559 | 22,307 | 23,377 |
| Chloride | 976,434 | 961,080 | 1,068,942 | 1,116,138 | 1,213,355 | 1,234,121 |
| Sulphate | 65,531 | 86,093 | 82,021 | 57,328 | 65,586 | 86,769 |
| Jordan— | | | | | | |
| Fertilizer salts | 4,016 | 6,149 | 6,926 | 1,814 | 862 | 844 |
| Korea (South)— | | | | | | |
| Chloride | 44,883 | 55,516 | 20,612 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Other fertilizer salts .. | 9,879 | 39,856 | 310,379 | 28,448 | 67,381 | 220,373 |
| Lebanon— | | | | | | |
| Fertilizer salts | 4,596 | 2,097 | 5,554 | 7,461 | 7,892 | 5,422 |
| Philippine Republic— | | | | | | |
| Nitrate | 218 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sulphate | 1,105 | 2,982 | <i>n.a.</i> | 8,641 | <i>n.a.</i> | <i>n.a.</i> |
| Other fertilizer salts .. | 37,656 | 48,226 | <i>n.a.</i> | 58,488 | <i>n.a.</i> | <i>n.a.</i> |
| Thailand— | | | | | | |
| Chlorate | 187 | 254 | 455 | 63 | 245 | 314 |
| Chloride | 984 | 127 | 40 | 498 | 485 | <i>n.a.</i> |
| Nitrate | 855 | 866 | 1,198 | 976 | 1,334 | 1,315 |
| Sulphate | 787 | 2,037 | 250 | 984 | 837 | 2,362 |
| Turkey— | | | | | | |
| Carbonate | 706 | 1,108 | 1,583 | 1,903 | 2,148 | 922 |
| Caustic potash | 355 | 467 | 429 | 1,742 | 708 | 272 |
| Chlorates | 156 | 434 | 442 | 150 | 346 | 511 |
| Nitrate | 211 | 267 | 587 | 322 | 316 | 167 |
| Sulphate | 541 | 6,112 | 3,122 | 2,155 | 540 | 1,277 |

(a) Years ended March 20 of year following that stated.

PYRITES
PRODUCTION OF PYRITES
 (see also Sulphur)
 (including Cupreous Pyrites)

| Producing Country | Estimated Sulphur Content | | | | | | Long tons |
|-------------------------------|---------------------------|-----------|-------------|-----------|-----------|-----------|-----------|
| | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | |
| COMMONWEALTH COUNTRIES | | | | | | | |
| Rhodesia .. | 81,129 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Canada (c) .. | 314,152 | 341,229 | 291,923 | 337,447 | 288,779 | 139,104 | 142,732 |
| Cyprus (a) .. | 673,786 | 977,829 | r 1,012,140 | 1,039,277 | 907,246 | 486,000 | 435,000 |
| India .. | — | — | — | — | 15,187 | — | n.a. |
| Australia (b) .. | 220,078 | 204,011 | 245,998 | 252,748 | 117,739 | 111,202 | 51,310 |
| TOTAL .. | 1,300,000 | 1,600,000 | 1,600,000 | 1,700,000 | 1,500,000 | 1,400,000 | |
| OTHER COUNTRIES | | | | | | | |
| Bulgaria (b) .. | 144,530 | 150,501 | 144,170 | r 161,500 | 161,500 | 61,000 | 71,000 |
| Czechoslovakia (b) .. | 355,000 | 369,000 | 346,000 | 370,000 | 374,000 | 140,000 | 154,000 |
| Finland (b) .. | 542,517 | 576,184 | 500,000 | 700,000 | 760,000 | 260,000 | 370,000 |
| France (d) .. | 188,319 | 132,239 | 86,685 | 84,032 | 80,505 | 55,887 | 34,400 |
| Germany (Federal) .. | 419,081 | 438,984 | 444,015 | 548,309 | 607,580 | 176,843 | 246,000 |
| Germany (East) .. | n.a. | n.a. | n.a. | n.a. | n.a. | 41,000 | 57,000 |
| Greece .. | 113,141 | 102,171 | 157,624 | r 162,353 | 207,898 | 43,000 | 53,000 |
| Italy .. | 1,373,815 | 1,378,652 | 1,283,846 | 1,388,759 | 1,451,396 | 53,000 | 77,000 |
| Norway .. | 708,040 | 697,675 | 666,798 | 626,805 | 681,647 | 640,000 | 609,000 |
| Poland .. | 230,000 | n.a. | n.a. | n.a. | n.a. | 317,000 | 282,179 |
| Portugal .. | 597,808 | 606,657 | 549,043 | 519,683 | 552,421 | 87,000 | 80,000 |
| Roumania .. | 403,000 | n.a. | n.a. | n.a. | n.a. | 274,991 | 239,054 |
| | | | | | | 160,000 | 249,694 |
| | | | | | | n.a. | n.a. |

(a) Saleable.

(b) Pyrite concentrate.

(c) Producers shipments of pyrites produced as a by-product in the treatment of copper and copper-zinc ores.

(d) In addition the sulphur content of mispickel and auriferous pyrites was as follows (long tons): 1964—8,033; 1965—9,664; 1966—9,182;

1967—8,635; 1968—7,015; 1969—n.a.

PRODUCTION OF PYRITES (cont.)

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | Estimated Sulphur Content | | | | 1969 | |
|-----------------------------------|------------|------------|-------------|-------------|------------|------------|---------------------------|-----------|-------------|-----------|-----------|-----------|
| | | | | | | | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
| OTHER COUNTRIES (cont.) | | | | | | | | | | | | |
| Spain .. | 2,355,423 | 2,386,100 | r 2,432,886 | r 2,290,760 | 2,406,605 | 2,433,844 | 1,117,000 | 1,131,000 | r 1,146,000 | 1,086,000 | 1,144,000 | 1,131,000 |
| Sweden .. | 445,239 | 434,363 | 426,747 | 474,900 | 467,000 | 487,380 | 227,524 | 221,475 | 218,106 | 242,210 | 236,000 | 246,420 |
| U.S.S.R. (c) .. | 3,149,000 | 3,250,000 | 3,250,000 | 3,450,000 | 3,450,000 | 3,450,000 | 1,673,000 | 1,720,000 | 1,720,000 | 1,820,000 | 1,821,000 | 1,821,000 |
| Yugoslavia (a) .. | 421,000 | 401,000 | 372,000 | 418,000 | 270,000 | 268,000 | 168,000 | 160,000 | 149,000 | 175,000 | 113,000 | 113,000 |
| Algeria .. | 59,994 | 55,978 | 40,729 | 33,836 | 45,446 | 45,039 | 28,000 | 26,000 | 19,000 | 15,000 | 21,000 | 21,000 |
| Morocco .. | 20,885 | 18,029 | 14,661 | — | — | — | 6,000 | 5,000 | 4,000 | — | — | — |
| South Africa .. | 425,647 | 421,532 | 473,587 | e 854,943 | 763,108 | e 824,107 | 164,000 | 158,000 | 179,000 | 400,000 | 267,000 | 256,000 |
| United States (b) .. | 847,493 | 874,957 | 872,414 | 860,909 | 872,000 | 860,000 | 353,831 | 353,645 | 355,512 | 355,033 | 362,000 | 355,000 |
| China (c) .. | 1,279,000 | 1,480,000 | 1,480,000 | 1,480,000 | 1,480,000 | 1,800,000 | 575,000 | 665,000 | 665,000 | 665,000 | 669,000 | 803,000 |
| Formosa .. | 45,592 | 38,640 | 41,342 | 38,085 | 38,365 | 37,684 | 17,100 | 14,500 | 15,500 | 14,300 | 14,400 | 14,100 |
| Japan (d) .. | 2,728,646 | 2,925,000 | 3,062,000 | 2,968,129 | 2,950,000 | 2,900,000 | 1,261,439 | 1,350,000 | 1,409,000 | 1,363,527 | 1,357,000 | 1,350,000 |
| Korea (South) .. | 59 | 168 | 21,834 | 3,571 | n.a. | n.a. | 27 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Korea (North) (c) .. | 415,000 | 445,000 | 445,000 | 492,000 | 492,000 | 492,000 | 167,000 | 177,000 | 177,000 | 190,000 | 197,000 | 197,000 |
| Philippine Republic .. | 43,218 | 103,630 | 113,000 | 143,910 | 179,281 | 94,480 | 20,000 | 48,000 | 51,000 | 65,000 | 85,000 | 47,000 |
| Turkey .. | 111,307 | 130,072 | r 118,717 | r 123,036 | 134,656 | 127,793 | 51,000 | 60,000 | r 58,000 | r 60,000 | 62,000 | 59,000 |
| TOTAL* | 17,600,000 | 18,200,000 | 18,000,000 | 18,600,000 | 18,900,000 | 19,600,000 | | | | | | |
| WORLD'S TOTAL* | 18,900,000 | 19,800,000 | 20,000,000 | 20,300,000 | 20,400,000 | 20,900,000 | 8,700,000 | 9,200,000 | 9,000,000 | 9,500,000 | 9,600,000 | 9,600,000 |

*Including an estimate for pyrites produced in Cuba but excluding pyrites known to have been produced in Brazil.

(a) Concentrates.

(c) United States Bureau of Mines' estimate.

(d) Including pyrrhotite.

(e) Copper pyrites included.

EXPORTS OF PYRITES

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|------------|------------|------------|------------|------------|------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Canada (a) | (£291,585) | (£324,653) | (£325,373) | (£360,181) | (£407,000) | (£426,000) |
| Cyprus— | | | | | | |
| Iron pyrites | 724,138 | 701,162 | 735,022 | 710,260 | 798,900 | 831,755 |
| Cupreous pyrites | 86,128 | 173,513 | 161,653 | 183,673 | 148,021 | 102,971 |
| OTHER COUNTRIES | | | | | | |
| Austria | 131 | — | — | — | — | 2,251 |
| Belgium-Luxemburg E.U. | — | 929 | 3 | — | — | 19 |
| Finland— | | | | | | |
| Concentrate | 77,458 | 61,653 | 50,421 | 30,816 | 44,916 | 89,774 |
| Germany (Federal) | 32 | 81 | 262 | 173 | 144 | 224 |
| Greece | 56,577 | 7,736 | 5,935 | 4,260 | 3,973 | 4,064 |
| Italy— | | | | | | |
| Iron pyrites | 46,804 | 51,739 | 51,475 | 51,262 | 47,710 | 39,635 |
| Cupreous pyrites | | | | | | |
| Norway | 622,815 | 576,702 | 546,023 | 476,711 | 513,954 | 495,846 |
| Poland | 30,960 | 8,632 | 38,926 | 53,703 | 36,470 | 17,970 |
| Portugal— | | | | | | |
| Iron pyrites | 289,552 | 313,599 | 268,218 | 240,320 | 265,358 | 246,731 |
| Cupreous pyrites | 172 | — | — | — | — | — |
| Spain— | | | | | | |
| Iron pyrites | 1,198,642 | 1,149,427 | 813,913 | 690,023 | 819,870 | 1,008,252 |
| Cupreous pyrites | | | | | | |
| Sweden | 20,907 | 13,009 | 40,674 | 38,882 | 40,965 | 40,954 |
| U.S.S.R. | 927,100 | 1,213,000 | 1,478,000 | 1,586,000 | 1,507,000 | 1,509,000 |
| Yugoslavia | 107,723 | 159,041 | 187,147 | 94,883 | 105,040 | 107,600 |
| Algeria | 31,642 | 35,313 | n.a. | 12,598 | n.a. | n.a. |
| Morocco | n.a. | 3,889 | n.a. | n.a. | n.a. | n.a. |
| Turkey | 94,139 | 121,213 | 89,740 | 17,962 | 9,596 | 87,187 |

(a) Sulphur in ores (pyrite).

IMPORTS OF PYRITES

Long tons

| Importing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|-------------|-----------|-----------|-----------|-------------|-----------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom .. | 284,306 | 224,340 | 259,233 | 241,750 | 216,333 | 217,220 |
| Irish Republic | 3,060 | 2,171 | 1,950 | 1,900 | 1,085 | 1,236 |
| OTHER COUNTRIES | | | | | | |
| Austria | 29,616 | 27,243 | 26,047 | 24,518 | 25,542 | 25,812 |
| Belgium-Luxemburg .. | | | | | | |
| E.U. | 277,572 | 263,844 | 259,844 | 271,778 | 347,142 | 386,935 |
| Czechoslovakia (a) .. | 129,000 | 118,000 | 48,000 | 36,000 | 31,000 | 32,000 |
| Denmark | 132,535 | 140,465 | 182,105 | 111,573 | 116,536 | 144,455 |
| France | 363,157 | 345,434 | 333,629 | 310,827 | 310,671 | 321,100 |
| Germany (Federal) .. | 1,576,463 | 1,523,811 | 1,417,052 | 1,414,242 | 1,861,694 | 1,774,733 |
| Germany (East) (a) .. | 138,223 | 109,877 | 106,102 | 107,170 | 107,704 | 106,765 |
| Hungary | 204,246 | 143,000 | 152,000 | 173,220 | 146,047 | 164,252 |
| Italy | 840,611 | 916,883 | 943,346 | 1,186,342 | 1,087,194 | 843,185 |
| Netherlands | 252,535 | 207,479 | 265,572 | 88,820 | 120,663 | 95,182 |
| Sweden | 29,464 | 81,403 | 122,769 | 122,489 | 62,905 | 111,094 |
| Switzerland | 31,414 | 47,354 | 45,583 | 45,260 | 41,550 | 31,848 |
| Egypt | 58,273 | 44,746 | 91,874 | 73,897 | 45,921 | 58,937 |
| South Africa | 7,391 | — | 7,487 | 7,674 | 8,441 | 9,244 |
| Tunisia | 16,890 | 3,727 | 7,857 | 7,643 | 7,836 | 10,485 |
| Japan | <i>n.a.</i> | 28,975 | 261,370 | 77,305 | <i>n.a.</i> | 54,116 |

(a) S content.

RARE EARTH AND THORIUM MINERALS

PRODUCTION OF RARE EARTH AND THORIUM MINERALS

Long tons

| Producing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-------------|-------------|-----------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Nigeria— | | | | | | |
| Monazite | 12 | 126 | 35 | 109 | 7 | 12 |
| Thorite (c) | — | 1 | — | — | <i>n.a.</i> | |
| Canada— | | | | | | |
| Thorium oxide | <i>n.a.</i> | <i>n.a.</i> | 39 | 52 | 62 | 13 |
| Ceylon— | | | | | | |
| Monazite | 23 | (a) 125 | 35 | 20 | 41 | 55 |
| India— | | | | | | |
| Monazite (d) | 2,060 | (e) 2,500 | 2,300 | (e) 2,500 | (e) 2,500 | 3,437 |
| Malaysia (West) (a)— | | | | | | |
| Monazite | 303 | 695 | 1,022 | 1,203 | 2,172 | 1,580 |
| Australia (b)— | | | | | | |
| High-grade concentrates | 1,848 | 2,165 | 1,836 | 2,163 | 1,849 | 3,535 |
| OTHER COUNTRIES | | | | | | |
| Malagasy Republic— | | | | | | |
| Monazite | 949 | 1,068 | 837 | 366 | — | — |
| Uranothorianite (f) | 551 | 505 | 413 | — | — | — |
| Brazil— | | | | | | |
| Monazite | 654 | 588 | 734 | 1,062 | 1,664 | 1,966 |
| Indonesia— | | | | | | |
| Monazite | 138 | 25 | <i>n.a.</i> | 5 | <i>n.a.</i> | <i>n.a.</i> |
| Korea (South)— | | | | | | |
| Monazite | — | — | — | 12 | — | — |

Rare earth and thorium minerals are also produced in the United States.

(a) Exports.

(b) Monazite content. Estimated.

(c) Between 5% and 6% ThO₂.

(d) Years ended March 31 of year following that stated. Source United States Bureau of Mines.

(e) Estimated.

(f) Containing an average of 60% Th.

EXPORTS OF RARE EARTH MINERALS, ETC.

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|-------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Ceylon— | | | | | | |
| Monazite | — | 125 | 74 | 74 | <i>n.a.</i> | <i>n.a.</i> |
| India— | | | | | | |
| Monazite | 475 | 1,706 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Malaysia (West)— | | | | | | |
| Monazite | 303 | 695 | 1,022 | 1,203 | 2,172 | 1,580 |
| Australia— | | | | | | |
| Monazite | 2,041 | 2,240 | 2,092 | 1,858 | 2,575 | 2,652 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Salts of rare earth minerals (a) | — | 32 | — | — | — | — |
| France— | | | | | | |
| Salts of rare earth minerals | 249 | 302 | 450 | 426 | 554 | 725 |
| Germany (Federal)— | | | | | | |
| Compounds of rare earth minerals | 59 | 26 | 378 | 395 | 387 | 358 |
| Malagasy Republic— | | | | | | |
| Monazite | 845 | 1,021 | 898 | — | — | — |
| Uranothorianite | 610 | 414 | 353 | 302 | 55 | — |
| United States— | | | | | | |
| Cerium ores, metals, etc. | 731 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Thorium ore, concentrates and compounds | 32 | 18 | — | — | 1 | 1 |
| Brazil— | | | | | | |
| Cerium chloride .. | 875 | 4,244 | 1,573 | 1,376 | 1,779 | <i>n.a.</i> |

(a) Including uranium salts.

IMPORTS OF RARE EARTH MINERALS, ETC.

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|-------|-------|-------|-------|-------|-------|
| Austria— | | | | | | |
| Salts of rare earth minerals (a) | 934 | — | — | — | — | — |
| France— | | | | | | |
| Rare earth minerals .. | 1,465 | 1,382 | 1,376 | 1,115 | 69 | 525 |
| Salts of rare earth minerals | 32 | 96 | 104 | 359 | 304 | 171 |
| Germany (Federal)— | | | | | | |
| Rare earth minerals .. | 5 | — | — | — | — | — |
| Salts of rare earth minerals (a) | 529 | 774 | 422 | 476 | 402 | 385 |
| United States— | | | | | | |
| Monazite sand and other thorium ore | 1,879 | 1,811 | 2,181 | 1,867 | 3,899 | 3,755 |

Rare earth minerals are also imported into the United Kingdom and Canada but statistics of imports are not recorded in the trade returns of these countries.

(a) Including uranium salts.

United Kingdom
Rare earth minerals

SALT
PRODUCTION OF SALT

Long tons

| Producing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Rock-salt | 693,000 | 723,000 | 1,030,000 | 692,000 | 1,088,000 | 1,395,000 |
| Brine-salt | 1,347,000 | 1,428,000 | 1,455,000 | 1,391,000 | 1,495,000 | 1,580,000 |
| Salt in brine (a) .. | 4,598,000 | 4,738,000 | 4,732,000 | 4,918,000 | 5,050,000 | 5,494,000 |
| Malta— | | | | | | |
| Sea-salt | 2,077 | 1,976 | 2,044 | 2,617 | 2,418 | <i>n.a.</i> |
| Ghana | 30,000 | 27,000 | 35,000 | 30,000 | 29,000 | 35,356 |
| Kenya | 40,056 | 50,741 | 53,333 | 48,032 | 60,036 | 41,617 |
| Mauritius— | | | | | | |
| Sea-salt | 4,300 | 4,100 | 4,100 | 4,100 | 4,100 | 4,000 |
| Nigeria | 548 | 890 | 834 | 802 | 818 | <i>n.a.</i> |
| Tanzania | 35,251 | 39,834 | 41,340 | 35,534 | 29,805 | 33,552 |
| Uganda | 2,849 | 5,429 | 5,461 | <i>n.a.</i> | <i>n.a.</i> | 6,000 |
| Canada— | | | | | | |
| Rock-salt | 1,675,157 | 2,298,236 | 2,034,304 | 2,698,317 | } 4,343,146 | 4,133,036 |
| Other salt (b) | 1,886,311 | 1,948,526 | 2,059,166 | 2,035,573 | | |
| West Indies— | | | | | | |
| Sea-salt— | | | | | | |
| Bahamas (c) | 220,786 | 413,714 | 520,000 | 711,250 | 629,536 | 450,538 |
| St. Kitts (c) | 2,777 | 4,009 | 5,505 | 2,711 | <i>n.a.</i> | <i>n.a.</i> |
| Virgin Islands (c) .. | 3 | 4 | 2 | — | — | — |
| Turks and Caicos Islands | 8,300 | 3,000 | 5,500 | 4,193 | 2,200 | <i>n.a.</i> |
| Ceylon | 50,698 | 77,203 | 63,467 | 74,610 | 96,842 | 111,907 |
| Cyprus | — | 5,003 | 3,949 | 6,581 | 4,740 | 5,778 |
| India— | | | | | | |
| Rock-salt | 2,800 | 2,800 | 3,900 | 3,200 | 2,900 | 3,400 |
| Other salt | 4,573,400 | 4,625,400 | 4,433,100 | 4,395,800 | 4,957,100 | 5,500,000 |
| Goa | 6,298 | 16,534 | 13,089 | 18,010 | 13,385 | 11,023 |
| Pakistan— | | | | | | |
| Rock-salt | 219,277 | 268,815 | 259,767 | 248,348 | 329,023 | 337,481 |
| Sea-salt | 183,990 | 215,525 | 207,993 | 436,570 | 551,639 | 552,635 |
| Australia | 545,491 | 654,533 | 644,817 | 703,157 | 899,704 | <i>n.a.</i> |
| New Zealand | 21,332 | 34,170 | 35,450 | 55,200 | 55,000 | 48,518 |
| TOTAL | 16,200,000 | 17,600,000 | 17,700,000 | 18,600,000 | 19,700,000 | 20,700,000 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Rock-salt | 1,359 | 969 | 802 | 884 | 948 | 911 |
| Evaporated salt | 164,168 | 182,668 | 182,525 | 187,957 | 197,637 | 221,381 |
| Bulgaria | 81,000 | 123,000 | 111,000 | 123,000 | 113,000 | 118,000 |
| Czechoslovakia | 181,000 | 188,000 | 194,000 | 199,000 | 200,000 | 204,000 |
| France— | | | | | | |
| Rock-salt (incl. refined) .. | 833,598 | 1,052,947 | 927,111 | 895,312 | 971,500 | 1,139,700 |
| Salt in brine | 2,356,783 | 2,217,926 | 2,420,849 | 2,518,392 | 2,416,800 | 2,624,900 |
| Sea-salt | 778,021 | 1,108,290 | 1,044,300 | 1,516,110 | 983,600 | 949,800 |
| Germany (Federal)— | | | | | | |
| Rock-salt | 5,318,420 | 5,024,379 | 5,041,156 | 5,084,048 | 6,028,681 | 6,674,018 |
| Brine-salt | 392,518 | 431,110 | 564,097 | 580,818 | 643,909 | 683,767 |
| Salt in brine | 542,889 | 1,140,449 | 1,189,355 | 1,133,795 | 1,254,267 | 1,361,297 |

(a) Used for purposes other than salt-making.

(b) Including salt in brine.

(c) Exports.

PRODUCTION OF SALT (cont.)

Long tons

| Producing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|------------|------------|--------------|-------------|--------------|--------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Germany (East) | 2,046,000 | 1,860,000 | (a)2,000,000 | r 1,804,000 | 1,939,000 | (a)2,000,000 |
| Greece— | | | | | | |
| Sea-salt | r 98,943 | 85,786 | 89,944 | r 95,236 | 94,679 | n.a. |
| Italy— | | | | | | |
| Rock-salt and brine-salt | 1,999,792 | 2,095,174 | 2,083,350 | 2,536,348 | 2,585,000 | 2,750,000 |
| Sea-salt | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Netherlands (brine-salt) | 1,571,000 | 1,680,600 | 1,828,000 | 1,894,600 | 2,376,000 | 2,627,000 |
| Poland— | | | | | | |
| Rock-salt | 650,000 | 663,000 | 750,000 | 817,000 | 954,000 | 1,148,000 |
| Brine-salt | 265,000 | 281,000 | 287,000 | 289,000 | 286,000 | } 1,625,000 |
| Other salt | 1,291,000 | 1,316,000 | 1,334,000 | 1,342,000 | 1,352,000 | |
| Portugal— | | | | | | |
| Rock-salt | 87,632 | 88,162 | 95,991 | 110,929 | 148,919 | 163,411 |
| Sea-salt | 228,325 | 402,989 | 252,768 | 315,566 | 259,157 | (a) 296,000 |
| Roumania | 1,780,000 | 1,984,000 | 2,014,000 | 2,026,000 | 2,331,000 | 2,682,000 |
| Spain— | | | | | | |
| Rock-salt | 721,812 | 782,483 | 795,667 | 833,441 | 896,955 | 1,059,322 |
| Sea-salt | 1,133,273 | 1,008,953 | 913,681 | 887,278 | 894,353 | 758,962 |
| Other salt | 18,497 | 20,154 | 16,977 | 22,462 | 23,825 | 14,302 |
| Switzerland | 178,703 | 226,730 | 187,057 | 212,954 | 251,033 | 262,382 |
| U.S.S.R. | 9,940,000 | 9,350,000 | 9,153,000 | 10,432,000 | a10,826,000 | a11,319,000 |
| Yugoslavia— | | | | | | |
| Sea-salt | 52,000 | 39,000 | 34,000 | 40,000 | 40,407 | } 208,652 |
| Evaporated salt | 129,000 | 131,000 | 128,000 | 126,000 | 124,994 | |
| Algeria— | | | | | | |
| Brine-salt and sea-salt.. | 114,000 | n.a. | n.a. | (a) 115,000 | (a) 118,000 | (a) 120,000 |
| Angola | 79,813 | 58,679 | 60,298 | 76,460 | 71,351 | 78,915 |
| Canary Islands (sea-salt) | 20,130 | 15,675 | n.a. | n.a. | n.a. | n.a. |
| Cape Verde Islands . . . | 31,072 | 39,000 | n.a. | n.a. | n.a. | n.a. |
| Egypt | 663,901 | 486,317 | 617,064 | 574,363 | 611,930 | 378,700 |
| Ethiopia (d) | 107,000 | 185,000 | (a) 185,000 | 202,000 | 229,000 | 230,000 |
| Libya (sea-salt) | 12,000 | 12,000 | 49,000 | (a) 16,000 | (a) 16,000 | (a) 16,000 |
| Morocco | 59,750 | 33,746 | 38,186 | 20,029 | 39,900 | 65,666 |
| Mozambique— | | | | | | |
| Rock-salt | n.a. | } 29,526 | 25,589 | 37,340 | 18,241 | 9,394 |
| Other salt | n.a. | | | | | |
| Senegal | 55,220 | 50,091 | 59,788 | 69,888 | 71,000 | 78,600 |
| South Africa | 295,378 | 325,496 | 309,938 | 311,671 | 336,262 | 371,967 |
| South West Africa— | | | | | | |
| Rock-salt | 5,000 | 4,445 | 4,853 | n.a. | n.a. | n.a. |
| Other salt | 92,000 | 91,100 | 57,573 | n.a. | n.a. | n.a. |
| Sudan | 59,000 | 51,000 | 42,000 | (a) 39,000 | 50,000 | 50,000 |
| Tunisia (sea-salt) | 210,618 | 348,215 | 322,838 | 315,000 | 349,000 | 279,000 |
| Costa Rica (b) | 10,000 | 10,000 | 10,000 | 12,000 | 11,000 | 9,000 |
| Dominican Republic— | | | | | | |
| Rock-salt | 2,185 | 20,300 | 19,322 | 905 | 1,673 | n.a. |
| Sea-salt | 28,365 | 25,528 | 24,252 | 15,517 | 27,678 | 25,145 |
| Guatemala (sea-salt) . . . | 17,800 | 14,740 | 19,330 | 14,366 | 13,000 | 12,036 |
| Haiti (b) | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | n.a. |
| Honduras | (b) 10,000 | (b) 10,000 | (b) 10,000 | r 23,113 | 22,149 | 27,362 |
| Mexico | 1,754,000 | 2,165,000 | 2,360,000 | 3,278,000 | (a)2,950,000 | (a)2,950,000 |
| Netherlands Antilles . . . | (c) 47 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Nicaragua (sea-salt) . . . | r 36,967 | r 38,815 | r 39,490 | r 40,169 | 65,990 | 70,666 |
| Panama (sea-salt) | 10,846 | 11,000 | 9,000 | 10,500 | n.a. | n.a. |
| Salvador (sea-salt) | (b) 30,000 | 19,730 | 22,758 | 24,113 | 23,847 | 26,793 |

(a) United States Bureau of Mines' estimate.

(b) Estimated.

(c) Exports.

(d) Years ended September 10 of year stated.

PRODUCTION OF SALT (cont.)

Long tons

| Producing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| United States (e)— | | | | | | |
| Rock-salt | 7,637,000 | 8,759,000 | 9,000,000 | 10,412,000 | 11,126,000 | 11,962,000 |
| Salt in brine | 16,399,000 | 17,814,000 | 19,061,000 | 19,639,000 | 20,796,000 | 22,487,000 |
| Evaporated salt | 4,198,000 | 4,397,000 | 4,496,000 | 4,722,000 | 4,930,000 | 5,056,000 |
| Argentina— | | | | | | |
| Rock-salt | <i>n.a.</i> | 3,344 | 3,690 | 2,739 | 1,758 | } 738,000 |
| Other salt | 385,203 | 712,977 | 875,915 | 841,327 | 726,752 | |
| Brazil (sea-salt) | 742,015 | 1,180,732 | 1,417,971 | 1,023,280 | 1,425,817 | 1,604,000 |
| Chile | 90,529 | 55,448 | 199,480 | 411,191 | 817,407 | 1,323,096 |
| Colombia— | | | | | | |
| Rock-salt | 284,396 | 275,465 | 278,752 | 303,553 | 317,348 | 340,285 |
| Sea-salt | 49,855 | 45,455 | 119,123 | 156,612 | 187,632 | 296,869 |
| Ecuador (sea-salt) | (a) 30,000 | (a) 30,000 | 34,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Peru— | | | | | | |
| Rock-salt | 8,970 | 9,050 | 8,245 | 10,327 | } 130,074 | <i>n.a.</i> |
| Sea-salt | 77,410 | 78,209 | 91,856 | 122,132 | | |
| Brine-salt | 10,263 | 5,833 | 9,842 | 14,821 | | |
| Venezuela (sea-salt) | 199,493 | 169,051 | 146,407 | 168,266 | 124,000 | 168,000 |
| Afghanistan (d) | 30,000 | 37,000 | 37,000 | 30,000 | 36,900 | 36,600 |
| Burma— | | | | | | |
| Sea-salt | } 125,000 | 130,000 | a)(b)116,000 | 166,000 | 130,000 | 180,000 |
| Brine-salt | | | | | | |
| China (a) | 10,000,000 | 13,000,000 | 13,000,000 | 13,000,000 | 15,000,000 | 15,000,000 |
| Formosa (sea-salt) | 592,668 | 551,199 | 404,596 | 509,330 | 306,530 | 376,864 |
| Cambodia | (a)(b)58,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Indonesia | <i>n.a.</i> | <i>n.a.</i> | 211,482 | a)(b)296,000 | (a)(b)79,000 | a)(b)177,000 |
| Iran (d) | 217,000 | 221,000 | 221,000 | 254,000 | 271,000 | 305,000 |
| Iraq (c) | (a)(b)27,000 | (a)(b)60,000 | (a)(b)54,000 | (a)(b)59,000 | (a)(b)59,000 | <i>n.a.</i> |
| Israel | 41,883 | 53,925 | 56,727 | 56,179 | 64,450 | 65,999 |
| Japan— | | | | | | |
| Government-licensed plants | 879,000 | 835,000 | 837,000 | 958,000 | 952,000 | 966,000 |
| Jordan (brine-salt) | 19,614 | 20,115 | 18,435 | 13,982 | 17,217 | 19,109 |
| Korea (North) | a)(b)400,000 | a)(b)500,000 | a)(b)500,000 | a)(b)500,000 | a)(b)500,000 | a)(b)540,000 |
| Korea (South) | 379,516 | 658,310 | 387,281 | 602,364 | 552,000 | 284,000 |
| Lebanon (sea-salt) (a) | 20,000 | 20,000 | 24,000 | 25,000 | 25,000 | 25,000 |
| Philippine Republic— | | | | | | |
| Sea-salt | 45,891 | 221,000 | 140,000 | 116,000 | 189,000 | 227,000 |
| Southern Yemen | 79,000 | 71,000 | 71,000 | 59,000 | — | — |
| Syria | 16,000 | 21,000 | (a)(b)20,000 | (a)(b)20,000 | (a)(b)20,000 | (a)(b)21,000 |
| Thailand | 187,000 | 185,000 | a)(b)200,000 | a)(b)110,000 | a)(b)150,000 | a)(b)200,000 |
| Turkey— | | | | | | |
| Rock-salt | 31,488 | 31,230 | 34,861 | 35,809 | } 560,000 | <i>n.a.</i> |
| Lake and spring salt | 243,202 | 192,640 | 201,323 | 172,983 | | |
| Sea-salt | 316,086 | 260,868 | 249,396 | 418,451 | | |
| Vietnam (North) | a)(b)150,000 | a)(b)150,000 | a)(b)150,000 | a)(b)150,000 | a)(b)150,000 | a)(b)150,000 |
| Vietnam (South) | 186,157 | 158,860 | 85,509 | 154,824 | 155,780 | a)(b)157,000 |
| Yemen | (a)(b)35,000 | — | <i>n.a.</i> | (a)(b)98,000 | (a)(b)84,000 | (a)(b)98,000 |
| TOTAL* | 82,000,000 | 90,000,000 | 93,000,000 | 97,000,000 | 104,000,000 | 110,000,000 |
| WORLD'S TOTAL* | 98,000,000 | 108,000,000 | 111,000,000 | 115,000,000 | 124,000,000 | 131,000,000 |

*Salt is known to have been produced in many countries for which statistics are not available. An allowance has been made for these in the total.

(a) Estimated.

(b) United States Bureau of Mines.

(c) Years ended March 31 of year following that stated.

(d) Years ended March 20 of year following that stated.

(e) Sold or used by producers.

