

INSTITUTE OF GEOLOGICAL SCIENCES
MINERAL RESOURCES DIVISION

STATISTICAL
SUMMARY OF THE
MINERAL INDUSTRY

WORLD PRODUCTION,
EXPORTS AND IMPORTS

1967-1971



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 Mineral Statistics and Economics 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 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 for 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. There are, however, certain cases where this cannot be followed; in particular, with re-exports no longer separately recorded in the official trade statistics after 1969, the figures shown for the United Kingdom from 1970 refer to total exports (including re-exports) and to total imports respectively.

Units. The units of weight employed in the tables for 1967-70 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 tonnes |

The data for 1970 and 1971 are shown throughout the tables in metric units.

The factors used for converting volumes of liquids into weights are given in footnotes to the tables relating to Coal By-Products (p. 87) and Petroleum and Allied Products (pp. 241, 255).

Symbols. The following symbols are used in this Summary:

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

ABRASIVES (NATURAL) AND ASSOCIATED MINERALS*

The following tables cover the materials usually classed together as "natural abrasives"—pumice, emery, corundum, garnet—whether for use as abrasives or for non-abrasive purposes.

PRODUCTION OF PUMICE AND RELATED VOLCANIC MATERIALS

| Producing Country and Description | Long tons | | | | Tonnes | |
|-----------------------------------|-----------|-----------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Kenya— | | | | | | |
| Pumice | 120 | — | — | — | — | — |
| Volcanic ash | 928 | 3,857 | 1,640 | 849 | 863 | 1,866 |
| Dominica— | | | | | | |
| Pumice | 39,241 | 51,675 | 54,971 | 30,117 | 30,600 | <i>n.a.</i> |
| New Zealand— | | | | | | |
| Pumice | 16,144 | 16,315 | 16,250 | 18,904 | 19,207 | 13,009 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Pozzolan | 22,277 | 18,082 | 18,227 | 19,552 | 19,866 | <i>n.a.</i> |
| France— | | | | | | |
| Pumice | 616 | 583 | 581 | 578 | 587 | } 700,000 |
| Pozzolan and lapilli | 711,960 | 714,733 | 759,167 | 767,519 | 779,835 | |
| Germany (Federal)— | | | | | | |
| Basalt lava | 631,469 | 709,497 | 787,472 | 825,319 | 838,563 | 534,000 |
| Lava sand | 5,053,999 | 6,025,421 | 6,726,289 | 7,421,539 | 7,540,633 | 7,058,621 |
| Tuff | 2,725 | 2,970 | 2,261 | 3,176 | 3,227 | 2,712 |
| Pumice (a) | 4,071,000 | 3,504,000 | 3,939,000 | 4,147,000 | 4,214,000 | 5,020,000 |
| Greece— | | | | | | |
| Pumice | 225,377 | 272,538 | 369,305 | 398,000 | 404,000 | 419,081 |
| Pozzolan | 440,065 | 469,088 | 537,719 | 535,000 | 545,000 | 612,387 |
| Iceland— | | | | | | |
| Pumice (b) | 10,000 | 10,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Italy— | | | | | | |
| Pumice | 524,078 | 626,546 | 607,491 | } 1,109,000 | 1,127,000 | <i>n.a.</i> |
| Lapilli | 191,822 | 156,518 | 156,243 | | | |
| Pozzolan | 4,211,222 | 4,161,920 | 4,256,032 | 4,191,000 | 4,258,000 | <i>n.a.</i> |
| Volcanic ash | 315,000 | 276,000 | 197,087 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Spain— | | | | | | |
| Pumice (c) | 107,548 | 166,530 | 228,000 | 196,743 | 199,902 | <i>n.a.</i> |
| Cape Verde Islands— | | | | | | |
| Pozzolan | 7,864 | 8,036 | 8,857 | 16,691 | 16,959 | 9,511 |
| Egypt— | | | | | | |
| Pumice | 7,010 | 7,900 | 200 | 200 | 200 | 225 |
| Guatemala— | | | | | | |
| Volcanic ash | 43,586 | 41,337 | 44,285 | 44,000 | 45,000 | <i>n.a.</i> |
| Martinique— | | | | | | |
| Pumice | 14,762 | 14,733 | 17,715 | 18,000 | 18,000 | <i>n.a.</i> |
| United States (d)— | | | | | | |
| Pumice and pumicite | 693,204 | 429,772 | 534,006 | 426,783 | 433,631 | <i>n.a.</i> |
| Volcanic cinder (e) | 2,408,851 | 2,740,701 | 2,689,668 | 2,371,000 | 2,409,000 | <i>n.a.</i> |
| Argentina— | | | | | | |
| Volcanic materials | 4,367 | 12,223 | 29,420 | 32,102 | 32,617 | <i>n.a.</i> |
| Chile— | | | | | | |
| Pozzolan | 132,057 | 164,883 | 172,448 | 160,000 | 162,000 | <i>n.a.</i> |

*See also Aluminium, Diamonds and Diatomaceous earth.

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

(b) United States Bureau of Mines' estimate.

(c) Includes Canary Islands.

(d) Sold or used by producers.

(e) Principally for ballast.

EXPORTS OF PUMICE

| Exporting Country | Long tons | | | | Tonnes | |
|-------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 349 |
| Dominica | 12,111 | 25,744 | 22,748 | 28,192 | 28,644 | <i>n.a.</i> |
| New Zealand (a) | 735 | 638 | 601 | 859 | 872 | 685 |
| OTHER COUNTRIES | | | | | | |
| France | 296 | 280 | 61 | 262 | 266 | 75 |
| Germany (Federal) | 636,054 | 468,033 | 535,535 | 550,907 | 559,747 | 698,843 |
| Greece | 113,334 | 181,128 | 205,019 | 132,328 | 134,451 | 248,855 |
| Italy | 270,090 | 295,584 | 295,717 | 281,927 | 286,451 | 363,602 |
| Mexico | 3,596 | 7,206 | 388 | 113 | 115 | 167 |
| United States | 306 | 557 | 476 | 272 | 276 | 324 |

(a) Year ended June 30 of that stated.

IMPORTS OF PUMICE

| Importing Country | Long tons | | | | Tonnes | |
|-------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 90,958 |
| Canada | 7,890 | 5,713 | 4,297 | 4,482 | 4,554 | 19,356 |
| Australia (a) | 624 | 417 | 1,530 | 1,442 | 1,465 | 1,518 |
| New Zealand (a) | 53 | 113 | 92 | 84 | 85 | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Austria | 312 | 456 | 1,546 | 548 | 557 | 551 |
| Belgium | 194,728 | 138,772 | 160,264 | 190,566 | 193,624 | 139,700 |
| Denmark | 4,807 | 2,939 | 7,472 | 6,004 | 6,100 | 5,798 |
| France | 33,168 | 26,807 | 18,378 | 22,652 | 23,015 | 10,076 |
| Germany (Federal) | 71,303 | 25,087 | 16,330 | 8,228 | 8,360 | 5,550 |
| Netherlands | 355,476 | 365,471 | 367,775 | 362,087 | 367,897 | (b) 548,404 |
| Portugal | 181 | 122 | 336 | 343 | 349 | 192 |
| Switzerland | 1,261 | 1,038 | 1,841 | 1,315 | 1,336 | 1,317 |
| Tunisia | 22 | 150 | 37 | 15 | 15 | 14 |
| Mexico | 39 | 6 | 42 | 13 | 13 | 16 |
| United States— | | | | | | |
| Crude | 5,612 | 8,425 | 7,521 | 9,500 | 9,652 | <i>n.a.</i> |
| Manufactured | 2,050 | 2,849 | 1,121 | 2,617 | 2,659 | <i>n.a.</i> |
| Brazil | 651 | 847 | 924 | 966 | 981 | <i>n.a.</i> |
| Colombia | 10 | 10 | 20 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Peru | 6 | 4 | 4 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Lebanon | 33 | 31 | 2,312 | 1,364 | 1,386 | 802 |

(a) Year ended June 30 of that stated.

(b) Excluding imports from Belgium—Luxemburg, if any.

PRODUCTION OF EMERY

| Producing Country | Long tons | | | | Tonnes | |
|-------------------|-----------|--------|--------|---------|---------|--------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| Greece | 7,480 | 7,480 | 6,988 | 7,000 | 7,000 | 7,000 |
| Turkey | 24,088 | 36,608 | 43,457 | 114,188 | 116,020 | 83,100 |

EXPORTS OF EMERY

| Exporting Country | Long tons | | | | Tonnes | |
|--------------------------|-----------|---------|--------|--------|--------|-------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| Denmark | 2 | — | 1 | 10 | 10 | 2 |
| France | (a) 43 | (a) 107 | 24 | 23 | 23 | 82 |
| Germany (Federal) (a) .. | 17 | 76 | 9 | 36 | 37 | 24 |
| Greece | 5,460 | 6,485 | 5,834 | 4,341 | 4,411 | 5,712 |
| Italy | 7 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Japan | 637 | 894 | 794 | 661 | 672 | 923 |
| Turkey | 20,328 | 23,134 | 47,573 | 64,826 | 65,866 | n.a. |

(a) Includes natural corundum.

IMPORTS OF EMERY

| Importing Country | Long tons | | | | Tonnes | |
|--------------------------|-----------|------|------|--------|--------|--------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom (a) .. | n.a. | n.a. | n.a. | 16,593 | 16,859 | 29,309 |
| OTHER COUNTRIES | | | | | | |
| Finland | 57 | 43 | n.a. | n.a. | n.a. | n.a. |
| France | 755 | 636 | 855 | 832 | 845 | 972 |
| Germany (Federal) (b) .. | 647 | 876 | 519 | 527 | 535 | 159 |
| Italy | 927 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Spain (c) | 370 | 171 | 365 | 433 | 440 | 549 |
| Mexico | 402 | 405 | 115 | 144 | 146 | 107 |
| Brazil | 19 | 11 | 27 | 32 | 33 | n.a. |
| Chile | 29 | 23 | 25 | 33 | 34 | n.a. |
| Colombia | 60 | 68 | 62 | n.a. | n.a. | n.a. |
| Peru | 80 | 44 | 41 | n.a. | n.a. | n.a. |
| Japan (d) | 34 | 31 | 36 | 33 | 34 | 29 |
| Lebanon | 13 | 39 | 54 | 32 | 33 | 25 |
| Philippine Republic .. | 388 | 223 | 486 | 654 | 665 | 527 |

- (a) Crude.
- (b) Includes natural corundum.
- (c) Emery powder.
- (d) Emery and corundum sands and powder.

PRODUCTION OF GARNET

| Producing Country | Long tons | | | | Tonnes | |
|-------------------------------|-----------|--------|--------|--------|--------|--------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| India | 279 | 1,952 | 1,611 | 970 | 986 | 1,557 |
| Australia (a) | 591 | 100 | 82 | 199 | 202 | n.a. |
| OTHER COUNTRIES | | | | | | |
| Malagasy Republic (b) .. | 28 | 28 | 2 | 32 | 33 | n.a. |
| United States | 18,298 | 19,764 | 18,266 | 16,819 | 17,089 | 17,222 |
| Argentina | 93 | 64 | 98 | 59 | 60 | n.a. |

(a) Sales.

(b) Exports.

PRODUCTION OF NATURAL CORUNDUM

| Producing Country | Long tons | | | | Tonnes | |
|-------------------------------|-----------|-------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Kenya | 25 | 42 | 117 | 59 | 60 | 46 |
| Rhodesia (a) | 4,500 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Tanzania (b) | 38 | — | — | — | — | — |
| India | 301 | 321 | 445 | 405 | 412 | 316 |
| OTHER COUNTRIES | | | | | | |
| U.S.S.R. (a) | 5,000 | 6,000 | 6,000 | 6,400 | 6,500 | 6,500 |
| South Africa | 313 | 252 | 225 | 243 | 247 | 241 |

(a) United States Bureau of Mines' estimate.

(b) Exports.

EXPORTS OF NATURAL CORUNDUM

| Exporting Country | Long tons | | | | Tonnes | |
|-------------------------------|-----------|---------|---------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Tanzania | 38 | — | — | — | — | — |
| OTHER COUNTRIES | | | | | | |
| France | (a) 43 | (a) 107 | 113 | 72 | 73 | 63 |
| Germany (Federal) (a) | 17 | 76 | 9 | 36 | 37 | 24 |
| Italy | 81 | 13 | (a) 253 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |

(a) Includes emery.

IMPORTS OF NATURAL CORUNDUM

| Importing Country | Long tons | | | | Tonnes | |
|-------------------------------|-----------|-------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| France | 33 | 38 | 103 | 200 | 203 | 127 |
| Germany (Federal) (a) | 647 | 876 | 519 | 527 | 535 | 159 |
| Italy | 151 | 855 | (a) 868 | (a) 760 | (a) 772 | (a) 770 |
| United States— | | | | | | |
| Crude | 1,986 | 5,357 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Argentina | 28 | 35 | 32 | 32 | 33 | 8 |

(a) Includes emery.

EXPORTS OF NATURAL ABRASIVES*

| Exporting Country | Long tons | | | | Tonnes | |
|------------------------|-----------|---------|---------|---------|---------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom .. r | 4,041 | 8,811 | 5,386 | 8,458 | 8,594 | 8,929 |
| Tanzania .. | 38 | — | — | — | — | — |
| Canada (a) .. | 55 | 92 | 94 | 2 | 2 | 10 |
| Dominica .. | 12,111 | 25,744 | 22,748 | 28,192 | 28,644 | n.a. |
| New Zealand (b) .. | 735 | 638 | 601 | 859 | 872 | 685 |
| OTHER COUNTRIES | | | | | | |
| Austria .. | — | 2 | 4 | 8 | 8 | 3 |
| Belgium .. | 484 | 422 | 382 | 1,733 | 1,761 | 1,040 |
| Denmark .. | 2 | — | 1 | 10 | 10 | 2 |
| France .. | 827 | 558 | 612 | 527 | 535 | 464 |
| Germany (Federal) .. | 636,071 | 468,109 | 535,695 | 551,089 | 559,932 | 699,010 |
| Greece .. | 118,795 | 187,613 | 210,854 | 136,669 | 138,862 | 254,567 |
| Italy .. | 272,356 | 311,447 | 316,371 | 311,627 | 316,628 | 383,927 |
| Netherlands .. | 4,862 | 5,124 | 5,524 | 5,518 | 5,607 | 5,163 |
| Sweden .. | 31 | 10 | 33 | 21 | 21 | 31 |
| Switzerland .. | 16 | 29 | 52 | 22 | 22 | 17 |
| South Africa .. | 5 | 6 | 1 | 15 | 15 | 20 |
| Mexico .. | 3,596 | 7,206 | 388 | 113 | 115 | 213 |
| United States .. | 13,112 | 19,164 | 14,660 | 15,172 | 15,415 | 9,798 |
| Japan .. | 1,201 | 2,475 | 2,960 | 4,847 | 4,925 | 1,202 |
| Turkey .. | 20,328 | 23,134 | 47,573 | 64,826 | 65,866 | n.a. |

*Corresponds to item 275·23 of the Standard International Trade Classification (Revised). The tables include the trade in pumice, emery and natural corundum separately recorded as far as available on pages 2, 3 and 5.

See also Aluminium, Diamonds and Diatomaceous earth.

(a) Includes diatomaceous earth.

(b) Year ended June 30 of that stated.

IMPORTS OF NATURAL ABRASIVES*

| Importing Country | Long tons | | | | Tonnes | |
|-------------------------------|-------------|--------------|---------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom .. | 55,271 | 79,881 | 63,675 | 69,335 | 70,468 | 150,202 |
| Nigeria | 180 | 43 | 123 | 207 | 210 | 488 |
| Canada | 7,441 | 8,746 | 12,536 | 26,403 | 26,827 | 36,168 |
| Jamaica | 4 | 42 | 7 | 401 | 407 | 462 |
| Hong Kong | 448 | 416 | 510 | 586 | 595 | 878 |
| India (a) | 54 | 388 | 144 | 13 | 13 | 17 |
| Malaysia (West) .. | 106 | 104 | 103 | 90 | 91 | 160 |
| Ceylon | 70 | 31 | 21 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Australia (b) .. | 1,585 | 1,426 | 1,530 | 1,442 | 1,465 | 1,518 |
| New Zealand (b) .. | 58 | <i>r</i> 113 | 92 | 84 | 85 | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Austria | 412 | 595 | 1,710 | 779 | 792 | 712 |
| Belgium | 195,347 | 139,813 | 162,805 | 193,535 | 196,641 | 141,733 |
| Denmark | 5,328 | 3,422 | 7,963 | 6,602 | 6,707 | 5,798 |
| Finland | 183 | <i>r</i> 285 | 241 | 238 | 242 | 251 |
| France | 33,956 | 27,481 | 19,336 | 23,684 | 24,063 | 10,076 |
| Germany (Federal) .. | 73,775 | 28,264 | 19,230 | 11,318 | 11,500 | 8,180 |
| Greece | <i>n.a.</i> | 9 | 267 | 15 | 15 | <i>n.a.</i> |
| Italy | 2,954 | 3,797 | 3,459 | 2,761 | 2,805 | 2,104 |
| Netherlands | 365,239 | 373,481 | 376,383 | 370,499 | 376,444 | 557,371 |
| Norway | 427 | 393 | 540 | 1,084 | 1,101 | 2,435 |
| Portugal | 292 | 448 | 646 | 643 | 653 | 402 |
| Spain | 370 | 171 | 365 | 433 | 440 | <i>n.a.</i> |
| Sweden | 726 | 588 | 498 | 3,299 | 3,352 | 448 |
| Switzerland | 1,495 | 1,281 | 2,084 | 1,532 | 1,557 | 1,483 |

*Corresponds to item 275·23 of the Standard International Trade Classification (Revised). The tables include the trade in pumice, emery and natural corundum separately recorded as far as available on pages 2, 3 and 5.

See also Aluminium, Diamonds and Diatomaceous earth.

(a) Years ended March 31 following that stated.

(b) Years ended June 30 of that stated.

IMPORTS OF NATURAL ABRASIVES (cont.)

| Importing Country | Long tons | | | | Tonnes | |
|-----------------------------|-----------|--------|-------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Yugoslavia | 684 | 384 | 548 | 971 | 987 | 608 |
| Malagasy Republic | 14 | 19 | 21 | 31 | 32 | <i>n.a.</i> |
| Morocco | 23 | 9 | 23 | 28 | 28 | 37 |
| South Africa | 2,792 | 4,655 | 2,705 | 4,404 | 4,475 | 1,313 |
| Sudan | 3 | 91 | 211 | 63 | 64 | 118 |
| Tunisia | 26 | 151 | 56 | 18 | 18 | 16 |
| Costa Rica | 7 | 7 | 9 | 11 | 11 | 8 |
| Guatemala | 13 | 25 | 11 | 12 | 12 | 13 |
| Mexico | 842 | 737 | 915 | 662 | 673 | 830 |
| United States | 9,648 | 16,631 | 8,642 | 12,117 | 12,311 | 7,000 |
| Argentina | 201 | 329 | 282 | 284 | 289 | 421 |
| Brazil | 706 | 921 | 1,031 | 1,030 | 1,047 | <i>n.a.</i> |
| Chile | 29 | 23 | 70 | 74 | 75 | <i>n.a.</i> |
| Colombia | 95 | 124 | 173 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Peru | 83 | 48 | 45 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Venezuela | 196 | 336 | 420 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Iran (a) | 50 | 34 | 53 | 50 | 51 | 60 |
| Iraq | 4 | 9 | 5 | 9 | 9 | <i>n.a.</i> |
| Israel | 110 | 126 | 155 | 241 | 245 | 344 |
| Japan | 2,884 | 4,157 | 4,968 | 4,208 | 4,276 | 2,755 |
| Lebanon | 46 | 70 | 2,366 | 1,397 | 1,419 | 827 |
| Philippine Republic | 501 | 363 | 599 | 703 | 715 | 608 |
| Thailand | 1,149 | 1,077 | 1,239 | 1,690 | 1,717 | 1,730 |
| Turkey | 24 | 24 | 23 | 12 | 12 | <i>n.a.</i> |

(a) Years ending March 20 following that stated.

ABRASIVES (ARTIFICIAL)

Production statistics for artificial abrasives are not generally available. The United States Bureau of Mines reports the following crude artificial abrasives produced in the United States and Canada:

| | Long tons | | Tonnes | | | |
|------------------------|-----------|---------|---------|---------|---------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| Silicon carbide .. | 127,000 | 142,000 | 144,000 | 149,000 | 151,000 | 118,000 |
| Aluminium oxide .. | 185,000 | 171,000 | 193,000 | 174,000 | 177,000 | 135,000 |
| Metallic abrasives† .. | 182,000 | 193,000 | 205,000 | 178,000 | 181,000 | 175,000 |

†Shipments for U.S. plants only.

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

EXPORTS OF ARTIFICIAL CORUNDUM

| Exporting Country | Long tons | | | | Tonnes | |
|-------------------------------|-----------|---------|---------|---------|---------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom .. | 4,953 | 3,226 | 3,355 | 2,153 | 2,188 | 2,128 |
| Canada | 149,269 | 141,621 | 165,139 | 150,139 | 152,549 | 122,650 |
| Australia (a) | 213 | 20 | 25 | 4 | 4 | 4 |
| OTHER COUNTRIES | | | | | | |
| Austria | 19,541 | 18,769 | 22,739 | 21,614 | 21,961 | 22,141 |
| Belgium | 120 | 190 | 158 | 196 | 199 | 200 |
| France | 12,160 | 11,405 | 13,722 | 16,382 | 16,645 | 15,254 |
| Germany (Federal) .. | 26,868 | 27,896 | 35,150 | 36,732 | 37,321 | 37,328 |
| Italy | 3,822 | 4,584 | 3,892 | 4,026 | 4,091 | 1,959 |
| Netherlands | 30 | 52 | 32 | 180 | 183 | 11 |
| Sweden | 1,337 | 1,355 | 2,077 | 1,619 | 1,645 | 897 |
| Yugoslavia | 3,200 | 4,846 | 5,698 | 7,332 | 7,450 | 7,983 |
| United States | 17,467 | 13,860 | 15,180 | 16,048 | 16,306 | 14,358 |
| Japan | 1,438 | 1,527 | 2,181 | 3,183 | 3,234 | 3,695 |

(a) Year ended June 30 of that stated.

IMPORTS OF ARTIFICIAL CORUNDUM

Long tons | Tonnes

| Importing Country | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|---------------------------|-------------|---------|---------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | 18,139 | 13,801 | 17,690 | 18,846 | 19,148 | 16,463 |
| Canada (a) | 8,243 | 8,517 | 8,701 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Australia (b) | 1,920 | 2,258 | 4,588 | 2,697 | 2,740 | 2,380 |
| OTHER COUNTRIES | | | | | | |
| Austria | 3,580 | 4,924 | 5,788 | 6,786 | 6,895 | 6,116 |
| Belgium | 3,456 | 3,579 | 3,786 | 4,707 | 4,782 | 4,637 |
| Denmark | 476 | 576 | 947 | 1,132 | 1,150 | 469 |
| France | 3,145 | 2,602 | 4,662 | 4,560 | 4,633 | 4,572 |
| Germany (Federal) | 4,534 | 5,848 | 10,746 | 12,615 | 12,817 | 9,479 |
| Italy | 8,276 | 6,282 | 8,327 | 8,509 | 8,646 | 11,716 |
| Netherlands | 3,251 | 3,093 | 3,580 | 4,084 | 4,150 | 3,823 |
| Norway | 738 | 623 | 990 | 1,072 | 1,089 | 803 |
| Spain | 1,681 | 1,646 | 3,580 | 3,747 | 3,807 | 2,283 |
| Sweden | 5,177 | 6,233 | 5,704 | 7,750 | 7,874 | 6,658 |
| Switzerland | 4,006 | 4,430 | 4,697 | 4,923 | 5,002 | 4,613 |
| Yugoslavia | 977 | 1,127 | 1,798 | 2,113 | 2,147 | 2,607 |
| South Africa | 2,968 | 2,599 | 2,023 | 2,857 | 2,903 | 2,329 |
| Tunisia | 113 | 198 | 49 | 111 | 113 | 168 |
| United States | 141,199 | 140,378 | 155,720 | 148,215 | 150,593 | 118,800 |
| Argentina | 1,389 | 1,185 | 1,924 | 2,253 | 2,289 | 2,484 |
| Chile | <i>n.a.</i> | 42 | 52 | 74 | 75 | <i>n.a.</i> |
| Israel | 180 | 294 | 289 | 364 | 370 | 105 |
| Japan | 1,203 | 1,068 | 1,332 | 1,012 | 1,028 | 2,213 |

(a) Aluminium oxide and silicon carbide.

(b) Year ended June 30 of that stated.

EXPORTS OF CARBORUNDUM

| Exporting Country | Long tons | | | | Tonnes | |
|-------------------------------|-----------|--------|--------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Canada | 77,828 | 91,897 | 92,412 | 94,639 | 96,158 | 85,148 |
| OTHER COUNTRIES | | | | | | |
| Belgium | 186 | 180 | 215 | 1,165 | 1,184 | 2,015 |
| France | 971 | 2,485 | 1,014 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Germany (Federal) | 7,306 | 8,027 | 7,360 | 8,473 | 8,609 | 9,995 |
| Italy | 9,574 | 11,301 | 11,039 | 12,742 | 12,946 | 9,646 |
| Norway | 35,973 | 41,541 | 48,886 | 48,257 | 49,031 | 45,362 |
| Sweden | 130 | 504 | 123 | 110 | 112 | 804 |
| Switzerland | 3,261 | 3,168 | 4,450 | 3,834 | 3,896 | 4,001 |
| Yugoslavia | — | 239 | 116 | 707 | 718 | 744 |
| United States | 5,770 | 6,324 | 5,605 | 5,752 | 5,844 | 6,165 |
| Japan | 1,270 | 1,624 | 1,804 | 1,730 | 1,758 | 1,766 |

IMPORTS OF CARBORUNDUM

| Importing Country | Long tons | | | | Tonnes | |
|-------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom .. | 12,779 | 14,490 | 15,557 | 19,904 | 20,224 | 14,189 |
| Canada (a) | 8,243 | 8,517 | 8,701 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Australia (b) | 1,673 | 1,961 | 2,183 | 2,154 | 2,189 | 2,027 |
| OTHER COUNTRIES | | | | | | |
| Austria | 1,840 | 2,073 | 2,489 | 2,648 | 2,691 | 2,539 |
| Belgium | 2,227 | 2,289 | 4,073 | 4,568 | 4,641 | 4,264 |
| Denmark | 288 | 342 | 456 | 393 | 399 | 351 |
| Finland | 841 | 718 | 616 | 1,181 | 1,200 | 1,029 |
| France | 7,597 | 9,392 | 10,897 | 12,485 | 12,685 | 14,905 |
| Germany (Federal) | 7,973 | 11,197 | 14,894 | 16,669 | 16,936 | 13,263 |
| Italy | 1,839 | 2,300 | 3,280 | 3,387 | 3,441 | 2,622 |
| Netherlands | 844 | 919 | 995 | 1,257 | 1,277 | 1,167 |
| Norway | 12 | 10 | 29 | 2,427 | 2,466 | 641 |
| Spain | 1,313 | 1,137 | 2,554 | 2,554 | 2,595 | 2,173 |
| Sweden | 3,863 | 4,588 | 4,437 | 5,688 | 5,779 | 5,446 |
| Switzerland | 969 | 1,356 | 1,572 | 1,530 | 1,555 | 1,274 |
| Yugoslavia | 1,737 | 974 | 1,340 | 1,430 | 1,453 | 1,471 |
| South Africa | <i>n.a.</i> | <i>n.a.</i> | 1,242 | 1,879 | 1,909 | 1,786 |
| United States | 81,360 | 96,594 | 98,925 | 97,321 | 98,883 | 91,600 |
| Argentina | 218 | 140 | 250 | 241 | 245 | 192 |
| Brazil | 500 | 937 | 1,048 | 1,354 | 1,376 | <i>n.a.</i> |
| Chile | 43 | 40 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Venezuela | 75 | 41 | 22 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Japan | 271 | 2,335 | 2,318 | 562 | 571 | 1,771 |
| Turkey | 61 | 85 | 217 | 516 | 524 | <i>n.a.</i> |

(a) Silicon carbide and aluminium oxide.

(b) Year ended June 30 of that stated.

ALUMINIUM
(Including Bauxite and Cryolite)
PRODUCTION OF BAUXITE

| Producing Country | Long tons | | | | Tonnes | |
|--------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Ghana | 345,400 | 287,000 | 241,900 | 336,600 | 342,000 | 350,000 |
| Sierra Leone | 329,259 | 462,891 | 435,333 | 441,860 | 448,951 | 590,471 |
| Jamaica (b) | 9,247,258 | 8,391,000 | 10,280,000 | 11,820,000 | 12,010,000 | 12,194,000 |
| Guyana (c) | 3,328,000 | 3,663,000 | 4,238,000 | 3,160,681 | 3,211,410 | 2,332,240 |
| India | 776,538 | 921,503 | 1,067,765 | 1,347,892 | 1,369,522 | 1,486,766 |
| Malaysia (West) | 885,389 | 786,042 | 1,056,068 | 1,121,318 | 1,139,315 | 977,945 |
| Australia | 4,176,474 | 4,876,822 | 7,796,003 | 9,110,132 | 9,256,350 | 12,541,230 |
| TOTAL | 20,536,000 | 19,396,000 | 25,049,000 | 27,414,000 | 27,854,000 | 30,473,000 |
| OTHER COUNTRIES | | | | | | |
| France | 2,768,167 | 2,670,000 | 2,729,000 | 3,002,552 | 3,050,735 | 3,183,568 |
| Germany (Federal) | 2,248 | 3,200 | 3,156 | 2,990 | 3,038 | 2,871 |
| Greece | r 1,634,658 | r 1,807,105 | r 1,917,570 | 2,242,337 | 2,278,320 | 2,860,695 |
| Hungary | 1,623,000 | 1,923,000 | 1,904,000 | 1,990,000 | 2,022,000 | 2,090,000 |
| Italy | 238,206 | 212,782 | r 213,045 | 221,152 | 224,701 | 190,847 |
| Roumania | (d) 500,000 | (d) 600,000 | (d) 600,000 | (d) 600,000 | (d) 600,000 | (d) 700,000 |
| Spain | 4,682 | 5,685 | 4,677 | 4,934 | 5,013 | 5,400 |
| U.S.S.R. (a) | 5,000,000 | 5,000,000 | 4,100,000 | 4,200,000 | 4,300,000 | 4,500,000 |
| Yugoslavia | 2,097,000 | 2,039,000 | 2,094,000 | 2,066,000 | 2,099,000 | 1,959,000 |
| Guinea | 1,639,000 | 2,084,000 | 2,420,000 | (d) 2,600,000 | (d) 2,600,000 | (d) 2,900,000 |
| Mozambique | 6,177 | 3,223 | 4,324 | 7,033 | 7,146 | 7,713 |
| Dominican Republic (b) | 1,074,370 | 923,576 | 1,085,441 | 1,069,179 | 1,086,336 | 1,031,674 |
| Haiti (b) | 354,000 | 439,000 | 764,000 | 647,000 | 656,000 | 643,000 |
| United States (b) | 1,654,000 | 1,665,000 | 1,843,000 | 2,082,000 | 2,115,000 | 2,020,000 |
| Brazil | 298,070 | 308,793 | 356,340 | 492,000 | 500,000 | 450,000 |
| Surinam | 5,380,000 | 5,571,000 | 6,138,000 | 5,927,000 | 6,022,000 | 6,260,000 |
| China (a) | 344,000 | 374,000 | 443,000 | 500,000 | 500,000 | 500,000 |
| Indonesia | 905,633 | 865,413 | 912,000 | 1,203,800 | 1,223,121 | 1,238,000 |
| Turkey | 21,151 | n.a. | 2,000 | 50,000 | 51,000 | 130,000 |
| TOTAL (d) | 24,800,000 | 25,500,000 | 27,500,000 | 29,100,000 | 29,600,000 | 30,700,000 |
| WORLD'S TOTAL (d) | 45,300,000 | 44,900,000 | 53,000,000 | 56,500,000 | 57,400,000 | 61,200,000 |

(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 | | | | Tonnes | |
|---------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| Metallurgical | 1,582,717 | 1,547,460 | 1,834,046 | 2,104,114 | 2,137,885 | 1,856,676 |
| Chemical | 184,005 | 214,609 | 252,793 | 197,399 | 200,567 | 228,929 |
| Refractory | 368,218 | 393,684 | 454,144 | 557,010 | 565,950 | 594,302 |
| Abrasive | 92,174 | 128,936 | 130,415 | 69,310 | 70,422 | 20,002 |

Exports of calcined ore are shown on page 14.

(d) Estimated.

PRODUCTION (EXPORTS) OF CRYOLITE IN GREENLAND

| Year | Long tons | Tonnes |
|------------|-----------|--------|
| 1967 | 65,619 | |
| 1968 | 66,432 | |
| 1969 | 48,521 | |
| 1970 | 62,940 | 63,950 |
| 1971 | | 55,250 |

PRODUCTION OF ALUMINIUM

| Producing Country | Long tons | | | | Tonnes | |
|-------------------------------|------------------|------------------|------------------|------------------|------------------|-------------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | 38,430 | 37,559 | 33,257 | 38,960 | 39,585 | 119,007 |
| Ghana | 39,100 | 108,900 | 109,900 | 106,800 | 108,500 | 111,100 |
| Canada | 860,128 | 874,260 | 963,140 | 956,891 | 972,246 | 1,016,910 |
| India | 94,703 | 118,203 | 121,603 | 158,537 | 161,081 | 178,179 |
| Australia | 91,326 | 95,810 | 124,423 | 202,355 | 205,603 | 223,217 |
| TOTAL | 1,123,700 | 1,234,700 | 1,352,300 | 1,452,900 | 1,476,200 | 1,648,400 |
| OTHER COUNTRIES | | | | | | |
| Austria | 77,501 | 84,542 | 88,300 | 88,583 | 90,004 | 90,698 |
| Czechoslovakia | 25,946 | 31,134 | 34,198 | 30,346 | 30,833 | 36,942 |
| France | 355,505 | 359,924 | 366,000 | 375,000 | 381,000 | 375,076 |
| Germany— | | | | | | |
| Federal | 248,902 | 253,362 | 258,571 | 304,461 | 309,347 | 427,500 |
| East (a) | 50,000 | 50,000 | 50,000 | 60,000 | 60,000 | 60,000 |
| Greece | 71,000 | 75,300 | 81,840 | 86,099 | 87,481 | 116,066 |
| Hungary | 60,820 | 62,092 | 62,989 | 64,597 | 66,000 | 6,700 |
| Iceland | — | — | 9,000 | 38,100 | 38,700 | 41,900 |
| Italy | 125,760 | 140,100 | r 139,323 | 144,163 | 146,476 | 136,413 |
| Netherlands | 31,250 | 48,000 | 68,200 | 73,900 | 75,100 | 116,400 |
| Norway | 355,282 | 460,903 | 499,921 | 521,850 | 530,200 | 530,230 |
| Poland | 91,000 | 92,000 | 95,300 | 97,200 | 98,800 | 100,000 |
| Roumania | 49,210 | 75,069 | 88,234 | 99,000 | 100,600 | 111,000 |
| Spain | 76,947 | 87,911 | 116,825 | 113,327 | 115,146 | 127,362 |
| Sweden | 33,000 | 54,700 | 65,010 | 63,039 | 64,051 | 74,410 |
| Switzerland | 71,178 | 75,641 | 75,843 | 90,045 | 91,490 | 94,000 |
| U.S.S.R. | (b) 950,000 | (b) 982,000 | (a) 1,000,000 | (a) 1,100,000 | (a) 1,100,000 | (a) 1,250,000 |
| Yugoslavia | 43,870 | 47,320 | 47,606 | 46,950 | 47,700 | 46,584 |
| Cameroun | 47,540 | 44,682 | 45,999 | 51,545 | 52,372 | 50,693 |
| Mexico | 21,173 | 22,164 | 31,872 | 33,200 | 33,700 | 39,900 |
| United States | 2,918,981 | 2,906,287 | 3,386,662 | 3,550,132 | 3,606,934 | 3,560,651 |
| Brazil | 29,232 | 40,800 | 42,900 | 55,200 | 56,100 | 80,600 |
| Surinam | 30,600 | 42,800 | 52,300 | 54,000 | 54,900 | 54,200 |
| Venezuela | 3,100 | 11,000 | 16,900 | 22,500 | 22,900 | 22,400 |
| China (b) | 80,000 | 90,000 | 120,000 | 130,000 | 130,000 | (a) 145,000 |
| Formosa | 15,196 | 19,704 | 21,800 | 26,560 | 26,990 | 26,546 |
| Japan (c) | 376,109 | 474,294 | 556,073 | 716,407 | 727,905 | 887,117 |
| Korea (South) | n.a. | n.a. | 6,500 | 15,200 | 15,450 | 16,600 |
| TOTAL | 6,200,000 | 6,600,000 | 7,400,000 | 8,000,000 | 8,100,000 | 8,700,000 |
| WORLD'S TOTAL | 7,300,000 | 7,700,000 | 8,600,000 | 9,500,000 | 9,600,000 | 10,300,000 |

In addition secondary metal produced in certain countries was as follows:

| | Long tons | | | | Tonnes | |
|------------------------|-----------|---------|---------|---------|---------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| United Kingdom .. | 188,207 | 197,190 | 223,482 | 211,036 | 214,423 | 189,100 |
| France | 59,000 | 74,000 | 89,000 | 86,000 | 87,400 | 97,770 |
| Germany (Federal) .. | 182,579 | 228,240 | 267,057 | 254,400 | 258,500 | 275,711 |
| Italy | 100,000 | 100,000 | 126,000 | 151,600 | 154,000 | 150,000 |
| United States | 622,992 | 729,382 | 804,000 | 697,000 | 708,000 | 738,700 |
| Japan | 175,300 | 216,900 | 273,000 | 314,800 | 319,900 | 348,600 |

(a) Estimated.

(b) United States Bureau of Mines' estimate.

(c) Including high-purity aluminium.

EXPORTS OF ALUMINIUM, ETC.*

Long tons Tonnes

| Exporting Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|-----------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Alumina and hydrate .. | 21,847 | 16,853 | 9,992 | 3,349 | 3,403 | 18,780 |
| Unwrought (a) .. | 21,873 | 20,980 | 21,384 | 25,548 | 25,958 | 41,623 |
| Scrap (a) .. | 2,004 | 1,591 | 1,294 | 1,856 | 1,886 | 2,084 |
| Semi-manufactures (a) | 37,760 | 39,397 | 40,190 | 40,833 | 41,488 | 32,060 |
| of which—Foil .. | 6,721 | 8,872 | 8,588 | 8,349 | 8,483 | 7,412 |
| Powder .. | 969 | 1,162 | 852 | 841 | 854 | 1,406 |
| Aluminium sulphates .. | 13,664 | 17,822 | 19,873 | 16,671 | 16,939 | 25,494 |
| Ghana— | | | | | | |
| Bauxite .. | 295,693 | 237,193 | 241,501 | 211,082 | 214,470 | n.a. |
| Alumina (e) .. | — | — | 41,918 | 122,660 | 124,628 | n.a. |
| Sierra Leone— | | | | | | |
| Bauxite .. | 329,259 | 462,891 | r 413,028 | 371,970 | 377,940 | 560,942 |
| Canada— | | | | | | |
| Alumina (e) .. | 11,277 | 13,414 | 18,131 | 21,229 | 21,570 | 19,224 |
| Unwrought (a) .. | 679,151 | 770,210 | 791,685 | 749,640 | 761,670 | 806,441 |
| Scrap (a) .. | 47,579 | 46,487 | 46,355 | 41,350 | 42,014 | 43,740 |
| Semi-manufactures (a) | 27,385 | 26,612 | 17,111 | 11,472 | 11,656 | 14,746 |
| of which—Foil .. | 206 | 248 | 196 | 231 | 235 | 181 |
| Jamaica— | | | | | | |
| Bauxite (b) .. | 7,142,416 | 6,212,053 | 7,601,416 | 7,683,186 | 7,806,501 | n.a. |
| Alumina .. | 824,533 | 867,675 | 1,137,062 | 1,724,305 | 1,751,980 | n.a. |
| Guyana— | | | | | | |
| Bauxite, dried .. | 1,823,734 | 1,777,747 | 1,733,648 | 2,302,897 | 2,339,858 | 2,085,605 |
| do. calcined .. | 458,808 | 587,217 | r 860,210 | 701,557 | 712,817 | 699,693 |
| Alumina .. | 268,908 | 244,231 | 296,115 | 323,567 | 328,760 | 306,775 |
| Hong Kong— | | | | | | |
| Scrap .. | 1,852 | 1,978 | 2,627 | 2,744 | 2,788 | 2,750 |
| Semi-manufactures (a) | 3,287 | 4,625 | 4,763 | 5,063 | 5,144 | 4,312 |
| India— | | | | | | |
| Bauxite .. | 59,912 | 97,354 | 66,656 | 54,510 | 55,385 | 53,736 |
| Unwrought (a) (c) .. | 749 | 18,554 | 8,040 | 1,390 | 1,412 | 91 |
| Semi-manufactures(a)(c) | 1,173 | 4,059 | 9,570 | 8,271 | 8,404 | 6,718 |
| Aluminium sulphate (c) | 904 | 6,611 | 10,890 | 18,638 | 18,937 | 11,416 |
| Malaysia (West)— | | | | | | |
| Bauxite .. | 852,299 | 776,980 | 863,003 | 1,066,106 | 1,083,217 | 983,707 |
| Singapore— | | | | | | |
| Semi-manufactures (a) | 574 | 866 | 764 | 867 | 881 | 645 |
| of which—Foil .. | 171 | 146 | 68 | 141 | 143 | 166 |
| Aluminium sulphates .. | 8,211 | 10,029 | 7,334 | 1,068 | 1,085 | 1,077 |
| Australia— | | | | | | |
| Bauxite (d) .. | 1,500,000 | 1,650,000 | 2,400,000 | 3,350,000 | 3,400,000 | 1,900,000 |
| Alumina (d) .. | 590,000 | 1,100,000 | 1,600,000 | 1,600,000 | 1,600,000 | 1,800,000 |
| Unwrought (a) .. | 10,501 | 5,577 | r 20,198 | 81,029 | 82,330 | 84,961 |
| Scrap (a) .. | 1,126 | 2,036 | 3,683 | 1,738 | 1,766 | 2,932 |
| Semi-manufactures (a) | 4,835 | 4,753 | 1,782 | 4,385 | 4,455 | 4,131 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Unwrought (a) .. | 23,220 | 24,413 | 26,703 | 18,545 | 18,843 | 27,141 |
| Scrap .. | 5,806 | 9,039 | 8,108 | 7,040 | 7,153 | 11,083 |
| Semi-manufactures (a) | 28,655 | 31,233 | 39,648 | 32,877 | 33,405 | 28,083 |
| of which—Foil .. | 4,828 | 4,551 | 5,633 | 6,612 | 6,718 | 6,521 |
| Powder .. | 3,800 | 4,312 | 4,349 | 514 | 522 | 416 |

*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/or concentrates" but believed to consist wholly or largely of alumina.

EXPORTS OF ALUMINIUM, ETC. (cont.)

| Exporting Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Bauxite | — | 20 | 180 | 72 | 73 | 27 |
| Cryolite | 1 | — | — | 289 | 294 | 74 |
| Alumina and hydrate | 131 | 25 | 16 | 18 | 18 | 195 |
| Unwrought | 5,160 | 6,225 | 9,482 | 9,698 | 9,854 | 4,783 |
| do. alloys | 1,551 | 807 | 861 | 287 | 292 | 434 |
| Scrap | 9,741 | 11,283 | 13,395 | 13,581 | 13,799 | 13,295 |
| Semi-manufactures (a) | 101,427 | 112,668 | 129,790 | 130,523 | 132,618 | 150,981 |
| Aluminium sulphates | 13,947 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Denmark— | | | | | | |
| Refined cryolite | 27,844 | 28,345 | 44,683 | 32,630 | 33,154 | 27,936 |
| Unwrought | 18 | 25 | — | 71 | 72 | 31 |
| do. alloys | 1,808 | 2,333 | 2,342 | 2,211 | 2,247 | 2,961 |
| Scrap | 1,174 | 808 | 700 | 1,004 | 1,002 | 651 |
| Semi-manufactures (a) | 1,473 | 2,637 | 3,644 | 4,117 | 4,183 | 4,238 |
| of which—Foil | 350 | 495 | 1,149 | 1,582 | 1,608 | 1,703 |
| Finland— | | | | | | |
| Unwrought | 830 | 1,266 | 597 | 24 | 24 | 152 |
| Semi-manufactures | 1,646 | 2,695 | 3,644 | 4,949 | 5,028 | 10,176 |
| of which—Foil | 1,516 | 2,367 | 2,922 | 4,327 | 4,396 | 9,693 |
| France— | | | | | | |
| Bauxite | 155,757 | 154,836 | 145,696 | 156,675 | 159,189 | 109,318 |
| Cryolite | 102 | 1,573 | 1,489 | 1,456 | 1,479 | 930 |
| Alumina | 181,314 | 204,079 | 249,511 | 197,206 | 200,371 | 253,284 |
| do. hydrate | 19,758 | 26,287 | 32,493 | 62,437 | 63,439 | 94,108 |
| Unwrought | 102,170 | 120,319 | 112,576 | 93,101 | 94,595 | 82,821 |
| do. alloys | 35,896 | 63,588 | 64,392 | 51,589 | 52,417 | 52,591 |
| Scrap (a) | 13,144 | 12,123 | 12,105 | 19,343 | 19,653 | 21,271 |
| Semi-manufactures (a) | 66,313 | 68,657 | 84,601 | 100,359 | 101,969 | 99,713 |
| of which—Foil | 9,588 | 10,187 | 12,265 | 15,747 | 16,000 | 15,201 |
| Powder | 663 | 1,112 | 2,611 | 2,231 | 2,267 | 1,040 |
| Aluminium sulphates | 11,911 | 5,522 | 6,537 | 7,684 | 7,807 | 4,059 |
| Germany (Federal)— | | | | | | |
| Bauxite and cryolite | 2,486 | 2,152 | 2,295 | 6,390 | 6,493 | 3,020 |
| Alumina | 111,992 | 85,195 | 106,722 | 94,388 | 95,903 | 151,923 |
| do. hydrate | 42,194 | 47,554 | 58,269 | 74,611 | 75,808 | 81,456 |
| Unwrought | 8,890 | 8,441 | 11,365 | 12,669 | 12,872 | 23,908 |
| do. alloys | 12,568 | 14,333 | 23,882 | 35,349 | 35,916 | 39,350 |
| Scrap | 10,494 | 7,663 | 6,651 | 11,868 | 12,058 | 15,288 |
| Semi-manufactures (a) | 94,683 | 116,242 | 147,866 | 133,888 | 136,037 | 142,069 |
| of which—Foil | 32,372 | 37,293 | 44,758 | 46,678 | 47,427 | 46,821 |
| Powder | 3,117 | 3,554 | 3,337 | 3,827 | 3,888 | 4,020 |
| Greece— | | | | | | |
| Bauxite | 1,113,827 | 1,171,464 | 1,288,466 | 1,215,298 | 1,234,800 | 951,634 |
| Unwrought | 58,971 | 62,695 | 66,601 | 59,064 | 60,012 | 87,003 |
| Semi-manufactures | 2,160 | 1,606 | 5,240 | 8,585 | 8,723 | 4,328 |
| Alumina | 33,223 | 71,125 | 116,650 | 167,075 | 169,756 | 217,658 |
| Hungary— | | | | | | |
| Bauxite | 657,450 | 654,847 | 645,748 | 649,443 | 659,865 | 699,820 |
| Alumina | 241,131 | 355,457 | 377,413 | 408,724 | 415,283 | 428,354 |
| Unwrought | 19,172 | 46,778 | 40,402 | 51,749 | 52,579 | 62,514 |
| Semi-manufactures | 7,817 | 4,637 | 4,509 | 6,168 | 6,267 | 12,486 |
| Italy— | | | | | | |
| Bauxite | 315 | — | 25 | 2,842 | 2,888 | 2,607 |
| Alumina | 8,556 | 9,224 | 6,750 | 8,889 | 9,032 | 4,832 |
| do. hydrate | 1,883 | 2,212 | 1,770 | 1,862 | 1,892 | 741 |
| Unwrought | 4,864 | 24,977 | 4,883 | 3,006 | 3,054 | 5,620 |
| do. alloys | | | 2,514 | 1,823 | 1,852 | 7,305 |
| Semi-manufactures (a) | 29,471 | 43,202 | 49,150 | 40,878 | 41,534 | 44,924 |
| of which—Foil | 4,018 | 5,535 | 6,295 | 6,122 | 6,220 | 6,990 |
| Aluminium sulphates | <i>n.a.</i> | <i>n.a.</i> | 35 | 2,302 | 2,339 | 3,141 |

(a) Including alloys.

EXPORTS OF ALUMINIUM, ETC. (cont.)

Long tons Tonnes

| Exporting Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|-----------------------------------|--------------|-----------|-----------|-----------|-----------|-----------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Netherlands— | | | | | | |
| Bauxite | 70 | 380 | 971 | 4,167 | 4,234 | 1,433 |
| Unwrought (a) .. | 25,193 | 43,031 | 63,055 | 63,041 | 64,053 | 88,749 |
| Scrap (a) | 10,055 | 11,645 | 16,543 | 14,155 | 14,382 | 20,033 |
| Semi-manufactures (a) | 18,760 | 26,551 | 36,775 | 39,477 | 40,110 | 47,574 |
| of which—Foil .. | 5,030 | 5,957 | 7,608 | 8,184 | 8,315 | 8,746 |
| Powder | 5 | 2 | 18 | 6 | 6 | 29 |
| Aluminium sulphates .. | 4 | 15,433 | 20,544 | 32,305 | 32,823 | 36,776 |
| Norway— | | | | | | |
| Unwrought | 292,854 | 390,562 | 421,650 | 372,375 | 378,351 | 353,188 |
| do. alloys | 17,091 | 37,762 | 51,097 | 50,587 | 51,399 | 62,140 |
| Scrap | 3,728 | 5,500 | 6,638 | 5,229 | 5,313 | 4,820 |
| Semi-manufactures (a) | 7,645 | 12,134 | 25,309 | 33,443 | 33,980 | 37,070 |
| of which—Foil .. | 287 | 210 | 348 | 248 | 252 | 357 |
| Powder | 35 | 32 | 3 | — | — | — |
| Spain— | | | | | | |
| Unwrought | 10,673 | 5,516 | 620 | 10 | 10 | 3,841 |
| do. alloys | 260 | 884 | 820 | 2,413 | 2,452 | 2,841 |
| Semi-manufactures (a) | 4,555 | 6,952 | 8,805 | 10,582 | 10,752 | 8,601 |
| Sweden— | | | | | | |
| Unwrought (a) | 3,826 | 15,849 | 11,022 | 15,950 | 16,206 | 23,663 |
| Scrap | 1,428 | 948 | 543 | 1,969 | 2,001 | 1,692 |
| Semi-manufactures (a) | 18,336 | 18,154 | 25,954 | 27,132 | 27,567 | 28,916 |
| of which—Powder .. | 504 | 584 | 793 | 988 | 1,004 | 515 |
| Aluminium sulphates .. | 3,575 | 8,030 | 14,461 | 30,630 | 31,122 | 49,950 |
| Switzerland— | | | | | | |
| Alumina and hydrate | 65 | 87 | 124 | 139 | 141 | 142 |
| Unwrought and scrap (a) | 19,516 | 23,829 | 17,988 | 14,214 | 14,442 | 16,975 |
| Semi-manufactures (a) | 25,958 | 26,580 | 28,324 | 30,491 | 30,980 | 33,270 |
| U.S.S.R.— | | | | | | |
| Cryolite | 3,800 | 5,300 | 5,300 | 5,512 | 5,600 | 5,700 |
| Unwrought | 249,103 | 283,058 | 315,000 | 363,074 | 368,900 | 405,600 |
| Semi-manufactures .. | 59,400 | 78,244 | 101,200 | 128,931 | 131,000 | 118,500 |
| Yugoslavia— | | | | | | |
| Bauxite | 1,784,128 | 1,817,636 | 1,951,275 | 1,999,660 | 2,031,749 | 1,859,450 |
| Alumina and hydrate .. | 11,405 | 20,556 | 23,329 | 27,753 | 28,198 | 23,761 |
| Unwrought | 6,225 | 18,378 | 23,024 | 13,572 | 13,790 | 12,373 |
| Scrap | 153 | 4,102 | 4,969 | 3,725 | 3,785 | 4,742 |
| Semi-manufactures .. | 18,053 | 21,948 | 13,221 | 12,515 | 12,716 | 19,274 |
| Cameroun— | | | | | | |
| Unwrought | 46,170 | 35,500 | 40,129 | 38,400 | 39,100 | 32,488 |
| Morocco— | | | | | | |
| Scrap (a) | 429 | 481 | 640 | 469 | 477 | 702 |
| Mozambique— | | | | | | |
| Bauxite | 6,194 | 5,594 | 4,233 | 7,025 | 7,138 | 7,766 |
| South Africa— | | | | | | |
| Scrap | 1,383 | 2,170 | 1,900 | 414 | 421 | 962 |
| Semi-manufactures | 1,375 | 1,699 | 2,094 | 2,928 | 2,976 | 2,297 |
| Tunisia— | | | | | | |
| Unwrought and scrap | 139 | 135 | 261 | 93 | 94 | 121 |
| Dominican Republic— | | | | | | |
| Bauxite | c) 1,000,644 | 1,187,789 | 1,330,978 | 1,272,666 | 1,293,089 | n.a. |
| Greenland— | | | | | | |
| Cryolite | 65,619 | 66,432 | 48,521 | 62,940 | 63,950 | 55,250 |
| Haiti— | | | | | | |
| Bauxite (b) (c) | 362,000 | 462,000 | 693,000 | 714,000 | 726,000 | 589,000 |

(a) Including alloys. (b) Including shipments from stockpile built up during development period.
(c) United States imports.

EXPORTS OF ALUMINIUM, ETC. (cont.)

| Exporting Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|-------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| United States— | | | | | | |
| Alumina, etc. | 499,090 | 790,181 | 892,420 | 981,989 | 997,747 | 959,749 |
| Cryolite (b) (c) | 1,096 | 671 | 709 | 599 | 609 | 391 |
| Unwrought (a) | 186,615 | 160,964 | 307,511 | 364,696 | 370,548 | 101,873 |
| Scrap (a) | 48,689 | 44,131 | 77,014 | 51,035 | 51,854 | 27,828 |
| Semi-manufactures | 100,910 | 119,145 | 120,956 | 149,428 | 151,826 | 145,208 |
| of which—Foil | 3,225 | 3,633 | 4,732 | 5,936 | 6,031 | 7,525 |
| Powder (Al content) | 1,009 | 1,149 | 1,160 | 2,748 | 2,792 | 1,580 |
| Aluminium sulphates . . . | 14,440 | 16,296 | 10,959 | 15,827 | 16,081 | 15,277 |
| Argentina— | | | | | | |
| Unwrought | 10 | — | — | — | — | <i>n.a.</i> |
| Aluminium sulphates . . . | 25 | 47 | 59 | 72 | 73 | 80 |
| Brazil— | | | | | | |
| Bauxite | 2,195 | 3,193 | 2,677 | 3,360 | 3,414 | <i>n.a.</i> |
| Surinam— | | | | | | |
| Bauxite | 3,804,839 | 3,726,000 | r 3,619,770 | 3,365,523 | 3,419,530 | 3,596,769 |
| Alumina | 673,727 | 692,000 | r 842,926 | 879,246 | 893,355 | 1,166,718 |
| Unwrought | 30,606 | 42,900 | r 26,479 | 52,520 | 53,363 | 50,663 |
| Semi-manufactures | | | | | | |
| Formosa— | | | | | | |
| Unwrought (a) | 955 | 3,490 | 194 | 1,004 | 1,020 | <i>n.a.</i> |
| Semi-manufactures (a) . . . | 3,288 | 1,315 | 5,710 | 4,417 | 4,488 | <i>n.a.</i> |
| Aluminium sulphates . . . | 424 | <i>n.a.</i> | 365 | 98 | 100 | <i>n.a.</i> |
| Indonesia— | | | | | | |
| Bauxite | 887,754 | 834,312 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Israel— | | | | | | |
| Scrap | 836 | 875 | 1,337 | 1,081 | 1,098 | 576 |
| Japan— | | | | | | |
| Bauxite | 514 | 325 | 142 | 108 | 110 | 319 |
| Cryolite | — | — | 48 | 295 | 300 | 341 |
| Alumina | 73,317 | 12,196 | 90,209 | 99,642 | 101,241 | 223,897 |
| do. hydrate | 12,840 | 14,602 | 20,525 | 24,287 | 24,677 | 26,435 |
| Unwrought | 1,249 | 250 | 1,114 | 2,999 | 3,047 | 22,008 |
| do. alloys | 658 | 1,010 | 1,806 | 2,471 | 2,511 | 784 |
| Semi-manufactures (a) . . . | 19,243 | 35,283 | 40,597 | 47,693 | 48,458 | 83,856 |
| of which—Foil | 4,959 | 5,518 | 6,837 | 6,476 | 6,580 | 6,671 |
| Aluminium sulphates . . . | 13,048 | 9,878 | 10,465 | 16,985 | 17,258 | 20,608 |

(a) Including alloys.

(b) Including artificial.

(c) Including quartz.

IMPORTS OF ALUMINIUM, ETC.*

| Importing Country and Description | Long tons | | | | Tonnes | |
|--|-----------|-----------|------------|------------|------------|------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Bauxite, uncalcined .. | 436,604 | 405,722 | 443,117 | 385,693 | 391,883 | 411,113 |
| do. calcined .. | 91,049 | 118,706 | 135,570 | 134,184 | 136,338 | 182,975 |
| Cryolite .. | 1,533 | 2,300 | 1,452 | 4,841 | 4,919 | 3,194 |
| Alumina and hydrate .. | 5,910 | 5,777 | 8,529 | 53,413 | 54,270 | 272,126 |
| Unwrought .. | 223,971 | 260,063 | 240,246 | 247,988 | 251,968 | 241,570 |
| do. alloys .. | 77,779 | 94,230 | 108,451 | 124,978 | 126,984 | 28,256 |
| Scrap (a) .. | 13,905 | 12,783 | 13,009 | 15,227 | 15,471 | 11,870 |
| Semi-manufactures (a) | 30,284 | 37,870 | 46,185 | 75,242 | 76,449 | 79,401 |
| of which—Foil .. | 2,210 | 3,659 | 5,977 | 7,640 | 7,763 | 8,448 |
| Malta— | | | | | | |
| Semi-manufactures .. | (£52,911) | (£86,185) | (£108,747) | (£157,368) | (£157,368) | (£175,850) |
| Ghana— | | | | | | |
| Alumina and hydrate .. | 114,673 | 680,819 | 206,468 | 213,654 | 217,083 | n.a. |
| Unwrought (a) .. | 387 | 233 | 166 | 784 | 797 | n.a. |
| Semi-manufactures (a) | 2,020 | 1,836 | 1,987 | 2,229 | 2,265 | n.a. |
| Kenya— | | | | | | |
| Unwrought (a) .. | 3 | 2 | 4 | 3 | 3 | 2 |
| Semi-manufactures (a) | 693 | 1,273 | 1,139 | 1,617 | 1,643 | 1,092 |
| of which—Foil .. | 209 | 174 | 314 | 340 | 346 | 337 |
| Malawi— | | | | | | |
| Semi-manufactures .. | 494 | 226 | 465 | 146 | 148 | 433 |
| Mauritius— | | | | | | |
| Semi-manufactures (a) | 272 | 166 | 116 | 128 | 130 | 77 |
| Nigeria— | | | | | | |
| Unwrought and semi-manufactures (a) .. | 1,950 | 2,927 | 4,617 | 8,244 | 8,376 | 10,129 |
| Sierra Leone— | | | | | | |
| Semi-manufactures (a) | 165 | 294 | 164 | 174 | 177 | 161 |
| Tanzania— | | | | | | |
| Unwrought .. | 673 | 2,024 | 2,730 | 2,479 | 2,519 | 4,015 |
| Semi-manufactures (a) | 215 | 161 | 281 | 303 | 308 | 349 |
| Uganda— | | | | | | |
| Semi-manufactures (a) | 400 | 733 | 1,602 | 1,051 | 1,068 | 1,051 |
| of which—Foil .. | 83 | 147 | 218 | 220 | 224 | 230 |
| Zambia— | | | | | | |
| Semi-manufactures (a) | 368 | 509 | 508 | 592 | 601 | n.a. |
| Barbados— | | | | | | |
| Semi-manufactures (a) | 116 | 109 | 115 | 105 | 107 | n.a. |
| Jamaica— | | | | | | |
| Semi-manufactures (a) | 4,403 | 3,239 | 3,373 | 3,693 | 3,753 | 1,486 |
| Canada— | | | | | | |
| Bauxite .. | 2,286,887 | 2,241,430 | 2,224,247 | 2,485,559 | 2,525,445 | 2,463,114 |
| Alumina .. | 679,228 | 759,367 | 949,127 | 928,415 | 943,313 | 925,486 |
| Cryolite .. | 2,751 | 4,052 | 3,419 | 2,212 | 2,248 | 2,149 |
| Unwrought .. | 7,300 | 13,431 | 10,296 | 11,987 | 12,179 | 15,900 |
| Scrap (a) .. | 8,522 | 14,539 | 13,910 | 5,119 | 5,201 | 5,819 |
| Semi-manufactures (a) | | | | | | |
| (excluding Foil) .. | 71,796 | 78,877 | 83,245 | 77,460 | 78,703 | 94,177 |
| of which—Powder .. | 524 | 545 | 841 | 1,000 | 1,016 | 1,290 |
| Foil .. | 916 | 553 | 471 | 654 | 665 | 1,000 |
| Aluminium sulphates .. | 1,608 | 1,658 | 1,801 | 2,487 | 2,527 | 2,529 |
| Trinidad and Tobago— | | | | | | |
| Semi-manufactures (a) | 766 | 398 | 938 | 415 | 422 | 513 |
| Aluminium sulphates .. | 1,165 | 1,647 | 1,540 | 2,039 | 2,072 | 1,407 |
| Guyana— | | | | | | |
| Semi-manufactures (a) | 465 | 524 | 386 | 271 | 275 | 247 |
| Aluminium sulphates .. | 536 | 243 | 485 | 589 | 598 | 923 |

* See footnote on p.14 concerning the descriptions "unwrought" aluminium and "semi-manufactures" used in these tables.

(a) Including alloys.

IMPORTS OF ALUMINIUM, ETC. (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|---------|---------|---------|---------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES—(cont.) | | | | | | |
| Ceylon— | | | | | | |
| Semi-manufactures (a) | 2,034 | 2,305 | n.a. | n.a. | n.a. | n.a. |
| of which—Foil.. | 362 | 405 | n.a. | n.a. | n.a. | n.a. |
| Cyprus— | | | | | | |
| Semi-manufactures (a) | 417 | 781 | 782 | 1,118 | 1,136 | 1,273 |
| Hong Kong— | | | | | | |
| Bauxite | 500 | 348 | 85 | 19 | 19 | 247 |
| Unwrought | 9,761 | 13,267 | 11,397 | 15,008 | 15,248 | 12,496 |
| Scrap | 120 | 57 | 521 | 310 | 316 | 441 |
| Semi-manufactures | 2,466 | 4,740 | 6,548 | 5,996 | 6,092 | 8,730 |
| of which—Foil.. | 751 | 795 | 937 | 797 | 809 | 939 |
| Aluminium sulphate .. | 888 | 2,216 | 2,322 | 2,153 | 2,187 | 1,483 |
| India (b)— | | | | | | |
| Cryolite | 1,068 | 384 | 1,014 | 1,190 | 1,209 | 326 |
| Alumina | 19,064 | 5,720 | 14,782 | 3,743 | 3,803 | 624 |
| Unwrought | 24,977 | 7,825 | 1,790 | 5,511 | 5,600 | 19,090 |
| do. alloys | 98 | 18 | 1,829 | 58 | 59 | 28 |
| Semi-manufactures (a) | 13,123 | 1,812 | 650 | 700 | 711 | 2,119 |
| of which—Foil.. | 144 | 99 | 42 | 69 | 70 | 78 |
| Powder | 202 | 64 | 19 | 5 | 5 | 27 |
| Aluminium sulphate .. | 10 | — | — | 1 | 1 | — |
| Malaysia (West)— | | | | | | |
| Unwrought (a) | 1,522 | 1,593 | 1,488 | 155 | 157 | 2,538 |
| Semi-manufactures (a) | 2,927 | 2,808 | 3,127 | 5,105 | 5,187 | 5,311 |
| of which—Foil.. | 813 | 816 | 1,172 | 2,541 | 2,582 | 1,973 |
| Sabah— | | | | | | |
| Semi-manufactures (a) | 104 | 35 | 125 | 47 | 48 | 60 |
| Sarawak— | | | | | | |
| Semi-manufactures (a) | 179 | 352 | 183 | n.a. | n.a. | n.a. |
| Aluminium sulphates .. | 374 | 479 | n.a. | n.a. | n.a. | n.a. |
| Singapore— | | | | | | |
| Bauxite | 295 | 688 | 572 | 705 | 716 | n.a. |
| Alumina and hydrate .. | 3,722 | 5,109 | 7,120 | 7,840 | 7,965 | 7,429 |
| Semi-manufactures (a) | 2,730 | 4,294 | 6,166 | 6,464 | 6,568 | 9,488 |
| of which—Foil.. | 455 | 482 | 578 | 757 | 769 | 746 |
| Aluminium sulphate .. | 139 | 503 | 1,413 | 1,420 | 1,443 | 519 |
| Australia— | | | | | | |
| Cryolite | 237 | 201 | (d) 266 | (d) 254 | (d) 258 | (d) 297 |
| Alumina and hydrate (c) | 59,045 | 10,204 | 3,745 | 3,202 | 3,253 | 18,277 |
| Unwrought (a) | 361 | 11,975 | 1,062 | 402 | 408 | 108 |
| Scrap (a) | 1,468 | 856 | 754 | 767 | 779 | 662 |
| Semi-manufactures (a) | r 2,826 | r 2,939 | r 4,839 | 4,345 | 4,415 | 3,870 |
| of which—Foil.. | r 1,165 | r 1,285 | 1,377 | 1,544 | 1,569 | 1,542 |
| Powder | 365 | 418 | 158 | 197 | 200 | 37 |
| New Zealand (c)— | | | | | | |
| Unwrought | 9,910 | 6,790 | 9,660 | 13,049 | 13,258 | 16,396 |
| Semi-manufactures (a) | 5,621 | 4,321 | 5,787 | 6,977 | 7,089 | 6,368 |
| of which—Foil.. | 875 | 814 | 887 | 1,000 | 1,016 | n.a. |
| Irish Republic— | | | | | | |
| Unwrought (a) | 8,228 | 8,295 | 8,203 | 5,002 | 5,082 | 3,117 |
| Semi-manufactures (a) | 4,706 | 5,666 | 6,195 | 6,413 | 6,516 | 6,284 |
| of which—Foil.. | 694 | 786 | 898 | 715 | 726 | 840 |
| Aluminium sulphates .. | 845 | 394 | 513 | 37 | 37 | 114 |

(a) Including alloys.

(b) Years ended March 31 following that stated.

(c) Years ended June 30 of that stated.

(d) Including chiolite.

IMPORTS OF ALUMINIUM, ETC. (cont.)