EXPORTS OF SALT

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | 357,127 | 399,064 | 447,101 | 414,708 | 475,356 | 510,476 |
| Kenya | 12 | 18 | 162 | 762 | 1,555 | 202 |
| Tanzania | 10,146 | 14,656 | 12,294 | 10,914 | 10,609 | 12,684 |
| Uganda | 546 | 441 | 1,144 | 1,615 | 1,939 | 1,473 |
| Bahamas (c) | 220,786 | 413,714 | 520,000 | 711,250 | 629,536 | 450,538 |
| St. Kitts | 2,777 | 3,716 | 5,505 | 2,711 | <i>n.a.</i> | <i>n.a.</i> |
| Virgin Islands | 3 | 4 | 2 | — | — | — |
| Turks and Caicos Islands | 8,271 | 6,535 | 5,580 | 3,770 | 2,504 | 3,350 |
| India (b) | 278,932 | 269,521 | 234,483 | 281,568 | 291,609 | 264,631 |
| Malaysia (West) | <i>n.a.</i> | 166 | 208 | 1,222 | 223 | 445 |
| Pakistan | 185,876 | <i>n.a.</i> | <i>n.a.</i> | (a) 124,194 | (a) 83,378 | (a) 125,890 |
| Singapore | 4,527 | 3,747 | 4,051 | 5,675 | 6,543 | 9,367 |
| Australia (a)— | | | | | | |
| Refined salt | 203 | 382 | — | 2,129 | 1,806 | 608 |
| Other salt | 107,144 | 111,289 | 101,313 | 90,761 | 164,352 | 294,236 |
| OTHER COUNTRIES | | | | | | |
| Austria | 3 | 1,201 | 202 | 4 | 35 | 14 |
| Belgium-Luxemburg | | | | | | |
| E.U. | 1,747 | 3,394 | 4,183 | 3,807 | 6,453 | 6,686 |
| Denmark | 245 | 351 | 13,223 | 12,803 | 10,942 | 3,123 |
| France | 135,083 | 92,587 | 115,816 | 92,336 | 82,182 | 132,979 |
| Germany (Federal) | 857,140 | 946,191 | 930,263 | 997,547 | 1,150,775 | 1,217,214 |
| Italy | 56,443 | 56,876 | 18,403 | 21,075 | 20,102 | 28,915 |
| Netherlands— | | | | | | |
| Refined salt | 943,986 | 963,759 | 1,039,909 | 1,133,681 | 1,399,944 | 1,603,306 |
| Norway— | | | | | | |
| Common salt | 4,621 | 3,895 | 4,125 | 2,946 | 3,630 | 3,069 |
| Poland | 169,000 | 116,511 | 169,517 | 141,180 | 176,911 | 196,986 |
| Portugal | 8 | 16 | 21 | 300 | 60 | 239 |
| Roumania | 381,100 | 470,800 | 423,000 | 390,238 | 477,044 | 516,000 |
| Spain | 329,155 | 397,630 | 309,404 | 294,414 | 360,844 | 268,968 |
| Sweden | 32 | 1,316 | 300 | 26 | 218 | 184 |
| Switzerland | 3,282 | 3,137 | 2,046 | 7 | 7 | 1,167 |
| U.S.S.R. | 107,200 | 161,900 | 191,900 | 265,834 | 271,000 | 218,000 |
| Angola | 33,401 | 24,321 | 33,971 | 30,082 | 19,242 | 20,299 |
| Cape Verde Islands | 35,145 | 28,086 | 31,341 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Egypt | 327,201 | 225,981 | 270,000 | 114,199 | 47,960 | 40,431 |
| Ethiopia | 78,417 | 78,247 | <i>n.a.</i> | 154,009 | 159,524 | 175,485 |
| Malagasy Republic | 1,607 | 2,052 | 2,083 | 1,293 | 2,600 | 1,839 |
| Mozambique | 3,692 | 7,230 | 8,783 | 3,436 | <i>n.a.</i> | <i>n.a.</i> |
| Morocco | 12 | 3 | — | 1 | — | 105 |
| Senegal | 11,725 | 6,061 | 7,843 | 18,122 | 21,962 | <i>n.a.</i> |
| South Africa | 29,707 | 30,890 | 33,072 | 27,576 | 35,140 | 28,268 |
| South West Africa— | | | | | | |
| Rock-salt | 2,882 | 2,513 | 2,461 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Coarse salt | 50,930 | 44,988 | 51,909 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Other salt | 1,409 | 1,031 | 2,166 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sudan | 981 | 773 | 1,684 | 213 | 411 | 431 |
| Tunisia | 191,600 | 372,318 | 271,311 | 274,348 | 317,800 | 260,955 |
| Honduras | 5,816 | 6,234 | 6,372 | 6,397 | 6,508 | <i>n.a.</i> |
| Mexico | 1,428,287 | 1,575,789 | 836,137 | 2,716,607 | 2,945,517 | <i>n.a.</i> |

(a) Years ended June 30 of that stated.

(b) Years ending March 31 following that stated.

(c) Converted from bushels at the rate of 28 bushels = 1 long ton.

EXPORTS OF SALT (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|---------|---------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Netherlands Antilles .. | 47 | — | — | — | — | <i>n.a.</i> |
| Salvador | 3,026 | 7,162 | 4,737 | 8,428 | 8,980 | 9,704 |
| United States | 530,641 | 615,552 | 591,563 | 605,115 | 649,753 | 639,502 |
| Argentina | 66,430 | 88,057 | 58,937 | 48,244 | 47,158 | 61,649 |
| Peru | 336 | 118 | 179 | 236 | 218 | <i>n.a.</i> |
| Burma | 5,625 | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Formosa | 392,420 | 297,649 | 128,014 | 16,554 | <i>n.a.</i> | 7,690 |
| Iran (a) | 3,337 | 3,549 | 2,015 | 3,148 | 4,644 | <i>n.a.</i> |
| Japan | 13 | 7 | 4,732 | 7,669 | 392 | 1,284 |
| Southern Yemen .. | 93,021 | 47,939 | 74,237 | 71,464 | 88,284 | <i>n.a.</i> |
| Thailand | 122,903 | 80,495 | 83,517 | 74,771 | 95,097 | 109,088 |
| Turkey | 126,902 | 87,121 | 51,040 | 6,693 | <i>n.a.</i> | 32,912 |
| Vietnam (South) .. | 38,433 | 4,921 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |

(a) Years ended March 20 of year following that stated.

IMPORTS OF SALT

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Salt for use of fisheries.. | 30,975 | 53,119 | 54,290 | 29,031 | 32,895 | 44,906 |
| Other salt | 5,864 | 5,573 | 6,505 | 7,183 | | |
| Channel Islands | 641 | 548 | 420 | 778 | 1,015 | 362 |
| Malta— | | | | | | |
| Refined salt | (£4,863) | (£6,546) | (£5,972) | (£5,491) | (£9,472) | (£10,774) |
| Other salt | 236 | 360 | 420 | 56 | — | 353 |
| Gambia | 254 | 98 | 120 | 35 | 64 | 41 |
| Ghana | 2,079 | 8,418 | 706 | 137 | 425 | 1,602 |
| Kenya | 11,889 | 5,461 | 4,930 | 4,966 | 6,630 | 4,269 |
| Malawi | 5,973 | 9,178 | 9,131 | 9,125 | 10,863 | 10,279 |
| Mauritius | 19 | 148 | 56 | 99 | 154 | 150 |
| Nigeria | 131,522 | 127,993 | 123,557 | 124,029 | 127,782 | 137,939 |
| Rhodesia | 28,750 | 38,973 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Seychelles | 196 | 428 | 233 | 233 | 403 | <i>n.a.</i> |
| Sierra Leone | 8,859 | 6,881 | 10,788 | 9,291 | 8,847 | <i>n.a.</i> |
| Tanzania | 3,717 | 4,403 | 4,368 | 3,138 | 5,695 | 19,799 |
| Uganda | 26,553 | 34,744 | 22,165 | 21,234 | 35,878 | 19,135 |
| Zambia | 10,136 | 10,720 | 12,166 | 11,586 | 13,368 | 44,630 |
| Canada— | | | | | | |
| Salt for use of fisheries.. | 40,772 | 46,291 | 454,954 | 506,261 | 575,137 | 621,105 |
| Refined salt | — | — | | | | |
| Other salt | 321,347 | 347,995 | | | | |
| Antigua | 286 | 190 | 256 | 764 | <i>n.a.</i> | <i>n.a.</i> |
| Barbados— | (b) 7,543 | 1,951 | 6,992 | 1,946 | 1,906 | 1,930 |
| Bermuda | 183 | 177 | 166 | 180 | 164 | 156 |
| British Honduras | 469 | 567 | 582 | 715 | 673 | 589 |
| Dominica | 263 | 242 | 317 | 422 | 361 | 346 |
| Grenada | 293 | 2,388 | 567 | 618 | 636 | <i>n.a.</i> |
| Jamaica— | | | | | | |
| Rock-salt | 192 | 105 | 63 | 124 | 182 | 3,714 |
| Other salt | 11,209 | 10,920 | 11,370 | 11,839 | 14,019 | 11,418 |
| Montserrat | 63 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 68 | <i>n.a.</i> |
| St. Kitts | 55 | 127 | 105 | 100 | 99 | <i>n.a.</i> |
| St. Lucia— | | | | | | |
| Common salt | 339 | 595 | 747 | 649 | 503 | <i>n.a.</i> |
| Refined salt | 2 | 14 | 40 | 4 | 3 | <i>n.a.</i> |
| St. Vincent— | | | | | | |
| Unrefined salt | <i>n.a.</i> | 6 | 19 | 1 | 20 | <i>n.a.</i> |
| Refined salt | <i>n.a.</i> | 424 | 435 | 415 | 911 | <i>n.a.</i> |
| Trinidad and Tobago— | | | | | | |
| Rock and coarse salt .. | 2,373 | 2,137 | 2,339 | 2,749 | 2,228 | 2,238 |
| Refined salt | 4,796 | 6,209 | 7,421 | 7,670 | 8,222 | 8,639 |
| Virgin Islands | 12 | 14 | 21 | 15 | 21 | 21 |
| Guyana— | | | | | | |
| Rock and coarse salt .. | 17 | 21 | (b) 2 | 1 | 18 | 6 |
| Refined salt, etc. .. | 2,546 | 2,705 | 2,702 | 2,832 | 3,202 | 3,025 |
| Brunei | 336 | 1,006 | 734 | 1,095 | 998 | 588 |
| Ceylon— | | | | | | |
| Refined salt | 72 | 50 | 80 | 64 | 167 | 211 |
| Other salt | 32,748 | 39,132 | 4,113 | 10,950 | 3,096 | 11 |
| Cyprus | 227 | 245 | 314 | 212 | 369 | 477 |
| Hong Kong | 32,652 | 30,803 | 29,465 | 32,434 | 36,482 | 34,108 |
| India (a) | 3,533 | 105 | — | 4 | 7 | 45 |
| Malaysia (West) | <i>n.a.</i> | 63,898 | 71,640 | 83,114 | 84,525 | 104,501 |
| Pakistan | 2,601 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sabah | 8,354 | 3,180 | 2,965 | 3,710 | 3,636 | 6,752 |

(a) Years ended March 31 following that stated.

(b) Excess of re-exports.

IMPORTS OF SALT (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---------------------------------------|---------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Sarawak | 5,008 | 5,588 | 5,660 | 6,379 | 6,550 | <i>n.a.</i> |
| Singapore | 20,531 | 19,753 | 26,826 | 27,022 | 34,356 | 92,026 |
| Australia (a)— | | | | | | |
| Refined salt | 16 | 45 | 77 | 9 | 211 | 6 |
| Other salt | 7,056 | 6,523 | 7,012 | 12,716 | 8,581 | 6,235 |
| Fiji | 1,767 | 1,514 | 2,173 | 1,961 | 2,317 | 2,560 |
| New Guinea (a) | 1,695 | 1,289 | 1,566 | 1,297 | 1,808 | 1,806 |
| New Hebrides | 207 | 200 | 221 | — | 7 | 163 |
| New Zealand (a) | 62,429 | 50,995 | 50,456 | 43,749 | 45,046 | 34,588 |
| Papua (a) | 401 | 408 | 462 | 312 | 399 | 398 |
| Solomon Islands | 80 | 65 | 84 | 67 | 113 | 98 |
| Western Samoa | 280 | 263 | 386 | 435 | 318 | 572 |
| Irish Republic— | | | | | | |
| Refined salt | 4,403 | 5,224 | 4,890 | 4,717 | 5,180 | 5,411 |
| Other salt | 32,874 | 35,765 | 38,913 | 41,379 | 43,745 | 45,173 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Common salt | 90 | 62 | 767 | 21 | 6,437 | 13,137 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Common salt | 701,448 | 672,069 | 722,187 | 818,204 | 999,856 | 1,018,654 |
| Refined salt | 109,695 | 108,668 | 111,036 | 110,507 | 121,855 | 128,162 |
| Denmark— | | | | | | |
| Rock-salt | 82,869 | 101,305 | 153,473 | 107,057 | 159,473 | } 245,648 |
| Refined salt | 80,291 | 88,687 | 84,071 | 39,356 | 27,546 | |
| Faroe Islands | 25,453 | 34,919 | 20,898 | 35,807 | 29,781 | 31,838 |
| Finland | 302,303 | 320,728 | 370,071 | 346,779 | 239,246 | 420,549 |
| France | 131,660 | 115,875 | 57,141 | 50,649 | 69,768 | 65,414 |
| Germany (Federal) | 94,592 | 92,368 | 98,659 | 123,598 | 143,817 | 174,396 |
| Iceland— | | | | | | |
| Common salt | 52,101 | 50,942 | 42,945 | 42,189 | 55,960 | 46,687 |
| Refined salt | 289 | 295 | 310 | 317 | 367 | 329 |
| Italy | 36,958 | 2,143 | 379 | 3,589 | 245 | 313 |
| Netherlands— | | | | | | |
| Rock-salt | } 8,968 | } 11,880 | } 46,794 | } 38,939 | } 34,213 | } 62,446 |
| Sea-salt, etc. | | | | | | |
| Refined salt | | | | | | |
| Norway— | | | | | | |
| Common salt | 91,014 | 126,176 | 136,833 | 112,559 | 147,101 | 135,565 |
| Refined salt | 157,259 | 164,945 | 164,724 | 151,838 | 170,399 | 168,652 |
| Portugal | 9,535 | 27,620 | 20,324 | 10,866 | 3,853 | 1,043 |
| Spain | 389 | 336 | 638 | 511 | 923 | 1,788 |
| Sweden | 661,591 | 732,748 | 819,887 | 811,043 | 240,841 | 977,585 |
| Switzerland | 829 | 1,103 | 1,104 | 928 | 1,575 | 1,102 |
| Yugoslavia | 104,255 | 159,251 | 163,984 | 121,756 | 135,490 | 168,330 |
| Cameroun | 16,620 | 15,672 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Central African | | | | | | |
| Republic | 3,754 | 2,104 | 5,296 | 3,918 | 5,289 | 4,657 |
| Congo (Republic of) | 2,701 | 2,109 | 3,024 | 1,667 | 3,687 | 2,082 |
| Dahomey | 1,236 | 2,285 | 2,848 | 8,944 | <i>n.a.</i> | <i>n.a.</i> |
| Ethiopia | 126 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Gabon | 1,327 | 1,746 | 2,012 | 2,430 | 2,709 | 2,548 |
| Ivory Coast | 22,673 | 18,683 | 22,111 | 23,990 | 22,741 | 18,300 |

(a) Years ended June 30 of that stated.

IMPORTS OF SALT (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Malagasy Republic | 626 | 910 | 549 | 803 | 661 | 894 |
| Mali | 17,673 | 14,919 | 20,504 | 15,993 | 12,337 | <i>n.a.</i> |
| Morocco | 5,388 | 235 | 51 | 69 | 41 | — |
| Mozambique | 2,332 | 1,509 | 1,341 | 5,842 | <i>n.a.</i> | <i>n.a.</i> |
| Niger | 6,598 | 4,962 | <i>n.a.</i> | 13,385 | 8,244 | 6,176 |
| Reunion | 1,611 | 2,139 | 2,111 | 1,465 | 2,466 | 1,761 |
| Senegal | 87 | 73 | 102 | 113 | 75 | <i>n.a.</i> |
| South Africa | 2,418 | 2,082 | 1,732 | 2,104 | <i>n.a.</i> | 2,609 |
| Sudan | 1,211 | 58 | 29 | 46 | 93 | 7 |
| Togo | 10,692 | 6,877 | 6,727 | 3,001 | 7,047 | 6,749 |
| Upper Volta | 12,147 | 7,549 | <i>n.a.</i> | <i>n.a.</i> | 12,246 | <i>n.a.</i> |
| Costa Rica | 272 | 254 | 1,454 | 4,098 | 4,040 | 3,863 |
| French West Indies— | | | | | | |
| Guadeloupe | <i>n.a.</i> | 1,168 | 898 | 1,005 | 594 | 2,185 |
| Martinique | <i>n.a.</i> | 2,507 | 2,225 | 2,933 | 2,831 | 1,699 |
| Greenland | 3,301 | 3,699 | 7,163 | 9,302 | 16,311 | 9,102 |
| Guatemala | 1,617 | 4,598 | 2,058 | 4,679 | 8,368 | 8,287 |
| Honduras | 1,620 | 2,334 | 140 | 3,860 | 1,291 | <i>n.a.</i> |
| Mexico | 1,027 | 4,812 | 1,204 | 5,112 | 90 | <i>n.a.</i> |
| Netherlands Antilles | 577 | 622 | 623 | 1,090 | 989 | <i>n.a.</i> |
| Nicaragua | 1,939 | 2,767 | 3,963 | 6,791 | 16,566 | 25,029 |
| St. Pierre and Miquelon | 2,118 | <i>n.a.</i> | 1,551 | 3,790 | 2,163 | 2,109 |
| Salvador | 4,202 | 4,182 | 2,148 | 1,731 | 26 | 119 |
| United States | 2,089,176 | 1,575,828 | 1,626,877 | 12,142,920 | 2,817,445 | 2,948,013 |
| Bolivia | 120 | 186 | 154 | 37 | <i>n.a.</i> | <i>n.a.</i> |
| Brazil | 51,395 | 245,568 | 194,153 | 48,712 | <i>n.a.</i> | <i>n.a.</i> |
| Colombia | 7 | 4 | 15 | 7 | 8 | <i>n.a.</i> |
| French Guiana | 277 | 306 | 228 | 317 | 282 | 270 |
| Peru | 3,271 | 4,258 | 2,645 | 2,671 | 2,882 | <i>n.a.</i> |
| Surinam | 1,181 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Uruguay | <i>n.a.</i> | 57,804 | 50,072 | 50,064 | 40,146 | 39,387 |
| Burma | 816 | 812 | 68 | 5 | 9 | <i>n.a.</i> |
| Iran (a) | 78 | 113 | 185 | 112 | 46 | <i>n.a.</i> |
| Iraq | 61 | <i>n.a.</i> | 62 | 90 | 14 | 432 |
| Japan | 3,583,607 | 3,487,467 | 3,771,232 | 4,361,824 | 4,943,937 | 5,567,440 |
| Lebanon | 1,439 | 1,811 | 412 | 584 | 225 | 404 |
| Syria | — | 15,394 | 28,845 | 13,271 | 19,862 | 4,481 |
| Philippine Republic— | | | | | | |
| Crude | 690 | 22,228 | <i>n.a.</i> | 10,335 | <i>n.a.</i> | <i>n.a.</i> |
| Refined | 185 | 169 | <i>n.a.</i> | 114 | <i>n.a.</i> | <i>n.a.</i> |
| French Polynesia | 396 | 557 | 320 | 453 | 579 | 371 |
| New Caledonia | 551 | 431 | 378 | 395 | <i>n.a.</i> | <i>n.a.</i> |

(a) Years ended March 20 of year following that stated.

SELENIUM

PRODUCTION OF SELENIUM

Lb. avdp.

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|------------------|------------------|------------------|---------------------|------------------|------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Zambia (a) | 57,631 | 57,573 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Canada | 465,746 | 512,077 | 575,412 | 724,573 | 635,510 | 710,618 |
| OTHER COUNTRIES | | | | | | |
| Belgium (b) | 87,100 | 93,000 | 90,100 | 72,300 | 54,500 | 55,000 |
| Finland | 14,500 | 12,577 | 11,973 | 15,000 | 15,000 | 15,000 |
| Sweden | 181,540 | 176,209 | 144,041 | 128,529 | 168,956 | 169,756 |
| Yugoslavia | 8,439 | 17,441 | 20,558 | 10,238 | 21,246 | 20,000 |
| Mexico | 9,345 | 8,120 | 24,458 | 5,000 | 2,000 | 42,000 |
| United States (c) .. | 929,000 | 540,200 | 620,300 | 598,400 | 633,000 | 1,229,000 |
| Peru | 16,797 | 18,964 | 13,131 | ^r 10,604 | 13,000 | 15,000 |
| Japan | 325,929 | 347,027 | 423,391 | 422,172 | 394,000 | 435,000 |
| WORLD'S TOTAL .. | 2,100,000 | 1,780,000 | 1,900,000 | 2,100,000 | 2,100,000 | 2,700,000 |

Selenium is also produced in Australia.

(a) Contained in copper slimes exported for treatment.

(b) Exports.

(c) Including selenium content of compounds.

EXPORTS OF SELENIUM

Lb. avdp.

| Exporting Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|---------|---------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Zambia (a) | 57,631 | 57,573 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Canada | 401,300 | 451,200 | 588,100 | 539,400 | 787,100 | 872,300 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U. | 87,100 | 93,000 | 90,100 | 72,300 | 54,500 | 45,636 |
| Sweden | 143,000 | 141,000 | 165,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Peru | 24,478 | 19,253 | 14,870 | 10,741 | 12,218 | 12,200 |
| Japan | 102,092 | 68,976 | 92,806 | 105,275 | 111,384 | 62,349 |

(a) Contained in copper slimes exported for treatment.

IMPORTS OF SELENIUM

Lb. avdp.

| Importing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|--------------|---------|------------------|------------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom .. | 321,938 | 360,866 | 419,015 | 298,248 | 341,470 | 487,201 |
| India (c) | <i>n.a.</i> | 13,797 | 7,877 | 19,324 | 13,159 | 12,571 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U. | 1,500 | 700 | 700 | 5,300 | 2,094 | 13,669 |
| France | 70,500 | 62,000 | 93,000 | 62,000 | 60,000 | 141,000 |
| Germany (Federal) .. | 203,500 | 231,900 | 323,000 | 293,876 | 454,593 | 506,843 |
| Italy | 61,593 | 38,600 | 38,140 | 75,178 | 50,044 | 75,838 |
| Spain | 14,533 | 16,557 | 14,306 | 13,190 | 16,175 | 19,842 |
| Sweden | 22,000 | 51,000 | 71,000 | 22,000 | 13,000 | 35,000 |
| Yugoslavia | <i>n.a.</i> | 5,207 | 3,862 | 1,852 | 4,200 | 4,101 |
| Morocco (b) | 223 | 1,323 | 220 | 220 | 227 | 403 |
| United States (a) .. | 215,098 | 234,645 | <i>r</i> 266,321 | <i>r</i> 280,657 | 562,783 | 533,612 |
| Argentina | 12,710 | 14,716 | 15,999 | 15,809 | 19,899 | 23,223 |
| Brazil | 4,740 | 3,719 | 17,117 | 8,190 | <i>n.a.</i> | <i>n.a.</i> |
| Peru | 677 | 862 | 1,466 | 847 | (b) 5,518 | <i>n.a.</i> |
| Japan | 7,184 | 130 | 1,795 | 10,578 | 15,084 | 7,445 |

(a) Including salts.

(b) Including tellurium.

(c) Years ending March 31 following that stated.

SILLIMANITE, Etc.

PRODUCTION OF SILLIMANITE, ETC.

Long tons

| Producing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|--------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Rhodesia— | | | | | | |
| Kyanite | 230 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| India— | | | | | | |
| Kyanite | 33,623 | 36,889 | 62,664 | 49,164 | 63,345 | 82,551 |
| Sillimanite | 12,167 | 11,098 | 10,124 | 5,705 | 4,562 | 3,883 |
| Australia— | | | | | | |
| Kyanite, sillimanite and andalusite (a) .. | 2,634 | 2,554 | 2,664 | 1,183 | 2,115 | 1,674 |
| OTHER COUNTRIES | | | | | | |
| Spain— | | | | | | |
| Andalusite | — | 128 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sillimanite | 1,275 | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| South Africa— | | | | | | |
| Andalusite | 13,752 | 21,573 | 21,146 | 24,195 | 22,089 | 41,779 |
| Sillimanite | 53,787 | 41,482 | 34,549 | 34,826 | 32,671 | 27,850 |
| South West Africa— | | | | | | |
| Kyanite | 563 | — | 18 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| United States— | | | | | | |
| Kyanite (b) | 46,000 | 52,000 | 60,000 | 62,000 | 60,000 | 62,000 |
| Korea (South)— | | | | | | |
| Andalusite | 110 | 126 | — | 59 | <i>n.a.</i> | <i>n.a.</i> |

(a) In addition the following amounts of kaolinised sillimanite were produced (long tons): 1964—3,325; 1965—6,805; 1966—6,797; 1967—7,679; 1968—6,997; 1969—*n.a.*

(b) Estimated. In addition the following amounts of synthetic mullite were produced (long tons): 1964—32,239; 1965—35,758; 1966—44,242; 1967—35,971; 1968—32,155; 1969—43,382.

EXPORTS OF SILLIMANITE, ETC.

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|--------|--------|--------|--------|--------|--------|
| COMMONWEALTH COUNTRIES | | | | | | |
| India— | | | | | | |
| Kyanite | 28,363 | 30,652 | 35,161 | 40,011 | 49,668 | 44,920 |
| Sillimanite | 8,633 | 5,695 | 6,232 | 2,014 | 2,474 | 2,068 |
| OTHER COUNTRIES | | | | | | |
| France— | | | | | | |
| Kyanite, sillimanite, etc. | | | | | | |
| Crude | 346 | 371 | 239 | 750 | 363 | 547 |
| Calcined | 563 | 229 | 871 | 852 | 1,337 | 672 |

EXPORTS OF SILLIMANITE, ETC. (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|--------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Germany (Federal)— | | | | | | |
| Kyanite, sillimanite, etc. | | | | | | |
| Crude | 105 | 120 | 76 | 215 | 569 | 154 |
| Calcined | | 185 | 165 | 1,616 | 1,247 | 1,074 |
| Italy— | | | | | | |
| Kyanite, sillimanite, etc. | | | | | | |
| Crude | 471 | 587 | 1,129 | 643 | 148 | 38 |
| Calcined | | | | | | |
| Netherlands— | | | | | | |
| Kyanite, sillimanite, etc. | 1,890 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| South-West Africa— | | | | | | |
| Kyanite | 546 | 206 | 27 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| South Africa— | | | | | | |
| Andalusite | 6,179 | 9,046 | 12,407 | 7,354 | 6,487 | 14,616 |
| Sillimanite | 46,926 | 39,805 | 28,238 | 33,757 | 34,743 | 27,960 |
| United States— | | | | | | |
| Kyanite, etc. | 5,429 | 9,141 | 15,481 | 19,132 | 18,283 | 17,586 |
| Japan— | | | | | | |
| Sillimanite, etc. . . . | 45 | 411 | 116 | 152 | 883 | 2,485 |

IMPORTS OF SILLIMANITE, ETC.*

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|--------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Kyanite, sillimanite, etc. | 27,335 | 26,152 | 28,135 | 17,109 | 18,765 | 26,814 |
| Australia— | | | | | | |
| Kyanite | 1,939 | 1,000 | 1,332 | 1,714 | 1,776 | 3,240 |
| Sillimanite | 218 | 489 | 1,055 | 572 | 758 | 302 |
| OTHER COUNTRIES | | | | | | |
| France— | | | | | | |
| Kyanite, sillimanite, etc. | | | | | | |
| Crude | 3,312 | 3,330 | 4,578 | 2,999 | 2,672 | 1,787 |
| Calcined | 1,482 | 2,036 | 1,578 | 1,392 | 1,627 | 1,893 |
| Germany (Federal)— | | | | | | |
| Kyanite, sillimanite, etc. | | | | | | |
| Crude | 15,128 | 17,647 | 18,795 | 14,686 | 18,162 | 18,258 |
| Calcined | 157 | 1,204 | 1,003 | 1,214 | 2,289 | 4,189 |
| Greece— | | | | | | |
| Kyanite, sillimanite, etc. | 701 | 1,316 | 2,729 | 1,814 | 3,369 | 3,589 |
| Italy— | | | | | | |
| Kyanite, sillimanite, etc. | | | | | | |
| Crude | 8,720 | 4,244 | 11,246 | 11,512 | 6,770 | 11,303 |
| Calcined | 1,729 | | | | | |
| Netherlands— | | | | | | |
| Kyanite, sillimanite, etc. | 4,626 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| South Africa— | | | | | | |
| Sillimanite | 63 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| United States— | | | | | | |
| Kyanite, sillimanite, etc. | 2,131 | 3,613 | 3,040 | 1,626 | 1,295 | 1,864 |
| Japan— | | | | | | |
| Kyanite, sillimanite, etc. | 32,474 | 26,448 | 25,079 | 34,887 | 45,637 | 41,227 |
| Thailand— | | | | | | |
| Kyanite, sillimanite, etc. | 1,181 | 855 | 1,595 | 1,850 | 302 | 682 |

*These minerals are not separately recorded in the trade returns of several countries.

SILVER
PRODUCTION OF SILVER
(Metal content)

Troy ounces fine

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Botswana | 1 | — | — | — | — | — |
| Kenya | 47,702 | 26,785 | 19,003 | 3,038 | 2,769 | 1,668 |
| Rhodesia | 88,463 | (a) 83,285 | (e) 95,000 | n.a. | n.a. | n.a. |
| Swaziland | 130 | 130 | 28 | — | n.a. | n.a. |
| Tanzania | 25,295 | 22,865 | 10,572 | 2,294 | 2,387 | 2,023 |
| Uganda (a) | — | 2 | — | — | — | — |
| Zambia (b) | 1,001,267 | 848,819 | 815,000 | 825,000 | (f) 830,000 | (f) 830,000 |
| Canada | 29,902,611 | 32,272,464 | 33,362,208 | 36,315,189 | 45,012,797 | 43,092,976 |
| India | 152,200 | 168,300 | 39,224 | 111,563 | 94,073 | 105,390 |
| Australia | 18,426,990 | 17,280,839 | 18,887,691 | 19,842,000 | 21,394,000 | 24,971,000 |
| Fiji | 60,564 | 60,470 | 67,499 | 61,820 | 54,654 | 38,294 |
| New Guinea | 23,206 | 19,663 | 18,052 | 17,176 | 18,139 | n.a. |
| New Zealand | 141 | 55 | 2 | — | 3,854 | n.a. |
| TOTAL | 49,730,000 | 50,784,000 | 53,000,000 | 55,000,000 | 68,000,000 | 69,200,000 |
| OTHER COUNTRIES | | | | | | |
| Czechoslovakia (d) | 2,400,000 | 2,400,000 | 2,400,000 | (e)2,400,000 | 2,400,000 | 2,400,000 |
| Finland | 607,906 | 582,186 | 520,103 | 623,000 | 677,000 | 624,946 |
| France | 969,440 | 1,401,200 | 2,008,300 | 2,162,514 | 2,166,350 | 2,396,388 |
| Germany (Federal) | 2,062,600 | 1,992,200 | 1,983,200 | 2,022,300 | 1,769,300 | 1,684,442 |
| Germany (East) (d) | 4,800,000 | 4,800,000 | 4,800,000 | f)4,800,000 | 4,800,000 | 4,800,000 |
| Greece | 154,000 | 139,000 | 222,000 | 239,000 | 269,000 | 257,913 |
| Italy | (g)1,073,800 | (g)1,103,400 | (g)1,131,800 | (g)1,382,400 | (g)1,155,700 | (g)1,832,592 |
| Portugal | 48,770 | 63,020 | 354,600 | 380,000 | 327,000 | 330,000 |
| Roumania (d) | 600,000 | 600,000 | 600,000 | (e) 800,000 | (e) 800,000 | (e) 800,000 |
| Spain | 2,300,000 | 2,000,000 | 2,025,000 | 2,218,000 | e 2,400,000 | (d)2,400,000 |
| Sweden | 3,122,300 | 3,408,800 | 3,517,100 | 3,455,000 | 3,523,800 | 3,683,100 |
| Yugoslavia (g) | 3,408,429 | 4,268,525 | 3,665,249 | 3,457,716 | 3,023,102 | 3,456,526 |
| Algeria (f) | 290,000 | 340,000 | 300,000 | 160,000 | 290,000 | 260,000 |
| Congo Republic | 1,480,300 | 1,538,400 | 1,851,400 | 1,839,800 | 2,139,100 | 1,983,765 |
| Morocco | 604,080 | 599,258 | 707,413 | 772,807 | 920,000 | 850,000 |
| Mozambique | 5 | — | n.a. | n.a. | n.a. | n.a. |
| South Africa | 2,916,660 | 3,131,580 | 3,134,093 | 3,063,505 | 3,337,048 | 3,334,614 |
| South West Africa (c) | 1,161,220 | 1,637,554 | 1,516,539 | 1,449,763 | 1,349,741 | 1,273,000 |
| Tunisia | 12,600 | 33,800 | 38,000 | 44,700 | 35,600 | (e) 47,000 |
| Guatemala | (h) 9,445 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Haiti | 92,057 | 77,488 | 50,690 | 34,000 | 13,000 | n.a. |
| Honduras | 3,220,371 | 3,670,659 | 3,734,290 | 4,009,418 | 4,397,000 | 3,905,000 |
| Mexico | 41,716,260 | 40,332,080 | 41,990,000 | 38,273,350 | 40,031,000 | 42,904,359 |
| Nicaragua | 332,370 | 380,377 | 361,248 | 336,118 | 316,340 | 304,158 |
| United States | 36,334,000 | 39,806,033 | 43,668,988 | 32,344,862 | 32,728,979 | 40,635,000 |
| Argentina | 1,943,127 | 2,285,853 | 2,207,176 | 2,640,000 | 2,469,980 | n.a. |
| Bolivia (a) | 4,810,973 | 4,114,427 | r 4,612,924 | 4,249,653 | 4,770,000 | 6,076,000 |
| Brazil | 305,400 | 227,800 | 222,400 | 478,700 | 464,000 | n.a. |
| Chile | 2,800,800 | 2,972,264 | 3,609,962 | 3,065,504 | 3,739,324 | 3,132,768 |

(a) Exports.

(b) Recovered from copper-refinery slimes.

(c) Accounted for by smelters.

(d) "Metallgesellschaft" estimate.

(e) United States Bureau of Mines' estimate.

(f) Estimated.

(g) Refined.

(h) Imports into the United States.

PRODUCTION OF SILVER (cont.)

Troy ounces fine

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Colombia.. .. | 130,353 | 113,451 | 106,757 | 110,060 | 99,172 | 76,085 |
| Ecuador | 117,126 | 69,966 | 76,710 | 79,657 | 136,204 | 35,500 |
| Peru (c) | r36,818,000 | 36,470,356 | 32,841,243 | r35,903,000 | 36,020,000 | 34,147,000 |
| Burma | 1,866,752 | 1,638,000 | 1,096,000 | 917,000 | 780,000 | 902,000 |
| China (a) | 800,000 | 800,000 | 800,000 | 800,000 | 800,000 | 800,000 |
| Formosa | 60,600 | 87,300 | 79,500 | 115,800 | 89,800 | 80,900 |
| Indonesia.. .. | 254,730 | 298,777 | 220,779 | 308,969 | 309,065 | 316,000 |
| Japan | 8,714,750 | 8,970,000 | 10,318,716 | 10,799,659 | 10,713,000 | 10,804,000 |
| Korea (South) .. | 404,460 | 434,000 | 500,100 | 587,910 | 610,607 | 629,640 |
| Korea (North) (a) .. | 500,000 | 500,000 | 600,000 | (b) 700,000 | (b) 700,000 | 800,000 |
| Philippine Republic .. | 907,504 | 933,938 | 1,162,889 | 1,368,976 | 1,510,500 | 1,566,312 |
| TOTAL* | 169,000,000 | 174,000,000 | 179,000,000 | 169,000,000 | 172,000,000 | 183,000,000 |
| WORLD'S TOTAL* .. | 218,000,000 | 225,000,000 | 232,000,000 | 224,000,000 | 240,000,000 | 252,000,000 |

*Totals exclude estimates for the U.S.S.R. for which no authentic figures are available. (In recent years Russian production has been estimated by the United States Bureau of Mines as 29-35,000,000 troy ounces.) An allowance, however, has been made for those other countries for which information is not yet available.

- (a) "Metallgesellschaft" estimate.
- (b) United States Bureau of Mines' estimate.
- (c) Recoverable.