Long tons Tonnes

| Importing Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|-----------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Bauxite | 30,459 | 24,656 | 25,648 | 29,098 | 29,565 | 24,464 |
| Cryolite | 351 | 255 | 410 | 352 | 358 | 209 |
| Alumina | 163,102 | 164,342 | 185,121 | 182,738 | 185,670 | 185,880 |
| do. hydrate | 5,402 | 6,092 | 6,206 | 6,293 | 6,394 | 6,649 |
| Unwrought (a) | 5,256 | 7,592 | 7,300 | 9,703 | 9,859 | 9,867 |
| Scrap | 2,864 | 2,327 | 3,986 | 6,519 | 6,624 | 10,061 |
| Semi-manufactures (a) | 7,148 | 6,701 | 9,211 | 11,262 | 11,443 | 11,219 |
| Aluminium sulphates | 2,379 | 2,408 | 2,464 | 3,008 | 3,056 | 4,066 |
| Belgium-Luxemburg— | | | | | | |
| Bauxite | 7,975 | 11,154 | 17,104 | 12,662 | 12,865 | 14,659 |
| Cryolite | 254 | 281 | 323 | 427 | 434 | 347 |
| Alumina | 1,945 | 2,061 | 2,318 | 3,535 | 3,592 | 4,993 |
| do. hydrate | 11,841 | 9,908 | 10,443 | 9,163 | 9,310 | 11,345 |
| Unwrought | 105,645 | 111,432 | 121,559 | 133,438 | 135,579 | 149,624 |
| do. alloys | 32,127 | 45,474 | 52,106 | 48,650 | 49,431 | 44,799 |
| Scrap | 1,701 | 2,086 | 4,702 | 6,359 | 6,461 | 6,920 |
| Semi-manufactures (a) | 22,401 | 22,728 | 28,433 | 29,664 | 30,140 | 37,108 |
| of which—Foil | 3,508 | 3,982 | 5,525 | 5,115 | 5,197 | 6,181 |
| Powder | 718 | 341 | 306 | 911 | 926 | 947 |
| Aluminium sulphates | 233 | 7,927 | 10,789 | 15,504 | 15,753 | 13,129 |
| Denmark— | | | | | | |
| Bauxite | 1,997 | 935 | 966 | 1,049 | 1,066 | 27,359 |
| Crude cryolite | 48,456 | 54,402 | 48,521 | 62,940 | 63,950 | 55,250 |
| Unwrought | 5,716 | 7,512 | 6,896 | 9,171 | 9,318 | 8,661 |
| do. alloys | 3,214 | 2,331 | 6,781 | 1,268 | 1,288 | 768 |
| Scrap | 605 | 3,086 | 1,547 | 1,360 | 1,381 | 821 |
| Semi-manufactures (a) | 16,787 | 18,721 | 23,443 | 27,545 | 27,987 | 26,151 |
| of which—Foil | 4,116 | 4,276 | 5,055 | 5,383 | 5,469 | 5,186 |
| Powder | 172 | 159 | 218 | 224 | 228 | 178 |
| Aluminium sulphates | 4,659 | 6,038 | 8,249 | 6,601 | 6,707 | 5,392 |
| Finland— | | | | | | |
| Alumina | 74 | 66 | 70 | 72 | 73 | 112 |
| do. hydrate | 16,388 | 12,029 | 16,176 | 15,089 | 15,331 | 25,991 |
| Unwrought (a) | 14,232 | 12,068 | 14,977 | 18,417 | 18,713 | 15,225 |
| Semi-manufactures (a) | 13,564 | 15,787 | 17,151 | 19,799 | 20,117 | 19,110 |
| of which—Foil | 1,405 | 1,476 | 1,282 | 1,775 | 1,804 | 2,515 |
| Powder | 126 | 174 | 183 | 255 | 259 | 185 |
| Aluminium sulphates | 6,431 | 3,383 | 1,981 | 645 | 655 | 1,778 |
| France— | | | | | | |
| Bauxite | 222,803 | 329,558 | 472,319 | 481,168 | 488,889 | 504,628 |
| Cryolite | 1,408 | 1,604 | 2,122 | 8,574 | 8,712 | 3,874 |
| Alumina | 2,902 | 30,826 | 4,895 | 6,013 | 6,110 | 7,620 |
| do. hydrate | 312 | 383 | 525 | 975 | 991 | 2,347 |
| Unwrought | 91,263 | 87,867 | 119,807 | 151,647 | 154,081 | 129,539 |
| do. alloys | 5,951 | 8,446 | 20,221 | 28,795 | 29,257 | 36,013 |
| Scrap (a) | 5,455 | 5,228 | 13,887 | 12,541 | 12,742 | 13,274 |
| Semi-manufactures (a) | 37,608 | 58,279 | 85,150 | 63,363 | 64,380 | 84,693 |
| of which—Foil | 10,408 | 13,753 | 17,274 | 15,174 | 15,418 | 19,192 |
| Powder | 1,675 | 2,382 | 2,323 | 2,082 | 2,115 | 1,891 |
| Aluminium sulphates | 1,360 | 2,220 | 7,587 | 13,964 | 14,188 | 18,295 |
| Germany (Federal)— | | | | | | |
| Bauxite | 1,773,565 | 1,947,020 | 1,987,200 | 2,585,815 | 2,627,310 | 2,831,011 |
| Cryolite | 1,580 | 1,523 | 2,807 | 2,516 | 2,556 | 1,833 |
| Alumina | 64,488 | 47,709 | 83,083 | 117,635 | 119,523 | 349,202 |
| do. hydrate | 1,664 | 1,604 | 1,291 | 1,415 | 1,438 | 1,236 |
| Unwrought | 153,665 | 220,923 | 306,172 | 313,000 | 318,023 | 209,129 |
| do. alloys | 28,788 | 66,687 | 108,943 | 113,966 | 115,795 | 106,368 |
| Scrap | 48,933 | 66,031 | 79,441 | 66,313 | 67,377 | 58,947 |
| Semi-manufactures (a) | 38,143 | 68,186 | 90,901 | 92,287 | 93,768 | 116,329 |
| of which—Foil | 4,502 | 6,257 | 7,769 | 9,999 | 10,159 | 10,318 |
| Powder | 2,785 | 3,439 | 3,326 | 2,182 | 2,217 | 1,848 |

(a) Including alloys.

IMPORTS OF ALUMINIUM, ETC. (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|---------|---------|---------|---------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Germany (East)— | | | | | | |
| Bauxite | 313,990 | 237,014 | 241,282 | 251,643 | 255,681 | 285,700 |
| Alumina | 49,310 | 43,788 | 63,624 | 62,205 | 63,203 | 63,392 |
| Greece— | | | | | | |
| Alumina | 294 | 245 | 408 | n.a. | n.a. | n.a. |
| do. hydrate | 1,420 | 1,047 | 1,046 | 1,386 | 1,408 | 1,040 |
| Unwrought | 2,419 | 1,598 | 1,035 | 446 | 453 | 533 |
| Semi-manufactures (a) | 967 | 1,061 | 1,438 | 1,648 | 1,675 | 1,296 |
| of which—Foil | 762 | 923 | 1,178 | 981 | 997 | 966 |
| Aluminium sulphates .. | n.a. | — | 101 | 2 | 2 | 27 |
| Hungary— | | | | | | |
| Unwrought | — | 64,234 | 48,632 | 80,748 | 82,004 | 120,313 |
| Iceland— | | | | | | |
| Semi-manufactures .. | 241 | 630 | 343 | 451 | 458 | 872 |
| Italy— | | | | | | |
| Bauxite | 533,968 | 576,670 | 578,416 | 712,354 | 723,785 | 548,026 |
| Cryolite | 623 | 436 | 720 | 629 | 639 | 627 |
| Alumina | 22,507 | 41,537 | 65,008 | 61,927 | 62,921 | 57,808 |
| do. hydrate | 3,754 | 5,450 | 6,739 | 8,706 | 8,846 | 11,934 |
| Unwrought | 80,834 | 84,504 | 104,425 | 129,095 | 131,167 | 105,330 |
| do. alloys | | | 26,835 | 35,962 | 36,539 | 27,859 |
| Scrap | 63,842 | 43,100 | 53,992 | 61,324 | 62,308 | 53,541 |
| Semi-manufactures (a) | 25,933 | 23,378 | 29,091 | 36,746 | 37,336 | 29,362 |
| of which—Foil | 5,266 | 4,730 | 6,939 | 7,153 | 7,268 | 6,409 |
| Powder | 79 | 160 | 220 | 157 | 160 | 134 |
| Aluminium sulphates .. | 6,524 | 6,859 | 8,829 | 4,625 | 4,699 | 4,472 |
| Netherlands— | | | | | | |
| Bauxite | 16,278 | 40,296 | 105,908 | 82,501 | 83,825 | 71,077 |
| Cryolite | 779 | 1,018 | 735 | 899 | 914 | 2,078 |
| Alumina | 65,339 | 101,258 | 138,358 | 160,388 | 163,470 | (b) 260,814 |
| do. hydrate | 9,857 | 18,530 | 17,561 | 24,357 | 24,748 | (b) 30,080 |
| Unwrought (a) | 19,112 | 32,700 | 42,639 | 44,640 | 45,356 | 46,716 |
| Scrap (a) | 4,516 | 8,646 | 9,460 | 10,726 | 10,898 | 9,790 |
| Semi-manufactures (a) | 36,520 | 40,626 | 50,370 | 50,533 | 51,344 | 61,158 |
| of which—Foil | 6,422 | 7,641 | 8,748 | 8,394 | 8,529 | 8,680 |
| Powder | 196 | 319 | 302 | 336 | 342 | 326 |
| Aluminium sulphates .. | 13,630 | 12,249 | 12,934 | 9,376 | 9,527 | 13,275 |
| Norway— | | | | | | |
| Bauxite | 34,293 | 36,510 | 21,970 | 3,936 | 3,999 | 5,767 |
| Cryolite | 4,247 | 4,362 | 4,305 | 4,219 | 4,287 | 2,500 |
| Alumina | 701,340 | 916,897 | 966,143 | 979,723 | 995,445 | 1,128,267 |
| Unwrought | 10,714 | 9,766 | 13,629 | 12,014 | 12,207 | 20,208 |
| do. alloys | 1,487 | 11,476 | 11,866 | 11,325 | 11,507 | 13,456 |
| Scrap | 294 | 576 | 52 | 27 | 27 | 64 |
| Semi-manufactures (a) | 11,846 | 10,323 | 16,333 | 13,882 | 14,105 | 18,370 |
| of which—Foil | 666 | 930 | 916 | 1,209 | 1,228 | 2,942 |
| Powder | 145 | 135 | 313 | 270 | 274 | 408 |
| Aluminium sulphates .. | 780 | 461 | 669 | 645 | 655 | 1,155 |
| Poland— | | | | | | |
| Bauxite | 106,112 | 110,482 | 95,019 | 116,216 | 118,081 | 122,168 |
| Cryolite | 4,351 | 4,208 | 3,541 | 2,009 | 2,041 | 1,402 |
| Alumina | 164,670 | 193,198 | 192,890 | 209,648 | 213,012 | 224,983 |
| Portugal— | | | | | | |
| Cryolite | 49 | 47 | 49 | 69 | 70 | 63 |
| Unwrought (a) | 610 | r 745 | 823 | 1,702 | 1,729 | 1,578 |
| Semi-manufactures (a) | 7,783 | 8,350 | 9,700 | 11,464 | 11,648 | 17,258 |
| of which—Powder | 186 | 92 | 102 | 100 | 102 | 78 |
| Aluminium sulphates .. | 4,213 | 5,414 | r 6,108 | 7,772 | 7,897 | 6,316 |

(a) Including alloys.

(b) Excluding imports from Belgium and Luxemburg, if any.

IMPORTS OF ALUMINIUM, ETC. (cont.)

Long tons

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-------------|-------------|---------------|-----------|-----------|-----------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Spain— | | | | | | |
| Bauxite | 63,675 | 71,592 | 92,132 | 91,740 | 93,212 | 110,421 |
| Cryolite | 1,155 | 1,042 | 1,951 | 956 | 971 | 872 |
| Alumina and hydrate .. | 156,262 | 178,350 | 211,740 | 241,626 | 245,503 | 279,010 |
| Unwrought (a) r | 15,571 | 15,866 | 26,170 | 13,658 | 13,877 | 29,079 |
| Semi-manufactures (a) | 9,069 | 5,871 | 6,219 | 4,389 | 4,459 | 4,722 |
| of which—Powder .. | 51 | 75 | 146 | 146 | 148 | 195 |
| Sweden— | | | | | | |
| Bauxite | 48,344 | 40,397 | 48,103 | 58,854 | 59,799 | 34,083 |
| Cryolite | 1,234 | 1,255 | 424 | 1,560 | 1,585 | 2,081 |
| Alumina and hydrate .. | 84,977 | 141,480 | 145,766 | 181,458 | 184,370 | 197,097 |
| Unwrought | 20,587 | 14,040 | 20,300 | 27,757 | 28,203 | 21,557 |
| do. alloys | 8,598 | 10,423 | 13,838 | 12,001 | 12,194 | 11,971 |
| Scrap | 1,074 | 2,125 | 2,196 | 2,058 | 2,091 | 1,380 |
| Semi-manufactures (a) | 24,997 | 25,693 | 31,700 | 32,899 | 33,427 | 29,946 |
| of which—Foil .. | 3,596 | 3,930 | 4,626 | 5,260 | 5,345 | 5,471 |
| Powder | 318 | 324 | 243 | 323 | 328 | 65 |
| Aluminium sulphates .. | 5,284 | 5,867 | 4,873 | 3,329 | 3,383 | 2,707 |
| Switzerland— | | | | | | |
| Bauxite | 583 | 329 | 291 | 2,422 | 2,461 | 3,405 |
| Cryolite | 876 | 640 | 541 | 733 | 745 | 981 |
| Alumina and hydrate .. | 141,888 | 159,342 | 147,076 | 173,402 | 176,185 | 181,148 |
| Unwrought and scrap (a) | 6,694 | 15,331 | 18,819 | 21,770 | 22,119 | 6,181 |
| Semi-manufactures (a) | 6,615 | 7,938 | 10,487 | 10,742 | 10,914 | 11,152 |
| Aluminium sulphates .. | 4,063 | 3,936 | 4,140 | 5,000 | 5,080 | 4,698 |
| U.S.S.R.— | | | | | | |
| Bauxite | (b) 620,960 | (b) 705,213 | (c) 1,305,167 | 1,500,000 | 1,500,000 | 1,400,000 |
| Alumina | 164,900 | 381,400 | 586,400 | 509,400 | 517,600 | 755,200 |
| Semi-manufactures .. | n.a. | 2,160 | 1,470 | 1,575 | 1,600 | 1,500 |
| Yugoslavia— | | | | | | |
| Bauxite | 7,693 | 9,803 | 221,691 | 254,024 | 258,100 | 237,682 |
| Cryolite | n.a. | n.a. | 15 | 22 | 22 | 20 |
| Alumina and hydrate .. | 3,429 | 1,287 | 7,015 | 8,340 | 8,473 | 9,288 |
| Unwrought | 24,900 | 21,221 | 38,538 | 56,033 | 56,932 | 36,188 |
| Semi-manufactures (a) | 2,739 | 4,279 | 8,409 | 18,166 | 18,458 | 15,105 |
| of which—Foil .. | 1,278 | 1,702 | 2,867 | 4,398 | 4,467 | 3,972 |
| Algeria— | | | | | | |
| Unwrought | 143 | 315 | 285 | 305 | 310 | n.a. |
| Semi-manufactures (a) | 1,182 | 2,285 | 3,646 | 4,744 | 4,820 | n.a. |
| Aluminium sulphates | 814 | 731 | 720 | 833 | 846 | n.a. |
| Angola— | | | | | | |
| Semi-manufactures .. | 854 | 909 | 1,086 | 1,111 | 1,129 | 1,103 |
| Aluminium sulphates .. | 1,399 | 966 | 1,358 | 1,979 | 2,011 | 1,301 |
| Cameroun— | | | | | | |
| Alumina | 72,540 | 78,520 | 86,167 | 98,264 | 99,841 | n.a. |
| Egypt— | | | | | | |
| Unwrought and scrap .. | 8,384 | 8,007 | 4,506 | 4,588 | 4,662 | 11,294 |
| Semi-manufactures .. | 500 | 277 | 1,209 | 887 | 901 | 1,167 |
| of which—Foil .. | 140 | 158 | 310 | 325 | 330 | 302 |
| Ethiopia— | | | | | | |
| Semi-manufactures .. | 314 | 983 | 627 | 534 | 543 | 372 |
| Malagasy Republic— | | | | | | |
| Unwrought and scrap .. | 351 | 800 | 459 | 329 | 334 | n.a. |
| Aluminium sulphates | 441 | 502 | 465 | 445 | 452 | n.a. |
| Morocco— | | | | | | |
| Bauxite | 1,970 | 1,575 | 118 | 481 | 489 | 2,070 |
| Alumina and hydrate .. | 652 | 737 | 720 | 717 | 728 | 773 |
| Semi-manufactures (a) | 2,505 | 2,114 | 3,187 | 3,439 | 3,494 | 2,929 |
| of which—Foil .. | 41 | 55 | 27 | 344 | 350 | 394 |
| Powder | 102 | 63 | 151 | 79 | 80 | 55 |
| Aluminium sulphates .. | 65 | 40 | 3 | — | — | n.a. |
| Mozambique— | | | | | | |
| Semi-manufactures (a) | 496 | 447 | 658 | 688 | 699 | 591 |

(a) Including alloys.

(b) Imports from Yugoslavia.

 (c) Imports from Greece and
Yugoslavia.

IMPORTS OF ALUMINIUM, ETC. (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|------------|------------|------------|------------|------------|------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Senegal— | | | | | | |
| Semi-manufactures .. | 291 | 308 | 631 | 378 | 384 | 344 |
| South Africa— | | | | | | |
| Bauxite | 8,310 | 12,059 | 16,253 | 13,825 | 14,047 | 24,254 |
| Cryolite | | | 66 | 54 | 85 | 86 |
| Alumina and hydrate .. | 685 | 903 | 1,341 | 14,927 | 15,166 | 77,678 |
| Unwrought | 17,560 | 23,816 | 40,540 | 48,343 | 49,119 | 22,500 |
| Semi-manufactures (a) | 9,924 | 8,502 | 6,743 | 13,994 | 14,217 | 11,406 |
| of which—Foil .. | 370 | 516 | 939 | 1,373 | 1,396 | 1,117 |
| Powder | 63 | 84 | 54 | 141 | 143 | 65 |
| Aluminium Sulphates .. | n.a. | n.a. | 980 | 867 | 881 | 5,174 |
| Sudan— | | | | | | |
| Semi-manufactures (a) | 1,368 | 938 | 954 | 809 | 822 | 1,400 |
| Aluminium sulphates .. | 669 | 1,214 | 5,446 | 324 | 329 | 327 |
| Tunisia— | | | | | | |
| Unwrought and scrap (a) | 14 | 1 | 1 | 53 | 54 | — |
| Semi-manufactures .. | 556 | 510 | 511 | 603 | 613 | 861 |
| Costa Rica— | | | | | | |
| Semi-manufactures (a) | 828 | 1,128 | 1,169 | 2,276 | 2,313 | 1,387 |
| Honduras— | | | | | | |
| Semi-manufactures .. | 1,114 | 386 | 500 | 219 | 223 | 189 |
| Mexico— | | | | | | |
| Bauxite, calcined .. | 13,332 | 11,351 | 18,539 | 25,111 | 25,514 | 28,591 |
| Alumina and hydrate .. | 47,310 | 49,123 | 71,779 | 80,078 | 81,363 | 89,996 |
| Unwrought | 145 | 1,589 | 99 | 36 | 37 | 112 |
| Semi-manufactures .. | 3,885 | 7,308 | 9,560 | 10,904 | 11,079 | 4,679 |
| Aluminium sulphates .. | 2 | 18 | 30 | 24 | 24 | 18 |
| Nicaragua— | | | | | | |
| Semi-manufactures (a) | 751 | 528 | 736 | 947 | 962 | 769 |
| Salvador— | | | | | | |
| Semi-manufactures (a) | 1,387 | 1,235 | 373 | 1,275 | 1,295 | 1,451 |
| United States— | | | | | | |
| Bauxite, crude dried (c) | 11,594,000 | 10,976,000 | 12,180,000 | 12,650,000 | 12,850,000 | 12,523,000 |
| do. calcined | 214,136 | 207,316 | 220,458 | 255,909 | 260,016 | 296,750 |
| Cryolite | 32,428 | 30,154 | 18,220 | 19,687 | 19,393 | 21,035 |
| Alumina and hydrate .. | 871,793 | 1,200,883 | 1,719,402 | 2,302,852 | 2,339,806 | 2,186,489 |
| Unwrought | 215,283 | 348,461 | 219,003 | 149,720 | 152,123 | 269,663 |
| do. alloys | 113,014 | 166,584 | 131,681 | 162,831 | 165,444 | 233,106 |
| Scrap | 27,222 | 33,501 | 25,758 | 32,839 | 33,366 | 57,008 |
| Semi-manufactures .. | 55,444 | 63,293 | 56,861 | 85,476 | 86,848 | 77,693 |
| of which—Foil (b) | 1,573 | 1,706 | 1,554 | 12,355 | 12,553 | 11,376 |
| Aluminium sulphates .. | 10,883 | 13,587 | 13,194 | 10,935 | 11,110 | n.a. |
| Argentina— | | | | | | |
| Bauxite | 33,539 | 36,935 | 29,444 | 40,994 | 41,652 | 11,820 |
| Alumina | 37 | 28 | 68 | 48 | 49 | 73 |
| do. hydrate | 4,054 | 4,548 | 5,760 | 6,435 | 6,538 | 5,666 |
| Unwrought | 30,532 | 39,533 | 51,749 | 49,920 | 50,721 | 59,337 |
| Semi-manufactures .. | 186 | 1,358 | 906 | 763 | 775 | 724 |
| of which—Foil .. | 131 | 75 | 206 | 443 | 450 | 413 |
| Brazil— | | | | | | |
| Cryolite | 1,121 | 1,367 | 1,142 | 2,137 | 2,171 | n.a. |
| Alumina | 455 | 67 | 535 | 465 | 472 | n.a. |
| do. hydrate | 467 | 642 | 531 | 631 | 641 | n.a. |
| Unwrought (a) | r 27,571 | 30,753 | 48,493 | 27,988 | 28,437 | n.a. |
| Semi-manufactures (a) | 1,068 | 1,571 | 4,852 | 4,049 | 4,114 | n.a. |
| of which—Foil .. | 203 | 234 | 333 | 428 | 435 | n.a. |
| Powder | 424 | 646 | 1,232 | 1,929 | 1,960 | n.a. |
| Aluminium sulphates .. | 7 | — | — | — | — | n.a. |

(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 | Tonnes

| Importing Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|------------------------------------|----------------|----------------|------------------|------------------|------------------|------------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Chile— | | | | | | |
| Unwrought | 3,990 | 3,143 | 3,757 | 4,424 | 4,495 | <i>n.a.</i> |
| Semi-manufactures .. | 1,006 | 1,128 | 377 | 599 | 609 | <i>n.a.</i> |
| Colombia— | | | | | | |
| Bauxite | 5,893 | <i>r</i> 5,844 | 4,527 | 1,449 | 1,472 | <i>n.a.</i> |
| Alumina and hydrates | <i>r</i> 273 | <i>r</i> 489 | 520 | 908 | 923 | <i>n.a.</i> |
| Unwrought (<i>a</i>) | <i>r</i> 4,715 | <i>r</i> 8,951 | 7,913 | 7,923 | 8,050 | <i>n.a.</i> |
| Semi-manufactures (<i>a</i>) | <i>r</i> 1,100 | <i>r</i> 1,299 | 3,297 | 1,882 | 1,912 | <i>n.a.</i> |
| Aluminium sulphates .. | <i>r</i> 5 | 1 | 1 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ecuador— | | | | | | |
| Semi-manufactures .. | 655 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Aluminium sulphates .. | 2,290 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Peru— | | | | | | |
| Unwrought (<i>a</i>) | 3,016 | 3,308 | 2,900 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Semi-manufactures (<i>a</i>) | 1,504 | 1,693 | 1,593 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Aluminium sulphates .. | 54 | 157 | 5 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Uruguay— | | | | | | |
| Unwrought | 1,746 | 1,220 | 1,298 | 1,329 | 1,350 | 1,396 |
| Aluminium sulphates .. | 3,445 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 1,000 |
| Venezuela— | | | | | | |
| Unwrought | 2,651 | 306 | 20 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Semi-manufactures .. | 9,906 | 8,420 | 6,023 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Aluminium sulphates .. | 9,688 | 13,642 | 11,977 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Alumina and hydrate .. | 458 | 25,489 | 33,434 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Burma— | | | | | | |
| Unwrought | 131 | 531 | (<i>a</i>) 555 | (<i>a</i>) 624 | (<i>a</i>) 634 | (<i>a</i>) 613 |
| Semi-manufactures (<i>a</i>) | 445 | 602 | 406 | 1,537 | 1,562 | 1,593 |
| Formosa— | | | | | | |
| Bauxite | 101,715 | 54,393 | 104,269 | 124,370 | 126,366 | <i>n.a.</i> |
| Unwrought (<i>a</i>) | 2,214 | 4,429 | 3,245 | 9,365 | 9,515 | <i>n.a.</i> |
| Semi-manufactures (<i>a</i>) | 399 | 1,063 | 353 | 488 | 496 | <i>n.a.</i> |
| of which—Foil | 62 | 400 | 114 | 192 | 195 | <i>n.a.</i> |
| Scrap | 3,793 | 4,231 | 1,952 | 3,082 | 3,131 | <i>n.a.</i> |
| Iran (<i>b</i>)— | | | | | | |
| Unwrought | 3,867 | 4,892 | 7,472 | 3,425 | 3,480 | 8,129 |
| Semi-manufactures .. | 2,809 | 3,471 | 4,450 | 6,493 | 6,597 | 5,306 |
| Iraq— | | | | | | |
| Semi-manufactures | 3,206 | 3,811 | 3,010 | 3,370 | 3,424 | <i>n.a.</i> |
| Aluminium sulphates .. | 3,323 | <i>n.a.</i> | 9,298 | 4,656 | 4,731 | <i>n.a.</i> |
| Israel— | | | | | | |
| Unwrought | 5,198 | 10,343 | 10,371 | 12,113 | 12,307 | 13,677 |
| Semi-manufactures .. | 2,776 | 3,498 | 4,007 | 5,070 | 5,151 | 3,875 |
| of which—Foil | 115 | 203 | 235 | 285 | 290 | 407 |
| Japan— | | | | | | |
| Bauxite | 2,052,979 | 2,411,163 | 3,072,493 | 3,602,319 | 3,660,126 | 4,669,064 |
| Cryolite | 8,863 | 7,445 | 8,723 | 8,441 | 8,576 | 7,668 |
| Unwrought | 133,543 | 139,081 | 266,172 | 229,683 | 233,369 | 204,416 |
| do. alloys | 29,025 | 27,409 | 42,811 | 24,542 | 24,936 | 21,192 |
| Scrap | 2,665 | 2,404 | 2,480 | 1,042 | 1,059 | 1,116 |
| do. alloys | 17,851 | 21,157 | 16,182 | 9,619 | 9,773 | 11,336 |
| Semi-manufactures (<i>a</i>) | 3,473 | 3,862 | 4,721 | 3,276 | 3,329 | 4,196 |
| Alumina and hydrate .. | 116,721 | 175,828 | 220,120 | 345,599 | 351,145 | 506,219 |
| Jordan— | | | | | | |
| Semi-manufactures .. | 386 | 516 | 505 | 712 | 723 | 1,253 |
| of which—Foil | 84 | 87 | 84 | 94 | 96 | 772 |
| Korea (South)— | | | | | | |
| Unwrought and semi-manufactures .. | 12,198 | 14,496 | 15,842 | 5,738 | 5,830 | 4,349 |

 (*a*) Including alloys.

 (*b*) Years ending March 20 following that stated.

IMPORTS OF ALUMINIUM, ETC. (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|--------|--------|--------|--------|-------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Lebanon— | | | | | | |
| Unwrought and scrap .. | 3,658 | 4,192 | 7,253 | 7,582 | 7,704 | 7,347 |
| Semi-manufactures .. | 511 | 813 | 547 | 920 | 935 | 968 |
| Philippine Republic— | | | | | | |
| Unwrought | 7,345 | 9,187 | 16,368 | 6,953 | 7,065 | 7,648 |
| Semi-manufactures (a) | 1,172 | 1,225 | 1,265 | 1,510 | 1,534 | 1,444 |
| of which—Foil.. .. | 255 | 445 | 391 | 190 | 193 | 96 |
| Aluminium sulphates .. | 1,117 | 509 | 380 | 466 | 473 | 92 |
| Southern Yemen— | | | | | | |
| Unwrought | 164 | 183 | n.a. | n.a. | n.a. | n.a. |
| Syria— | | | | | | |
| Unwrought | 69 | 425 | 522 | 239 | 243 | 221 |
| Thailand— | | | | | | |
| Unwrought | 4,484 | 5,148 | 5,784 | 8,290 | 8,423 | 9,358 |
| Semi-manufactures (a) | 3,434 | 3,522 | 4,390 | 4,510 | 4,581 | 3,819 |
| of which—Foil.. .. | 1,381 | 1,197 | 1,537 | 1,618 | 1,644 | 1,640 |
| Aluminium sulphates .. | 326 | 528 | 1,098 | 1,164 | 1,183 | 1,197 |
| Turkey— | | | | | | |
| Unwrought (a) | 9,128 | 12,445 | 13,046 | 13,429 | 13,644 | n.a. |
| Semi-manufactures (a) | 3,925 | 2,928 | 2,900 | 4,035 | 4,100 | n.a. |
| of which—Foil.. .. | 2,630 | 1,970 | 2,130 | 3,340 | 3,394 | n.a. |
| Aluminium sulphates .. | 1,415 | 6,448 | 6,968 | 4,653 | 4,727 | n.a. |
| Alumina and hydrate .. | 186 | 131 | 232 | 962 | 978 | n.a. |

(a) Including alloys.

ANTIMONY
PRODUCTION OF ANTIMONY ORE
(Metal content)

| Producing Country | Long tons | | | | Tonnes | |
|-------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Canada (a) | — | — | — | — | — | — |
| Sarawak | 31 | 23 | 85 | 177 | 180 | — |
| Australia (b) | 91 | 158 | 142 | 113 | 115 | 440 |
| OTHER COUNTRIES | | | | | | |
| Austria | 679 | 692 | 613 | 600 | 610 | 467 |
| Czechoslovakia (e) | 500 | 600 | 600 | 600 | 600 | 600 |
| France | 164 | — | — | — | — | — |
| Italy | 609 | 1,248 | 1,275 | 1,279 | 1,299 | 1,175 |
| Portugal | 23 | 20 | 1 | — | — | — |
| Spain | 119 | 130 | 118 | 78 | 79 | 110 |
| U.S.S.R. (e) | 7,000 | 7,000 | 7,000 | 7,000 | 7,000 | 7,500 |
| Yugoslavia | 3,030 | 2,620 | 2,034 | 1,967 | 1,999 | 2,002 |
| Algeria | 100 | 53 | 60 | 152 | 154 | 150 |
| Morocco | 1,463 | 1,254 | 1,500 | 1,832 | 1,861 | 1,834 |
| South Africa | 12,201 | 16,585 | 17,816 | 17,365 | 17,644 | 14,638 |
| Guatemala | 30 | 14 | 98 | 257 | 261 | 300 |
| Mexico | 3,741 | 3,408 | 3,176 | 4,397 | 4,468 | 3,361 |
| Honduras | 20 | 255 | 111 | 113 | 115 | 30 |
| United States (d) | 796 | 764 | 823 | 1,009 | 1,025 | 930 |
| Bolivia (g) | 11,295 | 10,940 | 12,893 | 11,393 | 11,576 | 11,667 |
| Peru (c) | 738 | 773 | 603 | 1,149 | 1,167 | 1,022 |
| China (f) | 12,000 | 12,000 | 12,000 | 12,000 | 12,000 | 12,000 |
| Japan | 56 | 19 | 3 | 6 | 6 | 3 |
| Thailand | 1,010 | 186 | 806 | 2,865 | 2,911 | 2,833 |
| Turkey | 912 | 1,456 | 2,580 | 2,726 | 2,770 | 2,200 |
| TOTAL* | 58,000 | 62,000 | 66,000 | 68,000 | 69,000 | 63,000 |

*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): 1967—566; 1968—518; 1969—366; 1970—324. (Tonnes): 1970—330; 1971—150.
- (b) In addition the antimony content of antimonial slag obtained as a by-product of lead refining was as follows (long tons): 1967—839; 1968—683; 1969—768; 1970—802. (Tonnes): 1970—815; 1971—685.
- (c) Metal plus content of ore.
- (d) Secondary metal was recovered as follows (long tons): 1967—21,129; 1968—21,160; 1969—17,778; 1970—19,129. (Tonnes): 1970—19,435; 1971—18,976.
- (e) Estimate.
- (f) United States Bureau of Mines' estimate.
- (g) Content of ore exported plus exports of metal.

EXPORTS OF ANTIMONY

| Exporting Country and Description | Long tons | | | | Tonnes | |
|---|-----------|--------|--------|--------|--------|--------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— Regulus and refined .. | 840 | 1,678 | 1,607 | 964 | 979 | 310 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Ore | 465 | 389 | 193 | 138 | 140 | 234 |
| Sulphide (b) | 290 | 397 | 375 | 221 | 225 | 319 |
| France— | | | | | | |
| Crude and regulus .. | 52 | 139 | 191 | 95 | 97 | 15 |
| Germany (Federal)— | | | | | | |
| Ore | 106 | — | — | — | — | — |
| Regulus, scrap, etc. .. | 186 | 118 | 74 | 144 | 146 | 34 |
| Oxide | 238 | 236 | 139 | 244 | 248 | 330 |
| Italy— | | | | | | |
| Regulus and scrap .. | 1 | 20 | 102 | 813 | 826 | 607 |
| Netherlands— | | | | | | |
| Regulus (a) | 9 | 12 | 18 | 93 | 95 | 25 |
| Oxide | 22 | 31 | 65 | 122 | 124 | 90 |
| Sweden— | | | | | | |
| Regulus | 11 | 1 | 76 | 31 | 31 | 8 |
| U.S.S.R.— | | | | | | |
| Regulus | 1,300 | 787 | 1,200 | 886 | 900 | 416 |
| Yugoslavia— | | | | | | |
| Regulus | 1,720 | 1,267 | 1,246 | 1,239 | 1,259 | 1,500 |
| Morocco— | | | | | | |
| Ore | 3,272 | 2,687 | 2,772 | 3,330 | 3,383 | 4,070 |
| South Africa— | | | | | | |
| Ore | 20,437 | 25,440 | 31,474 | 26,357 | 26,780 | 12,017 |
| Mexico— | | | | | | |
| Ore and concentrates .. | 9,404 | 6,079 | 8,385 | 15,423 | 15,670 | 8,770 |
| Regulus and refined .. | 186 | 307 | 270 | 164 | 167 | 258 |
| United States— | | | | | | |
| Metal and alloys | 73 | 97 | 127 | 485 | 493 | 928 |
| Oxide | 148 | 106 | 185 | 388 | 394 | 129 |
| Bolivia— | | | | | | |
| Ore (Sb content) | 11,287 | 10,900 | 12,300 | 11,393 | 11,576 | 11,667 |
| Regulus | 8 | 62 | 30 | — | — | n.a. |
| Peru— | | | | | | |
| Ore and metal (Sb content) | 886 | 1,325 | 1,033 | n.a. | n.a. | n.a. |
| Thailand— | | | | | | |
| Ore | 2,734 | 1,085 | 1,333 | 3,246 | 3,298 | 4,702 |
| Turkey— | | | | | | |
| Ore | 2,586 | 1,983 | 3,486 | 1,794 | 1,823 | n.a. |
| Sulphide | 950 | 565 | 1,900 | 502 | 510 | n.a. |

(a) Including scrap.

(b) Believed to be crude liquated sulphide.

IMPORTS OF ANTIMONY, ETC.

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Zambia— | | | | | | |
| Refined and regulus .. | 13 | 53 | 29 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Canada— | | | | | | |
| Oxide | 237 | 354 | 352 | 377 | 383 | 268 |
| India— | | | | | | |
| Ore | 1,504 | 1,777 | 1,610 | 688 | 699 | 1,640 |
| Metal | 17 | 1 | 6 | 2 | 2 | 306 |
| Oxide (<i>d</i>) | 90 | 23 | 49 | 51 | 52 | 99 |
| Australia (<i>c</i>)— | | | | | | |
| Regulus | 20 | 2 | 30 | 65 | 66 | 27 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Regulus | 125 | 127 | 88 | 44 | 45 | 103 |
| Belgium-Luxemburg | | | | | | |
| Ore | 8,688 | 10,931 | 8,741 | 6,417 | 6,520 | 8,245 |
| Regulus (<i>a</i>) | 108 | 23 | 47 | 4 | 4 | 36 |
| Oxide | 50 | 115 | 77 | 123 | 125 | 49 |
| Denmark— | | | | | | |
| Regulus | 119 | 66 | 107 | 12 | 12 | 75 |
| France— | | | | | | |
| Ore | 1,241 | 2,392 | 4,030 | 4,360 | 4,430 | 5,075 |
| Crude and regulus (<i>a</i>) .. | 2,177 | 1,213 | 981 | 356 | 362 | 801 |
| Sulphide | 11 | 14 | 6 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Germany (Federal)— | | | | | | |
| Ore | 2,976 | 3,323 | 4,309 | 2,016 | 2,048 | 3,269 |
| Regulus, scrap, etc. .. | 2,364 | 1,418 | 1,576 | 1,797 | 1,826 | 1,261 |
| Oxide | 572 | 1,042 | 1,397 | 1,540 | 1,565 | 1,223 |
| Greece— | | | | | | |
| Regulus | 28 | 44 | 7 | 10 | 10 | 15 |
| Italy— | | | | | | |
| Ore | 760 | 4,610 | 649 | 956 | 971 | 855 |
| Regulus and scrap | 584 | 145 | 323 | 143 | 145 | 140 |
| Oxide | 298 | 397 | 544 | 387 | 393 | 517 |
| Sulphide | 25 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Netherlands— | | | | | | |
| Regulus (<i>a</i>) | 145 | 144 | 120 | 156 | 159 | 55 |
| Oxide | 485 | 543 | 698 | 623 | 633 | 325 |
| Norway— | | | | | | |
| Regulus | 84 | 119 | 68 | 21 | 21 | 19 |
| Spain— | | | | | | |
| Ore | 64 | 885 | 658 | 425 | 432 | 352 |
| Regulus | 288 | 216 | 191 | 241 | 245 | 204 |
| Oxide | 193 | 160 | 77 | 37 | 38 | 116 |
| Sweden— | | | | | | |
| Regulus | 299 | 475 | 413 | 191 | 194 | 189 |
| Switzerland— | | | | | | |
| Regulus | 266 | 274 | 208 | 152 | 154 | 159 |
| Yugoslavia— | | | | | | |
| Ore | <i>n.a.</i> | <i>n.a.</i> | 1,319 | 1,908 | 1,939 | 87 |
| Morocco— | | | | | | |
| Regulus | 12 | 8 | 19 | 5 | 5 | 5 |
| Mexico— | | | | | | |
| Oxide | 18 | 20 | 4 | 4 | 4 | 10 |
| United States— | | | | | | |
| Ore (<i>Sb content</i>) | 9,390 | 9,477 | 10,802 | 12,339 | 12,537 | 8,726 |
| Crude | 25 | 53 | 55 | 16 | 16 | 29 |
| Regulus (<i>b</i>) | 2,370 | 2,404 | 1,242 | 1,339 | 1,360 | 1,731 |
| Oxide | 4,552 | 4,286 | 4,210 | 3,800 | 3,861 | 2,532 |

(a) Including scrap.

(b) Including waste and scrap.

(c) Years ended June 30 of that stated.

(d) Years ended March 31 following that stated.

IMPORTS OF ANTIMONY, ETC. (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|-------|--------|--------|--------|--------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Argentina— | | | | | | |
| Ore | 484 | 279 | 363 | 66 | 67 | 388 |
| Brazil— | | | | | | |
| Ore | 232 | 227 | 182 | 94 | 96 | n.a. |
| Regulus | 69 | 313 | 255 | 48 | 49 | n.a. |
| Oxide | 77 | 113 | 130 | 167 | 170 | n.a. |
| Sulphide | 109 | 108 | 70 | 56 | 57 | n.a. |
| Chile— | | | | | | |
| Regulus | 25 | 58 | 140 | 28 | 28 | n.a. |
| Colombia— | | | | | | |
| Metal | 20 | 16 | 11 | 7 | 7 | n.a. |
| Uruguay— | | | | | | |
| Regulus | 4 | 15 | 1 | 7 | 7 | 11 |
| Venezuela— | | | | | | |
| Regulus | 10 | 71 | 58 | n.a. | n.a. | n.a. |
| Japan— | | | | | | |
| Ore and concentrates .. | 8,927 | 7,946 | 12,457 | 17,070 | 17,344 | 10,197 |
| Regulus | 876 | 61 | 5 | 20 | 20 | — |
| Sulphide | 152 | n.a. | 19 | 32 | 33 | 3 |

ARSENIC
PRODUCTION OF ARSENIC

| Producing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-------------|-------------|--------|------------|------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Canada— | | | | | | |
| White arsenic | 337 | 309 | 152 | 63 | 64 | 45 |
| OTHER COUNTRIES | | | | | | |
| France— | | | | | | |
| White arsenic | 13,947 | 13,300 | 13,800 | (c) 10,000 | (c) 10,000 | <i>n.a.</i> |
| Germany (Federal) (a)— | | | | | | |
| White arsenic, etc. .. | 102 | 595 | 302 | 432 | 439 | 82 |
| Portugal— | | | | | | |
| White arsenic | 248 | 180 | 230 | 194 | 197 | <i>n.a.</i> |
| Spain— | | | | | | |
| White arsenic | 127 | 128 | 98 | 244 | 248 | <i>n.a.</i> |
| Sweden— | | | | | | |
| White arsenic | 19,901 | 20,767 | 16,239 | 16,000 | 16,300 | 17,400 |
| South West Africa— | | | | | | |
| White arsenic (b) .. | <i>n.a.</i> | <i>n.a.</i> | 2,182 | 3,998 | 4,062 | 3,701 |
| Mexico— | | | | | | |
| Ores (As_2O_3 content) .. | 11,157 | 10,086 | 5,951 | 6,813 | 6,922 | 8,717 |
| Brazil— | | | | | | |
| White arsenic | 218 | 307 | 295 | 293 | 298 | 148 |
| Peru— | | | | | | |
| White arsenic | 263 | 1,207 | 473 | 760 | 772 | 677 |
| Japan— | | | | | | |
| White arsenic | 633 | 675 | 701 | 1,069 | 1,086 | 956 |

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) Exports.

(b) Years ended June 30 of that stated.

(c) Estimated.

EXPORTS OF ARSENIC, ETC.

| Exporting Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|---------|---------|--------|--------|-------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Arsenates and arsenites | 6,874 | 2,962 | 3,706 | 3,024 | 3,072 | 1,498 |
| Organo-arsenic compounds | £34,464 | £38,061 | £61,727 | 114 | 116 | 75 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E. U.— | | | | | | |
| Arsenates and arsenites | — | 59 | 49 | 41 | 42 | — |
| France— | | | | | | |
| White arsenic | 12,514 | 13,041 | 11,438 | 10,278 | 10,443 | 7,205 |
| Arsenates | 94 | 46 | 75 | 103 | 105 | 66 |
| Germany (Federal)— | | | | | | |
| White arsenic, etc. | 102 | 595 | 302 | 432 | 439 | 82 |
| Arsenates | 22 | 16 | 13 | 30 | 30 | 17 |
| Italy— | | | | | | |
| White arsenic | 3 | 30 | 112 | 25 | 25 | — |
| Arsenates and arsenites | 4 | 3 | 21 | 17 | 17 | 1 |
| Netherlands— | | | | | | |
| White arsenic | 9 | 14 | 25 | — | — | 10 |
| Arsenates and arsenites | 13 | 10 | 9 | 1 | 1 | — |
| Portugal— | | | | | | |
| White arsenic | 186 | 105 | 163 | 138 | 140 | 184 |
| Yugoslavia— | | | | | | |
| White arsenic | 64 | 26 | 587 | 218 | 222 | 81 |
| South Africa— | | | | | | |
| White arsenic | 885 | 1,078 | 131 | 465 | 472 | 1,783 |
| Arsenates and arsenites | 903 | 46 | 1,245 | 421 | 428 | 27 |
| Mexico— | | | | | | |
| White arsenic, pure | 8,122 | 3,295 | 5,275 | 6,540 | 6,645 | 6,497 |
| do. crude | 2,416 | 2,985 | 1,163 | 321 | 327 | 960 |
| Japan— | | | | | | |
| White arsenic | 52 | 63 | 6 | 8 | 8 | 210 |
| Arsenates and arsenites | 4 | 16 | 119 | 156 | 158 | 40 |

IMPORTS OF ARSENIC, ETC

| Importing Country and Description | Long tons | | | | Tonnes | |
|--|-------------|-------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| White arsenic | 9,527 | <i>n.a.</i> | <i>n.a.</i> | 7,192 | 7,307 | 3,938 |
| Arsenates and arsenites | 13 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| India (b)— | | | | | | |
| Arsenic and its oxides .. | 556 | 668 | 695 | 286 | 291 | 517 |
| Malaysia (West)— | | | | | | |
| Arsenite of soda | 5,875 | 3,149 | 2,833 | 1,224 | 1,244 | 714 |
| Australia (a)— | | | | | | |
| White arsenic | 1,499 | 1,863 | 1,006 | 1,216 | 1,236 | 1,040 |
| Arsenates and arsenites | 49 | 13 | 36 | 29 | 29 | 22 |
| New Zealand (a)— | | | | | | |
| White arsenic, etc. .. | 159 | 141 | 161 | 136 | 138 | <i>n.a.</i> |
| Arsenate of lead | 30 | 16 | 27 | 17 | 17 | <i>n.a.</i> |
| Other arsenates and arsenites | 20 | — | 20 | 4 | 4 | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| White arsenic, etc. .. | 21 | 32 | 65 | 67 | 68 | 41 |
| Belgium-Luxemburg E.U.— | | | | | | |
| White arsenic | 20 | 5 | 10 | 1,427 | 1,450 | 565 |
| Denmark— | | | | | | |
| White arsenic | 25 | 27 | 31 | 55 | 56 | 12 |
| Arsenates and arsenites | 2 | 2 | 1 | 1 | 1 | — |
| France— | | | | | | |
| Metallic arsenic | 16 | 51 | 79 | 96 | 98 | 131 |
| White arsenic | 5 | 20 | 5 | 1 | 1 | — |
| Germany (Federal)— | | | | | | |
| Metallic arsenic | <i>n.a.</i> | <i>n.a.</i> | (c) 67 | (c) 81 | (c) 82 | (c) 51 |
| White arsenic, etc. .. | 1,058 | 1,007 | 944 | 1,139 | 1,157 | 905 |
| Greece— | | | | | | |
| White arsenic | <i>n.a.</i> | 94 | 167 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Italy— | | | | | | |
| White arsenic | 1,461 | 2,620 | 2,312 | 1,386 | 1,408 | 1,311 |
| Metallic arsenic (c) .. | 61 | 88 | 97 | 77 | 78 | 96 |
| Arsenates and arsenites | 14 | 29 | 43 | 10 | 10 | 87 |
| Netherlands— | | | | | | |
| White arsenic etc. .. | 950 | 932 | 1,023 | 826 | 839 | 413 |
| Arsenates and arsenites | — | — | — | — | — | 4 |
| Norway— | | | | | | |
| White arsenic | 72 | 105 | 66 | 81 | 82 | 128 |
| Switzerland— | | | | | | |
| White arsenic, etc. .. | 85 | 120 | 93 | 75 | 76 | 113 |
| Yugoslavia— | | | | | | |
| Metallic arsenic | 9 | 10 | 8 | 7 | 7 | 18 |
| White arsenic | 250 | 481 | 759 | 58 | 59 | 85 |
| Arsenates | <i>n.a.</i> | 4 | — | — | — | — |
| Malagasy Republic— | | | | | | |
| Arsenates | 17 | 11 | 10 | 11 | 11 | <i>n.a.</i> |
| Morocco— | | | | | | |
| White arsenic | 14 | 13 | 37 | 16 | 16 | 16 |
| South Africa— | | | | | | |
| White arsenic, etc. .. | 514 | 39 | 18 | 20 | 20 | 74 |
| Tunisia— | | | | | | |
| Arsenates and arsenites | 6 | 6 | 4 | — | — | 1 |
| Mexico— | | | | | | |
| White arsenic | — | — | 4 | — | — | — |

(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.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|--------|--------|--------|--------|--------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| United States— | | | | | | |
| Metallic arsenic .. | 263 | 366 | 309 | 407 | 414 | 486 |
| White arsenic | 24,174 | 22,495 | 16,223 | 16,752 | 17,021 | 14,883 |
| Sulphide | 258 | 100 | r 8 | 8 | 8 | n.a. |
| Arsenate of soda .. | 113 | 33 | r 49 | 83 | 84 | 112 |
| Argentina— | | | | | | |
| White arsenic .. | 396 | 427 | 460 | 560 | 569 | 211 |
| Brazil— | | | | | | |
| Metallic arsenic .. | 15 | — | 9 | 20 | 20 | n.a. |
| White arsenic | 612 | 514 | 266 | 430 | 437 | n.a. |
| Arsenates | — | 12 | 12 | 6 | 6 | n.a. |
| Chile— | | | | | | |
| White arsenic | 113 | 46 | 98 | 94 | 96 | n.a. |
| Colombia— | | | | | | |
| White arsenic | r 24 | r 163 | 45 | n.a. | n.a. | n.a. |
| Japan— | | | | | | |
| White arsenic | 2,011 | 3,365 | 2,590 | 918 | 933 | 605 |
| Sulphide | 22 | 73 | 49 | 56 | 57 | 10 |
| Philippine Republic | | | | | | |
| White arsenic | n.a. | n.a. | 89 | 170 | 173 | 147 |
| Turkey— | | | | | | |
| Arsenic compounds .. | 19 | 77 | 52 | 27 | 27 | n.a. |

ASBESTOS
PRODUCTION OF ASBESTOS

| Producing Country and Description | Long tons | | | | Tonnes | |
|-----------------------------------|------------|------------|------------|------------|------------|------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Kenya— | | | | | | |
| Anthophyllite | 50 | — | — | — | — | — |
| Rhodesia | (c) 95,763 | (c) 84,642 | (c) 80,000 | (c) 80,000 | (c) 80,000 | (c) 80,000 |
| Swaziland | 35,852 | 38,341 | 38,468 | 32,535 | 33,057 | 35,484 |
| Canada (a)— | | | | | | |
| Chrysotile | 1,296,521 | 1,424,956 | 1,438,543 | 1,483,611 | 1,507,419 | 1,489,000 |
| Crude | 257 | 259 | 6,265 | 6,475 | 6,579 | n.a. |
| Fibre | 629,728 | 693,755 | 614,218 | 658,069 | 668,629 | n.a. |
| Shorts and Waste | 666,536 | 730,942 | 818,060 | 819,067 | 832,211 | n.a. |
| Cyprus | 19,477 | 19,012 | 21,363 | 28,253 | 28,706 | 27,697 |
| India | 7,982 | 8,930 | 9,494 | 9,897 | 10,056 | 10,931 |
| Australia— | | | | | | |
| Chrysotile | 527 | 799 | 737 | 728 | 739 | 899 |
| Crocidolite | 120 | — | — | — | — | — |
| Total | 1,470,000 | 1,580,000 | 1,580,000 | 1,628,000 | 1,653,000 | 1,644,000 |
| OTHER COUNTRIES | | | | | | |
| Bulgaria | 1,476 | 2,054 | 2,768 | 2,950 | 3,000 | (c) 3,000 |
| Finland | (c) 11,600 | 12,932 | 13,828 | 13,410 | 13,625 | 10,360 |
| France | 148 | 492 | 394 | 699 | 710 | n.a. |
| Italy | 99,149 | 101,803 | 110,706 | 116,739 | 118,612 | 119,469 |
| Portugal | 51 | 84 | 200 | 199 | 202 | 127 |
| U.S.S.R. (c) | 757,000 | 787,000 | r 946,000 | 1,049,000 | 1,066,000 | 1,152,000 |
| Yugoslavia | 8,879 | 10,230 | 11,280 | 11,913 | 12,104 | 15,432 |
| Egypt | 11,748 | 2,560 | — | 442 | 449 | 70 |
| Mozambique | 499 | 118 | 775 | 224 | 228 | 230 |
| South Africa— | | | | | | |
| Amosite | 84,730 | 86,831 | 88,528 | 95,842 | 97,380 | 98,464 |
| Blue | 119,901 | 107,803 | 122,700 | 135,068 | 137,235 | 159,671 |
| Chrysotile | 35,086 | 37,982 | 42,868 | 51,967 | 52,801 | 61,161 |
| United States (d) .. | 109,990 | 107,759 | 112,443 | 111,887 | 113,682 | 118,733 |
| Argentina | 492 | 341 | 321 | 34 | 35 | (c) 36 |
| Bolivia (b) | 2 | 1 | — | — | — | n.a. |
| China (c) | 150,000 | 150,000 | 160,000 | 170,000 | 170,000 | 160,000 |
| Formosa | 563 | 1,181 | 3,032 | 2,797 | 2,842 | 2,327 |
| Japan— | | | | | | |
| Chrysotile | 16,019 | 24,100 | 20,668 | 21,050 | 21,386 | 22,000 |
| Amphibole | 8,122 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Korea (South) | 2,132 | 3,259 | 5,800 | 1,350 | 1,372 | n.a. |
| Philippine Republic | 57 | 31 | 44 | 1,194 | 1,213 | (c) 1,200 |
| Turkey | 3,851 | 3,487 | 5,087 | 1,658 | 1,685 | (c) 1,760 |
| Total* | 1,500,000 | 1,450,000 | 1,690,000 | 1,770,000 | 1,800,000 | 2,000,000 |
| WORLD'S TOTAL* .. | 3,000,000 | 3,000,000 | 3,300,000 | 3,400,000 | 3,500,000 | 3,600,000 |

*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.

EXPORTS OF ASBESTOS

| Exporting Country and Description | Long tons | | | | Tonnes | |
|-----------------------------------|------------|--------------|--------------|--------------|--------------|--------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Unmanufactured .. | 4,246 | 4,389 | 4,711 | 4,665 | 4,740 | 2,394 |
| Packing, etc. .. | 8,985 | 9,469 | 11,063 | 9,590 | 9,744 | 2,121 |
| Cement products .. | 31,427 | 32,986 | 38,371 | 33,888 | 34,432 | 34,676 |
| Yarn and cloth .. | 3,182 | 3,656 | 4,101 | } 20,522 | } 20,851 | } 4,493 |
| Other manufactures .. | 12,418 | 12,778 | 12,009 | | | |
| Canada— | | | | | | |
| Crude | 204 | 180 | 121 | 91 | 92 | 104 |
| Fibre | 583,286 | 645,641 | 695,215 | 736,003 | 747,814 | 698,749 |
| Shorts and waste .. | 614,763 | 657,437 | 701,773 | 658,935 | 669,509 | 712,424 |
| Manufactured .. | (£866,527) | (£1,231,018) | (£1,565,000) | (£2,569,000) | (£2,569,000) | (£2,891,000) |
| Cyprus— | | | | | | |
| Unmanufactured .. | 18,541 | 17,700 | 22,146 | 23,752 | 24,133 | 23,609 |
| India— | | | | | | |
| Unmanufactured .. | 68 | 22 | 7 | 30 | 30 | 47 |
| Manufactured (a) .. | 89 | 147 | 313 | 240 | 244 | 278 |
| Cement products (a) .. | 1,587 | 5,612 | 11,318 | 8,871 | 9,013 | 5,216 |
| Malaysia (West)— | | | | | | |
| Cement products .. | 3,869 | 8,649 | 12,689 | 16,664 | 16,931 | 7,881 |
| Other manufactures .. | 39 | 17 | 5 | 27 | 27 | 7 |
| Singapore— | | | | | | |
| Cement products .. | 15,842 | 16,614 | 17,211 | 15,866 | 16,120 | 9,044 |
| Other manufactures .. | 640 | 214 | 138 | 214 | 217 | 241 |
| Australia— | | | | | | |
| Unmanufactured .. | 2,254 | 718 | r 471 | 436 | 443 | 34 |
| Packing (b) .. | (£41,200) | (£94,181) | (£93,000) | (£170,797) | (£170,797) | (£112,931) |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Unmanufactured .. | 13 | 56 | 53 | 29 | 29 | 20 |
| Manufactured (c) .. | 2,923 | 3,039 | 3,813 | 3,390 | 3,444 | 4,745 |
| Cement products (d) .. | 5,995 | 17,909 | 30,422 | 38,264 | 38,878 | 44,466 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Unmanufactured .. | 32 | 987 | 227 | 938 | 953 | 202 |
| Manufactured (c) .. | 598 | 620 | 1,392 | 2,479 | 2,519 | 2,751 |
| Cement products (d) .. | 196,249 | 204,628 | 210,927 | 227,190 | 230,836 | 245,682 |
| Denmark— | | | | | | |
| Unmanufactured .. | 59 | 48 | 361 | 6 | 6 | 2 |
| Manufactured (c) .. | 1,058 | 886 | 1,061 | 1,010 | 1,027 | 1,055 |
| Cement products (d) .. | 6,690 | 9,866 | 14,742 | 13,662 | 13,881 | 9,432 |
| Finland— | | | | | | |
| Unmanufactured .. | 8,709 | 10,159 | 11,760 | 9,188 | 9,335 | 10,113 |
| Manufactured .. | 517 | 577 | 1,420 | 2,051 | 2,084 | 1,406 |
| France— | | | | | | |
| Unmanufactured .. | 1,069 | 1,014 | 781 | 198 | 201 | 338 |
| Manufactured (c) .. | 4,519 | 5,311 | 5,429 | 5,524 | 5,613 | 7,200 |
| Cement products (d) .. | 28,577 | 23,301 | 32,969 | 73,213 | 74,388 | 71,173 |
| Germany (Federal)— | | | | | | |
| Unmanufactured .. | 501 | 1,474 | 692 | 909 | 924 | 1,271 |
| Manufactured (c) .. | 8,085 | 11,218 | 11,358 | 16,488 | 16,753 | 18,113 |
| Cement products (d) .. | 55,882 | 58,424 | 44,515 | 45,545 | 46,276 | 41,497 |
| Greece— | | | | | | |
| Manufactured (e) .. | 505 | 114 | 1,751 | n.a. | n.a. | n.a. |

(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.

(e) Including manufactures of asbestos cement.

EXPORTS OF ASBESTOS (cont.)

Long tons | Tonnes

| Exporting Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|-----------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Italy— | | | | | | |
| Unmanufactured .. | 33,488 | 41,168 | 45,321 | 47,893 | 48,662 | 48,793 |
| Manufactured (a) .. | 1,085 | 617 | 1,821 | 2,238 | 2,274 | 3,307 |
| Cement products (b) .. | 84,568 | 23,523 | 65,018 | 75,304 | 76,512 | 69,814 |
| Netherlands— | | | | | | |
| Unmanufactured .. | 53 | 54 | 159 | 271 | 275 | 862 |
| Manufactured (a) .. | 2,564 | 3,489 | 3,730 | 3,779 | 3,840 | 5,320 |
| Cement products (b) .. | 3,485 | 4,608 | 4,224 | 5,308 | 5,393 | 5,845 |
| Portugal— | | | | | | |
| Unmanufactured .. | 57 | n.a. | 72 | 177 | 180 | — |
| Cement products (b) .. | r 887 | n.a. | r 1,574 | 1,820 | 1,849 | 1,796 |
| Spain— | | | | | | |
| Manufactured (a) .. | 488 | 691 | 1,040 | 862 | 876 | 1,259 |
| Cement products (b) .. | 1,610 | 2,668 | 11,189 | 29,701 | 30,178 | 34,569 |
| Sweden— | | | | | | |
| Unmanufactured .. | 22 | 20 | 35 | 181 | 184 | 53 |
| Manufactured (a) .. | 66 | 105 | 167 | 184 | 187 | 195 |
| Cement products .. | 25,115 | 15,627 | 17,134 | 18,279 | 18,572 | 18,550 |
| Switzerland— | | | | | | |
| Unmanufactured .. | 73 | 31 | 50 | 65 | 66 | 94 |
| Manufactured (a) .. | 261 | 433 | 473 | 363 | 369 | 322 |
| Cement products (b) .. | 1,572 | 5,930 | 4,819 | 2,372 | 2,410 | 773 |
| U.S.S.R.— | | | | | | |
| Unmanufactured .. | 280,696 | 298,805 | 341,000 | 379,215 | 385,300 | 433,000 |
| Yugoslavia— | | | | | | |
| Unmanufactured .. | 1,634 | 1,545 | 2,410 | 4,666 | 4,741 | 1,403 |
| Manufactured .. | 1,378 | 2,160 | 2,904 | 4,402 | 4,473 | 4,942 |
| Cement products .. | 6,194 | 45,543 | 60,276 | 41,001 | 41,659 | 25,524 |
| Morocco— | | | | | | |
| Cement products .. | 6,381 | 7,808 | 6,328 | 7,003 | 7,115 | 10,233 |
| Mozambique— | | | | | | |
| Unmanufactured .. | 204 | 118 | 774 | 311 | 316 | 259 |
| South Africa— | | | | | | |
| Unmanufactured (c) .. | 230,321 | 254,279 | 273,907 | 285,794 | 290,381 | 299,803 |
| Cement products .. | 9,274 | 7,450 | 8,335 | 5,842 | 5,935 | 6,436 |
| Other manufactures .. | (£266,985) | (£261,123) | (£109,299) | (£135,282) | (£135,282) | (£111,834) |
| United States— | | | | | | |
| Unmanufactured .. | 46,608 | 36,801 | 30,822 | 34,138 | 34,686 | 47,357 |
| Spun, woven and packing .. | 4,469 | 5,236 | 6,179 | 5,606 | 5,696 | 8,140 |
| Brake linings .. | (£2,110,857) | (£2,385,000) | (£2,835,000) | (£2,323,000) | (£2,323,000) | (£2,934,000) |
| Clutch facings .. | (£844,488) | (£965,833) | (£1,235,833) | (£802,500) | (£802,500) | (£643,000) |
| Pipe covering and cement .. | 21,406 | 14,774 | 12,254 | 10,532 | 10,701 | 20,229 |
| Other manufactures .. | (£1,580,900) | (£2,163,750) | (£2,363,750) | (£2,335,417) | (£2,335,417) | (£2,412,000) |
| Bolivia— | | | | | | |
| Unmanufactured .. | 2 | 1 | — | — | — | n.a. |
| Colombia— | | | | | | |
| Cement products .. | 16,721 | r 5,529 | r 3,490 | n.a. | n.a. | n.a. |
| Peru— | | | | | | |
| Manufactured .. | 15 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Formosa— | | | | | | |
| Unmanufactured .. | 56 | 44 | 44 | 149 | 151 | n.a. |
| Manufactured .. | 87 | — | 52 | 215 | 218 | n.a. |
| Japan— | | | | | | |
| Unmanufactured .. | 326 | 189 | 1,448 | 166 | 169 | 493 |
| Manufactured .. | 3,877 | 4,588 | 4,577 | 5,254 | 5,338 | 5,881 |
| Cement products .. | 15,254 | 28,756 | 28,617 | 100,346 | 101,956 | 23,288 |

(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.)

| Exporting Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|--------|--------|--------|--------|--------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Lebanon— | | | | | | |
| Cement products .. | 26,984 | 34,144 | 33,803 | 23,024 | 23,393 | 24,663 |
| Thailand— | | | | | | |
| Cement products .. | 332 | 391 | 1,112 | 1,361 | 1,383 | 2,822 |
| Turkey— | | | | | | |
| Manufactured (a) .. | n.a. | 4 | 26 | 61 | 62 | n.a. |

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

IMPORTS OF ASBESTOS

Long tons | Tonnes

| Importing Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|-----------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Unmanufactured— | | | | | | |
| Crude and fibre .. | 160,173 | 163,239 | 160,462 | 145,817 | 148,157 | 158,778 |
| Waste | 6,996 | 12,178 | 16,524 | 6,377 | 6,479 | 9,023 |
| Manufactured | 1,991 | 2,129 | 7,111 | 8,702 | 8,841 | 11,537 |
| Cement products .. | 29,587 | 30,586 | 21,951 | 23,738 | 24,119 | 25,783 |
| Channel Islands— | | | | | | |
| Manufactured (a) .. | 2,323 | 2,243 | 3,529 | 1,210 | 1,229 | 1,166 |
| Malta— | | | | | | |
| Manufactured | (£22,612) | (£22,220) | (£66,994) | (£111,976) | (£111,976) | (£26,547) |
| Gambia— | | | | | | |
| Cement sheets and pipes | 311 | 13 | 58 | 144 | 146 | <i>n.a.</i> |
| Ghana— | | | | | | |
| Cement sheets, pipes etc. | 10,594 | 70,703 | 58,630 | 9,730 | 9,886 | <i>n.a.</i> |
| Kenya— | | | | | | |
| Manufactured (a) .. | 4,180 | 3,994 | 2,136 | 1,294 | 1,315 | 2,281 |
| Mauritius— | | | | | | |
| Manufactured | 1,164 | 2,552 | 1,537 | 1,023 | 1,039 | 1,438 |
| Nigeria— | | | | | | |
| Cement sheets and pipes | 1,230 | 73 | 62 | 1,258 | 1,278 | 5,219 |
| Unmanufactured .. | 9,708 | 15,036 | 20,036 | 33,899 | 34,443 | 50,598 |
| Sierra Leone— | | | | | | |
| Cement sheets and pipes | 1,809 | 744 | 864 | 580 | 589 | 433 |
| Tanzania— | | | | | | |
| Manufactured (a) .. | 1,420 | 4,717 | 2,076 | 3,498 | 3,554 | 3,287 |
| Uganda— | | | | | | |
| Unmanufactured .. | 764 | 1,276 | 1,926 | 2,429 | 2,468 | 277 |
| Manufactured (a) .. | 841 | 1,392 | 1,598 | 1,212 | 1,232 | 722 |
| Zambia— | | | | | | |
| Unmanufactured .. | 759 | 125 | — | 15,361 | 15,607 | <i>n.a.</i> |
| Cement products .. | 3,639 | 5,966 | 4,679 | 2,754 | 2,798 | <i>n.a.</i> |
| Canada— | | | | | | |
| Unmanufactured .. | 6,512 | 5,296 | 6,651 | 5,208 | 5,292 | 5,977 |
| Packing | 628 | 594 | 547 | 660 | 671 | 617 |
| Other manufactures .. | (£2,829,464) | (£3,445,618) | (£4,124,000) | (£3,669,900) | (£3,669,900) | (£5,050,112) |
| Barbados— | | | | | | |
| Manufactured | 17 | 139 | 120 | 112 | 114 | <i>n.a.</i> |
| Bermuda— | | | | | | |
| Sheets, etc. | (£13,752) | (£19,434) | (£21,122) | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Grenada— | | | | | | |
| Manufactured | 7 | 4 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Jamaica— | | | | | | |
| Unmanufactured .. | 539 | 838 | 870 | 1,880 | 1,910 | 944 |
| Manufactured | 285 | 272 | 647 | 467 | 474 | 690 |
| Cement products .. | 363 | 91 | 356 | 478 | 486 | <i>n.a.</i> |
| St. Vincent— | | | | | | |
| Cement products .. | 11 | 9 | — | 317 | 322 | <i>n.a.</i> |
| Trinidad and Tobago— | | | | | | |
| Cement products .. | 99 | 291 | 305 | 376 | 382 | 172 |
| Other manufactures .. | 638 | 103 | 132 | 183 | 186 | 299 |
| Guyana— | | | | | | |
| Cement products .. | 915 | 1,036 | 2,176 | 2,163 | 2,198 | 2,395 |
| Other manufactures .. | 314 | 556 | 112 | 142 | 144 | 28 |
| Brunei— | | | | | | |
| Cement products .. | 865 | 3,009 | 3,027 | 5,672 | 5,763 | <i>n.a.</i> |
| Ceylon— | | | | | | |
| Unmanufactured .. | 1,766 | 830 | 6,735 | <i>n.a.</i> | <i>n.a.</i> | 2,971 |
| Cement sheets, etc. .. | 91 | 28 | 338 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Other manufactures .. | 1,820 | 4,134 | 1,295 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Cyprus— | | | | | | |
| Sheets and pipes .. | 6,458 | 4,525 | 12,077 | 7,006 | 7,118 | 4,531 |
| Other manufactures .. | (£50,049) | (£55,562) | (£65,127) | (£80,620) | (£80,620) | (£109,606) |

(a) Including cement products.