TOTAL EXPORTS OF SILVER*

(Metal content)

Troy ounces fine

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|------------|------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Bullion | 21,328,105 | 38,146,064 | 35,417,248 | 31,714,026 | 29,418,055 | 18,591,796 |
| Kenya— | | | | | | |
| Refined bullion | 46,834 | 29,750 | 16,924 | — | — | — |
| Rhodesia— | | | | | | |
| Bullion | 96,280 | 83,285 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Tanzania— | | | | | | |
| Refined bullion | 25,329 | 22,865 | 10,572 | 2,293 | 2,386 | 2,023 |
| Uganda— | | | | | | |
| Bullion | — | 2 | — | — | — | — |
| Zambia— | | | | | | |
| Bullion | 40,000 | 2,539 | 40,000 | 166,000 | 76,097 | 49,163 |
| Canada— | | | | | | |
| Ore, concentrates, etc. | 9,478,317 | 12,245,877 | 11,850,469 | 10,407,418 | 21,502,022 | 21,883,028 |
| Bullion | 10,586,939 | 11,268,110 | 12,221,142 | 13,735,675 | 28,104,562 | 34,658,937 |
| Hong Kong | | | | | | |
| Bullion | 3,594,709 | 1,631,164 | 881,558 | 897,118 | 1,849,448 | 763,924 |
| Singapore— | | | | | | |
| Bullion (b) | 405,000 | 373,000 | 628,000 | 1,086,000 | 2,082,000 | 982,000 |
| Australia (a)— | | | | | | |
| Ores and concentrates | 3,766,059 | 2,740,289 | 2,959,026 | 3,432,019 | 3,309,135 | 3,210,893 |
| Silver-lead bullion | 5,502,534 | 3,367,282 | 5,887,644 | 4,714,641 | 7,543,409 | 8,736,989 |
| Bullion, refined | 4,536,735 | 1,366,813 | 247,428 | } 2,724,878 | 11,356,431 | 11,666,551 |
| do. unrefined | 4,308 | — | 901 | | | |
| Beaten, rolled or drawn | 33,027 | 89,101 | 178,218 | | | |
| Fiji— | | | | | | |
| Bullion | 60,260 | 60,640 | 67,783 | 61,690 | 54,419 | 33,698 |
| Irish Republic— | | | | | | |
| Bullion (b) | 214,000 | 14,100 | 34,400 | 16,000 | 30,000 | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Bullion and scrap | 10,870,000 | 8,131,000 | 9,208,000 | 8,115,000 | 17,188,000 | 45,091,400 |
| Denmark— | | | | | | |
| Bullion | 36,000 | 45,000 | 58,000 | 11,000 | 82,000 | 636,000 |
| Beaten, rolled or drawn | 13,000 | 12,000 | 4,000 | 6,000 | 20,000 | 19,300 |
| France— | | | | | | |
| Bullion and scrap | 1,031,000 | 1,183,000 | 3,126,000 | 773,000 | 8,645,000 | 3,518,000 |
| Beaten, rolled or drawn | 3,077,000 | 4,904,000 | 2,026,000 | 1,409,000 | 1,624,000 | 2,780,000 |
| Germany (Federal)— | | | | | | |
| Bullion | 18,066,000 | 15,751,000 | 14,416,000 | 13,542,000 | 23,940,000 | 27,683,000 |
| Netherlands— | | | | | | |
| Bullion and scrap | 588,000 | 1,355,000 | 771,000 | 722,000 | 1,659,900 | 3,122,600 |
| Beaten, rolled or drawn | 284,000 | 345,000 | 211,000 | 217,500 | 480,500 | 1,247,800 |
| Sweden— | | | | | | |
| Bullion | 482,000 | 390,000 | 386,000 | 1,800,000 | 4,018,800 | 5,626,400 |
| Switzerland— | | | | | | |
| Bullion | 211,000 | 1,107,000 | 1,848,000 | 1,676,000 | 407,000 | 3,743,000 |
| Yugoslavia— | | | | | | |
| Bullion | 2,415,000 | 3,079,000 | 2,977,000 | 2,616,000 | 2,320,000 | 3,255,000 |
| Morocco— | | | | | | |
| Bullion | 85,000 | 17,500 | 69,285 | 758,000 | 915,000 | 848,890 |
| South Africa— | | | | | | |
| Bullion | 1,699,777 | 2,773,203 | 11,827,383 | 11,175,744 | 4,108,791 | 3,713,085 |

*Excluding silver coin, but including silver shipped for minting.

(a) Years ended June 30 of that stated.

(b) Estimated.

EXPORTS OF SILVER (cont.)

Troy ounces fine

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|-------------|------------|------------|--------------|-------------|------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| South West Africa— Concentrates (b) .. | 328,808 | 461,581 | 483,764 | n.a. | n.a. | n.a. |
| Guatemala (a)— Ore and base bullion .. | n.a. | n.a. | 378 | n.a. | n.a. | n.a. |
| Honduras— Ore and base bullion .. | 2,350,740 | 3,967,000 | 3,842,005 | 3,845,394 | 1,982,351 | 3,183,858 |
| Mexico— Bullion, etc. | 34,389,000 | 29,521,000 | 34,245,000 | n.a. | 37,320,000 | n.a. |
| Nicaragua— Bullion | 168,791 | 165,700 | 447,956 | 181,870 | 159,693 | 168,051 |
| Salvador— Bullion | — | 11,000 | n.a. | n.a. | n.a. | n.a. |
| United States— Ore and base bullion .. | 2,676,000 | 537,000 | 369,000 | 2,365,000 | 23,129,000 | 31,047,000 |
| Refined bullion .. | 106,718,000 | 39,128,000 | 85,169,000 | 68,404,000 | 102,632,000 | 57,956,000 |
| Argentina— Bullion, etc. | 268,000 | 161,000 | 214,000 | 337,000 | 395,000 | n.a. |
| Bolivia— Ores, etc. | 4,810,973 | 4,114,427 | 4,612,924 | 4,249,653 | 4,770,000 | 6,076,000 |
| Chile— Ores, etc. | 2,448,961 | 2,522,579 | n.a. | n.a. | n.a. | n.a. |
| Ecuador (a)— Ore and base bullion .. | 51,000 | 39,000 | 20,000 | n.a. | n.a. | n.a. |
| Peru— Ores and concentrates | 14,413,403 | 13,348,043 | 14,793,595 | } 30,768,258 | 33,100,000 | 36,000,000 |
| Bullion | 23,000,000 | 19,695,419 | 20,576,305 | | | |
| Matte, slag, etc. .. | 125,169 | 938 | — | | | |
| Burma— Bullion | 1,406,039 | 1,002,648 | 1,256,430 | 400,957 | 299,934 | n.a. |
| Japan— Bullion and scrap (c) .. | 2,913,000 | 155,000 | 99,000 | 167,259 | 701,819 | 1,489,427 |
| Philippine Republic (a)— Ore and base bullion .. | 351,700 | 356,700 | 587,000 | n.a. | 358,000 | n.a. |

(a) Imports into the United States from the country stated.

(b) Contained in lead complex concentrates exported.

(c) Including "beaten, rolled or drawn".

TOTAL IMPORTS OF SILVER*
(Metal content)

Troy ounces fine

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|------------|------------|-------------|-------------|------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ores | 8,000 | 142,000 | 202,000 | — | — | — |
| Unrefined bullion | 340,387 | 5,466,339 | 6,685,162 | 13,226,990 | 53,171,493 | 19,673,284 |
| Refined bullion | 62,081,478 | 35,666,545 | 48,149,119 | 50,575,441 | 72,706,499 | 104,234,170 |
| Malta— | | | | | | |
| Bullion | 10,000 | (c) 7,800 | (c) 11,951 | (c) 15,749 | (c) 6,289 | (c) 5,081 |
| Ghana— | | | | | | |
| Bullion | 400 | 176 | — | — | — | — |
| Nigeria— | | | | | | |
| Bullion (c) | 22,284 | 20,702 | 47,250 | 7,263 | 1,368 | 13,186 |
| Sierra Leone— | | | | | | |
| Bullion | 1,344 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Zambia— | | | | | | |
| Bullion | n.a. | 2,539 | n.a. | 812 | n.a. | n.a. |
| Canada— | | | | | | |
| Bullion | 5,197,764 | 13,413,434 | 14,477,787 | 5,383,872 | 14,060,635 | 19,168,785 |
| Jamaica— | | | | | | |
| Bullion | 1,800 | 200 | 9,000 | 17,500 | n.a. | — |
| Trinidad and Tobago— | | | | | | |
| Bullion | 17,401 | 24,450 | 20,870 | 27,868 | 48,734 | 24,295 |
| Guyana— | | | | | | |
| Bullion (c) | 3,260 | 5,655 | 6,190 | 7,134 | 5,899 | 5,315 |
| Ceylon— | | | | | | |
| Bullion | — | 9,800 | 110,000 | 6,523 | — | n.a. |
| Cyprus— | | | | | | |
| Bullion | 43,600 | 76,000 | (c) 109,000 | (c) 112,000 | 54,898 | 27,501 |
| Hong Kong— | | | | | | |
| Bullion | 106,546 | 278,800 | 245,266 | 252,261 | 484,222 | 346,536 |
| India (b)— | | | | | | |
| Bullion | 7,901 | 6,646 | 6,130 | n.a. | n.a. | n.a. |
| Malaysia (West)— | | | | | | |
| Bullion (d) | n.a. | 2,500 | 300 | 732 | 1,868 | n.a. |
| Sarawak— | | | | | | |
| Bullion | 1,051 | 88 | 15 | 58 | 7 | n.a. |
| Singapore— | | | | | | |
| Bullion (d) | 9,300 | 1,400 | 2,000 | 7,000 | 158,000 | 126,400 |
| Australia (a)— | | | | | | |
| Bullion | 102,906 | 89,484 | 98,684 | 107,001 | 77,878 | 113,118 |
| Beaten, rolled or drawn | 11,529 | 2,740 | n.a. | n.a. | n.a. | n.a. |
| New Zealand (a)— | | | | | | |
| Beaten, rolled or drawn | 8,056 | 25,025 | 25,817 | 18,475 | n.a. | n.a. |
| Irish Republic— | | | | | | |
| Bullion (d) | 216,981 | 8,430 | 37,825 | 41,724 | 13,200 | n.a. |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Bullion | 2,090,000 | 3,199,000 | 3,778,000 | 3,273,000 | 2,363,080 | 3,494,785 |
| Belgium-Luxemburg | | | | | | |
| E. U.— | | | | | | |
| Bullion and scrap | 7,298,000 | 7,588,000 | 14,043,000 | 10,198,200 | 35,066,800 | 19,425,479 |
| Denmark— | | | | | | |
| Bullion | 678,000 | 812,000 | 825,000 | 546,241 | 311,862 | 221,840 |
| Beaten, rolled or drawn | 3,324,000 | 3,625,000 | 3,353,000 | 3,628,211 | 2,621,893 | 2,790,684 |
| Finland— | | | | | | |
| Bullion, etc. | 340,000 | 404,000 | 1,323,000 | 1,876,000 | 648,156 | 737,634 |

*Excluding silver coin, but including silver shipped for minting.

(a) Years ended June 30 of that stated.

(c) Including partly worked.

(b) Years ended March 31 following that stated.

(d) Estimated.

IMPORTS OF SILVER (cont.)

Troy ounces fine

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-------------|------------|------------|------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| France— | | | | | | |
| Bullion and scrap .. | 27,822,000 | 22,061,000 | 27,571,000 | 18,578,242 | 29,152,580 | 18,602,774 |
| Beaten, rolled or drawn | 1,000,000 | 1,091,000 | 1,353,000 | 1,530,665 | 1,760,643 | 2,556,373 |
| Germany (Federal)— | | | | | | |
| Bullion | 45,180,000 | 55,463,000 | 45,169,000 | 47,720,000 | 59,990,100 | 78,125,900 |
| Netherlands— | | | | | | |
| Bullion and scrap .. | 3,039,000 | 5,098,000 | 4,316,500 | 1,513,400 | 3,545,000 | 5,020,800 |
| Beaten, rolled or drawn | 1,399,000 | 3,397,000 | 1,419,000 | 2,056,700 | 2,622,400 | 2,723,600 |
| Norway— | | | | | | |
| Bullion | 1,105,000 | 1,726,000 | 1,234,000 | 1,051,000 | 827,000 | 2,026,000 |
| Beaten, rolled or drawn | 1,491,000 | 1,540,000 | 1,846,000 | 1,978,000 | 1,780,000 | 1,740,000 |
| Portugal— | | | | | | |
| Bullion and scrap .. | 964,000 | 578,000 | 316,000 | 908,000 | 541,700 | 520,868 |
| Beaten, rolled and drawn | 58,000 | 129,000 | 98,000 | 74,000 | 60,600 | 115,456 |
| Spain | <i>n.a.</i> | <i>n.a.</i> | 6,438,668 | 4,816,149 | 3,278,186 | 3,623,033 |
| Sweden— | | | | | | |
| Bullion | 450,000 | 510,000 | 482,000 | 386,000 | 386,000 | 418,000 |
| Switzerland— | | | | | | |
| Bullion | 11,175,000 | 4,190,000 | 17,762,000 | 18,636,000 | 16,347,390 | 3,743,000 |
| South Africa— | | | | | | |
| Bullion | 1,000 | 94,494 | 142,465 | 161,719 | 237,104 | 191,526 |
| Guatemala— | | | | | | |
| Bullion | 20,000 | 1,500 | 2,200 | 800 | 2,668 | 1,929 |
| United States— | | | | | | |
| Ore and base bullion .. | 43,146,000 | 47,830,864 | 36,288,344 | 25,642,000 | 28,786,000 | 31,888,000 |
| Refined bullion .. | 8,528,000 | 6,878,106 | 27,040,450 | 29,878,000 | 41,923,000 | 39,543,000 |
| Brazil— | | | | | | |
| Bullion | 1,512,000 | 734,000 | 970,000 | 901,000 | 983,330 | <i>n.a.</i> |
| Colombia— | | | | | | |
| Bullion and scrap .. | 56,000 | 66,000 | 59,000 | 13,000 | 23,000 | <i>n.a.</i> |
| Japan— | | | | | | |
| Bullion and scrap .. | 9,937,000 | 4,789,000 | 7,032,000 | 10,157,000 | 12,291,443 | 10,449,817 |
| Lebanon— | | | | | | |
| Bullion and scrap .. | 47,400 | 79,000 | 760,400 | 46,900 | 19,300 | 18,300 |
| Turkey— | | | | | | |
| Bullion, etc. | 7,000 | 3,000 | 19,400 | 48,000 | 1,000 | 15,000 |

STRONTIUM MINERALS

PRODUCTION OF STRONTIUM MINERALS

Long tons

| Producing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|--------|-------|-------|-------|-------|--------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Celestite | 17,033 | 9,549 | 9,405 | 6,680 | 7,763 | 11,536 |
| Pakistan (b)— | | | | | | |
| Celestite | 265 | 444 | 527 | 373 | 640 | 590 |
| OTHER COUNTRIES | | | | | | |
| Italy— | | | | | | |
| Celestite | 450 | 630 | 588 | 650 | 550 | n.a. |
| Mexico (a)— | | | | | | |
| Celestite | 4,815 | 3,076 | 6,202 | 2,788 | 2,500 | n.a. |
| Argentina— | | | | | | |
| Celestite | n.a. | 589 | 364 | 30 | 69 | n.a. |

Strontium minerals are also known to have been produced in Germany, Poland and the U.S.S.R.

(a) Exports.

(b) West Pakistan.

Mexico (a) Exports: 2,500 (1968), 17,791 (1969)

EXPORTS OF STRONTIUM MINERALS, ETC.

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|--------|-------|-------|-------|-------|-------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Celestite | 15,234 | 5,441 | 7,383 | 3,863 | 5,824 | 7,546 |
| OTHER COUNTRIES | | | | | | |
| France— | | | | | | |
| Oxide | 69 | 2 | — | 5 | 79 | 32 |
| Italy— | | | | | | |
| Strontianite and celestite | 132 | 97 | 117 | 118 | 80 | n.a. |
| Mexico— | | | | | | |
| Celestite | 4,815 | 3,076 | 6,202 | 2,788 | 2,500 | n.a. |

IMPORTS OF STRONTIUM MINERALS, ETC.

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|--------|-------|--------|-------|--------|--------|
| OTHER COUNTRIES | | | | | | |
| United States— | | | | | | |
| Strontianite and celestite | 19,301 | 8,697 | 10,283 | 5,011 | 11,500 | 24,800 |
| Strontium compounds .. | 6 | 7 | n.a. | 7 | 16 | n.a. |

UK: 3,704 (1969), 3,704 (1968)
 Mexico: 19,109 (1969), 19,109 (1968)
 Spain: 2,017 (1969), 2,017 (1968)

SULPHUR

(see also Pyrites)

PRODUCTION OF SULPHUR

Long tons

| Producing Country and Description | Estimated Sulphur Content | | | | | | | |
|-----------------------------------|---------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | 1968 | 1969 |
| COMMONWEALTH COUNTRIES | | | | | | | | |
| United Kingdom— | | | | | | | | |
| Spent oxide .. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 66,536 | 53,217 |
| Anhydrite (a) .. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 263,529 | 252,067 |
| Other (b) .. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 46,131 | 42,265 |
| Canada— | | | | | | | | |
| Smelter gas .. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 594,973 | 491,788 |
| Hydrogen sulphide (g) (f) .. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 2,304,237 | 2,665,122 |
| Trinidad (f) .. | 5,322 | 3,723 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Australia— | | | | | | | | |
| Sulphur content of: | | | | | | | | |
| zinc concentrates .. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 224,105 | 270,997 |
| lead concentrates .. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 50,244 | 56,367 |
| OTHER COUNTRIES | | | | | | | | |
| Austria— | | | | | | | | |
| Recovered sulphur .. | r 29,034 | r 29,723 | r 28,813 | 31,052 | 31,372 | n.a. | 31,372 | n.a. |
| Belgium— | | | | | | | | |
| By-product sulphur .. | 5,000 | 3,500 | n.a. | 8,190 | 8,521 | n.a. | 8,521 | n.a. |
| Bulgaria (c) .. | 7,000 | 10,000 | r 9,200 | r 8,200 | 8,500 | 8,563 | 8,500 | 8,563 |
| France— | | | | | | | | |
| Sulphur (d) .. | 1,486,800 | 1,497,200 | 1,516,111 | 1,638,824 | 1,609,000 | 1,705,000 | 1,609,000 | 1,705,000 |
| Finland (c) .. | 67,063 | 72,606 | 72,478 | e 103,000 | e 123,000 | e 110,000 | e 123,000 | e 110,000 |
| Germany (Federal)— | | | | | | | | |
| Refined sulphur .. | 76,602 | 75,412 | 82,476 | 104,071 | 124,877 | 127,033 | 124,877 | 127,033 |
| Germany (East)— | | | | | | | | |
| Sulphur .. | 123,081 | 122,835 | 125,681 | 121,339 | 117,597 | 107,823 | 117,597 | 107,823 |

(a) For sulphuric acid manufacture only.

(b) Including sulphur recovered from petroleum refineries.

(c) Sulphur recovered from pyrites or other sulphide ores.

(d) Recovered from natural gas.

(e) Estimated.

(f) Recovered from petroleum refineries.

(g) Sales.

(h) United States Bureau of Mines' estimate.

(i) Recovered from natural gas and nickel sulphide.

PRODUCTION OF SULPHUR (cont.)

Long tons

| Producing Country and Description | Estimated Sulphur Content | | | | | | | | | | | |
|-----------------------------------|---------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
| OTHER COUNTRIES (cont.) | | | | | | | | | | | | |
| Italy— | | | | | | | | | | | | |
| Sulphur rock .. | 667,773 | 638,822 | 582,047 | 493,078 | 532,552 | 406,938 | 88,000 | 77,000 | 73,000 | 65,000 | 69,000 | 52,000 |
| Fused (c) .. | 28,472 | 15,824 | 13,834 | 9,681 | 6,916 | 1,300 | 28,472 | 15,824 | 13,834 | 9,681 | 6,916 | 1,300 |
| Ground sulphur rock (c) .. | 23,033 | 24,041 | 18,160 | 14,355 | 22,182 | n.a. | 7,000 | 6,000 | 5,000 | 4,300 | n.a. | n.a. |
| Netherlands (i) .. | 28,400 | 26,500 | 45,000 | 42,000 | 42,000 | 42,000 | 28,400 | 26,500 | 45,000 | 42,000 | 42,000 | 42,000 |
| Poland— | | | | | | | | | | | | |
| Native sulphur .. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 289,900 | 424,000 | 469,000 | 484,000 | 479,000 | 650,000 |
| Spain— | | | | | | | | | | | | |
| Refined sulphur (h) .. | 75,451 | 42,810 | 27,819 | 42,120 | n.a. | n.a. | 75,451 | 42,810 | 27,819 | 42,120 | n.a. | n.a. |
| Sweden— | | | | | | | | | | | | |
| Sulphur .. | 27,009 | 21,082 | 9,842 | n.a. | n.a. | n.a. | 27,009 | 21,082 | 9,842 | n.a. | n.a. | n.a. |
| U.S.S.R. (d)— | | | | | | | | | | | | |
| Native sulphur .. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 935,000 | 984,000 | 984,000 | 1,034,000 | 1,033,000 | 1,102,000 |
| By-product sulphur .. | 394,000 | 423,000 | 423,000 | 443,000 | 443,000 | 472,000 | 394,000 | 423,000 | 423,000 | 443,000 | 443,000 | 472,000 |
| Egypt— | | | | | | | | | | | | |
| By-product sulphur (a) .. | 2,427 | 3,790 | 11,490 | 8,839 | 3,149 | 500 | 2,427 | 3,790 | 11,490 | 8,839 | 3,149 | 500 |
| South Africa— | | | | | | | | | | | | |
| By-product sulphur (a) .. | 5,701 | 7,102 | 6,300 | 6,000 | 6,000 | 6,000 | 5,701 | 7,102 | 6,300 | 6,000 | 6,000 | 6,000 |
| Mexico— | | | | | | | | | | | | |
| Crude sulphur (f) .. | 1,635,767 | 1,481,236 | 1,611,446 | 1,793,085 | 1,582,206 | 1,605,601 | 1,635,767 | 1,481,236 | 1,611,446 | 1,793,085 | 1,582,206 | 1,605,601 |
| Sulphur ore (g) .. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 25,989 | 33,800 | 29,322 | 23,542 | 23,922 | 26,421 |
| Refined sulphur (e) .. | 36,284 | 45,984 | 38,160 | 47,577 | 52,204 | 57,043 | 36,284 | 45,984 | 38,160 | 47,577 | 52,204 | 57,043 |
| Netherlands Antilles— | | | | | | | | | | | | |
| By-product sulphur (a) .. | 26,000 | 25,000 | n.a. | n.a. | n.a. | n.a. | 26,000 | 25,000 | n.a. | n.a. | n.a. | n.a. |
| United States— | | | | | | | | | | | | |
| Crude sulphur (f) .. | 5,228,207 | 6,116,273 | 7,001,360 | 7,014,448 | 7,458,392 | 7,145,658 | 5,228,207 | 6,116,273 | 7,001,360 | 7,014,448 | 7,458,392 | 7,145,658 |
| Sulphur ore (g) .. | 794 | 2,592 | 557 | 568 | 3,125 | — | 158 | 133 | 143 | 284 | 1,563 | — |
| Smelter gas (h) .. | 1,119,976 | 1,188,314 | 1,297,184 | 1,114,881 | 1,315,251 | 1,583,000 | 365,706 | 388,484 | 424,075 | 364,477 | 429,982 | 517,515 |

(a) Recovered from petroleum refineries.

(b) Estimated sulphur content of gas driven off in the smelting of lead, zinc and copper concentrates, recovered as sulphuric acid.

(c) Derived from sulphur rock above.

(d) United States Bureau of Mines' estimate.

(e) Recovered from natural gas.

(f) Frasch-process mines.

(g) Other mines.

(h) Mainly recovered from pyrites.

(i) Sulphur recovered from pyrites or other sulphide ores.

PRODUCTION OF SULPHUR (cont.)

Long tons

| Producing Country and Description | Estimated Sulphur Content | | | | | | 1969 | 1968 | 1967 | 1966 | 1965 | 1964 |
|---|---------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | | | | | | |
| OTHER COUNTRIES | | | | | | | | | | | | |
| United States (cont.)— | | | | | | | | | | | | |
| By-product sulphur (h) | 1,024,649 | 1,219,312 | 1,243,960 | 1,270,289 | 1,358,926 | 1,422,000 | 1,422,000 | 1,358,926 | 1,270,289 | 1,243,960 | 1,219,312 | 1,024,649 |
| Hydrogen sulphide and liquid sulphur dioxide(h) | 143,689 | 162,668 | 161,962 | 157,262 | 247,297 | n.a. | n.a. | 247,297 | 157,262 | 161,962 | 162,668 | 143,689 |
| Argentina— | | | | | | | | | | | | |
| Refined sulphur | 21,955 | 23,391 | 29,942 | 32,278 | 33,107 | 45,000 | 45,000 | 33,107 | 32,278 | 29,942 | 23,391 | 21,955 |
| Bolivia (f)— | | | | | | | | | | | | |
| Refined sulphur | 10,635 | 9,305 | 56,554 | 49,513 | 34,869 | 35,647 | 35,647 | 34,869 | 49,513 | 56,554 | 9,305 | 10,635 |
| Chile— | | | | | | | | | | | | |
| Smelter gases, etc. (g) | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Refined sulphur | 40,496 | 77,720 | 36,694 | 44,988 | 40,705 | 45,979 | 45,979 | 40,705 | 44,988 | 36,694 | 77,720 | 40,496 |
| Colombia— | | | | | | | | | | | | |
| Refined sulphur | 11,942 | 18,114 | 20,649 | 24,000 | 28,000 | 30,000 | 30,000 | 28,000 | 24,000 | 20,649 | 18,114 | 11,942 |
| Ecuador— | | | | | | | | | | | | |
| Native sulphur | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| China (c)— | | | | | | | | | | | | |
| Native sulphur | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Recovered sulphur (d) | 128,000 | 128,000 | 128,000 | 128,000 | 128,000 | 128,000 | 128,000 | 128,000 | 128,000 | 128,000 | 128,000 | 128,000 |
| Formosa— | | | | | | | | | | | | |
| Refined sulphur | 9,170 | 6,772 | 6,860 | 6,387 | 4,362 | 4,754 | 4,754 | 4,362 | 6,387 | 6,860 | 6,772 | 9,170 |
| Indonesia— | | | | | | | | | | | | |
| Native sulphur | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Iran— | | | | | | | | | | | | |
| By-product sulphur (a)(c) | 20,000 | 20,000 | 25,000 | 25,000 | 25,000 | 25,000 | 25,000 | 25,000 | 25,000 | 20,000 | 20,000 | 20,000 |
| Japan— | | | | | | | | | | | | |
| Refined sulphur (e) | 237,412 | 210,000 | 225,000 | 250,000 | 256,000 | 200,719 | 200,719 | 256,000 | 250,000 | 225,000 | 210,000 | 237,412 |
| By-product sulphur (a) | 18,499 | 55,988 | 52,187 | 61,201 | 73,000 | 140,000 | 140,000 | 73,000 | 61,201 | 52,187 | 55,988 | 18,499 |
| Philippine Republic (b) | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Turkey— | | | | | | | | | | | | |
| Refined sulphur | 21,800 | 23,000 | 22,300 | 25,000 | 24,000 | 25,000 | 25,000 | 24,000 | 25,000 | 22,300 | 23,000 | 21,800 |

Sulphur is also produced in Iraq.

(f) From sulphur rock and sulphide ores.

(a) Recovered from petroleum refineries.

(b) Including sulphur recovered from gold and silver mines.

(c) United States Bureau of Mines' estimate.

(d) Probably recovered from pyrites.

(e) Exports.

(g) Sulphur contained in sulphuric acid.

(h) Produced in treatment of industrial gases.

EXPORTS OF SULPHUR

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | 2,162 | 1,950 | 1,484 | 1,851 | <i>n.a.</i> | <i>n.a.</i> |
| Canada | 1,155,881 | 1,337,453 | 1,249,193 | 1,583,635 | 1,884,942 | 2,021,679 |
| Singapore— | | | | | | |
| Crude | 27 | 24 | 38 | 2,081 | 4,355 | 4,245 |
| Refined | 182 | 193 | 161 | 805 | 372 | 3,060 |
| Australia— | | | | | | |
| Zinc concentrates | | | | | | |
| (<i>S content</i>) (a) | 57,000 | 54,000 | 58,000 | 74,000 | 80,000 | 93,000 |
| New Zealand (b) | 5 | — | 2 | 2 | 1 | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Crude | 283 | 371 | — | 2,057 | 3 | 544 |
| Refined | 7,438 | 6,658 | 9,298 | 8,030 | 3,977 | 5,123 |
| France— | | | | | | |
| Crude | 1,017,792 | 898,815 | 868,030 | 1,012,571 | 1,039,387 | 845,137 |
| Unrefined ground | 1,638 | 2,316 | 2,127 | 4,309 | 2,822 | 2,669 |
| Refined lump | 504 | 736 | 735 | 2,035 | 1,380 | 2,999 |
| Flowers of sulphur | 8,274 | 8,797 | 7,697 | 3,076 | 2,708 | 3,086 |
| Precipitated sulphur | — | 28 | 5 | 2 | 8 | 50 |
| Germany (Federal) | 25,700 | 26,674 | 66,467 | 72,961 | 45,173 | 37,522 |
| Germany (East) | 11,702 | 5,914 | 7,905 | 11,399 | <i>n.a.</i> | 13,847 |
| Greece | 6,052 | 14,377 | 20,359 | 7,674 | 22,771 | 24,678 |
| Italy— | | | | | | |
| Crude | 3 | — | 20 | 49 | 24 | 538 |
| Refined | 4,303 | 2,131 | 1,415 | 2,102 | 2,900 | 5,892 |
| Flowers of sulphur | 286 | 259 | 305 | 326 | 297 | 278 |
| Precipitated sulphur | 3 | 37 | 13 | 7 | | |
| Netherlands— | | | | | | |
| Crude | 4,388 | 3,002 | 1 | 2,480 | 617 | 1,356 |
| Refined | 37 | 3 | 49 | 25 | 205 | 38 |
| Norway | 425 | — | 2,053 | — | — | 18 |
| Poland | 148,152 | 237,202 | 267,435 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Portugal | 152 | 637 | 933 | 2,060 | 456 | 774 |
| Spain— | | | | | | |
| Refined | 271 | 398 | 343 | 245 | 244 | 246 |
| Sweden | 189 | 331 | 89 | 24 | 18 | 4 |
| Switzerland | — | — | 294 | 224 | 203 | 232 |
| U.S.S.R. | 144,800 | 151,800 | 216,000 | 277,153 | 286,600 | 356,800 |
| South Africa | 115 | 449 | 127 | 4,992 | <i>n.a.</i> | 2,877 |
| Mexico | 1,811,600 | 1,515,513 | 496,156 | 1,611,394 | 1,400,000 | 1,100,000 |
| United States— | | | | | | |
| Crude | 1,920,392 | 2,624,052 | 2,326,103 | 2,042,079 | 1,549,047 | 1,536,169 |
| Refined and flowers of sulphur | 7,700 | 27,683 | 47,339 | 149,825 | 52,786 | 69,443 |
| Bolivia | 10,635 | 9,305 | 57,334 | 49,514 | 34,869 | 35,647 |
| Chile | 246 | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Japan | 154 | 188 | 5,717 | 1,947 | 25,635 | 29,671 |
| Turkey | <i>n.a.</i> | <i>n.a.</i> | 4,114 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |

(a) Estimated amount recoverable.

(b) Years ended June 30 of that stated.

IMPORTS OF SULPHUR

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— Sulphur | 709,651 | 786,079 | 753,896 | 701,040 | } 769,029 | 730,484 |
| Wastes and residues | — | 9,448 | 459 | 15,360 | | |
| Malta— Crude | 2 | 31 | 2 | 20 | 7 | 45 |
| Flowers of sulphur | <i>n.a.</i> | 241 | 124 | 233 | 299 | 215 |
| Kenya | 1,388 | 1,450 | 1,419 | 270 | 511 | 535 |
| Mauritius | 1 | 104 | 111 | 83 | 69 | 106 |
| Nigeria | 17 | 190 | 74 | 1,290 | 253 | 116 |
| Tanzania | 239 | 266 | 550 | 270 | 407 | 286 |
| Uganda | 1,539 | 5,815 | 5,894 | 2,746 | 1,589 | 4,461 |
| Zambia— Crude | <i>n.a.</i> | 4,987 | 3,021 | 2,836 | 3,950 | <i>n.a.</i> |
| Flowers of sulphur | <i>n.a.</i> | 34 | 21 | 23 | 2,261 | <i>n.a.</i> |
| Canada | 133,542 | 144,822 | 129,879 | 111,412 | 67,692 | 40,632 |
| Jamaica | 1,004 | 1,006 | 1,009 | 3,477 | 1,303 | — |
| Trinidad and Tobago | 16,415 | 17,132 | 16,963 | 14,471 | 44,080 | 18,813 |
| Guyana | 5 | 5 | 6 | 3 | 4 | 1 |
| Ceylon | 2,562 | 1,907 | 2,056 | 1,631 | 452 | 961 |
| Cyprus | 1,486 | 1,833 | 1,992 | 1,467 | 2,397 | 598 |
| Hong Kong | 422 | 376 | 709 | 1,605 | 1,540 | 1,808 |
| India | 237,352 | 278,774 | 283,048 | 583,281 | 384,154 | 289,515 |
| Malaysia (West) | <i>n.a.</i> | 5,063 | 5,372 | 4,061 | 5,754 | 5,516 |
| Pakistan | 16,948 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Singapore— Crude | 1,002 | 59 | 2,000 | — | — | 17 |
| Refined | 184 | 1,343 | 1,346 | 782 | 7,769 | 10,365 |
| Australia | 376,639 | 387,868 | 434,045 | 513,962 | 548,563 | 383,886 |
| New Zealand (a) | 174,202 | 204,846 | 211,548 | 187,626 | 166,425 | 157,741 |
| Irish Republic | 53,798 | 52,532 | 85,288 | 97,851 | 102,495 | 106,811 |
| OTHER COUNTRIES | | | | | | |
| Austria | 88,731 | 112,218 | 80,778 | 87,776 | 82,564 | 110,642 |
| Belgium-Luxemburg E.U.— Crude | 210,204 | 269,824 | 215,218 | 220,373 | 283,592 | 298,713 |
| Refined | 510 | 403 | 528 | 371 | 525 | 286 |
| Czechoslovakia | 186,000 | 222,000 | 234,000 | 233,000 | 282,000 | 262,000 |
| Denmark | 10,791 | 13,612 | 10,318 | 6,595 | 5,900 | 11,449 |
| Finland | 66,329 | 71,245 | 76,622 | 50,426 | 33,703 | 38,496 |
| France— Crude | 210,593 | 259,615 | 222,468 | 231,002 | 329,303 | 345,477 |
| Unrefined ground | 156 | 119 | 59 | 120 | 710 | 134 |
| Refined lump | 618 | 255 | 317 | 265 | 314 | 365 |
| Precipitated | 77 | 58 | 39 | 95 | 129 | 242 |
| Germany (Federal) | 398,384 | 478,168 | 366,008 | 319,482 | 247,575 | 315,181 |
| Greece | 45,712 | 47,302 | 58,017 | 76,252 | 98,876 | 142,503 |
| Hungary | 162,992 | 156,000 | 149,000 | 165,347 | 242,601 | 93,592 |
| Italy | 60,777 | 72,268 | 84,400 | 75,996 | 39,900 | 200,598 |
| Netherlands— Crude | 163,227 | 212,939 | 196,318 | 275,705 | 327,508 | 381,064 |
| Refined | 1,570 | 1,642 | 1,796 | 1,687 | 2,325 | 2,264 |
| Norway | 45,966 | 57,097 | 40,958 | 37,298 | 25,859 | 33,920 |
| Poland | 19,200 | 6,889 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Portugal | 37,552 | 53,863 | 33,732 | 18,517 | 20,481 | 26,851 |
| Spain | 39,054 | 35,483 | 37,659 | 63,204 | 53,147 | 73,333 |

(a) Years ended June 30 of that stated.