IMPORTS OF ASBESTOS (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|---------------------------------------|------------|------------|------------|--------------|--------------|--------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Hong Kong— | | | | | | |
| Unmanufactured .. | 144 | 266 | 215 | 89 | 90 | 111 |
| Manufactured .. | (£130,598) | (£166,893) | (£209,600) | (£226,570) | (£226,570) | (£268,356) |
| Cement products .. | 5,186 | 9,536 | 9,227 | 10,188 | 10,352 | 11,300 |
| India— | | | | | | |
| Unmanufactured .. | 29,315 | 26,251 | 33,078 | 39,138 | 39,766 | 45,111 |
| Manufactured (b) .. | 547 | 353 | 383 | 736 | 747 | 740 |
| Cement products (b) .. | 132 | 115 | 60 | 118 | 120 | 488 |
| Malaysia (West)— | | | | | | |
| Unmanufactured .. | 10,922 | 10,190 | 8,647 | 14,095 | 14,321 | 13,792 |
| Cement products .. | 4,441 | 1,063 | 1,335 | 2,293 | 2,330 | 289 |
| Other manufactures .. | 1,456 | 330 | 347 | 498 | 506 | 409 |
| Sabah— | | | | | | |
| Manufactured .. | 13 | 29 | 11 | 21 | 21 | 17 |
| Cement products .. | 3,328 | 4,066 | 4,567 | 3,932 | 3,995 | 1,398 |
| Sarawak— | | | | | | |
| Cement products .. | 4,425 | 6,058 | 10,804 | n.a. | n.a. | n.a. |
| Other manufactures .. | 15 | 41 | 14 | n.a. | n.a. | n.a. |
| Singapore— | | | | | | |
| Unmanufactured .. | 4,367 | 3,020 | 1,147 | 3,100 | 3,150 | 3,533 |
| Cement products .. | 3,821 | 4,062 | 7,765 | 11,145 | 11,324 | 8,457 |
| Other manufactures .. | 1,631 | 1,244 | 1,560 | 3,660 | 3,718 | 2,944 |
| Australia— | | | | | | |
| Unmanufactured .. | 46,950 | 59,590 | r 50,630 | 67,521 | 68,605 | 21,160 |
| Manufactured (a) .. | (£873,200) | (£910,274) | (£983,000) | (£1,163,843) | (£1,163,843) | (£1,312,240) |
| New Zealand (a)— | | | | | | |
| Unmanufactured .. | 7,950 | 5,851 | 5,757 | 8,525 | 8,662 | 8,337 |
| Manufactured £ | (371,704) | (482,911) | (322,386) | (312,824) | (312,824) | n.a. |
| Cement products £ | (12,459) | (5,797) | (4,625) | (101) | (101) | n.a. |
| Irish Republic— | | | | | | |
| Unmanufactured .. | 4,806 | 3,955 | 6,392 | 4,991 | 5,071 | 5,181 |
| Manufactured .. | 1,172 | 1,397 | 3,026 | 5,588 | 5,677 | 4,430 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Unmanufactured .. | 17,199 | 31,245 | 33,810 | 33,616 | 34,155 | 39,943 |
| Manufactured (c) .. | 713 | 742 | 1,303 | 1,055 | 1,072 | 1,172 |
| Cement products (d) .. | 9,902 | 6,854 | 5,451 | 5,247 | 5,331 | 5,627 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Unmanufactured .. | 54,893 | 60,150 | 63,700 | 53,973 | 54,839 | 70,068 |
| Manufactured (c) .. | 2,656 | 2,332 | 3,163 | 5,248 | 5,332 | 3,694 |
| Cement products (d) .. | 2,692 | 3,712 | 5,651 | 7,088 | 7,202 | 9,322 |
| Czechoslovakia— | | | | | | |
| Unmanufactured .. | 32,538 | 36,323 | 28,767 | 38,400 | 39,017 | 42,011 |
| Denmark— | | | | | | |
| Unmanufactured .. | 23,122 | 24,727 | 24,535 | 28,181 | 28,633 | 26,747 |
| Manufactured (c) .. | 1,540 | 1,916 | 2,664 | 2,136 | 2,170 | 1,789 |
| Cement products (d) .. | 8,617 | 1,571 | 8,100 | 3,656 | 3,715 | 1,812 |
| Finland— | | | | | | |
| Unmanufactured .. | 6,329 | 4,468 | 4,652 | 7,622 | 7,744 | 8,049 |
| Manufactured .. | 1,362 | 1,499 | 2,255 | 2,401 | 2,440 | 2,447 |
| France— | | | | | | |
| Unmanufactured .. | 124,741 | 126,583 | 133,003 | 149,450 | 151,848 | 128,980 |
| Manufactured (c) .. | 2,967 | 3,213 | 5,538 | 5,518 | 5,607 | 8,085 |
| Cement products (d) .. | 120,298 | 130,965 | 113,406 | 111,062 | 112,844 | 119,078 |

(a) Years ended June 30 of that stated.

(d) Including manufactures of other fibro-cements.

(b) Years ended March 31 following that stated.

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

IMPORTS OF ASBESTOS (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|---------|---------|---------|---------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Germany (Federal)— | | | | | | |
| Unmanufactured .. | 123,812 | 185,140 | 162,127 | 172,838 | 175,612 | 167,941 |
| Manufactured (a) .. | 6,572 | 10,029 | 12,788 | 13,918 | 14,141 | 11,665 |
| Cement products (b) .. | 88,551 | 105,325 | 106,426 | 105,255 | 106,944 | 128,046 |
| Germany (East)— | | | | | | |
| Unmanufactured .. | 37,734 | 36,491 | 45,657 | 51,193 | 52,015 | 58,342 |
| Greece— | | | | | | |
| Unmanufactured .. | 5,427 | 8,331 | 11,430 | 17,530 | 17,811 | 16,100 |
| Manufactured (a) (c) .. | 5,009 | 6,613 | 3,104 | 1,496 | 1,520 | 1,442 |
| Hungary— | | | | | | |
| Unmanufactured .. | 13,891 | n.a. | n.a. | 14,995 | 15,236 | n.a. |
| Iceland— | | | | | | |
| Unmanufactured .. | 7 | 11 | 7 | 1,012 | 1,028 | 13 |
| Manufactured .. | 205 | 176 | 283 | 95 | 97 | 198 |
| Italy— | | | | | | |
| Unmanufactured .. | 44,712 | 50,463 | 57,257 | 61,416 | 62,402 | 63,894 |
| Manufactured (a) .. | 4,288 | 2,312 | 5,933 | 7,517 | 7,638 | 6,358 |
| Cement products (b) .. | 11,074 | 9,945 | 19,810 | 12,120 | 12,314 | 13,355 |
| Netherlands— | | | | | | |
| Unmanufactured .. | 17,802 | 22,939 | 20,327 | 19,746 | 20,063 | 23,869 |
| Manufactured (a) .. | 4,922 | 6,407 | 5,475 | 6,556 | 6,661 | 6,331 |
| Cement products (b) .. | 92,732 | 97,056 | 115,427 | 128,721 | 130,787 | 85,063 |
| Norway— | | | | | | |
| Unmanufactured .. | 5,593 | 4,650 | 6,835 | 7,856 | 7,982 | 5,733 |
| Manufactured (a) .. | 2,167 | 2,029 | 2,215 | 3,056 | 3,105 | 3,915 |
| Cement products (b) .. | 14,862 | 15,330 | 19,686 | 23,465 | 23,842 | 12,590 |
| Poland— | | | | | | |
| Unmanufactured .. | 41,959 | 41,574 | 56,153 | 63,368 | 64,385 | 67,252 |
| Portugal— | | | | | | |
| Unmanufactured .. | 4,233 | 4,201 | 3,418 | 6,406 | 6,509 | 5,780 |
| Manufactured (a) (b) .. | 568 | 586 | 856 | 1,465 | 1,489 | 2,133 |
| Spain— | | | | | | |
| Unmanufactured .. | 46,750 | 61,779 | 84,096 | 76,450 | 77,677 | 65,188 |
| Manufactured (a) (b) .. | 2,426 | 2,148 | 1,964 | 2,498 | 2,538 | 2,934 |
| Sweden— | | | | | | |
| Unmanufactured .. | 13,320 | 18,435 | 15,848 | 18,533 | 18,830 | 13,231 |
| Manufactured (a) .. | 4,067 | 3,995 | 4,947 | 5,250 | 5,334 | 4,439 |
| Cement products .. | 10,399 | 11,675 | 10,141 | 9,161 | 9,308 | 7,935 |
| Switzerland— | | | | | | |
| Unmanufactured .. | 12,511 | 14,762 | 15,465 | 17,441 | 17,721 | 19,898 |
| Manufactured (a) .. | 2,379 | 2,629 | 2,985 | 3,078 | 3,127 | 3,575 |
| Cement products (b) .. | 1,932 | 1,168 | 1,324 | 3,536 | 3,593 | 12,905 |
| Yugoslavia— | | | | | | |
| Unmanufactured .. | 18,349 | 16,855 | 26,044 | 28,101 | 28,552 | 38,678 |
| Manufactured .. | 633 | 1,730 | 1,130 | 875 | 889 | 1,051 |
| Cement products .. | 12,196 | 2,617 | 7,804 | 41,943 | 42,616 | 86,470 |
| Algeria— | | | | | | |
| Unmanufactured .. | 1,797 | 1,440 | 3,659 | 2,249 | 2,285 | n.a. |
| Angola— | | | | | | |
| Unmanufactured .. | 1,425 | 549 | 398 | 1,059 | 1,076 | 1,312 |
| Manufactured (a) .. | 154 | 130 | 170 | 169 | 172 | 204 |
| Egypt— | | | | | | |
| Unmanufactured .. | 5,440 | 3,896 | 2,717 | 6,505 | 6,609 | 6,819 |
| Manufactured .. | 276 | 222 | 387 | 630 | 640 | 627 |
| Ethiopia— | | | | | | |
| Manufactured (a) .. | 1,602 | 542 | 29 | 133 | 135 | 297 |
| Cement products (b) .. | n.a. | 1,437 | 349 | 1,228 | 1,248 | 118 |
| Libya— | | | | | | |
| Unmanufactured .. | 28 | 58 | 435 | 531 | 540 | n.a. |
| Manufactured .. | 53 | 65 | 187 | 45 | 46 | n.a. |

(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.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|--------------|--------------|------------|------------|------------|------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Malagasy Republic— | | | | | | |
| Manufactured (a) .. | 89 | 91 | 114 | 128 | 130 | n.a. |
| Cement products .. | 670 | 1,254 | 1,764 | 1,313 | 1,334 | n.a. |
| Morocco— | | | | | | |
| Unmanufactured .. | 2,104 | 2,188 | 2,505 | 3,495 | 3,551 | 3,638 |
| Manufactured (a) .. | 187 | 52 | 223 | 238 | 242 | 222 |
| Cement products .. | 2 | 1 | — | — | — | 101 |
| Mozambique— | | | | | | |
| Unmanufactured .. | 1,053 | 501 | 193 | 741 | 753 | n.a. |
| Manufactured .. | 71 | 66 | 69 | 106 | 108 | n.a. |
| Senegal— | | | | | | |
| Unmanufactured .. | 483 | 750 | 467 | 786 | 799 | 1,016 |
| Cement products .. | 917 | 882 | 418 | 439 | 446 | 632 |
| South Africa— | | | | | | |
| Unmanufactured .. | 13,772 | 12,920 | 15,154 | 16,920 | 17,191 | 11,792 |
| Packing | (d) | (d) | (d) | (d) | (d) | (d) |
| Cement products .. | 595 | 326 | 531 | 977 | 993 | 6,719 |
| Other manufactures .. | (£1,006,158) | (£1,014,549) | (£659,620) | (£869,180) | (£869,180) | (£983,473) |
| Sudan— | | | | | | |
| Manufactured | 3 | 1,195 | 2,599 | 296 | 301 | 157 |
| Tunisia— | | | | | | |
| Unmanufactured .. | 2,131 | 1,068 | 1,959 | 1,738 | 1,766 | 1,859 |
| Manufactured (a) .. | 96 | 93 | 63 | 134 | 136 | 258 |
| Cement products (b) .. | 628 | 1,395 | 2,506 | 78 | 79 | 1,601 |
| Costa Rica— | | | | | | |
| Unmanufactured .. | 251 | 293 | 450 | 724 | 736 | 673 |
| Manufactured | 163 | 74 | 102 | 115 | 117 | 137 |
| Guatemala— | | | | | | |
| Unmanufactured .. | 541 | 361 | 897 | 450 | 457 | 674 |
| Manufactured (c) .. | 157 | 189 | 376 | 220 | 224 | 225 |
| Honduras— | | | | | | |
| Manufactured | 64 | 117 | 122 | — | — | n.a. |
| Mexico— | | | | | | |
| Unmanufactured .. | 30,085 | 33,274 | 36,237 | 39,821 | 40,460 | 38,320 |
| Manufactured | 318 | 245 | 109 | 675 | 686 | 359 |
| Netherlands Antilles— | | | | | | |
| Manufactured | 217 | 247 | 223 | 330 | 336 | n.a. |
| Cement sheets | 2,084 | 2,748 | 3,021 | 3,526 | 3,583 | n.a. |
| Nicaragua— | | | | | | |
| Unmanufactured .. | 69 | 167 | 151 | 311 | 316 | 325 |
| Manufactured | 56 | 64 | 75 | 59 | 60 | 215 |
| Panama Republic— | | | | | | |
| Unmanufactured .. | 232 | 8 | 48 | 144 | 146 | 167 |
| Manufactured | 69 | 59 | 183 | 309 | 314 | 111 |
| Cement products .. | 5 | r 5 | 2 | n.a. | n.a. | 2 |
| Salvador— | | | | | | |
| Unmanufactured .. | 679 | 1,003 | 742 | 948 | 963 | 1,326 |
| Manufactured | 6 | 33 | 29 | 24 | 24 | 11 |
| United States— | | | | | | |
| Unmanufactured— | | | | | | |
| Crude | 33,600 | 34,124 | 29,300 | 21,488 | 21,833 | 21,585 |
| Mill fibre | 14,270 | 15,255 | 14,262 | 15,343 | 15,589 | 10,559 |
| Other | 528,123 | 609,469 | 576,578 | 542,992 | 551,705 | 585,982 |
| Manufactured | 26,630 | 40,443 | 44,735 | 37,441 | 38,042 | 33,709 |
| Argentina— | | | | | | |
| Unmanufactured .. | 14,201 | 16,366 | 16,191 | 20,772 | 21,106 | 22,026 |
| Manufactured | 221 | 254 | 410 | 334 | 339 | 288 |
| Brazil— | | | | | | |
| Unmanufactured .. | 17,227 | 27,150 | 20,376 | 23,043 | 23,413 | n.a. |
| Manufactured | 383 | 726 | 965 | 1,617 | 1,643 | n.a. |

(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 Tonnes

| Importing Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|-----------------------------------|----------|----------|---------|---------|---------|---------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Chile— | | | | | | |
| Unmanufactured .. | 8,853 | 8,520 | 10,644 | 8,661 | 8,800 | n.a. |
| Manufactured .. | 352 | 418 | 360 | 716 | 727 | n.a. |
| Cement products .. | n.a. | 58 | 443 | 93 | 95 | n.a. |
| Colombia— | | | | | | |
| Unmanufactured .. | r 13,751 | r 14,024 | 12,121 | 16,498 | 16,763 | n.a. |
| Manufactured .. | r 417 | r 394 | 776 | n.a. | n.a. | n.a. |
| Cement products .. | — | 5 | — | n.a. | n.a. | n.a. |
| Ecuador— | | | | | | |
| Unmanufactured .. | 613 | 890 | n.a. | n.a. | n.a. | n.a. |
| Manufactured .. | 237 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Peru— | | | | | | |
| Unmanufactured .. | 4,098 | 3,875 | 2,652 | n.a. | n.a. | n.a. |
| Manufactured .. | 405 | 358 | 430 | n.a. | n.a. | n.a. |
| Uruguay .. | 1,077 | 1,145 | 766 | 1,964 | 1,996 | 1,312 |
| Venezuela— | | | | | | |
| Unmanufactured .. | 4,932 | 5,575 | 4,599 | n.a. | n.a. | n.a. |
| Manufactured .. | 388 | 388 | 974 | n.a. | n.a. | n.a. |
| Cement products .. | 18,379 | 4,553 | 1,960 | n.a. | n.a. | n.a. |
| Burma— | | | | | | |
| Unmanufactured .. | 1 | 1,418 | 1,103 | 1,442 | 1,465 | 277 |
| Manufactured .. | n.a. | n.a. | 137 | 102 | 104 | 91 |
| Formosa— | | | | | | |
| Unmanufactured .. | 2,277 | 3,298 | 5,855 | 6,485 | 6,589 | n.a. |
| Manufactured .. | 392 | 400 | 539 | 742 | 754 | n.a. |
| Iran (a)— | | | | | | |
| Unmanufactured .. | 5,713 | 5,821 | 6,601 | 11,020 | 11,197 | 10,514 |
| Manufactured .. | 431 | 490 | 549 | 477 | 485 | 853 |
| Cement products .. | 394 | 623 | 340 | 201 | 204 | 687 |
| Iraq— | | | | | | |
| Unmanufactured .. | 595 | 1,165 | 2,728 | 2,000 | 2,000 | n.a. |
| Manufactured .. | 179 | 249 | 305 | 486 | 494 | n.a. |
| Cement products .. | 226 | 336 | 660 | n.a. | n.a. | n.a. |
| Israel— | | | | | | |
| Unmanufactured .. | 4,202 | 8,220 | 8,450 | 7,469 | 7,589 | 9,435 |
| Japan— | | | | | | |
| Unmanufactured .. | 185,760 | 196,266 | 233,427 | 293,543 | 298,253 | 273,757 |
| Manufactured .. | 1,141 | 786 | 1,220 | 1,408 | 1,431 | 1,776 |
| Cement products .. | 228 | 240 | 365 | 576 | 585 | 1,125 |
| Jordan— | | | | | | |
| Manufactured (b) .. | n.a. | 444 | 291 | 30 | 30 | 30 |
| Cement products .. | 929 | 2,264 | 4,622 | 828 | 841 | 953 |
| Korea (South)— | | | | | | |
| Unmanufactured .. | 21,685 | 24,816 | 27,196 | 34,735 | 35,292 | 38,028 |
| Lebanon— | | | | | | |
| Unmanufactured .. | 4,944 | 6,542 | 5,928 | 6,317 | 6,418 | 3,147 |
| Manufactured .. | 156 | 197 | 345 | 280 | 284 | 325 |
| Cement products .. | 78 | 21 | 200 | 255 | 259 | — |
| Philippine Republic— | | | | | | |
| Unmanufactured .. | 1,808 | 1,101 | 2,547 | 3,251 | 3,303 | 1,903 |
| Manufactured .. | 118 | r 133 | 2,317 | 1,071 | 1,088 | 2,132 |
| Cement products .. | 16 | 2 | 27 | 38 | 39 | 53 |
| Syria— | | | | | | |
| Cement sheets .. | 4,111 | 2,236 | 2,545 | 742 | 754 | 179 |
| Other manufactures .. | 100 | r 406 | 316 | 132 | 134 | 401 |
| Thailand— | | | | | | |
| Unmanufactured .. | 20,132 | 18,578 | 23,402 | 20,936 | 21,272 | 33,424 |
| Manufactured .. | 859 | 804 | 779 | 2,212 | 2,247 | 1,309 |
| Cement products .. | 2,752 | 2,671 | 2,851 | 818 | 831 | 279 |
| Turkey— | | | | | | |
| Unmanufactured .. | 5,791 | 8,180 | 9,913 | 7,427 | 7,546 | n.a. |
| Manufactured .. | 648 | 257 | 296 | 344 | 350 | n.a. |
| Cement products .. | 14 | 5 | 41 | 39 | 40 | n.a. |

(a) Years ended March 20 following that stated.

(b) Including brake and clutch linings of materials other than asbestos.

BARIUM MINERALS

PRODUCTION OF BARIUM MINERALS*

| Producing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Barytes, unground .. | 4,000 | 1,000 | 1,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| do. ground .. | 26,000 | 25,000 | 16,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Witherite .. | 6,000 | 5,000 | 2,000 | — | — | — |
| Kenya .. | 209 | 345 | 428 | 440 | 447 | 743 |
| Swaziland .. | 556 | 876 | 561 | 333 | 338 | 144 |
| Canada .. | 153,812 | 123,267 | 127,884 | 131,474 | 133,584 | 124,300 |
| India .. | 52,179 | 50,900 | 64,444 | 73,661 | 74,843 | 58,136 |
| Pakistan .. | 6,218 | 10,193 | 4,900 | 5,900 | 6,000 | (a) 2,500 |
| Australia .. | 15,666 | 39,197 | 39,562 | 42,137 | 42,813 | 27,357 |
| Irish Republic .. | 69,610 | 133,080 | 157,970 | (a) 157,000 | (a) 160,000 | (a) 150,000 |
| OTHER COUNTRIES | | | | | | |
| Austria .. | 2,389 | 1,437 | 696 | 310 | 315 | 789 |
| France .. | 100,386 | 89,562 | 93,500 | 103,300 | 105,000 | 110,000 |
| Germany (Federal) .. | 403,187 | 424,637 | 435,529 | 409,446 | 416,016 | 411,082 |
| Greece .. | 146,000 | 185,030 | 232,200 | 102,000 | 103,600 | 138,900 |
| Italy .. | r 154,104 | r 203,833 | r 241,942 | 219,538 | 223,061 | 201,526 |
| Poland (c) .. | 46,000 | 46,000 | 49,000 | 49,000 | 50,000 | 55,000 |
| Portugal .. | 311 | 315 | 106 | 1,063 | 1,080 | 1,150 |
| Spain .. | 49,337 | 63,984 | 67,502 | 92,563 | 94,048 | (c) 85,000 |
| U.S.S.R. (c) .. | 260,000 | 260,000 | 276,000 | 280,000 | 285,000 | 299,000 |
| Yugoslavia .. | 83,144 | 69,323 | r 80,223 | 78,470 | 79,729 | 64,690 |
| Algeria .. | 30,904 | 44,275 | 50,896 | 50,827 | 51,643 | 36,500 |
| Egypt .. | 1,262 | 367 | (c) 400 | 212 | 215 | 291 |
| Morocco .. | 89,088 | 76,926 | 85,567 | 83,411 | 84,750 | 84,474 |
| South Africa .. | 1,470 | 511 | 3,457 | 2,856 | 2,902 | 2,962 |
| Mexico .. | 219,754 | 242,645 | 174,127 | 314,052 | 319,089 | 279,742 |
| United States (d) .. | 842,930 | 827,437 | 961,793 | 762,613 | 774,850 | 748,000 |
| Argentina .. | 21,704 | 23,813 | 26,563 | 26,169 | 26,589 | (c) 25,000 |
| Brazil .. | 84,647 | 42,385 | 46,200 | 25,200 | 25,600 | (c) 43,000 |
| Chile .. | 4,430 | 3,920 | 7,879 | 1,500 | 1,500 | 1,282 |
| Colombia .. | 5,900 | 6,889 | 12,242 | 6,713 | 6,821 | 5,790 |
| Peru .. | 183,653 | 33,370 | 146,488 | 127,942 | 129,994 | 130,000 |
| Burma (c) .. | 9,300 | 9,400 | 9,550 | 13,247 | 13,460 | 22,960 |
| China (c) .. | 100,000 | 118,000 | 137,000 | 147,000 | 149,000 | 140,000 |
| Iran (b) .. | (c) 89,000 | r 52,477 | r 57,693 | 59,268 | 60,219 | (c) 60,000 |
| Japan .. | 36,979 | 54,534 | 61,304 | 64,888 | 65,929 | 57,886 |
| Korea (South) .. | — | 5 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Korea (North) (c) .. | 100,000 | 100,000 | 118,000 | 120,000 | 120,000 | 120,000 |
| Thailand .. | — | — | — | 16,230 | 16,490 | 63,539 |
| Turkey .. | 31,713 | 19,645 | 29,263 | 28,583 | 29,042 | 29,000 |
| TOTAL† .. | 3,300,000 | 3,500,000 | 3,600,000 | 3,400,000 | 3,500,000 | 3,400,000 |

*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.

(d) Sold or used by producers.

EXPORTS OF BARIUM MINERALS, ETC.*

Long tons Tonnes

| Exporting Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Barytes and witherite— | | | | | | |
| Unground | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 512 | 520 | 286 |
| Ground | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 907 | 922 | 1,452 |
| Canada— | | | | | | |
| Barytes | 130,449 | 104,010 | 96,973 | 88,879 | 90,305 | 67,022 |
| India— | | | | | | |
| Unground barytes .. | 6,503 | 2,819 | 13,542 | 20,160 | 20,484 | 36,996 |
| Pakistan (a)— | | | | | | |
| Barytes | 2,811 | 3,920 | 2,712 | 4,475 | 4,547 | 356 |
| Australia— | | | | | | |
| Ground barytes .. | 4,174 | 19,564 | r 22,060 | 29,705 | 30,182 | 16,262 |
| Irish Republic— | | | | | | |
| Unground barytes .. | 73,584 | 140,006 | 153,964 | 218,634 | 222,143 | 192,281 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Barytes and witherite .. | 60 | — | 69 | — | — | — |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Barytes and witherite .. | 45 | 62 | 91 | 167 | 170 | 251 |
| Sulphate | 79 | 10 | 44 | 60 | 61 | 6 |
| Carbonate | — | — | — | 25 | 25 | 22 |
| Chloride | — | 27 | 1 | 25 | 25 | 29 |
| France— | | | | | | |
| Barytes | 17,848 | 14,821 | 14,165 | 18,753 | 19,054 | 21,291 |
| Witherite | 21 | 3 | 23 | — | — | 23 |
| Chloride | 11,449 | 10,006 | 14,896 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Carbonate | 1,566 | 6,704 | 3,338 | 1,813 | 1,842 | 1,407 |
| Sulphate | 2,619 | 2,778 | 5,089 | 8,269 | 8,402 | 7,631 |
| Germany (Federal)— | | | | | | |
| Barytes and witherite .. | 107,209 | 118,712 | 115,551 | 109,923 | 111,687 | 122,452 |
| Carbonate | 27,570 | 26,700 | 33,651 | 38,792 | 39,415 | <i>n.a.</i> |
| Sulphate | 21,726 | 23,336 | 23,981 | 22,492 | 22,853 | 25,426 |
| Greece— | | | | | | |
| Barytes | 61,855 | 64,816 | 73,194 | 46,088 | 46,828 | 120,568 |
| Italy— | | | | | | |
| Barytes | 40,256 | 30,794 | 51,737 | 52,634 | 53,479 | 34,968 |
| Witherite | — | 198 | 25 | 240 | 244 | 78 |
| Carbonate | 1,096 | 6,522 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Chloride | 6,065 | 5,351 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sulphate | 119 | 314 | 563 | 637 | 647 | 380 |
| Netherlands— | | | | | | |
| Barytes | 1,696 | 444 | 1,831 | 258 | 262 | (b) 3,367 |
| Carbonate | 109 | 168 | 218 | 458 | 465 | 783 |
| Chloride | 64 | 49 | 49 | 61 | 62 | <i>n.a.</i> |
| Sulphate | 2,633 | 3,002 | 2,731 | 2,327 | 2,364 | 1,842 |
| Portugal— | | | | | | |
| Barytes and witherite .. | 6 | 10 | — | 10 | 10 | 3 |
| Spain— | | | | | | |
| Barytes | 22,787 | 49,358 | 40,966 | 47,693 | 48,458 | 60,457 |
| Carbonate | 177 | 153 | 123 | 10 | 10 | — |
| Yugoslavia— | | | | | | |
| Unground barytes .. | 29,771 | 35,354 | 39,530 | 23,768 | 24,149 | 27,918 |
| Ground barytes .. | 14,547 | 15,917 | 12,560 | 18,311 | 18,605 | 18,189 |
| Algeria— | | | | | | |
| Barytes | 28,739 | 7,871 | 9,350 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |

*For Lithopone, see "Zinc".

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

(b) Excludes exports to Belgium and Luxemburg, if any.

EXPORTS OF BARIUM MINERALS, ETC. (cont.)

| Exporting Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|--------|---------|---------|---------|--------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Morocco— | | | | | | |
| Barytes | 87,708 | 80,298 | 85,559 | 69,674 | 70,792 | 30,863 |
| South Africa— | | | | | | |
| Barytes | — | — | 4 | — | — | — |
| Mexico— | | | | | | |
| Barytes | 117,280 | 97,790 | 111,707 | 115,496 | 117,349 | 93,421 |
| Argentina— | | | | | | |
| Barytes | 10 | 1,243 | 98 | 162 | 165 | 15 |
| Brazil— | | | | | | |
| Barytes | 48,293 | 12,098 | 18,003 | 18,052 | 18,342 | n.a. |
| Peru— | | | | | | |
| Barytes | 66,374 | 85,007 | 105,134 | n.a. | n.a. | n.a. |
| Iran (a)— | | | | | | |
| Witherite | 444 | 9,755 | 4,145 | 8,319 | 8,452 | 13,604 |
| Japan— | | | | | | |
| Barytes and witherite .. | 1,636 | 2,897 | 3,447 | n.a. | n.a. | 210 |
| Chloride | 1,809 | 1,787 | 355 | 279 | 283 | 176 |
| Sulphate | 291 | 405 | 516 | 592 | 601 | 244 |
| Thailand— | | | | | | |
| Barytes | — | — | — | 2,700 | 2,700 | 3,450 |
| Turkey— | | | | | | |
| Barytes | 270 | 16,419 | 25,074 | 26,361 | 26,784 | n.a. |

(a) Years ended March 20 following that stated.

IMPORTS OF BARIUM MINERALS, ETC.*

Long tons | Tonnes

| Importing Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Unground barytes .. | 30,647 | 17,874 | 30,762 | 53,281 | 54,136 | 46,996 |
| Ground barytes .. | 20,208 | 14,910 | 24,839 | 11,346 | 11,528 | 14,360 |
| Chloride (c) | <i>n.a.</i> | 2,907 | 3,138 | 4,353 | 4,423 | 3,966 |
| Sulphate (c) | <i>n.a.</i> | 6,537 | 5,688 | 5,702 | 5,793 | 6,546 |
| Canada— | | | | | | |
| Barytes | 5,289 | 7,054 | 5,574 | 6,719 | 6,827 | 10,280 |
| Carbonate | 3,528 | 3,121 | 3,575 | 3,212 | 3,264 | 3,404 |
| Trinidad and Tobago— | | | | | | |
| Barytes | 44,106 | 14,646 | (d) 176 | 6,900 | 7,010 | 13,730 |
| India (a)— | | | | | | |
| Barytes | 9 | — | — | — | — | — |
| Carbonate | 11 | 5 | 12 | 12 | 12 | 15 |
| Chloride | 23 | — | — | — | — | — |
| Sulphate | 198 | 125 | 10 | 29 | 29 | 20 |
| Australia (b)— | | | | | | |
| Witherite | 78 | 75 | 1,571 | 34 | 35 | — |
| Barytes ground .. | 299 | 869 | | | | |
| Barytes unground .. | 1,169 | 749 | 1,037 | 1,825 | 1,854 | 503 |
| Carbonate | 920 | 946 | | | | |
| Chloride | 1,564 | 1,548 | 1,333 | 766 | 778 | 1,279 |
| Sulphate incl. blanc fixe | 297 | 610 | 344 | 386 | 392 | 315 |
| New Zealand (b)— | | | | | | |
| Barytes and witherite .. | 2,267 | 859 | 1,553 | 5,809 | 5,902 | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Barytes and witherite .. | 7,280 | 5,633 | 8,326 | 8,084 | 8,214 | 6,628 |
| Carbonate | 1,128 | 947 | 976 | 810 | 823 | 737 |
| Chloride | 286 | 360 | 364 | 430 | 437 | 370 |
| Sulphate | 442 | 558 | 435 | 486 | 494 | 776 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Barytes | 5,259 | 5,348 | 5,551 | 5,457 | 5,545 | 6,373 |
| Witherite | 629 | 630 | 454 | 904 | 919 | 186 |
| Sulphate | 1,683 | 2,012 | 2,271 | 3,707 | 3,767 | 2,952 |
| Carbonate | 1,022 | 630 | 1,616 | 1,526 | 1,551 | 1,819 |
| Chloride | 1,792 | 1,999 | 2,410 | 3,038 | 3,087 | 3,125 |
| Denmark— | | | | | | |
| Barytes | 1,912 | 922 | 1,107 | 800 | 813 | 1,348 |
| Carbonate | 556 | 476 | 545 | 666 | 677 | 751 |
| Chloride | 228 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sulphate | 210 | 299 | 206 | 192 | 195 | 414 |
| Finland— | | | | | | |
| Barytes | 636 | 482 | 484 | 518 | 526 | 814 |
| Witherite | | | | | | |
| Chloride | 143 | 302 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Carbonate | 719 | 1,033 | 1,026 | 1,614 | 1,640 | 1,692 |
| Sulphate | 1,282 | 2,067 | 1,710 | 1,310 | 1,331 | 1,865 |
| France— | | | | | | |
| Barytes | 87,278 | 79,242 | 78,072 | 86,031 | 87,412 | 80,286 |
| Witherite | 9 | 23 | 24 | 2 | 2 | 1 |
| Chloride | 947 | 315 | — | — | — | — |
| Carbonate | 823 | 110 | 73 | 498 | 506 | 354 |
| Sulphate | 1,681 | 2,102 | 2,045 | 1,859 | 1,889 | 1,826 |

*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.

(d) Excess of re-exports.

IMPORTS OF BARIUM MINERALS, ETC. (cont.)

Long tons Tonnes

| Importing Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 | |
|-----------------------------------|----------|---------|-----------|---------|---------|---------|-------|
| OTHER COUNTRIES | | | | | | | |
| (cont.) | | | | | | | |
| Germany (Federal)— | | | | | | | |
| Barytes and witherite .. | 38,660 | 43,398 | 59,589 | 95,861 | 97,399 | 99,960 | |
| Carbonate | 3,081 | 3,254 | 7,050 | 7,453 | 7,573 | n.a. | |
| Sulphate | 446 | 2,362 | 2,945 | 3,073 | 3,122 | 3,219 | |
| Greece— | | | | | | | |
| Sulphate | 367 | 328 | 388 | 340 | 346 | 318 | |
| Iceland— | | | | | | | |
| Sulphate | 59 | 73 | 131 | 196 | 199 | 250 | |
| Italy— | | | | | | | |
| Barytes | 6,552 | 11,078 | 5,745 | 24,355 | 24,746 | 19,721 | |
| Witherite | 22 | 42 | — | — | — | 30 | |
| Carbonate | 49 | 878 | 730 | 538 | 547 | 1,082 | |
| Chloride | 1 | — | 14 | — | — | 10 | |
| Sulphate | 1,662 | 1,874 | 1,777 | 1,145 | 1,163 | 1,307 | |
| Netherlands— | | | | | | | |
| Barytes and witherite .. | } 20,819 | 29,600 | 34,024 | 26,164 | 26,584 | 41,292 | |
| Barytes, ground | | | | | | | |
| Carbonate | | 4,161 | 5,811 | 5,974 | 5,484 | 5,572 | 5,740 |
| Chloride | | 334 | 337 | 352 | 373 | 379 | 362 |
| Sulphate | 953 | 857 | 1,232 | 1,213 | 1,233 | 1,588 | |
| Norway— | | | | | | | |
| Barytes and witherite .. | 1,168 | 16,069 | 16,046 | 20,466 | 20,795 | 21,830 | |
| Carbonate | 563 | 539 | 705 | 915 | 930 | 947 | |
| Chloride | 308 | n.a. | n.a. | n.a. | n.a. | n.a. | |
| Sulphate | 107 | 209 | 139 | 129 | 131 | 84 | |
| Poland— | | | | | | | |
| Barytes | 26,082 | 12,196 | 16,874 | 24,975 | 25,376 | 14,045 | |
| Portugal— | | | | | | | |
| Barytes and witherite .. | 293 | 205 | 294 | 237 | 241 | 362 | |
| Chloride | 3 | — | 197 | 362 | 368 | 102 | |
| Sulphate | 108 | 149 | 164 | 122 | 124 | 165 | |
| Spain— | | | | | | | |
| Barytes | 341 | 670 | 932 | 884 | 898 | 1,095 | |
| Sulphate | 331 | 795 | 1,288 | 1,484 | 1,508 | 1,433 | |
| Sweden— | | | | | | | |
| Barytes and witherite .. | 1,660 | 1,265 | 1,547 | 2,066 | 2,099 | 2,284 | |
| Carbonate | 3,017 | 3,824 | 3,838 | 3,358 | 3,412 | 3,467 | |
| Chloride | 497 | 534 | 383 | 553 | 562 | 628 | |
| Sulphate | 2,790 | 2,822 | 3,372 | 3,160 | 3,211 | 3,595 | |
| Switzerland— | | | | | | | |
| Barytes and witherite .. | 2,214 | 1,797 | 1,741 | 2,565 | 2,606 | 2,403 | |
| Sulphate | 1,617 | 1,636 | 2,202 | 2,072 | 2,105 | 2,262 | |
| U.S.S.R.— | | | | | | | |
| Barytes | 140,839 | 176,960 | 140,400 | 149,400 | 151,800 | 190,100 | |
| Carbonate | 9,400 | 13,600 | 14,500 | 16,100 | 16,400 | 16,800 | |
| Malagasy Republic— | | | | | | | |
| Barytes and witherite .. | 5 | 146 | — | 11 | 11 | n.a. | |
| Senegal— | | | | | | | |
| Barytes | 126 | 1,121 | 107 | 910 | 925 | 516 | |
| South Africa— | | | | | | | |
| Barytes | 2,826 | 3,424 | 4,317 | 1,730 | 1,758 | 2,459 | |
| Tunisia— | | | | | | | |
| Barytes | 2,845 | 2,135 | 2,543 | 2,800 | 2,845 | 2,201 | |
| Mexico— | | | | | | | |
| Barytes | 454 | 464 | 45 | 94 | 96 | 111 | |
| Witherite | 279 | 343 | 54 | — | — | n.a. | |
| Carbonate | 484 | 281 | 392 | 289 | 294 | 2 | |
| Chloride | 371 | 414 | 552 | 997 | 1,013 | 967 | |
| United States— | | | | | | | |
| Unground barytes .. | 475,188 | 591,701 | r 548,409 | 630,358 | 640,473 | 439,000 | |
| Ground barytes | — | — | 2,000 | 1,000 | 1,000 | n.a. | |
| Witherite | 1,125 | 1,812 | 408 | 162 | 165 | 464 | |
| Carbonate | 726 | 586 | 791 | 1,265 | 1,285 | 1,016 | |
| Chloride | 874 | 1,262 | 966 | 1,391 | 1,413 | 1,312 | |
| Sulphate | 2,008 | 2,485 | 2,415 | 2,559 | 2,600 | 3,195 | |

IMPORTS OF BARIUM MINERALS, ETC. (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|--------|--------|--------|--------|-------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Argentina— | | | | | | |
| Barytes and witherite .. | 19 | 69 | 117 | 39 | 40 | 91 |
| Sulphate | 204 | 202 | 254 | 212 | 215 | 297 |
| Barium compounds .. | 19 | 69 | 13 | 28 | 28 | 17 |
| Brazil— | | | | | | |
| Barytes | 7 | 83 | 25 | 30 | 30 | n.a. |
| Carbonate | 3,598 | 3,427 | 3,407 | 3,910 | 3,973 | n.a. |
| Chloride | 863 | 749 | 1,196 | 328 | 333 | n.a. |
| Sulphate | 295 | 707 | 591 | 589 | 598 | n.a. |
| Chile— | | | | | | |
| Barytes | 1,357 | 19 | 16 | 15 | 15 | n.a. |
| Witherite | 31 | 8 | n.a. | 109 | 111 | n.a. |
| Carbonate r | 193 | 139 | 152 | 195 | 198 | n.a. |
| Sulphate | 35 | 48 | 34 | 66 | 67 | n.a. |
| Colombia— | | | | | | |
| Carbonate r | 276 | r 339 | 222 | n.a. | n.a. | n.a. |
| Chloride r | 43 | 37 | 123 | n.a. | n.a. | n.a. |
| Sulphate r | 110 | r 49 | 37 | n.a. | n.a. | n.a. |
| Ecuador— | | | | | | |
| Sulphate | 23 | 10 | n.a. | n.a. | n.a. | n.a. |
| Peru— | | | | | | |
| Barytes and witherite .. | 303 | 199 | 244 | n.a. | n.a. | n.a. |
| Carbonate | 279 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Chloride | 90 | 18 | 40 | n.a. | n.a. | n.a. |
| Sulphate | 27 | 20 | 37 | n.a. | n.a. | n.a. |
| Uruguay— | | | | | | |
| Sulphate | 10 | 3 | 17 | 5 | 5 | 3 |
| Venezuela— | | | | | | |
| Barytes | 8,040 | 14,693 | 12,410 | n.a. | n.a. | n.a. |
| Carbonate | 62 | 54 | 43 | n.a. | n.a. | n.a. |
| Chloride | 263 | 141 | 204 | n.a. | n.a. | n.a. |
| Sulphate | 171 | 208 | 163 | n.a. | n.a. | n.a. |
| Formosa— | | | | | | |
| Carbonate | 178 | 238 | 337 | 374 | 380 | n.a. |
| Chloride | 158 | 203 | 47 | 230 | 234 | n.a. |
| Iraq— | | | | | | |
| Barytes | 64 | 1,990 | 10 | 152 | 154 | n.a. |
| Israel— | | | | | | |
| Barytes and witherite .. | 991 | 750 | 4,042 | 3,340 | 3,394 | 2,528 |
| Japan— | | | | | | |
| Barytes | 33,259 | 6,023 | 29,000 | 28,489 | 28,946 | 8,594 |
| Sulphate | 50 | 24 | 496 | 1,402 | 1,425 | 789 |
| Lebanon— | | | | | | |
| Barytes and witherite .. | 31 | 49 | 20 | 20 | 20 | 6 |
| Philippine Republic— | | | | | | |
| Barytes and witherite .. | 180 | 288 | 172 | 138 | 140 | 4,393 |
| Syria— | | | | | | |
| Barytes and witherite .. | 492 | 15 | 522 | 2,047 | 2,080 | 524 |
| Turkey— | | | | | | |
| Barytes | — | — | 292 | 2,086 | 2,119 | n.a. |
| Carbonate | 86 | 99 | 168 | 111 | 113 | n.a. |
| Chloride | 133 | 178 | 156 | 228 | 232 | n.a. |
| Sulphate | — | — | — | 46 | 47 | n.a. |

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

| Producing Country | Long tons | | | | Tonnes | |
|-------------------------------|-----------|-----------|-------------|-----------|-----------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Tanzania | 200 | — | — | — | — | — |
| Cyprus (a) | 4,539 | 9,069 | 9,036 | 12,894 | 13,101 | 12,564 |
| India | 41,489 | 45,368 | 59,301 | 53,345 | 54,201 | n.a. |
| Australia— | | | | | | |
| Bentonite | 95 | 100 | 95 | 100 | 102 | 125 |
| Bentonitic clay | 262 | 203 | 361 | 252 | 256 | 163 |
| New Zealand | 3,053 | 3,113 | 5,630 | 19,722 | 20,039 | 11,761 |
| OTHER COUNTRIES | | | | | | |
| Austria | 945 | 502 | — | — | — | — |
| Greece | r 123,561 | 134,584 | r 203,594 | 189,894 | 192,941 | 222,714 |
| Hungary | 83,000 | 59,000 | 56,000 | 64,000 | 65,000 | n.a. |
| Italy | r 246,362 | r 246,622 | r 272,307 | 315,789 | 320,856 | 296,342 |
| Spain | 16,167 | 26,652 | 34,405 | 36,764 | 37,354 | n.a. |
| Algeria | 16,226 | 18,990 | 12,381 | n.a. | n.a. | 9,516 |
| Morocco | n.a. | 13,576 | 7,517 | 6,384 | 6,486 | 3,801 |
| Mozambique | 3,853 | 2,614 | 2,578 | 5,406 | 5,493 | 5,453 |
| South Africa | 14,922 | 12,452 | 14,274 | 16,439 | 16,703 | 20,634 |
| Mexico | 32,575 | 48,950 | 45,290 | 61,956 | 62,950 | 52,486 |
| United States (b) | 1,823,965 | 2,176,362 | r 2,357,332 | 2,261,468 | 2,297,742 | n.a. |
| Argentina | 41,788 | 45,915 | 61,158 | 72,497 | 73,660 | n.a. |
| Peru | 2,807 | 12,614 | 25,508 | 35,016 | 35,578 | n.a. |

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

(a) Exports of bentonitic clay.

(b) Sold or used by producers.

EXPORTS OF BENTONITE

| Exporting Country | Long tons | | | | Tonnes | |
|-------------------------------|-------------|-------------|-------------|---------|---------|-----------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom .. | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 14,345 | 14,575 | 17,183 |
| Tanzania | 130 | 27 | — | — | — | — |
| Cyprus (a) | 4,539 | 9,069 | 9,036 | 12,894 | 13,101 | 12,564 |
| India | 400 | 958 | 1,693 | 1,438 | 1,461 | 3,189 |
| OTHER COUNTRIES | | | | | | |
| Austria | 53 | 10 | 1 | — | — | 8 |
| Germany (Federal) .. | 11,401 | 17,634 | 29,207 | 34,983 | 35,544 | 36,876 |
| Italy | 26,547 | 30,598 | 15,498 | 12,798 | 13,003 | 9,546 |
| Netherlands | <i>n.a.</i> | <i>n.a.</i> | 2,869 | 4,766 | 4,842 | (b) 8,019 |
| Spain | 3,228 | 2,840 | 5,674 | 4,966 | 5,046 | 9,249 |
| Sweden | 52 | 120 | r 368 | 14 | 14 | 2 |
| Yugoslavia | 25,819 | 23,371 | 21,982 | 21,249 | 21,590 | 23,413 |
| Algeria | 12,280 | 17,102 | 2,065 | 18 | 18 | 2,267 |
| Morocco | 155 | 123 | 734 | 525 | 533 | 288 |
| Mozambique | 3,102 | 2,317 | 2,308 | 4,960 | 5,040 | 4,822 |
| Senegal | <i>n.a.</i> | 20 | 1,153 | 2,612 | 2,654 | 2,490 |
| South Africa | 1,237 | 2,158 | 1,303 | 1,960 | 1,991 | 2,252 |
| Mexico | — | 113 | 2,757 | 31 | 32 | 225 |
| United States | 284,512 | 426,182 | 447,702 | 443,052 | 450,162 | 601,103 |
| Argentina | 5,265 | 10,306 | 7,642 | 6,035 | 6,132 | 7,533 |

(a) Bentonitic clay.

(b) Excludes exports to Belgium and Luxemburg, if any.

IMPORTS OF BENTONITE

| Importing Country | Long tons | | | | Tonnes | |
|-------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom .. | 31,444 | 33,219 | 46,592 | 48,239 | 49,013 | 47,037 |
| Canada | 196,305 | 274,732 | 262,475 | 307,280 | 312,211 | 314,612 |
| India | 6 | 11 | 10 | 6 | 6 | 9 |
| Australia (a) | 20,927 | 43,810 | r 53,735 | 65,434 | 66,484 | 88,803 |
| OTHER COUNTRIES | | | | | | |
| Austria | 2,766 | 323 | 498 | 524 | 532 | 658 |
| Belgium—Luxemburg .. | <i>n.a.</i> | <i>n.a.</i> | 8,183 | 9,261 | 9,410 | 10,466 |
| Germany (Federal) .. | 21,547 | 22,377 | 39,520 | 72,809 | 73,977 | 60,766 |
| Italy | 7,415 | 9,798 | 9,817 | 14,299 | 14,528 | 25,595 |
| Netherlands | <i>n.a.</i> | <i>n.a.</i> | 13,359 | 24,092 | 24,479 | (b) 29,012 |
| Poland | 4,166 | 4,804 | 5,323 | 7,308 | 7,425 | 10,346 |
| Portugal | 1,538 | 2,596 | 3,073 | 4,559 | 4,632 | 5,014 |
| Spain | 15,206 | 14,873 | 18,792 | 20,812 | 21,146 | 17,864 |
| Sweden | 4,416 | 8,022 | 5,340 | 7,672 | 7,795 | 7,332 |
| Morocco | — | 70 | — | — | — | 1 |
| Mozambique | 314 | 22 | 46 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Senegal | <i>n.a.</i> | 2 | 1,464 | 5,805 | 5,898 | 3,206 |
| Mexico | <i>n.a.</i> | 32 | 28 | 101 | 103 | 55 |
| United States | 110 | 130 | 68 | 163 | 166 | <i>n.a.</i> |
| Brazil | 5,410 | 7,808 | 9,682 | 9,754 | 9,911 | <i>n.a.</i> |
| Chile | 3,108 | 8,802 | 3,643 | 4,091 | 4,157 | <i>n.a.</i> |
| Colombia | 1,420 | 2,617 | 2,880 | 2,131 | 2,165 | <i>n.a.</i> |
| Ecuador | 130 | 454 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Peru | 2,270 | 1,260 | 432 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Uruguay | 31 | 18 | 31 | 32 | 33 | 26 |
| Venezuela | 4,337 | 8,282 | 6,734 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Turkey | 968 | 2,054 | 856 | 1,976 | 2,008 | <i>n.a.</i> |

(a) Including bentonitic clay.

(b) Excludes imports from Belgium and Luxemburg, if any.

BERYL
PRODUCTION OF BERYL

| Producing Country | Long tons | | | | Tonnes | |
|-------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Kenya | 17 | 11 | 3 | 4 | 4 | — |
| Uganda | 307 | 355 | 282 | 361 | 367 | 222 |
| India (a) | 4,828 | — | — | — | — | — |
| Australia | 55 | 15 | 7 | 18 | 18 | 71 |
| OTHER COUNTRIES | | | | | | |
| Portugal | 14 | 126 | 28 | 14 | 14 | 15 |
| Malagasy Republic | 29 | 78 | 74 | 51 | 52 | 60 |
| Mozambique | 166 | 93 | 120 | 32 | 33 | 12 |
| Rwanda and Burundi | 107 | 28 | 289 | 281 | 286 | 240 |
| South Africa | 103 | 304 | 308 | 317 | 322 | 491 |
| Zaire Republic | <i>n.a.</i> | <i>n.a.</i> | 143 | 128 | 130 | 72 |
| Argentina | 264 | 584 | 510 | 297 | 302 | 300 |
| Brazil (b) | 1,287 | 2,045 | 3,539 | 3,280 | 3,333 | 2,200 |
| TOTAL* | 4,000 | 5,000 | 7,000 | 6,000 | 6,000 | 4,000 |

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

(a) Imports into the United States.

(b) Exports.

EXPORTS OF BERYL

| Exporting Country | Long tons | | | | Tonnes | |
|-------------------------------|-----------|-------|-------|-------|--------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Uganda | 310 | 475 | 314 | 250 | 254 | 230 |
| India (a) | 4,828 | — | — | — | — | — |
| Australia | 637 | 135 | 9 | 46 | 47 | 69 |
| OTHER COUNTRIES | | | | | | |
| Italy | 908 | — | — | — | — | 22 |
| Portugal | 28 | 51 | 58 | 14 | 14 | <i>n.a.</i> |
| Malagasy Republic | 24 | 56 | 75 | 30 | 30 | <i>n.a.</i> |
| Mozambique | 188 | 102 | 85 | 26 | 26 | 43 |
| South Africa | 62 | 318 | 316 | 336 | 341 | 224 |
| United States | 34 | 42 | 13 | 19 | 19 | 19 |
| Argentina | 262 | 561 | 518 | 49 | 50 | 100 |
| Brazil | 1,289 | 2,045 | 3,539 | 3,280 | 3,333 | 2,200 |

(a) Imports into the United States.

IMPORTS OF BERYL*

| Importing Country | Long tons | | | | Tonnes | |
|-----------------------|-----------|-------|-------------|-------|--------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| France | — | — | <i>n.a.</i> | 300 | 305 | <i>n.a.</i> |
| United States | 8,492 | 3,415 | 5,736 | 4,412 | 4,483 | 3,652 |

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

BISMUTH
PRODUCTION OF BISMUTH ORE, ETC.*

| Producing Country and Description | Long tons | | | | Tonnes | |
|---|-----------|------|------|------|--------|--------------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Canada— Metal plus content of bullion and concen- trates exported .. | 298 | 289 | 259 | 263 | 268 | 123 |
| Australia— Concentrates (<i>Bi con- tent</i>) | 11 | 180 | 197 | 188 | 191 | 244 |
| OTHER COUNTRIES | | | | | | |
| France— Ore (<i>Bi content</i>) | 55 | 63 | 68 | 73 | 74 | 77 |
| Spain— Ore (<i>Bi content</i>) | 4 | 6 | 12 | 12 | 12 | <i>n.a.</i> |
| Sweden— Ore (<i>Bi content</i>) (<i>c</i>) .. | 30 | 19 | 14 | 14 | 14 | 15 |
| Yugoslavia— Metal | 106 | 84 | 101 | 74 | 75 | 92 |
| Mozambique— Ore (<i>Bi content</i>) | 2 | 2 | 3 | 1 | 1 | 2 |
| South Africa— Ore (<i>Bi content</i>) | — | 2 | — | 12 | 12 | — |
| Mexico— Ore (<i>Bi content</i>) | 501 | 516 | 597 | 562 | 571 | 570 |
| Bolivia (<i>b</i>)— Ore, etc. (<i>Bi content</i>) .. | 523 | 600 | 656 | 615 | 625 | 677 |
| Peru— Concentrates (<i>a</i>) (<i>Bi content</i>) | 33 | 17 | 28 | 42 | 43 | } (<i>c</i>) 651 |
| Lead bars (<i>Bi content</i>) | 62 | 38 | 51 | 39 | 40 | |
| Metal | 700 | 742 | 590 | 711 | 722 | |
| Japan— Metal | 624 | 712 | 683 | 667 | 678 | (<i>c</i>) 655 |
| Korea (South)— Ore (<i>Bi content</i>) | 107 | 101 | 108 | 103 | 105 | 96 |

*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. and United States.

(a) Recoverable.

(b) Exports.

(c) United States Bureau of Mines' estimate.

EXPORTS OF BISMUTH, ETC.

| Exporting Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|------|------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Bismuth.. .. | 379 | 303 | 352 | 311 | 316 | 243 |
| Bismuth salts | 46 | 44 | 41 | 33 | 34 | 42 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Bismuth (a) | 60 | 156 | 189 | 336 | 341 | 371 |
| France— | | | | | | |
| Bismuth (a) | 82 | 59 | 71 | 81 | 82 | 112 |
| Germany (Federal)— | | | | | | |
| Bismuth (a) | 125 | 80 | 111 | 232 | 236 | 263 |
| Netherlands— | | | | | | |
| Bismuth (a) | 211 | 146 | 85 | 93 | 94 | 43 |
| Bismuth salts | 6 | 49 | 93 | 79 | 80 | 57 |
| Yugoslavia— | | | | | | |
| Bismuth.. .. | 64 | 44 | 54 | 46 | 47 | 11 |
| Mexico— | | | | | | |
| Bismuth, refined .. | 216 | 229 | 358 | 296 | 301 | 297 |
| do. impure bars .. | 371 | 332 | 327 | 386 | 392 | 281 |
| United States— | | | | | | |
| Metal and alloys .. | 68 | 54 | 200 | 406 | 413 | 32 |
| Bolivia— | | | | | | |
| Ore, etc. (<i>Bi content</i>) .. | 523 | 600 | 656 | 615 | 625 | 677 |
| Peru— | | | | | | |
| Bars, etc. (<i>Bi content</i>) .. | 822 | 794 | 689 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Japan— | | | | | | |
| Bismuth.. .. | 266 | 384 | 237 | 285 | 290 | 460 |

(a) Including scrap.

IMPORTS OF BISMUTH, ETC.

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|-------------|------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Bismuth (c) | 324 | 318 | 324 | 313 | 318 | 237 |
| Unwrought alloys .. | 262 | 158 | 237 | 182 | 185 | 95 |
| India (a)— | | | | | | |
| Bismuth and alloys .. | 20 | 9 | 19 | 14 | 14 | 35 |
| Australia (b)— | | | | | | |
| Bismuth.. .. . | 7 | 12 | 10 | 14 | 14 | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Bismuth (c) | 89 | 169 | 237 | 280 | 285 | 235 |
| Bismuth salts | 81 | 78 | 98 | 67 | 68 | 106 |
| France— | | | | | | |
| Bismuth (c) | 793 | 928 | 829 | 903 | 917 | 898 |
| Germany (Federal)— | | | | | | |
| Bismuth (c) | 246 | 147 | 233 | 215 | 218 | 165 |
| Italy— | | | | | | |
| Bismuth.. .. . | 52 | 55 | 107 | 171 | 174 | 186 |
| Bismuth salts | 55 | <i>n.a.</i> | 19 | 28 | 28 | 27 |
| Netherlands— | | | | | | |
| Bismuth salts | 67 | 84 | 159 | 118 | 120 | 111 |
| Poland— | | | | | | |
| Bismuth.. .. . | 103 | 119 | 130 | 63 | 64 | <i>n.a.</i> |
| Spain — | | | | | | |
| Bismuth.. .. . | 12 | 25 | 34 | 31 | 31 | 44 |
| Morocco— | | | | | | |
| Bismuth salts | 10 | 19 | 5 | 4 | 4 | 14 |
| United States— | | | | | | |
| Bismuth.. .. . | 616 | 565 | 399 | 446 | 453 | 385 |
| Argentina— | | | | | | |
| Bismuth and its salts .. | 18 | 17 | 22 | 14 | 14 | 15 |
| Brazil— | | | | | | |
| Bismuth.. .. . | 10 | 18 | 11 | 14 | 14 | <i>n.a.</i> |
| Bismuth salts | 10 | 15 | 13 | 15 | 15 | <i>n.a.</i> |
| Colombia— | | | | | | |
| Bismuth salts | 1 | 2 | 1 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Japan— | | | | | | |
| Bismuth.. .. . | 2 | 3 | 36 | 31 | 32 | 1 |
| Turkey— | | | | | | |
| Bismuth salts | 8 | 6 | 16 | 8 | 8 | <i>n.a.</i> |

(a) Years ended March 31 following that stated.

(b) Years ended June 30 of that stated.

(c) Including scrap

BORATES
PRODUCTION OF CRUDE BORATES

| Producing Country and Description | Long tons | | | | Tonnes | |
|---------------------------------------|-----------|---------|---------|---------|---------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| United States (a)— Borates | 796,000 | 859,000 | 910,000 | 929,000 | 944,000 | 950,000 |
| Argentina— Borates | 17,684 | 20,694 | 31,286 | 42,661 | 43,346 | <i>n.a.</i> |
| Turkey— Borates | 224,891 | 261,648 | 319,345 | 346,000 | 352,000 | 400,000 |

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

| Exporting Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-------------|------------------|------------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Borax | 332 | 564 | 231 | 178 | 181 | 85 |
| Other borates and perborates | 9,613 | 8,968 | 7,686 | 10,065 | 10,227 | 6,195 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Borates and perborates .. | 3,963 | 4,231 | 3,910 | 3,760 | 3,820 | 5,182 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Boron minerals | 4,366 | 69 | 507 | 2,121 | 2,155 | 3,317 |
| Borax, refined | 2 | 3 | 23 | 1 | 1 | 54 |
| Boric acid | 18 | 16 | 30 | 77 | 78 | 27 |
| Borates and perborates | 7,597 | 11,756 | 15,907 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| France— | | | | | | |
| Boron minerals | 994 | 4,044 | 1,455 | 989 | 1,005 | 244 |
| Borax, refined | 7,704 | 9,056 | 10,205 | 7,985 | 8,113 | 9,070 |
| Boric acid | 17,017 | 17,532 | 16,790 | 14,236 | 14,463 | 14,862 |
| Borates and perborates | 5,251 | 6,053 | 6,513 | 219 | 223 | 80 |
| Germany (Federal)— | | | | | | |
| Boron minerals | 211 | 1,304 | 4,245 | 9,140 | 9,287 | 11,566 |
| Borax | 87 | 123 | 640 | 4,880 | 4,958 | 11,463 |
| Boric acid | 50 | 114 | 149 | 344 | 350 | 237 |
| Borates and perborates | 22,830 | 26,497 | 20,913 | 16,569 | 16,835 | 20,478 |
| Italy— | | | | | | |
| Boric acid | 2,385 | 1,923 | 2,758 | 1,105 | 1,123 | 1,913 |
| Borax, refined | — | — | — | — | — | 31 |
| Perborates | 311 | 456 | 2,129 | 2,111 | 2,145 | 4,276 |
| Netherlands— | | | | | | |
| Boron minerals | 218,549 | 242,757 | 269,432 | 303,455 | 308,325 | 322,568 |
| Borax, refined | 36,706 | 37,535 | 37,812 | 34,347 | 34,898 | 30,633 |
| Boric acid | 87 | 44 | 58 | 87 | 88 | 100 |
| Perborates | 7 | — | — | — | — | 2 |
| Sweden— | | | | | | |
| Perborate of sodium .. | 16 | 71 | 912 | 1,560 | 1,585 | 5,015 |
| Switzerland— | | | | | | |
| Borates and perborates | 2,398 | 4,111 | 8,591 | 8,698 | 8,838 | 13,360 |
| Yugoslavia— | | | | | | |
| Perborates | 871 | 625 | <i>n.a.</i> | 89 | 90 | 60 |
| United States— | | | | | | |
| Borax (refined) | 145,261 | 150,742 | 176,066 | 161,453 | 164,044 | 150,672 |
| Boric acid | 21,239 | 33,837 | 32,546 | 46,757 | 47,507 | 33,029 |
| Argentina— | | | | | | |
| Boron minerals | 494 | 197 | — | 59 | 60 | 51 |
| Borates and perborates .. | 5,920 | 7,275 | 7,764 | 10,876 | 11,051 | 9,741 |
| Boric acid | 49 | 226 | 130 | 42 | 43 | <i>n.a.</i> |
| Japan— | | | | | | |
| Borates and perborates | 187 | 190 | 775 | 438 | 445 | 2,085 |
| Boric acid | 27 | 30 | — | 59 | 60 | 85 |
| Turkey— | | | | | | |
| Borates | 208,771 | <i>r</i> 228,391 | <i>r</i> 288,343 | 330,709 | 336,014 | <i>n.a.</i> |
| Borax | <i>n.a.</i> | 455 | 21,324 | 11,373 | 11,555 | <i>n.a.</i> |

IMPORTS OF BORATES

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|-------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Boron minerals | 52,561 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Borax | 14,578 | 12,991 | 13,008 | 12,286 | 12,483 | 12,277 |
| Other Borates and perborates | 4,495 | 3,913 | 3,007 | 1,037 | 1,054 | 2,443 |
| Boric acid | 6,228 | 8,808 | 9,467 | 12,548 | 12,749 | 7,393 |
| Canada— | | | | | | |
| Borax | 8,990 | 11,421 | 9,335 | 10,513 | 10,682 | 11,388 |
| Boric acid | 3,412 | 3,859 | 5,385 | 4,014 | 4,078 | 3,760 |
| Hong Kong— | | | | | | |
| Borax, refined | 4,225 | 3,612 | 4,797 | 4,728 | 4,804 | 5,194 |
| Boric acid | 135 | 99 | 204 | 206 | 209 | 163 |
| India— | | | | | | |
| Boron minerals | 936 | 4,003 | 1,673 | 6,259 | 6,359 | 3,455 |
| Borax | 4,545 | 1,671 | 8,422 | 12,099 | 12,293 | 6,102 |
| Boric acid (b) | 55 | 61 | 4 | 12 | 12 | 7 |
| Australia (a)— | | | | | | |
| Boron minerals | 2,010 | 1,953 | 1,405 | 1,725 | 1,753 | 1,692 |
| Borates and Perborates | 4,257 | 5,055 | 3,970 | 4,584 | 4,658 | 5,096 |
| Boric acid | 1,883 | 2,006 | 1,769 | 2,229 | 2,265 | 2,498 |
| New Zealand (a)— | | | | | | |
| Boric acid | 477 | 423 | 694 | 450 | 457 | <i>n.a.</i> |
| Borates and perborates | 1,283 | 1,076 | 1,584 | 1,444 | 1,467 | <i>n.a.</i> |
| Irish Republic— | | | | | | |
| Borax | 561 | 1,112 | 922 | 1,225 | 1,245 | 765 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Boron minerals | 8,018 | 8,200 | 7,558 | 9,693 | 9,849 | 10,025 |
| Borates and Perborates | 9 | 441 | 631 | 526 | 534 | 657 |
| Boric acid | 11 | 8 | 296 | 730 | 742 | 627 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Boron minerals | 16,659 | 16,987 | 21,875 | 36,169 | 36,749 | 50,591 |
| Borax, refined | 2,361 | 2,750 | 3,581 | 3,435 | 3,490 | 4,597 |
| Boric acid | 961 | 1,566 | 3,023 | 2,396 | 2,435 | 3,290 |
| Borates and perborates | 2,294 | 2,181 | 2,184 | 976 | 992 | 577 |
| Denmark— | | | | | | |
| Boron minerals | 1,240 | 1,802 | 2,217 | 2,032 | 2,065 | 2,073 |
| Borax | 225 | 354 | 471 | 546 | 555 | 416 |
| Boric acid | 118 | 228 | 127 | 213 | 216 | 173 |
| Borates and perborates | 5,650 | 6,468 | 7,656 | 7,670 | 7,793 | 8,496 |
| Finland— | | | | | | |
| Boron minerals | 2,499 | 2,865 | 5,119 | 5,561 | 5,650 | 4,391 |
| Borax | 698 | 786 | 943 | 859 | 873 | 672 |
| Boric acid | 149 | 103 | 182 | 128 | 130 | 135 |
| Borates and perborates | 2,833 | 2,998 | 2,377 | 2,873 | 2,919 | 3,532 |
| France— | | | | | | |
| Boron minerals | 81,601 | 96,118 | 105,892 | 115,513 | 117,367 | 133,201 |
| Borax refined | 18,542 | 15,382 | 20,812 | 11,516 | 11,701 | 13,593 |
| Boric acid | 596 | 901 | 1,901 | 647 | 657 | 716 |
| Borates and perborates | 1,219 | 1,436 | 1,827 | 2,321 | 2,358 | 5,717 |

(a) Years ended June 30 of that stated.

(b) Years ended March 31 following that stated.