IMPORTS OF SULPHUR (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Sweden | 126,086 | 157,226 | 176,210 | 121,921 | 146,576 | 116,541 |
| Switzerland— | | | | | | |
| Crude and ground | 52,111 | 79,912 | 54,414 | 41,446 | 34,684 | 54,252 |
| Flowers of sulphur | 216 | 251 | 239 | 184 | 331 | 207 |
| U.S.S.R. | 143,500 | 24,800 | 26,900 | 45,766 | 9,252 | 24,400 |
| Yugoslavia | 18,187 | 15,468 | 14,566 | 21,364 | 20,325 | 22,273 |
| Angola | 485 | 397 | 560 | 460 | 519 | 623 |
| Canary Islands— | | | | | | |
| Crude | | | | | | |
| Refined, etc. | 1,257 | 923 | 7,483 | 6,291 | 7,706 | 7,692 |
| Egypt | 5,977 | 5,028 | 15,960 | <i>n.a.</i> | <i>n.a.</i> | 32,824 |
| Malagasy Republic | 29 | 22 | 20 | 22 | 15 | 22 |
| Morocco— | | | | | | |
| Crude | 4,581 | 9,851 | 9,981 | 5,945 | 12,376 | 29,504 |
| Unrefined, ground | 966 | 843 | 644 | 563 | 380 | 277 |
| Refined | 92 | 117 | 101 | 140 | 120 | 89 |
| Flowers of sulphur | 3,492 | 2,632 | 3,023 | 1,604 | 1,709 | 213 |
| Precipitated | 46 | 34 | — | — | — | — |
| Mozambique | 583 | 425 | 659 | 377 | <i>n.a.</i> | <i>n.a.</i> |
| South Africa | 142,110 | 191,008 | 181,838 | 197,260 | 217,845 | 156,467 |
| Tunisia— | | | | | | |
| Crude and unrefined | 21,152 | 72,997 | 126,913 | 122,195 | 142,600 | 131,249 |
| Refined and flowers of sulphur | 203 | 886 | 1,280 | 788 | — | 90 |
| Costa Rica | 40 | <i>n.a.</i> | 59 | 15 | 36 | 47 |
| Cuba | 50,434 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Guatemala | 2 | — | 98 | 14 | 13 | 29 |
| Mexico | 340 | 422 | 244 | 240 | 106 | <i>n.a.</i> |
| Netherlands Antilles | 1,959 | — | — | — | — | <i>n.a.</i> |
| Nicaragua | 275 | 50 | 308 | 55 | 142 | 108 |
| Salvador | 43 | 39 | 5,444 | 6,181 | 3 | 3,204 |
| United States | 1,462,211 | 1,465,093 | 1,514,032 | 1,474,182 | 1,571,542 | 1,774,948 |
| Argentina— | | | | | | |
| Crude | 44,310 | 44,367 | 34,829 | 20,606 | 22,025 | 43,712 |
| Refined and flowers of sulphur | 165 | 169 | 150 | 91 | 87 | — |
| Bolivia | <i>n.a.</i> | 4 | 18 | 46 | <i>n.a.</i> | <i>n.a.</i> |
| Brazil— | | | | | | |
| Crude | 138,577 | 189,299 | 164,331 | 199,631 | 234,177 | <i>n.a.</i> |
| Refined | — | 558 | 524 | 2,135 | 3,496 | <i>n.a.</i> |
| Precipitated | 23 | 3 | 12 | 5 | 7 | <i>n.a.</i> |
| Chile | 5,794 | 22,408 | <i>n.a.</i> | 31,977 | <i>n.a.</i> | <i>n.a.</i> |
| Colombia | 1,537 | 3,138 | 64 | 1,059 | 40 | <i>n.a.</i> |
| Ecuador | 134 | 148 | 159 | 139 | <i>n.a.</i> | <i>n.a.</i> |
| Peru | 12,062 | 15,757 | 13,043 | 13,941 | 5,405 | <i>n.a.</i> |
| Uruguay | <i>n.a.</i> | 8,441 | 9,291 | 10,059 | 7,638 | 5,999 |
| Venezuela | 22,381 | 33,325 | 3,451 | 26,447 | 42,282 | 11,433 |
| Burma | 513 | 1,234 | 661 | — | — | <i>n.a.</i> |
| Formosa | 86,535 | 116,788 | 68,210 | 163,275 | 64,864 | 183,245 |
| Iran (a) | 269 | 146 | 3,717 | 379 | 689 | <i>n.a.</i> |
| Iraq | 1,344 | <i>n.a.</i> | 56 | 5,134 | 2,887 | 316 |
| Israel | 69,057 | 47,941 | 55,538 | 72,268 | 68,945 | 57,187 |
| Japan | 24,227 | 53,119 | 9,630 | 31 | 8 | 23 |
| Jordan | 2,319 | 1,169 | 2,050 | 1,765 | 775 | 1,818 |
| Korea (South) | 89 | 6,365 | 21,693 | 28,141 | 54,243 | 135,445 |
| Lebanon | 2,375 | 25,567 | 10,019 | 12,871 | 30,934 | 56,292 |
| Philippine Republic | 5,438 | 18,954 | <i>n.a.</i> | 5,976 | <i>n.a.</i> | <i>n.a.</i> |
| Syria | 1,363 | 51 | 2,041 | 59 | 212 | 342 |
| Thailand | 9,288 | 5,128 | 10,998 | 8,272 | 15,009 | 11,895 |
| Turkey | 207 | 98 | 103 | 591 | 9,973 | 14,371 |

(a) Years ended March 20 of year following that stated.

TALC
PRODUCTION OF TALC
(Including Steatite and Pyrophyllite)

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | 10,155 | 9,977 | 8,978 | 8,968 | 11,345 | 10,099 |
| Rhodesia | 14 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Swaziland— | | | | | | |
| Pyrophyllite | 1,964 | 905 | 1,426 | 589 | 573 | 591 |
| Canada (c) | 51,904 | 47,176 | 62,629 | 54,165 | 71,954 | 72,703 |
| India— | | | | | | |
| Steatite | 131,706 | 154,000 | 146,697 | 133,173 | 163,689 | 166,863 |
| Pyrophyllite | 5,975 | 11,641 | 8,266 | 4,856 | 10,507 | 10,714 |
| Pakistan (e) | 2,519 | 2,799 | 3,231 | 2,607 | 2,576 | <i>n.a.</i> |
| Australia— | | | | | | |
| Talc | 15,695 | 19,719 | 17,327 | 17,779 | 38,681 | 51,968 |
| Pyrophyllite | 381 | — | — | — | — | — |
| OTHER COUNTRIES | | | | | | |
| Austria | 70,737 | 74,703 | 75,098 | 76,505 | 83,219 | 92,651 |
| Finland | 5,900 | 6,900 | 5,000 | 2,500 | 3,000 | <i>n.a.</i> |
| France | 202,156 | 236,493 | 220,537 | 213,920 | 242,198 | 243,100 |
| Germany (Federal) | 30,004 | 30,249 | 32,393 | 32,772 | 27,576 | 44,715 |
| Greece | 3,705 | 3,401 | 4,430 | 4,168 | 2,500 | 5,978 |
| Italy | 131,716 | 119,537 | 110,899 | 116,596 | 114,029 | <i>n.a.</i> |
| Norway | 75,880 | 75,000 | 77,113 | 78,043 | 73,771 | 66,598 |
| Portugal | 787 | 699 | 709 | 138 | 1,437 | 1,181 |
| Spain | 26,384 | 27,378 | 28,596 | 31,416 | 28,569 | 33,195 |
| Sweden | 16,400 | 18,300 | 18,200 | 23,900 | 23,326 | 27,951 |
| U.S.S.R. (a) | 345,000 | 350,000 | 350,000 | 364,000 | 364,000 | (d) 364,000 |
| Egypt | 16,555 | 39,002 | 29,170 | <i>n.a.</i> | <i>n.a.</i> | 4,200 |
| South Africa (b) | 6,512 | 9,096 | 8,509 | 8,992 | 8,909 | 8,673 |
| Mexico | 772 | 3,333 | 2,471 | 2,872 | 631 | <i>n.a.</i> |
| United States— | | | | | | |
| Talc | 673,072 | 657,687 | 687,324 | 700,942 | 738,962 | } 918,962 |
| Pyrophyllite | 121,525 | 112,737 | 111,787 | 104,872 | 116,629 | |
| Argentina | 24,022 | 24,693 | 29,378 | 24,996 | 20,930 | <i>n.a.</i> |
| Brazil | 47,355 | 56,738 | 28,412 | 28,895 | <i>n.a.</i> | <i>n.a.</i> |
| Chile | 2,716 | 1,465 | 2,233 | 2,836 | 2,769 | <i>n.a.</i> |
| Colombia | 718 | 400 | 1,176 | 1,176 | 1,349 | 1,525 |
| Paraguay | 46 | 138 | 59 | 71 | 74 | <i>n.a.</i> |
| Peru— | | | | | | |
| Pyrophyllite | 3,535 | 4,126 | 4,430 | 5,454 | <i>n.a.</i> | <i>n.a.</i> |
| Uruguay | 2,090 | 2,337 | 2,094 | 2,596 | 2,173 | 2,270 |
| China (a) | 150,000 | 150,000 | 150,000 | 150,000 | 150,000 | 150,000 |
| Formosa | 16,713 | 14,988 | 28,298 | 40,662 | 28,595 | 23,988 |
| Japan— | | | | | | |
| Talc | 95,962 | 91,724 | 103,054 | 127,772 | 141,726 | 149,000 |
| Pyrophyllite | 941,886 | 900,549 | 988,143 | 1,220,811 | 1,520,599 | 1,529,000 |
| Korea (South)— | | | | | | |
| Talc | 43,207 | 35,168 | 52,763 | 55,391 | 63,738 | 128,847 |
| Pyrophyllite | 45,429 | 48,141 | 53,826 | 65,540 | 89,707 | 68,819 |
| Korea (North) (a) | 39,000 | 49,000 | 49,000 | 49,000 | 59,000 | <i>n.a.</i> |
| Philippine Republic | 96 | 584 | 627 | 437 | 858 | <i>n.a.</i> |
| TOTAL* | 3,370,000 | 3,390,000 | 3,470,000 | 3,770,000 | 4,230,000 | 4,420,000 |

*Excluding talc known to have been produced in Roumania.

(a) United States Bureau of Mines' estimate.

(b) In addition the following amounts of wonderstone were produced (long tons):
1964—1,677; 1965—3,569; 1966—6,172; 1967—4,546; 1968—5,013; 1969—4,631.

(c) Shipments. (d) Estimated. (e) West Pakistan.

EXPORTS OF TALC

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-----------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Canada | (a) 2,300 | (a) 3,100 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| India | 11,771 | 10,376 | 10,240 | 10,107 | 13,378 | 25,006 |
| Malaysia (West) | <i>n.a.</i> | 14 | 20 | 46 | 10 | 131 |
| Singapore | 877 | 335 | 458 | 692 | 901 | 1,186 |
| Australia | 5,181 | 6,778 | 7,634 | 8,648 | 24,982 | 33,599 |
| OTHER COUNTRIES | | | | | | |
| Austria | 54,915 | 59,535 | 59,601 | 60,772 | 71,710 | 78,464 |
| Belgium-Luxemburg | | | | | | |
| E.U. | 91 | 30 | 1,487 | 8,351 | 11,564 | 14,119 |
| France | 50,468 | 50,372 | 43,414 | 44,280 | 43,677 | 48,101 |
| Germany (Federal) | 1,196 | 1,201 | 1,128 | 1,515 | 3,989 | 5,462 |
| Greece | 30 | 173 | 192 | 84 | 247 | 25 |
| Italy | 42,963 | 42,384 | 38,827 | 31,851 | 39,963 | 49,423 |
| Netherlands | 144 | 344 | 207 | 140 | 172 | 420 |
| Norway | 73,581 | 68,480 | 73,621 | 74,907 | 71,798 | 62,389 |
| Portugal | 87 | 12 | 33 | 83 | 42 | 33 |
| Sweden | 4,131 | 5,001 | 3,978 | 3,762 | 4,641 | 3,810 |
| Switzerland | 1,256 | 1,256 | 527 | 1,707 | 2,027 | 1,712 |
| Egypt | 1,619 | 1,280 | 1,235 | 1,213 | 1,676 | 1,260 |
| South Africa | 632 | 167 | 347 | 274 | 184 | 253 |
| Mexico | 6 | 40 | 18 | 40 | 24 | <i>n.a.</i> |
| United States | 66,070 | 62,140 | 62,837 | 59,103 | 58,614 | 61,627 |
| Japan | 629 | 4,760 | 982 | 752 | 881 | 436 |
| Korea (South)— Talc | 26,482 | 19,120 | 40,436 | 56,948 | 47,910 | 59,676 |
| Turkey | 20 | 1 | 46 | 16 | 50 | 67 |

(a) Estimated.

IMPORTS OF TALC

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | 47,832 | 45,301 | 47,714 | 50,149 | 49,664 | 50,968 |
| Canada | 28,212 | 24,873 | 22,248 | 23,645 | 25,218 | 31,170 |
| Ceylon | 1,007 | 1,302 | 1,153 | 1,633 | 1,143 | 1,325 |
| Hong Kong | 645 | 1,009 | 1,181 | 1,371 | 1,412 | 1,478 |
| Malaysia (West) | <i>n.a.</i> | 1,890 | 1,483 | 2,326 | 2,856 | 3,025 |
| Singapore | 2,961 | 1,759 | 1,359 | 2,982 | 4,409 | 4,963 |
| Australia (a) | 2,631 | 2,340 | (c) 1,897 | (c) 2,228 | (c) 2,048 | (c) 3,003 |
| New Zealand (a) | 1,315 | 1,311 | 1,750 | 1,392 | 1,406 | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Austria | 883 | 1,769 | 1,469 | 1,204 | 1,691 | 1,392 |
| Belgium-Luxemburg | | | | | | |
| E.U. | 16,690 | 15,986 | 35,562 | 26,401 | 29,191 | 32,393 |
| Denmark | 12,966 | 13,072 | 13,539 | 13,839 | 14,150 | 13,181 |
| Finland | 3,766 | 4,392 | 4,915 | 4,841 | 4,312 | 5,953 |
| France | 7,635 | 6,784 | 7,549 | 8,522 | 9,502 | 9,545 |
| Germany (Federal) | 59,769 | 68,212 | 67,349 | 60,330 | 76,565 | 90,543 |
| Greece | 405 | 68 | 179 | r 1,306 | 1,970 | 1,927 |
| Italy | 12,115 | 11,098 | 12,305 | 14,196 | 15,628 | 17,487 |
| Netherlands | 13,498 | 14,032 | 14,272 | 14,457 | 15,023 | 14,724 |
| Norway | 3,037 | 4,009 | 4,812 | 4,339 | 5,922 | 5,108 |
| Poland | 10,200 | 17,801 | 14,500 | 10,109 | 17,270 | 22,853 |
| Portugal | 1,912 | 1,911 | 1,895 | 2,279 | 2,600 | 2,625 |
| Spain | 858 | 2,150 | 2,481 | 2,408 | 2,484 | 3,667 |
| Sweden | 14,457 | 16,487 | 18,329 | 18,328 | 18,622 | 18,428 |
| Switzerland | 13,098 | 13,652 | 12,535 | 12,537 | 12,166 | 11,204 |
| U.S.S.R. | 71,500 | 66,400 | 59,300 | 56,297 | 49,998 | 81,400 |
| Yugoslavia | 6,602 | 9,733 | 1,578 | 658 | 690 | 1,515 |
| Malagasy Republic | 8 | 27 | 76 | 31 | 58 | 83 |
| Morocco | 1,450 | 1,217 | 1,592 | 774 | 1,184 | 792 |
| South Africa | 1,016 | 742 | 1,198 | 1,663 | 2,960 | 2,395 |
| Tunisia | 619 | 332 | 344 | 434 | 1,169 | 892 |
| Costa Rica | 103 | 137 | 116 | 201 | 262 | 253 |
| Cuba | 3,287 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Guatemala | 116 | 174 | 114 | 232 | 160 | 267 |
| Honduras | 17 | 34 | 52 | 45 | 71 | <i>n.a.</i> |
| Mexico— | | | | | | |
| Talc | 39,361 | 34,215 | 46,520 | 32,423 | 52,010 | <i>n.a.</i> |
| Pyrophyllite | 89 | 148 | 81 | 120 | <i>n.a.</i> | <i>n.a.</i> |
| Salvador | 98 | 74 | 124 | 133 | 144 | 98 |
| United States | 20,284 | 18,770 | 19,561 | r 30,377 | 21,709 | 18,175 |
| Argentina | 190 | 148 | 227 | 499 | 141 | 232 |
| Brazil | — | — | — | 30 | 102 | <i>n.a.</i> |
| Chile | 57 | 258 | <i>n.a.</i> | 200 | <i>n.a.</i> | <i>n.a.</i> |
| Colombia | 981 | 971 | 931 | 947 | 523 | <i>n.a.</i> |
| Ecuador | 169 | 173 | 192 | 233 | <i>n.a.</i> | <i>n.a.</i> |
| Peru | 732 | 955 | 795 | 917 | 672 | <i>n.a.</i> |
| Venezuela | 2,733 | 2,954 | 2,936 | 3,383 | 5,712 | 4,350 |
| Iran (b) | 125 | 138 | 108 | 248 | 425 | <i>n.a.</i> |
| Iraq | 324 | <i>n.a.</i> | 666 | 334 | 924 | 599 |
| Japan | 59,798 | 52,828 | 75,739 | 93,313 | 125,480 | 152,272 |
| Lebanon | 217 | 226 | 167 | 287 | 422 | 583 |
| Philippine Republic | 2,531 | 2,610 | 2,814 | 2,794 | <i>n.a.</i> | <i>n.a.</i> |
| Syria | 581 | 485 | 767 | 167 | 285 | 907 |
| Thailand | 1,747 | 1,813 | 1,977 | 2,009 | 2,128 | 2,653 |
| Turkey | 93 | 217 | 71 | 137 | 117 | 138 |

(a) Years ended June 30 of that stated.

(b) Years ended March 20 of year following that stated.

(c) Owing to reclassification not strictly comparable with earlier years.

TANTALUM AND NIOBIUM MINERALS
PRODUCTION OF TANTALUM AND NIOBIUM MINERALS

Long ton^r

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|--------------|--------------|--------------|--------------|--------------|---------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Nigeria— | | | | | | |
| Tantalite | 10 | 13 | 65 | 18 | 27 | 6 |
| Columbite | 2,339 | 2,548 | 2,221 | 1,919 | 1,132 | 1,491 |
| Rhodesia— | | | | | | |
| Tantalum concentrates | 63 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Uganda— | | | | | | |
| Tantalite and columbite | 7 | 10 | 12 | 28 | 8 | <i>n.a.</i> |
| Canada— | | | | | | |
| Niobium concentrates (<i>Nb₂O₅ content</i>) .. | 966 | 1,042 | 1,178 | 985 | 974 | 1,344 |
| Malaysia (West)— | | | | | | |
| Columbite | 56 | 46 | 67 | 87 | 51 | 63 |
| Australia— | | | | | | |
| Tantalite and columbite | 15 | 11 | 5 | 36 | 106 | 72 |
| OTHER COUNTRIES | | | | | | |
| Norway— | | | | | | |
| Niobium concentrates(<i>b</i>) | 320 | 148 | — | — | — | — |
| Portugal— | | | | | | |
| Tantalite and columbite | 5 | 5 | 10 | 14 | 12 | 6 |
| Congo Republic— | | | | | | |
| Tantalite and columbite concentrates (<i>d</i>) .. | <i>n.a.</i> | <i>n.a.</i> | 94 | 144 | 112 | 76 |
| Ivory Coast— | | | | | | |
| Tantalite and columbite | 1 | 1 | — | — | 1 | — |
| Malagasy Republic— | | | | | | |
| Columbite | 4 | 4 | 1 | — | — | — |
| Mozambique— | | | | | | |
| Tantalite-columbite .. | 43 | 51 | 64 | <i>r</i> 88 | 61 | 63 |
| Microlite | 139 | 84 | 78 | 69 | 91 | 81 |
| Rwanda and Burundi— | | | | | | |
| Tantalite and columbite concentrates (<i>d</i>) .. | 154 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| South Africa— | | | | | | |
| Tantalite-columbite .. | 6 | 3 | 2 | 4 | 18 | 4 |
| South West Africa— | | | | | | |
| Tantalum and niobium concentrates | 1 | 1 | 1 | — | <i>n.a.</i> | <i>n.a.</i> |
| Argentina (<i>a</i>)— | | | | | | |
| Tantalite | — | — | 4 | 1 | 3 | — |
| Brazil— | | | | | | |
| Tantalite-columbite | 24 | 12 | 4 | 55 | <i>n.a.</i> | <i>n.a.</i> |
| Pyrochlore concentrates | 318 | 1,177 | 4,700 | 4,543 | 4,920 | 8,526 |
| French Guiana— | | | | | | |
| Tantalite and columbite | 1 | — | 1 | — | — | — |
| TOTAL (<i>c</i>) .. | 5,500 | 6,300 | 9,500 | 8,900 | 8,700 | 13,100 |

Small quantities of tantalite and columbite have been produced in Zambia, India and the Somali Republic.

(*a*) Imports into the United States.

(*b*) 53.7% Nb₂O₅ in 1964; 56% Nb₂O₅ in 1965.

(*c*) Total of tantalum and niobium concentrates produced in the countries listed above.

(*d*) Including tantalite-columbite content of tin-tantalite-columbite.

EXPORTS OF TANTALUM AND NIOBIUM MINERALS, ETC.

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|-------------|-------------|-------------|--------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ferro-niobium and ferro-niobium-tantalum .. | 153 | 212 | 196 | 175 | 152 | 281 |
| Nigeria— | | | | | | |
| Tantalite | 11 | 8 | 11 | 15 | 16 | 17 |
| Columbite | 3,132 | 2,776 | 2,325 | 2,085 | 1,349 | 1,310 |
| Rhodesia— | | | | | | |
| Tantalum concentrates | 74 | 17 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Uganda— | | | | | | |
| Tantalite and columbite | 6 | 15 | 12 | 14 | 7 | 5 |
| Malaysia (West)— | | | | | | |
| Columbite | 6 | 52 | 82 | 57 | 53 | 46 |
| Australia (a)— | | | | | | |
| Tantalite and columbite | 20 | 47 | 7 | 27 | 54 | 70 |
| OTHER COUNTRIES | | | | | | |
| Germany (Federal)— | | | | | | |
| Tantalum metal, etc. .. | (9,500lb.) | (11,500lb.) | (21,400lb.) | (29,900lb.) | (13,600lb.) | (13,600lb.) |
| Niobium metal, etc. .. | (1,500lb.) | (12,500lb.) | (2,900lb.) | (3,700lb.) | (4,700lb.) | (4,000lb.) |
| Portugal— | | | | | | |
| Tantalite and columbite | 25 | 20 | 29 | 25 | 9 | <i>n.a.</i> |
| Norway— | | | | | | |
| Niobium concentrates .. | 308 | 165 | — | — | — | <i>n.a.</i> |
| Congo Republic (b)— | | | | | | |
| Tantalite and columbite(c) | 50 | 60 | 60 | 60 | 150 | <i>n.a.</i> |
| Malagasy Republic— | | | | | | |
| Columbite | 16 | 3 | 1 | — | <i>n.a.</i> | <i>n.a.</i> |
| Mozambique— | | | | | | |
| Columbite | 203 | 74 | <i>n.a.</i> | 89 | 72 | 9 |
| South Africa— | | | | | | |
| Tantalite | — | 6 | 11 | 4 | 14 | 2 |
| South West Africa— | | | | | | |
| Tantalite | — | 1 | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| United States— | | | | | | |
| Tantalum concentrates | 89 | 127 | 73 | 34 | 29 | 38 |
| Niobium concentrates | 153 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Tantalum metal, etc. .. | (32,489lb.) | (35,821lb.) | (21,722lb.) | (48,790lb.) | (98,205lb.) | (95,323lb.) |
| Niobium metal, etc. .. | (4,674lb.) | (4,217lb.) | (4,101lb.) | <i>n.a.</i> | <i>n.a.</i> | (4,611lb.) |
| Tantalum powder .. | (32,217lb.) | (9,621lb.) | (51,354lb.) | (157,325lb.) | (83,713lb.) | (99,861lb.) |
| Brazil— | | | | | | |
| Tantalite | 81 | 163 | 157 | 202 | 267 | <i>n.a.</i> |
| Columbite | 11 | 39 | 58 | 100 | 62 | <i>n.a.</i> |
| Pyrochlore concentrates | 67 | 1,313 | 3,736 | 2,682 | 2,900 | <i>n.a.</i> |

(a) Years ended June 30 of that stated.

(b) Including Rwanda and Burundi.

(c) Estimated.

IMPORTS OF TANTALUM AND NIOBIUM MINERALS, ETC.

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|--------------|--------------|-------------|--------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Tantalum and niobium ores and concentrates | 1,439 | 1,635 | 1,558 | 1,053 | 1,054 | 2,738 |
| Tantalum metal .. | (10,940lb.) | (12,353lb.) | (33,040lb.) | (46,411lb.) | (70,135lb.) | (87,341lb.) |
| OTHER COUNTRIES | | | | | | |
| France— | | | | | | |
| Tantalum and niobium minerals | 148 | 136 | 422 | 376 | 551 | 1,145 |
| Germany (Federal)— | | | | | | |
| Tantalum and niobium minerals | <i>n.a.</i> | 1,440 | 1,383 | 1,003 | 1,649 | 2,041 |
| Tantalum metal, etc. .. | (11,500lb.) | (26,000lb.) | (40,100lb.) | (19,740lb.) | (58,530lb.) | (58,526lb.) |
| United States— | | | | | | |
| Tantalum concentrates | 438 | 534 | 957 | 871 | 549 | 435 |
| Niobium concentrates .. | 2,054 | 2,184 | 4,142 | 3,318 | 1,632 | 1,858 |
| Tantalum metal .. | (3,491lb.) | (26,162lb.) | (47,748lb.) | (54,887lb.) | (17,863lb.) | (10,949lb.) |
| Niobium metal (a) .. | (3,792lb.) | (9,817lb.) | (4,431lb.) | (55,552lb.) | (5,391lb.) | (5,185lb.) |
| Japan— | | | | | | |
| Niobium minerals .. | 300 | 279 | 553 | 465 | 773 | 1,294 |
| Tantalum ores and concentrates | <i>n.a.</i> | <i>n.a.</i> | 6,891 | 1,089 | 122 | 106 |
| Tantalum metal .. | (261,903lb.) | (302,884lb.) | (8,682lb.) | (241,677lb.) | (30,896lb.) | (49,438lb.) |

(a) As recorded in official trade returns. According to U.S. Bureau of Mines includes ferro-alloy.

TIN

PRODUCTION OF TIN ORE

(Metal content)

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom .. | 1,254 | 1,263 | 1,284 | 1,436 | 1,642 | 1,695 |
| Nigeria .. | 8,721 | 9,535 | 9,299 | 9,340 | 9,649 | 8,603 |
| Rhodesia .. | 536 | (a) 510 | (a) 600 | (a) 600 | (a) 600 | (a) 600 |
| Swaziland .. | 2 | 2 | — | — | — | — |
| Tanzania .. | 283 | 255 | 346 | 353 | 323 | 177 |
| Uganda .. | 217 | 178 | 120 | 104 | 169 | 163 |
| Zambia .. | 9 | 16 | 3 | — | — | — |
| Canada (b) .. | 157 | 168 | 317 | 195 | 115 | 120 |
| Malaysia (West) .. | 60,004 | 63,669 | 68,886 | 72,121 | 75,069 | 72,167 |
| Australia .. | 3,642 | 3,849 | 4,807 | 5,586 | 6,734 | 8,013 |
| TOTAL .. | 74,825 | 79,400 | 85,600 | 89,400 | 94,300 | 91,200 |
| OTHER COUNTRIES | | | | | | |
| France .. | 486 | 447 | 421 | 447 | 370 | 249 |
| Germany (Eastern) (g) .. | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 |
| Portugal .. | 676 | 557 | 600 | 645 | 668 | 489 |
| Spain .. | 90 | r 110 | 199 | r 160 | 140 | 138 |
| Cameroun .. | 39 | 38 | 42 | 33 | 33 | 31 |
| Congo Republic .. | 5,108 | 6,324 | 5,100 | 4,664 | 8,806 | 5,560 |
| Congo (Republic of) .. | 35 | 44 | 44 | 53 | 26 | — |
| Morocco .. | 14 | 15 | (a) 12 | (a) 12 | 18 | 8 |
| Niger .. | 51 | 54 | 57 | 56 | 71 | 85 |
| Rwanda and Burundi .. | 1,445 | 1,520 | 1,382 | (a) 1,422 | (a) 1,420 | 1,420 |
| South Africa .. | 1,586 | 1,671 | 1,745 | 1,763 | 1,837 | 1,794 |
| South West Africa .. | 474 | 416 | 687 | (f) 720 | (f) 700 | (f) 700 |
| Mexico .. | 1,206 | 503 | 789 | 588 | 518 | 492 |
| United States .. | 65 | 47 | 97 | 50 | n.a. | n.a. |
| Argentina .. | 343 | 497 | 458 | 802 | 700 | 800 |
| Bolivia (c) .. | 22,960 | 23,828 | 25,825 | 27,283 | 29,101 | 29,625 |
| Brazil .. | 729 | 1,673 | 1,475 | 1,599 | 1,700 | 2,458 |
| Peru (e) .. | 36 | 49 | r 18 | r 65 | 94 | n.a. |
| Burma .. | 568 | 464 | 370 | 259 | 270 | 298 |
| China (d) (f) .. | 25,000 | 25,000 | 22,000 | 20,000 | 20,000 | 20,000 |
| Indonesia .. | 16,345 | 14,699 | 12,568 | 13,601 | 16,632 | 16,281 |
| Japan .. | 796 | 838 | 970 | 1,166 | 943 | 729 |
| Korea (South) .. | — | — | — | 76 | 76 | 76 |
| Laos .. | 338 | 284 | 335 | 548 | 482 | 790 |
| Thailand .. | 15,597 | 19,048 | 22,565 | 22,490 | 23,601 | 20,857 |
| TOTAL* .. | 95,000 | 99,000 | 99,000 | 99,000 | 107,000 | 104,000 |
| WORLD'S TOTAL* .. | 170,000 | 178,000 | 185,000 | 188,000 | 201,000 | 196,000 |

*Excluding tin ore known to have been produced in Czechoslovakia, the U.S.S.R. and Vietnam.

(a) International Tin Council estimate.

(b) Tin in concentrates exported and in tin-lead alloy.

(c) Content of ore plus metal exported.

(d) Smelter.

(e) Recoverable.

(f) United States Bureau of Mines' estimate.

(g) "Metallgesellschaft" estimate.

SMELTER PRODUCTION OF TIN

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | 16,849 | 16,494 | 17,499 | 23,317 | 24,933 | 25,982 |
| Nigeria | 8,749 | 9,369 | 8,225 | 9,131 | 9,843 | 8,839 |
| Rhodesia | 511 | (b) 494 | (b) 600 | (b) 600 | (b) 600 | (b) 400 |
| Malaysia (West) | 71,351 | 72,469 | 71,049 | 76,328 | 88,185 | 86,878 |
| Australia | 3,021 | 3,179 | 3,640 | 3,594 | 3,692 | 4,156 |
| TOTAL | 100,481 | 102,000 | 101,000 | 113,000 | 127,000 | 126,000 |
| OTHER COUNTRIES | | | | | | |
| Belgium | 6,804 | 5,227 | 6,472 | 6,070 | 5,881 | 6,474 |
| Germany— | | | | | | |
| Federal Republic | 1,178 | 1,427 | 1,362 | 1,622 | 1,504 | 1,446 |
| Eastern (d) | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 |
| Netherlands | 15,858 | 18,114 | 12,551 | 13,739 | 7,983 | 5,298 |
| Portugal | 589 | 603 | 556 | 592 | 638 | 501 |
| Spain | 1,774 | 1,787 | 1,877 | 1,823 | 2,324 | 2,264 |
| Congo Republic | 1,485 | (b) 1,800 | 2,002 | 1,404 | 1,909 | 1,900 |
| Morocco (b) | 10 | 12 | 12 | 12 | 12 | 12 |
| South Africa | 1,016 | 962 | 822 | 658 | 682 | 738 |
| Mexico | 1,145 | 459 | 795 | 607 | 317 | 400 |
| United States | (b) 3,900 | 3,098 | 3,825 | 3,048 | 3,453 | 345 |
| Argentina (b) | 120 | 120 | 120 | 120 | 120 | 120 |
| Bolivia (a) | 2,461 | 3,406 | 1,083 | 1,059 | 59 | 85 |
| Brazil | 1,478 | 1,545 | 1,211 | 1,415 | 1,251 | 2,000 |
| China (c) | 25,000 | 25,000 | 22,000 | 20,000 | 20,000 | 20,000 |
| Indonesia (b) | 1,800 | 1,800 | 1,510 | 1,481 | 4,560 | 5,805 |
| Japan | 1,485 | 1,610 | 1,836 | 1,666 | 1,859 | 1,387 |
| Thailand | — | 5,524 | 16,990 | 26,551 | 24,434 | 23,640 |
| TOTAL* | 67,000 | 73,000 | 77,000 | 83,000 | 79,000 | 74,000 |
| WORLD'S TOTAL* | 168,000 | 175,000 | 178,000 | 196,000 | 207,000 | 200,000 |

*Excluding tin metal known to have been produced in Czechoslovakia and the U.S.S.R.

In addition secondary tin recovered in the United States (as metal, in alloys, and in chemical compounds) was as follows:

| | Long tons | Long tons |
|--------------|-----------|-----------|
| 1964 | 23,508 | 22,667 |
| 1965 | 25,076 | 22,495 |
| 1966 | 25,349 | 23,029 |

(a) Exports.

(b) International Tin Council estimate.

(c) United States Bureau of Mines' estimate.

(d) "Metallgesellschaft" estimate.

EXPORTS OF TIN, ETC.*

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|--------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Unwrought | 6,443 | 6,682 | 6,003 | 9,377 | 10,517 | 13,551 |
| do. alloys | 2,995 | 2,601 | 3,565 | 3,127 | 2,356 | 2,847 |
| Semi-manufactures (a) | 514 | 937 | 648 | 730 | 610 | 594 |
| Nigeria— | | | | | | |
| Ore and concentrates .. | 25 | 9 | 634 | 9 | 1,151 | 4 |
| Unwrought (a) | 10,557 | 10,575 | 11,495 | 10,813 | 11,280 | 10,110 |
| Rhodesia— | | | | | | |
| Ore and concentrates .. | 54 | 71 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Unwrought | 473 | 399 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Tanzania— | | | | | | |
| Ore and concentrates .. | 361 | 351 | 487 | 378 | 385 | 176 |
| Uganda— | | | | | | |
| Ore and concentrates .. | 320 | 294 | 204 | 183 | 291 | 232 |
| Zambia— | | | | | | |
| Ore and concentrates .. | 155 | 4 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Canada— | | | | | | |
| Concentrates | | | | | | |
| (<i>Sn content</i>) | 329 | 216 | 337 | 326 | 118 | 304 |
| Hong Kong— | | | | | | |
| Scrap | — | 19 | 1 | 6 | 2 | 32 |
| Semi-manufactures | 3 | 8 | 25 | 34 | 39 | 52 |
| India (b)— | | | | | | |
| Scrap | 53 | 85 | 10 | 32 | — | — |
| Malaysia (West)— | | | | | | |
| Ore | <i>n.a.</i> | 798 | 1,254 | 1,176 | 957 | 741 |
| Unwrought | <i>n.a.</i> | 73,287 | 71,410 | 73,528 | 86,017 | 87,530 |
| Semi-manufactures (a) | <i>n.a.</i> | 182 | 39 | 41 | 27 | — |
| Australia— | | | | | | |
| Ore and concentrates .. | | | | | | |
| (<i>Sn content</i>) | 321 | 682 | 1,326 | 1,662 | 3,135 | 3,524 |
| Unwrought | 1 | — | 1 | } 28 | 234 | 632 |
| do. alloys | 8 | 7 | 4 | | | |
| New Zealand (c)— | | | | | | |
| Scrap | 4,926 | 4,746 | 7 | 2 | 6 | 17 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Unwrought (a) | 55 | 41 | 26 | 17 | 23 | 10 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Unwrought | 4,506 | 3,896 | 4,215 | 3,739 | 4,246 | 3,843 |
| do. alloys | 68 | 215 | 89 | 81 | — | 40 |
| Scrap | 317 | 223 | 174 | 124 | 144 | 123 |
| Semi-manufactures (a) | 209 | 179 | 239 | 37 | 56 | 41 |
| Denmark— | | | | | | |
| Unwrought | 44 | 54 | 67 | 37 | 148 | 81 |
| do. alloys | 729 | 608 | 760 | 1,032 | 876 | 1,383 |
| Scrap | — | 336 | — | 32 | 108 | 47 |
| Semi-manufactures (a) | 31 | 38 | 27 | 48 | 55 | 51 |
| France— | | | | | | |
| Ore | 643 | 642 | 560 | 524 | 560 | 359 |
| Unwrought | 70 | 75 | 89 | 53 | 122 | 279 |
| do. alloys | 124 | 155 | 138 | 104 | 165 | 281 |
| Semi-manufactures (a) | 61 | 81 | 38 | 54 | 76 | 129 |

*In these tables the description "unwrought" tin corresponds to item 687.1 in the Standard International Trade Classification (Revised) and comprises ingots, pigs, unwrought bars, sticks, etc. "Semi-manufactures" corresponds to S.I.T.C. (R) 687.2 and includes foil and powder as well as sheets, strip, wire, pipes, tubes, etc.

(a) Including alloys.

(b) Years ended March 31 following that stated.

(c) Year ended June 30 of that stated.

EXPORTS OF TIN, ETC. (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|--------|--------|--------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Germany (Federal)— | | | | | | |
| Ore | 81 | 66 | 59 | 46 | 43 | 56 |
| Unwrought (a) | 1,478 | 1,581 | 1,632 | 1,994 | 1,512 | 1,489 |
| Scrap | 59 | 78 | 30 | 81 | 47 | 80 |
| Semi-manufactures (a) | 120 | 168 | 171 | 182 | 230 | 259 |
| Italy— | | | | | | |
| Unwrought (a) | 241 | 162 | 255 | 115 | 301 | 230 |
| Semi-manufactures (a) | 6 | 7 | 8 | 11 | 12 | 11 |
| Netherlands— | | | | | | |
| Unwrought | 13,813 | 15,651 | 11,659 | 11,500 | 8,974 | 7,076 |
| do. alloys | 605 | 313 | 232 | 407 | 341 | 196 |
| Scrap (a) | 323 | 378 | 334 | 322 | 579 | 451 |
| Semi-manufactures (a) | 367 | 288 | 362 | 257 | 341 | 359 |
| Norway— | | | | | | |
| Unwrought (a) | 292 | 239 | 238 | 238 | 256 | 216 |
| Semi-manufactures (a) | 4 | 4 | 5 | 2 | 3 | 4 |
| Portugal— | | | | | | |
| Ore | 122 | 35 | — | — | — | — |
| Unwrought | 375 | 204 | 89 | 350 | 270 | 90 |
| Spain— | | | | | | |
| Unwrought | 494 | 260 | 41 | 95 | 228 | 403 |
| Sweden— | | | | | | |
| Unwrought | 37 | 81 | 79 | 21 | 66 | 43 |
| do. alloys | 96 | 74 | 65 | 49 | 131 | 20 |
| Switzerland— | | | | | | |
| Unwrought | 36 | 43 | 52 | 24 | 24 | 22 |
| Scrap | 132 | 134 | 85 | 60 | 84 | 152 |
| Semi-manufactures (a) | 23 | 26 | 29 | 39 | 57 | 63 |
| U.S.S.R.— | | | | | | |
| Unwrought | — | 7 | 7 | 6 | — | — |
| Cameroun— | | | | | | |
| Ore | 76 | 78 | 31 | 49 | <i>n.a.</i> | <i>n.a.</i> |
| Congo Republic (c)— | | | | | | |
| Ore (b) | 5,970 | 5,370 | 7,120 | 6,130 | 7,199 | 6,000 |
| Unwrought (b) | 1,160 | 1,250 | 1,870 | 1,280 | 1,828 | 1,800 |
| Congo (Republic of)— | | | | | | |
| Ore | 59 | 70 | 43 | 83 | 32 | — |
| Niger— | | | | | | |
| Ore | 6 | 64 | 63 | 53 | 80 | 44 |
| South Africa— | | | | | | |
| Concentrates | 978 | 1,125 | 943 | 1,079 | 1,172 | 1,136 |
| South West Africa— | | | | | | |
| Ore and concentrates | 296 | 462 | 664 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| United States— | | | | | | |
| Unwrought (a) | 2,726 | 2,606 | 1,866 | 2,050 | 3,813 | 1,603 |
| Scrap (a) | 4,844 | 1,133 | 7,012 | 2,775 | 4,629 | 4,305 |
| Semi-manufactures (a) | 1,049 | 221 | 221 | 182 | 499 | 1,064 |
| Argentina— | | | | | | |
| Ore | 70 | 16 | 3 | — | 81 | 23 |
| Tin-silver ore | 1,749 | 2,190 | 3,219 | 4,117 | 4,568 | 5,597 |
| Bolivia— | | | | | | |
| Ores, concentrates, etc. | | | | | | |
| (<i>Sn content</i>) | 20,499 | 20,422 | 24,742 | 19,793 | 28,883 | 30,000 |
| Unwrought | 2,461 | 3,406 | 381 | 820 | <i>n.a.</i> | 85 |
| Peru— | | | | | | |
| Concentrates | | | | | | |
| (<i>Sn content</i>) | 39 | 12 | 19 | <i>n.a.</i> | 185 | <i>n.a.</i> |
| Unwrought | | | | | | |
| (<i>Sn content</i>) | — | 77 | 33 | <i>n.a.</i> | 40 | <i>n.a.</i> |
| Burma— | | | | | | |
| Ore and concentrates | | | | | | |
| (<i>Sn content</i>) | 720 | 301 | 124 | 60 | 107 | 32 |

(a) Including alloys.

(b) Estimated.

(c) Including Rwanda and Burundi.

EXPORTS OF TIN, ETC. (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|--------|--------|-------|-------|-------|-------|
| OTHER COUNTRIES (cont.) | | | | | | |
| China— | | | | | | |
| Unwrought (b) | 7,000 | 7,000 | 5,000 | 3,000 | 4,000 | 3,000 |
| Japan— | | | | | | |
| Unwrought | 33 | 157 | 211 | 46 | 105 | 136 |
| Semi-manufactures (a) | 78 | 177 | 112 | 73 | 333 | 564 |
| Laos— | | | | | | |
| Ore (Sn content) .. | 495 | 366 | 463 | 415 | 533 | 803 |
| Thailand— | | | | | | |
| Ore (Sn content) .. | 15,666 | 10,758 | 454 | — | — | — |

(a) Including alloys.

(b) Estimated.

IMPORTS OF TIN, ETC.*

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|-------------|--------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ore and concentrates .. | 43,518 | 44,606 | 55,697 | 62,803 | 67,551 | 74,306 |
| Unwrought (a) .. | 8,685 | 9,128 | 9,893 | 8,199 | 9,445 | 6,833 |
| Ghana— | | | | | | |
| Unwrought (a) .. | 7 | 19 | — | 6 | 8 | 2 |
| Semi-manufactures (a) .. | 164 | 51 | 184 | 138 | 99 | 248 |
| Kenya— | | | | | | |
| Unwrought (a) .. | 43 | 72 | 77 | 30 | 70 | 53 |
| Malawi— | | | | | | |
| Unwrought .. | <i>n.a.</i> | 34 | 29 | — | — | } 2 |
| Semi-manufactures .. | <i>n.a.</i> | — | 17 | 1 | <i>n.a.</i> | |
| Mauritius— | | | | | | |
| Unwrought (a) .. | 5 | 2 | 3 | 5 | 4 | 3 |
| Semi-manufactures (a) .. | 17 | 5 | 3 | 13 | 4 | 67 |
| Nigeria— | | | | | | |
| Unwrought and semi-manufactures (a) .. | 237 | 142 | 641 | 187 | 90 | 451 |
| Rhodesia— | | | | | | |
| Unwrought and semi-manufactures (a) .. | 78 | 76 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Tanzania— | | | | | | |
| Unwrought (a) .. | 20 | 34 | 18 | 18 | 40 | 31 |
| Uganda— | | | | | | |
| Unwrought (a) .. | 32 | 25 | 20 | 16 | 8 | 17 |
| Zambia— | | | | | | |
| Unwrought and semi-manufactures (a) .. | 41 | 53 | 69 | 64 | 43 | 85 |
| Canada— | | | | | | |
| Unwrought .. | 4,849 | 4,993 | 4,254 | 4,548 | 4,301 | 4,946 |
| Semi-manufactures .. | 12 | 26 | 9 | 15 | 16 | 63 |
| Barbados— | | | | | | |
| Unwrought (a) .. | 2 | 5 | 4 | 102 | 3 | 2 |
| Semi-manufactures (a) .. | 284 | 227 | 300 | 334 | 341 | 551 |
| Jamaica— | | | | | | |
| Unwrought (a) .. | 186 | 14 | 31 | 36 | 53 | 139 |
| Semi-manufactures (a) .. | 27 | 232 | 24 | 5 | 171 | 13 |
| Trinidad and Tobago— | | | | | | |
| Unwrought (a) .. | 58 | 13 | 12 | 5 | 6 | 162 |
| Semi-manufactures (a) .. | 2,581 | 4,124 | 4,061 | 6,566 | 4,340 | 1,072 |
| Guyana— | | | | | | |
| Unwrought (a) .. | 16 | 15 | 23 | 17 | 18 | 19 |
| Semi-manufactures (a) .. | 3 | 9 | 1 | 2 | 3 | 1 |
| Ceylon— | | | | | | |
| Unwrought .. | 30 | 14 | 53 | 36 | 47 | 43 |
| do. alloys .. | 14 | 2 | 41 | 4 | 2 | — |
| Semi-manufactures (a) .. | 4,346 | 2,211 | 2,985 | 3,592 | 3,381 | 220 |
| Cyprus— | | | | | | |
| Unwrought (a) .. | 8 | 6 | — | — | — | — |
| Hong Kong— | | | | | | |
| Unwrought (a) .. | 14 | 94 | 51 | 89 | 81 | 174 |
| Scrap .. | 4 | 3 | 3 | 2 | — | 4 |
| Semi-manufactures (a) .. | — | (b) 10 | (b) 9 | (b) 3 | 5 | 10 |
| India— | | | | | | |
| Unwrought .. | 5,043 | 4,657 | 5,695 | 6,961 | 6,171 | 4,830 |
| Semi-manufactures (a)(c) .. | 114 | 122 | 54 | 26 | 22 | 4 |
| Malaysia (West)— | | | | | | |
| Ore .. | <i>n.a.</i> | 10,696 | 3,242 | 6,769 | 25,459 | 18,387 |
| Unwrought (a) .. | <i>n.a.</i> | 167 | 203 | 55 | 70 | 157 |
| Semi-manufactures (a) .. | <i>n.a.</i> | 50 | 59 | 195 | 87 | 158 |

*See footnote on page 358 concerning the descriptions "unwrought" tin and "semi-manufactures" used in these tables.

(a) Including alloys.

(c) Years ended March 31 following that stated.

(b) Excess of re-exports.

IMPORTS OF TIN, ETC. (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|--------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Pakistan— | | | | | | |
| Unwrought (a) .. | 683 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sabah— | | | | | | |
| Unwrought | 7 | 12 | 12 | 11 | 12 | 12 |
| Semi-manufactures .. | 25 | 8 | 12 | 9 | 6 | 5 |
| Australia— | | | | | | |
| Unwrought | 1,283 | 1,582 | 203 | 693 | 159 | 104 |
| Semi-manufactures (b) .. | 20 | 35 | 21 | 27 | 26 | 27 |
| Fiji— | | | | | | |
| Semi-manufactures (a) | 311 | 308 | 274 | 179 | 284 | <i>n.a.</i> |
| Sarawak— | | | | | | |
| Unwrought and semi-manufactures (a) .. | 6 | 36 | 120 | 109 | 135 | <i>n.a.</i> |
| New Zealand (b)— | | | | | | |
| Unwrought (a) .. | 364 | 434 | 388 | 389 | 293 | <i>n.a.</i> |
| Semi-manufactures (a) | 15 | (c) 2 | 16 | 20 | 14 | <i>n.a.</i> |
| Irish Republic— | | | | | | |
| Unwrought (a) .. | 70 | 47 | 63 | 92 | 32 | 96 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Unwrought (a) .. | 632 | 599 | 564 | 523 | 556 | 604 |
| Semi-manufactures (a) | 37 | 31 | 42 | 82 | 42 | 56 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Ore | 6,560 | 5,616 | 6,797 | 5,943 | 6,407 | 5,556 |
| Unwrought | 3,023 | 2,235 | 3,080 | 2,624 | 2,409 | 3,179 |
| do. alloys | 148 | 145 | 175 | 163 | 170 | 153 |
| Scrap | 15 | 1 | 23 | 17 | 8 | 19 |
| Semi-manufactures (a) | 130 | 152 | 191 | 104 | 138 | 138 |
| Czechoslovakia— | | | | | | |
| Unwrought | 2,322 | 3,005 | 3,065 | 2,106 | 4,501 | 3,017 |
| Denmark— | | | | | | |
| Unwrought | 631 | 687 | 581 | 680 | 763 | 761 |
| do. alloys | 548 | 261 | 459 | 399 | 343 | 385 |
| Scrap | 124 | 70 | 93 | 311 | 254 | 280 |
| Semi-manufactures (a) | 108 | 96 | 94 | 93 | 77 | 87 |
| Finland— | | | | | | |
| Unwrought (a) .. | 315 | 442 | 360 | 237 | 244 | 333 |
| France— | | | | | | |
| Unwrought | 11,061 | 9,973 | 10,441 | 10,148 | 9,384 | 10,925 |
| do. alloys | 24 | 69 | 104 | 68 | 255 | 216 |
| Scrap | 81 | 40 | 38 | 31 | 111 | 79 |
| Semi-manufactures (a) | 53 | 115 | 38 | 38 | 57 | 35 |
| Germany (Federal)— | | | | | | |
| Ore | 7,539 | 7,816 | 7,373 | 8,250 | 7,988 | 7,655 |
| Unwrought (a) .. | 13,608 | 13,492 | 12,941 | 12,162 | 16,883 | 15,286 |
| Scrap (a) | 212 | 388 | 196 | 175 | 186 | 201 |
| Semi-manufactures (a) | 19 | 34 | 18 | 7 | 33 | 22 |
| Greece— | | | | | | |
| Unwrought | 265 | 240 | 258 | 215 | 311 | 195 |
| Hungary— | | | | | | |
| Unwrought | 991 | 1,730 | 1,429 | 1,186 | 1,263 | 1,389 |
| Iceland— | | | | | | |
| Semi-manufactures (a) | 12 | 15 | 14 | 12 | 13 | 10 |
| Italy— | | | | | | |
| Unwrought | 4,795 | 5,101 | 5,686 | 5,810 | 6,898 | 7,120 |
| do. alloys | 412 | 321 | 224 | 196 | 170 | 337 |
| Scrap | 1 | 6 | — | 19 | 43 | 18 |
| Semi-manufactures (a) | 71 | 39 | 82 | 71 | 44 | 94 |

(a) Including alloys.

(b) Years ended June 30 of that stated.

(c) Excess of re-exports.

IMPORTS OF TIN, ETC. (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|--------|--------|--------|--------|--------|--------|
| OTHER COUNTRIES | | | | | | |
| (cont.) | | | | | | |
| Netherlands— | | | | | | |
| Ore | 28,782 | 24,022 | 15,880 | 19,768 | 11,461 | 10,378 |
| Unwrought | 1,227 | 879 | 3,184 | 5,053 | 4,221 | 6,295 |
| do. alloys | 275 | 309 | 483 | 890 | 428 | 179 |
| Scrap (a) | 170 | 330 | 286 | 314 | 238 | 311 |
| Semi-manufactures (a) | 71 | 64 | 58 | 44 | 63 | 81 |
| Norway— | | | | | | |
| Unwrought | 322 | 417 | 417 | 343 | 412 | 410 |
| do. alloys | 215 | 179 | 177 | 218 | 234 | 196 |
| Semi-manufactures (a) | 302 | 296 | 354 | 414 | 459 | 468 |
| Poland— | | | | | | |
| Unwrought | 2,518 | 2,518 | 3,421 | 3,171 | 3,246 | 3,925 |
| Portugal— | | | | | | |
| Unwrought (a) | 10 | 12 | 7 | 15 | 30 | 107 |
| Semi-manufactures (a) | 26 | 13 | 9 | 13 | 13 | 11 |
| Spain— | | | | | | |
| Ore | 3,168 | 2,397 | 3,094 | 2,066 | 2,502 | 4,949 |
| Unwrought | 29 | 24 | 163 | 13 | 3 | 3 |
| Sweden— | | | | | | |
| Unwrought | 707 | 904 | 675 | 574 | 646 | 482 |
| do. alloys | 85 | 214 | 85 | 115 | 116 | 94 |
| Semi-manufactures (a) | 106 | 103 | 104 | 136 | 147 | 147 |
| Switzerland— | | | | | | |
| Unwrought | 727 | 965 | 865 | 854 | 869 | 913 |
| Semi-manufactures (a) | 90 | 88 | 141 | 115 | 110 | 154 |
| U.S.S.R.— | | | | | | |
| Unwrought | 5,400 | 5,700 | 4,700 | 5,600 | 6,980 | 6,690 |
| Yugoslavia— | | | | | | |
| Unwrought | 1,373 | 1,224 | 1,378 | 1,792 | 1,385 | 927 |
| Semi-manufactures (a) | 19 | 13 | 35 | 29 | 60 | 38 |
| Egypt— | | | | | | |
| Unwrought and scrap .. | 662 | 1,567 | 1,285 | 438 | 467 | 281 |
| Malagasy Republic— | | | | | | |
| Semi-manufactures (a) | 6 | 3 | 3 | 6 | 7 | 3 |
| Morocco— | | | | | | |
| Unwrought | 250 | 199 | 135 | 232 | 247 | 255 |
| Mozambique— | | | | | | |
| Semi-manufactures .. | 48 | 41 | 56 | 20 | n.a. | n.a. |
| South Africa— | | | | | | |
| Unwrought | 562 | 440 | 386 | 318 | 384 | 402 |
| Sudan— | | | | | | |
| Unwrought and scrap .. | 38 | 22 | 1 | 59 | 1 | — |
| Semi-manufactures .. | 258 | 23 | 59 | 22 | 22 | 540 |
| Tunisia— | | | | | | |
| Unwrought (a) | 18 | 28 | 22 | 28 | 29 | 12 |
| Semi-manufactures (a) | 66 | 10 | 9 | 13 | 8 | 34 |
| Mexico— | | | | | | |
| Unwrought | 347 | 548 | 482 | 80 | 811 | n.a. |
| United States— | | | | | | |
| Ore (Sn content) | 8,743 | 4,326 | 4,372 | 3,255 | 3,266 | n.a. |
| Unwrought | 31,582 | 40,816 | 41,624 | 49,923 | 57,358 | 54,949 |
| do. alloys (b) | 1,198 | 2,622 | 875 | 692 | 623 | 1,832 |
| Scrap | 976 | 335 | 89 | 281 | 344 | 643 |
| Argentina— | | | | | | |
| Unwrought | 1,476 | 1,319 | 1,467 | 845 | 1,078 | n.a. |
| Brazil— | | | | | | |
| Ore | 923 | 1,184 | 234 | 1 | 30 | n.a. |
| Unwrought (a) | 2 | 1 | 1 | 3 | 8 | n.a. |
| Colombia— | | | | | | |
| Unwrought (a) | 115 | 97 | 252 | 127 | 239 | n.a. |
| Semi-manufactures (a) | 14 | 3 | 16 | 6 | 7 | n.a. |

(a) Including alloys.

(b) Including alloyed scrap, dross and residues.

IMPORTS OF TIN, ETC. (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Chile— | | | | | | |
| Unwrought | 797 | 791 | <i>n.a.</i> | 862 | <i>n.a.</i> | <i>n.a.</i> |
| Peru— | | | | | | |
| Unwrought (a) .. | 100 | 229 | 182 | 193 | 167 | <i>n.a.</i> |
| Uruguay— | | | | | | |
| Unwrought | <i>n.a.</i> | 46 | 27 | 27 | 47 | 42 |
| Venezuela— | | | | | | |
| Unwrought | 147 | 125 | 124 | 133 | 103 | 94 |
| Burma— | | | | | | |
| Unwrought | 44 | 1 | — | 4 | 2 | <i>n.a.</i> |
| Semi-manufactures (a) | — | — | 4 | — | 1 | <i>n.a.</i> |
| Formosa— | | | | | | |
| Unwrought (a) | 102 | 227 | 381 | 324 | 301 | 452 |
| Iran (b)— | | | | | | |
| Unwrought | 216 | 239 | 236 | 277 | 225 | <i>n.a.</i> |
| Iraq— | | | | | | |
| Unwrought | 29 | <i>n.a.</i> | 32 | 51 | 43 | 36 |
| Semi-manufactures .. | 32 | <i>n.a.</i> | 63 | 94 | 35 | 142 |
| Israel— | | | | | | |
| Unwrought | 149 | 120 | 126 | 126 | 146 | 135 |
| Japan— | | | | | | |
| Ore and concentrates .. | 2,811 | 762 | 1,687 | 594 | 1,102 | 22 |
| Unwrought | 16,026 | 14,619 | 16,838 | 19,300 | 20,273 | 25,542 |
| Jordan— | | | | | | |
| Semi-manufactures .. | 18 | 16 | 31 | <i>n.a.</i> | 18 | — |
| Korea (South)— | | | | | | |
| Unwrought and semi-manufactures | 261 | 125 | 214 | 201 | <i>n.a.</i> | <i>n.a.</i> |
| Lebanon— | | | | | | |
| Unwrought | 7 | 16 | 14 | 18 | 17 | 12 |
| Philippine Republic— | | | | | | |
| Unwrought (a) | 4,530 | 591 | 600 | 700 | <i>n.a.</i> | <i>n.a.</i> |
| Southern Yemen | | | | | | |
| Semi-manufactures (a) | 1,693 | 873 | 710 | 141 | 415 | <i>n.a.</i> |
| Syria— | | | | | | |
| Unwrought and scrap .. | 84 | 82 | 80 | 54 | 130 | 69 |
| Turkey— | | | | | | |
| Unwrought (a) | 844 | 905 | 1,060 | 867 | 1,089 | 808 |
| Semi-manufactures (a) | 7 | 3 | 2 | — | 3 | 4 |

(a) Including alloys.

(b) Years ended March 20 of year following that stated.

TITANIUM MINERALS
PRODUCTION OF TITANIUM MINERALS

Long tons

| Producing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|-----------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Sierra Leone— Rutile concentrates .. | — | — | — | 18,918 | 5,629 | <i>n.a.</i> |
| Canada (shipments) (b)— Ilmenite.. .. | 1,239,520 | 1,177,145 | 1,129,181 | 1,287,712 | 1,424,552 | <i>n.a.</i> |
| Ceylon— Ilmenite.. .. | 45,429 | (a) 59,588 | (a) 40,549 | (a) 52,298 | (a) 73,430 | 81,546 |
| Rutile | — | — | — | — | 1,134 | 2,711 |
| India— Ilmenite.. .. | 11,851 | 29,587 | 29,691 | 40,952 | 57,797 | 46,939 |
| Rutile | 1,841 | 1,296 | 1,787 | 2,496 | 2,644 | 2,461 |
| Malaysia (West) (a)— Ilmenite | 129,222 | 121,566 | 116,386 | 89,372 | 123,838 | 130,533 |
| Australia— Ilmenite concentrates (c) | 304,284 | 441,034 | 513,011 | 544,216 | 551,499 | 693,815 |
| Rutile concentrates .. | 182,371 | 217,330 | 243,858 | 265,514 | 288,936 | 353,642 |
| OTHER COUNTRIES | | | | | | |
| Finland— Ilmenite concentrates .. | 114,230 | 105,138 | 115,703 | 124,896 | 138,000 | 136,000 |
| Norway— Ilmenite.. .. | 267,727 | 277,690 | 363,887 | 418,836 | 395,863 | 482,987 |
| Portugal— Ilmenite.. .. | 56 | 74 | 473 | 527 | 545 | 203 |
| Spain— Ilmenite.. .. | 43,230 | 19,792 | 44,488 | 36,486 | 38,432 | 28,770 |
| Egypt— Ilmenite | 21 | — | 542 | 1,045 | — | 200 |
| Rutile | — | — | 33 | 6 | — | — |
| Malagasy Republic— Ilmenite.. .. | 4,800 | 6,211 | 6,090 | 1,828 | <i>n.a.</i> | <i>n.a.</i> |
| Senegal— Ilmenite.. .. | 1,299 | — | — | — | <i>n.a.</i> | <i>n.a.</i> |
| Rutile | 53 | — | — | — | <i>n.a.</i> | <i>n.a.</i> |
| South Africa— Ilmenite.. .. | — | — | — | — | — | 16,245 |
| Rutile | — | — | — | — | — | 485 |
| United States— Ilmenite (d) | 893,868 | 865,588 | 861,945 | 834,903 | 873,669 | 831,470 |
| Rutile | 7,198 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | — |
| Brazil— Ilmenite (f) | 8,140 | 9,639 | 13,321 | 14,730 | 17,598 | 17,716 |
| Rutile | 223 | 310 | 33 | 280 | 113 | 98 |
| Japan (e)— Ilmenite.. .. | 4,779 | 3,413 | 5,676 | 6,664 | 5,800 | <i>n.a.</i> |
| WORLD'S TOTAL*— | | | | | | |
| Ilmenite | 3,100,000 | 3,100,000 | 3,200,000 | 3,500,000 | 3,700,000 | 3,900,000 |
| Rutile | 192,000 | 220,000 | 250,000 | 294,000 | 305,000 | 365,000 |

*Excluding the U.S.S.R.

(a) Exports.

(b) Production of titanium dioxide slag (70–72% TiO₂) at Sorel was as follows (long tons):
 1964—486,358; 1965—487,425; 1966—468,547; 1967—537,906; 1968—600,773; 1969—669,000.

(c) Despatches. Including leucoxene.

(d) Contains a mixed product containing ilmenite, leucoxene and rutile.

(e) Production of metal (commercial titanium sponge) was as follows (long tons):
 1964—2,945; 1965—4,764; 1966—6,330; 1967—7,716; 1968—5,341; 1969—6,342.

(f) Comissao Nacional de Energie Nuclear only.

EXPORTS OF TITANIUM MINERALS, ETC.

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|-----------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ferro-titanium | 1,076 | 1,251 | 1,085 | 977 | 1,456 | 1,282 |
| Sierra Leone— | | | | | | |
| Rutile concentrates .. | — | — | 7 (r) | 18,918 | 5,629 | <i>n.a.</i> |
| Canada— | | | | | | |
| Titanium dioxide slag (70% TiO ₂) | (a) | (a) | (a) | (a) | (a) | (a) |
| Ceylon— | | | | | | |
| Ilmenite | 36,982 | 59,588 | 40,549 | r 52,298 | 73,430 | 83,362 |
| India— | | | | | | |
| Ilmenite | 26,102 | 14,857 | 31,569 | 20,607 | 47,759 | 72,836 |
| Malaysia (West)— | | | | | | |
| Ilmenite | 129,222 | 121,566 | 116,386 | 89,372 | 123,838 | 130,533 |
| Singapore— | | | | | | |
| Titanium oxide | 112 | 111 | 136 | 180 | 207 | 318 |
| Australia— | | | | | | |
| Rutile | 193,893 | 239,454 | 231,289 | 258,791 | 284,995 | 299,113 |
| Ilmenite | 246,056 | 360,719 | 356,462 | 384,300 | 395,911 | 566,520 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Titanium oxide .. | 1,563 | 3,223 | 3,897 | 5,884 | 6,878 | 5,283 |
| do, extended .. | 10,648 | 10,322 | 9,764 | 9,653 | 10,402 | 10,813 |
| Finland— | | | | | | |
| Ilmenite | 49,785 | 82,608 | 49,864 | 39,792 | 45,164 | 12,816 |
| Titanium oxide .. | 1,496 | 19,535 | 21,109 | 5,042 | 4,216 | 3,483 |
| France— | | | | | | |
| Titanium minerals .. | 5 | 1,303 | 555 | 25 | 144 | 127 |
| Ferro-titanium | 1,754 | 2,414 | 2,228 | 2,265 | 2,788 | 3,462 |
| Titanium oxide | 10,508 | 10,557 | 5,780 | 13,589 | 10,012 | 9,689 |
| do, extended | 23,507 | 22,507 | 26,309 | 27,625 | 47,646 | 54,453 |
| Germany (Federal)— | | | | | | |
| Titanium minerals .. | 427 | 253 | 619 | 162 | 681 | 520 |
| Titanium oxide | 54,808 | 32,232 | 28,864 | 26,683 | 29,667 | 42,634 |
| do, extended | 14,100 | 37,554 | 49,006 | 57,458 | 68,019 | 63,813 |
| Italy— | | | | | | |
| Titanium oxide | 13,069 | 17,339 | 18,919 | 17,381 | 21,590 | 16,612 |
| Netherlands— | | | | | | |
| Titanium oxide | 6,090 | 8,492 | 10,557 | 8,900 | 14,390 | 21,190 |
| do, extended | 86 | 32 | 564 | 436 | 43 | 355 |
| Norway— | | | | | | |
| Ilmenite | } 275,039 | 319,118 | 344,517 | 344,238 | 389,733 | 448,048 |
| Rutile | | | | | | |
| Titanium oxide, extended | | | | | | |
| Titanium oxide, extended | 3,122 | 5,261 | 7,865 | 6,584 | <i>n.a.</i> | <i>n.a.</i> |
| Spain— | | | | | | |
| Ilmenite | 26,299 | 18,806 | 9,744 | 6,200 | 6,348 | 3,445 |
| Titanium oxide | 1,648 | 1,766 | 1,587 | 4,788 | 3,142 | 655 |
| Sweden— | | | | | | |
| Titanium minerals .. | 25 | 43 | 28 | — | 24 | 1,519 |
| Titanium oxide | 24 | 82 | 66 | 45 | 32 | 10 |
| do, extended | — | — | — | — | — | 443 |
| Senegal— | | | | | | |
| Ilmenite | 2,114 | — | — | — | — | — |
| South Africa— | | | | | | |
| Ilmenite | 16,194 | — | — | — | — | — |
| United States— | | | | | | |
| Ores and concentrates .. | 1,929 | 1,073 | 1,161 | 2,703 | 3,784 | 1,271 |
| Titanium metal (b) .. | 2,395 | 2,444 | 1,547 | 1,276 | 2,458 | 2,502 |
| Ferro-titanium | 483 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Titanium oxide and pigments | 26,213 | 24,014 | 24,328 | 23,272 | 27,050 | 21,880 |

(a) Information not available. Most of the titanium dioxide slag produced in Canada (figures on page 365) is believed to be exported.

(b) Including alloys and scrap.

EXPORTS OF TITANIUM MINERALS, ETC. (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|--------|--------|--------|--------|--------|-------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Brazil— | | | | | | |
| Titanium minerals .. | — | — | 9 | — | — | <i>n.a.</i> |
| Japan— | | | | | | |
| Titanium sponge metal | 1,549 | 3,264 | 4,474 | 5,310 | 3,416 | 4,620 |
| Titanium oxide.. .. | 35,411 | 37,511 | 37,148 | 27,306 | 34,851 | 41,022 |

IMPORTS OF TITANIUM MINERALS, ETC.

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-------------|-------------|---------|---------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ilmenite.. .. | 178,969 | 266,477 | 244,947 | 250,016 | 249,686 | 255,903 |
| Rutile | 13,955 | 17,225 | 16,953 | 16,926 | 21,149 | 43,993 |
| Other titanium minerals | (c) 20,924 | — | — | — | — | — |
| Titanium metal | 1,706 | 2,409 | 1,865 | 861 | 2,419 | 2,693 |
| Titanium oxide.. .. | 2,761 | 3,134 | 2,782 | 5,566 | 4,430 | 2,454 |
| Canada— | | | | | | |
| Titanium metal | 649 | 717 | 1,267 | 1,935 | 208 | 339 |
| Titanium oxide | 1,642 | 1,397 | 4,453 | 1,443 | 2,132 | 2,236 |
| do, extended | 9,324 | 8,512 | 8,727 | 8,717 | 8,658 | 7,725 |
| Hong Kong— | | | | | | |
| Titanium oxide.. .. | 2,237 | 2,262 | 2,456 | 2,707 | 3,218 | 3,428 |
| India— | | | | | | |
| Rutile | 336 | 743 | 998 | 640 | 30 | — |
| Titanium oxide (b) | 3,002 | 2,758 | 3,820 | 4,752 | 4,650 | 5,892 |
| Malaysia (West)— | | | | | | |
| Titanium oxide | <i>n.a.</i> | 904 | 1,400 | 1,332 | 1,502 | 1,564 |
| Singapore— | | | | | | |
| Titanium oxide.. .. | 547 | 581 | 744 | 899 | 1,276 | 1,644 |
| Australia (a)— | | | | | | |
| Titanium oxide.. .. | 3,149 | 3,384 | 1,464 | 1,103 | 1,173 | 1,192 |
| New Zealand (a)— | | | | | | |
| Titanium oxide.. .. | 4,286 | 4,849 | 1,639 | 654 | 566 | <i>n.a.</i> |
| Irish Republic— | | | | | | |
| Titanium oxide.. .. | 2,096 | 2,138 | 1,750 | 2,412 | 2,598 | 3,213 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Ferro-titanium | 103 | 185 | 226 | 163 | 182 | 215 |
| Titanium oxide.. .. | 4,815 | 4,734 | 5,153 | 5,674 | 6,257 | 6,443 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Titanium minerals | <i>n.a.</i> | <i>n.a.</i> | 1,532 | 14,642 | 32,626 | 46,562 |
| Ferro-titanium | 225 | 251 | 143 | 94 | 209 | 223 |
| Titanium oxide | 6,862 | 8,274 | 10,137 | 11,473 | 9,537 | 10,575 |
| do, extended | 1,659 | 1,979 | 2,417 | 3,379 | 4,060 | 3,811 |
| Denmark— | | | | | | |
| Titanium oxide | 5,362 | 5,762 | 5,855 | 5,860 | 6,048 | 6,816 |
| do, extended | 172 | 139 | 102 | 88 | 84 | 49 |
| Finland— | | | | | | |
| Titanium oxide | 1,526 | 1,390 | 756 | 10 | 22 | 47 |
| France— | | | | | | |
| Titanium minerals | 134,711 | 93,420 | 108,771 | 97,689 | 132,933 | 136,539 |
| Titanium metal | 250 | 292 | 332 | 487 | 482 | 556 |
| Titanium oxide.. .. | 12,727 | 14,488 | 17,033 | 14,102 | 17,603 | 19,619 |
| do, extended | 87 | 492 | 3,332 | 5,702 | 3,164 | 4,668 |
| Germany (Federal)— | | | | | | |
| Ilmenite | 207,808 | 275,967 | 227,078 | 212,694 | 223,997 | 319,523 |
| Other titanium minerals | 142,654 | 128,983 | 138,689 | 155,787 | 183,444 | 234,588 |
| Titanium metal | 693 | 758 | 1,030 | 1,193 | 1,302 | 2,158 |
| Titanium oxide.. .. | 1,583 | 1,783 | 3,072 | 2,435 | 3,029 | 7,771 |
| do, extended | 4,345 | 7,818 | 9,391 | 8,667 | 12,550 | 15,670 |
| Greece— | | | | | | |
| Titanium oxide.. .. | 1,580 | 1,749 | 2,082 | 2,379 | 2,716 | 3,132 |
| Hungary— | | | | | | |
| Ferro-titanium | 98 | <i>n.a.</i> | <i>n.a.</i> | — | — | <i>n.a.</i> |

(a) Years ended June 30 of that stated.

(b) Years ended March 31 following that stated.