IMPORTS OF BORATES (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|---------|---------|---------|---------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Germany (Federal)— | | | | | | |
| Boron minerals | 91,124 | 101,028 | 106,073 | 127,613 | 129,661 | 118,973 |
| Boric acid | 8,936 | 13,263 | 15,684 | 15,445 | 15,693 | 12,711 |
| Borax | 14,018 | 14,312 | 19,305 | 15,562 | 15,812 | 16,827 |
| Borates and perborates | 153 | 2,138 | 1,902 | 15,775 | 16,028 | 35,945 |
| Greece— | | | | | | |
| Boron minerals | 588 | 472 | 673 | 1,220 | 1,240 | 1,087 |
| Borax | 16 | 28 | 54 | 45 | 46 | 2 |
| Boric acid | 23 | 101 | 244 | 411 | 418 | 176 |
| Italy— | | | | | | |
| Boron minerals | 69,635 | 80,704 | 94,778 | 124,666 | 126,667 | 103,332 |
| Borax | 5,482 | 8,771 | 5,737 | 10,809 | 10,982 | 10,851 |
| Boric acid | — | — | 88 | 7,057 | 7,170 | 682 |
| Borates | 3,165 | 1,023 | 18,915 | 10,012 | 10,173 | 3,938 |
| Perborates | | | | | | |
| Netherlands— | | | | | | |
| Boron minerals | 226,956 | 276,983 | 305,122 | 302,473 | 307,327 | 374,236 |
| Borax | 40,203 | 35,109 | 45,830 | 36,861 | 37,453 | 34,495 |
| Boric acid | 1,392 | 1,300 | 1,779 | 1,833 | 1,863 | 2,002 |
| Perborates | 8,360 | 12,220 | 11,882 | 12,106 | 12,300 | 17,169 |
| Norway— | | | | | | |
| Borax | 2,571 | 3,471 | 3,725 | 4,267 | 4,336 | 3,880 |
| Boric acid | 208 | 294 | 343 | 339 | 345 | 192 |
| Perborate of sodium .. | 1,983 | 2,042 | 2,528 | 2,916 | 2,963 | 2,175 |
| Portugal— | | | | | | |
| Boric acid | 151 | 123 | 172 | 148 | 150 | 234 |
| Borax | 1,588 | 2,599 | 2,709 | 3,540 | 3,597 | 4,039 |
| Spain— | | | | | | |
| Boron minerals | 16,810 | 20,187 | 25,949 | 27,388 | 27,828 | 44,574 |
| Boric acid | 696 | 878 | 1,425 | 621 | 631 | 597 |
| Borates and perborates | 1,720 | 3,307 | 8,317 | 4,037 | 4,102 | 1,947 |
| Sweden— | | | | | | |
| Boron minerals | 4,877 | 6,262 | 7,946 | 10,981 | 11,066 | 10,682 |
| Borax | 3,110 | 3,886 | 2,811 | 4,597 | 4,671 | 4,461 |
| Boric acid | 1,089 | 780 | 778 | 647 | 657 | 914 |
| Perborate of sodium .. | 4,793 | 5,560 | 5,842 | 5,237 | 5,321 | 4,409 |
| Switzerland— | | | | | | |
| Boron minerals | 740 | 745 | 1,227 | 1,322 | 1,343 | 3,012 |
| Boric acid | 479 | 475 | 3,907 | 461 | 468 | 1,171 |
| Borates | 4,907 | 6,366 | 7,959 | 13,558 | 13,776 | 16,311 |
| Perborates | 1,118 | 2,451 | 5 | 83 | 84 | 469 |
| U.S.S.R.— | | | | | | |
| Borax | 7,480 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Yugoslavia— | | | | | | |
| Boron minerals | 1,821 | 298 | 512 | 1,703 | 1,730 | 5,907 |
| Boric acid | 281 | 3,405 | 105 | 397 | 403 | 1,148 |
| Borates | 2,758 | 4,531 | 5,677 | 5,144 | 5,227 | 3,332 |
| Perborates | 2,523 | 1,074 | 1 | — | — | 682 |
| Angola— | | | | | | |
| Borax | 60 | 127 | 92 | 123 | 125 | 106 |
| Morocco— | | | | | | |
| Borates | 862 | 767 | 856 | 1,315 | 1,336 | 1,190 |
| Perborates | 27 | 51 | 56 | 53 | 54 | 49 |
| Mozambique— | | | | | | |
| Borax | 3 | 6 | 1 | 5 | 5 | n.a. |
| Boric acid | 5 | 4 | 5 | 5 | 5 | n.a. |
| South Africa— | | | | | | |
| Boron minerals | 383 | 641 | 762 | 1,265 | 1,285 | 1,250 |
| Boric acid | 687 | 403 | 545 | 733 | 745 | 751 |
| Borates and perborates | 3,821 | 2,988 | 3,106 | 3,836 | 3,899 | 3,739 |

IMPORTS OF BORATES (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|--------|--------|--------|--------|--------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Tunisia— | | | | | | |
| Boron minerals .. | — | 1 | 3 | 32 | 33 | 2 |
| Boric acid | 33 | 1 | 55 | 32 | 33 | 86 |
| Borates and perborates .. | 65 | 33 | 83 | 48 | 49 | 199 |
| Mexico— | | | | | | |
| Borax | 62 | 105 | 8 | 17 | 17 | 4 |
| Boric acid | 936 | 985 | 916 | 1,671 | 1,698 | 1,396 |
| United States— | | | | | | |
| Boron minerals .. | 23,942 | 16,927 | 21,698 | 24,407 | 24,799 | 6,735 |
| Sodium perborate .. | 6,168 | 7,027 | 3,585 | 5,600 | 5,690 | 6,343 |
| Argentina— | | | | | | |
| Perborate of sodium .. | 102 | 100 | 94 | 121 | 123 | 98 |
| Brazil— | | | | | | |
| Boron minerals .. | 1,926 | 2,667 | 2,637 | 3,397 | 3,452 | n.a. |
| Boric acid | 966 | 1,356 | 1,293 | 1,690 | 1,717 | n.a. |
| Sodium borate and perborate | 6,516 | 9,564 | 11,286 | 11,808 | 11,997 | n.a. |
| Borates | 2 | 18 | 10 | 9 | 9 | n.a. |
| Colombia— | | | | | | |
| Borax | r 505 | r 907 | 1,106 | 9 | 9 | n.a. |
| Boric acid | r 134 | r 175 | 238 | n.a. | n.a. | n.a. |
| Perborate of sodium .. | 12 | r 103 | 53 | n.a. | n.a. | n.a. |
| Peru— | | | | | | |
| Borax | 350 | 423 | 413 | n.a. | n.a. | n.a. |
| Boric acid | 285 | 175 | 245 | n.a. | n.a. | n.a. |
| Uruguay— | | | | | | |
| Borates | 109 | 197 | 224 | 243 | 247 | 442 |
| Venezuela— | | | | | | |
| Borax | 1,438 | 1,250 | 1,071 | n.a. | n.a. | n.a. |
| Boric acid | 242 | 205 | 286 | n.a. | n.a. | n.a. |
| Formosa— | | | | | | |
| Borax | 2,059 | 1,996 | 2,416 | 2,100 | 2,134 | n.a. |
| Boric acid | 79 | 196 | 169 | 250 | 254 | n.a. |
| Iran (a)— | | | | | | |
| Borax | 449 | 485 | 348 | 493 | 501 | 346 |
| Boric acid | 27 | 18 | 40 | 137 | 139 | 127 |
| Israel— | | | | | | |
| Boric acid | 343 | 316 | 242 | 330 | 335 | 417 |
| Borates | 328 | 487 | 204 | 474 | 482 | 708 |
| Perborate of sodium .. | 241 | 186 | 39 | | | |
| Japan— | | | | | | |
| Boron minerals .. | 8,210 | 11,565 | 21,442 | 27,847 | 28,294 | 23,941 |
| Borax | 39,968 | 35,883 | 50,325 | 39,155 | 39,783 | 44,029 |
| Boric acid | 7,819 | 10,804 | 13,889 | 14,220 | 14,448 | 13,666 |
| Borates and perborates .. | 87 | 30 | 103 | 169 | 172 | 99 |
| Korea (South)— | | | | | | |
| Borax | 1,354 | 2,322 | 1,955 | 23 | 23 | 2,147 |
| Lebanon— | | | | | | |
| Borates and perborates | 2,111 | 1,718 | 1,935 | 2,320 | 2,357 | 2,334 |
| Philippine Republic— | | | | | | |
| Boron minerals .. | 217 | 54 | 73 | 101 | 103 | n.a. |
| Boric acid | n.a. | n.a. | 232 | 370 | 376 | 610 |
| Borates and perborates .. | n.a. | 1,147 | 753 | 637 | 647 | 798 |
| Syria— | | | | | | |
| Borates and perborates | 629 | 1,343 | 1,988 | 1,773 | 1,801 | 2,157 |
| Thailand— | | | | | | |
| Borax | 582 | 452 | 561 | 155 | 157 | 161 |
| Boric acid | 50 | 59 | 921 | 299 | 304 | 84 |
| Turkey— | | | | | | |
| Borax | 1,482 | 1,734 | 2,676 | 2,726 | 2,770 | n.a. |
| Boric acid | 106 | 16 | 13 | — | — | n.a. |
| Borates and perborates | 41 | 146 | 42 | 74 | 75 | n.a. |

(a) Years ended March 20 following that stated.

BROMINE
PRODUCTION OF BROMINE

| Producing Country | Lb. avdp. | | | | Kilogrammes | |
|--------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| India | 344,000 | 514,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 244,000 |
| OTHER COUNTRIES | | | | | | |
| France | 28,814,000 | 31,173,000 | 32,430,000 | 32,430,000 | 14,710,000 | 14,530,000 |
| Germany (Federal) .. | 4,600,000 | 5,000,000 | 5,000,000 | 5,500,000 | 2,500,000 | <i>n.a.</i> |
| Italy | 7,722,792 | 8,943,491 | 9,000,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| United States (a) (b) .. | 292,072,000 | 304,501,000 | 335,242,000 | 349,748,000 | 158,643,000 | 161,456,000 |
| Israel | 616,300,000 | 20,700,000 | 23,300,000 | 24,600,000 | 11,199,000 | 12,156,000 |
| Japan | 13,000,000 | 13,959,000 | 16,484,000 | 21,010,000 | 9,530,000 | <i>n.a.</i> |

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.

| Exporting Country and Description | Lb. avdp. | | | | Kilogrammes | |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Bromine | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 2,888,144 | 1,310,040 | 2,003,645 |
| Bromides and bromates | (£120,840) | (£251,679) | (£231,530) | (£234,315) | (£234,315) | (£283,448) |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg E.U.— | | | | | | |
| Bromine | — | — | 220 | <i>n.a.</i> | <i>n.a.</i> | 300 |
| Bromides, etc. | 23,100 | 77,603 | 97,885 | 75,398 | 34,200 | 38,700 |
| France— | | | | | | |
| Bromine | 2,879,000 | 3,730,221 | 4,420,268 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Bromides | 2,454,000 | 2,012,820 | 3,203,316 | 2,888,055 | 1,310,000 | 1,271,000 |
| Germany (Federal)— | | | | | | |
| Bromides | 60,600 | 58,900 | 48,061 | 54,897 | 24,901 | 45,400 |
| Italy— | | | | | | |
| Bromine | 278,003 | 280,640 | 157,851 | 333,169 | 151,123 | — |
| Bromides | 15,873 | 9,259 | 32,187 | 10,701 | 4,854 | 7,600 |
| Netherlands— | | | | | | |
| Bromides, etc. | 740,753 | 877,440 | 1,141,994 | 1,060,423 | 481,000 | 483,000 |
| South Africa— | | | | | | |
| Bromides | 3,300 | 15,300 | 22,930 | 2,830 | 1,284 | 3,636 |
| Israel— | | | | | | |
| Bromine | <i>n.a.</i> | 6,741,735 | 8,613,459 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Japan— | | | | | | |
| Bromine compounds .. | 793,699 | 287,423 | 225,372 | 273,358 | 123,992 | 138,327 |

IMPORTS OF BROMINE, ETC.

Lb. avdp. Kilogrammes

| Importing Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|---------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Bromine | <i>n.a.</i> | (£338,999) | (£312,434) | 2,639,840 | 1,197,412 | 1,841,179 |
| Hong Kong— | | | | | | |
| Bromates and bromides | 18,592 | 33,600 | 29,120 | 41,776 | 18,950 | 29,161 |
| India (b)— | | | | | | |
| Bromine | 163 | 629,320 | 444,877 | 932,601 | 423,021 | 187,349 |
| Bromide of potash .. | 4,409 | 3,386 | 1,109 | 1,691 | 767 | 2,090 |
| Australia (a)— | | | | | | |
| Bromates and bromides of potash | 161,713 | 176,206 | 190,575 | 169,630 | 76,943 | 135,530 |
| Bromates and bromides of soda | 150,130 | 162,384 | 154,377 | 130,635 | 59,255 | 80,158 |
| Other bromates and bromides | 109,652 | 144,034 | 214,914 | 120,659 | 54,730 | 49,418 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg E.U.— | | | | | | |
| Bromine | 35,000 | 48,000 | 85,000 | 95,700 | 43,400 | 14,400 |
| Bromides, etc. | 1,567,300 | 1,440,700 | 1,460,562 | 1,649,498 | 748,200 | 683,300 |
| Denmark— | | | | | | |
| Bromine | 63,000 | 5,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Bromide of potash .. | 22,000 | 200,600 | 167,550 | 198,400 | 90,000 | 27,300 |
| Bromide of soda .. | 143,000 | | | | | |
| Other bromides | 57,000 | | | | | |
| Finland— | | | | | | |
| Bromine | 2,721 | 1,682 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| France— | | | | | | |
| Bromine | — | 57,300 | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Bromides | 295,400 | 189,600 | 121,200 | 346,100 | 157,000 | 141,000 |
| Germany (Federal)— | | | | | | |
| Bromides | 1,163,400 | 1,178,591 | 1,552,495 | 2,047,000 | 928,500 | 582,800 |
| Greece— | | | | | | |
| Bromine | 3,221 | 97 | 3,390 | — | — | 275 |
| Italy— | | | | | | |
| Bromine | 26,235 | 44,313 | 1,602,538 | 142,319 | 64,555 | 152,000 |
| Bromides | 395,729 | 383,383 | 1,006,850 | 1,077,970 | 488,959 | 394,500 |
| Netherlands— | | | | | | |
| Bromine | 1,644,648 | 1,488,120 | 1,693,150 | 2,381,000 | 1,080,000 | (c) 847,000 |
| Bromides, etc. | 158,733 | 191,802 | 119,050 | 178,600 | 81,000 | 93,000 |
| Portugal— | | | | | | |
| Bromine | 661 | 1,764 | 660 | — | — | 800 |
| Bromide of soda | 24,250 | <i>n.a.</i> | 30,864 | 22,000 | 10,000 | 7,800 |
| Bromide of potash .. | | | | | | |
| Bromide of ammonium | | | | | | |
| Spain— | | | | | | |
| Bromine | 172,685 | 219,356 | 201 | 165 | 75 | 78 |
| Bromides | 66,357 | 126,335 | 99,208 | 138,891 | 63,000 | 82,000 |
| Yugoslavia— | | | | | | |
| Bromine | 2,427 | 5,004 | 3,728 | 13,772 | 6,247 | 5,543 |
| Bromides, bromates, etc. | 111,470 | 96,265 | 103,154 | 158,490 | 71,890 | 23,731 |
| Morocco— | | | | | | |
| Bromides | 9,952 | 4,147 | 22,544 | 19,348 | 8,776 | 5,537 |
| South Africa— | | | | | | |
| Bromides | 222,100 | 381,400 | 411,143 | 354,916 | 160,987 | 227,038 |

(a) Years ended June 30 of that stated.

(b) Years ended March 31 following that stated.

(c) Excludes imports from Belgium and Luxemburg, if any.

IMPORTS OF BROMINE, ETC. (cont.)

| Importing Country and Description | Lb. avdp. | | | | Kilogrammes | |
|---|-----------|---------|-----------|-----------|-------------|-----------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Mexico— | | | | | | |
| Bromine | 102,771 | 79,366 | 112,435 | 149,808 | 67,952 | 80,659 |
| Bromides of potash and soda | 64,035 | 41,127 | 79,366 | 73,694 | 33,427 | 43,492 |
| United States— | | | | | | |
| Bromine compounds .. | 254,560 | 18,687 | 58,531 | 192,532 | 87,331 | (b) 6,126 |
| Argentina— | | | | | | |
| Bromine | 344,840 | 165,408 | 257,508 | 259,096 | 117,523 | 97,145 |
| Bromides | 423,689 | 412,006 | 468,921 | 746,889 | 338,783 | 284,460 |
| Brazil— | | | | | | |
| Bromine | 11,788 | 558 | 461 | 48,973 | 22,214 | n.a. |
| Bromides | 268,274 | 75,311 | 75,942 | 112,905 | 51,213 | n.a. |
| Chile— | | | | | | |
| Bromine | 2 | 2,140 | 648 | 220 | 100 | n.a. |
| Bromides | 13 | 3,404 | 4,345 | 7,636 | 3,464 | n.a. |
| Colombia— | | | | | | |
| Bromine | r 3,007 | r 5,798 | 7,868 | n.a. | n.a. | n.a. |
| Peru— | | | | | | |
| Bromine | 637 | 300 | 492 | n.a. | n.a. | n.a. |
| Bromides | 5,794 | 17,877 | 2,509 | n.a. | n.a. | n.a. |
| Iran (a)— | | | | | | |
| Bromides | 30,479 | 56,934 | 2,205 | 22,491 | 10,202 | 6,800 |
| Japan— | | | | | | |
| Bromine compounds .. | 76,397 | 22,218 | 63,445 | 22,952 | 10,411 | 6,000 |
| Philippine Republic— | | | | | | |
| Bromide of potash .. | 4,400 | 3,549 | 10,714 | 6,158 | 2,793 | 6,237 |
| Other bromides, bromates, etc. | n.a. | 670,864 | 1,114,509 | 1,348,404 | 611,626 | 513,326 |
| Thailand— | | | | | | |
| Bromide of potash .. | 33,826 | 23,850 | 35,273 | 35,016 | 15,883 | 14,927 |
| Turkey— | | | | | | |
| Bromine | 450 | 990 | 364 | 858 | 389 | n.a. |
| Bromides | 20,461 | 20,818 | 35,878 | 16,945 | 7,686 | n.a. |

(a) Years ended March 20 following that stated.

(b) Potassium bromide only.

CADMIUM
PRODUCTION OF CADMIUM

| Producing Country | Long tons | | | | Tonnes | |
|-------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | 205 | 202 | 241 | 313 | 318 | 262 |
| Zambia | 10 | 9 | 6 | 12 | 12 | 10 |
| Canada (b) | 2,159 | 2,239 | 2,327 | 1,923 | 1,954 | 1,874 |
| India | — | 40 | (e) 39 | 33 | 34 | 31 |
| Australia | 516 | 465 | 562 | 604 | 614 | 559 |
| OTHER COUNTRIES | | | | | | |
| Austria | 19 | 19 | 19 | 24 | 24 | 25 |
| Belgium | 700 | 800 | 806 | 890 | 900 | 1,092 |
| Finland | — | — | — | 88 | 89 | 120 |
| France | 490 | 517 | 515 | 500 | 508 | 579 |
| Germany (Federal) .. | 392 | 337 | 779 | 1,019 | 1,035 | 981 |
| Italy | 215 | 246 | 415 | 418 | 425 | 356 |
| Netherlands | 105 | 110 | 109 | 109 | 111 | 123 |
| Norway | 83 | 86 | 85 | 96 | 98 | 99 |
| Poland (e) | 409 | 409 | 413 | 413 | 420 | 420 |
| Spain | 66 | 69 | 79 | 109 | 111 | 102 |
| U.S.S.R. (e) | 2,165 | 2,165 | 2,214 | 2,300 | 2,300 | 2,400 |
| Yugoslavia | r 78 | r 155 | (e) 167 | (e) 148 | (e) 150 | (e) 140 |
| South West Africa (a) .. | 178 | 154 | 234 | 202 | 205 | 159 |
| Zaire Republic | 279 | 315 | 348 | 312 | 317 | 262 |
| Honduras | 111 | 118 | 150 | 180 | 180 | 108 |
| Mexico (c) | 1,226 | 1,175 | 1,553 | 1,936 | 1,967 | 1,662 |
| United States— | | | | | | |
| Metal (d) | 3,883 | 4,755 | 5,646 | 4,225 | 4,293 | 3,597 |
| Bolivia | n.a. | n.a. | 13 | 68 | 69 | 86 |
| Ecuador | 1 | — | — | 1 | 1 | n.a. |
| Peru (f) | 437 | 442 | 435 | 474 | 482 | 400 |
| Japan | 1,867 | 2,160 | 2,721 | 2,500 | 2,540 | 2,675 |
| Philippine Republic .. | 3 | 2 | — | — | — | n.a. |
| TOTAL* | 15,000 | 15,000 | 17,000 | 16,000 | 17,000 | 16,000 |

*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, China and North Korea.

(a) Metal only.

(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.

EXPORTS OF CADMIUM, ETC.

| Exporting Country and Description | Long tons | | | | Tonnes | |
|--|-------------|--------------|--------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Zambia | 11 | 9 | 8 | 31 | 31 | <i>n.a.</i> |
| Canada | 749 | 805 | 753 | 691 | 702 | 653 |
| Australia | 382 | 327 | <i>r</i> 424 | 639 | 649 | 617 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg E.U. (a) .. | 646 | 847 | 1,020 | 1,004 | 1,020 | 1,099 |
| France— | | | | | | |
| Cadmium (a) | 47 | 49 | 57 | 103 | 105 | 132 |
| Cadmium sulphide | 19 | 24 | 49 | 26 | 26 | 28 |
| Germany (Federal)— | | | | | | |
| Cadmium (a) | 145 | 68 | 154 | 245 | 249 | 287 |
| Cadmium oxide | <i>n.a.</i> | 13 | 10 | 9 | 9 | 22 |
| Italy (a) | 74 | 53 | 38 | 82 | 83 | 85 |
| Netherlands (a) | 248 | 402 | 191 | 164 | 167 | 121 |
| Norway | 65 | 75 | 78 | 84 | 85 | 78 |
| Poland | 277 | 284 | 273 | 218 | 222 | 225 |
| U.S.S.R. | 500 | 689 | 689 | 871 | 885 | 869 |
| Yugoslavia | 12 | 71 | 128 | 54 | 55 | <i>n.a.</i> |
| Zaire Republic (b) | 260 | <i>r</i> 127 | <i>r</i> 295 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Honduras | 93 | 111 | 159 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Mexico (c) | 876 | 171 | 1,058 | 975 | 991 | 913 |
| United States— | | | | | | |
| Metal, alloys, dross, flue dust, etc. | 309 | 237 | 484 | 166 | 169 | 30 |
| Peru | 152 | 162 | 163 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Japan | 556 | 698 | 760 | 930 | 945 | 1,190 |

(a) Including scrap.

(b) Estimated.

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

IMPORTS OF CADMIUM, ETC.

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|-------|-------|-------|--------|-------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom .. | 1,070 | 1,238 | 1,340 | 1,160 | 1,179 | 864 |
| India (a) | 109 | 34 | 1 | 2 | 2 | 222 |
| OTHER COUNTRIES | | | | | | |
| Austria | 8 | 10 | 11 | 15 | 15 | 6 |
| Belgium-Luxemburg E.U. (b) | 392 | 624 | 752 | 708 | 719 | 903 |
| Denmark | 22 | 24 | 23 | 23 | 23 | 7 |
| France— | | | | | | |
| Cadmium (b) | 497 | 346 | 738 | 596 | 606 | 488 |
| Cadmium sulphide .. | 21 | 15 | 20 | 20 | 20 | 11 |
| Germany (Federal)— | | | | | | |
| Cadmium (b) | 1,171 | 1,512 | 1,726 | 1,205 | 1,224 | 961 |
| Cadmium oxide | n.a. | n.a. | 185 | 207 | 210 | 231 |
| Italy— | | | | | | |
| Cadmium (b) | 89 | 167 | 36 | 39 | 40 | 29 |
| Cadmium oxide | 11 | 6 | n.a. | n.a. | n.a. | n.a. |
| Cadmium sulphide .. | 18 | 24 | 31 | 26 | 26 | 35 |
| Netherlands— | | | | | | |
| Cadmium (b) | 168 | 343 | 121 | 145 | 147 | 100 |
| Cadmium salts | 123 | 121 | 143 | 139 | 141 | 135 |
| Spain | 3 | 4 | 9 | 5 | 5 | 7 |
| Sweden | 113 | 93 | 77 | 158 | 161 | 224 |
| U.S.S.R. | 217 | 231 | 214 | 305 | 310 | 229 |
| Yugoslavia | 4 | — | — | 3 | 3 | 61 |
| United States— | | | | | | |
| Cadmium | 708 | 860 | 481 | 1,113 | 1,131 | 1,587 |
| Flue dust (cadmium content) | 520 | 717 | 498 | 496 | 504 | 504 |
| Argentina— | | | | | | |
| Cadmium | 1 | — | — | — | — | 1 |
| Brazil— | | | | | | |
| Cadmium | 45 | 62 | 68 | 55 | 56 | n.a. |
| Cadmium salts | 3 | 1 | — | 1 | 1 | n.a. |
| Japan | 31 | 17 | 9 | n.a. | n.a. | 1 |

(a) Years ended March 31 following that stated.

(b) Including scrap.

CEMENT
PRODUCTION OF CEMENT

| Producing Country | Long tons | | | | Tonnes | |
|--|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | 17,304,000 | 17,592,000 | 17,148,000 | 16,788,000 | 17,057,000 | 17,896,000 |
| Kenya | 485,804 | 535,000 | 642,776 | 788,955 | 801,615 | 803,823 |
| Malawi | 43,000 | 54,000 | 60,000 | 69,000 | 70,000 | 61,500 |
| Nigeria | 709,810 | 564,000 | 557,000 | 587,000 | 596,000 | 666,000 |
| Tanzania | 146,918 | <i>n.a.</i> | 196,484 | 164,654 | 167,296 | 177,523 |
| Uganda | 135,142 | 150,000 | 167,000 | 192,000 | 195,000 | 199,000 |
| Zambia | 240,000 | 275,000 | 205,000 | 371,000 | 377,000 | <i>n.a.</i> |
| Canada (a) | 7,138,351 | 7,290,897 | 7,366,099 | 7,094,567 | 7,208,414 | 8,649,000 |
| Bahamas (c) | 820,000 | 820,000 | 820,000 | 820,000 | 830,000 | <i>n.a.</i> |
| Jamaica | 329,722 | 403,000 | 407,000 | 449,458 | 456,649 | 419,000 |
| Trinidad | 187,200 | 206,600 | 239,500 | 266,000 | 270,000 | 255,800 |
| Ceylon | 188,741 | 218,490 | 278,652 | 321,001 | 326,152 | 385,096 |
| Cyprus | 182,158 | 237,500 | 242,600 | 264,522 | 268,767 | 308,117 |
| Hong Kong | 212,000 | 255,000 | 372,000 | 423,000 | 429,600 | 512,400 |
| India | 11,122,000 | 11,400,000 | 13,400,000 | 13,700,000 | 13,900,000 | 14,931,000 |
| Malaysia (West) | 885,000 | 922,538 | 958,094 | 1,013,000 | 1,030,000 | 1,096,000 |
| Pakistan | 2,006,000 | 2,532,000 | 2,656,000 | 2,586,000 | 2,628,000 | 2,600,000 |
| Australia | 3,769,000 | 3,868,000 | 4,240,000 | 4,526,000 | 4,599,000 | 4,716,000 |
| Fiji | 46,000 | 50,000 | 55,000 | 59,000 | 60,000 | <i>n.a.</i> |
| New Zealand | 801,000 | 751,000 | 790,000 | 803,000 | 816,000 | 823,000 |
| TOTAL | 45,000,000 | 48,000,000 | 51,000,000 | 51,000,000 | 52,000,000 | 56,000,000 |
| Irish Republic | 1,243,786 | 1,330,996 | 1,252,550 | 845,830 | 859,406 | 1,500,000 |
| OTHER COUNTRIES | | | | | | |
| Albania | 218,000 | 217,000 | 217,000 | 217,000 | 220,000 | <i>n.a.</i> |
| Austria | 4,476,240 | 4,478,600 | 4,490,000 | 4,730,000 | 4,806,000 | 5,491,000 |
| Belgium (b) | 4,828,400 | 5,652,222 | 6,170,372 | 6,623,206 | 6,729,489 | 6,931,212 |
| Bulgaria | 3,305,000 | 3,457,000 | 3,496,000 | 3,614,000 | 3,672,000 | 3,876,000 |
| Czechoslovakia | 6,358,000 | 6,390,000 | 6,627,000 | 7,285,000 | 7,402,000 | 7,956,000 |
| Denmark— | | | | | | |
| Portland cement | 2,168,653 | 2,241,976 | 2,563,000 | 2,562,667 | 2,603,790 | 2,732,928 |
| Special cements | | | | | | |
| Finland | 1,490,088 | 1,453,000 | 1,731,000 | 1,810,000 | 1,839,000 | 1,810,900 |
| France— | | | | | | |
| Portland cement | 18,928,390 | 20,324,835 | 21,726,064 | 21,726,162 | 22,074,803 | 28,821,000 |
| Portland blast furnace cements | | | | | | |
| Slag cements | | | | | | |
| Masonry cements | | | | | | |
| Natural cements | | | | | | |
| Special cements | | | | | | |
| Germany (Federal)— | | | | | | |
| Portland cement | 23,287,000 | 24,919,000 | 26,553,000 | 29,262,000 | 29,732,000 | 32,691,000 |
| Portland blast furnace cements | 7,090,000 | 7,109,000 | 7,093,000 | 7,307,000 | 7,424,000 | 6,927,000 |
| Special cements | 832,000 | 887,000 | 878,000 | 1,151,000 | 1,169,000 | 1,395,000 |
| Germany (East) | 7,069,000 | 7,432,000 | 7,292,000 | 7,861,000 | 7,987,000 | 8,473,000 |
| Greece | 3,675,602 | 4,015,072 | 4,763,560 | 4,800,000 | 4,900,000 | 5,555,000 |
| Hungary | 2,614,000 | 2,757,000 | 2,524,000 | 2,727,000 | 2,771,000 | 2,712,000 |
| Iceland | 114,000 | 100,000 | 100,000 | 85,000 | 86,000 | 114,667 |
| Italy | 26,000,000 | 29,000,000 | 31,000,000 | 32,000,000 | 33,000,000 | 31,793,000 |
| Luxemburg | 179,848 | 188,322 | 203,668 | 241,320 | 245,192 | 266,506 |
| Netherlands | 3,296,000 | 3,382,000 | 3,200,000 | 3,768,000 | 3,828,000 | 4,044,000 |
| Norway | 2,118,278 | 2,260,809 | 2,453,000 | 2,567,859 | 2,609,066 | 2,740,169 |
| Poland | 10,962,000 | 11,410,000 | 11,643,000 | 11,988,000 | 12,180,000 | 13,082,000 |
| Portugal | 1,792,664 | 1,832,521 | 2,002,625 | 2,309,868 | 2,346,935 | 2,268,000 |
| Roumania | 6,239,000 | 6,915,000 | 7,396,000 | 7,999,000 | 8,127,000 | 8,523,000 |

(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

Tonnes

| Producing Country | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|---|-------------|-------------|-------------|---------------|---------------|--------------|
| OTHER COUNTRIES | | | | | | |
| (cont.) | | | | | | |
| Spain— | | | | | | |
| Portland cement .. | 12,074,346 | 13,918,341 | 14,825,120 | 15,287,223 | 15,532,538 | 16,320,048 |
| Natural cement .. | 334,038 | 273,919 | n.a. | n.a. | n.a. | n.a. |
| Other cements .. | 817,821 | 754,419 | 934,741 | 722,347 | 733,939 | 672,941 |
| Sweden— | | | | | | |
| Portland cement .. | 3,743,590 | 3,850,477 | 3,895,061 | 3,734,335 | 3,974,260 | 3,827,000 |
| Other cements .. | 96,274 | | | | | |
| Switzerland .. | 4,109,723 | 4,252,278 | 4,462,533 | 4,721,478 | 4,797,244 | 5,219,714 |
| U.S.S.R. .. | 83,460,000 | 86,069,000 | 88,354,000 | 93,740,000 | 95,244,000 | n.a. |
| Yugoslavia .. | 3,261,000 | 3,804,000 | 3,901,000 | 4,330,000 | 4,399,000 | 4,954,000 |
| Algeria .. | 719,000 | 853,000 | 927,000 | 909,000 | 924,000 | 972,000 |
| Angola .. | 274,862 | 306,764 | 376,714 | 442,612 | 449,715 | 529,594 |
| Canary Islands .. | (g) | (g) | (g) | (g) | (g) | (g) |
| Cape Verde Islands .. | 8,000 | 9,000 | — | — | — | n.a. |
| Egypt .. | 2,711,000 | 3,097,124 | 3,556,000 | 3,638,000 | 3,696,000 | 3,920,000 |
| Ethiopia (d) .. | 148,000 | 168,000 | 195,000 | 201,000 | 204,000 | n.a. |
| Morocco .. | 860,368 | 999,794 | 1,149,900 | 1,400,000 | 1,400,000 | 1,528,000 |
| Mozambique .. | 239,115 | 281,000 | 300,849 | 378,921 | 385,002 | 420,873 |
| Senegal .. | 169,700 | 199,100 | 203,600 | 237,200 | 241,000 | 241,000 |
| Sudan .. | 89,000 | 145,000 | 166,000 | 187,000 | 190,000 | n.a. |
| Tunisia .. | 464,000 | 462,000 | 592,900 | 537,000 | 546,000 | 583,000 |
| South Africa .. | 3,750,000 | 3,995,000 | 5,033,000 | 5,657,000 | 5,748,000 | 5,856,000 |
| Zaire Republic .. | 287,000 | 289,000 | 317,000 | 378,000 | 384,000 | n.a. |
| Costa Rica .. | 115,312 | 126,442 | 149,030 | 184,125 | 187,080 | 212,532 |
| Cuba .. | 882,000 | n.a. | f 1,400,000 | f 1,500,000 | f 1,500,000 | f 1,500,000 |
| Dominican Republic .. | 305,442 | 321,540 | 383,772 | 480,568 | 488,280 | 592,942 |
| Guatemala .. | 165,629 | 161,517 | 180,429 | 186,363 | 189,354 | n.a. |
| Haiti .. | 39,000 | 40,000 | 60,000 | 60,000 | 60,000 | n.a. |
| Honduras .. | 109,000 | 127,000 | 129,646 | 130,000 | 130,000 | n.a. |
| Mexico .. | 5,400,000 | 5,913,000 | 6,549,000 | 7,152,000 | 7,267,000 | 7,521,000 |
| Nicaragua .. | 89,285 | 108,755 | 107,357 | 125,438 | 127,451 | n.a. |
| Panama Republic .. | 148,000 | 162,000 | 171,000 | 180,000 | 180,000 | n.a. |
| Salvador .. | 143,054 | 152,278 | 139,475 | 164,284 | 166,920 | 186,000 |
| United States (a)— | | | | | | |
| Portland cement .. | 62,006,300 | 66,288,300 | 68,748,000 | 65,328,000 | 66,376,000 | 71,052,000 |
| Prepared masonry cement (b) .. | 2,745,000 | 2,900,100 | 2,907,000 | 2,632,000 | 2,674,000 | |
| Natural, slag and hydraulic lime cements .. | 15,900 | 14,400 | 15,000 | n.a. | n.a. | n.a. |
| Argentina .. | 3,496,650 | 4,146,331 | 4,278,215 | 4,694,262 | 4,769,591 | 5,556,000 |
| Bolivia .. | (f) 66,000 | 70,000 | 69,700 | 117,690 | 119,579 | 128,378 |
| Brazil .. | 6,363,000 | 7,240,000 | 7,699,926 | 8,860,250 | 9,002,431 | 9,804,000 |
| Chile .. | 1,184,064 | 1,230,963 | 1,420,000 | 1,323,000 | 1,344,000 | 1,368,000 |
| Colombia .. | 2,080,314 | 2,329,826 | 2,353,238 | 2,728,000 | 2,772,000 | 2,828,000 |
| Ecuador .. | 422,914 | 434,000 | 449,000 | 451,000 | 458,000 | 462,000 |
| Paraguay .. | 15,000 | 24,000 | 36,809 | 67,000 | 68,000 | n.a. |
| Peru .. | 1,070,379 | 1,091,323 | 1,119,077 | 1,126,294 | 1,144,368 | n.a. |
| Uruguay .. | 414,000 | 506,000 | 460,000 | 493,000 | 501,000 | n.a. |
| Venezuela .. | 2,242,320 | 2,398,173 | 2,106,000 | 2,596,000 | 2,638,000 | n.a. |
| Afghanistan (c) .. | 123,600 | 90,600 | 103,400 | 103,000 | 105,000 | n.a. |
| Burma .. | 138,000 | 174,000 | 197,000 | 154,000 | 156,000 | 194,000 |
| Cambodia .. | (e) 59,000 | 59,000 | 59,000 | 39,000 | 40,000 | n.a. |
| China .. | e 8,000,000 | 8,853,000 | 10,000,000 | e 10,000,000 | e 10,000,000 | f 13,000,000 |
| Formosa .. | 3,431,743 | 3,930,300 | 4,023,000 | 4,237,000 | 4,305,000 | 5,043,000 |
| Indonesia .. | 324,000 | 404,000 | 531,000 | 591,000 | 600,000 | n.a. |
| Iran (c) .. | 1,372,000 | r 1,874,000 | 2,305,000 | (e) 2,536,000 | (e) 2,577,000 | n.a. |
| Iraq .. | e 1,575,000 | 1,575,000 | 1,377,000 | f 1,500,000 | f 1,500,000 | n.a. |

(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.)

| Producing Country | Long tons | | | | Tonnes | |
|-----------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Israel | 791,000 | 1,087,000 | 1,279,000 | 1,362,000 | 1,384,000 | 1,392,000 |
| Japan | 42,608,000 | 46,927,000 | 50,575,000 | 56,290,000 | 57,190,000 | 59,460,000 |
| Jordan | 315,495 | 375,189 | 480,400 | 371,586 | 377,549 | 418,910 |
| Korea (South) | 2,402,473 | 3,516,000 | 4,788,000 | 5,729,000 | 5,821,000 | 6,870,000 |
| Korea (North) | 2,559,000 | 2,656,000 | 2,760,000 | 4,000,000 | 4,000,000 | n.a. |
| Lebanon | 1,000,000 | 892,000 | 1,233,000 | 1,320,000 | 1,340,000 | 1,499,000 |
| Philippine Republic | 2,079,000 | 2,518,000 | 2,900,000 | 2,425,000 | 2,464,000 | 3,138,000 |
| Saudi Arabia | 348,000 | 393,000 | 549,000 | 640,000 | 650,000 | n.a. |
| Syria | 677,000 | 902,000 | 919,000 | 948,000 | 964,000 | 909,000 |
| Thailand | 1,710,000 | 2,133,960 | 2,365,430 | 2,791,000 | 2,836,000 | 2,720,000 |
| Turkey | 4,181,892 | 4,653,000 | 5,704,000 | 6,260,000 | 6,360,000 | 7,548,000 |
| Vietnam (South) | 177,901 | 143,000 | 243,000 | 280,000 | 284,000 | 263,300 |
| Vietnam (North) | (b) 738,000 | (b) 500,000 | (b) 500,000 | (a) 600,000 | (a) 600,000 | (a) 600,000 |
| TOTAL (a) | 425,000,000 | 454,000,000 | 481,000,000 | 507,000,000 | 515,000,000 | 540,000,000 |
| WORLD'S TOTAL (a) | 470,000,000 | 503,000,000 | 533,000,000 | 558,000,000 | 567,000,000 | 596,000,000 |

(a) Estimated.

(b) United States Bureau of Mines' estimate.

CHINA CLAY
PRODUCTION OF CHINA CLAY

Long tons | Tonnes

| Producing Country and Description | Long tons | | | | Tonnes | |
|-----------------------------------|-----------|------------|-----------|-----------|-----------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom (c) .. | 2,581,000 | 2,751,000 | 2,751,000 | 3,100,000 | 3,149,000 | 2,736,000 |
| Kenya | 1,433 | 1,331 | 1,449 | 1,742 | 1,770 | n.a. |
| Nigeria | 320 | 233 | 462 | 482 | 490 | 153 |
| Swaziland | 1,830 | 2,111 | 1,631 | 1,594 | 1,620 | 2,049 |
| Tanzania | 307 | 596 | 732 | 457 | 464 | 830 |
| Ceylon | 2,574 | 2,822 | 3,035 | 2,174 | 2,209 | 3,165 |
| Hong Kong | 8,435 | 5,575 | 4,341 | 3,725 | 3,785 | 2,526 |
| India | 504,898 | 498,000 | 547,059 | 538,020 | 546,654 | 599,249 |
| Malaysia (West) .. | 1,758 | 1,497 | 2,016 | 3,274 | 3,326 | 11,655 |
| Pakistan | 2,881 | 3,033 | 3,792 | n.a. | n.a. | 4,336 |
| Australia | 66,112 | 59,343 | 64,450 | 88,162 | 89,577 | 76,497 |
| OTHER COUNTRIES | | | | | | |
| Austria (crude) .. | 377,718 | 321,978 | 342,575 | 334,477 | 339,844 | 302,334 |
| Belgium | 97,245 | (e) 97,000 | n.a. | n.a. | n.a. | n.a. |
| Bulgaria (f) | 123,000 | 125,000 | r 120,000 | 125,000 | 127,000 | (e) 130,000 |
| Czechoslovakia .. | 335,000 | 336,000 | 338,000 | 361,000 | 367,000 | 404,000 |
| France | 148,000 | 140,700 | 148,600 | 168,300 | 171,000 | 176,000 |
| Germany (Federal) .. | 397,339 | 460,912 | 481,655 | 517,652 | 525,959 | 491,472 |
| Greece | 59,052 | 77,623 | r 60,435 | 47,512 | 48,274 | 54,855 |
| Hungary | 65,000 | 62,000 | 59,000 | 76,300 | 77,500 | n.a. |
| Italy— | | | | | | |
| Crude | r 99,099 | r 103,071 | r 111,752 | 99,439 | 101,035 | 91,138 |
| Kaolinic earth .. | r 10,483 | r 15,413 | 16,086 | 9,897 | 10,056 | n.a. |
| Portugal— | | | | | | |
| Crude and washed .. | 36,621 | 40,754 | 44,122 | 52,185 | 53,023 | 44,950 |
| Spain (f) | 212,606 | 223,114 | 269,982 | 207,000 | 210,000 | n.a. |
| Sweden (b) | 28,666 | 27,263 | 28,247 | n.a. | n.a. | n.a. |
| Yugoslavia | 4,500 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Egypt | 31,613 | r 107,900 | 77,000 | 22,087 | 22,441 | 44,727 |
| Ethiopia | n.a. | 12,500 | 12,500 | 10,700 | 10,870 | n.a. |
| Mozambique | 612 | 514 | 1,250 | 1,452 | 1,476 | 1,586 |
| South Africa | 32,316 | 32,195 | 32,636 | 36,313 | 36,896 | 39,184 |
| Mexico | 77,350 | 74,520 | 88,315 | 77,300 | 78,548 | 72,587 |
| United States (a) .. | 3,547,249 | 3,751,000 | 4,231,000 | 4,398,000 | 4,469,000 | n.a. |
| Argentina | 63,084 | r 72,542 | 79,627 | 73,378 | 74,555 | n.a. |
| Chile | 28,959 | 26,000 | 41,000 | 47,786 | 48,553 | 57,434 |
| Colombia | 82,790 | 82,700 | 86,800 | 91,147 | 92,610 | 96,575 |
| Ecuador | 70 | 900 | 478 | 759 | 771 | n.a. |
| Peru | n.a. | 113 | 1,574 | 1,525 | 1,549 | n.a. |
| Japan | 147,913 | 167,000 | 191,000 | 217,389 | 220,877 | n.a. |
| Korea (South) | 101,054 | 59,557 | 52,146 | 83,272 | 84,608 | 124,445 |
| Thailand | — | — | 1,900 | 3,138 | 3,188 | 10,133 |

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

(a) Sold or used by producers.

(e) United States Bureau of Mines' estimate.

(b) Sales.

(f) Washed or equivalent.

(c) The figures are unofficial. The official production statistics for China Clay and China Stone together are as follows (long tons): 1967—2,611,000; 1968—2,781,000; 1969—2,784,000; 1970—3,133,000. (Tonnes): 1970—3,183,000; 1971—2,799,000.

EXPORTS OF CHINA CLAY

| Exporting Country | Long tons | | | | Tonnes | |
|-------------------------------|-----------|-----------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom .. | 1,760,137 | 1,848,145 | 2,096,278 | 2,137,858 | 2,172,171 | 1,927,075 |
| Hong Kong .. | 4,823 | 3,062 | 4,875 | 4,404 | 4,475 | 5,441 |
| India (a) .. | 529 | 107 | 135 | 374 | 380 | 269 |
| Malaysia (West) .. | 120 | 138 | 549 | 806 | 819 | 7,337 |
| OTHER COUNTRIES | | | | | | |
| Austria .. | 27,374 | 26,385 | 28,611 | 24,813 | 25,211 | 22,090 |
| Belgium-Luxemburg .. | | | | | | |
| E.U. .. | 1,220 | 1,052 | 1,433 | 10,473 | 10,641 | 8,478 |
| Czechoslovakia .. | 162,000 | 167,000 | 245,000 | 189,000 | 192,000 | 211,000 |
| Denmark .. | 57 | 46 | 42 | 1 | 1 | 4 |
| France .. | 52,784 | 59,206 | 62,892 | 68,999 | 70,106 | 74,876 |
| Germany (Federal) .. | 77,311 | 75,594 | 89,684 | 96,827 | 98,381 | 89,306 |
| Germany (East) .. | 78,503 | 72,444 | 63,516 | 83,876 | 85,222 | 86,627 |
| Italy .. | 234 | 469 | 589 | 1,653 | 1,680 | 1,197 |
| Netherlands .. | 145 | 20,792 | 37,550 | 44,959 | 45,680 | 47,094 |
| Portugal .. | 2,401 | 429 | 892 | 1,304 | 1,325 | 1,260 |
| Spain .. | 19,277 | 17,428 | 32,482 | 39,583 | 40,218 | 54,937 |
| Sweden .. | 160 | 1,993 | 540 | 122 | 124 | 92 |
| U.S.S.R. .. | 5,200 | 13,287 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Mozambique .. | 72 | 20 | 696 | 966 | 981 | 1,302 |
| South Africa .. | 872 | 701 | 633 | 560 | 569 | 485 |
| United States .. | 287,437 | 348,109 | 426,495 | 728,825 | 740,515 | 610,611 |
| Argentina .. | 41 | 22 | 71 | 76 | 77 | 77 |
| Brazil .. | 945 | 1,403 | 787 | 1,479 | 1,503 | <i>n.a.</i> |
| Japan .. | 1,743 | 2,665 | 3,943 | 7,908 | 8,035 | 3,426 |
| Korea (South) .. | 25,942 | 38,982 | 40,355 | 87,622 | 89,028 | 77,522 |
| Turkey .. | — | — | — | 740 | 752 | <i>n.a.</i> |

(a) Years ended March 31 following that stated.

IMPORTS OF CHINA CLAY

Long tons | Tonnes

| Importing Country | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|-------------------------------|---------|---------|---------|---------|---------|---------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Canada | 169,921 | 160,979 | 205,327 | 212,151 | 215,555 | 183,650 |
| Hong Kong | 51 | 148 | 389 | 998 | 1,014 | 793 |
| India | 3,412 | 2,072 | 2,992 | 971 | 987 | 980 |
| Malaysia (West) | 1,299 | 1,177 | 1,397 | 1,395 | 1,418 | 990 |
| Australia | 26,197 | 25,549 | 24,276 | 41,932 | 42,605 | 32,717 |
| New Zealand (b) | 3,004 | 2,413 | 3,845 | 2,637 | 2,679 | n.a. |
| OTHER COUNTRIES | | | | | | |
| Austria | 27,955 | 31,264 | 38,838 | 47,270 | 48,029 | 55,264 |
| Belgium-Luxemburg | | | | | | |
| E.U. | 93,897 | 128,714 | 179,842 | 226,218 | 229,848 | 208,622 |
| Denmark | 30,877 | 35,232 | 37,436 | 41,492 | 42,158 | 38,110 |
| Finland | 209,726 | 199,596 | 234,197 | 303,723 | 308,597 | 233,941 |
| France | 225,048 | 252,368 | 281,752 | 312,578 | 317,594 | 302,535 |
| Germany (Federal) | 391,800 | 498,025 | 534,432 | 632,237 | 642,383 | 590,701 |
| Germany (East) | 26,194 | 29,301 | 28,263 | 34,355 | 34,906 | 31,721 |
| Hungary | 63,939 | 67,073 | 89,934 | 75,269 | 76,477 | 63,833 |
| Italy | 364,692 | 438,375 | 479,947 | 553,574 | 562,457 | 463,663 |
| Netherlands | 131,439 | 150,327 | 190,312 | 225,238 | 228,852 | 229,468 |
| Norway | 66,681 | 72,755 | 85,744 | 79,129 | 80,399 | 83,507 |
| Poland | 70,187 | 77,799 | 89,632 | 111,710 | 113,503 | 127,633 |
| Portugal | 970 | 2,253 | 3,539 | 4,434 | 4,505 | 3,658 |
| Spain | 44,189 | 52,760 | 63,980 | 75,806 | 77,022 | 69,782 |
| Sweden | 189,506 | 204,560 | 212,771 | 234,741 | 238,508 | 208,299 |
| Yugoslavia | 26,096 | 29,233 | 35,591 | 36,871 | 37,463 | 36,066 |
| Algeria | 6,294 | 5,243 | 4,920 | 7,469 | 7,589 | n.a. |
| Angola | 74 | 99 | 92 | 60 | 61 | 218 |
| Morocco | 2,004 | 3,013 | 3,414 | 3,205 | 3,256 | 3,794 |
| Mozambique | 73 | 73 | 84 | 72 | 73 | n.a. |
| Costa Rica | 176 | 394 | 152 | 568 | 577 | 472 |
| Guatemala | 657 | 897 | 1,137 | 1,527 | 1,552 | 1,657 |
| Mexico | 12,897 | 17,373 | 20,005 | 22,949 | 23,317 | 23,229 |
| Nicaragua | n.a. | 4,416 | 3,612 | 3,016 | 3,064 | 2,728 |
| United States | 82,229 | 67,094 | 58,217 | 58,335 | 59,271 | 40,480 |
| Argentina | 11,411 | 13,599 | 15,332 | 14,726 | 14,962 | 13,741 |
| Brazil | 909 | 1,723 | 2,327 | 6,137 | 6,235 | n.a. |
| Chile | 165 | 200 | 405 | 476 | 484 | n.a. |
| Colombia | r 2,244 | r 3,379 | 2,474 | 3,801 | 3,862 | n.a. |
| Ecuador | 25 | 39 | n.a. | n.a. | n.a. | n.a. |
| Peru | 3,488 | 2,882 | 2,872 | n.a. | n.a. | n.a. |
| Uruguay | 1,618 | 1,327 | 1,399 | 2,687 | 2,730 | 2,020 |
| Venezuela | 6,375 | 9,645 | 8,960 | n.a. | n.a. | n.a. |
| Iran (a) | 639 | 1,040 | 664 | 3,503 | 3,559 | 5,801 |
| Japan | 102,286 | 122,157 | 134,387 | 239,221 | 243,060 | 248,504 |
| Philippine Republic | 3,888 | 4,822 | 3,910 | 3,801 | 3,862 | 2,816 |
| Turkey | 25 | 21 | 26 | 43 | 44 | n.a. |

(a) Years ended March 20 following that stated.

(b) Years ended June 30 of that stated.

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

| Producing Country | Long tons | | | | | Tonnes | | | | |
|-------------------------------|--|-----------|-----------|-----------|-----------|-----------|---------|---------|---------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1971 | 1967 | 1968 | 1969 | 1970 | 1971 |
| | Estimated Cr ₂ O ₃ content | | | | | | | | | |
| COMMONWEALTH COUNTRIES | | | | | | | | | | |
| Rhodesia .. | b 312,000 | b 375,000 | b 357,000 | b 357,000 | b 363,000 | 156,000 | 187,000 | 178,000 | 178,000 | 181,000 |
| Cyprus (a) .. | 21,035 | 24,708 | 23,543 | 32,808 | 33,335 | 10,000 | 12,000 | 16,000 | 16,000 | 16,300 |
| India .. | 107,805 | 202,409 | 222,496 | 269,357 | 273,679 | 51,700 | 97,200 | 106,800 | 129,000 | 131,000 |
| Pakistan .. | 25,956 | 25,610 | 25,893 | 25,621 | 26,032 | 15,000 | 13,000 | 13,000 | 13,000 | 13,000 |
| TOTAL | 467,000 | 628,000 | 629,000 | 682,000 | 693,000 | 707,000 | | | | |
| OTHER COUNTRIES | | | | | | | | | | |
| Albania .. | 321,700 | 382,000 | 422,000 | b 446,000 | b 454,000 | 138,000 | 164,000 | 181,000 | 192,000 | 195,000 |
| Finland .. | 6,300 | 35,600 | 70,200 | 118,606 | 120,509 | n.a. | n.a. | 29,600 | 49,800 | 50,600 |
| Greece .. | 10,257 | 13,000 | 23,800 | 27,007 | 27,440 | 5,000 | 5,000 | 11,000 | 12,000 | 12,000 |
| U.S.S.R. (b) .. | 1,500,000 | 1,620,000 | 1,673,000 | 1,722,000 | 1,750,000 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Yugoslavia .. | 46,417 | 44,546 | 38,711 | 39,924 | 40,565 | 21,500 | 21,500 | 13,800 | 21,300 | 21,600 |
| Malagasy Republic .. | — | — | 44,068 | 103,031 | 104,684 | — | — | 18,300 | 42,700 | 43,400 |
| South Africa .. | 1,130,906 | 1,134,524 | 1,178,752 | 1,404,717 | 1,427,259 | 509,000 | 510,536 | 530,483 | 632,000 | 642,000 |
| Sudan .. | 18,000 | 22,000 | 25,000 | 46,300 | 47,100 | 9,000 | 11,000 | 12,300 | 14,000 | 14,000 |
| Cuba .. | (b) 29,000 | n.a. | n.a. | n.a. | n.a. | 10,600 | n.a. | n.a. | n.a. | n.a. |
| Brazil .. | 14,788 | 16,762 | 16,071 | 27,180 | 27,616 | 5,600 | 6,400 | 5,900 | 10,300 | 10,500 |
| Colombia .. | — | — | 160 | 170 | 180 | — | — | n.a. | n.a. | n.a. |
| Iran (c) .. | 147,000 | 157,000 | 180,000 | 220,000 | 220,000 | 73,000 | 78,000 | 86,000 | 103,000 | 105,000 |
| Japan .. | 44,497 | 27,450 | 29,312 | 32,459 | 32,980 | 15,000 | 10,000 | 10,700 | 10,721 | 10,893 |
| Philippine Republic .. | 413,124 | 431,768 | 462,240 | 557,497 | 566,443 | 149,000 | 150,000 | 166,000 | 195,000 | 198,000 |
| Turkey (a) .. | 438,763 | 412,189 | 446,733 | 510,600 | 518,800 | 211,000 | 198,000 | 214,000 | 245,000 | 249,000 |
| New Caledonia .. | 1,795 | — | — | — | — | 933 | — | — | — | — |
| TOTAL | 4,000,000 | 4,300,000 | 4,700,000 | 5,300,000 | 5,400,000 | 5,500,000 | | | | |
| WORLD'S TOTAL | 4,700,000 | 4,900,000 | 5,300,000 | 6,000,000 | 6,100,000 | 6,200,000 | | | | |

Chrome ore is also produced in Bulgaria, Roumania and North Vietnam.
 (a) Figures relate to saleable production. (b) United States Bureau of Mines' estimate.
 (c) Years ended March 20 following that stated.

EXPORTS OF CHROME ORE, ETC.

Long tons | Tonnes

| Exporting Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|---|------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Chromium metal .. | 639 | 1,054 | 1,262 | (d) 1,587 | (d) 1,612 | (d) 1,289 |
| Cyprus— | | | | | | |
| Ore and concentrates .. | 26,948 | 23,591 | 27,973 | 30,752 | 31,246 | 42,951 |
| India (a)— | | | | | | |
| Ore | 65,980 | 108,327 | 140,927 | 115,732 | 117,589 | 57,476 |
| Pakistan— | | | | | | |
| Ore | (c) 13,286 | (c) 2,489 | (c) 1,083 | (c) 50,642 | (c) 51,455 | (c) 23,885 |
| OTHER COUNTRIES | | | | | | |
| Albania— | | | | | | |
| Ore | 317,900 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Austria— | | | | | | |
| Ore | 508 | 234 | 697 | 93 | 94 | 39 |
| Finland— | | | | | | |
| Ferro-chrome and ferro-silico-chrome .. | — | 589 | 19,359 | 28,399 | 29,465 | 26,390 |
| France— | | | | | | |
| Chromium metal .. | 225 | 210 | 338 | 316 | 321 | 307 |
| Ferro-chrome | 20,662 | 21,318 | 12,711 | 11,209 | 11,389 | 14,982 |
| Germany (Federal)— | | | | | | |
| Ore | 1,382 | 1,295 | 3,258 | 2,854 | 2,900 | 5,590 |
| Chromium metal .. | 97 | 19 | 29 | 211 | 214 | 119 |
| Greece— | | | | | | |
| Ore | 13,226 | 15,088 | 25,453 | 24,581 | 24,975 | 26,804 |
| Italy— | | | | | | |
| Ore | 47 | 114 | 117 | 241 | 245 | 685 |
| Ferro-chrome | 7,498 | 3,787 | 7,329 | 5,911 | 6,006 | 6,034 |
| Netherlands— | | | | | | |
| Ore | 3,268 | 3,727 | 2,555 | 4,164 | 4,231 | 5,437 |
| Norway— | | | | | | |
| Ferro-chrome | 27,065 | 33,690 | 37,894 | 31,989 | 32,502 | 24,489 |
| Ferro-silico-chrome .. | 945 | 5,021 | 3,087 | 1,424 | 1,447 | 700 |
| Spain— | | | | | | |
| Ferro-chrome | — | 8 | 1,055 | 3,338 | 3,392 | 5,523 |
| Sweden— | | | | | | |
| Ore | — | 84 | 25 | 10 | 10 | 4 |
| Ferro-chrome | 22,979 | 22,591 | 21,372 | 20,503 | 20,832 | 18,161 |
| U.S.S.R.— | | | | | | |
| Ore | 1,013,733 | 1,031,448 | 1,125,900 | 1,181,000 | 1,200,000 | 1,097,000 |
| Ferro-chrome | 31,000 | 32,800 | 37,200 | 44,092 | 44,800 | 42,300 |
| Yugoslavia— | | | | | | |
| Ore and concentrates .. | 6,811 | 9,114 | 3,090 | 11,148 | 11,327 | 11,582 |
| Ferro-chrome | 8,028 | 8,303 | 5,811 | 9,998 | 10,158 | 6,726 |
| Malagasy Republic— | | | | | | |
| Ore | — | — | 32,459 | 128,283 | 130,342 | 113,397 |
| South Africa— | | | | | | |
| Ore | 690,054 | 772,755 | 905,219 | 865,553 | 879,443 | 1,162,184 |
| Ferro-chrome | 88,911 | 74,706 | 105,775 | 86,441 | 87,828 | 88,911 |
| United States— | | | | | | |
| Ore | 6,780 | 11,201 | 44,184 | 36,497 | 37,083 | 31,588 |
| Chromium metal .. | 82 | 78 | 134 | 201 | 204 | 208 |
| Ferro-chrome | 12,012 | 24,221 | 21,940 | 25,332 | 25,739 | 8,313 |
| Iran (b)— | | | | | | |
| Ore | 87,368 | 61,147 | 143,005 | 218,950 | 222,463 | 151,828 |

(a) Years ended March 31 following that stated.

(b) Years ended March 20 following that stated.

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

(d) Including vanadium.

EXPORTS OF CHROME ORE, ETC. (cont.)

| Exporting Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|---------|---------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Japan— | | | | | | |
| Ore and concentrates .. | 5 | 1 | — | <i>n.a.</i> | <i>n.a.</i> | 30 |
| Ferro-chrome | 6,228 | 5,515 | 3,047 | 1,932 | 1,963 | 27,566 |
| Philippine Republic— | | | | | | |
| Ore and concentrates .. | 455,752 | 429,922 | 507,313 | 586,624 | 596,038 | 403,887 |
| Turkey— | | | | | | |
| Ore | 309,346 | 380,806 | 489,269 | 537,441 | 546,065 | <i>n.a.</i> |
| Ferro-chrome | 5,123 | 9,678 | 7,096 | 7,366 | 7,484 | <i>n.a.</i> |
| New Caledonia— | | | | | | |
| Ore | 1,216 | — | — | — | — | <i>n.a.</i> |

IMPORTS OF CHROME ORE, ETC.

| Importing Country and Description | Long tons | | | | Tonnes | |
|--|-------------|-------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ore | 98,359 | 156,432 | 195,643 | 161,906 | 164,505 | 207,030 |
| Ferro-chrome | 44,627 | 58,464 | 65,338 | 69,002 | 70,109 | 53,326 |
| Ferro-silico-chrome | 5,998 | 4,299 | 7,773 | 8,387 | 8,522 | 4,503 |
| Zambia— | | | | | | |
| Ore | 848 | 801 | 1,929 | 586 | 595 | <i>n.a.</i> |
| Canada— | | | | | | |
| Ore and concentrates | | | | | | |
| (<i>Cr content</i>) | 30,790 | 20,002 | 37,433 | 27,184 | 27,620 | 29,679 |
| Ferro-chrome | 19,411 | 13,433 | 22,431 | 20,485 | 20,814 | 36,202 |
| India— | | | | | | |
| Ore | 5 | — | — | — | — | — |
| Ferro-chrome (a) | 1,185 | 459 | 1,411 | 13 | 13 | 219 |
| Australia— | | | | | | |
| Ore | 25,115 | 23,898 | 18,688 | 13,221 | 13,433 | <i>n.a.</i> |
| Ferro-chrome | 3,430 | 3,487 | 5,877 | 12,879 | 13,086 | 6,900 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Ore | 36,405 | 53,678 | 83,830 | 80,501 | 81,793 | 94,290 |
| Ferro-chrome | 14,420 | 17,640 | 23,669 | 19,479 | 19,792 | 13,316 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Ore | 2,098 | 13,991 | 17,490 | 18,253 | 18,546 | 21,989 |
| Chromium metal | 27 | 51 | 56 | 72 | 73 | 50 |
| Ferro-chrome and silico-chrome | 6,721 | 7,582 | 8,727 | 14,751 | 14,988 | 15,200 |
| Czechoslovakia— | | | | | | |
| Ore | 155,000 | 188,000 | 178,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Denmark— | | | | | | |
| Ferro-chrome | 401 | 593 | 798 | 710 | 721 | 1,067 |
| Finland— | | | | | | |
| Ferro-chrome | 1,000 | 1,291 | 1,428 | 1,436 | 1,459 | 1,754 |
| France— | | | | | | |
| Ore | 244,920 | 258,963 | 325,110 | 414,769 | 421,425 | 340,407 |
| Ferro-chrome | 1,150 | 4,311 | 10,165 | 10,077 | 10,239 | 6,962 |
| Germany (Federal)— | | | | | | |
| Ore | 280,164 | 355,622 | 480,869 | 483,693 | 491,455 | 483,488 |
| Chromium metal | 89 | 234 | 377 | 123 | 125 | 236 |
| Germany (East)— | | | | | | |
| Ore (b) | 34,959 | 28,693 | 31,387 | 41,090 | 41,749 | 49,400 |
| Hungary— | | | | | | |
| Ore | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 52,293 | 53,132 | <i>n.a.</i> |
| Ferro-chrome | 9,303 | 8,108 | 6,837 | 8,122 | 8,252 | 6,128 |
| Italy— | | | | | | |
| Ore | 93,326 | 62,093 | 157,922 | 140,507 | 142,762 | 201,826 |
| Chromium metal | 58 | 77 | 72 | 111 | 113 | 73 |
| Ferro-chrome | 17,744 | 19,886 | 25,525 | 30,283 | 30,769 | 22,013 |
| Ferro-silico-chrome | 5,704 | 11,158 | 9,440 | 9,595 | 9,749 | 8,338 |
| Netherlands— | | | | | | |
| Ore | 5,858 | 3,236 | 4,069 | 5,511 | 5,600 | 9,645 |
| Chromium metal | 9 | 16 | 30 | 42 | 43 | 9 |
| Ferro-chrome | 1,106 | 2,263 | 2,286 | 2,607 | 2,649 | 2,967 |
| Norway— | | | | | | |
| Ore | 62,021 | 68,517 | 93,769 | 77,357 | 78,598 | 82,072 |
| Poland— | | | | | | |
| Ore | 147,865 | 134,808 | 159,895 | 139,258 | 141,493 | 152,536 |
| Spain— | | | | | | |
| Ore | 15,736 | 29,030 | 44,664 | 57,986 | 58,911 | 49,490 |
| Ferro-chrome | 1,485 | 2,420 | 6,176 | 3,582 | 3,640 | 3,935 |

(a) Years ended March 31 following that stated.

 (b) Cr_2O_3 content.

IMPORTS OF CHROME ORE, ETC. (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--|-----------|---------|----------|-----------|-----------|-----------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Sweden— | | | | | | |
| Ore | 138,496 | 147,077 | 181,070 | 193,793 | 196,903 | 187,656 |
| Chromium metal | 226 | 174 | 211 | 125 | 127 | 273 |
| Ferro-chrome | 13,744 | 18,651 | 30,108 | 20,811 | 21,145 | 22,622 |
| Yugoslavia— | | | | | | |
| Ore | 53,111 | 74,295 | 65,428 | 68,890 | 69,996 | 86,163 |
| South Africa— | | | | | | |
| Ore | 29,401 | 22,744 | 31,835 | 21,630 | 21,977 | 21,423 |
| Ferro-chrome | 41 | 1,105 | 3,551 | 1,872 | 1,902 | 2,124 |
| Mexico— | | | | | | |
| Ferro-chrome | 379 | 491 | 816 | 1,514 | 1,538 | 1,107 |
| United States— | | | | | | |
| Ore | 1,107,734 | 968,439 | 987,492 | 1,254,937 | 1,275,075 | 1,178,330 |
| <i>(Cr₂O₃ content)</i> | 505,482 | 451,829 | 451,782 | 581,770 | 591,106 | 535,451 |
| Ferro-chrome | 51,324 | 53,407 | r 51,276 | 36,879 | 37,471 | 77,280 |
| <i>(Cr content)</i> | 34,351 | 35,615 | r 33,036 | 23,610 | 23,989 | 48,932 |
| Metal | 1,084 | 1,219 | 1,331 | 1,689 | 1,716 | 1,480 |
| Argentina— | | | | | | |
| Ore and concentrates .. | 49 | 305 | 4,669 | 7,985 | 8,113 | 1,256 |
| Brazil— | | | | | | |
| Ore | 6,116 | 7,068 | 7,208 | 8,115 | 8,245 | n.a. |
| Ferro-chrome | 777 | 1,573 | 1,433 | 1,639 | 1,665 | n.a. |
| Chile— | | | | | | |
| Ferro-chrome | 269 | 195 | 542 | 595 | 605 | n.a. |
| Formosa— | | | | | | |
| Ore | 49 | — | n.a. | 980 | 996 | n.a. |
| Japan— | | | | | | |
| Ore | 586,285 | 625,817 | 721,262 | 1,131,436 | 1,149,592 | 1,161,969 |
| Ferro-chrome | 6,247 | 3,430 | 9,545 | 25,141 | 25,544 | 5,118 |
| Turkey— | | | | | | |
| Ferro-chrome | 19 | 25 | n.a. | 1 | 1 | n.a. |

COAL, COKE AND BY-PRODUCTS

PRODUCTION OF COAL (Including Brown Coal and Lignite)

| Producing Country and Description | Long tons | | | | Tonnes | |
|-----------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Great Britain— | | | | | | |
| Mined— | | | | | | |
| Anthracite | 2,671,000 | 2,391,000 | 2,178,000 | 2,099,000 | 2,133,000 | 2,156,000 |
| Bituminous | 162,388,000 | 154,833,100 | 142,078,200 | 132,427,100 | 134,552,500 | 134,322,100 |
| Opencast— | | | | | | |
| Anthracite | 1,375,800 | 1,507,000 | 1,396,000 | 1,527,000 | 1,551,000 | 1,976,200 |
| Bituminous | 5,708,900 | 5,305,600 | 4,866,000 | 6,196,600 | 6,296,100 | 8,648,900 |
| Northern Ireland— | | | | | | |
| Bituminous | 2,024 | <i>n.a.</i> | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Nigeria— | | | | | | |
| Sub-bituminous | 200,000 | — | 15,700 | 58,788 | 59,732 | 157,950 |
| Rhodesia— | | | | | | |
| Bituminous (a) | <i>b</i> 2,695,712 | <i>b</i> 2,760,755 | 3,033,862 | 3,120,741 | 3,170,820 | 3,092,533 |
| Swaziland— | | | | | | |
| Bituminous | 76,730 | 87,398 | 102,608 | 121,004 | 122,946 | 148,347 |
| Tanzania— | | | | | | |
| Bituminous | 1,688 | 3,310 | 2,519 | 2,622 | 2,664 | 2,798 |
| Zambia— | | | | | | |
| Bituminous | 387,000 | 565,000 | 390,982 | 613,400 | 623,200 | 812,100 |
| Canada— | | | | | | |
| Bituminous | 5,779,154 | 5,151,100 | 4,872,162 | 7,914,971 | 8,042,006 | 10,546,429 |
| Sub-bituminous | 2,369,015 | 2,651,389 | 2,852,636 | 3,500,184 | 3,556,362 | 4,014,956 |
| Lignite | 1,783,022 | 2,009,124 | 1,803,665 | 3,409,992 | 3,464,722 | 2,993,879 |
| India— | | | | | | |
| Bituminous | 67,145,000 | 69,696,000 | 74,220,000 | 72,534,000 | 73,698,000 | 69,602,000 |
| Lignite | 2,882,000 | 4,061,000 | 4,122,000 | 3,490,000 | 3,545,000 | 3,660,000 |
| Pakistan— | | | | | | |
| Lignite | 1,320,000 | 1,254,000 | 1,280,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Australia— | | | | | | |
| Semi-anthracite | 38,000 | 31,000 | 15,000 | 1,000 | 1,000 | — |
| Bituminous | 31,299,000 | 36,755,000 | 41,674,000 | 45,335,000 | 46,063,000 | 45,739,000 |
| Sub-bituminous | 3,370,000 | 3,486,000 | 3,675,000 | 3,428,000 | 3,483,000 | 3,161,000 |
| Brown coal | 23,384,000 | 22,974,000 | 22,911,000 | 23,793,000 | 24,175,000 | 23,382,000 |
| New Zealand— | | | | | | |
| Anthracite | 183 | 5 | — | — | — | — |
| Bituminous | 584,996 | 571,912 | 480,125 | 446,215 | 453,377 | 389,478 |
| Sub-bituminous | 1,617,410 | 1,483,467 | 1,677,956 | 1,714,405 | 1,741,921 | 1,573,185 |
| Lignite | 166,635 | 169,184 | 168,526 | 187,880 | 190,895 | 161,583 |
| TOTAL | 317,000,000 | 317,000,000 | 313,000,000 | 312,000,000 | 317,000,000 | 318,000,000 |
| Irish Republic— | | | | | | |
| Anthracite | | | | | | |
| including dust | 113,675 | 106,132 | 88,830 | 78,480 | 79,740 | } 90,000 |
| Semi-bituminous | 62,220 | 57,639 | 61,880 | 74,050 | 75,238 | |
| OTHER COUNTRIES | | | | | | |
| Albania— | | | | | | |
| Brown coal and lignite | 335,000 | 423,000 | 400,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Austria— | | | | | | |
| Bituminous | 13,670 | — | — | — | — | — |
| Brown coal | 4,531,252 | 4,111,000 | 3,780,084 | 3,611,602 | 3,669,558 | 3,769,728 |
| Belgium— | | | | | | |
| Anthracite | 4,914,000 | 4,252,000 | 3,698,000 | 3,196,000 | 3,247,000 | 2,595,000 |
| Bituminous | 11,261,000 | 10,320,000 | 9,294,000 | 7,987,000 | 8,115,000 | 8,365,000 |

(a) Years ended August 31 of that stated.