(c) Imports from Canada; probably titanium dioxide slag.

IMPORTS OF TITANIUM MINERALS, ETC. (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|---------|-------------|------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Iceland— | | | | | | |
| Titanium oxide, extended | 236 | 77 | 1 | 39 | <i>n.a.</i> | — |
| Italy— | | | | | | |
| Titanium minerals .. | 110,456 | 84,552 | 113,085 | 104,718 | 135,235 | 94,777 |
| Ferro-titanium .. | 528 | 771 | 607 | 502 | 626 | 987 |
| Titanium oxide .. | 14,366 | 15,744 | 17,840 | 21,012 | 23,842 | 29,237 |
| do, extended .. | 140 | 103 | 76 | 76 | 163 | 153 |
| Netherlands— | | | | | | |
| Ferro-titanium .. | 40 | 41 | 68 | 38 | 62 | 89 |
| Titanium oxide .. | 2,218 | 3,898 | 1,794 | 2,491 | 4,186 | 5,527 |
| do, extended .. | 14,839 | 10,402 | 13,868 | 16,545 | 14,779 | 16,717 |
| Norway— | | | | | | |
| Titanium oxide .. | — | — | — | 1,105 | 949 | 1,830 |
| do, extended .. | 5,183 | 4,868 | 3,902 | 3,932 | 5,253 | 5,316 |
| Poland— | | | | | | |
| Titanium oxide .. | 3,144 | 4,338 | 6,570 | 8,542 | 10,471 | 10,083 |
| Portugal— | | | | | | |
| Rutile .. | 200 | 341 | 549 | 343 | 262 | 374 |
| Titanium oxide .. | 1,999 | 2,157 | 2,394 | 2,595 | 3,064 | 3,498 |
| Spain— | | | | | | |
| Ilmenite .. | 3,936 | 53 | 7,334 | 2,718 | 23,476 | 17,453 |
| Titanium oxide .. | 2,482 | 3,687 | 5,244 | 5,491 | 5,231 | 8,067 |
| Sweden— | | | | | | |
| Titanium minerals .. | 3,419 | 3,632 | 4,468 | 2,747 | 2,619 | 3,408 |
| Ferro-titanium .. | 1,167 | 1,406 | 1,423 | 1,055 | 1,261 | 1,131 |
| Titanium oxide .. | 13,147 | 9,648 | 11,734 | 7,829 | 5,551 | 6,857 |
| Switzerland— | | | | | | |
| Titanium oxide .. | 6,721 | 6,953 | 6,872 | 7,211 | 8,828 | 8,777 |
| Yugoslavia— | | | | | | |
| Rutile .. | 1,194 | 1,119 | 1,840 | 1,672 | 989 | 1,743 |
| Titanium oxide .. | 3,008 | 1,522 | 2,700 | 3,863 | 4,521 | 5,040 |
| Morocco— | | | | | | |
| Titanium oxide .. | 331 | 361 | 152 | 367 | 658 | 669 |
| do, extended .. | <i>n.a.</i> | 191 | 359 | 191 | 233 | 245 |
| Tunisia— | | | | | | |
| Titanium oxide .. | 182 | 251 | 258 | 345 | 355 | 308 |
| Mexico— | | | | | | |
| Titanium oxide .. | 21 | 1,196 | 102 | 17 | 46 | <i>n.a.</i> |
| United States— | | | | | | |
| Ilmenite (a) .. | 154,660 | 148,496 | 166,553 | 185,630 | 219,740 | 282,650 |
| Rutile .. | 99,090 | 135,489 | 135,251 | 149,196 | 155,684 | 182,949 |
| Titanium metal .. | 1,835 | 2,798 | 4,665 | 6,379 | 3,074 | 5,654 |
| Ferro-titanium .. | <i>n.a.</i> | 15 | — | — | 177 | 492 |
| Titanium compounds .. | 36,348 | 44,364 | (b) 42,846 | (b) 41,763 | (b) 47,611 | (b) 47,583 |
| Argentina— | | | | | | |
| Titanium oxide .. | 7,159 | 4,905 | 6,107 | 2,057 | 1,083 | <i>n.a.</i> |
| Brazil— | | | | | | |
| Titanium oxide .. | 6,464 | 6,455 | 9,764 | 9,319 | 15,065 | <i>n.a.</i> |
| Chile— | | | | | | |
| Titanium oxide extended .. | 1,766 | 2,011 | <i>n.a.</i> | 2,090 | <i>n.a.</i> | <i>n.a.</i> |
| Colombia— | | | | | | |
| Titanium oxide .. | 2,234 | 271 | 1,602 | 896 | 1,860 | <i>n.a.</i> |
| Peru— | | | | | | |
| Titanium oxide .. | 1,012 | 71 | 1,415 | — | 1,372 | <i>n.a.</i> |
| Venezuela— | | | | | | |
| Titanium oxide .. | 314 | 330 | 312 | 533 | 621 | 694 |
| do, extended .. | 3,207 | 2,917 | 2,679 | 4,099 | 4,556 | 4,336 |

 (a) Including titanium dioxide slag (70% TiO₂) imported from Canada.

(b) Dioxide only.

IMPORTS OF TITANIUM MINERALS, ETC. (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Formosa— | | | | | | |
| Titanium oxide .. | 1,363 | 1,564 | 2,291 | 2,695 | <i>n.a.</i> | 4,568 |
| Iran (a)— | | | | | | |
| Titanium oxide .. | 304 | 414 | 642 | 919 | 1,234 | <i>n.a.</i> |
| Japan— | | | | | | |
| Ilmenite.. .. | 183,049 | 208,602 | 319,820 | 269,288 | 358,176 | 403,115 |
| Titanium oxide.. | 193 | 249 | 716 | 3,279 | 5,594 | 4,125 |
| Korea (South)— | | | | | | |
| Titanium oxide .. | 1,580 | 1,569 | 1,651 | 2,110 | 3,107 | 4,149 |
| Philippine Republic— | | | | | | |
| Titanium oxide.. | 2,259 | 2,324 | <i>n.a.</i> | 3,313 | <i>n.a.</i> | <i>n.a.</i> |
| do, extended .. | 744 | 1,185 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Turkey— | | | | | | |
| Titanium oxide .. | 1,396 | 2,502 | 2,782 | 2,771 | 3,827 | 4,028 |
| Titanium minerals .. | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 383 | 165 | 220 |

(a) Years ended March 20 of year following that stated.

TUNGSTEN

PRODUCTION OF TUNGSTEN ORES AND CONCENTRATES

Long tons

| Producing Country and Description | Estimated WO ₃ Content | | | | | | | | | | | |
|-----------------------------------|-----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
| COMMONWEALTH COUNTRIES | | | | | | | | | | | | |
| Nigeria— Wolfram .. | — | 2 | 1 | n.a. | n.a. | n.a. | — | 1 | 1 | n.a. | n.a. | n.a. |
| Rhodesia— Concentrates .. | — | n.a. | n.a. | n.a. | n.a. | n.a. | — | 16 | n.a. | n.a. | n.a. | n.a. |
| Tanzania— Wolfram .. | — | — | 11 | 47 | 31 | 13 | — | — | 7 | 28 | 19 | 8 |
| Uganda— Wolfram .. | — | 41 | 117 | 131 | n.a. | n.a. | — | 27 | 78 | 88 | n.a. | n.a. |
| Canada (a)— Concentrates .. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 1,668 | 1,878 | 164 | 1,607 | 1,813 |
| Hong Kong— Wolfram .. | 1 | 6 | 8 | 4 | 1 | — | 1 | 4 | 5 | 3 | 1 | — |
| India— Concentrates .. | 7 | 13 | 24 | 28 | 38 | 40 | 5 | 8 | 15 | 18 | 24 | 25 |
| Malaysia (West)— Wolfram .. | 5 | 14 | 6 | 13 | 98 | 471 | 3 | 9 | 4 | 9 | 69 | 330 |
| Scheelite .. | (b) | 1 | — | 9 | (b) | 1 | 1 | — | — | 6 | 5 | 1 |
| Australia— Wolfram .. | 380 | 487 | 497 | 450 | 559 | 861 | 276 | 354 | 365 | 330 | 391 | 616 |
| Scheelite .. | 1,020 | 1,150 | 1,308 | 1,202 | 1,465 | 1,469 | 720 | 822 | 940 | 860 | 970 | 1,050 |
| New Zealand— Scheelite .. | 5 | — | 3 | 16 | 19 | 8 | 3 | — | 2 | 10 | 12 | 5 |
| TOTAL .. | | | | | | | 1,010 | 2,954 | 3,310 | 1,520 | 3,140 | 3,950 |
| OTHER COUNTRIES | | | | | | | | | | | | |
| Austria— Concentrates .. | 93 | 169 | 121 | 143 | 247 | 200 | 62 | 115 | 81 | 97 | 174 | 140 |

(a) Shipments (chiefly scheelite).

(b) Exports.

PRODUCTION OF TUNGSTEN ORES AND CONCENTRATES (cont.)

Long tons

| Producing Country and Description | Estimated WO ₃ Content | | | | | | 1969 | 1968 | 1967 | 1966 | 1965 | 1964 |
|--|-----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | | | | | | |
| OTHER COUNTRIES (cont.) | | | | | | | | | | | | |
| France— Concentrates .. | — | — | 22 | 30 | 25 | 131 | — | — | 19 | 20 | 16 | 88 |
| Italy— Concentrates .. | 1 | 1 | 1 | 1 | 1 | n.a. | 1 | 1 | 1 | 1 | 1 | n.a. |
| Portugal— Scheelite .. | 1,401 | 1,329 | 1,601 | 1,842 | 2,361 | 2,253 | 1,043 | 970 | 1,180 | 1,360 | 1,716 | 1,652 |
| Wolfram .. | | | | | | | | | | | | |
| Spain— Concentrates .. | 27 | 40 | 90 | 152 | 254 | 356 | 18 | 26 | 60 | 99 | 154 | 251 |
| Tin-tungsten concentrates | 8 | 20 | n.a. | n.a. | n.a. | n.a. | 4 | 1 | n.a. | n.a. | n.a. | n.a. |
| U.S.S.R. (b) .. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 6,500 | 6,800 | 7,300 | 7,600 | 7,600 | 7,600 |
| Yugoslavia .. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 76 | 77 | 64 | n.a. | n.a. | n.a. |
| Congo Republic— Concentrates .. | n.a. | n.a. | n.a. | n.a. | 70 | 131 | 138 | 127 | 111 | 65 | 46 | 85 |
| Tin-tungsten ore .. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | | | | | | |
| Rwanda and Burundi— Concentrates .. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 89 | 162 | 208 | 371 | 400 | n.a. |
| South Africa— Concentrates .. | 4 | 4 | 7 | 23 | 47 | 60 | 2 | 3 | 5 | 16 | 32 | 1 |
| South West Africa— Scheelite .. | — | 1 | 1 | n.a. | n.a. | n.a. | — | 1 | 1 | n.a. | n.a. | n.a. |
| Tin-wolfram concentrates | 660 | 588 | 607 | n.a. | n.a. | n.a. | 133 | 118 | 165 | n.a. | n.a. | n.a. |
| Mexico .. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 5 | 108 | 85 | 185 | 262 | 283 |
| United States— Concentrates (a) .. | 8,254 | 7,097 | 7,957 | 8,114 | 9,557 | 8,824 | 4,952 | 4,258 | 4,775 | 4,868 | 5,794 | 5,294 |

(a) Shipments from mine.

(b) United States Bureau of Mines* estimate.

PRODUCTION OF TUNGSTEN ORES AND CONCENTRATES (cont.)

Long tons

| Producing Country and Description | Estimated WO ₃ Content | | | | | |
|--|-----------------------------------|--------|--------|--------|--------|--------|
| | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Argentina— Concentrates | n.a. | 128 | 130 | 201 | 354 | 288 |
| Bolivia (a)— Concentrates | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Brazil— Wolfram and scheelite .. | 314 | 313 | 494 | 589 | n.a. | n.a. |
| Peru— Concentrates | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Burma— Tungsten concentrates .. | 85 | 27 | 44 | 93 | 139 | 110 |
| Tin-wolfram concentrates | 958 | 606 | 367 | 185 | 515 | 452 |
| China— Concentrates (b) | 20,000 | 17,000 | 15,000 | 15,000 | 15,000 | 15,000 |
| Japan— Concentrates | 704 | 586 | 576 | 679 | 923 | 1,074 |
| Korea— South— Concentrates | 4,582 | 3,777 | 3,629 | 3,586 | 3,837 | 3,435 |
| North— Concentrates (b) | 4,000 | 4,000 | 4,000 | 4,500 | 4,500 | 4,500 |
| Thailand— Concentrates | 391 | 503 | 511 | 825 | 950 | 1,247 |
| TOTAL | 33,000 | 30,000 | 30,000 | 32,000 | 35,000 | 34,000 |
| WORLD'S TOTAL | 34,000 | 33,000 | 33,000 | 34,000 | 38,000 | 38,000 |

(a) Exports.
(b) Estimated.
(c) Recoverable.

EXPORTS OF TUNGSTEN, ETC.

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|-------------|-------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Tungsten ore | 45 | 12 | — | 5 | — | — |
| Ferro-tungsten | 896 | 1,005 | 1,175 | 1,176 | 1,366 | 1,638 |
| Tungsten metal, etc. | 58 | 71 | 96 | 87 | 42 | 102 |
| Rhodesia | | | | | | |
| Tungsten ores | <i>n.a.</i> | 26 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Tanzania— | | | | | | |
| Wolfram ore | — | — | 11 | 46 | 31 | 20 |
| Uganda— | | | | | | |
| Wolfram ore | 18 | 64 | 104 | 145 | 100 | 173 |
| Hong Kong— | | | | | | |
| Tungsten ore | 70 | 10 | 13 | 5 | 2 | — |
| India— | | | | | | |
| Wolfram ore | — | 1 | 1 | — | — | — |
| Malaysia (West)— | | | | | | |
| Wolfram | <i>n.a.</i> | 5 | 19 | 36 | 36 | 221 |
| Scheelite | 1 | 1 | — | 2 | 7 | 4 |
| Australia (a)— | | | | | | |
| Wolfram ores and concentrates | 475 | 361 | 560 | 472 | 362 | 679 |
| (<i>WO₃ content</i>) | 343 | 269 | 345 | 343 | 252 | 498 |
| Scheelite ores and concentrates | 1,045 | 1,725 | 1,300 | 1,206 | 1,248 | 1,771 |
| (<i>WO₃ content</i>) | 727 | 1,191 | 884 | 788 | 850 | 1,200 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Ore | 79 | 189 | 99 | 161 | 274 | 235 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Ferro-tungsten | 19 | 10 | — | 35 | 40 | 12 |
| France— | | | | | | |
| Tungsten ore | 63 | 5 | 3 | 32 | 1 | — |
| Ferro-tungsten | 168 | 260 | 451 | 313 | 254 | 484 |
| Tungsten metal, etc. | 171 | 201 | 260 | 230 | 331 | 296 |
| Germany (Federal)— | | | | | | |
| Tungsten metal, etc. | 246 | 260 | 674 | 334 | 296 | 312 |
| Netherlands— | | | | | | |
| Ore | 217 | 225 | 218 | 245 | 266 | 119 |
| Portugal— | | | | | | |
| Tungsten ores | 1,292 | 1,101 | 1,134 | 1,304 | 1,579 | 1,560 |
| do. residues | 87 | — | 116 | 127 | 56 | 131 |
| Ferro-tungsten | 265 | 217 | 267 | 371 | 297 | 370 |
| Spain— | | | | | | |
| Tungsten ore | 50 | 40 | 73 | 184 | 146 | 103 |
| Sweden— | | | | | | |
| Ore | 222 | 33 | 24 | 43 | 440 | 99 |
| Tungsten metal, etc. | 31 | 33 | 75 | 190 | 110 | 129 |
| Ferro-tungsten | 71 | 86 | 147 | 104 | 112 | 1 |
| Congo Republic (c)— | | | | | | |
| Tungsten ores (b) | 450 | 210 | 270 | 98 | 180 | 90 |
| South Africa— | | | | | | |
| Tungsten ore | 20 | 3 | 4 | 39 | 29 | 64 |
| South West Africa— | | | | | | |
| Tin-tungsten ore | 680 | 511 | 621 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Mexico— | | | | | | |
| Tungsten ore and concentrates | 14 | 201 | 224 | 256 | 412 | <i>n.a.</i> |
| (<i>WO₃ content</i>) | 5 | 108 | 85 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |

(a) Years ended June 30 of that stated.

(b) Estimated.

(c) Including Rwanda and Burundi.

EXPORTS OF TUNGSTEN, ETC. (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|-------|-------|-------|-------|-------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| United States— | | | | | | |
| Ore and concentrates .. | 69 | 10 | 88 | 843 | 539 | 6,187 |
| Tungsten metal, alloys and scrap .. | 228 | 136 | 114 | 300 | 265 | 597 |
| Tungsten powder .. | 100 | 47 | 18 | 23 | 21 | 29 |
| Argentina— | | | | | | |
| Tungsten ore .. | 5 | 24 | 49 | 98 | 207 | 99 |
| Bolivia— | | | | | | |
| Tungsten ore (<i>WO₃ content</i>) .. | 1,224 | 1,094 | 1,555 | 1,919 | 2,200 | 2,300 |
| Brazil— | | | | | | |
| Tungsten ores .. | 323 | 419 | 335 | 413 | 660 | <i>n.a.</i> |
| Peru— | | | | | | |
| Tungsten ore and concentrates (<i>WO₃ content</i>) .. | 578 | 445 | 425 | 730 | 854 | 774 |
| Burma— | | | | | | |
| Ore and concentrates .. | 406 | 173 | 187 | 70 | 109 | <i>n.a.</i> |
| Tin-tungsten ores .. | 521 | 514 | 246 | 145 | 30 | <i>n.a.</i> |
| Japan— | | | | | | |
| Tungsten metal .. | 15 | 105 | 84 | 28 | 23 | 34 |
| Korea (South)— | | | | | | |
| Tungsten ore .. | 5,377 | 4,041 | 3,701 | 3,927 | 3,562 | 3,653 |
| Thailand— | | | | | | |
| Tungsten ore .. | 74 | 206 | 804 | 844 | 806 | 559 |

IMPORTS OF TUNGSTEN, ETC.

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|-------|-------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Tungsten ores | 5,008 | 5,097 | 5,066 | 5,515 | 4,603 | 7,381 |
| Tungsten metal, etc. .. | 32 | 31 | 51 | 46 | 64 | 22 |
| Ferro-tungsten | 180 | 202 | 102 | 217 | 196 | 94 |
| Canada— | | | | | | |
| Ores and concentrates— | | | | | | |
| (<i>W</i> content) | 174 | 160 | 234 | 104 | 59 | 190 |
| Ferro-tungsten | 77 | 158 | 86 | 86 | 53 | 94 |
| India— | | | | | | |
| Tungsten ore | 226 | 98 | — | 184 | 203 | 169 |
| Australia (<i>b</i>)— | | | | | | |
| Tungsten metal | 34 | 31 | 18 | 13 | 13 | 15 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Tungsten ore | 3,228 | 3,299 | 3,494 | 2,616 | 2,354 | 3,149 |
| Tungsten metal, etc. .. | 79 | 33 | 24 | 83 | 89 | 66 |
| Ferro-tungsten | 226 | 188 | 59 | — | 10 | 79 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Tungsten ore | 3 | 42 | 86 | 58 | 106 | 36 |
| Ferro-tungsten | 57 | 14 | 22 | 33 | 10 | 25 |
| France— | | | | | | |
| Tungsten ore | 1,538 | 2,153 | 2,430 | 1,942 | 1,578 | 2,703 |
| Tungsten metal, etc. .. | 67 | 64 | 73 | 77 | 54 | 65 |
| Germany (Federal)— | | | | | | |
| Tungsten ore | 4,831 | 6,024 | 5,228 | 4,411 | 5,486 | 8,802 |
| Tungsten metal, etc. .. | 347 | 442 | 1,156 | 614 | 681 | 630 |
| Greece— | | | | | | |
| Tungsten metal | 180 | 1 | — | — | — | — |
| Italy— | | | | | | |
| Tungsten ore | 59 | 12 | 45 | 45 | 54 | 59 |
| Tungsten metal, etc. .. | 28 | 34 | 73 | 79 | 82 | 57 |
| Ferro-tungsten | 107 | 96 | 178 | 165 | 595 | 367 |
| Netherlands— | | | | | | |
| Tungsten ore | 60 | 239 | 431 | 216 | 215 | 367 |
| Ferro-tungsten | 14 | 4 | 4 | 3 | 2 | 5 |
| Poland— | | | | | | |
| Tungsten concentrates .. | 2,631 | 2,291 | 2,908 | 2,406 | 3,199 | 2,873 |
| Sweden— | | | | | | |
| Tungsten ore | 1,285 | 1,851 | 1,873 | 900 | 1,900 | 2,401 |
| Tungsten metal, etc. .. | 93 | 131 | 151 | 55 | 37 | 68 |
| Ferro-tungsten | 402 | 693 | 709 | 380 | 272 | 655 |
| U.S.S.R. (<i>a</i>)— | | | | | | |
| Tungsten concentrates | 5,900 | 5,900 | 3,000 | 6,000 | <i>n.a.</i> | <i>n.a.</i> |
| Yugoslavia— | | | | | | |
| Tungsten metal, etc. .. | 30 | 36 | 40 | 11 | 6 | 16 |
| Tungsten concentrates .. | 203 | 58 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ferro-tungsten | — | 36 | 36 | 87 | 139 | 185 |
| United States— | | | | | | |
| Tungsten ore | 2,449 | 3,055 | 3,346 | 1,280 | 1,276 | 1,210 |
| (<i>WO₃</i> content) | 1,405 | 1,615 | 1,919 | 759 | 779 | 671 |
| Tungsten metal and carbide | | | | | | |
| (<i>W</i> content) | 27 | 20 | 2 | 5 | 7 | 9 |
| Ferro-tungsten | 87 | 172 | 169 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Tungsten ingots, bars, scrap, etc. | 179 | 32 | 182 | 62 | 18 | 19 |
| Japan— | | | | | | |
| Tungsten ore | 2,807 | 1,477 | 2,710 | 4,436 | 2,835 | 4,788 |
| Tungsten metal | 2 | 2 | 2 | 37 | 30 | 50 |

(a) Imports from China.

(b) Years ended June 30 of that stated.

URANIUM MINERALS

PRODUCTION OF URANIUM MINERALS

(Metal content)

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Canada (a) | 5,516 | 3,364 | 2,977 | 2,830 | 2,802 | 2,919 |
| Australia | £ 27,716,372 | 20,691,256 | 18,058,024 | 17,898,304 | 20,151,307 | 19,141,874 |
| | 280 | n.a. | n.a. | n.a. | n.a. | n.a. |
| OTHER COUNTRIES | | | | | | |
| France | 993 | 1,055 | 1,121 | 1,208 | 1,152 | 1,246 |
| Portugal (b) | 15 | 32 | 35 | 79 | 79 | n.a. |
| Spain (b) | 58 | r 63 | r 64 | r 68 | 53 | 82 |
| Gabon | 430 | 434 | (b) 400 | 500 | 472 | 491 |
| Malagasy Republic (c) .. | 126 | 101 | 84 | 64 | 21 | — |
| South Africa | 3,375 | 2,231 | 2,489 | 2,544 | 2,932 | 3,902 |
| | £ 635,000,000 | 623,000,000 | 626,000,000 | 627,000,000 | 630,000,000 | 631,000,000 |
| United States | 8,970 | 7,906 | 7,259 | 6,909 | 9,342 | 9,537 |
| | £ 68,000,000 | 60,000,000 | 54,000,000 | 653,000,000 | 670,000,000 | 671,000,000 |
| Argentina | 28 | 41 | — | 23 | n.a. | n.a. |
| WORLD'S TOTAL (b) .. | 27,000 | 23,000 | 22,000 | 21,000 | 24,000 | 25,000 |

(a) Producers' shipments.

(b) Estimated.

(c) Uranium content of uranothorianite.

Uranium is known to have been produced in the U.S.S.R., in several Eastern European countries, Finland, Italy, Sweden, Western Germany, Mozambique, China, India and elsewhere. An allowance has been made for these countries in the world's total.

EXPORTS OF URANIUM MINERALS, ETC.

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|------------|------------|------------|-----------|------------|-----------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Canada— | | | | | | |
| Ores and concentrates £ | 24,777,024 | 17,810,184 | 12,061,692 | 8,059,006 | 10,046,635 | 9,445,000 |
| OTHER COUNTRIES | | | | | | |
| Congo Republic— | | | | | | |
| Radium products (Ra content) Mgrams .. | 13,100 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Gabon— | | | | | | |
| Concentrates Long tons .. | 1,370 | 1,497 | 1,422 | 1,376 | 1,119 | 1,095 |
| Malagasy Republic— | | | | | | |
| Uranothorianite Long tons | 610 | 414 | 353 | 302 | 55 | n.a. |
| South Africa— | | | | | | |
| Concentrates (U ₃ O ₈ content) £ | 29,034,237 | 16,653,899 | n.a. | n.a. | n.a. | n.a. |
| United States— | | | | | | |
| Ores, concentrates and compounds Long tons | 1 | — | 21 | — | — | 47 |
| Metal and alloys Long tons | 3 | 2 | 2 | — | — | — |
| Radium metal (Ra content) Mgrams. | 177 | n.a. | n.a. | n.a. | n.a. | n.a. |

IMPORTS OF URANIUM MINERALS, ETC.

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|---------|--------|---------|--------|--------|-------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Canada— | | | | | | |
| Radium and compounds .. £ | 105,823 | 47,753 | 118,076 | 32,406 | 38,542 | 5,000 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Ore Long tons | — | 22 | — | — | 6 | 10 |
| France— | | | | | | |
| Ore Long tons | 1,880 | 2,204 | 1,714 | 1,914 | 2,096 | 1,174 |
| Germany (Federal)— | | | | | | |
| Ore Long tons | 23 | — | — | — | — | 10 |
| United States— | | | | | | |
| Concentrates Long tons (U ₃ O ₈ content) .. . | 4,729 | 2,366 | 1,829 | 1,288 | n.a. | n.a. |

VANADIUM
PRODUCTION OF VANADIUM ORES*
(Metal content)

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------|--------------|--------------|--------------|----------------|--------------|--------------|
| Finland | 968 | 949 | 955 | 1,154 | 1,179 | 1,325 |
| France (a) | 33 | 83 | 71 | 95 | <i>n.a.</i> | <i>n.a.</i> |
| South Africa | 1,142 | 1,355 | 1,526 | 1,888 | 1,724 | 2,553 |
| South West Africa | 966 | 1,128 | 1,208 (d) | 964 (d) | 500 (d) | 402 |
| Mexico | — | 1 | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| United States (c) | 4,629 | 5,037 | 5,076 | 4,543 | 6,344 | 5,122 |
| Argentina | 2 | — | — | — | — | — |
| WORLD'S TOTAL (b) .. | 7,700 | 8,600 | 8,800 | r 8,600 | 9,800 | 9,500 |

Including, and chiefly consisting of, vanadium recovered as a by-product of other mining operations

(a) By-product vanadium from aluminium plants.

(b) Totals represent the sum of the countries shown and exclude vanadium ore known to have been produced in other countries. Vanadiferous iron concentrates (about 0.5% V) are produced in Norway.

(c) Shipments.

(d) Estimated.

EXPORTS OF VANADIUM, ETC.

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|-----------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— Ferro-vanadium .. | 5 | 117 | 61 | 41 | 42 | 55 |
| OTHER COUNTRIES | | | | | | |
| Finland— Oxide | 2,187 | — | 2,098 | 2,452 | 2,532 | 2,735 |
| France— Ferro-vanadium .. | 86 | 194 | 167 | 244 | 66 | 304 |
| Italy— Ferro-vanadium .. | 39 | 18 | 5 | — | 1 | 41 |
| Sweden— Ferro-vanadium .. | 139 | 105 | 193 | 172 | 371 | 288 |
| South Africa— Oxide | (d) 3,252 | (e) 2,159 | (f) 2,719 | (b) 2,756 | (g) 3,881 | (c) 4,098 |
| South West Africa— Concentrates (V content) (a) .. | 900 | 800 | 1,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| United States— Ore, concentrates, oxide, etc. (V content) .. | 1,099 | 695 | 1,412 | 1,255 | 737 | 411 |
| Flue dust and other waste (V content) .. | 97 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ferro-vanadium .. | 92 | 197 | 430 | 314 | 247 | 575 |

(a) Estimated.

(b) Including 43 tons of ammonium vanadate.

(c) Including 38 tons of ammonium vanadate.

(d) Including 60 tons of ammonium vanadate.

(e) Including 45 tons of ammonium vanadate.

(f) Including 57 tons of ammonium vanadate.

(g) Including 614 tons of ammonium vanadate.

IMPORTS OF VANADIUM, ETC.

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ferro-vanadium .. | 85 | 239 | 81 | 141 | 482 | 788 |
| Canada— | | | | | | |
| Ferro-vanadium .. | 232 | 290 | 427 | 346 | 237 | 349 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Ferro-vanadium .. | 20 | 6 | 13 | 10 | 23 | 32 |
| Oxide | 968 | 403 | 452 | 594 | 1,015 | 937 |
| France— | | | | | | |
| Oxide | 398 | 601 | 772 | 1,206 | 746 | 1,130 |
| Germany (Federal)— | | | | | | |
| Oxide | <i>n.a.</i> | 172 | 193 | 696 | 851 | 1,145 |
| Hungary— | | | | | | |
| Ferro-vanadium .. | 129 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 149 |
| Italy— | | | | | | |
| Ferro-vanadium .. | 179 | 334 | 334 | 616 | 254 | 352 |
| Oxide | 228 | 203 | 247 | 231 | 109 | 186 |
| Netherlands— | | | | | | |
| Ferro-vanadium .. | 6 | 9 | 15 | 8 | 3 | 5 |
| Sweden— | | | | | | |
| Ferro-vanadium .. | 76 | 156 | 359 | 173 | 372 | 447 |
| Oxide etc. | 518 | 632 | 745 | 657 | 907 | <i>n.a.</i> |
| United States— | | | | | | |
| Ore | 99 | — | 524 | 213 | 1,926 | <i>n.a.</i> |
| (V content) | 11 | — | 64 | 67 | 152 | 230 |
| Japan— | | | | | | |
| Ore | — | 92 | — | — | — | — |
| Oxide | 1,040 | 874 | 1,586 | 1,208 | 1,193 | 2,145 |

Ferro-vanadium

55.9

200

VERMICULITE
PRODUCTION OF VERMICULITE

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Kenya | 33 | 22 | 75 | 247 | 275 | 764 |
| Tanzania | 129 | 96 | 261 | 90 | 125 | 125 |
| India | 422 | 720 | 492 | 312 | 2,311 | 3,895 |
| OTHER COUNTRIES | | | | | | |
| South Africa | 99,886 | 113,313 | 101,546 | 99,898 | 108,440 | 126,753 |
| United States (a) | 202,053 | 222,636 | 234,215 | 227,679 | 258,926 | 270,500 |
| Argentina | 3,599 | 1,658 | 4,096 | 2,858 | 4,255 | 2,000 |
| WORLD'S TOTAL* | 306,000 | 339,000 | 341,000 | 333,000 | 373,000 | 404,000 |

*Excluding vermiculite produced in the U.S.S.R. and Brazil.

(a) Sold or used by producers.

EXPORTS OF VERMICULITE

Long tons

| Exporting Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|--------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Rhodesia | 22 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| South Africa | 96,620 | 94,596 | 87,768 | 94,059 | 103,165 | 109,477 |

IMPORTS OF VERMICULITE

Long tons

| Importing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|--------|--------|--------|--------|--------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom (a) | 30,805 | 33,513 | 24,354 | 26,977 | 24,772 | 25,784 |
| Canada | 22,910 | 25,478 | 25,740 | 26,197 | 24,642 | 28,088 |
| Australia (c) | 1,997 | 2,877 | 2,544 | 2,215 | 3,284 | 3,541 |
| OTHER COUNTRIES | | | | | | |
| France (b) | 15,806 | 19,402 | 21,384 | 36,363 | 31,526 | 42,303 |
| Greece | 32 | 62 | 63 | 63 | 3 | 22 |
| Mexico | 607 | 554 | 568 | 367 | 474 | <i>n.a.</i> |
| United States (a) | 16,444 | 14,904 | 7,529 | 14,252 | 9,443 | 5,801 |
| Venezuela | 335 | 491 | 446 | 218 | 515 | 380 |

(a) Exports from South Africa to country stated.

(b) May include perlite, etc.

(c) Years ended June 30 of that stated.

ZINC

PRODUCTION OF ZINC ORE

(Metal content)

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Zambia (c) | 45,974 | 46,687 | 41,654 | 43,781 | 51,547 | 49,373 |
| Canada (h) | 611,172 | 733,960 | 860,809 | 992,369 | 1,035,171 | 1,068,117 |
| India | 5,914 | 5,233 | 4,809 | 5,187 | 6,858 | 7,290 |
| Australia | 344,600 | 349,231 | 369,341 | 400,527 | 415,722 | 499,134 |
| TOTAL | 1,008,000 | 1,135,000 | 1,277,000 | 1,416,000 | 1,516,000 | 1,624,000 |
| Irish Republic | — | 1,283 | 22,670 | 35,490 | 49,730 | 95,940 |
| OTHER COUNTRIES | | | | | | |
| Austria | 9,609 | 9,396 | 10,317 | 10,984 | 12,401 | 8,622 |
| Bulgaria | 63,200 | 65,200 | 65,400 | 66,800 | 62,600 | 64,200 |
| Finland (b) | 61,996 | 67,920 | 53,516 | 59,839 | 64,366 | 69,682 |
| France | 16,575 | 20,572 | 22,926 | 24,279 | 21,462 | 19,658 |
| Germany (Federal) (d) .. | 94,318 | 93,128 | 97,098 | 104,882 | 108,649 | 108,990 |
| Germany (East) (g) .. | 7,000 | 8,000 | 12,000 | 12,000 | 12,000 | 12,000 |
| Greece | 10,186 | 10,410 | 10,216 | 11,552 | 10,441 | 9,239 |
| Hungary | 2,800 | 3,200 | (g) 3,200 | 6,000 | 8,126 | 9,007 |
| Italy | 101,670 | 112,495 | 111,571 | 122,237 | 136,267 | 130,210 |
| Norway | 12,296 | 12,726 | 13,101 | 11,980 | 11,654 | 11,011 |
| Poland | 148,300 | 149,700 | 147,900 | 152,700 | 162,000 | (g) 164,000 |
| Portugal | 937 | 2,905 | 2,308 | r 422 | 355 | 1,074 |
| Spain | 87,062 | 38,646 | r 56,321 | r 56,962 | 73,420 | 83,016 |
| Sweden | 75,955 | 77,870 | 82,219 | 80,529 | 80,037 | 88,674 |
| U.S.S.R. (c) (e) | 450,000 | 470,000 | 500,000 | 510,000 | 530,000 | 550,000 |
| Yugoslavia | 90,351 | 90,368 | 83,895 | 88,595 | 93,963 | 95,173 |
| Algeria | (e) 38,000 | 36,504 | 14,900 | 8,000 | 18,000 | 20,700 |
| Congo Republic | 103,874 | 117,272 | 113,036 | 119,604 | 116,000 | 114,000 |
| Congo, Republic of | 5,408 | 7,383 | 6,601 | 2,337 | n.a. | n.a. |
| Morocco | 41,677 | 50,409 | 45,952 | 38,873 | 32,767 | 34,644 |
| South Africa | — | 2 | — | — | — | n.a. |
| South West Africa | 29,732 | 29,407 | 27,796 | 22,200 | 22,800 | 37,500 |
| Tunisia | 3,200 | 4,662 | 5,702 | 4,087 | 5,020 | (g) 5,200 |
| Guatemala (b) | — | 1,376 | 490 | 243 | — | — |
| Honduras | 8,433 | 10,951 | 12,197 | 12,842 | 14,550 | 15,573 |
| Mexico | 231,882 | 221,324 | 215,718 | 210,351 | 236,000 | 249,000 |
| United States (b) | 513,266 | 545,672 | 511,212 | 490,547 | 472,720 | 485,800 |
| Argentina | 22,551 | 29,210 | 26,028 | 26,820 | 26,000 | 31,199 |
| Bolivia (a) | 9,604 | 13,472 | 16,438 | 16,433 | 11,599 | 25,885 |
| Brazil | — | 5,167 | n.a. | 1,800 | 4,700 | 8,800 |
| Chile | 863 | 1,093 | 2,054 | 1,105 | 1,235 | 1,455 |
| Colombia (g) | 100 | 50 | 295 | 545 | 650 | 423 |
| Ecuador | 373 | 232 | 133 | 158 | 112 | n.a. |
| Peru (b) | 232,922 | 250,477 | r 279,478 | 299,985 | 304,217 | 309,781 |
| Burma | 7,800 | 8,000 | 6,000 | 5,000 | 8,400 | 8,776 |
| China (g) | 100,000 | 100,000 | 100,000 | 90,000 | 100,000 | 100,000 |
| Iran (f) | (g) 15,000 | (g) 15,000 | (g) 17,000 | (g) 24,000 | (g) 25,000 | (e) 26,000 |
| Japan | 213,037 | 217,529 | 249,622 | 258,530 | 260,169 | 265,160 |
| Korea (South) | 2,500 | 7,000 | 11,500 | 13,400 | 19,000 | 22,000 |
| Korea (North) (g) | 100,000 | 105,000 | 105,000 | 120,000 | 120,000 | 123,000 |

(a) Exports.

(b) Recoverable.

(c) Smelter production.

(d) Excluding zinc in pyrites.

(e) Estimated.

(f) Years ended March 20 of year following that stated.

(g) United States Bureau of Mines' estimate.

(h) Refined zinc plus recoverable zinc in ores, etc., exported.

PRODUCTION OF ZINC ORE (cont.)

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Philippine Republic | 2,102 | 2,026 | 1,622 | 1,462 | 2,207 | 3,234 |
| Thailand | (a) 1,400 | (a) 2,000 | (a) 2,500 | n.a. | n.a. | n.a. |
| Turkey | r 3,566 | r 4,651 | 3,238 | 5,734 | 10,811 | 16,114 |
| TOTAL | 2,900,000 | 3,000,000 | 3,000,000 | 3,100,000 | 3,200,000 | 3,400,000 |
| WORLD'S TOTAL .. | 3,900,000 | 4,100,000 | 4,300,000 | 4,600,000 | 4,700,000 | 5,100,000 |

Zinc ore is also produced in the United Kingdom, Czechoslovakia, Roumania and North Vietnam.

(a) Estimated.

METAL PRODUCTION OF ZINC

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom .. | 109,282 | 105,127 | 99,745 | 102,675 | 140,625 | 148,608 |
| Zambia | 45,974 | 46,687 | 41,654 | 43,781 | 51,547 | 49,373 |
| Canada | 301,543 | 320,087 | 341,612 | 361,729 | 381,007 | 416,384 |
| Australia | 185,531 | 198,988 | 194,410 | 194,472 | 205,482 | 242,433 |
| TOTAL | 642,330 | 670,889 | 677,427 | 704,264 | 781,828 | 856,798 |
| OTHER COUNTRIES | | | | | | |
| Austria | 12,692 | 12,906 | 13,977 | 13,933 | 15,052 | 15,500 |
| Belgium | 218,634 | 236,013 | 247,738 | 223,738 | 247,148 | 256,477 |
| Bulgaria | 57,648 | 64,725 | 75,500 | 72,700 | 73,900 | 76,000 |
| France | 190,900 | 192,700 | 197,400 | 185,000 | 204,200 | 249,500 |
| Germany (Federal) .. | 153,528 | 152,277 | 173,567 | 138,596 | 142,068 | 144,817 |
| Germany (East) (a) .. | 10,000 | 10,000 | 12,000 | 11,000 | 15,000 | 15,000 |
| Hungary | 1,400 | 1,500 | (d) 1,500 | n.a. | n.a. | n.a. |
| Italy | 71,699 | 79,620 | 76,901 | 86,603 | 110,501 | 128,262 |
| Netherlands | 37,107 | 40,176 | 40,704 | 38,000 | 48,000 | 45,600 |
| Norway | 47,593 | 51,746 | 50,313 | 53,935 | 59,161 | 57,847 |
| Poland | 184,000 | 187,000 | 190,000 | 193,000 | 200,000 | 204,200 |
| Spain | 63,413 | 52,671 | 52,881 | 69,295 | 74,197 | 79,032 |
| U.S.S.R. (a) | 450,000 | 470,000 | 500,000 | 510,000 | 530,000 | 550,000 |
| Yugoslavia | 43,809 | 45,337 | 50,282 | 52,344 | 78,000 | 80,000 |
| Congo Republic | 54,676 | 56,119 | 60,529 | 60,521 | 61,584 | 62,300 |
| Mexico | 58,487 | 61,748 | 70,454 | 69,741 | 78,773 | 86,300 |
| United States (b) (c) .. | 851,861 | 887,859 | 915,237 | 838,241 | 911,510 | 968,000 |
| Argentina | 21,876 | 23,227 | 21,931 | 22,626 | 20,607 | 24,210 |
| Peru | 60,942 | 61,938 | 62,448 | 62,351 | 66,000 | 62,100 |
| China (d) | 90,000 | 90,000 | 90,000 | 80,000 | 90,000 | 90,000 |
| Japan | 311,090 | 312,784 | 437,141 | 508,066 | 595,992 | 700,939 |
| Korea (South) | — | — | 1,402 | 2,419 | 2,500 | 2,274 |
| Korea (North) (d) | 70,000 | 75,000 | 75,000 | 80,000 | 80,000 | 60,000 |
| TOTAL | 3,000,000 | 3,200,000 | 3,400,000 | 3,400,000 | 3,700,000 | 4,000,000 |
| WORLD'S TOTAL | 3,700,000 | 3,900,000 | 4,100,000 | 4,100,000 | 4,500,000 | 4,800,000 |

Zinc is also produced in Czechoslovakia, Roumania and North Vietnam.

(a) Estimated.

(b) In addition secondary zinc recovered was as follows (long tons):

| | | | |
|--------------|---------|--------------|---------|
| 1964 | 266,423 | 1967 | 285,579 |
| 1965 | 315,504 | 1968 | 316,696 |
| 1966 | 321,617 | 1969 | 301,074 |

(c) The production by grades (including redistilled secondary) was as follows (long tons):

| | | | | | | |
|--------------------------|---------|---------|---------|---------|---------|-----------|
| | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
| A—High grade—Special .. | 418,525 | 428,336 | 404,216 | 390,044 | 401,481 | 431,329 |
| Ordinary | 100,050 | 100,403 | 124,834 | 82,996 | 104,664 | 70,758 |
| B—Intermediate grade .. | 17,009 | 16,058 | 21,031 | 23,680 | 50,612 | 41,561 |
| C and D—Brass special .. | 72,352 | 77,406 | 92,129 | 81,321 | 67,714 | } 486,870 |
| Selected | 291 | 276 | — | — | — | |
| E—Prime Western | 307,559 | 340,040 | 347,370 | 325,829 | 358,346 | |

(d) United States Bureau of Mines' estimate.

PRODUCTION OF ELECTROLYTIC ZINC IN CERTAIN COUNTRIES*

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|---------|---------|---------|---------|---------|---------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Canada | 301,543 | 320,087 | 341,612 | 361,729 | 381,007 | 416,384 |
| Australia (Tasmania) .. | 185,531 | 198,988 | 194,410 | 194,472 | 204,992 | 242,433 |
| OTHER COUNTRIES | | | | | | |
| Austria | 12,692 | 12,906 | 13,977 | 13,933 | 15,052 | 15,500 |
| Norway | 47,593 | 51,746 | 50,313 | 53,935 | 59,161 | 57,847 |
| Poland | 85,900 | 88,600 | 90,400 | 92,000 | 95,100 | n.a. |
| Congo Republic .. | 54,676 | 56,119 | 60,529 | 60,521 | 61,584 | 62,300 |
| United States | 347,663 | 364,400 | 387,121 | 331,488 | 355,594 | 406,000 |
| Japan | 196,240 | 240,000 | 270,000 | 306,000 | 363,000 | 390,600 |

*This production is already included in the Metal table.

PRODUCTION OF ZINC DUST IN CERTAIN COUNTRIES

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|--------|--------|--------|--------|--------|--------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom .. | 13,581 | 12,716 | 12,183 | 12,272 | 14,024 | 13,628 |
| Australia | 4,495 | 3,422 | 3,299 | n.a. | 3,057 | 3,200 |
| OTHER COUNTRIES | | | | | | |
| France | 4,055 | 4,262 | 4,642 | 5,120 | 5,220 | 7,400 |
| Germany (Federal) .. | 8,145 | 6,658 | 5,777 | 3,939 | 290 | — |
| United States | 41,053 | 46,391 | 49,540 | 44,887 | 54,970 | 48,746 |
| Japan | 10,183 | n.a. | n.a. | 14,874 | n.a. | n.a. |

PRODUCTION OF ROLLED ZINC SHEETS, PLATES AND STRIPS
IN CERTAIN COUNTRIES

Long tons

| Producing Country | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------|--------|--------|--------|--------|--------|--------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom (a) .. | 25,395 | 24,738 | 26,750 | 22,859 | 25,346 | 26,885 |
| OTHER COUNTRIES | | | | | | |
| France | 71,550 | 63,620 | 70,730 | 76,080 | 69,480 | 71,200 |
| United States (b) .. | 38,361 | 39,932 | 45,914 | 39,500 | 42,432 | 44,000 |
| Japan | 6,802 | 5,643 | 6,699 | 9,690 | 30,690 | 33,668 |

(a) Including wire.

(b) Excluding strip and ribbon zinc re-rolled from scrap originating in fabricating plants operated in connection with zinc rolling-mills, as follows:

| Long tons | | | Long tons | | |
|-----------|-------|--------|-----------|-------|--------|
| 1964 | | 12,991 | 1967 | | 16,671 |
| 1965 | | 15,199 | 1968 | | 19,586 |
| 1966 | | 18,804 | 1969 | | n.a. |

EXPORTS OF ZINC*

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|---------|---------|---------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ore and concentrates .. | 1,138 | 18 | 10 | 43 | <i>n.a.</i> | <i>n.a.</i> |
| Unwrought (a) | 5,852 | 1,234 | 1,099 | 11,124 | 22,394 | 16,153 |
| Scrap | 2,752 | 270 | 178 | 649 | 1,185 | 611 |
| Semi-manufactures (a) | 5,513 | 6,182 | 4,951 | 4,159 | 4,527 | 6,764 |
| Oxide | 5,413 | 3,629 | 4,289 | 3,419 | 4,566 | 5,545 |
| Lithopone, etc | 2,955 | 2,376 | 3,110 | 2,524 | 2,064 | 212 |
| Nigeria— | | | | | | |
| Ore and concentrates .. | 200 | 1,875 | 1,501 | 10 | <i>n.a.</i> | 42 |
| Zambia— | | | | | | |
| Ores and concentrates .. | — | — | — | 621 | — | — |
| Unwrought | 45,151 | 44,449 | 40,900 | 39,183 | 44,315 | 52,740 |
| Canada— | | | | | | |
| Ore (<i>Zn content</i>) | 359,912 | 435,219 | 527,966 | 656,879 | 764,123 | 718,450 |
| Unwrought | 212,568 | 235,892 | 228,708 | 265,761 | 284,560 | 274,459 |
| Scrap (a) | 6,955 | 8,164 | 8,896 | 7,339 | 5,587 | 7,875 |
| Hong Kong— | | | | | | |
| Unwrought (a) | 100 | — | — | — | — | — |
| Scrap | — | — | — | — | 143 | 99 |
| Semi-manufactures (a) | 1 | — | — | — | — | — |
| India (c)— | | | | | | |
| Concentrates, etc. .. | 7,364 | 2,663 | — | — | — | — |
| Dross, scrap and ashes .. | 2,665 | 817 | 2,212 | 2,171 | 628 | 857 |
| Semi-manufactures (a) | 231 | 4 | 20 | 38 | 14 | 557 |
| Zinc white | 455 | 708 | 372 | 464 | 943 | 931 |
| Singapore— | | | | | | |
| Unwrought | 6 | 3 | 84 | 213 | 2,201 | 2,082 |
| Semi-manufactures (a) | 147 | 241 | 99 | 1,273 | 173 | 129 |
| Oxide | 341 | 343 | 245 | 293 | 253 | 205 |
| Australia (b)— | | | | | | |
| Ores and concentrates | | | | | | |
| (<i>Zn content</i>) | 131,690 | 110,370 | 139,386 | 140,198 | 171,707 | 181,991 |
| Unwrought | 83,534 | 84,658 | 99,182 | (a) 114,038 | (a) 89,136 | (a) 115,562 |
| Scrap | 66 | 67 | 119 | — | — | — |
| Semi-manufactures .. | 2,023 | 2,258 | 979 | (a) 433 | (a) 815 | (a) 1,300 |
| Oxide | 4 | 30 | 64 | 188 | 398 | 567 |
| Irish Republic— | | | | | | |
| Ores and concentrates | — | — | 26,077 | 33,905 | 84,098 | 190,491 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Ore | 1,562 | 53 | — | — | 3 | 704 |
| Unwrought (a) | 4,098 | 3,627 | 3,811 | 6,614 | 4,508 | 1,928 |
| Scrap | 1,001 | 514 | 57 | 25 | 62 | 228 |
| Lithopone | 2,496 | 2,463 | 1,822 | 1,912 | 1,397 | 1,456 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Ore | 20,704 | 12,053 | 12,556 | 26,429 | 49,183 | 54,891 |
| Unwrought | 124,740 | 127,609 | 144,993 | 134,020 | 148,970 | 153,055 |
| Scrap | 8,440 | 7,356 | 7,555 | 7,042 | 7,959 | 8,207 |
| Semi-manufactures (a) | 32,014 | 33,127 | 29,494 | 35,779 | 40,811 | 42,528 |
| Lithopone, etc. .. | 18,066 | 18,125 | 12,098 | 126 | 3 | 17 |

*In these tables the description "unwrought" zinc corresponds to item 686.1 in the Standard International Trade Classification (Revised) and comprises blocks, pigs, slabs, etc. "Semi-manufactures" corresponds to S.I.T.C.(R). 284.0 (8) and 686.2, and includes zinc dust as well as rods, wire, sheets, tubes, pipes, etc.

(a) Including alloys.

(b) Years ended June 30 of that stated.

(c) Years ended March 31 following that stated.

EXPORTS OF ZINC (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|---------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Denmark— | | | | | | |
| Unwrought | 83 | 185 | 64 | 98 | 161 | 47 |
| do. alloys | 1,142 | 485 | 321 | 230 | 876 | 178 |
| Scrap | 2,195 | 1,778 | 2,063 | 3,208 | 3,270 | 3,247 |
| Semi-manufactures | 9 | 13 | 14 | 20 | 27 | 19 |
| Finland— | | | | | | |
| Concentrates | 144,929 | 145,296 | 110,765 | 113,506 | 123,958 | 131,480 |
| Unwrought | — | — | 20 | — | — | — |
| France— | | | | | | |
| Ore | 708 | 497 | 233 | 216 | 26,801 | 7,013 |
| Unwrought | 11,156 | 17,375 | 19,723 | 9,891 | 19,914 | 19,972 |
| do. alloys | 578 | 364 | 383 | 2,046 | 369 | 87 |
| Semi-manufactures (a) | 2,715 | 4,268 | 3,828 | 3,476 | 4,437 | 4,669 |
| Oxide | 4,016 | 4,643 | 7,459 | 7,378 | 9,751 | 8,681 |
| Lithopone, etc. . . . | 1,116 | 995 | 1,007 | 1,533 | 2,407 | 3,843 |
| Germany (Federal)— | | | | | | |
| Ore | 43,503 | 45,555 | 49,993 | 88,967 | 114,996 | 59,374 |
| Unwrought (a) | 21,162 | 13,217 | 27,539 | 28,162 | 37,195 | 34,945 |
| Scrap (a) | 2,682 | 4,169 | 7,522 | 4,644 | 5,592 | 5,615 |
| Semi-manufactures (a) | 7,514 | 6,823 | 8,988 | 9,379 | 11,803 | 11,308 |
| Zinc-white, zinc-grey | 10,324 | 9,902 | 10,314 | 9,223 | 8,957 | 9,206 |
| Lithopone | 36,347 | 30,715 | 32,768 | 35,989 | 38,192 | 37,344 |
| Greece— | | | | | | |
| Ore and concentrates | 22,053 | 23,603 | 20,410 | 23,947 | 14,835 | 16,825 |
| Italy— | | | | | | |
| Ore | 48,484 | 28,946 | 40,503 | 21,906 | 48,581 | 39,060 |
| Unwrought | 1,064 | 1,401 | 52 | 39 | 880 | 736 |
| Semi-manufactures (a) | 454 | 140 | 349 | 403 | 2,243 | 1,286 |
| Oxide | 555 | 383 | 1,083 | 819 | 907 | 1,149 |
| Lithopone, etc. . . . | 2,664 | 2,166 | 3,073 | 3,078 | 2,809 | 2,897 |
| Netherlands— | | | | | | |
| Ore | 8,032 | 5,729 | 4,373 | 7,603 | 20,069 | 22,397 |
| Unwrought | 25,378 | 22,213 | 22,825 | 34,900 | 32,786 | 29,538 |
| do. alloys | 35 | 122 | 43 | 36 | 157 | 166 |
| Scrap (a) | 9,140 | 9,969 | 10,162 | 7,923 | 8,392 | 7,313 |
| Semi-manufactures (a) | 1,332 | 1,366 | 1,086 | 1,117 | 1,558 | 989 |
| Oxide | 10,601 | 9,360 | 9,469 | 8,774 | 10,876 | 11,067 |
| Lithopone, etc. . . . | 11,890 | 10,314 | 12,045 | 13,270 | 10,512 | 10,890 |
| Norway— | | | | | | |
| Ore | 14,377 | 19,225 | 15,895 | 14,995 | 12,883 | 13,452 |
| Unwrought | 38,089 | 35,655 | 39,114 | 35,552 | 49,504 | 41,036 |
| do. alloys | 1,252 | 1,533 | 1,096 | 1,234 | 3,360 | 4,512 |
| Scrap | 584 | 798 | 543 | 401 | 386 | 304 |
| Semi-manufactures (a) | 1,499 | 1,449 | 1,687 | 1,655 | 2,015 | 2,572 |
| Zinc-white | 299 | 195 | 219 | 180 | 264 | 437 |
| Poland— | | | | | | |
| Unwrought and sheets | 96,200 | 95,600 | 71,633 | 70,912 | 76,034 | 83,697 |
| Unwrought alloys | 8,338 | 7,869 | 8,765 | 5,644 | 6,206 | 5,887 |
| Zinc-white | 8,921 | 9,020 | 5,527 | 2,984 | 2,421 | 1,731 |
| Lithopone | 424 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Portugal— | | | | | | |
| Ore | 718 | 8,300 | 5,596 | 970 | — | 2,418 |
| Zinc-white | 91 | 57 | 77 | 102 | 116 | 121 |
| Spain— | | | | | | |
| Ore | 23,924 | 6,479 | 6,060 | 12,418 | 6,817 | 12,780 |
| Unwrought (a) | 19,057 | 10,637 | 1,915 | 13,654 | 21,985 | 6,499 |
| Oxide | 113 | 55 | 274 | 444 | 1,030 | 1,323 |
| Sweden— | | | | | | |
| Ore | 146,258 | 146,261 | 158,650 | 115,931 | 139,465 | 157,388 |
| Unwrought (a) | 286 | 188 | 119 | 306 | 449 | 438 |
| Scrap | 1,476 | 1,457 | 1,392 | 1,007 | 1,342 | 1,403 |
| Zinc-white | 467 | 459 | 646 | 645 | 347 | 344 |
| Lithopone | 59 | 31 | 22 | 10 | 1 | 3 |

(a) Including alloys.

EXPORTS OF ZINC (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Switzerland— | | | | | | |
| Unwrought and scrap .. | 1,258 | 1,047 | 1,647 | 1,622 | 1,664 | 1,699 |
| Semi-manufactures (a) | 66 | 29 | 37 | 57 | 39 | 47 |
| Zinc-white | 1 | 11 | 1 | 2 | 9 | 4 |
| U.S.S.R.— | | | | | | |
| Unwrought | 147,400 | 131,600 | 84,900 | 72,900 | 77,500 | 95,900 |
| Yugoslavia— | | | | | | |
| Concentrates | 31,673 | 20,093 | 10,585 | 2,791 | 9,059 | 83 |
| Unwrought | 3,063 | 2,828 | 5,241 | 5,135 | 30,138 | 30,016 |
| Semi-manufactures .. | 10,553 | 10,040 | 11,947 | 10,483 | 13,387 | 19,039 |
| Oxide | 1,157 | 1,141 | 797 | 1,204 | 988 | 1,519 |
| Lithopone | 2,028 | 3,629 | 2,664 | 2,451 | 708 | 79 |
| Algeria— | | | | | | |
| Ore | 51,596 | 66,604 | 14,763 | 13,007 | 21,815 | <i>n.a.</i> |
| Congo Republic (c)— | | | | | | |
| Ores and concentrates .. | 92,400 | 88,600 | 93,400 | 65,000 | 71,431 | 71,500 |
| Unwrought | 55,800 | 55,700 | 50,100 | 56,200 | 41,200 | 51,300 |
| Congo, Republic of— | | | | | | |
| Ore | <i>n.a.</i> | 16,236 | 11,546 | <i>n.a.</i> | 2,613 | 5 |
| Morocco— | | | | | | |
| Ore | 63,352 | 96,598 | 78,743 | 85,338 | 78,496 | 74,577 |
| South Africa— | | | | | | |
| Unwrought | 9 | 23 | 22 | 18 | 12 | 4 |
| Fume, dust, shavings, etc. | 330 | 76 | 92 | 71 | 82 | 95 |
| South West Africa— | | | | | | |
| Ores and concentrates (b) | 33,617 | 31,693 | 35,054 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Tunisia— | | | | | | |
| Ore | 8,842 | 2,132 | 10,807 | 13,127 | 7,283 | 5,186 |
| Guatemala— | | | | | | |
| Ore | 831 | 853 | 1,228 | 12 | 44 | <i>n.a.</i> |
| Honduras— | | | | | | |
| Ore and concentrates .. | 10,689 | 19,340 | 9,592 | 9,725 | 17,498 | <i>n.a.</i> |
| Mexico— | | | | | | |
| Ores and concentrates | 270,107 | 307,449 | 305,076 | 275,591 | 195,000 | <i>n.a.</i> |
| Unwrought | 28,710 | 25,453 | 32,091 | 32,563 | 41,498 | <i>n.a.</i> |
| Oxide | 3,201 | 6,428 | 7,861 | 7,658 | 4,359 | <i>n.a.</i> |
| United States— | | | | | | |
| Ore and concentrates (b) | 35 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Unwrought | 23,675 | 6,438 | 2,386 | 15,682 | 31,616 | 8,302 |
| Scrap (b) | 5,757 | 5,015 | 3,990 | 1,487 | 2,047 | 1,776 |
| Semi-manufactures (a) | 10,924 | 5,903 | 5,973 | 4,439 | 13,973 | 26,478 |
| Oxide | 2,174 | 2,375 | 7,461 | 3,071 | 3,250 | 3,374 |
| Lithopone | 1,057 | 544 | 2,694 | 723 | 1,161 | 969 |
| Argentina— | | | | | | |
| Ore | 29,383 | 2,629 | — | — | — | — |
| Unwrought | 1,070 | 146 | 2 | 918 | 1,823 | 2,509 |
| Bolivia— | | | | | | |
| Ores (b) | 9,604 | 13,472 | 16,438 | 16,433 | 11,599 | 26,000 |
| Chile— | | | | | | |
| Concentrates | 3,653 | <i>n.a.</i> | <i>n.a.</i> | 2,046 | <i>n.a.</i> | <i>n.a.</i> |
| Peru— | | | | | | |
| Ores, etc. (Zn content) .. | 199,557 | 208,644 | 212,086 | 228,631 | 298,000 | 246,000 |
| Unwrought (Zn content) | 71,074 | 54,836 | 47,797 | 63,892 | 54,264 | <i>n.a.</i> |
| Burma— | | | | | | |
| Concentrates | 15,407 | 14,310 | 16,040 | 8,912 | 6,385 | <i>n.a.</i> |
| Iran (d)— | | | | | | |
| Ore | 73,062 | 96,244 | 76,322 | 39,488 | 50,304 | <i>n.a.</i> |

(a) Including alloys.

(b) Zn content.

(d) Years ended March 20 following that stated.

(c) Estimated.

EXPORTS OF ZINC (cont.)

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|--------|--------|--------|-------------|-------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Japan— | | | | | | |
| Unwrought | 5,320 | 54,529 | 58,213 | 64,713 | 85,477 | 93,046 |
| Semi-manufactures | 844 | 1,054 | 2,161 | 3,407 | 2,918 | 3,796 |
| Oxide | 170 | 332 | 1,137 | 807 | 1,834 | 2,547 |
| Lithopone | <i>n.a.</i> | 205 | 323 | 398 | 683 | 292 |
| Korea (South)— | | | | | | |
| Ore | 5,878 | 13,694 | 31,666 | 21,967 | 33,537 | 39,243 |
| Philippine Republic— | | | | | | |
| Concentrates | 4,811 | 3,848 | 2,400 | 2,933 | <i>n.a.</i> | <i>n.a.</i> |
| Turkey— | | | | | | |
| Ore | 1,896 | 7,712 | 16,335 | 8,532 | 18,814 | 25,161 |

IMPORTS OF ZINC*

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--------------------------------------|-------------|-----------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ore and concentrates .. | 303,531 | 229,273 | 234,709 | 254,945 | 330,530 | 327,880 |
| Unwrought (a) .. | 187,109 | 185,268 | 178,698 | 159,515 | 168,071 | 159,602 |
| Waste and scrap .. | 2,298 | 1,944 | 1,214 | 3,905 | 3,452 | 1,198 |
| Semi-manufactures (a) | 601 | 288 | 600 | 587 | 1,622 | 1,215 |
| Oxide .. | 189 | 425 | 302 | 332 | <i>n.a.</i> | <i>n.a.</i> |
| Lithopone, etc. . . | 2,251 | 1,089 | 1,528 | 1,389 | 1,022 | 3,928 |
| Malta— | | | | | | |
| Semi-manufactures .. | (£7,376) | (£11,409) | (£14,222) | (£9,373) | (£2,515) | (£7,627) |
| Ghana— | | | | | | |
| Unwrought (a) .. | 29 | 977 | 303 | 838 | 18 | 1,752 |
| Semi-manufactures (a) | 30 | 52 | 16 | 40 | 17 | 208 |
| Kenya— | | | | | | |
| Unwrought (a) .. | 1,419 | 1,206 | 1,166 | 1,006 | 1,150 | 1,413 |
| Semi-manufactures (a) | 8 | 9 | 3 | 23 | 12 | 481 |
| Nigeria— | | | | | | |
| Unwrought and semi-manufactures (a) | 950 | 1,948 | 846 | 2,500 | 1,701 | 6,172 |
| Rhodesia— | | | | | | |
| Semi-manufactures (a) | 1,085 | 757 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Tanzania— | | | | | | |
| Unwrought (a) .. | 1,407 | 2,015 | 1,153 | 1,154 | 1,596 | 1,749 |
| Semi-manufactures (a) | 25 | 19 | 15 | 42 | 192 | 204 |
| Uganda— | | | | | | |
| Unwrought .. | 7 | 241 | 1,275 | 1,229 | 876 | 1,605 |
| Semi-manufactures (a) | 5 | 14 | 8 | — | 21 | 38 |
| Canada— | | | | | | |
| Ore and concentrates (Zn content) .. | 12,063 | 7,964 | (c) 71 | (c) 67 | (c) 114 | (c) 54 |
| Unwrought .. | 19 | 15 | 112 | 951 | 1,355 | 689 |
| Semi-manufactures .. | 2,390 | 2,027 | 1,833 | 1,671 | 1,600 | 1,680 |
| Zinc-white .. | 1,045 | 976 | 1,442 | 1,521 | 1,471 | 2,286 |
| Lithopone .. | 481 | 512 | 194 | 282 | 360 | — |
| Barbados— | | | | | | |
| Semi-manufactures (a) | 5 | 9 | 2 | 26 | 26 | 37 |
| Jamaica— | | | | | | |
| Semi-manufactures (a) | 79 | 20 | 17 | 7 | — | 22 |
| Trinidad and Tobago— | | | | | | |
| Semi-manufactures (a) | 36 | 18 | 21 | 23 | 25 | 19 |
| Ceylon— | | | | | | |
| Unwrought (a) .. | 85 | 274 | 151 | 546 | 1,812 | 1,244 |
| Semi-manufactures (a) | 19 | 49 | 138 | 87 | 57 | 80 |
| Cyprus— | | | | | | |
| Semi-manufactures (a) | 55 | 60 | 63 | 208 | 237 | 30 |
| Hong Kong— | | | | | | |
| Unwrought (a) .. | 6,164 | 1,240 | 3,614 | 4,398 | 7,344 | 8,024 |
| Scrap .. | 265 | 62 | 27 | 100 | 270 | 83 |
| Semi-manufactures (a) | 401 | 233 | 516 | 350 | 664 | 525 |
| Oxide .. | 716 | 632 | 686 | 668 | 1,066 | 1,006 |
| Lithopone .. | 1,272 | 1,097 | 1,293 | 593 | 1,073 | 1,139 |
| India (b)— | | | | | | |
| Ore and concentrates .. | — | — | 19,764 | 512 | 27,387 | 39,707 |
| Unwrought .. | 65,345 | 68,430 | 35,718 | 54,297 | 64,963 | 21,975 |
| do. alloys .. | 3,600 | 7,060 | 9,636 | 8,899 | 21,949 | 12,644 |
| Semi-manufactures (a) | 1,115 | 3,452 | 1,956 | 1,671 | 1,525 | 2,469 |
| Zinc-white .. | 102 | 172 | 31 | 46 | 9 | 1 |
| Lithopone .. | 343 | 689 | 802 | 617 | 734 | 1,029 |
| Malaysia (West)— | | | | | | |
| Ore .. | <i>n.a.</i> | 1,228 | 833 | 2,251 | 2,641 | 2,072 |
| Unwrought (a) .. | <i>n.a.</i> | 1,228 | 1,533 | 1,200 | 2,000 | 1,758 |
| Semi-manufactures (a) | <i>n.a.</i> | 148 | 47 | 1,204 | 1,327 | 1,989 |

*See footnote on p. 386 concerning the descriptions "unwrought" zinc and "semi-manufactures" used in these tables.

(a) Including alloys.

(c) Including scrap.

(b) Years ended March 31 following that stated.

IMPORTS OF ZINC (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|--|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Pakistan— | | | | | | |
| Unwrought (a) | 4,960 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Zinc-white | 15 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Lithopone | 1,369 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Singapore— | | | | | | |
| Unwrought | 192 | 2,532 | 4,354 | 4,428 | 7,115 | 5,128 |
| Semi-manufactures (a) | 272 | 248 | 387 | 330 | 1,356 | 858 |
| Oxide | 457 | 384 | 418 | 555 | 682 | 638 |
| Sarawak— | | | | | | |
| Semi-manufactures (a) | 126 | 67 | 102 | 69 | 67 | <i>n.a.</i> |
| Australia (b)— | | | | | | |
| Ore and concentrates .. | <i>n.a.</i> | <i>n.a.</i> | 5,083 | 6,210 | — | 3,251 |
| Unwrought and semi-manufactures (a) .. | 195 | 273 | (c) 177 | (c) 198 | (c) 132 | (c) 110 |
| Lithopone | 1,073 | 1,142 | 927 | 976 | 1,081 | 1,044 |
| New Zealand (b)— | | | | | | |
| Unwrought (a) | 3,227 | 4,666 | 4,220 | 3,983 | 3,578 | <i>n.a.</i> |
| Semi-manufactures (a) | 592 | 698 | 905 | 787 | 551 | <i>n.a.</i> |
| Oxide | 10 | 2 | 8 | 2 | 16 | <i>n.a.</i> |
| Lithopone | 94 | 131 | 146 | 117 | 72 | <i>n.a.</i> |
| Irish Republic— | | | | | | |
| Unwrought (a) | 3,439 | 3,286 | 3,203 | 3,603 | 4,433 | 4,507 |
| Semi-manufactures (a) | 312 | 264 | 200 | 252 | 657 | 852 |
| OTHER COUNTRIES | | | | | | |
| Albania— | | | | | | |
| Oxide | — | 169 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Austria— | | | | | | |
| Ore | 13,366 | 12,421 | 12,253 | 13,039 | 10,052 | 11,251 |
| Unwrought (a) | 8,293 | 7,286 | 7,182 | 5,488 | 6,499 | 6,748 |
| Semi-manufactures (a) | 502 | 548 | 627 | 626 | 727 | 692 |
| Zinc-white and zinc-grey | 512 | 445 | 477 | 518 | 688 | 700 |
| Lithopone | 221 | 289 | 391 | 498 | 312 | 174 |
| Belgium-Luxemburg E.U.— | | | | | | |
| Ore | 442,420 | 501,723 | 530,130 | 517,386 | 612,283 | 549,884 |
| Unwrought | 25,719 | 12,087 | 11,447 | 14,020 | 19,655 | 41,001 |
| Scrap | 1,012 | 1,400 | 693 | 879 | 1,082 | 1,348 |
| Semi-manufactures (a) | 958 | 393 | 544 | 921 | 1,369 | 1,480 |
| Oxide | 1,991 | 1,774 | 1,862 | 2,070 | 2,631 | 3,833 |
| Lithopone, etc. . . . | 1,646 | 1,636 | 2,497 | 4,105 | 3,555 | 3,749 |
| Denmark— | | | | | | |
| Unwrought | 11,231 | 11,336 | 9,551 | 8,513 | 9,897 | 11,922 |
| do. alloys | 254 | 183 | 340 | 333 | 752 | 1,164 |
| Scrap | 89 | 91 | 186 | 108 | 88 | 183 |
| Semi-manufactures (a) | 6,449 | 6,744 | 6,422 | 7,542 | 6,645 | 7,226 |
| Zinc-white | 1,467 | 1,370 | 1,531 | 1,684 | 1,597 | 2,002 |
| Lithopone | 1,843 | 1,810 | 1,756 | 1,584 | 1,442 | 1,398 |
| Finland— | | | | | | |
| Unwrought (a) | 3,781 | 7,769 | 6,985 | 6,629 | 5,395 | 9,467 |
| Scrap | — | 2 | 6 | 6 | — | 1 |
| Semi-manufactures (a) | 523 | 467 | 552 | 600 | 711 | 654 |
| Zinc-white | 268 | 417 | 313 | 326 | 356 | 364 |
| Lithopone | 1,767 | 1,517 | 1,457 | 1,119 | 829 | 1,024 |
| France— | | | | | | |
| Ore | 362,325 | 326,980 | 342,758 | 326,894 | 355,676 | 405,962 |
| Unwrought | 21,767 | 13,636 | 24,207 | 30,064 | 25,869 | 25,027 |
| Scrap | 18,585 | 16,937 | 18,430 | 14,868 | 18,890 | 18,148 |
| Semi-manufactures (a) | 6,918 | 6,856 | 7,912 | 8,958 | 7,675 | 9,249 |
| Oxide | 2,219 | 1,725 | 1,233 | 1,415 | 2,270 | 2,967 |
| Lithopone, etc. . . . | 23,592 | 19,499 | 17,805 | 12,092 | 14,797 | 12,148 |

(a) Including alloys.

(b) Years ended June 30 of that stated.