(b) Sales.

PRODUCTION OF COAL (cont.)

| Producing Country and Description | Long tons | | | | Tonnes | |
|-----------------------------------|---------------|-------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Bulgaria— | | | | | | |
| Anthracite and bituminous | 460,000 | 432,000 | 423,000 | 391,000 | 397,000 | 388,000 |
| Brown coal and lignite .. | 28,000,000 | 27,834,341 | 28,156,000 | 28,398,000 | 28,854,000 | 26,620,000 |
| Czechoslovakia— | | | | | | |
| Bituminous | 25,536,000 | 25,518,000 | 26,640,000 | 27,621,000 | 28,064,000 | 28,702,000 |
| Brown coal | 66,120,000 | 69,716,000 | 74,073,000 | 76,775,000 | 78,007,000 | 81,052,000 |
| Lignite | 4,116,000 | 3,986,000 | 4,011,000 | 3,716,000 | 3,776,000 | 3,739,000 |
| Denmark— | | | | | | |
| Lignite | 1,281,000 | 748,000 | 424,000 | 133,000 | 135,000 | — |
| France— | | | | | | |
| Anthracite and bituminous | 46,872,414 | 41,249,000 | 39,943,000 | 36,764,000 | 37,354,000 | 33,014,000 |
| Lignite | 2,883,744 | 3,170,000 | 2,903,000 | 2,741,300 | 2,785,300 | 2,752,000 |
| Germany— | | | | | | |
| Federal Republic (b)— | | | | | | |
| Anthracite | } 110,293,592 | 110,249,187 | 109,866,800 | 109,513,795 | 111,270,760 | 110,794,993 |
| Bituminous (a) | | 876,272 | 820,836 | 750,625 | 660,220 | 670,815 |
| Pechkohle | 95,239,053 | 99,917,801 | 105,728,853 | 106,066,242 | 107,767,897 | 104,479,302 |
| Brown coal | | | | | | |
| East Germany— | | | | | | |
| Bituminous | 1,761,000 | 1,600,000 | 1,500,000 | 1,028,000 | 1,044,000 | n.a. |
| Brown coal | 238,205,000 | 243,210,000 | 250,532,000 | 256,467,000 | 260,582,000 | 262,814,000 |
| Greece— | | | | | | |
| Lignite | 5,172,000 | 5,638,000 | 6,626,000 | 7,657,000 | 7,780,000 | 10,929,000 |
| Hungary— | | | | | | |
| Bituminous | 3,989,000 | 4,175,000 | 4,035,000 | 4,085,000 | 4,151,000 | 3,900,000 |
| Brown coal | 19,282,000 | 19,567,000 | 19,094,000 | 18,708,000 | 19,008,000 | 17,800,000 |
| Lignite | 3,332,000 | 3,041,000 | 2,953,000 | 4,597,000 | 4,671,000 | 5,700,000 |
| Italy— | | | | | | |
| Bituminous | 403,926 | 359,364 | 297,909 | 290,815 | 295,482 | 256,269 |
| Brown coal | 2,166,464 | 1,701,153 | 1,902,671 | 1,371,266 | 1,393,271 | 1,326,360 |
| Netherlands— | | | | | | |
| Bituminous and anthracite | 7,938,000 | 6,557,000 | 5,476,000 | 4,265,000 | 4,334,000 | 3,609,000 |
| Poland— | | | | | | |
| Bituminous | 121,900,000 | 126,602,000 | 132,880,000 | 137,790,000 | 140,000,000 | 145,491,000 |
| Brown coal | 23,544,000 | 26,453,000 | 30,377,000 | 32,300,000 | 32,800,000 | 34,500,000 |
| Portugal— | | | | | | |
| Anthracite | 435,735 | 391,000 | 409,958 | 266,612 | 270,890 | 253,263 |
| Brown coal | 37,996 | 30,130 | 7,793 | — | — | — |
| Roumania— | | | | | | |
| Anthracite and bituminous .. | 6,610,000 | 7,071,000 | 7,415,000 | 7,959,000 | 8,087,000 | 8,505,000 |
| Lignite | 7,526,000 | 9,002,000 | 10,746,000 | 13,822,000 | 14,044,000 | 13,792,000 |
| Brown coal | 646,000 | 679,000 | 689,000 | 693,000 | 704,000 | 654,000 |
| Spain— | | | | | | |
| Anthracite | 2,725,000 | 2,817,000 | 2,756,000 | 2,763,649 | 2,807,997 | 2,863,615 |
| Bituminous | 9,443,000 | 9,311,000 | 8,661,000 | 7,817,872 | 7,943,326 | 7,681,311 |
| Lignite | 2,624,000 | 2,787,000 | 2,657,000 | 2,781,555 | 2,826,191 | 3,064,474 |
| Spitzbergen— | | | | | | |
| Bituminous— | | | | | | |
| Norwegian mines .. | 419,882 | 340,804 | 379,178 | 476,264 | 483,907 | 455,465 |

(a) Including Stockheim hard coal.

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

Hard coal; 1967—217,024; 1968—144,813; 1969—147,847; 1970—127,200. (Tonnes:) 1970—129,200; 1971—254,669.

(c) Estimated.

PRODUCTION OF COAL (cont.)

| Producing Country and Description | Long tons | | | | Tonnes | |
|-----------------------------------|-------------|-------------|--------------|-------------|-------------|--------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Sweden— | | | | | | |
| Bituminous | 11,200 | 19,500 | 21,357 | — | — | — |
| U.S.S.R.— | | | | | | |
| Bituminous and anthracite | 439,000,000 | 440,843,000 | 451,964,000 | 425,881,000 | 432,715,000 | 441,416,000 |
| Lignite | 149,000,000 | 135,764,000 | 137,704,000 | 142,459,000 | 144,745,000 | 150,130,000 |
| Yugoslavia— | | | | | | |
| Bituminous | 895,000 | 822,000 | 671,000 | 633,000 | 643,000 | 707,000 |
| Brown coal and lignite | 25,154,000 | 25,488,000 | 25,407,000 | 27,340,000 | 27,779,000 | 30,195,000 |
| Algeria (Sahara)— | | | | | | |
| Bituminous and anthracite | 17,000 | n.a. | 19,000 | 12,400 | 12,600 | 14,130 |
| Egypt— | | | | | | |
| Bituminous | n.a. | n.a. | 4,000 | n.a. | n.a. | n.a. |
| Morocco— | | | | | | |
| Anthracite | 474,000 | 444,000 | 391,000 | 426,000 | 433,000 | 474,500 |
| Mozambique— | | | | | | |
| Bituminous | 278,000 | 309,000 | 272,417 | 345,472 | 351,016 | 328,673 |
| South Africa— | | | | | | |
| Anthracite | 1,259,387 | 1,343,760 | 1,517,001 | 1,651,308 | 1,677,807 | 1,841,382 |
| Bituminous | 47,262,423 | 49,495,100 | 50,402,116 | 52,097,908 | 52,933,925 | 56,824,637 |
| Zaire Republic— | | | | | | |
| Bituminous | 131,000 | 69,800 | 64,200 | 100,100 | 101,700 | 119,300 |
| Greenland— | | | | | | |
| Bituminous | 31,000 | 27,000 | 21,000 | 20,000 | 20,000 | 20,000 |
| Mexico— | | | | | | |
| Bituminous | 2,125,000 | 2,500,000 | 2,750,000 | 2,912,000 | 2,959,000 | 3,352,000 |
| United States— | | | | | | |
| Anthracite | 10,942,913 | 10,233,000 | 9,351,000 | 8,728,000 | 8,868,000 | 7,890,000 |
| Bituminous | 489,407,000 | 482,000,000 | 495,976,000 | 533,008,000 | 541,557,000 | 495,130,000 |
| Lignite | 4,009,000 | 4,370,000 | 4,476,000 | 5,323,000 | 5,408,000 | 5,808,000 |
| Argentina— | | | | | | |
| Lignite | 398,396 | 464,678 | 514,000 | 605,819 | 615,541 | 631,757 |
| Brazil— | | | | | | |
| Bituminous and lignite | 4,039,301 | 4,751,345 | 5,046,372 | 5,089,994 | 5,171,673 | n.a. |
| Chile— | | | | | | |
| Bituminous | 1,472,434 | 1,586,000 | 1,676,989 | 1,490,553 | 1,514,472 | 1,519,524 |
| Colombia— | | | | | | |
| Bituminous | 3,000,000 | 3,100,000 | r 3,265,000 | 3,100,000 | 3,200,000 | 3,000,000 |
| Peru— | | | | | | |
| Anthracite | 12,351 | 7,372 | 7,468 | 19,752 | 20,069 | n.a. |
| Bituminous | 151,824 | 150,696 | 151,745 | 134,000 | 136,000 | (a) 100,000 |
| Venezuela— | | | | | | |
| Bituminous | 33,914 | 28,459 | 31,971 | 38,000 | 39,000 | 41,000 |
| Afghanistan (b)— | | | | | | |
| Bituminous | 151,000 | 124,800 | 136,200 | 167,000 | 170,000 | (a)200,000 |
| Burma | 15,000 | 15,000 | 15,000 | n.a. | n.a. | 20,000 |
| China (a) | 220,000,000 | 300,000,000 | 330,000,000 | 350,000,000 | 360,000,000 | 390,000,000 |
| Formosa— | | | | | | |
| Bituminous | 4,998,000 | 4,935,134 | 4,572,086 | 4,402,815 | 4,473,467 | 4,097,000 |
| Indonesia— | | | | | | |
| Bituminous | 205,969 | 172,827 | 188,000 | 169,639 | 172,361 | 199,000 |
| Iran (b)— | | | | | | |
| Bituminous | 300,000 | r 292,000 | 304,000 | 318,000 | 323,000 | 400,000 |
| Japan— | | | | | | |
| Anthracite | 1,492,000 | 1,464,000 | 1,205,000 | 1,022,000 | 1,038,000 | } 33,431,000 |
| Bituminous | 45,733,000 | 43,962,000 | r 42,779,000 | 38,046,000 | 38,656,000 | |
| Lignite | 359,000 | 328,725 | r 245,300 | 171,567 | 174,230 | |

(a) United States Bureau of Mines estimate.

(b) Years ended March 20 following that stated.

PRODUCTION OF COAL (cont.)

| Producing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Korea (South)— | | | | | | |
| Anthracite | 12,239,800 | 10,080,242 | 10,110,752 | 12,198,000 | 12,394,000 | 12,785,000 |
| Korea (North) | a20,000,000 | a23,000,000 | a24,400,000 | a26,900,000 | a27,300,000 | n.a. |
| Mongolia | 1,040,000 | 1,230,000 | r 1,400,000 | 1,720,000 | 1,748,000 | (b) 1,996,000 |
| Philippine Republic— | | | | | | |
| Bituminous | 68,651 | 31,642 | 52,499 | 41,731 | 42,402 | 40,024 |
| Thailand— | | | | | | |
| Lignite | 330,000 | 300,000 | 342,000 | 393,600 | 399,900 | 445,100 |
| Turkey— | | | | | | |
| Bituminous | 7,350,000 | 7,387,623 | 7,620,983 | 7,486,981 | 7,607,125 | 7,846,500 |
| Lignite | 6,544,982 | 7,951,115 | 8,403,458 | 8,575,034 | 8,712,638 | 9,070,000 |
| Vietnam (North)— | | | | | | |
| Anthracite | (a)3,000,000 | (a)3,300,000 | b 2,900,000 | b 2,900,000 | b 3,000,000 | n.a. |
| TOTAL | 2,360,000,000 | 2,380,000,000 | 2,510,000,000 | 2,570,000,000 | 2,620,000,000 | 2,630,000,000 |
| WORLD'S TOTAL | 2,677,000,000 | 2,702,000,000 | 2,826,000,000 | 2,887,000,000 | 2,935,000,000 | 2,945,000,000 |

(a) Estimated.

(b) United States Bureau of Mines' estimate.

PRODUCTION OF COKE

Long tons | Tonnes

| Producing Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|-----------------------------------|------------|-------------|-------------|------------|------------|------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Gas-works—coke (a) .. | 6,198,000 | 4,594,000 | 2,986,000 | 1,849,000 | 1,879,000 | 772,000 |
| breeze (a) .. | 1,591,000 | 1,191,000 | 778,000 | 452,000 | 459,000 | 193,000 |
| Coke-ovens—coke .. | 15,322,000 | 16,247,000 | 16,575,000 | 16,330,000 | 16,592,000 | 15,373,000 |
| breeze .. | 1,317,000 | 1,418,000 | 1,464,000 | 1,524,000 | 1,548,000 | 1,463,000 |
| Rhodesia (f) | r 171,660 | r 194,978 | r 185,313 | 219,926 | 223,455 | 267,856 |
| Canada (c) | 3,955,624 | 4,741,752 | 4,466,317 | 5,060,910 | 5,142,137 | 4,631,897 |
| Hong Kong— | | | | | | |
| Gas-works (c) | 9,000 | n.a. | n.a. | n.a. | n.a. | n.a. |
| India— | | | | | | |
| Gas-works | 65,974 | n.a. | (e) 54,417 | (e) 57,721 | (e) 58,647 | n.a. |
| Hard | 7,470,000 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Soft | 2,756,000 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Australia— | | | | | | |
| Coke—gas-works (d) .. | 551,326 | 507,253 | r 407,000 | 272,000 | 276,000 | n.a. |
| coke-ovens .. | 3,635,000 | r 3,684,000 | r 3,787,000 | 4,225,000 | 4,293,000 | 4,405,000 |
| Breeze (d) | 521,426 | 607,099 | 630,390 | 633,000 | 643,000 | n.a. |
| New Zealand (b)— | | | | | | |
| Gas-works | r 55,000 | r 56,000 | r 53,000 | 48,000 | 49,000 | n.a. |
| Irish Republic— | | | | | | |
| Gas-works (c) | 88,748 | 53,751 | 35,387 | 35,000 | 36,000 | n.a. |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Gas-works | 210,000 | 195,000 | 83,000 | — | — | — |
| Coke-ovens | 1,400,000 | 1,600,000 | 1,700,000 | 1,740,000 | 1,768,000 | 1,638,000 |
| Belgium— | | | | | | |
| Coke-ovens | 6,744,000 | 7,129,000 | 7,135,500 | 6,956,000 | 7,068,000 | 6,783,000 |
| Bulgaria | 790,000 | 804,000 | 807,000 | 824,000 | 837,000 | n.a. |
| Czechoslovakia— | | | | | | |
| Hard coke | 9,160,000 | 9,382,000 | 9,883,000 | 10,104,000 | 10,266,000 | 10,462,000 |
| Brown-coal coke .. | 1,783,000 | 1,779,000 | 1,524,000 | 1,386,000 | 1,408,000 | 911,000 |
| Denmark (gas-works) .. | 242,000 | 289,000 | 158,000 | 180,000 | 183,000 | 135,000 |
| Finland | 134,000 | 118,000 | 134,000 | 117,000 | 119,000 | 112,000 |
| France— | | | | | | |
| Gas-works | 8,700 | 8,400 | 8,070 | 10,000 | 10,000 | 4,000 |
| Coke-ovens | 12,237,000 | 12,145,000 | 13,390,000 | 13,928,000 | 14,152,000 | 12,505,000 |
| Semi-coke | 194,000 | 160,000 | 65,000 | — | — | n.a. |
| Germany (Federal)— | | | | | | |
| Gas-works | 2,824,000 | 2,290,000 | 2,368,000 | 2,592,000 | 2,634,000 | 2,014,000 |
| Coke-ovens—hard coke | 34,688,000 | 35,671,000 | 38,307,000 | 39,181,000 | 39,810,000 | 37,537,000 |
| do. brown-coal coke .. | 388,000 | — | — | — | — | — |
| Germany (East)— | | | | | | |
| Hard coke | 2,875,000 | 2,511,000 | 2,353,000 | 2,531,000 | 2,572,000 | 2,316,000 |
| Brown-coal coke .. | 6,848,000 | 6,687,000 | 6,331,000 | 6,177,000 | 6,276,000 | 6,174,000 |
| Greece (gas-works) .. | 17,000 | 15,000 | 13,800 | 15,183 | 15,427 | 14,363 |
| Hungary— | | | | | | |
| Gas-works | n.a. | 430,000 | 424,000 | 393,000 | 399,000 | 378,000 |
| Coke-ovens—hard coke | 639,000 | 492,000 | 504,000 | 647,000 | 657,000 | 769,000 |
| Italy— | | | | | | |
| Gas-works | 312,278 | 264,491 | 190,887 | 123,614 | 125,598 | 110,938 |
| Coke-ovens | 6,147,479 | 6,373,720 | 6,565,021 | 6,934,309 | 7,045,584 | 6,957,434 |
| Luxemburg— | | | | | | |
| Gas-works | 10,000 | 10,000 | 10,000 | — | — | — |

(a) Excluding coke used for heating retorts.

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

(c) Including coke-breeze.

(d) Years ended June 30 of that stated.

(e) Year ended March 31 of that stated.

(f) Year ended August 31 of that stated.

PRODUCTION OF COKE (cont.)

| Producing Country and Description | Long tons | | | | Tonnes | |
|-----------------------------------|--------------|--------------|---------------|--------------|--------------|--------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Netherlands— | | | | | | |
| Gas-works | 17,322 | 3,000 | 3,000 | — | — | — |
| Coke-ovens | 3,261,700 | 2,889,000 | 1,978,000 | 1,965,000 | 1,997,000 | 1,900,000 |
| Norway— | | | | | | |
| Coke-ovens | 284,413 | 305,466 | 314,987 | 306,429 | 311,346 | 329,485 |
| Poland— | | | | | | |
| Gas-works | 1,255,800 | 1,271,600 | 1,326,000 | 1,315,200 | 1,336,300 | 1,329,300 |
| Coke-ovens | 13,704,000 | 14,187,000 | 14,585,000 | 14,968,000 | 15,208,000 | 16,833,500 |
| Portugal (gas-works) .. | 10,000 | 10,000 | 10,000 | — | — | — |
| Roumania— | | | | | | |
| Coke-ovens | 1,113,000 | 1,115,000 | 924,000 | 1,053,000 | 1,070,000 | 1,108,000 |
| Spain— | | | | | | |
| Gas-works | 54,140 | 17,616 | 16,043 | 9,000 | 9,000 | n.a. |
| Coke-ovens | 2,916,000 | 3,466,000 | 3,642,000 | 3,948,202 | 4,011,559 | 4,037,404 |
| Sweden (a) | 997,604 | 1,060,000 | 910,987 | 869,745 | 883,702 | 870,000 |
| Switzerland— | | | | | | |
| Gas-works | 348,340 | 300,183 | 374,887 | 186,038 | 189,023 | 121,732 |
| U.S.S.R. (a) | 68,000,000 | 70,376,000 | 72,372,000 | 74,213,000 | 75,404,000 | 78,326,000 |
| Yugoslavia— | | | | | | |
| Gas-works | 7,129 | 2,000 | — | — | — | — |
| Coke-ovens | 1,200,000 | 1,215,000 | 1,207,000 | 1,287,000 | 1,308,000 | 1,297,000 |
| Libya— | | | | | | |
| Gas-works (b) | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 |
| South Africa— | | | | | | |
| Gas-works | 114,000 | 95,000 | 172,000 | (c) 98,000 | (c) 100,000 | n.a. |
| Coke-ovens | 4,055,000 | 3,651,000 | (c) 3,248,000 | 3,100,000 | 3,100,000 | 2,348,000 |
| Mexico (coke-ovens) .. | 1,014,177 | 1,135,000 | 1,122,777 | 1,279,028 | 1,299,553 | 1,496,931 |
| United States— | | | | | | |
| Coke-ovens— | | | | | | |
| Coke | 56,942,000 | 56,141,000 | 57,142,000 | 58,620,000 | 59,560,000 | 51,404,000 |
| Breeze and screenings | 3,593,000 | 3,638,000 | 3,929,000 | 4,165,000 | 4,232,000 | 3,672,000 |
| Beehive— | | | | | | |
| Coke | 720,000 | 692,000 | 634,000 | 778,000 | 790,000 | 662,000 |
| Breeze and screenings | 19,000 | 22,000 | 18,000 | 54,000 | 55,000 | 15,000 |
| Other coke | 146,000 | 155,000 | n.a. | n.a. | n.a. | n.a. |
| Brazil— | | | | | | |
| Gas works | 202,000 | 195,000 | 171,000 | (b) 200,000 | (b) 200,000 | n.a. |
| Coke-ovens | 1,300,000 | 1,400,000 | 1,500,000 | 1,604,000 | 1,615,000 | n.a. |
| Colombia | 428,000 | 435,000 | r 458,000 | 490,000 | 498,000 | 498,000 |
| Peru | 34,285 | 41,069 | 46,962 | 28,947 | 29,412 | n.a. |
| Uruguay (gas-works)— | | | | | | |
| Coke | 20,946 | 19,343 | 16,038 | 17,111 | 17,386 | 15,122 |
| Breeze | 1,633 | 2,694 | 1,767 | 4,650 | 4,725 | 2,252 |
| China (c) | 13,000,000 | 15,000,000 | 17,000,000 | 18,000,000 | 18,000,000 | n.a. |
| Formosa | 248,336 | 251,623 | 249,000 | 275,000 | 279,000 | 254,000 |
| Japan— | | | | | | |
| Gas-works | 4,100,000 | } 30,123,000 | } 35,453,000 | 5,100,000 | 5,200,000 | } 43,171,000 |
| Coke-ovens | } 21,000,000 | | | } 37,000,000 | } 38,000,000 | |
| Beehive, etc. | | | | | | |
| Korea (North) (c) .. | 1,800,000 | 2,000,000 | 2,000,000 | 2,200,000 | 2,200,000 | n.a. |
| Turkey— | | | | | | |
| Gas-works | 178,000 | (b) 200,000 | (b) 200,000 | (b) 200,000 | (b) 200,000 | n.a. |
| Coke-ovens | 1,265,000 | 1,407,500 | 1,420,000 | 1,488,000 | 1,512,000 | n.a. |
| Semi-coke | 71,000 | (b) 70,000 | (b) 70,000 | (b) 70,000 | (b) 70,000 | n.a. |

(a) Including coke-breeze.

(c) United States Bureau of Mines' estimate.

(b) Estimated.

PRODUCTION OF BRIQUETTES

Long tons | Tonnes

| Producing Country | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|--|------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Great Britain (a) .. | 2,647,000 | 2,859,000 | 3,193,000 | 3,295,000 | 3,348,000 | 3,636,000 |
| Canada | 37,050 | 39,510 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Australia— | | | | | | |
| Brown-coal briquettes .. | 1,844,000 | 1,552,000 | 1,464,000 | 1,426,000 | 1,449,000 | 1,476,000 |
| New Zealand | 19,369 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Belgium | 854,926 | 810,029 | 811,000 | 733,000 | 745,000 | 568,100 |
| Czechoslovakia— | | | | | | |
| Brown-coal briquettes | 899,000 | 1,083,000 | 1,287,000 | 1,335,000 | 1,356,000 | 1,366,000 |
| France | 4,776,505 | 4,492,000 | 4,131,000 | 4,234,000 | 4,302,000 | 3,735,000 |
| Germany (Federal)— | | | | | | |
| Coal briquettes | 3,521,689 | 3,470,644 | 3,845,005 | 3,666,245 | 3,725,077 | 2,716,054 |
| Brown-coal briquettes .. | 10,887,781 | 10,193,599 | 10,332,793 | 9,420,106 | 9,571,271 | 7,758,077 |
| Germany (East)— | | | | | | |
| Brown-coal briquettes .. | 55,201,000 | 55,498,000 | 55,970,000 | 56,176,000 | 57,078,000 | 55,439,000 |
| Hungary— | | | | | | |
| Coal briquettes | 1,051,000 | 1,218,000 | 1,290,000 | 1,440,000 | 1,463,000 | 1,308,000 |
| Brown coal semi-coke briquettes | | | | | | |
| Netherlands— | | | | | | |
| Coal briquettes | 1,073,966 | 1,036,000 | 1,028,000 | 872,000 | 886,000 | 585,000 |
| Brown-coal briquettes .. | 28,000 | 20,000 | — | — | — | — |
| Poland— | | | | | | |
| Coal briquettes | 544,000 | 577,000 | 1,219,000 | 1,472,000 | 1,496,000 | 1,590,000 |
| Brown-coal briquettes .. | 343,000 | 341,000 | 343,000 | 326,000 | 331,000 | 355,000 |
| Portugal | 36,754 | 29,501 | 32,004 | 38,680 | 39,301 | 37,256 |
| Spain | 330,319 | 133,264 | 150,260 | 192,329 | 195,415 | <i>n.a.</i> |

(a) Production at manufactured fuel plants.

PRODUCTION OF COAL BY-PRODUCTS*

| Producing Country and Description | Long tons | | | | Tonnes | |
|-----------------------------------|-----------|----------------|------------------|---------------|---------------|---------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Tar (crude): gas works .. | 1,062,000 | 804,000 | 553,000 | 325,000 | 330,000 | 138,000 |
| do. coke ovens .. | 914,000 | 950,000 | 946,000 | 937,000 | 952,000 | 876,000 |
| Pitch | 308,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Benzol (crude)— | | | | | | |
| coke ovens | 261,200 | 272,800 | 268,800 | 256,800 | 260,900 | 236,900 |
| other | 69,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ammonium sulphate | | | | | | |
| coke ovens | 197,000 | 188,000 | 240,000 | 180,000 | 183,000 | 173,000 |
| Creosote-pitch mixture | 737,000 | } <i>n.a.</i> | } <i>n.a.</i> | } <i>n.a.</i> | } <i>n.a.</i> | } <i>n.a.</i> |
| Creosote oil | 380,000 | | | | | |
| Naphthalene (crude) .. | 77,700 | | | | | |
| Naphthalene (refined) | 7,000 | | | | | |
| Pyridine bases | 4,000 | | | | | |
| Natural phenol | 17,300 | | | | | |
| Refined cresylic acid .. | 62,800 | | | | | |
| Anthracene 40-50% .. | 3,600 | | | | | |
| Rhodesia— | | | | | | |
| Tar (crude) (c) | 4,540 | 4,637 | 3,175 | 4,478 | 4,550 | 5,123 |
| Ammonia liquor (c) .. | 964 | <i>r</i> 1,003 | <i>r</i> 1,130 | 756 | 768 | 604 |
| India (coke-ovens)— | | | | | | |
| Tar | 203,688 | } <i>n.a.</i> | } <i>(d)</i> | } <i>(d)</i> | } <i>(d)</i> | } <i>n.a.</i> |
| Benzol | 9,725 | | | | | |
| Benzene | 9,717 | | | | | |
| Toluol | 206 | | | | | |
| Toluene | 1,652 | | | | | |
| Xylene | 1,030 | | | | | |
| Solvent naphtha | 1,628 | | | | | |
| Pitch | 88,577 | | | | | |
| Naphthalene | 3,661 | | | | | |
| Ammonium sulphate .. | 59,307 | | | | | |
| Light oil | 3,045 | | | | | |
| Middle oil | 2,403 | | | | | |
| Heavy oil (230-270°C.) | 2,823 | | | | | |
| Anthracene oil | 7,887 | | | | | |
| Australia— | | | | | | |
| Tar (crude) (a) | 274,774 | 269,508 | <i>r</i> 300,900 | 264,000 | 268,000 | <i>n.a.</i> |
| Tar (refined) (a) | 183,021 | 202,514 | <i>r</i> 152,000 | 148,800 | 151,100 | <i>n.a.</i> |
| New Zealand (b)— | | | | | | |
| Tar (gas-works) | 12,328 | 11,251 | 11,154 | 9,262 | 9,410 | <i>n.a.</i> |
| Irish Republic (gas-works)— | | | | | | |
| Tar | 9,997 | 10,083 | 4,420 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Belgium— | | | | | | |
| Tar (crude) | 250,098 | 257,951 | 242,469 | 229,182 | 232,860 | 241,660 |
| France— | | | | | | |
| Tar (crude) | 554,507 | 537,268 | 538,541 | 566,331 | 575,419 | 506,900 |
| Ammonium sulphate .. | 120,071 | 116,123 | 121,954 | 114,599 | 116,438 | <i>n.a.</i> |
| Benzol (crude) | 143,064 | 140,025 | 149,356 | 145,944 | 148,286 | <i>n.a.</i> |
| Pitch | 199,027 | 166,853 | 183,898 | 193,824 | 196,934 | 174,100 |
| Naphthalene (crude) .. | 6,647 | 6,351 | 5,624 | 4,915 | 4,994 | <i>n.a.</i> |

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

See page 87 for conversion rates.

See Nitrogen Compounds (pages 227-230) 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.

(d) Year ended March 31 of that stated.

PRODUCTION OF COAL BY-PRODUCTS (cont.)

| Producing Country and Description | Long tons | | | | Tonnes | |
|---|-------------|-------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Germany (Federal)— | | | | | | |
| Tar (crude) | 1,571,333 | 1,580,609 | 1,631,334 | 1,706,041 | 1,733,418 | 1,593,899 |
| Benzol (crude) | 448,841 | 456,702 | 466,451 | 456,464 | 463,789 | 431,116 |
| Hungary— | | | | | | |
| Pitch | 16,000 | 11,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Benzol | 7,506 | 9,191 | 11,203 | 12,586 | 12,788 | <i>n.a.</i> |
| Creosote | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Italy— | | | | | | |
| Tar | 239,967 | 247,300 | 255,355 | 256,217 | 260,329 | 259,333 |
| Ammonium sulphate | 55,504 | 51,308 | 50,858 | 48,357 | 49,133 | <i>n.a.</i> |
| Benzol (crude) | 58,062 | 59,704 | 58,348 | 50,971 | 51,788 | 36,593 |
| Naphthalene (crude) | 10,572 | 13,987 | 12,398 | 13,220 | 13,432 | 12,649 |
| Distillates | 70,868 | 78,055 | 81,975 | 82,863 | 84,193 | 82,677 |
| Benzol (refined) | 20,305 | 23,246 | 21,061 | 19,733 | 20,050 | 18,662 |
| Toluol and xylol | 8,167 | 8,716 | 6,398 | 4,844 | 4,922 | 5,005 |
| Pitch | 81,816 | 91,890 | 96,999 | 101,146 | 102,769 | 106,401 |
| Solvent naphtha | 1,286 | 1,102 | 790 | 377 | 383 | 205 |
| Poland— | | | | | | |
| Tar (coke-ovens) | 590,800 | 612,100 | 632,000 | 644,000 | 654,000 | 671,100 |
| Tar (gas-works) | 88,200 | 92,300 | 96,800 | 92,300 | 93,800 | 91,000 |
| Ammonium sulphate (coke-ovens) | 150,600 | 155,300 | 156,700 | 156,000 | 159,000 | 151,700 |
| Benzol (coke-ovens) | 181,900 | 192,500 | 196,000 | 196,000 | 199,000 | 201,100 |
| Spain— | | | | | | |
| Tar | 129,506 | 149,956 | 150,156 | 164,796 | 167,441 | 173,824 |
| Pitch | 36,778 | 42,909 | 48,136 | 49,812 | 50,611 | 62,819 |
| Benzol (crude) | 27,401 | 34,113 | 37,345 | 36,647 | 37,235 | 34,884 |
| Benzene | 15,096 | 10,467 | 8,628 | 12,581 | 12,783 | 13,332 |
| Toluol | 2,246 | 1,427 | 1,084 | 774 | 786 | 1,491 |
| Toluene | 1,215 | 515 | 388 | 522 | 530 | 1,803 |
| Xylene | 550 | 517 | 647 | 649 | 660 | 246 |
| Solvent naphtha | 57 | 37 | 127 | 379 | 385 | 90 |
| Anthracene | 10,611 | 12,009 | 13,800 | 12,632 | 12,835 | <i>n.a.</i> |
| Naphthalene | 5,130 | 6,595 | 9,497 | 9,607 | 9,761 | 9,108 |
| Sweden— | | | | | | |
| Tar (crude) | 43,284 | 42,182 | 37,019 | 33,731 | 34,272 | <i>n.a.</i> |
| Pitch | 22 | 13 | 12 | 12 | 12 | <i>n.a.</i> |
| Benzol, toluol, etc. | 9,118 | 9,687 | 8,480 | 7,907 | 8,034 | <i>n.a.</i> |
| Distillates, etc. | | | | | | |
| Switzerland— | | | | | | |
| Tar (crude) (gas-works) | 19,683 | 15,812 | 13,833 | 10,030 | 10,191 | 6,317 |
| Yugoslavia— | | | | | | |
| Benzol | 12,134 | 10,983 | 10,526 | 9,514 | 9,667 | 7,580 |
| Mexico— | | | | | | |
| Benzol | 6,762 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 7,180 |
| Ammonium sulphate | 9,481 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 11,793 |
| Creosote | 10,415 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 14,327 |
| United States— | | | | | | |
| Coke-ovens— | | | | | | |
| Tar (crude) | 3,334,000 | 3,248,530 | 3,285,000 | 3,249,000 | 3,301,000 | 2,947,000 |
| Pitch | 892,000 | 940,000 | 761,000 | 684,000 | 695,000 | <i>n.a.</i> |
| Sulphate equivalent of ammonia produced (a) | 745,000 | 685,000 | 654,000 | 617,000 | 627,000 | <i>n.a.</i> |
| Benzol | 289,000 | 295,000 | 325,000 | 298,000 | 303,000 | 232,600 |
| do. motor | 11,000 | 11,000 | 11,000 | 13,000 | 13,000 | 11,500 |
| Toluol and xylol | 81,000 | 82,000 | 81,000 | 76,900 | 78,100 | 53,900 |
| Solvent naphtha | 12,000 | 12,000 | 11,000 | 12,000 | 12,000 | 9,400 |
| Other light products | 28,000 | 21,000 | 20,000 | 15,100 | 15,300 | <i>n.a.</i> |

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

1967—658,000; 1968—626,000; 1969—601,000; 1970—569,000. (Tonnes): 1970—578,000; 1971—523,000.

PRODUCTION OF COAL BY-PRODUCTS (cont.)

| Producing Country and Description | Long tons | | | | Tonnes | |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| United States (cont.)— | | | | | | |
| All sources (a)— | | | | | | |
| Tar (crude) | 3,334,000 | 3,248,530 | 3,283,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Crude light oil | 840,000 | 796,290 | 863,033 | 813,046 | 826,087 | 682,302 |
| Uruguay (gas-works)— | | | | | | |
| Tar | 2,078 | 1,961 | 1,845 | 1,364 | 1,386 | 1,608 |
| Benzol | 207 | 161 | 130 | 142 | 144 | 150 |
| Japan— | | | | | | |
| Tar | 1,666,000 | 1,581,756 | 1,890,654 | 2,127,114 | 2,161,248 | 2,220,126 |
| Benzol (crude) | 459,475 | <i>n.a.</i> | <i>n.a.</i> | } 1,559,661 | 1,584,689 | 1,689,025 |
| do. (other) | 642,211 | 848,538 | <i>n.a.</i> | | | |
| Creosote oil | 349,985 | 380,763 | <i>n.a.</i> | 446,784 | 453,954 | 518,419 |
| Turkey— | | | | | | |
| Road tar | 61,015 | 61,288 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Pitch | 3,180 | 5,473 | 11,102 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Benzol | 8,413 | 7,223 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Toluol and xylol | <i>n.a.</i> | 1,291 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Solvent naphtha | 91 | 59 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Creosote | <i>n.a.</i> | 2,433 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Naphthalene | 1,205 | 602 | 1,240 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |

The following rates have been used for conversion of Imperial gallons to long tons. Conversion factors for tonnes are shown in brackets: Tar, 195 (192); Benzol, 250 (246); Creosote, 210 (207); Motor fuel, 310 (305); Toluol, 255 (251); Solvent naphtha, 260 (256); Phenol, 210 (207); cresylic acid, 214 (211).

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

EXPORTS OF COAL, COKE AND BY-PRODUCTS*

Long tons | Tonnes

| Exporting Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|-----------------------------------|-----------|-------------|------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Anthracite— | | | | | | |
| smalls and graded .. | 573,746 | 634,129 | 928,989 | 1,302,172 | 1,323,072 | 910,926 |
| large | 11,415 | 26,661 | 20,652 | 608 | 618 | 223 |
| other | 53,286 | 158,366 | 210,167 | 97,274 | 98,835 | 31,573 |
| Bituminous— | | | | | | |
| smalls and graded .. | 994,939 | 1,617,925 | 1,997,127 | 1,717,793 | 1,745,364 | 1,655,484 |
| unscreened | 25,077 | 40,446 | 13,533 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| large | 109,053 | 109,445 | 118,960 | 104,269 | 105,943 | 87,925 |
| other | 82,103 | 74,674 | 98,355 | 87,297 | 88,698 | 8,999 |
| Coke, gas | 332,669 | 320,204 | 268,162 | 183,541 | 186,487 | 51,113 |
| do. other | 426,818 | 519,001 | 736,057 | 846,778 | 860,369 | 562,279 |
| Manufactured fuel .. | 14,450 | 56,483 | 93,182 | 126,791 | 128,826 | 135,056 |
| Tar | 65,120 | 48,337 | 36,921 | 33,138 | 33,670 | 21,792 |
| Pitch | 147,135 | 142,862 | 142,246 | 126,334 | 128,362 | 149,310 |
| Channel Islands (Jersey) | | | | | | |
| Coke | 953 | — | — | — | — | — |
| Tar | 1,304 | 1,300 | — | — | — | — |
| Gibraltar— | | | | | | |
| Coal (bunkers) (b) .. | — | 22 | — | 162 | 165 | — |
| Kenya— | | | | | | |
| Coal (bunkers) (b) .. | 10 | <i>n.a.</i> | — | 8 | 8 | 6 |
| Canada— | | | | | | |
| Coal | 1,194,958 | 1,291,976 | 1,230,243 | 3,921,050 | 3,983,971 | 7,015,965 |
| Coke | 58,296 | 128,367 | 243,747 | 244,545 | 248,469 | 288,272 |
| Tar and pitch | 37,183 | 72,238 | 59,895 | 43,969 | 44,675 | 42,560 |
| Trinidad and Tobago— | | | | | | |
| Coal (bunkers) (b) .. | 4 | — | 2 | — | — | 1 |
| Hong Kong— | | | | | | |
| Coke | 180 | 40 | — | — | — | — |
| India (c)— | | | | | | |
| Coal | 278,185 | 418,449 | 257,918 | 405,900 | 412,414 | 167,749 |
| Coke | 9,062 | 39,463 | 31,646 | 117,653 | 119,541 | 4,816 |
| Tar and pitch | 7 | 3 | 32 | 33 | 34 | 291 |
| Singapore— | | | | | | |
| Coke | 942 | 966 | 1,347 | 749 | 761 | 1,025 |
| Australia (a)— | | | | | | |
| Coal | 8,804,802 | 10,199,608 | 13,799,747 | 17,344,830 | 17,623,170 | 18,867,639 |
| do. (bunkers) | 457 | 345 | 482 | 265 | 269 | 188 |
| Coke | 80,064 | 285,138 | 146,983 | 447,703 | 454,887 | 593,243 |
| New Zealand (a)— | | | | | | |
| Coal | 4 | 6 | 10 | 5 | 5 | 6 |
| Coke | 18 | 29 | 292 | 5,312 | 5,397 | 894 |
| Tar | — | — | 66 | 73 | 74 | <i>n.a.</i> |
| Irish Republic— | | | | | | |
| Anthracite | 4,334 | 3,766 | 6,411 | 12,580 | 12,782 | 684 |
| Other coal | 2,200 | 3,631 | 4,727 | 55,369 | 56,258 | 25,715 |

*For Ammonium sulphate, etc. see Nitrogen Compounds, pages 231-233.

(a) Years ended June 30 of that stated.

(b) Foreign coal. (See imports.)

(c) Years ended March 31 following that stated.

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

| Exporting Country and Description | Long tons | | | | Tonnes | |
|-----------------------------------|------------|------------|------------|------------|------------|------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Coal | 20 | 22 | 22 | 11 | 11 | 34 |
| Brown coal | 15,120 | 9,044 | 7,374 | 7,679 | 7,802 | 6,108 |
| Coke | 47,518 | 122,961 | 140,203 | 5,666 | 5,757 | 19,792 |
| Tar | 1 | — | 15 | — | — | — |
| Pitch | 1,026 | 756 | 618 | 1,180 | 1,199 | 2,959 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Coal | 1,499,981 | 1,148,285 | 908,857 | 580,701 | 590,020 | 542,729 |
| Coke | 407,867 | 321,755 | 374,478 | 494,423 | 502,357 | 456,769 |
| Briquettes | 92,628 | 98,624 | 116,981 | 91,896 | 93,371 | 65,105 |
| Tar | 41,821 | 31,549 | 45,858 | 73,018 | 74,190 | 81,917 |
| Pitch | 57,132 | 32,549 | 30,161 | 18,382 | 18,677 | 31,218 |
| Czechoslovakia— | | | | | | |
| Coal | 2,291,000 | 2,382,000 | 2,612,000 | 2,746,000 | 2,790,000 | 3,461,000 |
| Brown coal | 1,120,000 | 1,140,000 | 1,228,000 | 1,230,000 | 1,250,000 | 1,232,000 |
| Coke | 2,133,000 | 2,245,000 | 2,545,000 | 2,460,000 | 2,500,000 | 2,202,000 |
| Denmark— | | | | | | |
| Coal | 12 | 214 | 57 | 20 | 20 | — |
| Brown coal briquettes | 1 | — | — | — | — | 58 |
| Coke | 44,425 | 78,377 | 86,684 | 75,045 | 76,249 | 54,660 |
| Tar and pitch | 1,542 | 2,807 | 1,396 | 253 | 257 | 6,853 |
| France— | | | | | | |
| Anthracite | 187,033 | 302,809 | 433,018 | 464,536 | 471,990 | 308,102 |
| Bituminous | 508,918 | 543,836 | 651,578 | 729,876 | 741,588 | 623,925 |
| Lignite | 82,322 | 28,527 | 17,003 | 24,793 | 25,191 | 15,867 |
| Coke | 116,003 | 182,395 | 873,966 | 1,092,128 | 1,109,653 | 506,113 |
| Briquettes | 15,388 | 13,928 | 42,343 | 93,926 | 95,433 | 110,444 |
| Brown coal briquettes | 180 | 7 | 8 | 611 | 621 | 2,376 |
| Tar and pitch | 18,773 | 26,089 | 15,527 | 39,337 | 39,968 | 32,880 |
| Germany (Federal)— | | | | | | |
| Coal | 17,165,557 | 19,928,831 | 17,274,579 | 15,350,700 | 15,597,108 | 14,056,944 |
| do. (bunkers) (a) | 1,651 | 456 | n.a. | — | — | — |
| Brown coal | 105,190 | 90,656 | 14,691 | 15,521 | 15,770 | 12,662 |
| Coke | 7,501,993 | 9,119,930 | 9,427,865 | 10,053,000 | 10,213,757 | 9,161,778 |
| Coal briquettes | 169,514 | 156,183 | 150,453 | 304,365 | 309,249 | 220,876 |
| Brown-coal briquettes | 1,034,917 | 951,082 | 955,235 | 935,612 | 950,626 | 719,658 |
| Tar and pitch | 313,424 | 302,596 | 351,732 | 335,386 | 340,768 | 339,592 |
| Germany (East)— | | | | | | |
| Coke | 66,000 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Brown coal briquettes .. | 3,886,000 | 3,894,000 | 3,453,580 | 3,726,000 | 3,786,000 | 2,760,000 |
| Hungary— | | | | | | |
| Coal | — | n.a. | n.a. | 90,070 | 91,515 | 104,936 |
| Italy— | | | | | | |
| Coal (incl. bunkers) .. r | 2,720 | r 4,012 | r 3,096 | 8,716 | 8,856 | 13,017 |
| Coke | 214,737 | 230,278 | r 341,004 | 373,912 | 379,912 | 408,175 |
| Tar | 281 | 328 | 433 | 31 | 32 | 3,127 |
| Pitch | 34,120 | 24,583 | 27,050 | 25,379 | 25,786 | 36,164 |
| Netherlands— | | | | | | |
| Coal | 1,904,918 | 1,944,222 | 1,763,948 | 1,620,499 | 1,646,503 | 1,582,523 |
| Brown coal | 20 | — | — | 8 | 8 | 83 |
| Coke | 1,966,248 | 1,473,720 | 776,112 | 680,435 | 691,354 | 632,236 |
| Briquettes | 730,807 | 787,960 | 822,443 | 678,221 | 689,105 | 450,329 |
| Brown coal briquettes .. | 11,815 | 9,698 | 294 | 221 | 225 | n.a. |
| Tar | 26,535 | 26,712 | 26,745 | 24,294 | 24,684 | 26,590 |
| Pitch | 2,409 | 122 | 780 | 1,375 | 1,397 | 3,260 |
| Norway— | | | | | | |
| Coal | 138,141 | 66,407 | 61,735 | 99,842 | 101,444 | 85,343 |
| Coke | 48,023 | 123,042 | 62,956 | 43,999 | 44,705 | 60,511 |
| Tar | 16,040 | 18,303 | 12,073 | 15,613 | 15,864 | 14,057 |
| Pitch | 17 | 15 | 18 | 11 | 11 | 7 |

(a) Bunkers for foreign ships only.

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

| Exporting Country and Description | Long tons | | | | Tonnes | |
|---|------------|------------|------------|------------|------------|------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Poland— | | | | | | |
| Coal | 23,649,000 | 25,591,000 | 25,957,000 | 28,361,000 | 28,816,000 | 30,301,000 |
| Brown coal | 3,647,000 | 3,939,000 | 4,311,000 | 3,909,000 | 3,972,000 | 3,561,000 |
| Coke | 2,318,000 | 2,372,000 | 2,287,000 | 2,248,000 | 2,284,000 | 2,398,000 |
| Pitch | 3,203 | n.a. | 5,602 | 3,960 | 4,024 | 3,147 |
| Portugal— | | | | | | |
| Coal | 41 | 44 | 55 | 75 | 76 | 67 |
| do. (bunkers) (a) | — | n.a. | n.a. | 2 | 2 | n.a. |
| Tar and pitch | 77 | 13 | 10 | 25 | 25 | 17 |
| Spain— | | | | | | |
| Anthracite | 60 | — | 18 | 200,518 | 203,736 | 97,374 |
| Bituminous (incl. bunkers) | } 1,635 | 1,520 | 7,604 | 368,529 | 374,443 | 47,328 |
| Other coal | | | | | | |
| Coke | 20,498 | 17,328 | 458,656 | 250,863 | 254,889 | 7,974 |
| Tar and pitch | 177 | 7,846 | 4,151 | 2,923 | 2,970 | 2,483 |
| Sweden— | | | | | | |
| Coal | 716 | 792 | r 81,670 | 137,268 | 139,471 | 10,330 |
| Coke | 8,369 | 8,466 | 59,294 | 37,791 | 38,398 | 493 |
| Tar, pitch, etc. | 30,621 | 19,291 | 20,862 | 21,411 | 21,755 | 27,618 |
| Switzerland— | | | | | | |
| Coal | — | — | 3,911 | 33,759 | 34,301 | 33,325 |
| Coke | 22,676 | 34,996 | 52,050 | 28,350 | 28,805 | 13,055 |
| Briquettes | 3 | 4 | — | 1,155 | 1,174 | — |
| Tar and pitch | 161 | 152 | 55 | 26 | 26 | 38 |
| U.S.S.R.— | | | | | | |
| Anthracite | 2,931,951 | 3,147,000 | 3,981,000 | 4,232,000 | 4,300,000 | 4,300,000 |
| Other coal | 18,778,000 | 20,914,000 | 22,931,000 | 19,684,000 | 20,000,000 | 20,500,000 |
| Coke | 3,635,000 | 3,763,000 | 3,932,900 | 4,035,000 | 4,100,000 | 4,400,000 |
| Pitch | 60,726 | 82,476 | 73,400 | 87,300 | 88,700 | 85,800 |
| Yugoslavia— | | | | | | |
| Brown coal | 15,810 | 9,176 | 11,942 | 35,382 | 35,950 | 108,833 |
| Lignite | 29,882 | 21,549 | 37,387 | 127,694 | 129,743 | 105,872 |
| Pitch | 9,014 | 3,022 | 2,870 | 20,796 | 21,130 | 3,350 |
| Tar | — | 49 | 74 | — | — | — |
| Ceuta— | | | | | | |
| Coal (bunkers) | 40 | 305 | 30 | n.a. | n.a. | n.a. |
| Morocco— | | | | | | |
| Anthracite | 65,542 | 55,997 | 48,967 | 54,561 | 55,437 | 40,037 |
| Briquettes | 947 | 1,013 | 2,577 | 4,470 | 4,542 | 4,860 |
| Mozambique— | | | | | | |
| Coal (incl. bunkers) | 72,200 | 67,135 | 94,622 | 106,392 | 108,099 | 80,284 |
| South Africa— | | | | | | |
| Coal | 1,236,675 | 1,215,129 | 812,165 | 1,183,972 | 1,202,970 | 1,932,282 |
| Coke | 1,305 | 30,399 | 11,996 | 92,711 | 94,198 | 50,895 |
| Tar and pitch | 53 | n.a. | 6,512 | 2,390 | 2,429 | 1,056 |
| Mexico— | | | | | | |
| Coal and coke | 8 | 2 | — | n.a. | n.a. | 1 |
| United States— | | | | | | |
| Anthracite | 531,069 | 462,642 | 560,261 | 704,906 | 716,218 | 608,743 |
| Bituminous | 44,205,697 | 45,211,839 | 50,208,813 | 63,342,000 | 64,359,000 | 51,376,595 |
| do. (bunkers) | 129,907 | 96,204 | 52,814 | 60,200 | 61,166 | 39,925 |
| Coke (inc. briquettes of coke) | 634,268 | 707,096 | 1,454,899 | 2,244,343 | 2,280,358 | 1,368,615 |
| Briquettes of coal | 106,869 | 55,979 | 64,867 | 61,506 | 62,493 | 64,307 |
| Tar and pitch | 103,071 | 90,478 | 107,917 | 114,495 | 116,332 | 103,877 |
| Argentina— | | | | | | |
| Coal | 49 | 2,130 | 729 | 1,845 | 1,875 | 330 |
| Chile— | | | | | | |
| Coal | 788 | 1,093 | 1,002 | 1,299 | 1,320 | n.a. |

(a) Bunkers for foreign ships only.

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

| Exporting Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|-------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Formosa— Coal (including bunkers) | 12,168 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Indonesia— Coal | 8,169 | 6,200 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Iran (a)— Coal | 151 | 283 | 112 | 84 | 85 | 39 |
| Japan— Coal | 57,886 | 25,886 | 21,965 | 15,435 | 15,683 | 17,491 |
| Coke | 45,720 | 61,914 | 82,606 | 92,758 | 94,246 | 259,354 |
| Tar and pitch | 13,195 | 10,135 | 10,585 | 9,786 | 9,943 | 8,846 |
| Korea (South)— Anthracite | 169,350 | 222,692 | 230,714 | 332,585 | 337,922 | 339,465 |
| Lebanon— Coal and briquettes .. | 922 | 944 | 413 | 231 | 235 | 358 |
| Coke | 979 | 1,814 | 1,568 | 1,035 | 1,052 | 1,697 |
| Turkey— Coal | 2,757 | 4,331 | 139,689 | 256,714 | 260,833 | <i>n.a.</i> |

(a) Years ended March 20 following that stated.

IMPORTS OF COAL, COKE AND BY-PRODUCTS*

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|------------|------------|------------|------------|------------|------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Coal | 6,754 | 1,907 | 2,024 | 77,825 | 79,074 | 4,230,374 |
| Coke | 246 | 3,211 | 670 | 5,746 | 5,838 | 36,376 |
| Manufactured fuel | 466 | | 13,911 | 51,456 | 52,282 | 307,667 |
| Tar | 18,126 | | 57,128 | 33,109 | 33,640 | 3,187 |
| Channel Islands— | | | | | | |
| Anthracite | 56,685 | 63,182 | 57,128 | 16,508 | 16,773 | 12,163 |
| Bituminous | | | | 25,216 | 25,620 | 20,785 |
| Coke | | | | 4,962 | 5,042 | 5,512 |
| Gibraltar— | | | | | | |
| Coal (b) | (a) 25 | 940 | (a) 5 | — | — | — |
| Malta— | | | | | | |
| Coal | 1,774 | 2,668 | — | 1,160 | 1,179 | 10 |
| Coke | — | 401 | — | 391 | 397 | — |
| Gambia— | | | | | | |
| Coal, coke and patent fuel | 1 | — | 11 | — | — | n.a. |
| Tar | 16 | 2 | 12 | 4 | 4 | n.a. |
| Ghana— | | | | | | |
| Coal | 28,661 | n.a. | 18,239 | 31,953 | 32,466 | n.a. |
| Coke and patent fuel | 677 | 302 | | 303 | 308 | n.a. |
| Tar | 184 | 122 | | 28 | 308 | n.a. |
| Kenya— | | | | | | |
| Coal (b) | 48,126 | 39,651 | 30,730 | 80,308 | 81,597 | 81,271 |
| Coke | 1,217 | 1,351 | 1,171 | 1,408 | 1,431 | 1,425 |
| Tar | 7 | 1 | 7 | 14 | 14 | 7 |
| Malawi— | | | | | | |
| Coal | 52,732 | 46,817 | 31,587 | 43,296 | 43,991 | 45,442 |
| Coke | 46 | 61 | 12 | 290 | 295 | 533 |
| Mauritius— | | | | | | |
| Coal | 301 | 994 | 735 | 452 | 459 | 1,002 |
| Coke | 297 | 312 | 294 | | 31 | 31 |
| Tar | 11 | — | — | | 31 | 18 |
| Nigeria— | | | | | | |
| Coal, coke and patent fuel | 75,434 | 2,272 | 4,935 | 5,197 | 5,280 | 14,331 |
| Tar | 264 | 399 | 322 | 2,342 | 2,379 | 884 |
| St. Helena— | | | | | | |
| Coal | 40 | 45 | 60 | 40 | 41 | 24 |
| Sierra Leone— | | | | | | |
| Tar | 141 | 237 | 151 | 125 | 127 | 58 |
| Tanzania— | | | | | | |
| Coal | 109 | 47 | 115 | 157 | 160 | 86 |
| Coke | 196 | 905 | 327 | 1,017 | 1,033 | 2,068 |
| Tar | 15 | 28 | 13 | 16 | 16 | 12 |
| Uganda— | | | | | | |
| Coal | 66 | 70 | 36 | 24 | 24 | — |
| Coke | 359 | 348 | 410 | 471 | 479 | 558 |
| Tar | — | — | 2 | 2 | 2 | — |
| Zambia— | | | | | | |
| Coal | 967,452 | 682,458 | 670,189 | 328,326 | 333,595 | n.a. |
| Coke briquettes | 73,095 | 84,350 | 78,600 | 27,555 | 27,997 | n.a. |
| Tar | 138 | 27 | 3 | — | — | n.a. |
| Canada— | | | | | | |
| Anthracite | 468,458 | 384,104 | 389,301 | 315,575 | 320,639 | 366,712 |
| do. dust | 868 | — | — | — | — | — |
| Bituminous | 13,918,238 | 14,799,102 | 15,041,426 | 16,448,550 | 16,712,507 | 15,997,449 |
| Briquettes | 7,579 | 5,412 | 5,412 | 9,076 | 9,222 | 7,572 |
| Coke | 345,579 | 228,040 | 250,808 | 352,636 | 358,295 | 586,430 |
| Tar and Pitch | 113,641 | 98,906 | 120,627 | 113,691 | 115,515 | 125,285 |

*For ammonium sulphate, etc., see Nitrogen Compounds, pages 234–240.

(a) Excess of re-exports.

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

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

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|--------|--------|--------|--------|--------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Bahamas— | | | | | | |
| Coal | 3 | 3 | — | 82 | 83 | 155 |
| Barbados— | | | | | | |
| Coal, coke and patent fuel | 619 | 86 | 239 | 260 | 264 | n.a. |
| Bermuda— | | | | | | |
| Bituminous | 14 | — | 15 | n.a. | n.a. | n.a. |
| British Honduras— | | | | | | |
| Coal and coke | 6 | 21 | 7 | 9 | 9 | 8 |
| Grenada— | | | | | | |
| Coal | — | 2 | n.a. | n.a. | n.a. | n.a. |
| Coke | 2 | — | n.a. | n.a. | n.a. | n.a. |
| Jamaica— | | | | | | |
| Coal | 31 | 27 | 25 | 29 | 29 | 15 |
| Coke | 776 | 792 | 842 | 965 | 980 | 612 |
| Tar | 21 | 27 | 33 | 16 | 16 | 10 |
| St. Kitts— | | | | | | |
| Coal, coke and patent fuel | 10 | 80 | — | 21 | 21 | 1 |
| St. Lucia— | | | | | | |
| Coal | 1 | 1 | 11 | 3 | 3 | n.a. |
| Tar | 3 | 5 | 5 | 7 | 7 | n.a. |
| Trinidad and Tobago— | | | | | | |
| Coal (b) | 316 | 67 | 110 | 51 | 52 | 92 |
| Coke | 20 | 71 | 72 | 45 | 46 | 59 |
| Falkland Islands— | | | | | | |
| Coal | 156 | 126 | 39 | 126 | 128 | 49 |
| Coke | 49 | 19 | 14 | 22 | 22 | 10 |
| Guyana— | | | | | | |
| Coal | 70 | 24 | 4 | 87 | 88 | 51 |
| Coke | 36 | 48 | 50 | 109 | 111 | 15 |
| Patent fuel | 60 | 56 | — | — | — | n.a. |
| Tar | 73 | 121 | 75 | 108 | 110 | 151 |
| Ceylon— | | | | | | |
| Coal | 136,289 | 41,553 | 21,994 | n.a. | n.a. | n.a. |
| Coke | 965 | 1,294 | 2,277 | n.a. | n.a. | n.a. |
| Tar | 640 | 42 | 923 | n.a. | n.a. | n.a. |
| Cyprus— | | | | | | |
| Coal | 174 | 195 | 178 | 147 | 150 | 95 |
| Coke | 206 | 908 | 613 | 214 | 218 | 487 |
| Tar and pitch | 12 | — | — | — | — | — |
| Hong Kong— | | | | | | |
| Coal | 113,925 | 76,559 | 43,910 | 22,640 | 23,002 | 29,649 |
| Coke | 5,387 | 9,472 | 7,299 | 7,896 | 8,022 | 8,802 |
| India— | | | | | | |
| Coal | 1,040 | 237 | 1,068 | 770 | 782 | 963 |
| Coke | 111 | 591 | 8,452 | 3,042 | 3,091 | 5,046 |
| Tar and pitch (a) | 292 | 13 | 17 | 430 | 437 | 83 |
| Malaysia (West)— | | | | | | |
| Anthracite | 10,871 | 11,959 | 16,505 | 12,017 | 12,210 | 15,435 |
| Coke | 6,387 | 5,526 | 6,333 | 11,472 | 11,656 | n.a. |
| Singapore— | | | | | | |
| Anthracite | 78 | — | — | 99 | 101 | 1,626 |
| Other coal | — | 3,791 | 34 | 40 | 41 | 5 |
| Coke | 4,287 | 5,069 | 3,985 | 5,272 | 5,357 | 6,461 |
| Australia (c)— | | | | | | |
| Coal | 8,276 | 8,491 | 19,554 | 10,326 | 10,492 | 11,042 |
| Coke | 2,968 | 1,868 | 1,078 | 13,075 | 13,285 | 5,773 |
| Tar and pitch | 10,882 | 6,092 | 1,159 | 275 | 280 | 433 |

(a) Years ending March 31 following that stated.

(c) Years ended June 30 of that stated.

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

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

| Importing Country and Description | Long tons | | | | Tonnes | |
|---------------------------------------|-----------|-------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Fiji— | | | | | | |
| Coal | 5,601 | 2,025 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Coke | 171 | 269 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Tar | 28 | 28 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| New Zealand (a)— | | | | | | |
| Coal | 38,618 | 4,981 | 23 | 7 | 7 | 2,146 |
| Coke | 60 | 50 | — | — | — | <i>n.a.</i> |
| Sabah— | | | | | | |
| Coal and coke | 30 | 26 | 20 | 31 | 31 | 48 |
| Sarawak— | | | | | | |
| Coal and coke | (b) 11 | (b) 10 | (b) 14 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Tar | 94 | 25 | 37 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Western Samoa— | | | | | | |
| Coal and coke | 7 | 12 | 7 | 25 | 25 | <i>n.a.</i> |
| Irish Republic— | | | | | | |
| Anthracite | 66,012 | 71,783 | 71,473 | 80,905 | 82,203 | 76,959 |
| Bituminous | 1,171,566 | 1,129,451 | 1,049,820 | 1,118,613 | 1,136,567 | 961,130 |
| Coke | 17,011 | 21,505 | 27,549 | 10,727 | 10,899 | 13,774 |
| Patent fuel | 2,511 | 2,234 | 6 | 681 | 692 | 1,065 |
| Tar | 3,215 | 3,655 | 3,925 | 2,287 | 2,324 | 835 |
| OTHER COUNTRIES | | | | | | |
| Albania— | | | | | | |
| Coke | 25,278 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Austria— | | | | | | |
| Coal | 3,074,538 | 3,311,965 | 2,999,461 | 3,397,455 | 3,451,974 | 2,751,249 |
| Brown coal | 41,375 | 33,063 | 46,059 | 136,885 | 139,082 | 154,718 |
| Coke | 947,789 | 1,001,738 | 1,053,243 | 1,064,851 | 1,081,939 | 882,983 |
| Briquettes | 564,040 | 495,636 | 562,940 | 812,266 | 825,300 | 513,767 |
| Tar, pitch, etc. | 24,081 | 3,820 | 3,959 | 7,399 | 7,518 | 13,211 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Coal | 5,794,867 | 6,630,804 | 6,561,615 | 7,583,888 | 7,705,590 | 5,541,898 |
| do. coke | 3,643,976 | 4,400,253 | 5,155,163 | 5,127,028 | 5,209,304 | 4,389,647 |
| do. briquettes | 325,344 | 349,637 | 311,905 | 277,399 | 281,851 | 194,472 |
| Brown coal | — | — | 238 | 752 | 764 | 1,833 |
| do. do. coke | 312 | 428 | 671 | 2,041 | 2,074 | 1,889 |
| do. do. briquettes | 134,765 | 96,314 | 118,075 | 97,228 | 98,788 | 93,503 |
| Tar | 41,030 | 41,169 | 35,287 | 48,913 | 49,698 | 41,264 |
| Pitch | 461 | 252 | 529 | 2,708 | 2,752 | 500 |
| Bulgaria— | | | | | | |
| Coal | 3,180,000 | 3,268,000 | 3,999,000 | 4,813,000 | 4,890,000 | <i>n.a.</i> |
| Coke | 320,107 | 299,473 | 246,000 | 458,000 | 465,000 | <i>n.a.</i> |
| Czechoslovakia— | | | | | | |
| Coal | 4,096,000 | 4,549,000 | 4,551,000 | 4,497,000 | 4,569,000 | 5,447,000 |
| Denmark— | | | | | | |
| Coal | 3,571,807 | 4,096,132 | 3,554,759 | 3,317,641 | 3,370,879 | 2,268,987 |
| Coke | 577,626 | 438,691 | 541,492 | 339,819 | 345,272 | 138,649 |
| Coal briquettes | 8,575 | 1,306 | 828 | 774 | 787 | 2 |
| Brown coal briquettes | 103,669 | 92,692 | 77,785 | 71,418 | 72,564 | 39,134 |
| Coke briquettes | 1,710 | <i>n.a.</i> | (c) | (c) | (c) | (c) |
| Tar | 2,393 | 576 | 1,876 | 5,123 | 5,205 | 14,105 |
| Pitch | 357 | 147 | 169 | 141 | 143 | 156 |
| Faroe Islands— | | | | | | |
| Coal | 2,357 | 1,213 | 1,077 | 692 | 703 | 538 |

(a) Years ended June 30 of that stated.

(b) Coke only

(c) Included with coke.