(c) Owing to reclassification not strictly comparable with earlier years.

IMPORTS OF ZINC (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|---------|---------|---------|---------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Germany (Federal)— | | | | | | |
| Ores | 143,539 | 118,840 | 162,081 | 147,583 | 232,295 | 345,051 |
| Unwrought (a) .. | 164,635 | 181,395 | 124,797 | 139,642 | 184,064 | 179,594 |
| Scrap (a) | 535 | 540 | 615 | 642 | 803 | 950 |
| Semi-manufactures (a) | 14,731 | 20,979 | 18,643 | 22,028 | 23,812 | 26,784 |
| Zinc-white and zinc-grey | 5,292 | 4,470 | 3,922 | 2,357 | 2,774 | 3,514 |
| Lithopone | 2,816 | 3,042 | 3,098 | 2,144 | 2,160 | 1,693 |
| Greece— | | | | | | |
| Unwrought | 5,537 | 5,493 | 7,817 | 7,375 | 7,275 | 10,592 |
| Semi-manufactures (a) | 179 | 219 | 149 | 260 | 330 | 240 |
| Zinc-white | 395 | 362 | 340 | 433 | 289 | 396 |
| Lithopone | 3,921 | 3,718 | 4,158 | 4,080 | 4,075 | 4,183 |
| Hungary— | | | | | | |
| Crude | 11,630 | 13,162 | 14,176 | 13,086 | 17,940 | 19,927 |
| Iceland— | | | | | | |
| Unwrought (a) .. . | 12 | 8 | 15 | 17 | 13 | 16 |
| Semi-manufactures (a) | 80 | 77 | 56 | 64 | 65 | 67 |
| Zinc-white | 17 | 17 | 13 | 6 | <i>n.a.</i> | <i>n.a.</i> |
| Italy— | | | | | | |
| Ore | 1,024 | 23 | 4,558 | 21,079 | 25,647 | 59,289 |
| Unwrought | 41,636 | 33,235 | 54,368 | 64,964 | 88,954 | 44,990 |
| do. alloys | 1,162 | 6,644 | | | | |
| Scrap | 4,473 | 3,876 | 7,002 | 7,913 | 6,761 | 5,898 |
| Semi-manufactures (a) | 2,964 | 2,997 | 3,312 | 3,443 | 3,686 | 3,497 |
| Oxide | 3,526 | 2,549 | 3,022 | 2,903 | 3,235 | 4,877 |
| Lithopone, etc... .. | 1,399 | 1,225 | 751 | 385 | 991 | 1,184 |
| Netherlands— | | | | | | |
| Ore | 103,926 | 83,802 | 84,376 | 81,229 | 94,740 | 100,539 |
| Unwrought | 13,482 | 15,548 | 14,376 | 16,110 | 16,881 | 16,625 |
| do. alloys | 2,102 | 1,758 | 1,491 | 1,597 | 1,860 | 1,466 |
| Scrap | 249 | 1,262 | 1,997 | 210 | 548 | 1,584 |
| Semi-manufactures (a) | 7,876 | 6,768 | 6,122 | 6,604 | 7,916 | 7,663 |
| Oxide | 1,838 | 2,061 | 1,490 | 1,661 | 1,797 | 2,647 |
| Lithopone, etc... .. | 2,714 | 2,543 | 1,838 | 1,354 | 1,198 | 1,200 |
| Norway— | | | | | | |
| Ore | 77,485 | 101,521 | 85,712 | 80,260 | 111,230 | 101,730 |
| Unwrought | 2,234 | 5,207 | 1,171 | 1,571 | 2,493 | 4,359 |
| Scrap | 774 | 1,068 | 1,366 | 1,676 | 2,736 | 3,647 |
| Semi-manufactures (a) | 2,414 | 1,946 | 1,906 | 1,942 | 1,658 | 1,083 |
| Zinc-white | 568 | 904 | 1,112 | 1,042 | 643 | 1,176 |
| Lithopone, etc... .. | 242 | 224 | 144 | 159 | 145 | 118 |
| Poland— | | | | | | |
| Concentrates | 164,600 | 143,824 | 99,298 | 105,580 | 84,505 | 82,280 |
| Portugal— | | | | | | |
| Unwrought and scrap .. | 4,979 | 6,010 | 5,006 | 6,374 | 6,100 | 8,038 |
| Semi-manufactures .. . | 296 | 260 | 254 | 313 | 683 | 643 |
| Oxide | 299 | 291 | 282 | 195 | 229 | 229 |
| Lithopone | 2,741 | 2,724 | 2,204 | 2,296 | 2,316 | 2,765 |
| Spain— | | | | | | |
| Unwrought and scrap .. | 11 | 1,026 | 4,889 | 113 | (a) 100 | (a) 972 |
| Semi-manufactures (a) | 29 | 106 | 267 | 71 | 108 | 121 |
| Oxide | 113 | 145 | 523 | 195 | 231 | 230 |
| Lithopone | 429 | 625 | 960 | 1,250 | 113 | 297 |
| Sweden— | | | | | | |
| Unwrought | 26,059 | 31,470 | 27,116 | 31,207 | 34,487 | 38,505 |
| do. alloys | 2,579 | 3,749 | 2,294 | 2,775 | 3,334 | 3,919 |
| Scrap | 61 | 72 | 29 | 89 | 132 | — |
| Semi-manufactures (a) | 1,617 | 1,649 | 1,580 | 1,532 | 1,585 | 1,540 |
| Zinc-white | 3,355 | 3,454 | 2,347 | 1,873 | 2,086 | 2,398 |
| Lithopone, etc... .. | 3,927 | 3,110 | 2,506 | 2,665 | 2,100 | 1,564 |

(a) Including alloys.

IMPORTS OF ZINC (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|---------|---------|----------------|-----------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Switzerland— | | | | | | |
| Unwrought | 20,342 | 25,301 | 22,784 | 24,114 | 25,401 | 30,566 |
| Semi-manufactures (a) | 3,125 | 3,456 | 3,263 | 4,303 | 4,509 | 5,188 |
| Zinc-white | 1,820 | 1,651 | 1,398 | 1,287 | 1,126 | 1,392 |
| U.S.S.R.— | | | | | | |
| Unwrought | 70,600 | 57,900 | 16,000 | 29,230 | 35,820 | 49,300 |
| do. alloys | 5,807 | 5,800 | 5,400 | 4,000 | 3,840 | 4,000 |
| Semi-manufactures .. | 3,838 | 3,900 | 3,900 | 700 | 780 | 3,700 |
| Yugoslavia— | | | | | | |
| Unwrought | 1,604 | 2,961 | 1,646 | 2,197 | 7,347 | 11,484 |
| Semi-manufactures .. | 182 | 140 | 241 | 329 | 186 | 207 |
| Oxide | 1,451 | 564 | 710 | 241 | 46 | 58 |
| Lithopone | 601 | 506 | <i>n.a.</i> | 1,269 | 669 | 1,159 |
| Angola— | | | | | | |
| Semi-manufactures (a) | 90 | 114 | 111 | 289 | 276 | 295 |
| Oxide | 59 | 44 | 35 | 52 | 106 | 100 |
| Egypt— | | | | | | |
| Unwrought | 1,954 | 509 | 491 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Malagasy Republic— | | | | | | |
| Semi-manufactures (a) | 76 | 53 | 105 | 108 | 104 | 91 |
| Oxide | 6 | 28 | 15 | 2 | 19 | 39 |
| Morocco— | | | | | | |
| Unwrought | 454 | 576 | 567 | 731 | 912 | 1,089 |
| Semi-manufactures (a) | 240 | 151 | 253 | 251 | 239 | 216 |
| Oxide | 566 | 496 | 479 | 432 | — | 2 |
| Lithopone | 1,217 | 969 | 1,273 | 1,386 | 1,569 | 2,040 |
| Mozambique— | | | | | | |
| Semi-manufactures .. | 9 | 27 | 48 | 20 | <i>n.a.</i> | <i>n.a.</i> |
| Oxide | 88 | 54 | 78 | 72 | <i>n.a.</i> | <i>n.a.</i> |
| South Africa— | | | | | | |
| Unwrought | 41,385 | 36,628 | 38,406 | 48,322 | 38,289 | 8,381 |
| Semi-manufactures .. | 943 | 694 | 382 | 980 | 1,581 | 698 |
| Lithopone | 1,458 | 1,473 | 1,498 | 1,512 | 1,378 | 1,362 |
| Oxide | 389 | 115 | 150 | 185 | 267 | 213 |
| Sudan— | | | | | | |
| Unwrought | — | — | — | — | 74 | 44 |
| Semi-manufactures .. | 58 | 166 | 54 | 9 | 187 | 446 |
| Tunisia— | | | | | | |
| Unwrought and scrap (a) | — | 108 | 59 | 96 | 59 | 157 |
| Semi-manufactures (a) | 86 | 93 | 98 | 128 | 51 | 128 |
| Oxide | 200 | 205 | 244 | 394 | 143 | 214 |
| Honduras— | | | | | | |
| Unwrought | 18 | 27 | 20 | 39 | — | <i>n.a.</i> |
| Semi-manufactures .. | 31 | 59 | 31 | 9 | 48 | <i>n.a.</i> |
| Mexico— | | | | | | |
| Semi-manufactures .. | 45 | 43 | 48 | 80 | 70 | <i>n.a.</i> |
| Oxide | 45 | 39 | 46 | 100 | <i>n.a.</i> | <i>n.a.</i> |
| Nicaragua— | | | | | | |
| Semi-manufactures .. | 38 | 721 | 1,078 | 147 | 74 | 46 |
| United States— | | | | | | |
| Ore (<i>Zn content</i>) .. | 278,067 | 363,540 | 357,343 | 386,880 | 439,905 | 519,367 |
| Unwrought | 119,748 | 138,829 | 249,589 | 197,607 | 272,042 | 289,850 |
| Dross and scrap .. | 3,371 | 4,198 | 1,814 | 1,308 | 1,203 | 2,219 |
| Semi-manufactures .. | 5,003 | 1,684 | <i>r</i> 3,016 | <i>r</i> 4,054 | 8,285 | 8,383 |
| Oxide | 7,546 | 10,264 | 12,939 | <i>r</i> 12,207 | 13,885 | 13,004 |
| Lithopone | 154 | 170 | 162 | 104 | 220 | 233 |
| Argentina— | | | | | | |
| Unwrought | 439 | 2,490 | 2,138 | 2,133 | 4,060 | <i>n.a.</i> |
| Sheets and plates .. | 71 | 35 | 25 | 326 | 361 | <i>n.a.</i> |
| Zinc-white | 10 | 6 | 18 | 26 | 71 | <i>n.a.</i> |

(a) Including alloys.

IMPORTS OF ZINC (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | |
|-----------------------------------|---------|---------|---------|---------|---------|---------|------|
| OTHER COUNTRIES (cont.) | | | | | | | |
| Brazil— | | | | | | | |
| Unwrought (a) .. | 30,222 | 31,075 | 40,780 | 35,876 | 42,404 | n.a. | |
| Semi-manufactures (a) .. | 344 | 3 | 3 | — | — | n.a. | |
| Zinc-white | 70 | 300 | 59 | 38 | 87 | n.a. | |
| Lithopone | 6,483 | 5,982 | 5,447 | 3,441 | 3,548 | n.a. | |
| Chile— | | | | | | | |
| Unwrought | 7,756 | 6,393 | n.a. | 5,941 | n.a. | n.a. | |
| Bars and sheets (a) .. | 221 | 187 | n.a. | n.a. | n.a. | n.a. | |
| Zinc-white | — | 31 | n.a. | — | n.a. | n.a. | |
| Lithopone | 18 | 20 | n.a. | 5 | n.a. | n.a. | |
| Colombia— | | | | | | | |
| Unwrought (a) .. | 4,301 | 2,311 | 7,564 | 2,296 | 4,166 | n.a. | |
| Semi-manufactures (a) .. | 168 | 95 | 49 | 744 | 54 | n.a. | |
| Zinc-white | 1,121 | 7 | 31 | 16 | 5 | n.a. | |
| Lithopone | 489 | 186 | 549 | 196 | 236 | n.a. | |
| Peru— | | | | | | | |
| Semi-manufactures (a) .. | 196 | 242 | 243 | 103 | 127 | n.a. | |
| Zinc-white | 15 | 72 | 25 | 11 | r 25 | n.a. | |
| Lithopone | 414 | 374 | 230 | 160 | r 198 | n.a. | |
| Uruguay— | | | | | | | |
| Unwrought and sheets .. | n.a. | 735 | 1,037 | 868 | 982 | 1,253 | |
| Lithopone | n.a. | 282 | 250 | 270 | 158 | 218 | |
| Zinc-white | n.a. | 7 | n.a. | n.a. | n.a. | n.a. | |
| Venezuela— | | | | | | | |
| Unwrought | 2,987 | 4,006 | 5,250 | 4,619 | 6,756 | 6,116 | |
| Oxide | 983 | 813 | 668 | 702 | 504 | 333 | |
| Lithopone | 490 | 422 | 406 | 490 | 518 | 470 | |
| Burma— | | | | | | | |
| Unwrought | 318 | 433 | 240 | 601 | 31 | n.a. | |
| Semi-manufactures (a) .. | 188 | — | — | 138 | 177 | n.a. | |
| Formosa— | | | | | | | |
| Unwrought (a) .. | 4,132 | 5,631 | 6,765 | 10,455 | 10,268 | 9,830 | |
| Semi-manufactures (a) .. | 254 | 539 | 216 | 348 | 477 | 715 | |
| Lithopone | 1,238 | 1,375 | 1,052 | 1,133 | n.a. | 800 | |
| Iran (b)— | | | | | | | |
| Unwrought | 166 | 448 | 731 | 1,757 | 3,245 | n.a. | |
| Semi-manufactures (a) .. | 66 | 75 | 173 | 1,725 | 226 | n.a. | |
| Oxide | 314 | 488 | n.a. | n.a. | n.a. | n.a. | |
| Lithopone | 1,242 | 973 | 1,178 | 1,410 | 1,806 | n.a. | |
| Iraq— | | | | | | | |
| Semi-manufactures .. | 21 | n.a. | 196 | 32 | 28 | 34 | |
| Israel— | | | | | | | |
| Unwrought (a) | 2,748 | 3,484 | 2,678 | 3,673 | 3,769 | 5,343 | |
| Semi-manufactures .. | 291 | 402 | 276 | 433 | 566 | 1,030 | |
| Oxide | 612 | 592 | 368 | 424 | 524 | 677 | |
| Japan— | | | | | | | |
| Ore | 283,891 | 374,325 | 439,066 | 604,380 | 843,138 | 833,386 | |
| Unwrought | 67,948 | 6,938 | 7,529 | 17,815 | 8,417 | 8,099 | |
| Scrap | 43 | 11 | 84 | 95 | 4 | 65 | |
| Semi-manufactures (a) .. | 21 | 81 | — | 10 | 290 | 19 | |
| Korea (South)— | | | | | | | |
| Unwrought | 4,741 | 8,791 | 6,748 | 4,527 | 6,564 | 8,195 | |
| Semi-manufactures .. | | 1,558 | 981 | 2,259 | n.a. | n.a. | |
| Lithopone | | 1,761 | 981 | 2,259 | n.a. | n.a. | |
| Lebanon— | | | | | | | |
| Unwrought | 655 | 581 | 926 | 447 | 791 | 817 | |
| Semi-manufactures .. | 65 | 89 | 65 | 49 | 60 | 50 | |
| Oxide and lithopone .. | 105 | 90 | 130 | 100 | 69 | 104 | |
| Philippine Republic— | | | | | | | |
| Unwrought (a) | 10,199 | 10,785 | 16,100 | 16,000 | n.a. | n.a. | |
| Semi-manufactures (a) .. | 2,253 | 534 | | n.a. | 909 | n.a. | n.a. |
| Oxide | 676 | 780 | | n.a. | n.a. | n.a. | n.a. |
| Lithopone | 423 | 209 | n.a. | n.a. | n.a. | n.a. | |

(a) Including alloys.

(b) Years ended March 20 of year following that stated.

IMPORTS OF ZINC (cont.)

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|--------|-------|---------|--------|---------|---------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Syria— | | | | | | |
| Oxide and lithopone .. | 869 | 505 | (b) 177 | 46 | (b) 113 | (b) 190 |
| Thailand— | | | | | | |
| Unwrought (a) .. | 10,341 | 8,930 | 11,412 | 16,387 | 14,414 | 17,983 |
| Semi-manufactures (a) | 1,660 | 1,594 | 2,448 | 2,128 | 2,104 | 1,871 |
| Oxide | 392 | 576 | 650 | 690 | 1,053 | 887 |
| Lithopone | 653 | 912 | 884 | 1,226 | 846 | 1,393 |
| Turkey— | | | | | | |
| Unwrought | 2,238 | 5,322 | 3,102 | 4,010 | 7,988 | 7,782 |
| Semi-manufactures (a) | 2,728 | 2,388 | 2,708 | 2,028 | 1,361 | 1,841 |
| Oxide | 2,088 | 2,426 | 2,325 | 2,537 | 2,487 | 2,499 |
| Lithopone | 129 | 5 | n.a. | — | — | n.a. |

(a) Including alloys.

(b) Oxide only.

ZIRCONIUM MINERALS

PRODUCTION OF ZIRCONIUM MINERALS

Long tons

| Producing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|---------|---------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Nigeria | 153 | — | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ceylon (b) | <i>n.a.</i> | (a) 2 | 151 | 119 | 25 | 67 |
| Malaysia (West) (a) | 145 | 582 | 774 | 465 | 1,109 | 1,395 |
| Australia— | | | | | | |
| Zircon concentrates | 184,082 | 226,863 | 235,649 | 283,682 | 294,195 | 366,983 |
| OTHER COUNTRIES | | | | | | |
| Egypt | 40 | — | 383 | 49 | — | — |
| Malagasy Republic | 504 | 634 | 693 | 205 | <i>n.a.</i> | <i>n.a.</i> |
| Senegal | 546 | — | — | — | — | — |
| Brazil (b) | 508 | 485 | 487 | 413 | <i>n.a.</i> | <i>n.a.</i> |

Zirconium minerals are also known to have been produced in India, the U.S.S.R., the United States and Cambodia.

(a) Exports.

(b) Zircon and baddeleyite.

EXPORTS OF ZIRCONIUM MINERALS, ETC.

Long tons

| Exporting Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------------------|-------------|---------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Nigeria— | | | | | | |
| Ores and concentrates | — | 20 | — | 536 | — | <i>n.a.</i> |
| Ceylon— | | | | | | |
| Baddeleyite | <i>n.a.</i> | 2 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Malaysia (West)— | | | | | | |
| Zircon | 145 | 582 | 774 | 465 | 1,109 | 1,395 |
| Australia— | | | | | | |
| Zircon concentrates | 198,664 | 216,661 | 210,428 | 247,179 | 266,121 | 309,358 |
| OTHER COUNTRIES | | | | | | |
| Germany (Federal)— | | | | | | |
| Ore | 1,669 | 1,252 | 777 | 710 | 1,244 | 1,556 |
| Malagasy Republic | — | 3 | 123 | — | — | — |
| South Africa— | | | | | | |
| Zircon concentrates | 71 | 2 | — | — | — | 89 |
| United States— | | | | | | |
| Ores and concentrates | 2,232 | 1,573 | 2,063 | 2,437 | 1,809 | 2,409 |
| Zirconium metal, etc. | 238 | 95 | 57 | 35 | 103 | 198 |

IMPORTS OF ZIRCONIUM MINERALS, ETC.

Long tons

| Importing Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|-------------|-------------|-------------|--------|--------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— Zirconium ores .. | 49,351 | 42,140 | 36,885 | 24,721 | 49,265 | 47,324 |
| Canada— Zirconium alloys .. | 8 | 10 | 12 | 56 | 98 | 93 |
| OTHER COUNTRIES | | | | | | |
| France— Zirconium ore | 22,695 | 29,349 | 27,562 | 17,618 | 23,542 | 29,231 |
| Germany (Federal)— Zirconium ore | 28,661 | 25,084 | 26,285 | 22,229 | 29,327 | 31,512 |
| Italy— Zirconium ore | 13,029 | 11,603 | 14,260 | 17,523 | 16,808 | 18,073 |
| United States— Zirconium ore | 39,655 | 52,563 | 51,765 | 52,950 | 53,482 | 85,190 |
| Zirconium metal | 24 | 16 | 52 | 73 | 134 | 222 |
| Brazil— Zirconium ore | <i>n.a.</i> | <i>n.a.</i> | 1,000 | 2,084 | 1,432 | <i>n.a.</i> |
| Japan— Zirconium ore | <i>n.a.</i> | 25,571 | 29,583 | 51,691 | 57,447 | 61,125 |
| Turkey— Zirconium ore | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 116 | 224 | 20 |

OTHER MINERALS AND METALS

These minerals are not separately recorded in the statistical returns of several countries.

| Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|-------------|-------------|-------------|-------------|-------------|-------------|
| Germanium (in terms of metal) | | | | | | |
| PRODUCTION*— | | | | | | |
| Congo Republic Lb. | 18,230 | 32,271 | 33,003 | 763 | — | <i>n.a.</i> |
| South West Africa Lb. | — | — | 1,854 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| United States (b) Lb. | 15,000 | 30,000 | 30,000 | 30,000 | 30,000 | 30,000 |
| EXPORTS— | | | | | | |
| Italy Lb. | 53 | 1,512 | 3,086 | 6,834 | 9,039 | 6,173 |
| South-West Africa Lb. | 11,434 | 7,023 | 5,710 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| IMPORTS— | | | | | | |
| Italy Lb. | <i>n.a.</i> | <i>n.a.</i> | 881 | 1,323 | 1,102 | 6,394 |
| Nepheline Syenite | | | | | | |
| PRODUCTION— | | | | | | |
| Canada Ton | 259,196 | 303,555 | 327,407 | 358,572 | 290,592 | 449,012 |
| Norway Ton | 30,258 | 40,369 | 56,401 | 64,180 | 81,712 | <i>n.a.</i> |
| EXPORTS— | | | | | | |
| Canada Ton | 202,653 | 220,714 | 235,379 | 274,654 | 288,555 | 353,226 |
| IMPORTS— | | | | | | |
| Mexico Ton | <i>n.a.</i> | 84 | 102 | 161 | <i>n.a.</i> | <i>n.a.</i> |
| United States .. Ton | 183,656 | 193,724 | 226,281 | 256,837 | 271,981 | 346,679 |
| Perlite | | | | | | |
| PRODUCTION— | | | | | | |
| United Kingdom Ton | 1,765 | 255 | 258 | 116 | 70 | — |
| Australia .. Ton | 489 | 764 | 1,544 | 1,389 | 996 | <i>n.a.</i> |
| New Zealand .. Ton | 914 | 1,124 | 1,028 | 1,055 | 1,840 | <i>n.a.</i> |
| Greece Ton | 39,142 | 90,428 | 102,799 | 111,576 | 130,000 | 236,415 |
| Morocco Ton | <i>n.a.</i> | 243 | — | — | — | <i>n.a.</i> |
| Mexico Ton | <i>n.a.</i> | 8,217 | 9,936 | 10,405 | 9,772 | <i>n.a.</i> |
| United States .. Ton | 381,000 | 448,000 | 489,000 | 570,000 | 498,000 | 510,000 |
| Turkey Ton | 1,200 | <i>n.a.</i> | <i>n.a.</i> | 20 | <i>n.a.</i> | <i>n.a.</i> |
| Sodium Carbonate (Natural) | | | | | | |
| PRODUCTION— | | | | | | |
| Kenya Ton | 80,380 | 81,880 | 110,624 | 103,100 | 105,908 | 104,235 |
| United States (a) Ton | 1,138,000 | 1,334,000 | 1,552,000 | 1,541,000 | 1,824,000 | 2,244,000 |
| EXPORTS— | | | | | | |
| Kenya Ton | 63,997 | 73,501 | 105,065 | 96,777 | 110,718 | 84,585 |
| Sudan Ton | 149 | 421 | 7 | 61 | 67 | 75 |

*Germanium is also produced in the United Kingdom.

(a) Sold or used by producers.

(b) From primary material of both domestic and foreign origin. Estimated.

OTHER MINERALS AND METALS (cont.)

| Country and Description | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Sodium Sulphate (Natural) | | | | | | |
| PRODUCTION— | | | | | | |
| Canada Ton | 297,556 | 308,454 | 361,887 | 382,425 | 410,419 | 454,004 |
| Spain Ton | 41,815 | 40,757 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| United States (d) Ton | 513,000 | 554,000 | 571,000 | 569,000 | 625,000 | 600,000 |
| Chile Ton | 30,200 | 55,448 | 33,625 | 17,928 | <i>n.a.</i> | <i>n.a.</i> |
| Argentina .. Ton | <i>n.a.</i> | 15,959 | 21,557 | 27,181 | 19,604 | <i>n.a.</i> |
| Turkey Ton | 2,387 | 4,885 | 7,306 | 8,968 | 10,865 | 13,567 |
| EXPORTS— | | | | | | |
| Canada Ton | 95,820 | 103,571 | 90,551 | 110,565 | 97,308 | 107,512 |
| Tellurium | | | | | | |
| PRODUCTION— | | | | | | |
| Canada Lb. | 77,782 | 69,794 | 72,239 | 73,219 | 70,991 | 103,777 |
| United States (a) Lb. | 145,000 | 195,000 | 199,000 | 135,000 | 121,000 | 234,000 |
| Peru Lb. | 46,757 | 36,045 | 39,654 | 32,690 | 35,000 | 38,000 |
| Japan Lb. | 7,573 | 20,126 | 22,701 | 29,760 | 31,000 | 51,000 |
| EXPORTS— | | | | | | |
| Germany (Federal) Lb. | 441 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Peru Lb. | 22,992 | 62,131 | 113,421 | 25,199 | 37,000 | 42,000 |
| IMPORTS— | | | | | | |
| Germany (Federal) Lb. | 14,100 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Spain Lb. | 573 | 3,166 | 3,161 | 4,377 | 2,275 | 6,614 |
| Wollastonite | | | | | | |
| PRODUCTION— | | | | | | |
| Kenya Ton | — | — | — | 12 | 1,360 | 680 |
| India Ton | — | — | — | — | — | 441 |
| New Zealand .. Ton | 14 | 54 | — | — | <i>n.a.</i> | <i>n.a.</i> |
| Finland Ton | 3,000 | 2,355 | 3,813 | 3,445 | 4,228 | 5,120 |
| South West Africa Ton | 116 | 205 | 330 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Mexico (b) .. Ton | 5,000 | 5,000 | 5,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| United States— | | | | | | |
| Industrial | (c) | (c) | (c) | (c) | (c) | (c) |
| Ornamental .. Ton | 3,237 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| EXPORTS— | | | | | | |
| South West Africa Ton | <i>n.a.</i> | 232 | 56 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |

(a) Including tellurium content of compounds.

(b) Estimated.

(c) In the range 30,000 to 40,000 tons per annum.

(d) Sold or used by producers.

MINERALS PRODUCED IN COUNTRIES OF THE COMMONWEALTH AND STERLING AREA

The following list comprises those minerals produced in Commonwealth and Sterling Area countries during the period 1964-1969 for which data have been given in the preceding tables. Minerals outside the general coverage of the statistics in this Summary are excluded. Where the name of an element appears alone, the word "ores" or "minerals" is implied to follow; this list does not extend to the production of metals.

Abu Dhabi
(Protected State)
Petroleum

Australia
Antimony
Asbestos
Barytes
Bauxite
Bentonite
Beryl
Bismuth
Cadmium
China Clay
Chrome
Coal
Cobalt
Copper
Diamonds
Diatomaceous earth
Feldspar, China stone
Fuller's earth
Garnet
Gold
Gypsum
Iron
Lead
Lithium
Magnesite, Dolomite
Manganese
Mica
Molybdenum
Monazite
Natural gas
Nickel
Perlite
Petroleum
Phosphate
Platinum
Pyrites
Salt
Selenium
Sillimanite, Andalusite
Silver
Sulphur
Talc, Pyrophyllite
Tantalite, Columbite
Tin
Titanium
Tungsten
Uranium
Zinc
Zircon

Bahamas
Salt

Bahrein
(Protected State)
Petroleum

Barbados
Natural gas

Botswana
Asbestos
Gold
Manganese
Silver

Brunei
Natural gas
Natural gasoline
Petroleum

Canada
Arsenic
Asbestos
Barytes
Bentonite
Bismuth
Cadmium
Coal
Cobalt
Copper
Diatomaceous earth
Feldspar
Fluorspar
Garnet
Gold
Graphite
Gypsum, Anhydrite
Indium
Iron
Lead
Lithium
Magnesite, Dolomite
Mercury
Mica
Molybdenum
Natural gas
Natural gasoline
Nepheline syenite
Nickel
Niobium
Petroleum
Platinum
Potash salts
Pyrites
Salt
Selenium
Silver
Sodium sulphate

Canada—(cont.)
Sulphur
Talc
Tantalite, Columbite
Tellurium
Thorium
Tin
Titanium
Tungsten
Uranium
Zinc

Ceylon
China clay
Feldspar
Graphite
Ilmenite
Magnesite, Dolomite
Monazite
Salt
Zircon

Christmas Island
Phosphate

Cyprus
Asbestos
Bentonite
Chrome
Cobalt
Copper
Gypsum
Pyrites
Salt

Fiji
Gold
Iron
Manganese
Silver

Ghana
Bauxite
Diamonds
Gold
Manganese
Salt

Guyana
Bauxite
Diamonds
Gold
Manganese

Hong Kong
China clay
Feldspar
Graphite
Iron
Tungsten

Minerals produced in countries of the Commonwealth and Sterling Area (cont.)

| | | |
|----------------------|------------------------------------|-----------------------------------|
| India | Kuwait (Protected State) | Ocean Island |
| Asbestos | Petroleum | Phosphate |
| Barytes | | |
| Bauxite | Lesotho | Pakistan |
| Bentonite | Diamonds | Antimony |
| Beryl | | Barytes |
| Bromine | Malaysia (West) | Bauxite |
| China Clay | Bauxite | Bentonite |
| Chrome | China clay | China clay |
| Coal | Columbite | Chrome |
| Copper | Gold | Coal |
| Columbite | Iron | Dolomite |
| Corundum | Manganese | Feldspar |
| Diamonds | Monazite | Fuller's earth |
| Feldspar | Tin | Gypsum |
| Fluorspar | Titanium | Iron |
| Fuller's earth | Tungsten | Magnesite |
| Garnet | Zircon | Manganese |
| Gold | | Mica |
| Gypsum | Malta | Natural gas |
| Iron | Salt | Petroleum |
| Lead | | Salt |
| Magnesite, Dolomite | Mauritius | Strontium |
| Manganese | Salt | Talc |
| Mica | | |
| Monazite | Nauru Island | Papua |
| Nitrate of potash | Phosphate | Gold |
| Petroleum | | |
| Phosphate | New Guinea | |
| Pyrites | Gold | |
| Salt | Platinum | |
| Sillimanite, Kyanite | Silver | Qatar (Protected State) |
| Silver | | Petroleum |
| Talc, Pyrophyllite | New Hebrides | |
| Titanium | Manganese | Rhodesia |
| Tungsten | | Antimony |
| Vermiculite | New Zealand | Arsenic |
| Wollastonite | Bentonite | Asbestos |
| Zinc | Coal | Barytes |
| Zircon | Copper | Bauxite |
| | Diatomaceous earth | Beryl |
| | Gold | China clay |
| | Iron | Chrome |
| | Magnesite, Dolomite | Coal |
| | Natural gas | Copper |
| | Natural gasoline | Corundum |
| | Perlite | Fluorspar |
| | Petroleum | Gold |
| | Pumice | Iron |
| | Salt | Kyanite |
| | Silver | Lead |
| | Tungsten | Lithium |
| | Wollastonite | Magnesite, Dolomite |
| | | Manganese |
| | Nigeria | Mica |
| | China clay | Nickel |
| | Coal | Phosphate |
| | Gold | Pyrites |
| | Lead | Silver |
| | Molybdenum | Talc |
| | Monazite, Thorite | Tantalite |
| | Natural gas | Tin |
| | Petroleum | Tungsten |
| | Salt | |
| | Tantalite, Columbite | St. Kitts |
| | Tin | Salt |
| | Tungsten | |
| | Zircon | |
| Jamaica | | |
| Bauxite | | |
| Gypsum | | |
| Phosphate | | |
| | | |
| Kenya | | |
| Asbestos | | |
| Barytes | | |
| Beryl | | |
| China clay | | |
| Copper | | |
| Diatomaceous earth | | |
| Feldspar | | |
| Fluorspar | | |
| Gold | | |
| Gypsum | | |
| Magnesite | | |
| Mica | | |
| Phosphate | | |
| Pumice | | |
| Salt | | |
| Silver | | |
| Sodium carbonate | | |
| Vermiculite | | |

Minerals produced in countries of the Commonwealth and Sterling Area (cont.)

Sarawak

Antimony
Bauxite
Gold
Petroleum
Phosphate

Seychelles

Phosphate

Sierra Leone

Bauxite
Diamonds
Gold
Iron
Titanium

Swaziland

Asbestos
Barytes
Beryl
China clay
Coal
Gold
Iron
Pyrophyllite
Silver
Tin

Tanzania

Bentonite
China clay
Coal
Corundum
Diamonds
Gold
Gypsum
Lead
Magnesite
Mica
Niobium
Salt
Silver
Tin
Tungsten
Vermiculite

Trinidad

Gypsum
Natural asphalt
Natural gas
Natural gasoline
Petroleum
Sulphur

Turks and Caicos Islands

Salt

Uganda

Beryl
Bismuth
Cobalt
Copper
Gold
Lithium

Uganda—(cont.)

Mica
Phosphate
Salt
Silver
Tantalite, Columbite
Tin
Tungsten

United Kingdom

Barytes, Witherite
Bromine
China clay
China stone
Coal
Copper
Diatomaceous earth
Fluorspar
Fuller's earth
Germanium
Gypsum, Anhydrite
Iron
Lead
Magnesite, Dolomite
Natural gas
Oil-shale
Perlite
Petroleum
Salt
Strontium
Sulphur
Talc
Tin
Zinc

Virgin Islands

Salt

Zambia

Cadmium
Cobalt
Copper
Gold
Gypsum
Lead
Manganese
Mica
Selenium
Silver
Tantalite, Columbite
Tin
Zinc

Burma

Antimony
Barytes
Bismuth
Coal
Copper
Gold
Gypsum

Burma—(cont.)

Iron
Lead
Nickel
Petroleum
Salt
Silver
Talc
Tin
Tungsten
Zinc

Iceland

Pumice

Irish Republic

Barytes
Coal
Copper
Gypsum
Lead
Pyrites
Zinc

Jordan

Gypsum
Phosphate
Salt

Libya

Gypsum
Petroleum
Salt

South Africa

Antimony
Asbestos
Barytes
Bentonite
Beryl
Bismuth
China clay
Chrome
Coal
Copper
Corundum
Diamonds
Diatomaceous earth
Feldspar
Fluorspar
Fuller's earth
Gadolinite
Garnet
Gold
Graphite
Gypsum
Iron
Lead
Lithium
Magnesite
Manganese
Mica
Monazite
Nickel
Phosphate

Minerals produced in countries of the Commonwealth and Sterling Area (cont.)

South Africa—(cont.)

Platinum, Osmiridium
Pyrites
Salt
Silver
Sillimanite, Andalusite
Sulphur
Talc
Tantalite
Tin
Titanium
Tungsten
Uranium
Vanadium
Vermiculite
Zinc
Zircon

South West Africa

Arsenic
Beryl
Bismuth
Cadmium
Copper
Diamonds
Feldspar
Fluorspar
Germanium
Gold
Graphite
Iron
Lead
Lithium
Manganese
Mica

South West Africa

—(cont.)

Phosphate
Salt
Sillimanite, Kyanite
Silver
Tantalite, Columbite
Tin
Tungsten
Vanadium
Wollastonite
Zinc

INDEX

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Celestite 343
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