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

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|--------------|--------------|--------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Finland— | | | | | | |
| Anthracite | 127,382 | 103,748 | 100,211 | 116,391 | 118,259 | 96,195 |
| Other coal | 1,896,170 | 1,955,408 | 2,323,263 | 3,054,174 | 3,103,186 | 2,833,662 |
| Briquettes | 2,840 | 1,936 | 1,191 | 1,660 | 1,687 | 650 |
| Coke | 724,855 | 651,430 | 749,605 | 829,635 | 842,948 | 714,031 |
| Tar | 45 | 89 | 78 | 221 | 225 | 175 |
| France— | | | | | | |
| Anthracite | 3,012,629 | 2,846,683 | 2,810,753 | 2,945,492 | 2,992,758 | 3,091,121 |
| Bituminous | 8,251,636 | 8,535,310 | 9,508,472 | 11,019,634 | 11,196,471 | 10,430,545 |
| Lignite | 14,795 | 12,226 | 14,790 | 13,119 | 13,330 | 11,515 |
| Coke | 3,273,349 | 3,463,964 | 3,238,423 | 2,812,754 | 2,857,890 | 2,625,896 |
| Coal briquettes .. | 318,649 | 329,081 | 256,962 | 203,512 | 206,778 | 144,009 |
| Brown-coal briquettes | 336,775 | 340,284 | 289,140 | 280,982 | 285,491 | 247,911 |
| Tar and pitch | 288,522 | 254,814 | 229,648 | 223,466 | 227,052 | 284,126 |
| Germany (Federal)— | | | | | | |
| Coal | 6,473,250 | 5,499,294 | 6,240,082 | 8,698,421 | 8,838,005 | 7,267,639 |
| Brown coal | 1,106,851 | 1,137,806 | 1,125,100 | 1,058,740 | 1,075,730 | 1,157,814 |
| Coke | 557,451 | 347,293 | 717,265 | 600,831 | 610,473 | 406,248 |
| Coal briquettes .. | 270,437 | 306,443 | 441,116 | 295,621 | 300,365 | 126,885 |
| Brown-coal briquettes | 20,697 | 23,087 | 27,303 | 26,676 | 27,104 | 21,348 |
| Tar and pitch | 37,127 | 42,585 | 53,052 | 80,848 | 82,145 | 79,893 |
| Germany (East)— | | | | | | |
| Coal | 8,143,000 | 6,185,000 | 6,643,393 | 7,802,000 | 7,927,000 | 7,973,000 |
| Brown coal | 3,673,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Coke | 2,833,000 | 2,798,000 | 2,733,141 | 3,074,000 | 3,123,000 | 3,045,000 |
| Greece— | | | | | | |
| Anthracite | 6,449 | 6,975 | 6,239 | 20,235 | 20,560 | 38,236 |
| Other coal | 107,238 | 64,675 | 91,297 | 138,888 | 141,117 | 297,220 |
| Coke | 121,015 | 208,377 | 266,388 | 281,941 | 286,465 | 54,177 |
| Tar and pitch | 7,123 | 6,685 | 11,685 | 13,404 | 13,619 | 15,317 |
| Hungary— | | | | | | |
| Coal | 1,714,488 | 1,634,767 | 1,675,881 | 1,954,469 | 1,985,833 | 1,911,000 |
| Coke | 2,171,160 | 2,134,743 | 1,106,075 | 1,234,223 | 1,254,029 | 1,231,413 |
| Pitch | — | <i>n.a.</i> | 7,144 | 13,297 | 13,510 | <i>n.a.</i> |
| Iceland— | | | | | | |
| Coal | 5,038 | 2,965 | 2,295 | 967 | 983 | 1,351 |
| Coke | 354 | 1,164 | 352 | 293 | 298 | 124 |
| Tar | 18 | 16 | 105 | 9 | 9 | 10 |
| Italy— | | | | | | |
| Anthracite | r 11,642,422 | r 11,403,001 | r 11,225,613 | 11,587,815 | 11,773,770 | 11,359,752 |
| Bituminous | | | | | | |
| Lignite | | | | | | |
| Coke | | | | | | |
| Briquettes | | | | | | |
| Tar | | | | | | |
| Pitch | | | | | | |
| Netherlands— | | | | | | |
| Coal | 6,928,287 | 7,295,080 | 5,836,782 | 4,697,756 | 4,773,141 | 3,218,616 |
| Brown coal | 89,109 | 74,331 | 871 | 2,824 | 2,869 | 33 |
| Coke | 184,631 | 390,372 | 986,870 | 899,320 | 913,752 | 1,242,528 |
| Briquettes | 24,347 | 18,720 | 11,758 | 3,591 | 3,649 | 941 |
| Brown-coal briquettes | 83,763 | 67,622 | 61,546 | 45,418 | 46,147 | 28,585 |
| Tar | 67,792 | 77,497 | 56,297 | 61,062 | 62,042 | 47,509 |
| Pitch | 54,341 | 84,045 | 89,746 | 105,907 | 107,607 | 85,293 |
| Norway— | | | | | | |
| Coal (a) | 414,917 | 529,042 | 543,941 | 453,664 | 460,944 | 448,464 |
| Coke | 620,966 | 681,421 | 715,898 | 827,083 | 840,355 | 614,849 |
| Briquettes | 1 | — | — | 6 | 6 | 1 |
| Tar and pitch | 77,739 | 88,045 | 85,093 | 103,818 | 105,484 | 94,908 |

(a) Excluding coal imported from Spitzbergen.

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

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Poland— | | | | | | |
| Anthracite | 30,000 | 32,000 | 24,000 | 33,000 | 34,000 | 38,000 |
| Other coal | 1,194,000 | 1,236,000 | 1,070,000 | 1,079,000 | 1,096,000 | 1,264,000 |
| Brown-coal briquettes | 219,000 | 134,000 | 296,000 | 305,000 | 310,000 | n.a. |
| Portugal— | | | | | | |
| Anthracite | 7,164 | 8,692 | 4,114 | 78,939 | 80,206 | 14,695 |
| Other coal | 374,539 | 376,601 | 331,370 | 393,861 | 400,181 | 141,744 |
| Coke | 293,336 | 227,110 | 340,047 | 243,996 | 257,911 | 310,882 |
| Briquettes | 71 | 295 | — | — | — | — |
| Tar and pitch | 3,578 | 2,740 | 2,409 | 5,271 | 5,356 | 3,904 |
| Roumania— | | | | | | |
| Coal | 780,672 | 661,091 | 622,511 | 716,800 | 728,300 | 758,300 |
| Coke | 1,071,899 | 1,545,105 | 2,063,093 | 2,378,300 | 2,416,500 | 2,434,500 |
| Spain— | | | | | | |
| Anthracite | 33,596 | 25,521 | 29,734 | 14,237 | 14,465 | 41,873 |
| Bituminous | 1,283,675 | 2,086,421 | 2,181,160 | 3,395,581 | 3,450,070 | 2,894,790 |
| Coke | 124,390 | 99,740 | 108,778 | 156,137 | 158,643 | 86,588 |
| Tar and pitch | 24,502 | 24,992 | 34,272 | 46,966 | 47,720 | 52,653 |
| Sweden— | | | | | | |
| Anthracite | 97,342 | 91,193 | 114,217 | 122,059 | 124,018 | 103,642 |
| Other coal | 1,554,097 | 1,616,475 | 1,430,287 | 1,511,854 | 1,536,115 | 1,318,660 |
| Coke (b) | 997,294 | 1,057,004 | 1,083,786 | 1,188,834 | 1,207,911 | 1,220,069 |
| Tar, pitch, etc. | 175 | 195 | 254 | 384 | 390 | 7,920 |
| Switzerland— | | | | | | |
| Coal | 633,566 | 561,463 | 508,875 | 391,353 | 397,633 | 276,769 |
| Lignite | 667 | 95 | 1,943 | 5,478 | 5,566 | 52 |
| Coke | 278,267 | 291,055 | 229,806 | 284,154 | 288,714 | 190,173 |
| Briquettes | 123,102 | 118,129 | 118,272 | 132,752 | 134,882 | 98,449 |
| Tar and pitch | 16,941 | 22,108 | 24,662 | 30,196 | 30,681 | 26,889 |
| U.S.S.R.— | | | | | | |
| Coal | 7,700,000 | 6,791,000 | 7,100,000 | 6,988,000 | 7,100,000 | 8,400,000 |
| Coke | 674,181 | 647,600 | 649,000 | 663,000 | 674,000 | 794,000 |
| Yugoslavia— | | | | | | |
| Anthracite | 141,684 | 135,204 | 151,780 | 143,880 | 146,189 | 142,623 |
| Other coal | 1,280,094 | 1,579,510 | 1,649,650 | 1,646,841 | 1,673,268 | 1,829,182 |
| Coke | 112,579 | 108,452 | 119,017 | 197,430 | 200,599 | 279,897 |
| Tar and pitch | 68 | 15 | 5 | 6 | 6 | 14 |
| Algeria— | | | | | | |
| Coal | 41,087 | 55,352 | 78,658 | 68,715 | 69,818 | n.a. |
| Coke | 4,633 | 6,523 | 67,509 | 304,298 | 309,181 | n.a. |
| Angola— | | | | | | |
| Coal | 19,546 | 37,202 | 33,540 | 16,582 | 16,848 | 11,086 |
| Coke | 543 | 457 | 686 | 888 | 902 | 1,171 |
| Tar and pitch | 181 | 239 | 340 | 241 | 245 | 167 |
| Cameroun— | | | | | | |
| Coal, coke, etc. . . | 850 | 690 | 860 | 814 | 827 | n.a. |
| Canary Islands— | | | | | | |
| Coal | 25 | 24 | 27 | 27 | 27 | 20 |
| Egypt— | | | | | | |
| Coal | 472,452 | 497,238 | 483,895 | 487,661 | 495,487 | 433,112 |
| Coke | n.a. | n.a. | 71,235 | n.a. | n.a. | n.a. |
| Equatorial African Community— | | | | | | |
| Coal, coke, briquettes .. | 108 | 148 | 127 | n.a. | n.a. | n.a. |
| Ethiopia (a)— | | | | | | |
| Coal, coke, briquettes .. | 752 | 4,747 | 9,741 | 39 | 40 | 1,072 |
| Ivory Coast— | | | | | | |
| Coal and briquettes .. | 5 | 17 | 60 | 34 | 35 | 25 |
| Coke | 185 | 279 | 202 | 251 | 255 | 49 |
| Libya— | | | | | | |
| Coal, coke, briquettes .. | 2,215 | 3,549 | 778 | 135 | 137 | n.a. |

(a) Years ended September 10 of that stated.

(b) including coke briquettes.

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

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|---------|---------|---------|---------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Malagasy Republic— | | | | | | |
| Coal and briquettes .. | 16,943 | 20,802 | 18,348 | 20,662 | 20,994 | n.a. |
| Coke | 69 | 166 | 74 | 53 | 54 | n.a. |
| Tar and pitch | 95 | 64 | 142 | 69 | 70 | n.a. |
| Morocco— | | | | | | |
| Coal | 42,007 | 59,681 | 58,050 | 46,569 | 47,316 | 52,341 |
| Coke | 13,888 | 16,324 | 17,233 | 17,741 | 18,026 | 14,760 |
| Pitch | 1,861 | 1,471 | 728 | 2,240 | 2,276 | 2,014 |
| Mozambique— | | | | | | |
| Coal | 205,990 | 304,945 | 429,011 | 330,259 | 335,559 | 368,939 |
| Coke | 1,511 | 1,442 | 1,756 | 1,684 | 1,711 | n.a. |
| Tar, pitch and asphalt.. | 70 | 70 | 50 | 120 | 122 | n.a. |
| Senegal— | | | | | | |
| Coal and briquettes .. | 143 | 308 | 169 | 250 | 254 | 210 |
| Coke | 151 | 130 | 137 | 156 | 159 | 234 |
| South Africa— | | | | | | |
| Coal | 733 | 20,661 | 18,759 | 59,761 | 60,720 | 86,872 |
| Coke | 3,749 | 6,112 | 7,285 | 7,417 | 7,536 | 2,362 |
| Sudan— | | | | | | |
| Coke | — | — | 984 | — | — | 600 |
| Togo— | | | | | | |
| Coal and briquettes .. | 13 | 65 | 11 | 5 | 5 | 5 |
| Tunisia— | | | | | | |
| Coal | 37,042 | 28,210 | 20,420 | 28,504 | 28,961 | 37,487 |
| Coke | 106,476 | 98,983 | 109,721 | 113,899 | 115,727 | 65,347 |
| Tar and pitch | 15 | 22 | 22 | 19 | 19 | 55 |
| Costa Rica— | | | | | | |
| Coal | 46 | 54 | 38 | 24 | 24 | 33 |
| Coke | 70 | 190 | 128 | 217 | 220 | 267 |
| Greenland— | | | | | | |
| Coal | 14,247 | 11,556 | 8,613 | 10,653 | 10,824 | 11,103 |
| Guatemala— | | | | | | |
| Coal | 91 | 20 | 30 | 50 | 51 | 81 |
| Coke | 94 | 79 | 180 | 224 | 228 | 171 |
| Honduras— | | | | | | |
| Coal | 121 | 186 | 245 | 59 | 60 | n.a. |
| Coke | 2 | 16 | 95 | 333 | 338 | 75 |
| Mexico— | | | | | | |
| Coal | 59,228 | 65,054 | 110,684 | 148,633 | 151,018 | 262,173 |
| Coke | 144,994 | 298,917 | 533,416 | 334,818 | 340,191 | 68,156 |
| Tar | 663 | 326 | 530 | 604 | 614 | 575 |
| Nicaragua— | | | | | | |
| Coal | — | 10 | 7 | 15 | 15 | 8 |
| Coke | 58 | 105 | 133 | 53 | 54 | 81 |
| Panama Republic— | | | | | | |
| Coal | 2,900 | 2,261 | 3,701 | 24 | 24 | 998 |
| Salvador— | | | | | | |
| Coal | 98 | 151 | 101 | 124 | 126 | 179 |
| Coke | 181 | 150 | 260 | 196 | 199 | 118 |
| Tar | 63 | 67 | 43 | 38 | 39 | 64 |
| St. Pierre and Miquelon— | | | | | | |
| Coal | 8,159 | 2,459 | 5,135 | 3,254 | 3,306 | 4,134 |
| United States— | | | | | | |
| Bituminous coal .. | 189,565 | 138,803 | 70,496 | 9,396 | 9,547 | 48,993 |
| Other coal | 28,970 | 64,130 | 27,955 | 26,005 | 26,422 | 55,498 |
| Coke | 82,144 | 84,004 | 154,511 | 136,500 | 138,690 | 157,772 |
| Argentina— | | | | | | |
| Coal | 793,257 | 511,751 | 424,169 | 341,822 | 347,307 | 716,605 |
| Coke | 38,633 | 30,926 | 45,646 | 13,641 | 13,860 | 9,704 |
| Tar and pitch | 33 | 393 | 2,517 | 6,043 | 6,140 | 18,354 |
| Bolivia— | | | | | | |
| Coal and coke | 371 | 1,176 | 1,449 | n.a. | n.a. | n.a. |

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

Long tons | Tonnes

| Importing Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|-----------------------------------|------------|------------|------------|------------|------------|------------|
| OTHER COUNTRIES | | | | | | |
| (cont.) | | | | | | |
| Brazil— | | | | | | |
| Anthracite | 827 | 1,872 | 3,642 | 1,970 | 2,002 | n.a. |
| Bituminous | 1,195,851 | 976,139 | 1,586,247 | 1,723,970 | 1,751,635 | n.a. |
| Other coal | 316,513 | 408,025 | 301,147 | 231,277 | 234,988 | n.a. |
| Coke | 42,813 | 61,544 | 86,782 | 110,519 | 112,292 | n.a. |
| Chile— | | | | | | |
| Coal | 278,919 | 205,280 | 406,787 | 231,428 | 235,142 | n.a. |
| Coke | 136 | n.a. | 60 | 15,150 | 15,393 | n.a. |
| Colombia— | | | | | | |
| Coal | — | r 31 | 7 | 14 | 14 | n.a. |
| Peru— | | | | | | |
| Coal | — | 100 | 8,128 | n.a. | n.a. | n.a. |
| Coke | 12,431 | 10,188 | 1,030 | n.a. | n.a. | n.a. |
| Tar | 27 | 3 | n.a. | n.a. | n.a. | n.a. |
| Uruguay— | | | | | | |
| Coal | 14,825 | 20,607 | 260,051 | 27,045 | 27,479 | 29,461 |
| Coke | 2,116 | 1,572 | 2,190 | 3,404 | 3,459 | 5,763 |
| Venezuela— | | | | | | |
| Coal | 4,380 | 17,914 | 26,744 | n.a. | n.a. | n.a. |
| Coke | 205,582 | 354,597 | 272,307 | n.a. | n.a. | n.a. |
| Burma— | | | | | | |
| Coal | 183,368 | 44,895 | 151,424 | 203,562 | 206,829 | 210,601 |
| Coke | 5,169 | 4,853 | — | n.a. | n.a. | n.a. |
| Formosa— | | | | | | |
| Coal | 12,168 | 21,102 | 198,119 | 54,403 | 55,276 | n.a. |
| Coke | 15,976 | 9,563 | 12,895 | 10,378 | 10,545 | n.a. |
| Iraq— | | | | | | |
| Coal | 465 | 529 | 93 | 343 | 348 | n.a. |
| Coke | 603 | 1,000 | 977 | 55 | 56 | n.a. |
| Israel— | | | | | | |
| Coal | 262 | 3,468 | 871 | 2,341 | 2,379 | 1,101 |
| Coke | 6,205 | 5,928 | 8,555 | n.a. | n.a. | 7,525 |
| Japan— | | | | | | |
| Anthracite | 1,413,248 | 1,433,704 | 1,280,604 | 1,382,658 | 1,404,846 | 1,583,776 |
| Other coal | 23,651,317 | 30,478,212 | 39,232,070 | 47,997,186 | 48,767,419 | 45,339,691 |
| Coke | 219,721 | 231,699 | 169,885 | 144,065 | 146,377 | 40,971 |
| Tar and pitch | 28 | 25 | 7 | — | — | 10,644 |
| Jordan— | | | | | | |
| Coal and briquettes | n.a. | 461 | n.a. | n.a. | n.a. | n.a. |
| Korea (South)— | | | | | | |
| Coal | 55,914 | 53,000 | 28,000 | n.a. | n.a. | 15,389 |
| Coke | 31,101 | 50,345 | 62,633 | 62,246 | 63,245 | 40,784 |
| Lebanon— | | | | | | |
| Coal and briquettes | 2,165 | 1,842 | 1,132 | 295 | 300 | 819 |
| Coke | 2,244 | 5,751 | 11,363 | 5,020 | 5,101 | 4,500 |
| Philippine Republic— | | | | | | |
| Coal | 130 | 291 | 365 | 156 | 158 | 505 |
| Coke | 14,569 | 22,531 | 12,815 | 16,600 | 16,866 | 14,300 |
| Tar | n.a. | r 508 | 687 | 511 | 519 | 1,034 |
| Syria— | | | | | | |
| Coal and briquettes | 1,213 | 2,285 | 1,522 | 1,207 | 1,226 | 2,685 |
| Coke | 1,071 | 3,112 | 3,267 | 1,248 | 1,268 | 4,018 |
| Thailand— | | | | | | |
| Coal | 59 | 3 | 78 | 223 | 227 | 294 |
| Coke | 4,453 | 9,789 | 9,219 | 9,628 | 9,783 | 17,438 |
| Tar | — | — | 20 | 1,585 | 1,610 | 17 |
| Turkey— | | | | | | |
| Coal | 326 | n.a. | 12 | n.a. | n.a. | n.a. |
| Coke | 11,662 | 15,837 | 18,615 | 22,786 | 23,152 | n.a. |
| French Polynesia— | | | | | | |
| Coal | 10 | 10 | 5 | n.a. | n.a. | n.a. |
| New Caledonia— | | | | | | |
| Coal | 243,653 | } 232,348 | 196,322 | 254,000 | 258,000 | n.a. |
| Coke | 82,897 | | | | | |

COBALT
PRODUCTION OF COBALT ORE
(Metal content)

| Producing Country | Long tons | | | | Tonnes | |
|-------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Zambia (a) | 1,430 | 1,321 | 1,770 | 2,019 | 2,052 | 2,079 |
| Canada (c) | 1,609 | 1,799 | 1,453 | 2,036 | 2,069 | 2,264 |
| Australia (d)— | | | | | | |
| Zinc concentrates .. | 100 | 114 | 135 | 123 | 125 | 105 |
| Nickel concentrates .. | 45 | 98 | 105 | 333 | 338 | 206 |
| OTHER COUNTRIES | | | | | | |
| Morocco | 1,725 | 1,494 | 1,388 | 594 | 604 | 978 |
| Zaire Republic (b) .. | 9,565 | 9,941 | 10,409 | 13,738 | 13,958 | 14,518 |
| Cuba (e) | 1,027 | 1,071 | 1,518 | 1,518 | 1,542 | 1,500 |
| TOTAL* | 19,000 | 19,000 | 20,000 | 24,000 | 24,500 | 25,000 |

*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) Cobalt content.

(e) Recoverable cobalt in sulphide. United States Bureau of Mines' estimate.

METAL PRODUCTION OF COBALT

| Producing Country | Long tons | | | | Tonnes | |
|-------------------------------|-----------|--------|--------|--------|--------|--------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Zambia | 1,430 | 1,321 | 1,770 | 2,019 | 2,052 | 2,079 |
| OTHER COUNTRIES | | | | | | |
| Finland | 16 | 497 | 766 | 992 | 1,008 | 925 |
| France | 904 | 787 | 631 | 299 | 304 | 576 |
| Germany (Federal) (a) .. | 869 | 796 | 770 | 813 | 826 | 601 |
| Norway (b) | 501 | 633 | 723 | 787 | 800 | 869 |
| Zaire Republic | 9,565 | 10,000 | 10,409 | 13,163 | 13,374 | 14,500 |

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 | Tonnes |
|---------|-----------|---------|-----------|--------|
| 1967 .. | 917 | 1970 .. | 1,339 | 1,360 |
| 1968 .. | 984 | 1971 .. | | 1,461 |
| 1969 .. | 1,400 | | | |

(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.

| Exporting Country and Description | Long tons | | | | Tonnes | |
|-----------------------------------|-----------|-------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Cobalt (a) | 370 | 253 | 300 | 546 | 555 | 263 |
| Cobalt oxide | 192 | 92 | 70 | 341 | 346 | 381 |
| Zambia— | | | | | | |
| Cobalt | 2,058 | 1,208 | 1,563 | 1,785 | 1,814 | 1,077 |
| Canada— | | | | | | |
| Cobalt | 669 | 541 | 516 | 375 | 381 | 339 |
| Cobalt oxides and salts .. | 863 | 735 | 536 | 824 | 837 | 1,119 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Cobalt (b) (c) | 2,213 | 2,112 | 1,514 | 1,301 | 1,322 | 1,580 |
| Finland | | | | | | |
| Cobalt | — | 346 | 794 | 691 | 703 | 1,036 |
| France— | | | | | | |
| Ingots and scrap (a) .. | 598 | 717 | 449 | 271 | 275 | 340 |
| Cobalt oxide | 1 | 10 | 99 | 106 | 108 | 66 |
| Cobalt salts | — | 5 | 24 | 5 | 5 | 27 |
| Germany (Federal)— | | | | | | |
| Cobalt (c) | 189 | 178 | 195 | 194 | 197 | 231 |
| Cobalt oxide | 39 | 38 | 25 | 14 | 14 | 13 |
| Norway— | | | | | | |
| Cobalt | 427 | 503 | 945 | 709 | 720 | 762 |
| Sweden— | | | | | | |
| Cobalt | 5 | 3 | 4 | 5 | 5 | 3 |
| U.S.S.R.— | | | | | | |
| Cobalt | 100 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Morocco— | | | | | | |
| Ore | 15,319 | 17,991 | 15,108 | 8,612 | 8,750 | 4,750 |
| Zaire Republic (d)— | | | | | | |
| Cobalt | 7,750 | 9,300 | 8,200 | 13,800 | 14,100 | <i>n.a.</i> |
| United States— | | | | | | |
| Unwrought (c) | 605 | 972 | 1,050 | 954 | 969 | 401 |
| Manufactured (a) | 64 | 161 | 404 | 252 | 256 | 149 |
| Japan— | | | | | | |
| Cobalt oxide | 2 | — | — | 5 | 5 | 6 |

(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.

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|--------|-------|-------|--------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Cobalt (c) | 1,608 | 1,559 | 1,436 | 2,320 | 2,357 | 1,977 |
| Cobalt oxide | 657 | 810 | 385 | 1,440 | 1,463 | 983 |
| Hong Kong— | | | | | | |
| Cobalt oxide | 51 | 30 | 75 | 55 | 56 | 28 |
| India— | | | | | | |
| Cobalt | 117 | 74 | 125 | 142 | 144 | <i>n.a.</i> |
| Cobalt oxide | 25 | 10 | 24 | 11 | 11 | 14 |
| Australia (a)— | | | | | | |
| Cobalt ingots, etc. .. | 77 | 71 | 121 | 94 | 96 | 80 |
| Cobalt oxide | 38 | 29 | 15 | 25 | 25 | 41 |
| Cobalt salts | 182 | 237 | 133 | 150 | 152 | 223 |
| New Zealand (a)— | | | | | | |
| Cobalt salts | 1 | — | 7 | 5 | 5 | 8 |
| OTHER COUNTRIES | | | | | | |
| Denmark— | | | | | | |
| Cobalt | 22 | 24 | 31 | 22 | 22 | 16 |
| France— | | | | | | |
| Ore | 11,736 | 11,417 | 8,574 | 7,550 | 7,671 | 4,100 |
| Ingots and scrap (c) .. | 392 | 269 | 653 | 967 | 983 | 609 |
| Cobalt oxide | 131 | 112 | 134 | 285 | 290 | 201 |
| Germany (Federal)— | | | | | | |
| Cobalt (b) | 561 | 1,175 | 1,570 | 1,464 | 1,487 | 994 |
| Cobalt oxide | 306 | 414 | 431 | 464 | 471 | 393 |
| Italy— | | | | | | |
| Cobalt (b) | 327 | 339 | 450 | 332 | 337 | 311 |
| Cobalt oxide | 211 | 225 | 256 | 294 | 299 | 201 |
| Netherlands— | | | | | | |
| Cobalt | 234 | 174 | 239 | 366 | 372 | 119 |
| Portugal— | | | | | | |
| Cobalt oxide | 4 | — | 7 | 5 | 5 | 6 |
| Sweden— | | | | | | |
| Cobalt | 187 | 166 | 389 | 469 | 477 | 348 |
| Yugoslavia— | | | | | | |
| Cobalt | 28 | 44 | 54 | 56 | 57 | 46 |
| South Africa— | | | | | | |
| Cobalt oxide | 8 | 14 | 15 | 13 | 13 | 13 |
| Mexico— | | | | | | |
| Cobalt oxide | 68 | 97 | 73 | 78 | 79 | 87 |
| United States— | | | | | | |
| Cobalt metal | 3,547 | 4,115 | 5,373 | 5,300 | 5,385 | 4,709 |
| Cobalt oxide | 466 | 530 | 525 | 317 | 322 | 329 |
| Cobalt salts | 75 | 48 | 58 | 70 | 71 | 18 |
| Argentina— | | | | | | |
| Cobalt metal | 59 | 70 | 77 | 58 | 59 | 84 |
| Cobalt salts | 10 | 10 | 16 | 13 | 13 | 10 |
| Brazil— | | | | | | |
| Cobalt oxide | 36 | 54 | 58 | 53 | 54 | <i>n.a.</i> |
| Cobalt metal | 73 | 109 | 102 | 146 | 148 | <i>n.a.</i> |
| Japan— | | | | | | |
| Cobalt metal (c) .. | 2,614 | 1,943 | 4,163 | 4,555 | 4,638 | 1,471 |
| Cobalt oxide | 453 | 434 | 524 | 599 | 609 | 506 |

(a) Years ended June 30 of that stated.

(b) Including alloys and scrap.

(c) Including alloys.

COPPER
PRODUCTION OF COPPER ORE
(Metal content)

| Producing Country | Long tons | | | | Tonnes | |
|-----------------------------------|------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Kenya (<i>f</i>) | 10 | 37 | 76 | 78 | 79 | 73 |
| Rhodesia | 17,678 | (<i>b</i>) 19,200 | (<i>b</i>) 27,400 | (<i>b</i>) 23,600 | (<i>b</i>) 24,000 | (<i>b</i>) 23,300 |
| Uganda (<i>h</i>) | 14,198 | <i>r</i> 15,346 | 16,310 | 16,716 | 16,984 | 15,731 |
| Zambia | 652,500 | 654,384 | 736,300 | 673,300 | 684,100 | 651,400 |
| Canada (<i>g</i>) | 547,602 | 565,458 | 511,827 | 600,640 | 610,281 | 648,190 |
| Cyprus (<i>e</i>) | 15,200 | 21,570 | 18,860 | 18,838 | 19,140 | 16,560 |
| India | 9,000 | 9,000 | 10,000 | 9,500 | 9,700 | 11,096 |
| Australia | 90,361 | 107,906 | 128,986 | 155,297 | 157,790 | 176,988 |
| New Zealand | 150 | 50 | 70 | 46 | 47 | 85 |
| TOTAL | 1,327,000 | 1,379,000 | 1,437,000 | 1,492,000 | 1,516,000 | 1,543,000 |
| Irish Republic | 3,425 | 6,777 | 6,170 | 8,150 | 8,281 | 11,800 |
| OTHER COUNTRIES | | | | | | |
| Albania (<i>h</i>) | 5,900 | 5,900 | 5,900 | 6,900 | 7,000 | 7,000 |
| Austria | 1,930 | 2,079 | 2,300 | 2,226 | 2,262 | 2,575 |
| Bulgaria | 35,000 | 37,000 | 38,000 | 41,000 | 42,000 | 44,400 |
| Finland | 28,377 | 29,500 | 32,500 | 30,400 | 30,900 | 28,500 |
| France (<i>d</i>) | 399 | 385 | 383 | 246 | 250 | 248 |
| Germany— | | | | | | |
| Federal Republic | 1,171 | 1,317 | 1,421 | 1,254 | 1,274 | 1,383 |
| East (<i>b</i>) | 20,000 | 20,000 | 20,000 | 10,000 | 10,000 | <i>n.a.</i> |
| Italy | 2,500 | 2,500 | 2,400 | 2,300 | 2,300 | 1,540 |
| Norway | 14,225 | 16,511 | 21,144 | 19,632 | 19,947 | 21,672 |
| Poland | 15,000 | <i>r</i> 26,100 | <i>r</i> 47,500 | 81,700 | 83,000 | 122,300 |
| Portugal | 3,605 | 4,450 | 4,010 | 3,703 | 3,762 | 3,957 |
| Spain (<i>i</i>) | 8,416 | 8,233 | 10,039 | 9,352 | 9,502 | 26,965 |
| Sweden | 15,044 | 17,925 | 24,753 | 25,868 | 26,283 | 30,200 |
| U.S.S.R. (<i>b</i>) | 850,000 | 850,000 | 875,000 | 886,000 | 900,000 | 916,000 |
| Yugoslavia | 62,154 | 69,373 | 80,387 | 89,374 | 90,808 | 94,392 |
| Algeria | 1,033 | 776 | 541 | 565 | 574 | 514 |
| Congo (Brazza) | 445 | 514 | 8 | 54 | 55 | 414 |
| Morocco | 2,180 | 2,634 | 2,497 | 3,179 | 3,230 | 3,764 |
| South Africa | 125,521 | <i>r</i> 123,400 | <i>r</i> 125,100 | 141,900 | 144,200 | 148,400 |
| South West Africa | 33,000 | 30,000 | 25,000 | 22,000 | 23,000 | 25,900 |
| Zaire Republic (<i>h</i>) | 313,938 | 319,375 | 351,269 | 379,587 | 385,679 | 405,832 |
| Cuba (<i>b</i>) | 6,300 | 6,700 | 7,100 | 7,000 | 7,000 | 7,000 |
| Haiti | 2,313 | 1,572 | 1,768 | 4,700 | 4,800 | 5,600 |
| Mexico (<i>d</i>) | 61,633 | 64,000 | 65,690 | 60,048 | 61,012 | 63,150 |
| Nicaragua | 9,188 | 6,614 | 4,341 | 2,981 | 3,029 | 3,600 |
| United States (<i>d</i>) | 851,843 | 1,075,554 | 1,379,088 | 1,535,408 | 1,559,975 | 1,390,793 |
| Argentina | 404 | 413 | 449 | 454 | 461 | <i>n.a.</i> |
| Bolivia (<i>a</i>) | 6,229 | 6,790 | 7,775 | 8,800 | 8,900 | 7,800 |
| Brazil (<i>c</i>) | 2,900 | 3,500 | 3,700 | 3,300 | 3,400 | 5,000 |
| Chile (<i>d</i>) | 650,000 | 648,000 | 676,000 | 682,000 | 693,000 | 708,300 |

(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): 1967—15,500; 1968—14,500; 1969—16,700; 1970—16,400. (Tonnes): 1970—16,600; 1971—15,000.

(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.)

| Producing Country | Long tons | | | | Tonnes | |
|-----------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Ecuador | 408 | 548 | 525 | 502 | 510 | <i>n.a.</i> |
| Peru (d) | 189,625 | 209,180 | 195,663 | 216,747 | 220,225 | 212,900 |
| Burma (c) | 70 | 40 | 40 | 39 | 40 | <i>n.a.</i> |
| China (a) (b) | 80,000 | 85,000 | 100,000 | 120,000 | 120,000 | 130,000 |
| Formosa | 2,207 | 2,200 | 2,303 | 2,500 | 2,500 | 2,400 |
| Israel | 10,000 | 10,100 | 10,500 | 10,814 | 10,988 | 10,700 |
| Japan | 115,986 | 118,038 | 119,211 | 117,625 | 119,513 | 120,551 |
| Korea (South) | 770 | 916 | 949 | 738 | 750 | 878 |
| Korea (North) (c) | 12,000 | 12,000 | 12,000 | 13,000 | 13,000 | <i>n.a.</i> |
| Philippine Republic | 84,800 | 108,533 | 129,300 | 157,764 | 160,292 | 197,573 |
| Turkey | 28,717 | 31,463 | 29,477 | 30,600 | 31,100 | 30,000 |
| TOTAL | 3,600,000 | 3,900,000 | 4,400,000 | 4,600,000 | 4,700,000 | 4,800,000 |
| WORLD'S TOTAL | 5,000,000 | 5,300,000 | 5,800,000 | 6,200,000 | 6,300,000 | 6,400,000 |

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

(a) Smelter.

(b) Estimated.

(c) United States Bureau of Mines' estimate.

(d) Amount estimated as recoverable.

METAL PRODUCTION OF COPPER

| Producing Country | Long tons | | | | Tonnes | |
|-------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Rhodesia | (c) 17,000 | 19,000 | 21,000 | 23,000 | 23,000 | 23,300 |
| Uganda | 14,198 | 15,346 | r 16,310 | 16,716 | 16,984 | 15,731 |
| Zambia | 606,486 | 654,600 | 683,968 | 672,459 | 683,250 | 633,400 |
| Canada (a) | r 418,100 | r 444,032 | r 382,167 | 457,740 | 465,085 | 462,300 |
| India | 8,763 | 9,139 | 9,597 | 9,164 | 9,311 | 9,554 |
| Australia | 70,826 | 92,454 | 114,349 | 109,126 | 110,877 | 143,249 |
| TOTAL | 1,138,000 | 1,256,000 | 1,247,000 | 1,315,000 | 1,336,000 | 1,288,000 |
| OTHER COUNTRIES | | | | | | |
| Albania | 5,900 | 5,900 | 5,900 | 6,900 | 7,000 | 7,000 |
| Austria (b) | 17,168 | 17,734 | 18,995 | 21,700 | 22,000 | 21,000 |
| Bulgaria | 32,900 | 35,900 | 37,400 | 39,000 | 40,000 | 45,000 |
| Finland | 33,400 | 35,900 | 33,400 | 33,200 | 33,700 | 32,300 |
| Germany— | | | | | | |
| Federal Republic | 72,100 | 94,200 | 91,400 | 83,100 | 84,400 | 87,400 |
| East (e) | 20,000 | 20,000 | 20,000 | 10,000 | 10,000 | 2,000 |
| Italy | 2,750 | 3,250 | 2,360 | 1,970 | 2,000 | — |
| Norway | 19,980 | 23,210 | 27,450 | 31,585 | 32,092 | 34,462 |
| Poland | 41,500 | 42,900 | 45,000 | 64,000 | 65,000 | n.a. |
| Spain | 28,545 | 45,054 | 37,203 | 39,196 | 39,825 | 70,552 |
| Sweden | 31,689 | 27,400 | 32,575 | 36,080 | 36,659 | 43,311 |
| U.S.S.R. (e) | 800,000 | 800,000 | 900,000 | 910,000 | 925,000 | 990,000 |
| Yugoslavia | 60,384 | 71,739 | 91,156 | 104,228 | 105,901 | 111,304 |
| South Africa | r 122,300 | r 134,500 | 125,300 | 142,400 | 144,700 | 160,000 |
| South-West Africa | 31,160 | 29,700 | 28,010 | 26,900 | 27,300 | 28,100 |
| Zaire Republic | 313,938 | 319,375 | 356,495 | 379,372 | 385,460 | 407,500 |
| Mexico | 53,582 | 58,825 | 55,700 | 58,600 | 59,600 | 59,200 |
| United States (d) | 769,946 | 1,130,784 | r 1,415,617 | 1,465,480 | 1,488,986 | 1,360,766 |
| Chile | 621,101 | 613,400 | 645,901 | 637,000 | 647,200 | 625,100 |
| Peru | 159,266 | 183,902 | 166,441 | 173,000 | 176,000 | 166,800 |
| China (e) | 77,000 | 85,000 | 100,000 | 118,000 | 120,000 | 130,000 |
| Formosa | 2,954 | 2,502 | 3,193 | 3,693 | 3,752 | 3,670 |
| Japan (f) | 389,062 | 469,734 | 521,445 | 593,484 | 603,008 | 610,317 |
| Korea (South) | 3,195 | 4,480 | 5,140 | 5,036 | 5,117 | 5,700 |
| Korea (North) (c) | 12,000 | 12,000 | 12,000 | 13,000 | 13,000 | n.a. |
| Turkey | 28,717 | 24,954 | 23,129 | 18,655 | 18,955 | 17,500 |
| TOTAL | 3,700,000 | 4,000,000 | 4,800,000 | 5,100,000 | 5,200,000 | 5,100,000 |
| WORLD'S TOTAL | 4,800,000 | 5,300,000 | 6,100,000 | 6,400,000 | 6,500,000 | 6,400,000 |

(a) Copper content of blister and anode copper.

(b) Including secondary metal.

(c) United States Bureau of Mines' estimate.

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

1967—1,035,631; 1968—1,087,777; 1969—1,228,119; 1970—1,113,930. (Tonnes): 1970—1,131,798; 1971—1,103,000

(e) Estimated.

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

1967—73,357; 1968—70,011; 1969—97,768; 1970—100,630. (Tonnes): 1970—102,245; 1971—103,000.

EXPORTS OF COPPER, ETC.*

| Exporting Country and Description | Long tons | | | | Tonnes | |
|--|-----------|---------|---------|---------|---------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Unwrought—Refined .. | 57,943 | 52,425 | 58,708 | 44,188 | 44,897 | 28,114 |
| Alloys .. | 57,168 | 48,484 | 46,243 | 44,740 | 45,458 | 39,744 |
| Scrap (a) .. | 2,817 | 1,586 | 2,196 | 1,958 | 1,989 | 1,563 |
| Semi-manufactures .. | 46,716 | 73,580 | 83,648 | 97,828 | 99,398 | 105,546 |
| do. alloys .. | 24,175 | | | | | |
| Sulphate .. | 12,457 | 10,539 | 7,466 | 8,958 | 9,102 | 7,332 |
| Kenya— | | | | | | |
| Unwrought (a) .. | — | — | — | 2 | 2 | — |
| Uganda— | | | | | | |
| Unwrought (a) .. | 14,738 | 15,385 | 16,374 | 16,186 | 16,446 | 16,808 |
| Zambia— | | | | | | |
| Unwrought— | | | | | | |
| Blister .. | 77,562 | 89,199 | 105,432 | 101,596 | 103,226 | n.a. |
| Electrolytic .. | 512,433 | 537,207 | 608,613 | 569,478 | 578,616 | n.a. |
| Other .. | 497 | 5,264 | 3,139 | 724 | 736 | n.a. |
| Canada— | | | | | | |
| Ore, matte, etc. (Cu content) .. | 115,157 | 144,495 | 140,908 | 159,928 | 162,494 | 203,988 |
| Unwrought .. | 246,356 | 246,981 | 187,530 | 261,075 | 265,264 | 283,371 |
| Scrap .. | 27,822 | 58,199 | 35,746 | 28,042 | 28,492 | 16,537 |
| Scrap alloys .. | 16,382 | 25,528 | 20,812 | 18,642 | 18,941 | 13,916 |
| Semi-manufactures .. | 33,343 | 51,790 | 35,032 | 36,691 | 37,280 | 33,485 |
| do. alloys (c) .. | 10,844 | 9,898 | 13,468 | 15,624 | 15,875 | 13,820 |
| Cyprus— | | | | | | |
| Ore and concentrates .. | 44,625 | 62,746 | 59,072 | 53,011 | 53,862 | 51,446 |
| Cupreous pyrites .. | 183,673 | 148,021 | 102,971 | 94,532 | 96,049 | 74,513 |
| Copper cement .. | 8,773 | 12,068 | 8,742 | 10,961 | 11,137 | 9,201 |
| Hong Kong— | | | | | | |
| Scrap (a) .. | 7,904 | 9,481 | 9,373 | 10,518 | 10,687 | 6,587 |
| Semi-manufactures (a) .. | 1 | 29 | 59 | 127 | 129 | 200 |
| India— | | | | | | |
| Semi-manufactures(a)(b) .. | 305 | 2,688 | 3,370 | 5,373 | 5,459 | 4,090 |
| Malaysia (West)— | | | | | | |
| Ore .. | 1,000 | 1,256 | 1,000 | 1,000 | 1,016 | 1,012 |
| Singapore— | | | | | | |
| Semi-manufactures (a) .. | 713 | 690 | 545 | 477 | 484 | 738 |
| Sulphate .. | 45 | 62 | 105 | 91 | 93 | 87 |
| Australia— | | | | | | |
| Ores, concentrates and dross (Cu content) .. | 14,173 | 13,988 | 11,850 | 36,374 | 36,958 | 38,869 |
| Unwrought— | | | | | | |
| Blister .. | 6,893 | 7,063 | 8,425 | 6,967 | 7,079 | 6,073 |
| Refined .. | 9,325 | 16,518 | 32,208 | 30,939 | 31,436 | 49,201 |
| Alloys .. | 5 | 7 | 27 | 55 | 56 | 6 |
| Scrap (a) .. | 223 | (d) 32 | (d) 54 | (d) 58 | (d) 59 | 274 |
| Semi-manufactures (a) .. | 9,454 | 10,621 | 13,660 | 17,654 | 17,937 | 17,123 |
| Fiji— | | | | | | |
| Ore .. | 1 | 3,240 | 2,298 | — | — | — |
| New Zealand (e)— | | | | | | |
| Unwrought (a) .. | 2,285 | 3,529 | 3,707 | 3,546 | 3,603 | 2,170 |
| Scrap (a) .. | 1,536 | 1,175 | 732 | 1,405 | 1,428 | 1,215 |
| Semi-manufactures (a) .. | 575 | 317 | 658 | 352 | 358 | 297 |

*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.

(e) Year ended June 30 of that stated.

EXPORTS OF COPPER, ETC. (cont.)

| Exporting Country and Description | Long tons | | | | Tonnes | |
|---------------------------------------|----------------|----------------|-----------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Irish Republic— | | | | | | |
| Ore and concentrates .. | — | 11,046 | 18,160 | 11,547 | 11,732 | 39,241 |
| Scrap (a) | 3,930 | 2,881 | 4,186 | 4,176 | 4,243 | 6,281 |
| OTHER COUNTRIES | | | | | | |
| Albania— | | | | | | |
| Unwrought | 2,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Austria— | | | | | | |
| Unwrought | 3,921 | 4,256 | 4,623 | 5,750 | 5,842 | 6,035 |
| do. alloys | 549 | 739 | <i>r</i> 1,025 | 672 | 683 | 676 |
| Scrap (a) | 297 | 233 | 489 | 1,057 | 1,074 | 299 |
| Semi-manufactures (a) .. | <i>r</i> 5,074 | <i>r</i> 6,946 | <i>r</i> 10,062 | 10,972 | 11,148 | 10,550 |
| Sulphate | 537 | 208 | 680 | 1,063 | 1,080 | 1,120 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Unwrought (a) (b) .. | 281,884 | 304,933 | 256,856 | 300,142 | 304,958 | 282,805 |
| Scrap (a) | 14,112 | 15,750 | 17,910 | 16,582 | 16,848 | 12,697 |
| Semi-manufactures (a) .. | 71,853 | 91,022 | 106,240 | 111,123 | 112,906 | 115,040 |
| Sulphate | 5,208 | 8,522 | 4,713 | 6,324 | 6,426 | 9,025 |
| Denmark— | | | | | | |
| Unwrought | 36 | — | 46 | 3 | 3 | 560 |
| do. alloys | 448 | 1,281 | 793 | 1,791 | 1,820 | 2,112 |
| Scrap (a) | 4,312 | 4,853 | 3,425 | 5,278 | 5,363 | 5,553 |
| Semi-manufactures (a) .. | 1,994 | 2,538 | 2,313 | 2,023 | 2,055 | 2,489 |
| Finland— | | | | | | |
| Unwrought (a) | 11,946 | 10,813 | 6,427 | 3,684 | 3,743 | 7,744 |
| Semi-manufactures (a) .. | 10,228 | 12,940 | 15,870 | 14,381 | 14,612 | 12,439 |
| France— | | | | | | |
| Ore | 169 | — | — | — | — | 17 |
| Matte | 219 | 611 | 899 | 689 | 700 | 909 |
| Unwrought— | | | | | | |
| Unrefined | 12,256 | 12,487 | 9,795 | 8,500 | 8,637 | 6,714 |
| Refined | 9,197 | 10,447 | 6,105 | 2,926 | 2,973 | 3,621 |
| Alloys | 4,512 | 1,962 | 2,051 | 3,193 | 3,244 | 2,446 |
| Scrap | 8,781 | 6,116 | 6,501 | 7,164 | 7,279 | 8,468 |
| do. alloys | 34,012 | 26,393 | 33,881 | 41,421 | 42,086 | 42,063 |
| Semi-manufactures (a) .. | 28,989 | 32,445 | 37,334 | 50,503 | 51,314 | 58,279 |
| Sulphate | 6,646 | 4,904 | 4,604 | 5,881 | 5,975 | 7,838 |
| Germany (Federal)— | | | | | | |
| Ore | 574 | — | — | 345 | 351 | 1,100 |
| Unwrought— | | | | | | |
| Unrefined | 2,988 | 3,954 | 1,182 | 931 | 946 | 594 |
| Refined | 156,082 | 136,854 | 93,963 | 78,681 | 79,944 | 103,135 |
| Alloys | 2,932 | 2,044 | 3,664 | 4,437 | 4,508 | 8,088 |
| Scrap (a) | 34,782 | 31,221 | 30,451 | 34,708 | 35,265 | 35,664 |
| Semi-manufactures (a) .. | 98,201 | 92,751 | 96,739 | 109,017 | 110,766 | 105,057 |
| Sulphate | 3,814 | 3,024 | 1,001 | 1,506 | 1,530 | 1,725 |
| Greece— | | | | | | |
| Semi-manufactures | 1,317 | 1,468 | 1,441 | 1,461 | 1,485 | 1,214 |
| Italy— | | | | | | |
| Ore | 6,008 | 7,959 | 8,253 | 9,398 | 9,549 | 5,802 |
| Unwrought (a) | 6,100 | 9,264 | 5,001 | 5,725 | 5,817 | 4,508 |
| Scrap (a) | 272 | 857 | 839 | 1,039 | 1,056 | 1,217 |
| Semi-manufactures (a) .. | 18,096 | 22,188 | 24,997 | 20,541 | 20,871 | 28,409 |
| Sulphate | 13 | 128 | 617 | 71 | 72 | 10 |
| Netherlands— | | | | | | |
| Unwrought | 876 | 3,075 | 877 | 593 | 603 | 929 |
| do. alloys | 4,610 | 6,350 | 7,662 | 6,792 | 6,901 | 4,463 |
| Scrap (a) | 33,674 | 30,154 | 33,611 | 30,821 | 31,316 | 28,213 |
| Semi-manufactures (a) .. | 13,304 | 18,079 | 19,702 | 16,652 | 16,919 | 23,004 |
| Sulphate | 41 | 32 | 132 | 69 | 70 | 1,322 |

(a) Including alloys.

(b) Including matte.

EXPORTS OF COPPER, ETC. (cont.)

Long tons Tonnes

| Exporting Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|-----------------------------------|---------|-----------|-----------|---------|---------|---------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Norway— | | | | | | |
| Ore | 12,955 | 19,723 | 35,016 | 33,022 | 33,552 | 40,300 |
| Unwrought— | | | | | | |
| Unrefined | 6,456 | 5,363 | 5,593 | 6,275 | 6,376 | 6,382 |
| Refined | 13,964 | 16,709 | 20,459 | 25,689 | 26,101 | 25,956 |
| Alloys | 3,267 | 3,326 | 3,630 | 2,954 | 3,001 | 2,087 |
| Scrap (a) | 1,973 | 1,495 | 1,684 | 1,454 | 1,477 | 702 |
| Semi-manufactures (a) | 2,936 | 2,478 | 3,278 | 2,618 | 2,660 | 2,160 |
| Portugal— | | | | | | |
| Ore | 32 | 31 | 19 | — | — | 12 |
| Unwrought | 861 | 850 | 367 | 342 | 347 | 101 |
| Semi-manufactures (a) | 148 | 280 | 832 | 1,033 | 1,050 | 548 |
| Sulphate | 341 | 685 | 214 | 136 | 138 | 531 |
| Spain— | | | | | | |
| Unwrought (a) | 35,343 | 33,547 | 21,486 | 18,123 | 18,414 | 6,382 |
| Scrap | 178 | 163 | 12 | 33 | 34 | 26 |
| Semi-manufactures (a) | 348 | 1,129 | 2,425 | 3,097 | 3,147 | 5,594 |
| Sweden— | | | | | | |
| Unwrought | 31,773 | 27,019 | 33,284 | 26,726 | 27,155 | 30,609 |
| do. alloys | 5,547 | 3,988 | 5,274 | 4,866 | 4,944 | 3,282 |
| Scrap (a) | 999 | 919 | 573 | 1,352 | 1,374 | 758 |
| Semi-manufactures (a) | 27,088 | 36,509 | r 34,544 | 33,316 | 33,851 | 35,875 |
| Sulphate | 873 | 422 | 552 | 264 | 268 | 620 |
| Switzerland— | | | | | | |
| Unwrought (a) | 4,543 | 6,359 | 3,982 | 3,780 | 3,841 | 2,961 |
| Scrap (a) | 10,286 | 12,580 | 17,662 | 12,707 | 12,911 | 8,029 |
| Semi-manufactures (a) | 9,809 | 9,754 | 9,344 | 8,183 | 8,314 | 7,570 |
| Sulphate | 1,260 | 1,354 | 1,308 | 1,256 | 1,276 | 470 |
| U.S.S.R.— | | | | | | |
| Unwrought | 92,510 | 107,574 | 105,700 | 121,100 | 123,100 | 173,600 |
| Semi-manufactures .. | 5,708 | 7,775 | 8,000 | 8,300 | 8,400 | 7,900 |
| Sulphate | 18,500 | 12,401 | 20,900 | 17,600 | 17,900 | 18,800 |
| Yugoslavia— | | | | | | |
| Unwrought (a) | 1,397 | 9,210 | 17,242 | 27,373 | 27,812 | 46,296 |
| Semi-manufactures (a) | 23,260 | 33,679 | 45,011 | 47,293 | 48,052 | 57,436 |
| Sulphate | n.a. | 2,657 | 7,756 | 4,070 | 4,135 | 8,647 |
| Algeria— | | | | | | |
| Ore | 241 | 24,437 | 980 | n.a. | n.a. | 3,297 |
| Angola— | | | | | | |
| Unwrought | 53 | — | 54 | 263 | 267 | 166 |
| Morocco— | | | | | | |
| Ore | 7,438 | 6,418 | 14,456 | 8,983 | 9,127 | 12,323 |
| Scrap (a) | 1,031 | 916 | 1,196 | 1,320 | 1,341 | 1,043 |
| Senegal— | | | | | | |
| Unwrought and scrap .. | 193 | 192 | 430 | 494 | 502 | 313 |
| South Africa— | | | | | | |
| Ore and concentrates .. | 7,615 | 10,253 | 14,218 | 16,195 | 16,455 | 10,743 |
| Matte | 40 | 54 | 32 | 83 | 84 | 148 |
| Unwrought— | | | | | | |
| Unrefined | 67,542 | 72,533 | 59,502 | 57,634 | 58,558 | 61,211 |
| Refined | 77,786 | 67,877 | 57,174 | 58,425 | 59,363 | 67,195 |
| Alloys | — | 211 | 12 | n.a. | n.a. | 2 |
| Semi-manufactures | 5,341 | 7,875 | 2,213 | 3,271 | 3,325 | 3,267 |
| Tunisia— | | | | | | |
| Unwrought and scrap .. | 548 | 893 | 985 | 770 | 782 | 491 |
| Zaire Republic— | | | | | | |
| Unwrought | 273,940 | r 280,900 | r 340,900 | 367,000 | 373,000 | n.a. |
| Mexico— | | | | | | |
| Ore, concentrates, etc. . . | 2,055 | 1,180 | 4,090 | 528 | 536 | 60 |
| Unwrought— | | | | | | |
| Unrefined | 6,272 | } 8,304 | { 7,070 | 4,887 | 4,965 | 9,691 |
| Refined | — | | | 149 | 708 | 719 |
| Semi-manufactures (a) | 825 | 4,156 | 8,559 | 1,481 | 1,505 | 3,570 |

(a) Including alloys.

EXPORTS OF COPPER, ETC. (cont.)

| Exporting Country and Description | Long tons | | | | Tonnes | |
|---|-----------|-----------|-----------|---------|---------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Nicaragua— | | | | | | |
| Ore and concentrates .. | 41,582 | 26,146 | 18,933 | 15,120 | 15,363 | 19,619 |
| United States— | | | | | | |
| Ores, matte, blister, etc. (Cu content) .. | 34,562 | 58,027 | 1,051 | 54,944 | 55,826 | 7,371 |
| Unwrought— | | | | | | |
| Unrefined | 18,733 | 14,062 | 3,875 | 6,969 | 7,081 | 26,034 |
| Refined | 142,280 | 214,951 | 178,811 | 197,513 | 200,682 | 170,237 |
| Unwrought alloys .. | 1,082 | 689 | 297 | 188 | 191 | 165 |
| Scrap | 15,729 | 30,455 | 6,779 | 14,782 | 15,019 | 16,724 |
| do. alloys | 57,926 | 76,731 | 69,945 | 98,542 | 100,123 | 69,737 |
| Semi-manufactures .. | 19,380 | 14,014 | 21,291 | 21,356 | 21,698 | 26,872 |
| do. alloys | | | | | | |
| Sulphate | 964 | 828 | 2,792 | 2,218 | 2,254 | n.a. |
| Argentina— | | | | | | |
| Ores | 138 | 277 | 131 | n.a. | n.a. | n.a. |
| Bolivia— | | | | | | |
| Ore, etc. (Cu content) .. | 6,229 | 6,790 | 7,775 | 8,800 | 8,900 | 7,809 |
| Chile— | | | | | | |
| Ores and concentrates | r 17,621 | r 11,073 | r 12,203 | 24,603 | 24,998 | n.a. |
| Precipitate | r 9,132 | r 2,841 | r 1,048 | 171 | 174 | n.a. |
| Copper cement | 15,915 | 18,447 | 20,968 | 17,375 | 17,654 | n.a. |
| Unwrought— | | | | | | |
| Blister | r 224,930 | r 221,378 | r 185,917 | 194,431 | 197,551 | 170,000 |
| Refined | r 90,356 | r 81,018 | r 85,198 | 90,915 | 92,374 | 65,000 |
| Electrolytic | r 240,081 | r 263,045 | r 283,724 | 328,425 | 333,695 | 370,000 |
| Cu content (b) | 640,435 | 657,280 | 650,000 | 660,000 | 670,000 | 680,000 |
| Semi-manufactures (a) | 8,799 | r 10,578 | r 5,196 | 9,471 | 9,643 | 9,000 |
| Peru— | | | | | | |
| Ore (Cu content) .. | 25,078 | 20,249 | r 30,100 | 29,723 | 30,200 | 45,100 |
| Matte, etc. (do.) .. | 753 | 285 | 974 | n.a. | n.a. | n.a. |
| Precipitate (do.) .. | | | | | | |
| Unwrought (do.) .. | 164,230 | 142,648 | 158,651 | n.a. | n.a. | n.a. |
| Burma— | | | | | | |
| Matte | 217 | 181 | n.a. | 217 | 220 | 239 |
| Formosa— | | | | | | |
| Ore | 15,421 | 16,192 | 10,859 | 8,882 | 9,025 | n.a. |
| Unwrought | — | — | 420 | 1,019 | 1,035 | n.a. |
| Semi-manufactures .. | 503 | 1,515 | 1,218 | 2,101 | 2,135 | n.a. |
| Japan— | | | | | | |
| Unwrought | 1,386 | 11,823 | 14,747 | 46,316 | 47,059 | 10,723 |
| Semi-manufactures (a) | 33,103 | 31,411 | 37,585 | 38,751 | 39,373 | 56,177 |
| Sulphate | 1,402 | 5,531 | 443 | 438 | 445 | 1,045 |
| Korea (South)— | | | | | | |
| Unwrought | 308 | 18 | 41 | n.a. | n.a. | — |
| Philippine Republic— | | | | | | |
| Ore and concentrates .. | 389,400 | 392,039 | 445,917 | 594,807 | 604,352 | 720,186 |
| Unwrought (a) | n.a. | 197 | 1,517 | 1,971 | 2,003 | 2,391 |
| Scrap | 1,926 | 1,278 | 2,683 | 1,925 | 1,956 | 932 |
| Turkey— | | | | | | |
| Unwrought | 15,514 | 14,900 | 6,974 | 6,162 | 6,261 | n.a. |

(a) Including alloys.

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

IMPORTS OF COPPER, ETC.

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|-----------|------------|-----------|-----------|------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ore and matte | 51 | 1,252 | — | 6,135 | 6,233 | 3,671 |
| Unwrought— | | | | | | |
| Electrolytic | 384,727 | 382,058 | 373,833 | 381,466 | 387,589 | 346,263 |
| Other refined | 24,798 | 26,890 | 28,414 | 27,093 | 27,528 | 20,274 |
| Blister | 31,060 | 39,404 | 43,896 | 33,155 | 33,688 | 31,872 |
| Alloys | 53 | 151 | 252 | 742 | 754 | 1,455 |
| Scrap | 842 | 2,390 | 4,700 | 3,700 | 3,759 | 8,087 |
| do. alloys | 1,142 | 5,540 | 3,434 | 8,619 | 8,757 | 3,372 |
| Semi-manufactures (a) | 7,062 | 11,546 | 10,673 | 12,477 | 12,677 | 11,798 |
| Malta— | | | | | | |
| Semi-manufactures .. | (£55,001) | (£87,889) | (£107,936) | (£96,936) | (£96,936) | (£132,188) |
| Ghana— | | | | | | |
| Semi-manufactures (a) | 391 | 440 | 604 | 726 | 738 | n.a. |
| Kenya— | | | | | | |
| Unwrought (a) | 43 | 25 | 15 | 45 | 46 | — |
| Semi-manufactures (a) | 544 | 551 | 560 | 2,347 | 2,385 | 1,222 |
| Sulphate | 21 | — | — | — | — | — |
| Mauritius— | | | | | | |
| Semi-manufactures (a) | 26 | 50 | 34 | 21 | 21 | 33 |
| Nigeria— | | | | | | |
| Unwrought and semi-manufactures (a) | 2,193 | 1,190 | 880 | 1,700 | 1,727 | 2,354 |
| Sierra Leone— | | | | | | |
| Semi-manufactures (a) | 28 | 47 | 42 | 11 | 12 | 34 |
| Tanzania— | | | | | | |
| Unwrought (a) | 1 | — | 8 | — | — | — |
| Semi-manufactures (a) | 111 | 145 | 160 | 212 | 215 | 813 |
| Sulphate | 17 | — | — | — | — | — |
| Uganda— | | | | | | |
| Semi-manufactures (a) | 146 | 159 | 285 | 285 | 290 | 474 |
| Zambia— | | | | | | |
| Unwrought (a) | 19 | 42 | 3 | 240 | 244 | n.a. |
| Semi-manufactures (a) | 383 | 481 | 409 | 609 | 619 | n.a. |
| Sulphate | 223 | 128 | 305 | 5 | 5 | n.a. |
| Canada— | | | | | | |
| Unwrought | 4,740 | 5,201 | 16,193 | 12,984 | 13,192 | 19,866 |
| Scrap (b) | 9,503 | 15,668 | 2,407 | 3,367 | 3,421 | 3,620 |
| Semi-manufactures .. | 1,925 | 1,919 | 3,096 | 2,321 | 2,358 | 4,321 |
| do. alloys | 4,111 | 3,682 | 10,271 | 8,489 | 8,625 | 14,118 |
| Sulphate | 416 | 372 | 1,248 | 2,025 | 2,057 | 1,817 |
| Barbados— | | | | | | |
| Semi-manufactures (a) | 38 | 31 | 33 | 85 | 86 | n.a. |
| Jamaica— | | | | | | |
| Semi-manufactures (a) | 209 | 348 | 532 | 680 | 691 | 704 |
| Sulphate | 10 | — | 1 | 5 | 5 | 58 |
| Trinidad and Tobago— | | | | | | |
| Semi-manufactures (a) | 111 | 107 | 138 | 257 | 261 | 525 |
| Sulphate | 22 | 28 | 9 | 17 | 17 | 12 |
| Guyana— | | | | | | |
| Semi-manufactures (a) | 66 | 51 | 59 | 44 | 45 | 55 |
| Ceylon— | | | | | | |
| Unwrought (a) | 123 | 45 | n.a. | n.a. | n.a. | n.a. |
| Semi-manufactures (a) | 1,061 | 783 | n.a. | n.a. | n.a. | n.a. |
| Cyprus— | | | | | | |
| Semi-manufactures (a) | 76 | 132 | 133 | 174 | 177 | 246 |

*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.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|---------------------------------------|-----------|---------|---------|-----------|-----------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Hong Kong— | | | | | | |
| Unwrought (a) | 115 | 199 | 71 | (e) 54 | (e) 55 | (e) 25 |
| Scrap (a) | 2,548 | 4,075 | 3,620 | 3,269 | 3,321 | 2,381 |
| Semi-manufactures (a) | 9,450 | 12,969 | 10,894 | 12,037 | 12,230 | 14,658 |
| Copper sulphate | 82 | 20 | 31 | 43 | 44 | 73 |
| India (d)— | | | | | | |
| Unwrought | 22,461 | 33,790 | 41,220 | 45,771 | 46,505 | 50,674 |
| do. alloys | 141 | 34 | 64 | 36 | 37 | 37 |
| Scrap (a) | 1,013 | 521 | 481 | 348 | 354 | 765 |
| Semi-manufactures (a) | 15,719 | 8,517 | 4,503 | 5,159 | 5,242 | 5,408 |
| Malaysia (West)— | | | | | | |
| Unwrought (a) | 23 | 32 | 12 | 30 | 30 | 74 |
| Semi-manufactures (a) | 1,806 | 2,622 | 3,191 | 3,887 | 3,949 | 4,046 |
| Sulphate | 182 | 150 | 315 | 185 | 188 | 179 |
| Sabah— | | | | | | |
| Semi-manufactures (a) | 30 | 49 | 55 | 47 | 48 | 99 |
| Sarawak— | | | | | | |
| Semi-manufactures (a) | 82 | 57 | 48 | n.a. | n.a. | n.a. |
| Singapore— | | | | | | |
| Semi-manufactures (a) | 2,186 | 2,520 | 2,830 | 4,546 | 4,619 | 6,048 |
| Sulphate | 85 | 102 | 192 | 180 | 183 | 137 |
| Australia (c)— | | | | | | |
| Unwrought | 3,078 | 4,844 | 118 | 49 | 50 | 64 |
| do. alloys | 46 | 79 | 46 | 48 | 49 | 82 |
| Scrap (a) | 1,190 | 2,052 | 2,000 | 2,870 | 2,916 | 2,318 |
| Semi-manufactures (a) | 1,737 | 1,725 | 2,042 | (f) 1,805 | (f) 1,834 | 3,584 |
| Sulphate | 1,675 | 1,505 | 2,032 | 2,434 | 2,473 | 2,292 |
| Fiji— | | | | | | |
| Semi-manufactures (a) | 47 | 75 | 85 | 96 | 98 | 1,226 |
| New Zealand (c)— | | | | | | |
| Unwrought (a) | 173 | 190 | 146 | 158 | 161 | 915 |
| Semi-manufactures (a) | 12,739 | 10,396 | 10,890 | 11,466 | 11,650 | 11,576 |
| Irish Republic— | | | | | | |
| Unwrought (a) | 146 | 180 | 183 | 153 | 156 | 265 |
| Semi-manufactures (a) | 6,213 | 8,263 | 8,469 | 7,797 | 7,922 | 8,490 |
| Sulphate | 630 | 1,287 | 1,800 | 1,622 | 1,648 | 1,012 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Unwrought— | | | | | | |
| Unrefined | 4,720 | 5,186 | 4,992 | 5,374 | 5,460 | 6,554 |
| Refined | 15,507 | 16,251 | 20,885 | 26,015 | 26,432 | 27,725 |
| Alloys | r 203 | r 652 | r 656 | 1,007 | 1,023 | 1,298 |
| Scrap | 397 | 995 | 1,287 | 1,075 | 1,092 | 606 |
| do. alloys | 4,355 | 5,608 | 7,805 | 12,255 | 12,452 | 8,877 |
| Semi-manufactures (a) | r 5,259 | r 4,874 | r 5,394 | 5,626 | 5,716 | 6,230 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Ore | 10,608 | 14,204 | 16,960 | 20,887 | 21,222 | 37,594 |
| Unwrought (a) (b) .. | 307,634 | 371,514 | 341,376 | 378,671 | 384,748 | 369,958 |
| Scrap (a) | 48,569 | 85,747 | 83,823 | 113,307 | 115,125 | 62,322 |
| Semi-manufactures (a) | 8,584 | 8,312 | 12,099 | 12,730 | 12,934 | 14,424 |
| Sulphate | 276 | 162 | 287 | 291 | 296 | 1,177 |

(a) Including alloys.

(b) Including matte.

(c) Years ended June 30 of that stated.

(d) Years ended March 31 following that stated.

(e) Excess of re-exports.

(f) Excluding foil.

IMPORTS OF COPPER, ETC. (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-------------|-------------|-----------|-----------|-----------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Bulgaria— | | | | | | |
| Sulphate | 7,824 | 10,189 | 10,076 | 7,730 | 7,854 | <i>n.a.</i> |
| Denmark— | | | | | | |
| Unwrought | 3,595 | 3,974 | 3,616 | 4,386 | 4,456 | 3,773 |
| do. alloys | 51 | 153 | 236 | 190 | 193 | 62 |
| Scrap (a) | 397 | 302 | 232 | 799 | 812 | 324 |
| Semi-manufactures (a) | 22,222 | 24,850 | 28,527 | 31,033 | 31,531 | 25,866 |
| Sulphate | 2,206 | 2,396 | 2,923 | 2,550 | 2,591 | 3,796 |
| Finland— | | | | | | |
| Unwrought (a) | 6,524 | 8,026 | 7,556 | 14,111 | 14,338 | 10,460 |
| Semi-manufactures (a) | 4,258 | 3,614 | 3,047 | 5,142 | 5,225 | 7,823 |
| Sulphate | 989 | 636 | 469 | 890 | 904 | 503 |
| France— | | | | | | |
| Unwrought— | | | | | | |
| Unrefined | 11,426 | 14,877 | 15,594 | 16,209 | 16,469 | 16,425 |
| Refined | 231,575 | 253,820 | 317,967 | 310,396 | 315,377 | 301,645 |
| Alloys | 1,601 | 1,691 | 1,360 | 1,920 | 1,951 | 2,655 |
| Scrap | 1,711 | 2,372 | 1,701 | 2,043 | 2,076 | 2,884 |
| do. alloys | 9,603 | 12,201 | 11,239 | 9,998 | 10,159 | 9,198 |
| Semi-manufactures (a) | 23,258 | 27,697 | 39,129 | 35,495 | 36,065 | 35,705 |
| Sulphate | 127 | 555 | 1,909 | 889 | 903 | 575 |
| Germany (Federal)— | | | | | | |
| Ore | 130,251 | 202,857 | 202,552 | 192,314 | 195,400 | 171,248 |
| Burnt cupreous pyrites | 1,231,635 | 1,315,544 | 1,246,234 | 1,278,157 | 1,298,668 | 1,038,127 |
| Matte | 351 | 1,189 | 663 | 5,448 | 5,536 | 2,349 |
| Unwrought— | | | | | | |
| Unrefined | 162,164 | 144,072 | 142,515 | 131,211 | 133,317 | 155,679 |
| Refined | 267,909 | 318,726 | 350,322 | 378,360 | 384,432 | 363,121 |
| Alloys | 42,806 | 51,954 | 60,670 | 54,722 | 55,600 | 51,454 |
| Scrap (a) | 82,021 | 108,877 | 121,239 | 111,586 | 113,377 | 80,453 |
| Semi-manufactures (a) | 32,919 | 56,768 | 74,683 | 78,163 | 79,417 | 83,619 |
| Sulphate | 2,176 | 2,314 | 4,808 | 4,760 | 4,836 | 4,040 |
| Greece— | | | | | | |
| Unwrought | 8,309 | 8,637 | 9,217 | 11,438 | 11,622 | 12,880 |
| Scrap | 17 | 19 | 98 | 88 | 90 | 182 |
| Semi-manufactures | 414 | 430 | 337 | 410 | 417 | 547 |
| Sulphate | 2,614 | 2,792 | 3,113 | 1,184 | 1,203 | 579 |
| Hungary— | | | | | | |
| Unwrought (b) | <i>n.a.</i> | <i>n.a.</i> | 30,951 | 35,016 | 35,578 | 17,905 |
| Sulphate | 11,590 | 4,769 | 3,716 | 3,274 | 3,327 | 3,970 |
| Iceland— | | | | | | |
| Semi-manufactures (a) | 177 | 103 | 85 | 107 | 109 | 162 |
| Italy— | | | | | | |
| Unwrought— | | | | | | |
| Unrefined | 4,352 | 1,505 | 2,905 | 4,106 | 4,172 | 4,526 |
| Refined (a) | 226,351 | 217,622 | 258,369 | 298,141 | 302,925 | 285,112 |
| Scrap (a) | 32,947 | 41,464 | 44,415 | 46,762 | 47,512 | 46,207 |
| Semi-manufactures (a) | 10,259 | 10,265 | 12,080 | 16,223 | 16,483 | 11,898 |
| Sulphate | 2,643 | 1,287 | 3,174 | 4,352 | 4,442 | 5,810 |
| Netherlands— | | | | | | |
| Unwrought | 30,510 | 7,268 | 10,538 | 12,522 | 12,723 | 44,207 |
| do. alloys | 2,245 | 3,482 | 3,721 | 3,607 | 3,665 | 2,536 |
| Scrap (a) | 10,615 | 7,577 | 7,310 | 9,429 | 9,580 | 6,982 |
| Semi-manufactures (a) | 49,289 | 61,648 | 67,734 | 70,186 | 71,312 | 58,437 |
| Sulphate | 2,729 | 2,669 | 3,058 | 3,604 | 3,662 | 4,366 |
| Norway— | | | | | | |
| Copper-nickel matte | 52,673 | 76,488 | 68,734 | 93,081 | 94,575 | 100,036 |
| Unwrought | 3,502 | 3,092 | 2,295 | 605 | 615 | 349 |
| do. alloys | 554 | 499 | 391 | 491 | 499 | 624 |
| Scrap (a) | 3 | 54 | 7 | 149 | 152 | 247 |
| Semi-manufactures (a) | 22,786 | 20,240 | 23,355 | 28,095 | 28,546 | 26,178 |
| Sulphate | 1,148 | 578 | 940 | 678 | 689 | 873 |

(a) Including alloys.

(b) Including semi-manufactures.

IMPORTS OF COPPER, ETC. (cont.)

Long tons

Tonnes

| Importing Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|-----------------------------------|---------|---------|-----------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Poland— | | | | | | |
| Concentrates | 18,337 | 17,057 | 14,425 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Unwrought | 37,098 | 34,886 | 25,862 | 21,554 | 21,900 | 33,560 |
| Sulphate | 3,012 | 2,051 | 3,131 | 1,999 | 2,031 | 760 |
| Portugal— | | | | | | |
| Ore | — | 26 | 1,046 | 11 | 11 | 141 |
| Matte | 3,912 | — | — | 2 | 2 | 4 |
| Unwrought (a) | 3,833 | 2,939 | 5,035 | 7,662 | 7,785 | 7,349 |
| Scrap | 78 | 19 | 943 | 1,599 | 1,625 | 1,304 |
| Semi-manufactures (a) | 5,954 | 6,756 | 7,958 | 8,254 | 8,386 | 8,998 |
| Sulphate | 644 | 395 | 373 | 218 | 222 | 450 |
| Spain— | | | | | | |
| Ore | 33,271 | 65,666 | 64,640 | 71,289 | 72,433 | 69,586 |
| Unwrought (a) | 59,285 | 61,147 | 70,551 | 72,895 | 74,065 | 62,053 |
| Scrap | 11,002 | 25,133 | 19,386 | 16,347 | 16,609 | 15,989 |
| Semi-manufactures (a) | 6,208 | 5,736 | 6,503 | 6,967 | 7,079 | 15,587 |
| Sulphate | 31 | 6 | 2,608 | 133 | 135 | 206 |
| Sweden— | | | | | | |
| Ore | 61,734 | 45,532 | 50,590 | 59,066 | 60,014 | 65,901 |
| Matte | 17,471 | 18,587 | 24,644 | 18,981 | 19,286 | 10,845 |
| Unwrought— | | | | | | |
| Unrefined | 63,261 | 8,755 | 8,621 | 4,056 | 4,121 | 1,850 |
| Refined | | 67,631 | 61,362 | 60,726 | 61,701 | 64,112 |
| Alloys | | 2,636 | 3,022 | 3,186 | 3,921 | 3,984 |
| Scrap (a) | 6,729 | 9,421 | 12,708 | 8,077 | 8,207 | 8,277 |
| Semi-manufactures (a) | 18,306 | 18,459 | 20,006 | 28,422 | 28,878 | 22,391 |
| Sulphate | 106 | 356 | 483 | 514 | 522 | 170 |
| Switzerland— | | | | | | |
| Unwrought | 40,408 | 36,820 | 37,349 | 47,856 | 48,624 | 40,454 |
| do. alloys | 1,409 | 1,104 | 3,180 | 2,906 | 2,953 | 2,121 |
| Scrap (a) | 550 | 628 | 503 | 391 | 397 | 432 |
| Semi-manufactures (a) | 20,865 | 21,972 | 26,840 | 43,263 | 43,957 | 42,206 |
| Sulphate | 445 | 218 | 803 | 464 | 471 | 868 |
| U.S.S.R.— | | | | | | |
| Unwrought | 13,779 | 9,252 | 394 | 1,005 | 1,021 | 7,400 |
| Yugoslavia— | | | | | | |
| Unwrought | 15,546 | 20,901 | 31,334 | 40,759 | 41,413 | 60,121 |
| Semi-manufactures (a) | 5,283 | 6,701 | 7,829 | 11,169 | 11,348 | 18,101 |
| Scrap | 1,148 | 1,050 | 1,852 | 1,815 | 1,844 | 1,059 |
| Angola— | | | | | | |
| Semi-manufactures (a) | 558 | 556 | 586 | 400 | 406 | 427 |
| Sulphate | 18 | 17 | 48 | 27 | 27 | 37 |
| Egypt— | | | | | | |
| Unwrought and scrap .. | 618 | 1,228 | 1,491 | 1,615 | 1,641 | 3,285 |
| Semi-manufactures | (a) 790 | (a) 559 | (a) 1,013 | 82 | 83 | 61 |
| Ethiopia— | | | | | | |
| Semi-manufactures (a) | 205 | 118 | 31 | 35 | 36 | 124 |
| Malagasy Republic— | | | | | | |
| Semi-manufactures (a) | 89 | 165 | 533 | 147 | 149 | <i>n.a.</i> |
| Morocco— | | | | | | |
| Semi-manufactures (a) | 2,245 | 2,483 | 2,665 | 3,226 | 3,278 | 2,445 |
| Mozambique— | | | | | | |
| Semi-manufactures (a) | 528 | 365 | 401 | 539 | 548 | 219 |
| South Africa— | | | | | | |
| Ore and concentrates .. | 8,279 | 58,150 | 9,244 | 7,255 | 7,372 | 2,319 |
| Unwrought | 32,202 | 10,194 | 2,648 | 1,106 | 1,123 | 5,186 |
| do. alloys | 32 | 32 | 35 | 45 | 46 | 45 |
| Semi-manufactures (a) | 4,191 | 2,367 | 1,241 | 2,601 | 2,642 | 3,675 |
| Sudan— | | | | | | |
| Semi-manufactures | 18 | 155 | 232 | 55 | 56 | 378 |
| Sulphate | 353 | 382 | 2 | 13 | 13 | <i>n.a.</i> |

(a) Including alloys.

IMPORTS OF COPPER, ETC. (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|---------|---------|---------|---------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Tunisia— | | | | | | |
| Semi-manufactures (a) | 1,161 | 492 | 940 | 1,087 | 1,104 | 990 |
| Sulphate | 123 | 189 | 86 | 136 | 138 | 252 |
| Costa Rica— | | | | | | |
| Semi-manufactures (a) | 237 | 211 | 95 | 437 | 444 | 554 |
| Sulphate | 28 | 20 | 29 | 22 | 22 | 20 |
| Guatemala— | | | | | | |
| Semi-manufactures (a) | 151 | 94 | 238 | 164 | 167 | 428 |
| Sulphate | 53 | 35 | 30 | 76 | 77 | 657 |
| Honduras— | | | | | | |
| Sulphate | 99 | 106 | 147 | 116 | 118 | 110 |
| Mexico— | | | | | | |
| Unwrought (a) .. | 10 | 13 | 13 | 40 | 41 | 22 |
| Semi-manufactures (a) | 582 | 731 | 595 | 845 | 859 | 790 |
| Nicaragua— | | | | | | |
| Semi-manufactures (a) | 174 | 118 | 66 | 103 | 105 | 111 |
| Salvador— | | | | | | |
| Semi-manufactures (a) | 1,621 | 1,525 | 797 | 1,221 | 1,241 | 1,314 |
| United States (b)— | | | | | | |
| Cu content of— | | | | | | |
| Ore and concentrates | 31,851 | 64,183 | 3,203 | 58,485 | 59,424 | 5,033 |
| Matte, precipitate, etc. | 362 | 102 | 70 | 38 | 39 | 69 |
| Unwrought— | | | | | | |
| Blister | 241,361 | 267,037 | 215,810 | 200,257 | 203,471 | 139,298 |
| Refined | 294,722 | 360,420 | 117,166 | 117,956 | 119,849 | 147,033 |
| Scrap | 2,344 | 6,466 | 5,256 | 1,188 | 1,207 | 4,645 |
| do. alloys | 5,954 | 3,944 | 2,673 | 872 | 886 | 7,867 |
| Semi-manufactures (a) | 66,379 | 90,498 | 69,958 | 69,558 | 70,674 | 87,962 |
| Sulphate | 137 | 253 | 196 | 330 | 335 | n.a. |
| Argentina— | | | | | | |
| Unwrought, refined .. | 16,461 | 18,977 | 28,232 | 22,524 | 22,885 | 34,717 |
| Semi-manufactures .. | 419 | 807 | 414 | 611 | 621 | (a) 411 |
| Brazil— | | | | | | |
| Unwrought (a) | 35,861 | 42,141 | 46,331 | 49,838 | 50,638 | n.a. |
| Semi-manufactures (a) r | 474 | r 690 | 897 | 2,532 | 2,573 | n.a. |
| Sulphate | 1,970 | 2,370 | 2,201 | 2,627 | 2,669 | n.a. |
| Colombia— | | | | | | |
| Unwrought | r 540 | r 1,091 | 1,153 | } 6,830 | } 6,940 | n.a. |
| Semi-manufactures (a) r | 3,741 | r 3,313 | 3,913 | | | |
| Sulphate | 3 | r 8 | 16 | | | |
| Peru— | | | | | | |
| Semi-manufactures (a) | 6,774 | 592 | 561 | n.a. | n.a. | n.a. |
| Sulphate | 42 | 4 | n.a. | n.a. | n.a. | n.a. |
| Uruguay— | | | | | | |
| Unwrought | 792 | 410 | 744 | 803 | 816 | 758 |
| Venezuela— | | | | | | |
| Semi-manufactures (a) | 6,774 | 7,337 | 6,520 | n.a. | n.a. | n.a. |
| Sulphate | 22 | 63 | 97 | n.a. | n.a. | n.a. |

(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):

| | | | | | Tonnes | Tonnes |
|----------------------|---------|---------|---------|---------|---------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| Ore and concentrates | 32,372 | 24,152 | 34,595 | 29,233 | 29,701 | 27,984 |
| Matte | 79 | 454 | 289 | 980 | 996 | n.a. |
| Unwrought— | | | | | | |
| Blister | 265,068 | 241,712 | 212,454 | 200,248 | 203,460 | 142,127 |
| Refined | 295,152 | 357,391 | 117,117 | 119,849 | 121,771 | 147,033 |
| Scrap | 14,610 | 10,196 | 5,258 | 1,123 | 1,141 | 4,645 |

IMPORTS OF COPPER, ETC. (cont.)

Long tons Tonnes

| Importing Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|-----------------------------------|-------------|-----------|-----------|-----------|-----------|---------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Burma— | | | | | | |
| Semi-manufactures .. | 122 | 116 | 550 | 330 | 335 | 364 |
| Formosa— | | | | | | <i>n.a.</i> |
| Unwrought (a) .. | 1,183 | 2,316 | 2,062 | 4,337 | 4,407 | |
| Semi-manufactures (a) | 2,372 | 2,550 | 3,426 | 4,575 | 4,648 | <i>n.a.</i> |
| Iran (b)— | | | | | | |
| Unwrought (a) .. | 4,923 | 3,071 | 82 | 37 | 38 | 219 |
| Scrap | 71 | 41 | 55 | 159 | 162 | 405 |
| Semi-manufactures (a) | 6,761 | 6,601 | 8,916 | 10,619 | 10,789 | 10,525 |
| Iraq— | | | | | | |
| Semi-manufactures (a) | 1,190 | 1,515 | 1,954 | 1,288 | 1,309 | <i>n.a.</i> |
| Japan— | | | | | | |
| Ore and concentrates .. | 1,006,011 | 1,044,331 | 1,101,841 | 1,540,562 | 1,565,283 | 1,926,078 |
| Matte | 24,522 | 23,594 | 30,018 | 23,240 | 23,613 | 9,220 |
| Unwrought | 258,380 | 279,925 | 343,804 | 297,240 | 302,010 | 268,349 |
| do. alloys | 13,379 | 7,001 | 11,579 | 11,032 | 11,209 | 13,927 |
| Scrap | 13,023 | 7,381 | 6,717 | 6,719 | 6,827 | 12,001 |
| do. alloys | 62,873 | 49,711 | 42,832 | 57,972 | 58,902 | 41,604 |
| Semi-manufactures (a) | 1,730 | 1,984 | 4,747 | 2,284 | 2,321 | 1,520 |
| Sulphate | — | — | — | 4 | 4 | 1 |
| Jordan— | | | | | | |
| Semi-manufactures (a) | 236 | 187 | 148 | 268 | 272 | 182 |
| Korea (South)— | | | | | | |
| Unwrought | } 2,084 | } 2,114 | } 2,108 | } 4,803 | } 4,880 | } <i>n.a.</i> |
| Semi-manufactures .. | | | | | | |
| Scrap | | | | | | |
| do. alloys | 1,328 | 1,305 | 1,161 | 797 | 810 | (a) 1,276 |
| do. alloys | | | | | | 5,573 |
| Lebanon— | | | | | | |
| Semi-manufactures .. | 587 | 576 | 844 | 1,161 | 1,180 | 2,825 |
| Philippine Republic— | | | | | | |
| Unwrought (a) | <i>n.a.</i> | 1,318 | 4,290 | 4,615 | 4,689 | 3,501 |
| Semi-manufactures (a) | 5,082 | 4,784 | 1,347 | 1,359 | 1,381 | 1,771 |
| Thailand— | | | | | | |
| Unwrought | 340 | 208 | 454 | 22 | 22 | 51 |
| Semi-manufactures (a) | 5,082 | 5,122 | 4,255 | 4,189 | 4,255 | 4,671 |
| Turkey— | | | | | | |
| Semi-manufactures (a) | 401 | 373 | 318 | 246 | 250 | <i>n.a.</i> |

(a) Including alloys.

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

DIAMONDS
PRODUCTION OF DIAMONDS†

Metric carats

| Producing Country | 1967 | 1968 | 1969 | 1970 | 1971 |
|-------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| COMMONWEALTH COUNTRIES | | | | | |
| Ghana (b) | 2,537,500 | 2,447,100 | 2,390,900 | 2,549,500 | 2,562,000 |
| Lesotho (a) | 21,737 | 11,914 | 29,787 | 17,547 | 6,940 |
| Sierra Leone | 1,160,102 | 2,432,770 | 2,000,849 | 2,048,264 | 1,944,174 |
| Tanzania | 926,757 | 702,395 | 777,289 | 708,145 | 837,190 |
| Guyana | 97,351 | 66,311 | 51,549 | 61,081 | 47,919 |
| India | 7,626 | 8,658 | 11,794 | 20,235 | 19,383 |
| TOTAL | 4,751,000 | 5,797,000 | 5,262,000 | 5,377,000 | 5,418,000 |
| OTHER COUNTRIES | | | | | |
| Angola— | | | | | |
| Gem | 982,868 | 1,316,411 | r 1,516,000 | 1,560,702 | } 2,413,021 |
| Industrial | 305,632 | 350,776 | r 506,000 | 834,850 | |
| Central African Republic | 520,628 | 609,360 | r 535,000 | 482,447 | 437,449 |
| Guinea | (e) 51,000 | (e) 70,000 | (e) 72,000 | 74,000 | n.a. |
| Ivory Coast | 175,825 | 187,009 | 202,414 | 212,808 | 326,368 |
| South Africa | 6,667,607 | 7,433,318 | 7,862,837 | 8,111,533 | 7,031,249 |
| South West Africa .. | 1,700,000 | 1,722,000 | 1,840,500 | 1,509,263 | 1,561,572 |
| Zaire Republic— | | | | | |
| Gem | 263,000 | 1,787,000 | 1,802,000 | 1,649,000 | 2,314,000 |
| Industrial | 13,153,602 | 11,352,733 | 11,621,000 | 12,438,000 | 12,002,000 |
| Venezuela | 69,630 | 111,720 | 193,784 | 553,000 | 500,000 |
| TOTAL* | 24,000,000 | 24,000,000 | 26,000,000 | 28,000,000 | 27,000,000 |
| WORLD'S TOTAL* .. | 29,000,000 | 30,000,000 | 32,000,000 | 33,000,000 | 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): 1967—8,000,000; 1968—11,000,000; 1969—13,000,000; 1970—15,000,000; 1971— 15,000,000

(a) Exports.

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

| | | <i>Companies</i> | <i>African diggers</i> |
|---------|-----------|------------------|------------------------|
| 1967 .. | 2,519,000 | 18,800 | |
| 1968 .. | 2,431,900 | 15,200 | |
| 1969 .. | 2,383,600 | 7,300 | |
| 1970 .. | 2,541,600 | 7,900 | |
| 1971 .. | n.a. | n.a. | |

PRODUCTION OF DIAMONDS†

£ sterling

| Producing Country | 1967 | 1968 | 1969 | 1970 | 1971 |
|-------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| COMMONWEALTH COUNTRIES | | | | | |
| Ghana (b) | 6,303,000 | 7,984,000 | 5,465,597 | 5,205,000 | 5,380,000 |
| Lesotho | (a) 508,328 | (a) 219,585 | (a) 684,167 | (a) 380,355 | (a) 137,589 |
| Sierra Leone | b14,870,785 | 23,466,517 | 30,457,614 | b21,000,000 | b23,895,000 |
| Tanzania (b) | 11,147,000 | 8,129,449 | 10,317,000 | 9,241,000 | 8,058,000 |
| Guyana | b 1,701,000 | (b)920,748 | 722,000 | (b) 816,000 | n.a. |
| India | 158,000 | (c) 182,000 | 442,000 | 386,000 | 413,500 |
| TOTAL | 34,688,000 | 39,034,000 | 47,892,000 | 35,590,000 | 38,700,000 |
| OTHER COUNTRIES | | | | | |
| Angola | b14,856,400 | c19,000,000 | c25,000,000 | c30,000,000 | c30,000,000 |
| Central African Republic | 5,361,000 | 7,542,000 | 6,072,000 | 5,499,000 | 4,412,000 |
| Ivory Coast (b) | (c)1,310,000 | (c)1,576,000 | (c)1,568,000 | (c)1,648,000 | (c)2,510,500 |
| South Africa (c) | 29,355,000 | 44,700,000 | 60,000,000 | 44,000,000 | 38,000,000 |
| South West Africa | n.a. | n.a. | n.a. | n.a. | n.a. |
| Zaire Republic— | | | | | |
| Gem | n.a. | n.a. | n.a. | n.a. | n.a. |
| Industrial | n.a. | n.a. | n.a. | n.a. | n.a. |
| Venezuela (b) | 952,000 | 1,528,000 | 2,650,000 | 3,000,000 | 3,000,000 |
| TOTAL* | 109,000,000 | 120,000,000 | 130,000,000 | 140,000,000 | 140,000,000 |
| WORLD'S TOTAL* | 144,000,000 | 160,000,000 | 180,000,000 | 180,000,000 | 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> |
| 1967 | 178,763,764 |
| 1968 | 250,129,109 |
| 1969 | 288,538,255 |
| 1970 | 220,510,610 |
| 1971 | 256,889,873 |
| 1972 | 338,921,618* |

*Reported as Rand 655,474,410.

EXPORTS OF DIAMONDS

| Exporting Country and Description | 1967 | 1968 | 1969 | 1970 | 1971 |
|--|---------------|-------------|-------------|-------------|---------------|
| COMMONWEALTH COUNTRIES | | | | | |
| United Kingdom— Diamonds .. | £ 188,297,234 | 271,674,457 | 328,374,760 | 256,807,099 | 379,656,330 |
| Ghana— Industrial diamonds Ct. | 1,989,890 | 2,996,511 | 2,477,414 | 2,871,971 | n.a. |
| | £ 4,944,000 | 7,117,217 | 5,662,475 | 5,907,444 | n.a. |
| Sierra Leone .. Ct. | 1,161,063 | 2,432,770 | 2,019,803 | 1,955,011 | 1,080,697 |
| | £ 14,878,774 | 23,465,517 | 28,944,001 | 25,476,966 | 13,540,882 |
| Tanzania Gem diamonds.. | Ct. 987,605 | Ct. 682,651 | Ct. 780,211 | Ct. 719,617 | Ct. 807,810 |
| Industrial diamonds | £11,146,500 | £7,900,930 | £10,356,000 | £9,391,600 | £7,553,493 |
| Guyana Ct. | 72,948 | 70,724 | 56,486 | 52,598 | 9,847 |
| | £ 1,282,182 | 982,024 | 791,324 | 702,971 | 515,503 |
| India (b)— Gem diamonds | £ 7,874,865 | 16,525,311 | 14,351,593 | 15,697,560 | 20,410,441 |
| Malaysia (West)— Cut and polished | £ — | — | 1,669 | 26,250 | n.a. |
| Australia (a)— Gem diamonds Ct. | 122 | 56 | 16 | 54 | 117 |
| | £ 12,000 | 1,314 | 2,800 | 2,800 | 7,467 |
| OTHER COUNTRIES | | | | | |
| Belgium-Luxemburg E.U.— Rough diamonds Ct. | 2,092,560 | 3,137,894 | 3,690,233 | 3,901,262 | 4,496,256 |
| | £ 21,586,000 | 33,062,000 | 37,227,000 | 37,453,000 | 44,244,000 |
| Cut diamonds .. Ct. | 1,643,915 | 1,765,745 | 1,788,816 | 1,894,946 | 2,461,859 |
| | £ 91,188,586 | 114,424,741 | 129,294,625 | 121,604,000 | 127,604,000 |
| Industrial diamonds Ct. | 9,795,279 | 9,991,190 | 9,753,344 | 8,140,048 | 8,817,761 |
| | £ 19,893,000 | 23,466,000 | 24,542,000 | 21,564,000 | 19,412,000 |
| France— Uncut Ct. | 194,941 | 588,384 | 224,068 | 25,143 | 17,075 |
| | £ 177,546 | 194,109 | 196,851 | 1,515,529 | 240,000 |
| Cut and polished Ct. | 20,855 | 28,565 | 29,880 | 31,495 | 34,115 |
| | £ 1,283,000 | 2,230,000 | 4,102,000 | 3,483,000 | 3,967,000 |
| Industrial diamonds Ct. | 241,330 | 277,645 | 178,900 | 180,380 | 240,225 |
| | £ 409,192 | 608,068 | 516,096 | 543,661 | 673,000 |
| Dust Ct. | 196,110 | 159,735 | 167,015 | 107,270 | 211,455 |
| | £ 149,571 | 157,735 | 160,540 | 76,894 | 33,000 |
| Netherlands .. Ct. | 1,513,823 | 1,220,263 | 1,331,930 | 1,409,801 | (c) 943,439 |
| | £ 10,482,423 | 12,609,576 | 13,571,133 | 12,047,500 | (c) 9,636,000 |
| Dust Ct. | 1,118,363 | 1,272,792 | 1,640,110 | 2,570,560 | 2,146,927 |
| | £ 1,055,440 | 1,293,854 | 1,664,078 | 2,559,277 | 4,481,000 |
| Sweden— Industrial diamonds | £ 20,786 | 1,600 | 2,300 | 13,531 | 11,000 |
| Angola Ct. | 1,315,890 | 1,530,434 | 1,980,394 | 2,502,688 | 2,342,524 |
| | £ 15,178,147 | 19,735,666 | 26,712,647 | 33,914,308 | 21,761,000 |
| Central African Republic .. Ct. | 479,025 | 634,627 | 536,790 | 471,800 | 427,254 |
| | £ 4,929,308 | 7,901,000 | 6,186,000 | 5,176,000 | 4,240,251 |
| Congo (Brazza) .. Ct. | 4,154,000 | 4,343,000 | 4,415,000 | n.a. | n.a. |
| | £ 6,700,000 | 6,471,000 | 2,715,000 | 1,210,000 | n.a. |
| Ivory Coast .. Ct. | 191,285 | 181,475 | 316,630 | 215,205 | 276,000 |
| | £ 595,800 | 669,830 | 777,765 | 618,296 | 861,670 |
| Liberia Ct. | 1,025,625 | 792,985 | 835,952 | 825,959 | 738,928 |
| | £ 5,379,000 | 3,780,503 | 3,680,000 | 2,394,590 | 2,311,300 |

(a) Years ended June 30 of that stated.

(b) Years ended March 31 following that stated.

(c) Excludes exports to Belgium and Luxemburg, if any.

EXPORTS OF DIAMONDS (cont.)

| Exporting Country and Description | 1967 | 1968 | 1969 | 1970 | 1971 |
|-----------------------------------|------------|------------|-------------|-------------|-------------|
| OTHER COUNTRIES (cont.) | | | | | |
| South Africa (a)— | | | | | |
| Uncut Ct. | 2,776,500 | 3,170,853 | 3,434,565 | 2,971,204 | 2,719,637 |
| £ | 58,926,628 | 81,624,810 | 88,917,099 | 65,194,285 | 63,299,242 |
| Cut and polished Ct. | 184,670 | 224,325 | 255,363 | 248,304 | 248,299 |
| £ | 19,749,624 | 28,964,079 | 37,712,826 | 33,807,191 | 30,431,926 |
| Industrial diamonds Ct. | 19,798,734 | 7,465,966 | 9,326,537 | 8,037,883 | 5,608,416 |
| £ | 29,260,109 | 16,236,810 | 22,824,423 | 16,374,150 | 14,752,084 |
| Zaire Republic .. Ct. | 10,998,400 | 9,090,600 | 13,185,000 | 13,650,000 | n.a. |
| £ | 9,807,000 | 9,153,000 | 14,235,000 | n.a. | n.a. |
| United States— | | | | | |
| Uncut Ct. | 58,832 | 122,306 | 149,954 | 93,937 | 62,904 |
| £ | 1,056,717 | 2,344,352 | 3,458,124 | 2,214,095 | 1,991,309 |
| Cut Ct. | 128,077 | 156,201 | 183,353 | 294,026 | 286,232 |
| £ | 20,948,620 | 37,163,524 | 47,488,868 | 46,204,684 | 49,265,874 |
| Industrial diamonds Ct. | 147,564 | 299,945 | 344,801 | 338,921 | 414,504 |
| £ | 335,300 | 480,478 | 680,728 | 765,808 | 748,755 |
| Bort Ct. | 17,765 | 26,493 | 45,223 | 33,470 | 19,642 |
| £ | 76,021 | 70,178 | 110,364 | 64,278 | 38,248 |
| Brazil Ct. | r 27,115 | 5,960 | 47,000 | n.a. | n.a. |
| £ | r 290,450 | 66,000 | 670,000 | n.a. | n.a. |
| Israel— | | | | | |
| Polished.. .. Ct. | 1,448,627 | 1,701,000 | 1,775,000 | 1,778,000 | 2,116,000 |
| £ | 70,025,500 | 95,522,083 | 105,644,000 | 101,912,000 | 126,450,000 |
| Japan— | | | | | |
| Industrial diamonds Ct. | 473,315 | 76,760 | 118,230 | 79,815 | 148,140 |
| £ | 563,708 | 187,242 | 167,865 | 259,071 | 384,290 |
| Cut and polished Ct. | 647,920 | 3,015 | 325 | 330 | 4,415 |
| £ | 391,420 | 40,677 | 45,004 | 99,392 | 150,254 |

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

| | 1967 | 1968 | 1969 | 1970 | 1971 |
|-----------|-----------|-----------|-----------|-----------|-----------|
| Ct. | 1,971,751 | 2,798,985 | 4,443,338 | 4,641,938 | 5,732,337 |
| £ | 1,115,288 | 2,803,037 | 3,304,709 | 3,453,772 | 4,174,980 |

IMPORTS OF DIAMONDS

| Importing Country and Description | 1967 | 1968 | 1969 | 1970 | 1971 |
|-----------------------------------|---------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | |
| United Kingdom | £ 213,397,699 | 291,531,536 | 327,773,189 | 310,873,686 | 388,432,944 |
| Malta— | | | | | |
| Rough diamonds | £ 1,836 | 1,519 | 321 | 11,866 | 15,330 |
| Cut and polished | £ 6,733 | 7,080 | 4,887 | 6,012 | 9,419 |
| Zambia— | | | | | |
| Industrial diamonds | Ct. 11,750 | n.a. | n.a. | n.a. | n.a. |
| | £ 20,015 | n.a. | n.a. | n.a. | n.a. |
| Canada— | | | | | |
| Unset (b) .. Ct. | 72,754 | 79,802 | 89,582 | 76,883 | 90,961 |
| (b) .. £ | 4,514,245 | 5,577,353 | 6,384,000 | 5,227,000 | 6,005,000 |
| Dust, bort, etc... Ct. | 1,383,487 | 1,413,789 | 1,696,930 | 1,613,569 | 1,165,984 |
| | £ 2,479,746 | 2,668,619 | 3,180,000 | 3,159,000 | 2,262,000 |
| Hong Kong— | | | | | |
| Gem diamonds .. Ct. | 286,568 | 377,317 | 435,109 | 424,489 | 572,940 |
| | £ 15,315,089 | 24,624,231 | 28,917,249 | 24,317,931 | 30,851,211 |
| Industrial diamonds | £ (a) 1,197 | 22,878 | 26,115 | 97,597 | 13,151 |
| India (c)— | | | | | |
| Gem diamonds .. £ | 2,210,007 | 12,482,539 | 11,917,756 | 10,687,377 | 10,849,915 |
| Industrial and bort | £ 603,128 | 393,717 | 332,747 | 470,222 | 636,862 |
| Malaysia (West)— | | | | | |
| Gem diamonds | £ 491,269 | 528,600 | 560,957 | 658,859 | n.a. |
| Australia (d)— | | | | | |
| Industrial diamonds Ct. | 490,794 | 541,389 | 633,221 | 892,281 | 665,249 |
| | £ 736,400 | 945,318 | 1,138,000 | 1,505,000 | 1,287,508 |
| Other diamonds | Ct. 25,841 | 25,449 | 33,831 | 31,786 | 46,620 |
| | £ 1,574,000 | 1,692,198 | 2,269,000 | 2,304,821 | 2,715,012 |
| New Zealand (d)— | | | | | |
| Industrial diamonds | £ 16,830 | 18,287 | 15,440 | 11,894 | n.a. |
| Other diamonds | £ 202,626 | 153,988 | 551,096 | 272,543 | n.a. |
| OTHER COUNTRIES | | | | | |
| Belgium-Luxemburg | | | | | |
| E.U.— | | | | | |
| Rough diamonds Ct. | 6,971,660 | 9,347,950 | 9,976,847 | 8,612,218 | 9,483,950 |
| | £ 58,994,400 | 97,963,075 | 115,431,200 | 81,461,500 | 113,327,000 |
| Cut diamonds .. Ct. | 597,876 | 833,335 | 1,012,036 | 1,184,162 | 988,437 |
| | £ 41,189,797 | 63,767,650 | 87,510,016 | 55,465,500 | 69,752,000 |
| Industrial .. Ct. | 9,530,780 | 10,582,335 | 20,608,162 | 8,216,925 | 8,898,836 |
| | £ 18,982,312 | 24,312,050 | 33,095,949 | 18,349,270 | 19,989,000 |
| France— | | | | | |
| Uncut Ct. | 57,875 | 68,475 | 61,230 | 184,020 | 63,040 |
| | £ 1,022,721 | 1,330,070 | 1,393,147 | 2,769,917 | 1,342,000 |
| Cut and polished Ct. | 82,675 | 99,165 | 108,445 | 109,805 | 108,615 |
| | £ 6,136,175 | 13,710,425 | 13,290,195 | 10,163,990 | 10,186,000 |
| Industrial diamonds Ct. | 863,100 | 1,002,170 | 835,855 | 724,325 | 773,915 |
| | £ 1,880,329 | 2,430,416 | 2,601,142 | 2,557,764 | 2,471,000 |
| Dust Ct. | 1,330,045 | 1,287,545 | 1,846,375 | 1,846,460 | 1,949,125 |
| | £ 1,239,787 | 1,448,231 | 1,893,187 | 1,947,486 | 2,044,000 |
| Netherlands .. Ct. | 1,647,356 | 1,275,966 | 1,455,132 | 1,805,392 | 1,468,182 |
| | £ 11,063,001 | 12,383,978 | 12,549,378 | 11,827,900 | 7,525,000 |
| Dust Ct. | 764,936 | 1,416,527 | 1,527,731 | 2,410,358 | 2,431,880 |
| | £ 671,437 | 1,336,901 | 1,450,161 | 2,347,400 | 4,490,000 |
| Norway Ct. | 40,000 | 15,000 | 5,000 | 30,000 | 25,000 |
| Industrial .. £ | 3,159 | 589 | 700 | 233 | 816 |
| Sweden— | | | | | |
| Industrial diamonds | £ 379,354 | 277,706 | 429,929 | 480,831 | 448,000 |

(a) Excess of re-exports.

(c) Years ended March 31 following that stated.

(b) Excluding uncut.

(d) Years ended June 30 of that stated.

(e) Excludes imports from Belgium and Luxemburg, if any.

IMPORTS OF DIAMONDS (cont.)

| Importing Country and Description | 1967 | 1968 | 1969 | 1970 | 1971 |
|-----------------------------------|------------|-------------|-------------|------------|-------------|
| OTHER COUNTRIES (cont.) | | | | | |
| Yugoslavia— | | | | | |
| Industrial diamonds Ct. | 372,285 | 51,800 | 70,085 | 109,660 | 39,420 |
| £ | 78,211 | 37,400 | 78,880 | 147,720 | 118,504 |
| South Africa— | | | | | |
| Industrial diamonds Ct. | 19,139,062 | 3,618,130 | 3,080,770 | 3,369,057 | 2,559,573 |
| £ | 18,493,128 | 4,244,560 | 3,739,311 | 3,803,424 | 2,988,672 |
| Rough diamonds | (a) | (a) | (a) | (a) | (a) |
| Cut and polished Ct. | 1,868 | 4,265 | 4,552 | 7,081 | 4,405 |
| £ | 104,919 | 245,508 | 197,823 | 310,331 | 251,338 |
| Mexico— | | | | | |
| Uncut Ct. | 5,815 | 11,580 | 800 | 1,830 | 2,160 |
| £ | n.a. | n.a. | 21,600 | 44,300 | 92,579 |
| Industrial diamonds Ct. | 35,000 | 50,000 | 80,000 | n.a. | n.a. |
| £ | n.a. | n.a. | 212,100 | n.a. | n.a. |
| United States— | | | | | |
| Uncut Ct. | 2,505,763 | 2,514,362 | 2,931,969 | 2,632,739 | 2,741,658 |
| £ | 77,231,000 | 105,272,230 | 119,819,136 | 97,568,180 | 104,128,992 |
| Cut and polished Ct. | 1,454,992 | 1,833,935 | 1,757,211 | 1,641,875 | 1,925,527 |
| £ | 63,326,000 | 92,699,401 | 90,450,534 | 79,472,275 | 85,351,191 |
| Industrial (b) .. Ct. | 6,043,093 | 4,248,560 | 4,731,179 | 5,882,673 | 4,885,316 |
| £ | 12,735,000 | 15,328,327 | 12,415,217 | 13,768,027 | 11,504,157 |
| Dust Ct. | 4,752,930 | 5,643,130 | 5,400,492 | 4,966,279 | 6,085,801 |
| £ | 3,910,000 | 5,220,266 | 4,954,225 | 4,341,999 | 5,517,827 |
| Bort, manufactured Ct. | 4,254,996 | 685,639 | 357,002 | 363,061 | 298,615 |
| £ | 3,651,000 | 640,408 | 382,318 | 414,356 | 317,723 |
| Argentina— | | | | | |
| Industrial diamonds Ct. | 1,290,000 | 400,000 | n.a. | 215,000 | 95,000 |
| £ | 20,200 | 40,500 | 48,300 | 88,900 | 112,000 |
| Dust Ct. | 5,000 | 56,000 | 76,000 | 88,000 | 139,000 |
| £ | 18,100 | 18,200 | 15,700 | 39,000 | 54,000 |
| Israel— | | | | | |
| Rough diamonds Ct. | 3,090,000 | 3,873,000 | 4,304,000 | 3,207,000 | 4,336,000 |
| £ | 50,028,000 | 75,220,000 | 87,653,000 | 72,830,000 | 98,282,068 |
| Industrial diamonds Ct. | 588,000 | 549,000 | 659,000 | 404,000 | 346,000 |
| £ | 1,763,000 | 2,034,000 | 2,438,000 | 1,285,000 | 620,900 |
| Bort Ct. | 765,000 | 674,000 | 707,000 | 678,000 | 646,000 |
| £ | 576,000 | 563,000 | 605,000 | 588,000 | 528,000 |
| Japan— | | | | | |
| Industrial diamonds Ct. | 734,010 | 753,000 | 651,000 | 772,000 | 672,000 |
| £ | 3,381,502 | 4,973,408 | 4,619,700 | 5,525,700 | 4,374,700 |
| Uncut Ct. | 24,195 | 3,330 | 12,940 | 10,485 | 15,055 |
| £ | 223,055 | 87,396 | 432,894 | 321,100 | 362,000 |
| Cut and polished Ct. | 469,055 | 315,155 | 570,830 | 254,230 | 367,450 |
| £ | 15,175,187 | 22,347,244 | 25,376,000 | 31,638,200 | 40,097,400 |
| Dust Ct. | 1,983,410 | 1,877,565 | 1,997,800 | 1,954,125 | 1,659,580 |
| £ | 1,925,186 | 2,127,989 | 2,182,000 | 2,119,400 | 1,790,200 |
| Philippine Republic— | | | | | |
| Industrial diamonds Ct. | 39,795 | 26,635 | 9,575 | 39,393 | 36,910 |
| £ | 6,014 | 18,994 | 26,672 | 89,725 | 84,486 |

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

| | Total imports | | Re-exports | |
|------|---------------|------------|------------|------------|
| | Carats | £ | Carats | £ |
| 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 |
| 1970 | 3,413,320 | 6,333,593 | 7,723,879 | 15,334,595 |
| 1971 | 2,604,370 | 6,223,489 | 5,615,763 | 17,654,547 |

(b) In addition synthetic diamonds (including Miner's diamond, powder and dust) were imported as follows:

| | 1967 | 1968 | 1969 | 1970 | 1971 |
|-----|-----------|-----------|-----------|-----------|-----------|
| Ct. | 1,287,189 | 2,241,775 | 2,807,221 | 2,152,664 | 1,639,925 |
| £ | 1,087,364 | 1,916,888 | 2,444,032 | 1,907,898 | 1,485,381 |

DIATOMACEOUS EARTH
PRODUCTION OF DIATOMACEOUS EARTH

| Producing Country | Long tons | | | | Tonnes | |
|-------------------------------|-------------|-------------|------------|------------|------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | 12,484 | 14,701 | 12,778 | 13,545 | 13,762 | 14,559 |
| Kenya | 1,856 | 2,022 | 2,267 | 1,576 | 1,601 | 1,400 |
| Canada (a) | <i>n.a.</i> | 465 | 435 | (b) 429 | (b) 435 | <i>n.a.</i> |
| Australia | 8,341 | 6,725 | 2,374 | 2,614 | 2,656 | 1,392 |
| New Zealand | 1,408 | 2,033 | 2,129 | 5,790 | 5,883 | 6,338 |
| OTHER COUNTRIES | | | | | | |
| Austria | 3,599 | 2,932 | 1,737 | 3,712 | 3,772 | 3,084 |
| Denmark— | | | | | | |
| Diatomaceous earth (b) | 9,267 | 11,938 | r 10,081 | 8,238 | 8,370 | 7,207 |
| Moler | (c) 94,352 | (b) 86,454 | (c) 82,529 | 90,380 | 91,830 | (c) 57,321 |
| Finland | 1,594 | 1,948 | 1,960 | 655 | 666 | — |
| France (d) | 157,103 | 167,955 | 157,907 | 157,279 | 159,803 | <i>n.a.</i> |
| Germany (Federal) | 55,595 | 54,638 | 52,149 | 37,651 | 38,255 | 26,499 |
| Iceland | <i>n.a.</i> | 2,706 | 7,480 | 13,030 | 13,139 | 19,046 |
| Italy | 59,007 | 59,100 | 58,793 | (e) 60,000 | (e) 60,000 | <i>n.a.</i> |
| Portugal | 4,038 | 3,444 | 2,761 | 3,145 | 3,195 | 4,671 |
| Spain | 16,860 | 11,081 | 8,320 | 18,067 | 18,357 | <i>n.a.</i> |
| Sweden | 509 | 500 | 591 | 617 | 627 | 514 |
| Algeria | 17,975 | 21,030 | 10,378 | — | — | <i>n.a.</i> |
| Egypt | <i>n.a.</i> | 1,201 | 1,279 | 2,289 | 2,326 | 2,250 |
| Mozambique | 5 | 206 | 118 | 116 | 118 | <i>n.a.</i> |
| South Africa | 576 | 614 | 505 | 835 | 848 | 325 |
| Costa Rica | (e) 10,000 | (e) 10,000 | (e) 15,000 | (e) 19,000 | (e) 19,000 | (e) 19,000 |
| Mexico | 7,100 | 9,787 | 10,998 | 15,860 | 16,115 | 16,615 |
| United States | (b) 560,000 | (b) 560,000 | 534,358 | 533,603 | 542,162 | 485,630 |
| Argentina | 8,017 | 6,443 | 10,176 | 8,098 | 8,228 | 8,000 |
| Peru | 3,610 | 2,974 | 20,271 | 2,519 | 2,559 | (e) 3,000 |
| Korea (South) | 2,203 | 2,179 | 2,869 | 2,543 | 2,584 | (e) 2,600 |

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) Including tripoli.
- (e) United States Bureau of Mines' estimate.

EXPORTS OF DIATOMACEOUS EARTH

| Exporting Country | Long tons | | | | Tonnes | |
|-------------------------------|-------------|-------------|-------------|---------|---------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 4,495 | 4,567 | 4,878 |
| Kenya | 723 | 525 | 609 | 604 | 614 | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Austria | 239 | 251 | 105 | 52 | 53 | 166 |
| Belgium-Luxemburg | | | | | | |
| E.U. | 856 | 288 | 393 | 826 | 839 | 1,432 |
| Denmark— | | | | | | |
| Diatomaceous earth | 10,290 | 9,419 | 8,937 | 8,295 | 8,428 | 7,695 |
| Moler | 94,352 | 86,513 | 82,529 | 90,441 | 91,892 | 57,290 |
| Moler bricks | 34,712 | 33,186 | 36,568 | 43,059 | 43,750 | 44,562 |
| Finland | 96 | 27 | 57 | 43 | 44 | 40 |
| France | 16,865 | 17,685 | 14,634 | 15,732 | 15,985 | 16,933 |
| Germany (Federal) | 3,559 | 5,230 | 5,796 | 4,695 | 4,770 | 6,236 |
| Italy | 1,616 | 3,426 | 1,945 | 1,475 | 1,499 | 1,410 |
| Netherlands | 267 | 1,288 | 250 | 435 | 442 | 396 |
| Norway | — | 2 | 60 | 5 | 5 | 11 |
| Portugal | 280 | 249 | 234 | 118 | 120 | 174 |
| Spain | 1,038 | 2,072 | 1,380 | 1,713 | 1,741 | 2,056 |
| Sweden | 217 | 102 | 131 | 127 | 129 | 150 |
| Yugoslavia | 1,651 | 1,398 | 1,217 | 609 | 619 | 244 |
| Algeria | 6,682 | 11,717 | 6,109 | 4,534 | 4,607 | 2,182 |
| South Africa | 414 | <i>n.a.</i> | 83 | 241 | 245 | 46 |
| United States | 132,571 | 149,580 | 156,782 | 137,446 | 139,652 | 128,778 |
| Japan | 647 | 761 | 1,975 | 1,005 | 1,021 | 1,414 |

IMPORTS OF DIATOMACEOUS EARTH

| Importing Country | Long tons | | | | Tonnes | |
|-------------------------------|-----------|---------|--------|--------|--------|--------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom (a) (e) .. | 46,467 | 42,640 | 39,220 | 33,228 | 33,761 | 15,964 |
| Canada | 29,758 | 27,393 | 27,199 | 34,093 | 34,640 | 27,483 |
| India (d) | 1,929 | 1,230 | 1,585 | 2,616 | 2,658 | 1,267 |
| Malaysia (West) .. | 337 | 294 | 313 | 153 | 155 | 161 |
| Australia (b) .. . | 5,082 | 4,733 | 6,095 | 8,097 | 8,227 | 6,191 |
| New Zealand (b) .. | 819 | 870 | 989 | 925 | 940 | n.a. |
| OTHER COUNTRIES | | | | | | |
| Austria | 2,318 | 2,112 | 2,221 | 2,593 | 2,635 | 3,300 |
| Belgium-Luxemburg | | | | | | |
| E.U. | 6,943 | 5,846 | 4,163 | 5,241 | 5,325 | 6,335 |
| Denmark | 2,488 | 4,081 | 4,500 | 4,196 | 4,263 | 3,274 |
| Finland | 1,119 | 1,065 | 911 | 1,106 | 1,124 | 765 |
| France | 6,994 | 6,898 | 6,709 | 5,729 | 5,821 | 5,302 |
| Germany (Federal) .. | 68,017 | 62,415 | 63,739 | 69,260 | 70,372 | 53,408 |
| Greece | 1,367 | 905 | 1,321 | 965 | 981 | 324 |
| Iceland | 1,554 | 650 | 767 | 1,397 | 1,420 | 1,021 |
| Italy | 6,112 | 7,740 | 4,350 | 5,996 | 6,092 | 3,799 |
| Netherlands | 7,383 | 7,914 | 10,530 | 8,729 | 8,869 | 9,626 |
| Norway | 4,963 | 4,167 | 3,708 | 2,383 | 2,421 | 2,907 |
| Poland | 1,252 | 1,418 | 1,476 | 1,992 | 2,024 | 1,765 |
| Portugal | 2,022 | 2,285 | 2,476 | 3,198 | 3,249 | 1,784 |
| Spain | 1,412 | 7,875 | 5,817 | 3,167 | 3,218 | 1,628 |
| Sweden | 9,311 | 8,582 | 9,657 | 8,167 | 8,298 | 8,136 |
| Switzerland | 1,918 | 1,997 | 2,560 | 2,002 | 2,034 | 2,778 |
| Yugoslavia | 585 | 641 | 793 | 1,067 | 1,084 | 1,153 |
| Angola | 177 | 153 | 335 | 385 | 391 | 356 |
| Egypt | n.a. | 1,997 | 3,411 | n.a. | n.a. | n.a. |
| Morocco | 921 | 718 | 1,052 | 666 | 677 | 421 |
| South Africa | 3,529 | 3,823 | 3,859 | 4,223 | 4,291 | 4,299 |
| Costa Rica | 428 | 341 | 433 | 215 | 218 | 276 |
| Guatemala | 754 | 507 | 745 | 414 | 421 | 497 |
| Honduras | 64 | 198 | 467 | 1,474 | 1,498 | 368 |
| Mexico | 48 | 224 | 141 | — | — | 3 |
| Nicaragua | 140 | 555 | 320 | 1,589 | 1,615 | 524 |
| Salvador | 562 | 588 | 509 | 294 | 299 | 848 |
| Argentina | 2,681 | 2,140 | 1,957 | 2,538 | 2,579 | 2,413 |
| Brazil | 1,365 | 673 | 972 | 1,215 | 1,234 | n.a. |
| Chile (c) | 254 | 356 | 273 | 812 | 825 | n.a. |
| Colombia | r 934 | r 1,274 | 1,324 | 1,340 | 1,360 | n.a. |
| Peru (c) | 3,373 | 1,205 | 1,820 | n.a. | n.a. | n.a. |
| Uruguay | 305 | 71 | 158 | 335 | 340 | 169 |
| Venezuela | 1,897 | 2,826 | 3,328 | n.a. | n.a. | n.a. |
| Israel | 349 | 540 | 765 | 476 | 484 | 356 |
| Japan | 1,276 | 949 | 1,464 | 2,898 | 2,944 | 2,100 |
| Lebanon | 130 | 290 | 282 | 215 | 218 | 96 |
| Philippine Republic .. | r 1,806 | r 1,614 | 1,936 | 1,242 | 1,262 | 1,157 |
| Thailand | — | — | — | 46 | 47 | n.a. |
| Turkey | 53 | 106 | 47 | 120 | 122 | n.a. |

(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.

(e) The following quantities of activated diatomite were also imported (Long tons): 1967—n.a.; 1968—6,997; 1969—8,862; 1970—11,613. (Tonnes): 1970—11,799; 1971—9,153.

FELDSPAR
(see also Nepheline Syenite)
PRODUCTION OF FELDSPAR

| Producing Country | Long tons | | | | Tonnes | |
|-------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| China stone | 29,720 | 30,384 | 32,579 | 33,135 | 33,667 | 62,861 |
| Kenya | 396 | 527 | 1,535 | 881 | 895 | 2,650 |
| Canada | 9,280 | 9,482 | 11,058 | 9,514 | 9,667 | 9,000 |
| Ceylon | 292 | 577 | 594 | 1,273 | 1,293 | 248 |
| Hong Kong | 1,135 | 1,582 | 1,909 | 1,595 | 1,621 | 1,145 |
| India | 25,375 | 33,000 | 31,712 | 29,157 | 29,625 | 32,957 |
| Australia (a) | 4,450 | 4,838 | 4,937 | 3,479 | 3,535 | 3,644 |
| OTHER COUNTRIES | | | | | | |
| Austria | 2,441 | 2,140 | 1,777 | 1,187 | 1,206 | 2,656 |
| Finland | 34,472 | 53,567 | 52,555 (c) | 62,000 (c) | 62,000 (c) | 64,000 (c) |
| Germany (Federal) (b) .. | 261,464 | 283,258 | 355,573 | 402,352 | 408,809 | 353,693 |
| Italy | 145,133 | 165,722 | r 209,287 | 174,111 | 176,905 | 192,498 |
| Norway— | | | | | | |
| Unground | 96,391 | 130,590 | 126,034 | 149,742 | 152,145 | 202,783 |
| Ground | 16,707 | 26,451 | n.a. | n.a. | n.a. | n.a. |
| Poland (c) | 28,000 | 28,000 | 29,000 | 30,000 | 30,000 | 30,000 |
| Portugal | 26,704 | 20,339 | 23,698 | 30,322 | 30,809 | 18,771 |
| Spain | 46,709 | 46,522 | 43,044 | 54,214 | 55,084 | n.a. |
| Sweden (d)— | | | | | | |
| Unground | 9,883 | 5,100 | 4,649 | 8,169 | 8,300 | 9,480 |
| Ground | 25,127 | 21,800 | 28,050 | 23,227 | 23,600 | 18,226 |
| U.S.S.R. (c) | 235,000 | 235,000 | 239,000 | 245,000 | 249,000 | 249,000 |
| Yugoslavia | 36,412 | 43,342 | 44,272 | 48,722 | 49,504 | 53,617 |
| Egypt | n.a. | 1,691 | 3,000 | 1,759 | 1,787 | 3,171 |
| Ethiopia | 3,690 | 7,017 | 11,459 | n.a. | n.a. | n.a. |
| South Africa | 24,498 | 19,574 | 21,687 | 18,598 | 18,896 | 12,240 |
| Mexico | 62,600 | 79,007 | 82,174 | 81,515 | 82,823 | 93,639 |
| United States (d) | 615,397 | 667,679 | 673,985 | 648,276 | 658,674 | 673,868 |
| Argentina | 20,029 | 18,042 | 21,491 | 29,070 | 29,536 | (c) 30,000 |
| Chile | 857 | 960 | 974 | 3,543 | 3,600 | 900 |
| Colombia | 19,700 | 20,700 | 22,050 | 23,152 | 23,523 | 25,235 |
| Peru | 2,460 | 137 | 1,018 | 2,818 | 2,863 | n.a. |
| Uruguay | 1,242 | 405 | 1,218 | 1,088 | 1,105 | 1,208 |
| Japan | 49,906 | 65,101 | 58,092 | 57,459 | 58,381 | 52,109 |
| Korea (South) | 16,551 | 20,661 | r 23,065 | 27,578 | 28,020 | 16,900 |
| Philippine Republic | n.a. | 41,656 | 34,832 | 19,916 | 20,236 | 39,358 |
| TOTAL* | 1,900,000 | 2,200,000 | 2,200,000 | 2,200,000 | 2,200,000 | 2,400,000 |

*Excluding feldspar known to have been produced in Czechoslovakia, Roumania, South West Africa, 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

| Exporting Country | Long tons | | | | Tonnes | |
|-------------------------------|-------------|-------------|-------------|------------|------------|--------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 3,328 | 3,381 | 3,974 |
| India (b) | 8,140 | 11,326 | 9,840 | 12,213 | 12,409 | 9,176 |
| OTHER COUNTRIES | | | | | | |
| Austria (a) | 404 | 286 | 409 | 701 | 712 | 1,363 |
| Belgium-Luxemburg | | | | | | |
| E.U. (a) | 61 | 461 | 5,991 | 15,178 | 15,422 | 4,597 |
| Finland (a) | 36,063 | 44,540 | 45,329 | 58,968 | 59,914 | 40,869 |
| France (a) | 19,609 | 21,311 | 26,822 | 33,817 | 34,360 | 35,837 |
| Germany (Federal) (a) | 11,891 | 12,714 | 14,745 | 14,061 | 14,287 | 8,714 |
| Italy | 24,176 | 24,772 | 26,926 | 25,481 | 25,890 | 26,814 |
| Netherlands (a) | 473 | 1,031 | 118 | 181 | 184 | (c) 73 |
| Norway— | | | | | | |
| Crude | 30,924 | 35,417 | 24,411 | 27,704 | 28,149 | 26,253 |
| Ground | 12,370 | 14,958 | 43,190 | 48,777 | 49,560 | 53,153 |
| Sweden (a) | 13,660 | 14,050 | 14,103 | 16,378 | 16,641 | 16,673 |
| Yugoslavia | 20,305 | 15,237 | 17,798 | 16,574 | 16,840 | 17,384 |
| South Africa | 5,958 | 6,142 | 17,152 | 12,920 | 13,127 | 12,382 |
| Japan | 3,552 | 3,349 | 5,755 | 3,556 | 3,613 | 3,701 |
| Korea (South) | (a) 28,072 | (a) 35,605 | (a) 47,022 | (a) 77,187 | (a) 78,426 | 4,596 |

(a) May include some leucite and nephelite.

(b) Years ended March 31 following that stated.

(c) Excludes exports to Belgium and Luxemburg, if any.

IMPORTS OF FELDSPAR

| Importing Country | Long tons | | | | Tonnes | |
|-------------------------------|-----------|-----------|-----------|--------------|--------------|--------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | 72,840 | 84,654 | 88,649 | 102,270 | 103,911 | 117,707 |
| Australia (b) (c) | 2,264 | 2,962 | 4,266 | 4,395 | 4,466 | 5,123 |
| New Zealand (c) | (a) 1,656 | (a) 1,384 | (a) 1,948 | (a) 1,863 | (a) 1,893 | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Austria (b) | 7,507 | 6,117 | 6,840 | 7,777 | 7,902 | 8,749 |
| Belgium-Luxemburg | | | | | | |
| E.U. (b) | 34,246 | 39,814 | 52,554 | 56,009 | 56,908 | 44,099 |
| Denmark (b) | 4,741 | 4,894 | 8,304 | 10,760 | 10,933 | 9,212 |
| Finland (b) | 1,245 | 1,173 | 645 | 742 | 754 | 1 |
| France (b) | 11,757 | 15,575 | 28,593 | 30,841 | 31,336 | 31,003 |
| Germany (Federal) (b) | 47,984 | 56,737 | 70,509 | 80,272 | 81,560 | 87,753 |
| Italy | 16,916 | 19,820 | 14,441 | 18,966 | 19,270 | 14,790 |
| Netherlands (b) | 26,112 | 31,550 | 32,355 | 29,394 | 29,866 | (d) 30,285 |
| Poland | 11,746 | 12,899 | 12,817 | 13,203 | 13,415 | 14,696 |
| Sweden (b) | 5,570 | 5,004 | 4,791 | 7,729 | 7,853 | 5,745 |
| Switzerland (b) | 14,593 | 17,051 | 16,944 | 15,471 | 15,719 | 13,731 |
| Morocco (b) | 39 | 42 | 127 | 111 | 113 | 274 |
| Mexico | 1,925 | 2,675 | 1,927 | 1,003 | 1,019 | 598 |
| United States | 2,783 | 3,377 | 4,644 | 3,247 | 3,299 | 2,154 |
| Colombia | 17 | 5 | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Venezuela | 8,187 | 9,646 | 1,812 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Israel | 1,624 | 2,232 | 1,160 | (a)(b) 2,602 | (a)(b) 2,644 | (a)(b) 2,751 |
| Japan | 4,635 | 8,063 | 4,277 | 3,822 | 3,883 | 2,106 |
| Turkey | 263 | 65 | 59 | 32 | 33 | <i>n.a.</i> |

(a) Including fluor spar.

(b) May include some leucite and nephelite.

(c) Years ended June 30 of that stated.

(d) Excludes imports from Belgium and Luxemburg, if any.

FLUORSPAR
PRODUCTION OF FLUORSPAR

| Producing Country | Long tons | | | | Tonnes | |
|-------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom (a) .. | 151,940 | 168,888 | 187,292 | 190,218 | 193,271 | 210,438 |
| Kenya | <i>n.a.</i> | 189 | 1,832 | 3,842 | 3,904 | 6,561 |
| Canada | £807,584 | £1,003,371 | £1,170,304 | £1,670,859 | £1,670,859 | £1,035,000 |
| India | 1,588 | 1,165 | 1,850 | 4,574 | 4,647 | 2,976 |
| OTHER COUNTRIES | | | | | | |
| France (c) | 385,872 | 423,400 | 443,000 | 467,500 | 475,000 | 600,000 |
| Germany— | | | | | | |
| Federal Republic .. | 85,554 | 86,358 | 83,427 | 73,928 | 75,114 | 84,687 |
| East (b) | 80,000 | 80,000 | 80,000 | 80,000 | 80,000 | <i>n.a.</i> |
| Italy | 201,955 | 221,379 | 254,008 | 284,697 | 289,266 | 288,243 |
| Spain | 280,799 | 304,409 | 300,689 | 336,269 | 341,665 | 399,874 |
| U.S.S.R. (b) | 375,000 | 375,000 | 375,000 | 402,000 | 408,000 | <i>n.a.</i> |
| South Africa | 93,802 | 106,845 | 147,903 | 170,262 | 172,994 | 239,041 |
| Tunisia | 2,461 | 5,364 | 12,201 | 30,200 | 30,700 | 32,959 |
| Mexico | 772,714 | 911,000 | 972,697 | 963,031 | 978,485 | 1,180,955 |
| United States (d) .. | 263,967 | 225,367 | r 163,006 | 240,376 | 244,232 | 233,622 |
| Argentina | 18,951 | 21,168 | 28,913 | 29,187 | 29,655 | <i>n.a.</i> |
| China (b) | 250,000 | 250,000 | 250,000 | 270,000 | 270,000 | <i>n.a.</i> |
| Japan | 15,063 | 15,478 | 12,000 | 7,904 | 8,031 | <i>n.a.</i> |
| Korea (South) | 56,068 | r 32,045 | r 23,795 | 29,505 | 29,978 | 50,815 |
| Mongolia (b) | 50,000 | r 69,000 | r 77,000 | 79,000 | 80,000 | <i>n.a.</i> |
| Thailand | 131,049 | 241,226 | 293,599 | 312,830 | 317,850 | 427,498 |
| Turkey | 594 | 1,699 | 2,061 | 1,639 | 1,665 | <i>n.a.</i> |
| TOTAL | 3,200,000 | 3,500,000 | 3,600,000 | 3,900,000 | 4,000,000 | 4,600,000 |

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 | | | | Tonnes | |
|---------------------|-----------|---------|---------|---------|---------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| Crude (Saleable) .. | 128,790 | 135,067 | 135,452 | 149,948 | 152,354 | <i>n.a.</i> |
| Concentrates | 111,767 | 121,373 | 135,754 | 144,692 | 147,014 | <i>n.a.</i> |

(d) Shipments from mine.

EXPORTS OF FLUORSPAR

| Exporting Country | Long tons | | | | Tonnes | |
|---------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| France | 107,381 | 115,409 | 100,612 | 144,143 | 146,456 | 122,216 |
| Germany (Federal) | 9,254 | 9,194 | 9,798 | 7,860 | 7,986 | 10,220 |
| Italy | 83,930 | 107,289 | 135,303 | 124,951 | 126,956 | 161,073 |
| Spain | 168,515 | 136,878 | 198,759 | 167,739 | 170,431 | 209,354 |
| Sweden | 430 | 589 | 298 | 496 | 504 | 878 |
| Algeria | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 22,194 | 22,550 | 29,960 |
| Morocco | <i>n.a.</i> | 5 | 11 | 9 | 9 | 8 |
| South Africa | 87,323 | 83,934 | 111,507 | 108,728 | 110,473 | 157,735 |
| Mexico | 744,335 | 918,020 | 959,941 | 904,943 | 919,465 | 1,094,128 |
| United States | 9,236 | 11,272 | 3,219 | 13,351 | 13,565 | 11,331 |
| Argentina | 339 | 965 | 491 | 668 | 679 | 28,215 |
| Japan | 459 | 112 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Korea (South) | 47,422 | 48,947 | 36,570 | 33,097 | 33,628 | 45,878 |
| Thailand | 124,120 | 201,636 | 253,886 | 343,741 | 349,257 | 335,774 |

IMPORTS OF FLUORSPAR

| Importing Country | Long tons | | | | Tonnes | |
|-------------------------------|-----------|-------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Canada | 84,146 | 103,094 | 93,198 | 84,537 | 85,894 | 204,201 |
| India (b) | 8,221 | 4,068 | 12,240 | 9,507 | 9,660 | 17,693 |
| Australia (a) | 17,983 | 20,797 | 20,660 | 19,864 | 20,183 | 33,490 |
| OTHER COUNTRIES | | | | | | |
| Austria | 13,337 | 15,182 | 14,320 | 13,450 | 13,666 | 13,701 |
| Belgium-Luxemburg | | | | | | |
| E.U. | 9,775 | 13,032 | 13,872 | 16,993 | 17,266 | 14,284 |
| Denmark | 1,678 | 3,570 | 1,701 | 3,720 | 3,780 | 2,254 |
| Finland | 4,287 | 6,182 | 6,485 | 7,344 | 7,462 | 6,019 |
| France | 3,421 | 359 | 6,623 | 12,368 | 12,567 | 5,589 |
| Germany (Federal) | 116,572 | 151,062 | 160,448 | 264,318 | 268,560 | 239,568 |
| Italy | 32,346 | 21,273 | 28,802 | 58,871 | 59,816 | 96,871 |
| Netherlands | 19,556 | 22,250 | 27,554 | 34,997 | 35,559 | (c) 24,265 |
| Norway | 2,383 | 2,774 | 2,259 | 24,573 | 24,967 | 41,132 |
| Poland | 29,961 | 32,822 | 27,083 | 22,765 | 23,130 | 29,985 |
| Sweden | 10,498 | 13,900 | 17,182 | 15,871 | 16,126 | 19,552 |
| U.S.S.R. | 83,067 | 100,389 | 131,980 | 142,415 | 144,700 | 176,200 |
| Yugoslavia | 3,387 | 4,015 | 5,500 | 6,706 | 6,813 | 4,907 |
| Mexico | 2 | 13 | 10 | <i>n.a.</i> | <i>n.a.</i> | — |
| United States | 814,170 | 937,596 | 1,026,380 | 975,284 | 990,934 | 972,869 |
| Brazil | 25 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Chile | 2,184 | 487 | 2,918 | 1,313 | 1,334 | <i>n.a.</i> |
| Colombia | 26 | 43 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Venezuela | 1,968 | 198 | 56 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Israel | 516 | 655 | 169 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Japan | 353,207 | 486,247 | 513,625 | 512,575 | 520,800 | 677,950 |
| Turkey | 3,469 | 1,180 | 2,512 | 1,704 | 1,731 | <i>n.a.</i> |

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

(c) Excludes imports from Belgium and Luxemburg, if any.

FULLER'S EARTH

(see also Bentonite)

PRODUCTION OF FULLER'S EARTH

| Producing Country | Long tons | | | | Tonnes | |
|-------------------------------|-----------|------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom (b) .. | 133,000 | 151,000 | 167,000 | 173,000 | 176,000 | <i>n.a.</i> |
| India | 11,183 | (c) 10,875 | (c) 8,938 | (c) 10,806 | (c) 10,979 | <i>n.a.</i> |
| Australia | 75 | 75 | 30 | — | — | 91 |
| OTHER COUNTRIES | | | | | | |
| Algeria | 37,705 | (b) 40,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 3,367 |
| Morocco | 26,138 | 29,492 | 13,353 | 11,185 | 11,364 | 14,253 |
| South Africa | 1,131 | 212 | 1,112 | 1,529 | 1,554 | 1,222 |
| Mexico | 7,406 | 11,102 | 21,062 | 23,814 | 24,197 | 20,199 |
| United States (a) .. | 717,785 | 822,812 | 879,118 | 876,687 | 890,749 | <i>n.a.</i> |

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

(a) Sold or used by producers.

(b) Estimated.

(c) Does not include Andhra Pradesh which produced approximately 2,500 tonnes p.a. prior to 1968.

EXPORTS OF FULLER'S EARTH*

| Exporting Country | Long tons | | | | Tonnes | |
|------------------------|-----------|--------|----------|--------|--------|--------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES | | | | | | |
| Morocco | 21,291 | 15,064 | r 12,380 | 8,689 | 8,828 | 9,520 |
| United States | 27,096 | 37,652 | 33,429 | 33,143 | 33,675 | 24,651 |
| Iran (a) | 6 | 20 | 12 | 12 | 12 | 87 |

*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

| Importing Country | Long tons | | | | Tonnes | |
|-------------------------------|-----------|-------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Zambia | 202 | 156 | 166 | 98 | 100 | <i>n.a.</i> |
| Canada | 8,106 | 8,080 | 8,703 | 10,208 | 10,372 | 9,659 |
| Ceylon | 150 | 243 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| India (a) | 63 | 46 | 97 | 18 | 18 | 11 |
| OTHER COUNTRIES | | | | | | |
| United States | 67 | 76 | 60 | 59 | 60 | <i>n.a.</i> |
| Chile | 17 | 103 | 12 | 111 | 113 | <i>n.a.</i> |
| Peru | 896 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Venezuela | 987 | 765 | 163 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Burma | 218 | 116 | <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)

| Producing Country | Troy ounces fine | | | | Kilogrammes | |
|-------------------------------|------------------|------------------|------------------|------------------|----------------|----------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Ghana | 762,609 | 727,121 | 707,354 | 715,032 | 22,240 | 21,700 |
| Kenya | 33,366 | 31,974 | 17,903 | — | — | — |
| Nigeria | 39 | 248 | 298 | 122 | 4 | 1 |
| Rhodesia | (c) 515,000 | (b) 500,000 | (c) 515,000 | (c) 501,000 | (c) 15,600 | (c) 15,600 |
| Tanzania | 18,486 | 17,473 | 16,015 | 7,859 | 244 | 5 |
| Zambia (c) | 5,000 | 5,000 | 5,000 | 5,500 | 170 | 301 |
| Canada | 2,993,366 | 2,743,021 | 2,502,169 | 2,408,574 | 74,915 | 69,765 |
| Guyana | 2,378 | 4,088 | 2,102 | 4,433 | 138 | 137 |
| India | 101,600 | 115,400 | 98,445 | 104,200 | 3,241 | 3,656 |
| Malaysia (West) (c) | 1,300 | 1,453 | 3,153 | 3,912 | 122 | 140 |
| Sarawak | 2,521 | 2,718 | 2,270 | 1,265 | 39 | 44 |
| Australia | 805,336 | 781,782 | r 701,895 | 619,922 | 19,282 | 20,905 |
| Fiji | 110,033 | 106,854 | 91,572 | 103,785 | 3,228 | 2,772 |
| New Guinea and Papua | 27,671 | 26,144 | 25,857 | 23,807 | 740 | 728 |
| New Zealand | 10,703 | 8,626 | 10,717 | 10,257 | 319 | 266 |
| TOTAL | 5,388,000 | 5,082,000 | 4,712,000 | 4,457,000 | 139,000 | 136,000 |
| OTHER COUNTRIES | | | | | | |
| Finland | 20,281 | 21,380 | 18,872 | 20,319 | 633 | 544 |
| France | 62,730 | 58,450 | 54,946 | 62,726 | 1,951 | 2,041 |
| Germany (Federal) | 916 | 1,000 | 1,000 | 1,000 | 30 | 53 |
| Portugal | 18,400 | 17,400 | 16,000 | 11,992 | 373 | 426 |
| Spain | 932 | — | — | — | — | n.a. |
| Sweden | 60,668 | 49,737 | 42,310 | 44,207 | 1,375 | 1,696 |
| Yugoslavia | 68,063 | 70,314 | 80,074 | 97,384 | 3,029 | 3,850 |
| Angola | — | 9 | 12 | — | — | n.a. |
| Cameroun | 993 | 514 | 193 | 235 | 7 | 3 |
| Congo (Brazza) | 5,048 | 4,790 | 3,922 | 2,636 | 82 | 92 |
| Ethiopia | 23,612 | 38,828 | 42,400 | 27,282 | 849 | 660 |
| Gabon | 29,386 | 16,525 | 14,243 | 16,108 | 501 | 427 |
| Liberia (b) (a) | 5,111 | 3,216 | 1,136 | 1,100 | 34 | 34 |
| Malagasy Republic | 755 | 476 | 646 | 534 | 17 | 13 |
| Mozambique | 22 | 6 | 21 | 35 | 1 | 1 |
| South Africa | 30,532,880 | 31,094,466 | 31,281,274 | 32,164,147 | 1,000,417 | (b) 976,297 |
| South-West Africa | — | 10 | — | n.a. | n.a. | n.a. |
| Sudan | 200 | 29 | n.a. | n.a. | n.a. | n.a. |
| Zaire Republic | 153,000 | 169,885 | 167,055 | 180,591 | 5,617 | 5,340 |

(a) Years ended August 31 of year stated.

(b) United States Bureau of Mines' estimate.

(c) Estimated.

PRODUCTION OF GOLD (cont.)

Troy ounces fine Kilogrammes

| Producing Country | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|--|-------------------|-------------------|-------------------|-------------------|------------------|------------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Costa Rica (c) | 500 | 500 | 500 | 500 | 16 | 16 |
| Haiti | (c) 6,000 | 3,100 | (c) 3,000 | (c) 3,000 | (c) 90 | (c) 90 |
| Honduras (b) | 2,860 | 6,426 | 6,223 | 3,333 | 104 | 84 |
| Mexico | 165,300 | 176,958 | 180,623 | 198,241 | 6,166 | 4,694 |
| Nicaragua | 194,683 | 184,034 | 148,694 | 109,377 | 3,402 | 3,373 |
| Salvador | 673 | n.a. | n.a. | 2,301 | 72 | 109 |
| United States | 1,584,187 | 1,478,292 | 1,733,176 | 1,743,322 | 54,223 | 46,474 |
| Argentina | — | 14 | 11 | n.a. | n.a. | n.a. |
| Bolivia (d) | 1,149 | 745 | 44,078 | 4,989 | 155 | 690 |
| Brazil (a) | 173,000 | 184,855 | 185,507 | 165,000 | 5,132 | 4,895 |
| Chile | 58,130 | 57,743 | 59,093 | 50,718 | 1,578 | 1,996 |
| Colombia | 257,588 | 238,658 | 217,966 | 201,519 | 6,268 | 5,874 |
| Ecuador | 6,738 | 8,659 | 7,287 | 8,520 | 265 | (c) 230 |
| French Guiana | 7,588 | 5,112 | 3,569 | 2,347 | 73 | 72 |
| Peru | 95,559 | 82,502 | 87,759 | 107,673 | 3,349 | 3,100 |
| Surinam | (c) 4,500 | (c) 4,690 | 2,379 | 1,161 | 36 | (c) 34 |
| Venezuela | 18,917 | 20,600 | 19,385 | 21,862 | 680 | 596 |
| Burma | (c) 200 | (c) r 150 | (c) r 150 | (c) 150 | (c) 5 | (c) 5 |
| Cambodia | (c) 4,000 | (c) 4,000 | (c) 4,000 | (c) 4,000 | (c) 120 | n.a. |
| Formosa | 32,500 | 20,994 | 21,400 | 22,500 | 700 | 606 |
| Indonesia | 7,748 | 5,967 | 7,597 | 7,620 | 237 | 329 |
| Japan | 253,000 | 238,500 | 253,000 | 255,180 | 7,937 | 7,928 |
| Korea (South) | 63,337 | 54,913 | 46,458 | 43,917 | 1,366 | 947 |
| Philippine Republic .. | 498,114 | 527,355 | 571,145 | 602,715 | 18,747 | 19,814 |
| TOTAL* | 34,700,000 | 34,900,000 | 35,300,000 | 36,200,000 | 1,126,000 | 1,094,000 |
| WORLD'S TOTAL* (excl. U.S.S.R.) .. | 40,100,000 | 40,000,000 | 40,000,000 | 41,000,000 | 1,270,000 | 1,230,000 |

*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.

(b) Imports into the United States.

(c) United States Bureau of Mines' estimate.

(d) Exports

TOTAL EXPORTS OF GOLD*

(Metal content)

Troy ounces fine Kilogrammes

| Exporting Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|-----------------------------------|------------|------------|-----------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Bullion, refined | 60,360,000 | 54,772,621 | 10,676,259 | 18,173,151 | 565,248 | 623,353 |
| Coin | 920,170 | 399,815 | 596,356 | 877,153 | 27,282 | 7,142 |
| Ghana— | | | | | | |
| Bullion | 767,340 | 735,042 | 713,042 | 697,371 | 21,690 | <i>n.a.</i> |
| Kenya— | | | | | | |
| Bullion | 26,942 | 24,741 | 16,044 | 5,916 | 184 | <i>n.a.</i> |
| Tanzania— | | | | | | |
| Bullion, refined | 18,486 | 17,474 | <i>r</i> 16,011 | 7,845 | 244 | 5 |
| Canada— | | | | | | |
| Bullion— | | | | | | |
| Unrefined | 103,774 | 136,917 | 141,339 | 117,570 | 3,657 | 4,149 |
| Refined | 2,296,197 | 16,186,394 | 4,534,660 | 5,756,970 | 179,062 | 119,019 |
| Coin* | 177,500 | 56,300 | 26,900 | 10,346 | 322 | 3,437 |
| Hong Kong— | | | | | | |
| Bullion | 1,732,887 | 710,838 | 727,791 | 883,357 | 27,475 | 31,103 |
| Australia (a)— | | | | | | |
| Ores, etc. | 151,909 | 100,222 | 102,502 | 126,960 | 3,949 | 6,806 |
| Bullion, refined | 515,134 | 485,480 | 695,176 | 975,578 | 30,344 | 5,771 |
| do. unrefined | 61,280 | 15,831 | — | — | — | 135 |
| Fiji— | | | | | | |
| Bullion | 112,698 | 106,784 | 95,346 | 107,632 | 3,348 | 2,726 |
| New Guinea (a)— | | | | | | |
| Bullion* | 28,473 | 23,422 | 22,472 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| New Zealand* (a)— | | | | | | |
| Beaten, rolled or drawn | 3,000 | 2,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Papua (a)— | | | | | | |
| Bullion* | 30 | 47 | 6 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Solomon Islands— | | | | | | |
| Bullion | 672 | 654 | 413 | 290 | 9 | 14 |
| Irish Republic*— | | | | | | |
| Bullion | 1,800 | 1,529 | 3,420 | 1,064 | 33 | 117 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Bullion | 119,000 | 374,950 | 141,703 | 120,067 | 3,735 | 9,288 |
| Coin | 64,301 | 128,603 | 212,195 | 93,237 | 2,900 | 49,600 |
| France— | | | | | | |
| Beaten, rolled or drawn | 53,000* | 98,000 | 62,000 | 128,000 | 3,978 | 2,216 |
| Germany (Federal)— | | | | | | |
| Bullion | 358,000 | 802,000 | 889,500 | 503,500 | 15,661 | 9,275 |
| Netherlands— | | | | | | |
| Bullion, etc. | 28,000 | 38 000 | 35,000 | 25,000 | 779 | 7,469 |
| Coin | — | 1,000 | 1,000 | 14,000 | 440 | 343 |
| Sweden*— | | | | | | |
| Bullion | 16,000 | 46,000 | 54,000 | 58,500 | 1,821 | 7,000 |
| Switzerland— | | | | | | |
| Bullion | 681,000 | 1,598,000 | 724,549 | 649,509 | 20,202 | 16,933 |
| Equatorial African Community— | | | | | | |
| Bullion | 23,000 | 12,400 | 7,800 | 6,700 | 207 | <i>n.a.</i> |

*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 | Kilogrammes

| Exporting Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|-----------------------------------|------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| South Africa— | | | | | | |
| Bullion | 32,294,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Honduras— | | | | | | |
| Ore and base bullion .. | 4,906 | 6,005 | 4,622 | 3,179 | 99 | 239 |
| Mexico— | | | | | | |
| Bullion | 3,000 | 2,389 | 3,176 | 2,678 | 83 | 27 |
| Nicaragua— | | | | | | |
| Bullion | 145,804 | 137,637 | 107,672 | 109,377 | 3,402 | 3,373 |
| United States— | | | | | | |
| Ore and base bullion .. | 112,578 | 181,385 | 58,867 | (b) 106,117 | (b) 3,301 | (b) 17,962 |
| Refined bullion | 28,607,404 | 23,781,006 | 279,434 | 968,108 | 30,112 | 23,679 |
| Bolivia— | | | | | | |
| Ore | 1,149 | 745 | 44,078 | 4,989 | 155 | 690 |
| Chile— | | | | | | |
| Ore etc. | 52,438 | 39,867 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| French Guiana— | | | | | | |
| Bullion | r 7,600 | 3,600 | 386 | 161 | 5 | — |
| Peru— | | | | | | |
| Ores, concentrates, etc. | } 33,887 | 32,000 | 46,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Bullion | | | | | | |
| Philippine Republic— | | | | | | |
| Ore and base bullion (a) | 56,677 | 61,597 | 47,110 | 89,602 | 2,787 | 2,101 |
| Refined bullion (a) .. | 286,087 | 426,376 | 412,158 | 35,854 | 1,115 | <i>n.a.</i> |

(a) Imports into the United States.

(b) Including 'Scrap'.

TOTAL IMPORTS OF GOLD*

(Metal content)

| Importing Country and Description | Troy ounces fine | | | | Kilogrammes | |
|-----------------------------------|------------------|-------------------|-------------------|-------------------|----------------|----------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ore, etc.* | — | 4 | — | 67 | 2 | — |
| Bullion— | | | | | | |
| Unrefined | 819,002 | 819,275 | 767,759 | 1,068,288 | 33,227 | 31,074 |
| Refined | 33,735,000 | 44,636,753 | 12,874,620 | 29,387,211 | 914,045 | 970,305 |
| Coin | 118,382 | 90,062 | 52,185 | 77,783 | 2,419 | 4,973 |
| Malta | | | | | | |
| Bullion | 14,500 | 11,000 | 9,400 | 15,000 | 467 | 593 |
| Ghana— | | | | | | |
| Bullion | 610 | 2,500 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Kenya— | | | | | | |
| Bullion | 6,748 | 7,318 | 7,030 | 5,931 | 184 | 85 |
| Tanzania— | | | | | | |
| Bullion | 556 | 62 | 152 | 52 | 2 | 27 |
| Uganda— | | | | | | |
| Bullion | 2,745 | 1,173 | 2,865 | 62 | 2 | 2 |
| Canada— | | | | | | |
| Bullion | 473,808 | 332,628 | 90,482 | 124,685 | 3,878 | 3,769 |
| Coin* | 133,000 | 221,000 | 78,000 | 74,243 | 2,309 | 4,723 |
| Jamaica*— | | | | | | |
| Bullion and coin .. | 5,998 | — | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Trinidad and Tobago— | | | | | | |
| Bullion and coin .. | 8,578 | 6,957 | 576 | 3,017 | 94 | <i>n.a.</i> |
| Brunei— | | | | | | |
| Bullion | 61,116 | 28,390 | 29,810 | 30,970 | 963 | <i>n.a.</i> |
| Ceylon*— | | | | | | |
| Bullion | 30 | 55 | 20 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Cyprus— | | | | | | |
| Bullion | 16,084 | <i>(c)</i> 15,738 | <i>(c)</i> 15,414 | <i>(c)</i> 17,520 | <i>(c)</i> 545 | <i>(c)</i> 655 |
| Hong Kong— | | | | | | |
| Bullion | 1,756,121 | 666,544 | 761,758 | 878,397 | 27,321 | 29,954 |
| Sabah— | | | | | | |
| Bullion | 12,599 | 8,365 | 6,000 | 4,500 | 140 | 218 |
| Sarawak— | | | | | | |
| Bullion <i>(b)</i> | 18,000 | 18,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Australia <i>(a)</i> — | | | | | | |
| Bullion | 151,792 | 145,728 | 113,369 | 196,244 | 6,104 | 4,054 |
| Fiji*— | | | | | | |
| Bullion <i>(c)</i> | 300 | 300 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| New Zealand <i>(a)</i> — | | | | | | |
| Bullion | 588 | 30 | 102 | 2 | — | <i>n.a.</i> |
| Beaten, rolled or drawn | 13,088 | 7,395 | 9,626 | 13,477 | 419 | <i>n.a.</i> |
| Irish Republic*— | | | | | | |
| Bullion | 23,500 | 30,000 | 34,300 | 36,400 | 1,100 | 1,300 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Bullion | 1,507,000 | 994,000 | 660,183 | 912,759 | 28,390 | 41,799 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Bullion | 1,275,000 | 1,097,000 | 1,480,000 | 578,680 | 17,999 | 35,391 |
| Coin | 479,000 | 212,000 | 212,000 | 45,000 | 1,400 | 1,200 |
| Finland— | | | | | | |
| Bullion | 77,700 | 22,042 | 38,324 | 37,092 | 1,154 | 857 |

*See note on page 131.

(a) Years ended June 30 of that stated.

(c) Including partly worked.

(b) Including coin and partly worked.

IMPORTS OF GOLD (cont.)

| Importing Country and Description | Troy ounces fine | | | | Kilogrammes | |
|--------------------------------------|------------------|-----------|-----------|-------------|-------------|-----------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| France— | | | | | | |
| Beaten, rolled or drawn | 18,000 | 68,400 | 144,335 | 20,140 | 626 | 1,554 |
| Germany (Federal)— | | | | | | |
| Bullion | 5,256,000 | 4,195,000 | 4,018,000 | 3,459,600 | 107,605 | 129,446 |
| Coin | 345,000 | 301,000 | 358,000 | 450,300 | 14,007 | 18,762 |
| Italy— | | | | | | |
| Bullion and scrap .. | 1,620,000 | 1,038,000 | 1,473,000 | 5,281,500 | 164,273 | 202,647 |
| Netherlands— | | | | | | |
| Bullion | 35,000 | 53,000 | 42,000 | 39,200 | 1,220 | 23,810 |
| Coin | 39 | 200 | 600 | 1,200 | 39 | 91 |
| Norway— | | | | | | |
| Bullion | 40,000 | 38,000 | 33,000 | 44,300 | 1,379 | 1,013 |
| Sheets and rolled .. | 6,500 | 10,000 | 17,000 | 18,200 | 567 | 868 |
| Sweden— | | | | | | |
| Bullion* | 161,000 | 95,000 | 85,000 | 46,500 | 1,447 | 1,000 |
| Switzerland— | | | | | | |
| Bullion | 680,000 | 135,000 | 97,000 | 68,000 | 2,112 | 1,780 |
| United States— | | | | | | |
| Ore and base bullion .. | 219,382 | 213,662 | 236,738 | (b) 286,988 | (b) 8,926 | (b) 5,955 |
| Refined bullion | 710,487 | 5,730,853 | 5,624,649 | 6,365,380 | 197,985 | 218,012 |
| Brazil— | | | | | | |
| Bullion | 17,000* | 80,000* | 40,000* | 128,000* | 3,981 | n.a. |
| Formosa— | | | | | | |
| Bullion | 315,119 | 7,456 | 5,504 | 8,166 | 254 | n.a. |
| Lebanon— | | | | | | |
| Bullion and scrap .. | 2,939,000 | 2,297,000 | 2,106,000 | 3,379,000 | 105,099 | 65,144 |
| Syria— | | | | | | |
| Bullion and scrap (a) .. | 3,600 | 264,000 | 26,600 | 20,800 | 646 | 182 |

*See note on page 131.

(a) Gross weight.

(b) Including scrap.

GRAPHITE
PRODUCTION OF GRAPHITE

| Producing Country | Long tons | | | | Tonnes | |
|-------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Ceylon | 10,203 | (c) 10,631 | (c) 11,238 | (c) 9,631 | (c) 9,786 | 7,186 |
| Hong Kong— | | | | | | |
| 72%-80% fixed carbon | 3 | 297 | 135 | — | — | — |
| 50% fixed carbon .. | 16 | 201 | 87 | — | — | — |
| OTHER COUNTRIES | | | | | | |
| Austria (a) | 31,043 | 25,066 | 25,417 | 27,295 | 27,733 | 21,392 |
| Germany (Federal) .. | 11,666 | 12,640 | 12,829 | 16,147 | 16,406 | 12,688 |
| Italy | 1,847 | 1,107 | 1,691 | 2,055 | 2,088 | 636 |
| Norway | 7,439 | 8,140 | 9,173 | 10,193 | 10,357 | 8,288 |
| U.S.S.R. (b) | 64,000 | 69,000 | 69,000 | 74,000 | 75,000 | n.a. |
| Malagasy Republic— | | | | | | |
| Flake | } 16,146 | 16,170 | 16,844 | 19,556 | 19,870 | 20,025 |
| Powder | | | | | | |
| South Africa | 629 | 711 | 451 | 688 | 699 | 1,145 |
| Mexico | 40,047 | 51,862 | 42,243 | 54,769 | 55,647 | 50,916 |
| Argentina | 211 | 366 | 288 | (b) 300 | (b) 300 | n.a. |
| Brazil | 9,080 | r 22,000 | 11,597 | n.a. | n.a. | n.a. |
| China (b) | 30,000 | 30,000 | 30,000 | 30,000 | 30,000 | 30,000 |
| Japan— | | | | | | |
| Flake | 1,688 | 1,465 | 1,699 | 1,442 | 1,465 | n.a. |
| Korea (South)— | | | | | | |
| Flake | 2,388 | 633 | 584 | 782 | 795 | 1,172 |
| Amorphous | 358,251 | 353,330 | 305,104 | 332,000 | 337,000 | 374,000 |
| Korea (North) (b) .. | 74,000 | 74,000 | 74,000 | 74,000 | 75,000 | n.a. |
| TOTAL* | 674,000 | 679,000 | 620,000 | 662,000 | 672,000 | 695,000 |

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

(a) Crude.

(b) United States Bureau of Mines' estimate.

(c) Exports.

EXPORTS OF GRAPHITE

| Exporting Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-------------|-------------|-------------|--------|--------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Natural | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 3,713 | 3,773 | 2,736 |
| Crucibles | 3,650 | 3,612 | 3,844 | 3,058 | 3,107 | 2,980 |
| Ceylon | 10,203 | 10,631 | 11,238 | 9,631 | 9,786 | 7,186 |
| Hong Kong | 30 | 100 | 300 | — | — | — |
| India (a) | 33 | 164 | 124 | 22 | 22 | 36 |
| OTHER COUNTRIES | | | | | | |
| Austria | 17,923 | 24,329 | 24,069 | 25,412 | 25,820 | 21,745 |
| Belgium-Luxemburg | | | | | | |
| E.U. | 5 | 32 | 11 | 31 | 31 | 111 |
| Denmark | 2 | 23 | 1 | — | — | — |
| France | 1,667 | 1,178 | 1,513 | 1,731 | 1,759 | 1,613 |
| Germany (Federal) .. | 7,554 | 7,907 | 7,461 | 9,174 | 9,321 | 7,235 |
| Italy | 1,467 | 1,543 | 1,478 | 1,786 | 1,815 | 1,579 |
| Netherlands | 68 | 189 | 151 | 162 | 165 | 268 |
| Norway | 7,274 | 8,558 | 8,491 | 10,452 | 10,620 | 8,566 |
| Sweden | 155 | 47 | — | 110 | 112 | 192 |
| U.S.S.R. | 9,349 | 10,039 | 11,900 | 17,300 | 17,600 | <i>n.a.</i> |
| Malagasy Republic .. | 15,943 | 15,634 | 18,222 | 19,986 | 20,307 | <i>n.a.</i> |
| South Africa | 16 | 19 | 22 | 36 | 37 | 434 |
| Mexico | 38,110 | 49,819 | 38,688 | 44,974 | 45,696 | 42,315 |
| United States | 3,187 | 3,722 | 5,049 | 5,163 | 5,246 | 5,201 |
| Formosa | 5 | 36 | 10 | — | — | <i>n.a.</i> |
| Japan | 640 | <i>n.a.</i> | 945 | 746 | 758 | 801 |
| Korea (South) | 50,422 | 47,278 | 42,345 | 44,927 | 45,648 | 32,118 |

(a) Years ended March 31 following that stated.

IMPORTS OF GRAPHITE

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|------------|------------|-----------|-----------|------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Natural | 8,280 | 10,105 | 10,162 | 11,775 | 11,964 | 10,196 |
| Artificial | 1,831 | 590 | 1,178 | 2,163 | 2,197 | 2,036 |
| Canada— | | | | | | |
| Crucibles | (£78,315) | (£118,000) | (£141,000) | (£97,000) | (£97,000) | (£158,000) |
| Hong Kong | 5 | 47 | 132 | 164 | 167 | 235 |
| India (a)— | | | | | | |
| Graphite | 1,409 | 940 | 946 | 1,210 | 1,230 | 1,028 |
| Crucibles | 736 | 568 | 334 | 336 | 341 | 545 |
| Malaysia West .. | 144 | 174 | 103 | 98 | 100 | 406 |
| Australia (b) .. | 1,449 | 1,274 | 1,741 | 1,480 | 1,504 | 1,800 |
| New Zealand (b) .. | 207 | 129 | 99 | 116 | 118 | n.a. |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Graphite | 293 | 683 | 582 | 1,747 | 1,775 | 2,747 |
| Crucibles, etc. .. | 412 | 307 | 517 | 591 | 601 | 542 |
| Belgium-Luxemburg | | | | | | |
| E.U. | 537 | 717 | 860 | 708 | 719 | 778 |
| Denmark | 283 | 296 | 395 | 224 | 228 | 206 |
| Finland | 341 | 326 | 323 | 618 | 628 | 627 |
| France | 4,805 | 4,700 | 5,541 | 6,682 | 6,789 | 5,707 |
| Germany (Federal) .. | 16,706 | 20,606 | 20,970 | 26,556 | 26,982 | 25,163 |
| Germany (East) .. | 5,460 | 5,670 | 5,082 | 4,849 | 4,927 | 6,327 |
| Greece | 255 | 187 | 352 | 252 | 256 | 318 |
| Italy | 13,567 | 13,361 | 13,772 | 13,819 | 14,041 | 10,052 |
| Netherlands | 182 | 235 | 443 | 306 | 311 | 653 |
| Norway | 380 | 342 | 384 | 389 | 395 | 417 |
| Poland | 9,854 | 11,386 | 10,492 | 11,436 | 11,620 | 11,818 |
| Portugal | 156 | 184 | 142 | 160 | 163 | 179 |
| Spain | 761 | 837 | 871 | 1,243 | 1,263 | 917 |
| Sweden | 966 | 1,090 | 1,210 | 1,251 | 1,271 | 1,234 |
| Switzerland | 463 | 500 | 347 | 393 | 399 | 377 |
| Yugoslavia | 1,123 | 878 | 984 | 1,760 | 1,788 | 1,943 |
| Morocco | 8 | 23 | 30 | 17 | 17 | 14 |
| Mozambique | 1 | 3 | 3 | 5 | 5 | n.a. |
| South Africa | 465 | 484 | 346 | 321 | 326 | 420 |
| Sudan | — | 16 | 2 | — | — | 116 |
| Mexico— | | | | | | |
| Graphite | 204 | 184 | 159 | 212 | 215 | 476 |
| Crucibles | 407 | 240 | 404 | 570 | 579 | 455 |

(a) Years ended March 31 following that stated.

(b) Years ended June 30 of that stated.

IMPORTS OF GRAPHITE (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|--------|--------|--------|--------|--------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| United States (a) | 43,144 | 60,550 | 52,176 | 59,231 | 60,181 | 56,878 |
| Argentina | 177 | 366 | 341 | 426 | 433 | 264 |
| Brazil— | | | | | | |
| Graphite | 165 | 154 | 111 | 188 | 191 | n.a. |
| Crucibles | 260 | 505 | 760 | 594 | 604 | n.a. |
| Chile | 312 | 67 | 93 | 162 | 165 | n.a. |
| Colombia | 48 | 49 | 52 | n.a. | n.a. | n.a. |
| Peru (b) | 251 | 61 | 160 | n.a. | n.a. | n.a. |
| Uruguay | 7 | 8 | 10 | 6 | 6 | 9 |
| Venezuela | 266 | 186 | 150 | n.a. | n.a. | n.a. |
| Burma | 86 | 56 | 112 | 94 | 96 | 117 |
| Lebanon | 34 | 92 | 28 | 68 | 69 | 8 |
| Israel | 43 | n.a. | 41 | 47 | 48 | 93 |
| Formosa | 1,970 | 4,577 | 4,362 | 3,751 | 3,811 | n.a. |
| Japan | 54,325 | 61,939 | 56,694 | 75,607 | 76,820 | 55,967 |
| Philippine Republic | 56 | 160 | 128 | 43 | 44 | 85 |
| Thailand | 842 | 1,000 | 990 | 762 | 774 | 1,014 |
| Turkey— | | | | | | |
| Graphite | 232 | 243 | 323 | 406 | 413 | n.a. |
| Crucibles, etc. | 206 | 372 | 228 | 269 | 273 | n.a. |

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

| Year | Long tons | | | Tonnes |
|------------|-----------|----|----|--------|
| 1967 | .. | .. | .. | 279 |
| 1968 | .. | .. | .. | 100 |
| 1969 | .. | .. | .. | 17 |
| 1970 | .. | .. | .. | 99 |
| 1971 | .. | .. | .. | n.a. |

(b) Including artificial graphite.

GYPSUM
PRODUCTION OF GYPSUM

| Producing Country | Long tons | | | | Tonnes | |
|-------------------------------|---------------|-------------|-------------|------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Gypsum | 2,671,000 | 2,560,000 | 2,809,000 | 2,802,000 | 2,847,000 | 3,027,000 |
| Anhydrite | 1,850,000 | 2,154,000 | 1,714,000 | 1,406,000 | 1,428,000 | 1,146,000 |
| Kenya | 39,807 | 41,438 | 60,868 | 59,128 | 60,077 | 91,872 |
| Tanzania | 15,235 | 4,391 | 10,858 | 20,391 | 20,718 | 17,691 |
| Zambia | 1,478 | 1,058 | — | — | — | n.a. |
| Canada (a) (f) | 4,620,879 | 5,291,910 | 5,690,758 | 5,641,538 | 5,732,068 | 6,080,044 |
| Jamaica | 183,857 | 208,000 | 251,000 | 278,000 | 282,000 | n.a. |
| Trinidad | 3,589 | 4,251 | 4,000 | n.a. | n.a. | n.a. |
| Cyprus | 49,800 | 20,000 | 16,030 | 33,810 | 34,353 | 889 |
| India | 1,011,764 | 1,298,000 | 1,367,570 | 905,997 | 920,536 | 1,068,744 |
| Pakistan | 101,000 | 45,321 | 134,000 | 165,000 | 168,000 | (b) 125,000 |
| Australia | 914,084 | 843,744 | 897,705 | 832,089 | 845,444 | 895,254 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Gypsum | 579,157 | 554,278 | 521,686 | 461,600 | 469,007 | 513,402 |
| Anhydrite | 147,232 | 132,908 | 143,676 | 156,317 | 158,825 | 80,317 |
| Bulgaria | 164,000 | 206,000 | 187,000 | 186,000 | 189,000 | (e) 190,000 |
| Czechoslovakia | 365,000 | 401,000 | 433,000 | 479,000 | 487,000 | 479,000 |
| France (a) | 5,108,097 | 5,230,600 | r 5,591,600 | 6,112,871 | 6,210,965 | n.a. |
| Germany (Federal)— | | | | | | |
| Gypsum | 1,221,753 | 1,454,535 | 1,737,090 | 1,946,504 | 1,977,740 | 2,394,913 |
| Anhydrite | 99,203 | 42,996 | 60,303 | 82,054 | 83,362 | 139,520 |
| Germany (East) (d) | 268,000 | 264,000 | 278,000 | 284,000 | 289,000 | 316,000 |
| Greece | 215,541 | 226,657 | r 267,366 | 303,680 | 308,553 | 330,000 |
| Italy (c) | 2,789,409 | 3,279,869 | 3,412,403 | 3,214,000 | 3,266,000 | n.a. |
| Luxemburg | 9,307 | 6,264 | 9,044 | 4,982 | 5,062 | 5,351 |
| Poland (e) | 743,000 | 778,000 | 797,000 | 812,000 | 825,000 | n.a. |
| Portugal | 102,586 | 104,617 | 93,632 | 113,228 | 115,045 | 17,522 |
| Spain— | | | | | | |
| Gypsum (b) | } 3,543,000 | 3,838,000 | 3,937,000 | 3,940,000 | 4,000,000 | n.a. |
| Anhydrite (b) | | | | | | |
| U.S.S.R. | (e) 4,617,000 | 4,773,000 | 4,493,000 | 4,626,000 | 4,700,000 | n.a. |
| Yugoslavia | 168,000 | 194,000 | 228,168 | 246,661 | 250,619 | 250,241 |
| Angola | 11,798 | 12,782 | 16,138 | 14,600 | 14,800 | 25,842 |
| Egypt | 536,265 | 561,160 | 462,400 | 492,000 | 500,000 | 526,992 |
| Libya | 3,000 | 3,000 | (e) 15,000 | (e) 15,000 | (e) 15,000 | (e) 15,000 |
| Niger | 1,702 | 1,926 | n.a. | (b) 1,500 | (b) 1,500 | (b) 400 |
| South Africa | 302,734 | 311,058 | 353,744 | 403,642 | 410,101 | 408,236 |
| Sudan | 4,000 | 10,000 | n.a. | 1,600 | 1,600 | n.a. |
| Dominican Republic | 117,000 | 98,000 | (e) 98,000 | (e) 98,000 | (e) 100,000 | n.a. |
| Guatemala | 11,000 | 7,578 | 7,602 | 7,588 | 7,710 | n.a. |
| Mexico | 960,980 | 1,215,733 | 1,148,464 | 1,270,500 | 1,290,800 | 1,298,247 |
| Nicaragua | 10,000 | 14,000 | 30,000 | 30,000 | 30,000 | n.a. |
| United States | 8,387,000 | 8,945,000 | 8,844,000 | 8,426,000 | 8,561,000 | 9,468,000 |
| Argentina (a) | 260,473 | 427,220 | 562,852 | 458,440 | 465,797 | n.a. |
| Brazil | 70,322 | 213,374 | 281,133 | 214,000 | 217,000 | n.a. |
| Chile | 130,653 | 101,400 | n.a. | 125,257 | 127,267 | 116,410 |
| Colombia | 116,000 | 121,000 | 151,250 | 189,062 | 192,095 | 185,000 |
| Paraguay | 2,000 | 3,400 | 3,445 | 5,905 | 6,000 | n.a. |
| Peru | 40,771 | 35,120 | 44,312 | 88,520 | 89,940 | n.a. |
| Venezuela | (e) 84,000 | (e) 100,000 | 81,000 | 98,000 | 100,000 | n.a. |

(a) Including anhydrite.

(b) Estimated.

(c) Including alabaster.

(d) Crude estimated on production of calcined

(e) United States Bureau of Mines' estimate.

(f) Producers' shipments.

PRODUCTION OF GYPSUM (cont.)

| Producing Country | Long tons | | | | Tonnes | |
|-----------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Burma | 1,970 | 3,543 | 3,444 | 2,900 | 2,900 | n.a. |
| Formosa | 16,197 | 5,547 | 5,042 | 11,146 | 11,325 | 16,338 |
| Iran (c) | 1,075,700 | 1,496,000 | 1,571,000 | 1,650,000 | 1,676,000 | n.a. |
| Israel | 90,000 | 70,000 | 71,000 | 69,000 | 70,000 | n.a. |
| Japan | 575,000 | 553,671 | 551,117 | 530,264 | 538,773 | 535,901 |
| Philippine Republic | 19,963 | 20,325 | 36,400 | 17,200 | 17,500 | 42,796 |
| Saudi Arabia | 30,108 | 39,665 | (b) 34,400 | 16,960 | 17,230 | n.a. |
| Syria | (b) 15,000 | (b) 15,000 | (b) 15,000 | (b) 15,000 | (b) 15,000 | n.a. |
| Thailand | 60,722 | 126,070 | 90,580 | 141,972 | 144,250 | 167,904 |
| Turkey (a) | 275,000 | 290,000 | 295,000 | 315,000 | 320,000 | n.a. |
| TOTAL* | 44,000,000 | 47,000,000 | 49,000,000 | 49,000,000 | 50,000,000 | 52,000,000 |

*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.

(c) Years ended March 20 following that stated.

EXPORTS OF GYPSUM

| Exporting Country and Description | Long tons | | | | Tonnes | |
|-----------------------------------|-----------|-----------|-----------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Calcined | 8,653 | 9,402 | 9,880 | 8,457 | 8,593 | 8,093 |
| Tanzania | — | 100 | 400 | 2,313 | 2,350 | 5,050 |
| Canada— | | | | | | |
| Crude | 3,478,691 | 3,985,362 | 4,349,271 | 4,333,308 | 4,402,845 | 4,567,653 |
| Jamaica | 188,696 | 249,326 | 337,225 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Cyprus— | | | | | | |
| Crude | 12,954 | 10,132 | 5,577 | 4,351 | 4,421 | — |
| Calcined | 293 | 213 | 194 | 157 | 160 | 539 |
| India (b) | — | 935 | 5 | — | — | — |
| Malaysia (West)— | | | | | | |
| Crude and calcined .. | 34 | 29 | 61 | 37 | 38 | 63 |
| Singapore— | | | | | | |
| Crude and calcined .. | 593 | 327 | 1,392 | 306 | 311 | 1,018 |
| Australia (a)— | | | | | | |
| Crude | 238,873 | 211,185 | 263,658 | 200,895 | 204,119 | 258,195 |
| Calcined | 516 | 736 | 905 | 1,573 | 1,598 | 1,270 |
| Irish Republic— | | | | | | |
| Crude | 96,310 | 107,478 | 98,118 | 106,558 | 108,268 | 115,412 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Crude | 92,600 | 103,550 | 112,936 | 138,111 | 140,327 | 157,542 |
| Calcined | 818 | 1,365 | 1,690 | 2,536 | 2,577 | 5,799 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Crude | 44 | 182 | 1,594 | 380 | 386 | 1,270 |
| Calcined | 10,481 | 10,459 | 10,613 | 8,937 | 9,081 | 9,458 |
| Denmark— | | | | | | |
| Crude and calcined .. | 125 | 55 | 128 | 24 | 25 | 20 |
| France— | | | | | | |
| Crude | 689,472 | 734,991 | 803,502 | 1,081,154 | 1,098,503 | 1,021,682 |
| Calcined | 134,715 | 114,885 | 104,412 | 108,544 | 110,286 | 133,174 |
| Germany (Federal)— | | | | | | |
| Crude and calcined .. | 291,752 | 296,269 | 309,038 | 254,901 | 258,992 | 289,802 |
| Germany (East)— | | | | | | |
| Calcined | 58,266 | 71,809 | 66,878 | 60,429 | 61,399 | 71,605 |
| Italy— | | | | | | |
| Crude | 16,152 | 28,961 | 13,355 | 15,766 | 16,019 | 22,690 |
| Calcined | | | 17,049 | 17,883 | 18,170 | 20,141 |
| Netherlands— | | | | | | |
| Crude | 21 | 38 | 323 | 1 | 1 | — |
| Calcined | 208 | 159 | 858 | 884 | 898 | 134 |
| Poland | 441,130 | 532,802 | 517,951 | 577,881 | 587,154 | 572,296 |
| Portugal— | | | | | | |
| Crude | 122 | 200 | 72 | 208 | 212 | 92 |
| Calcined | 85 | 92 | 162 | 26 | 26 | 152 |
| Spain— | | | | | | |
| Crude and calcined .. | 4,762 | 4,182 | 15,202 | 4,068 | 4,133 | 17,775 |
| Switzerland— | | | | | | |
| Ground and calcined .. | 1,334 | 2,183 | 2,354 | 2,332 | 2,370 | 4,059 |
| Yugoslavia— | | | | | | |
| Crude | — | 47 | 1,789 | 10,743 | 10,915 | <i>n.a.</i> |
| Ground and calcined .. | | | 21 | 37 | 38 | 186 |
| Angola— | | | | | | |
| Crude | 9,486 | 7,271 | 6,928 | 5,259 | 5,343 | 10,963 |

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

(c) Excludes exports to Belgium and Luxemburg, if any.

EXPORTS OF GYPSUM (cont.)

| Exporting Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Egypt— | | | | | | |
| Crude and ground | 38,514 | 819 | 44 | 3 | 3 | n.a. |
| Calcined | | | | | | |
| Morocco— | | | | | | |
| Crude | 49,887 | 66,785 | 76,102 | 102,263 | 103,904 | 105,762 |
| Calcined | 962 | 805 | 1,039 | 742 | 754 | 751 |
| South Africa | 20,373 | 25,799 | 26,388 | 33,467 | 34,004 | 41,839 |
| Dominican Republic | 84,081 | 73,929 | 61,370 | 82,747 | 84,075 | n.a. |
| Mexico— | | | | | | |
| Crude | 860,142 | 1,142,898 | 1,021,318 | 1,039,525 | 1,056,206 | 1,659,554 |
| Calcined | 69 | 3 | 21 | 10 | 10 | 11 |
| United States— | | | | | | |
| Crude | 14,768 | 16,490 | 13,203 | 8,710 | 8,850 | 9,396 |
| Calcined | 20,346 | 18,943 | 22,905 | 27,358 | 27,797 | 35,320 |
| Argentina | 13,097 | 14,799 | 9,637 | 12,047 | 12,240 | 11,893 |
| Bolivia | 1,368 | 1,575 | 4,540 | n.a. | n.a. | n.a. |
| Venezuela | 6,693 | 9,616 | 13,754 | n.a. | n.a. | n.a. |
| Iran (a)— | | | | | | |
| Calcined | 2,956 | 1,912 | 830 | 1,822 | 1,851 | 1,293 |
| Japan— | | | | | | |
| Crude | 6,726 | 5,664 | 7,305 | 5,011 | 5,091 | 70 |
| Calcined | 3,949 | 7,908 | 9,248 | 22,964 | 23,333 | 6,431 |
| Syria | 16,633 | 23,893 | 32,249 | 40,456 | 41,105 | 69,895 |
| Thailand | 14,653 | 26,100 | 32,699 | 37,305 | 37,904 | 22,513 |

a) Years ended March 20 following that stated

IMPORTS OF GYPSUM

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|---------|---------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Crude and calcined .. | 143,378 | 188,255 | 165,103 | 142,105 | 144,356 | 135,763 |
| Ghana | 5,483 | 7,697 | 19,104 | 11,868 | 12,058 | <i>n.a.</i> |
| Zambia | 2,870 | 21,345 | 18,797 | 11,635 | 11,822 | <i>n.a.</i> |
| Bermuda— | | | | | | |
| Calcined | 267 | 269 | 240 | <i>n.a.</i> | <i>n.a.</i> | 64 |
| Canada— | | | | | | |
| Crude and ground .. | 61,707 | 61,662 | 73,035 | 34,714 | 35,271 | 95,965 |
| Calcined | 8,812 | 7,195 | 7,908 | 7,855 | 7,981 | 9,590 |
| Ceylon | 16,056 | 1,012 | 3,601 | 17,500 | 17,800 | 19,800 |
| Hong Kong | 4,329 | 22,263 | 18,326 | 4,795 | 4,872 | 25,083 |
| Malaysia (West)— | | | | | | |
| Crude and calcined .. | 29,928 | 35,467 | 30,149 | 40,273 | 40,919 | 30,569 |
| Singapore— | | | | | | |
| Crude and calcined .. | 11,243 | 23,754 | 24,420 | 28,742 | 29,204 | 26,473 |
| New Zealand (a)— | | | | | | |
| Crude | 109,641 | 86,570 | 94,154 | 101,719 | 103,351 | 104,679 |
| Calcined | 1,279 | 1,045 | 1 | 1,182 | 1,201 | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Crude | 16,066 | 17,433 | 13,702 | 937 | 952 | 993 |
| Calcined | 11,008 | 12,695 | 8,223 | 12,109 | 12,303 | 19,834 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Crude | 378,147 | 392,263 | 393,719 | 422,022 | 428,794 | 401,908 |
| Calcined | 54,070 | 46,923 | 57,758 | 58,843 | 59,787 | 72,616 |
| Denmark— | | | | | | |
| Crude | 100,299 | 108,513 | 167,030 | 233,825 | 237,577 | 235,376 |
| Calcined | 6,667 | 4,890 | 4,739 | 4,701 | 4,777 | 4,365 |
| Finland— | | | | | | |
| Crude | 73,251 | 77,244 | 86,482 | 86,613 | 88,003 | 78,429 |
| Calcined | 39,676 | 43,158 | 40,129 | 42,664 | 43,349 | 31,002 |
| France— | | | | | | |
| Crude | 16,715 | 16,483 | 7,853 | 1,716 | 1,744 | 1,519 |
| Calcined | 21,011 | 4,155 | 2,788 | 2,351 | 2,389 | 27,815 |
| Germany (Federal)— | | | | | | |
| Crude and calcined .. | 119,380 | 122,044 | 119,883 | 147,841 | 150,214 | 179,612 |
| Greece— | | | | | | |
| Crude | 46 | 92 | 53 | 189 | 192 | 35 |
| Calcined | 700 | 576 | 748 | 809 | 822 | 721 |
| Iceland | 4,861 | 6,830 | 6,191 | 2,826 | 2,871 | 6,041 |
| Italy— | | | | | | |
| Crude | 1,550 | 908 | 87 | 125 | 127 | 157 |
| Calcined | 45 | 444 | 1,683 | 1,584 | 1,609 | 1,670 |
| Netherlands— | | | | | | |
| Crude | 154,450 | 171,925 | 161,041 | 172,598 | 175,368 | (b) 153,720 |
| Calcined | 70,910 | 73,830 | 88,419 | 92,822 | 94,312 | (b) 97,393 |
| Norway— | | | | | | |
| Crude | 91,026 | 132,665 | 134,614 | 184,884 | 187,851 | 205,307 |
| Calcined | 4,271 | 3,763 | 3,748 | 4,283 | 4,352 | 4,033 |
| Portugal— | | | | | | |
| Crude | 14,104 | 16,059 | 21,100 | 22,164 | 22,520 | 25,272 |
| Calcined | 11 | 8 | 8 | 15 | 15 | 31 |
| Sweden— | | | | | | |
| Crude | 333,207 | 359,615 | 368,559 | 459,139 | 466,507 | 486,392 |
| Calcined | 25,448 | 21,347 | 21,212 | 20,331 | 20,657 | 18,985 |
| Switzerland— | | | | | | |
| Crude | 52,877 | 53,923 | 61,739 | 56,780 | 57,691 | 70,912 |
| Ground and calcined .. | 6,043 | 8,409 | 17,032 | 21,118 | 21,457 | 40,130 |

(a) Year ended June 30 of that stated.

(b) Excludes imports from Belgium and Luxemburg, if any.

IMPORTS OF GYPSUM (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Angola— | | | | | | |
| Crude | r 55 | r 39 | r 56 | 92 | 93 | 82 |
| Calcined | 74 | 22 | 10 | 14 | 14 | 35 |
| Malagasy Republic | n.a. | 4,040 | 3,106 | 5,016 | 5,096 | n.a. |
| Mozambique— | | | | | | |
| Crude | 11,989 | 8,205 | 11,064 | 6,939 | 7,050 | n.a. |
| Calcined | 65 | 66 | 51 | 612 | 622 | n.a. |
| Senegal— | | | | | | |
| Crude | 3,205 | 3,445 | 8,698 | 5,004 | 5,084 | 8,879 |
| South Africa— | | | | | | |
| Crude and calcined | 4,701 | 5,361 | 6,309 | 6,332 | 6,433 | 5,911 |
| Sudan | — | 870 | 53 | 98 | 100 | 303 |
| Tunisia— | | | | | | |
| Calcined | 397 | — | 634 | 568 | 577 | 602 |
| Costa Rica— | | | | | | |
| Crude | 4,294 | 6,183 | 5,148 | 6,457 | 6,561 | 7,842 |
| Calcined | 128 | 204 | 175 | 160 | 163 | 234 |
| Guatemala | 31 | 21 | 32 | 35 | 36 | 34 |
| Honduras— | | | | | | |
| Calcined | 15 | 23 | 31 | 29 | 29 | 18 |
| Mexico— | | | | | | |
| Crude | 114 | 102 | 169 | 176 | 179 | 153 |
| Panama Republic | 6,410 | n.a. | 4,281 | 5,189 | 5,272 | 16,265 |
| Salvador— | | | | | | |
| Crude | 7,589 | 3,062 | 3,656 | n.a. | n.a. | 1,271 |
| Calcined | 57 | 54 | 43 | 73 | 74 | 101 |
| United States— | | | | | | |
| Crude | 4,074,100 | 4,887,500 | 5,230,300 | 5,471,071 | 5,558,866 | 5,608,573 |
| Ground and calcined | 1,600 | 1,767 | 1,655 | 1,861 | 1,891 | 1,778 |
| Argentina— | | | | | | |
| Crude | 10 | 34 | 39 | 28 | 28 | 4 |
| Brazil— | | | | | | |
| Crude | 1,225 | 1,595 | 3,073 | 1,071 | 1,088 | n.a. |
| Colombia— | | | | | | |
| Crude | r 9,363 | 12,106 | 21,607 | n.a. | n.a. | n.a. |
| Calcined | r 70 | r 76 | 120 | n.a. | n.a. | n.a. |
| Peru— | | | | | | |
| Crude and calcined | 424 | 500 | 278 | n.a. | n.a. | n.a. |
| Uruguay— | | | | | | |
| Crude and ground | 19,287 | 15,478 | 8,728 | 18,512 | 18,809 | 23,201 |
| Venezuela | 206 | 211 | 263 | n.a. | n.a. | n.a. |
| Formosa | 61,119 | 84,000 | 92,551 | 122,481 | 124,446 | n.a. |
| Iran (a) | 934 | 372 | 348 | 684 | 695 | 523 |
| Israel | 170 | 136 | 134 | 149 | 151 | 251 |
| Japan | 43,267 | 56,186 | 59,722 | 75,808 | 77,025 | 88,262 |
| Korea (South) | 81,130 | 98,988 | 108,484 | 35,752 | 36,326 | 61,311 |
| Lebanon | 20,223 | 37,180 | 44,556 | 47,469 | 48,231 | 70,199 |
| Philippine Republic— | | | | | | |
| Crude | } 57,093 | 85,859 | 41,810 | 11,253 | 11,434 | 16,845 |
| Calcined | | | | | | |
| Thailand— | | | | | | |
| Crude | 111 | 48 | 111 | 153 | 155 | 213 |

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

IODINE
PRODUCTION OF IODINE

| Producing Country | Lb. avdp. | | | | Kilogrammes | |
|-------------------|-----------|-----------|------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| Chile | 5,377,000 | 4,382,000 | 5,410,000 | 4,900,000 | 2,200,000 | 2,212,000 |
| Indonesia | 4,000 | 4,000 | 4,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Japan | 4,338,000 | 7,857,000 | 10,200,000 | 12,994,000 | 5,894,000 | <i>n.a.</i> |

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

EXPORTS OF IODINE

| Exporting Country and Description | Lb. avdp. | | | | Kilogrammes | |
|-----------------------------------|-----------|-----------|-----------|------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom .. | 87,376 | 94,696 | 64,839 | 120,808 | 54,798 | 60,639 |
| OTHER COUNTRIES | | | | | | |
| France— | | | | | | |
| Resublimed | 24,000 | 33,000 | 55,000 | 24,000 | 11,000 | 16,000 |
| Germany (Federal) .. | 17,000 | 34,000 | 20,000 | 56,000 | 25,500 | 22,300 |
| Chile— | | | | | | |
| Crude | 5,476,300 | 4,458,844 | 4,743,330 | 4,054,756 | 1,839,207 | <i>n.a.</i> |
| Resublimed | 2,426 | 11,685 | 678,007 | 626,644 | 284,241 | <i>n.a.</i> |
| Japan— | | | | | | |
| Crude | 4,680,404 | 6,619,509 | 7,893,803 | 10,257,850 | 4,652,885 | 5,636,557 |

IMPORTS OF IODINE

| Importing Country and Description | Lb. avdp. | | | | Kilogrammes | |
|--------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom .. | 1,428,663 | 1,394,904 | 1,543,929 | 1,855,446 | 841,616 | 843,773 |
| Canada— | | | | | | |
| Crude | 371,900 | 234,700 | 333,500 | 401,400 | 182,072 | 230,833 |
| India (a) | 214,556 | 225,101 | 245,734 | 549,921 | 249,440 | 189,757 |
| Australia (b)— | | | | | | |
| Crude | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 37,034 |
| New Zealand (b) .. | 1,752 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Denmark | 8,800 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| France— | | | | | | |
| Crude | 798,073 | 630,522 | 870,826 | 1,360,000 | 617,000 | 760,000 |
| Germany (Federal) .. | 1,026,100 | 1,251,500 | 1,491,425 | 1,966,300 | 891,900 | 978,000 |
| Greece | 5,450 | 4,209 | 7,648 | 7,489 | 3,397 | 2,952 |
| Italy— | | | | | | |
| Crude | 312,836 | 278,885 | 391,541 | 406,124 | 184,215 | 189,900 |
| Resublimed | 3,527 | 2,866 | 9,700 | 27,284 | 12,376 | 11,900 |
| Portugal— | | | | | | |
| Crude | 4,409 | 4,409 | 8,818 | 9,000 | 4,000 | 3,000 |
| Resublimed | 882 | 11 | 882 | 220 | 100 | 2,400 |
| Spain— | | | | | | |
| Crude | 50,696 | 46,599 | 79,366 | 75,000 | 34,000 | 35,000 |
| Resublimed | 64 | 73 | — | 42 | 19 | 333 |
| Sweden | 7,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Yugoslavia | 10,538 | 8,084 | 21,497 | 25,671 | 11,644 | 24,437 |
| Morocco— | | | | | | |
| Resublimed | 752 | 531 | 196 | 276 | 125 | 291 |
| Mexico | 97,305 | 136,686 | 231,400 | 126,982 | 57,598 | 86,941 |
| United States— | | | | | | |
| Crude | 3,459,000 | 5,882,524 | 5,704,826 | 5,905,000 | 2,678,000 | 3,674,000 |
| Resublimed | 9,000 | 13,550 | 10,720 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Argentina— | | | | | | |
| Crude | 37,055 | 51,992 | 69,586 | 122,745 | 55,676 | 59,661 |
| Resublimed | — | 5,512 | 53,351 | 13,228 | 6,000 | 9,002 |
| Brazil | 41,692 | 47,631 | 59,551 | 89,362 | 40,534 | <i>n.a.</i> |
| Colombia | r 5,097 | r 10,946 | 6,874 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Peru— | | | | | | |
| Crude | 1,587 | <i>n.a.</i> | 2,180 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Resublimed | 2,116 | 2,485 | 2,028 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Venezuela | 7,961 | 7,032 | 8,377 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Turkey— | | | | | | |
| Crude | 278 | 1,911 | 1,118 | 44 | 20 | <i>n.a.</i> |
| Resublimed | 10,278 | 5,357 | 5,743 | 8,179 | 3,710 | <i>n.a.</i> |

(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)

| Producing Country | ORE | | | | | | | | | | Estimated Iron Content | | | |
|-------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|------------|-------------|-------------|-------------|------------------------|-------------|------|--|
| | Tonnes | | | | | | | | | | Tonnes | | | |
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 | 1967 | 1968 | 1969 | 1970 | 1970 | 1970 | 1971 | |
| COMMONWEALTH COUNTRIES | | | | | | | | | | | | | | |
| United Kingdom (a) ... | 12,739,100 | 13,715,500 | 12,103,500 | 11,828,200 | 12,018,000 | 10,228,300 | 3,567,000 | 3,840,000 | 3,390,000 | 3,312,000 | 3,365,000 | 2,864,000 | | |
| Sierra Leone (d) ... | 2,224,467 | 2,495,451 | r 2,388,726 | 2,388,726 | 2,427,065 | 2,609,888 | 1,446,000 | 1,497,000 | 1,433,000 | 1,433,000 | 1,456,000 | 1,566,000 | | |
| Swaziland ... | 1,715,985 | 2,018,031 | 2,266,201 | 2,511,800 | 2,552,107 | 2,886,278 | 1,032,000 | 1,271,000 | 1,428,000 | 1,582,000 | 1,608,000 | 1,818,000 | | |
| Canada ... | 37,783,750 | 42,360,090 | 35,762,000 | 47,508,742 | 48,271,258 | 42,969,000 | 20,283,000 | 24,246,000 | 19,670,000 | 26,130,000 | 26,549,000 | 23,634,000 | | |
| Hong Kong ... | 141,324 | 159,041 | 165,325 | 167,567 | 170,256 | 162,739 | 79,000 | 89,000 | 81,000 | 84,000 | 85,000 | 81,000 | | |
| India ... | 18,676,000 | 20,252,100 | 21,561,002 | 21,876,974 | 22,228,035 | 23,106,351 | 11,448,000 | 12,354,000 | 13,100,000 | 13,345,000 | 13,529,000 | 14,096,000 | | |
| Goa ... | 6,645,000 | 6,748,200 | 7,536,200 | 8,993,954 | 9,136,280 | 10,341,213 | 3,854,000 | 4,116,000 | 4,597,000 | 5,216,000 | 5,300,000 | 5,998,000 | | |
| Malaysia (West) ... | 5,349,780 | 5,108,342 | 5,151,022 | 4,420,143 | 4,491,086 | 9,449,988 | 2,996,000 | 2,860,000 | 2,879,000 | 2,475,000 | 2,515,000 | 532,000 | | |
| Australia ... | 16,887,000 | 26,204,000 | 37,966,000 | 50,380,000 | 51,189,000 | 62,100,000 | 10,831,000 | 16,767,000 | 24,450,000 | 32,224,000 | 32,741,000 | 39,588,000 | | |
| New Zealand ... | (b) 2,575 | (b) 3,286 | 32,200 | 140,000 | 142,000 | n.a. | n.a. | n.a. | 17,700 | 77,000 | n.a. | n.a. | | |
| Total ... | 104,000,000 | 121,000,000 | 125,000,000 | 149,000,000 | 152,000,000 | 155,000,000 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | | |
| OTHER COUNTRIES | | | | | | | | | | | | | | |
| Albania (c) ... | 399,000 | r 399,000 | 399,000 | 531,000 | 540,000 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | | |
| Austria ... | 3,418,400 | 3,427,105 | 3,919,110 | 3,933,600 | 3,996,700 | 4,170,750 | 1,082,000 | 1,101,000 | 1,268,000 | 1,283,200 | 1,303,800 | 1,360,000 | | |
| Belgium ... | 87,000 | 80,000 | 93,000 | 92,000 | 93,000 | 93,000 | 30,000 | 28,000 | 32,000 | 32,000 | 32,000 | 32,500 | | |
| Bulgaria ... | 2,857,000 | 2,600,000 | 2,690,000 | 2,369,000 | 2,407,000 | 3,001,000 | 1,500,000 | 1,600,000 | 1,600,000 | 995,000 | 1,011,000 | 1,005,000 | | |
| Czechoslovakia ... | 1,884,000 | 1,548,000 | 1,544,000 | 1,381,000 | 1,606,000 | 1,609,000 | 570,000 | 511,000 | 510,000 | 474,000 | 482,000 | 483,000 | | |
| Finland ... | 633,000 | 650,000 | 579,000 | 576,000 | 585,000 | 579,000 | 412,000 | 420,000 | 376,000 | 374,000 | 380,000 | 349,000 | | |
| France ... | 48,444,253 | 54,366,000 | 54,550,000 | 55,908,000 | 56,805,000 | 55,862,000 | 15,232,000 | 16,906,000 | r16,869,000 | 17,479,000 | 17,759,000 | 17,500,000 | | |
| Germany-- | 6,679,268 | 6,345,172 | 5,964,682 | 5,443,500 | 5,530,900 | 5,020,212 | 2,152,000 | 2,031,000 | 1,927,576 | 1,745,000 | 1,773,000 | 1,631,000 | | |
| Federal Republic (e) ... | 1,653,000 | 1,392,000 | 900,000 | 445,000 | 422,000 | 318,000 | 496,000 | 350,000 | 225,000 | 104,000 | 105,000 | 80,000 | | |
| Greece ... | 16,531 | 12,000 | 12,000 | 12,000 | 12,000 | 12,000 | 8,000 | 6,000 | 8,000 | 8,000 | 8,000 | 8,000 | | |
| Hungary ... | 704,000 | 628,000 | 670,000 | 619,000 | 629,000 | 687,000 | 172,000 | 158,000 | 165,000 | 157,000 | 160,000 | 172,000 | | |
| Italy ... | 725,026 | r 726,082 | 751,586 | 744,777 | 756,729 | 683,087 | 375,000 | 375,000 | 380,000 | 380,000 | 382,000 | 359,000 | | |
| Luxemburg ... | 6,204,347 | 6,297,403 | 6,211,907 | 5,632,081 | 5,722,459 | 4,507,064 | 1,689,000 | r 1,720,000 | 1,708,000 | 1,558,000 | 1,583,000 | 1,240,000 | | |
| Norway ... | 3,324,392 | 3,645,052 | 3,702,987 | 3,944,818 | 4,068,121 | 4,056,063 | 2,068,000 | 2,376,662 | 2,486,000 | 2,580,000 | 2,622,000 | 2,615,000 | | |
| Poland ... | 3,028,000 | 3,002,000 | 2,724,000 | 2,513,000 | 2,553,000 | 2,078,000 | 1,029,000 | 1,020,000 | 926,000 | 854,000 | 868,000 | 600,000 | | |
| Portugal ... | 194,000 | 197,000 | 160,800 | 123,860 | 125,850 | 99,406 | 97,000 | 98,000 | 79,000 | 57,000 | 58,000 | 46,000 | | |
| Roumania ... | 2,753,000 | 2,704,000 | 2,952,000 | 3,155,000 | 3,206,000 | 3,467,000 | 1,240,000 | 1,220,000 | 1,330,000 | 1,420,000 | 1,443,000 | 1,577,000 | | |
| Spain ... | 5,118,000 | 5,889,000 | 5,905,000 | 6,939,766 | 7,051,129 | 7,307,577 | 2,500,000 | 2,948,000 | 3,016,000 | 3,459,000 | 3,514,000 | 3,567,000 | | |
| Sweden ... | 27,889,300 | 26,762,100 | 32,661,000 | 31,020,000 | 31,517,800 | 34,367,400 | 17,150,000 | 16,500,000 | 20,132,000 | 19,500,000 | 19,800,000 | 21,600,000 | | |
| U.S.S.R. ... | 165,594,000 | 174,200,000 | 183,200,000 | 192,418,000 | 195,506,000 | 203,004,000 | 99,000,000 | 100,000,000 | 110,000,000 | 115,000,000 | 117,000,000 | 122,000,000 | | |

* 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) United States Bureau of Mines' estimate

(d) Exports.

(e) Marketable production.

PRODUCTION OF IRON ORE (cont.)

Long tons Tonnes

Long tons Tonnes

Long tons Tonnes

| Producing Country | ORE | | | | | | | | | | Estimated Iron Content | | |
|------------------------|-------------|-------------|-------------|-------------|-------------|-------------|------------|------------|------------|------------|------------------------|------------|------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1970 | 1971 | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES | | | | | | | | | | | | | |
| <i>(cont.)</i> | | | | | | | | | | | | | |
| Yugoslavia | 2,538,000 | 2,677,000 | 2,678,000 | 3,636,000 | 3,694,000 | 3,725,000 | 1,100,000 | 1,205,000 | 1,205,000 | 1,636,000 | 1,636,000 | 1,676,000 | |
| Algeria | 2,499,000 | 3,031,000 | 2,923,000 | 2,818,000 | 2,863,229 | 3,147,000 | 1,350,000 | 1,600,000 | 1,540,000 | 1,500,000 | 1,500,000 | 1,603,000 | |
| Angola | 1,136,072 | 3,167,385 | 5,391,145 | 5,994,691 | 6,090,888 | 6,137,819 | 738,000 | 2,059,000 | 3,504,000 | 3,892,000 | 3,892,000 | 4,003,000 | |
| Egypt | 416,000 | 440,000 | 453,000 | 443,502 | 450,519 | 472,541 | 208,000 | 220,000 | 226,000 | 223,000 | 227,000 | 240,000 | |
| Ghana | (a) | 690,000 | 1,800,000 | 2,000,000 | 2,000,000 | 2,000,000 | 350,000 | 920,000 | 1,020,000 | 1,020,000 | 1,020,000 | n.a. | |
| Liberia | 17,935,000 | 19,262,000 | 22,505,000 | 21,942,000 | 22,294,000 | 24,573,760 | 12,196,000 | 13,098,000 | 15,303,000 | 15,921,000 | 15,921,000 | 16,000,000 | |
| Mauritania | 6,933,000 | 7,918,000 | 8,541,000 | 9,103,000 | 8,457,000 | 8,457,000 | 4,548,000 | 5,194,000 | 5,303,000 | 5,811,000 | 5,811,000 | 5,700,000 | |
| Morocco | 6,870,447 | 7,944,197 | 7,337,000 | 8,858,622 | 8,722,400 | 8,623,257 | 5,190,000 | 5,493,000 | 4,850,000 | 5,115,000 | 5,115,000 | 3,748,000 | |
| South Africa (e) | 7,614,987 | 8,102,708 | 8,648,890 | 9,047,046 | 8,972,224 | 10,496,347 | 4,570,000 | 4,862,000 | 5,189,000 | 5,428,000 | 5,428,000 | 6,298,000 | |
| South West Africa | (a) | 903,000 | 930,500 | n.a. | 761,700 | 773,900 | 500,000 | 500,000 | r 463,000 | n.a. | n.a. | n.a. | |
| Tunisia | 9,000 | 995,600 | 930,500 | 761,700 | 773,900 | 935,800 | n.a. | n.a. | r 463,000 | n.a. | n.a. | 468,000 | |
| Guatemala (f) | ... | 4,000 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | |
| Mexico | 2,653,000 | 3,151,000 | 3,527,000 | 3,600,000 | 3,660,000 | 3,817,000 | 1,593,000 | 1,774,000 | 1,975,000 | 2,571,117 | 2,571,117 | 2,726,349 | |
| United States (c) | 84,468,000 | 86,110,000 | 88,623,000 | 90,089,000 | 91,534,000 | 82,298,000 | 48,000,000 | 49,000,000 | 51,075,000 | 51,000,000 | 51,000,000 | 46,000,000 | |
| Argentina | 23,129,000 | 24,800,000 | 29,000,000 | 28,000,000 | 28,000,000 | 32,500,000 | 16,200,000 | 17,400,000 | 130,000 | 105,600 | 107,300 | n.a. | |
| Brazil | 10,613,141 | 11,728,087 | 11,332,328 | 11,087,015 | 11,264,929 | 11,227,633 | 6,792,000 | 7,510,000 | 7,048,000 | 19,000,000 | 19,000,000 | 22,000,000 | |
| Chile | 842,136 | 598,273 | 323,325 | 446,000 | 453,000 | 448,700 | n.a. | n.a. | 7,016,800 | 7,048,000 | 7,052,000 | 6,854,295 | |
| Colombia | 10,829,784 | 12,687,757 | r 9,123,144 | 9,559,420 | 9,712,821 | 9,000,000 | 6,111,400 | n.a. | n.a. | n.a. | n.a. | n.a. | |
| Peru | 2,000 | 2,000 | n.a. | 1,150 | 1,150 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 5,000,000 | |
| Uruguay | 16,853,101 | 15,900,000 | 19,736,000 | 21,649,000 | 21,996,000 | 19,572,000 | 10,786,000 | 10,200,000 | 12,600,000 | n.a. | n.a. | n.a. | |
| Venezuela | 33,000,000 | 37,000,000 | 39,000,000 | 43,000,000 | 44,000,000 | 44,000,000 | n.a. | n.a. | n.a. | n.a. | n.a. | 12,500,000 | |
| China (e) | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | |
| Iran (f) | 2,180,000 | 2,137,000 | 1,895,000 | 2,000 | 2,000 | 2,000 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | |
| Japan (d) | 683,000 | 628,700 | 722,407 | 1,549,516 | 1,574,381 | 1,428,000 | 1,200,000 | 1,180,000 | 1,010,000 | 901,833 | 916,305 | 830,000 | |
| Korea (South) | 6,400,000 | 6,909,000 | 7,400,900 | 7,625,000 | 8,000,000 | 8,500,000 | 348,000 | 348,000 | 368,000 | 313,000 | 318,000 | 221,000 | |
| Korea (North) | 1,454,412 | 1,331,846 | 1,536,350 | 1,692,000 | 1,872,000 | 2,250,100 | 831,000 | 766,000 | 883,000 | n.a. | n.a. | n.a. | |
| Philippine Republic | 540,000 | 490,000 | 469,853 | 422,167 | 422,523 | 411,591 | 350,000 | 310,000 | 280,000 | 1,060,000 | 1,060,000 | 1,305,000 | |
| Thailand | 1,528,658 | 2,186,257 | 2,462,842 | 2,629,280 | 2,671,472 | 2,550,000 | 864,000 | 1,236,000 | 1,400,000 | 1,600,000 | 1,600,000 | 23,000 | |
| Turkey | 201,000 | 169,000 | ... | ... | ... | ... | 110,000 | 93,000 | ... | ... | ... | ... | |
| New Caledonia | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | |
| TOTAL | 515,000,000 | 539,000,000 | 572,000,000 | 593,000,000 | 602,000,000 | 610,000,000 | ... | ... | ... | ... | ... | ... | |
| WORLD'S TOTAL | 619,000,000 | 661,000,000 | 697,000,000 | 742,000,000 | 754,000,000 | 765,000,000 | ... | ... | ... | ... | ... | ... | |

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

(a) Estimated. (b) Years ended March 20 following that stated.

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

1967—1,107,987; 1968—1,096,000; 1969—884,000; 1970—701,078; (Tonnes): 1970—712,328; 1971—n.a.

(e) Including by-product magnetite as follows (long tons): 1967—860,000; 1968—911,912; 1969—1,852,035; 1970—1,935,925 (Tonnes): 1970—1,966,991; 1971—2,228,222

(f) United States Bureau of Mines' estimate.

(c) Usable ore.

DETAILS OF PRODUCTION OF IRON ORE IN CERTAIN COUNTRIES

| Producing Country | Long tons | | | | Tonnes | |
|--|------------|------------|------------|------------|------------|--------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Hematite | 399,500 | 364,800 | 279,000 | 291,600 | 296,300 | 291,900 |
| Jurassic ironstones— | | | | | | |
| Lower lias | 4,732,100 | 4,741,700 | 4,408,000 | 4,616,800 | 4,690,900 | 4,022,900 |
| Middle lias | 537,600 | 245,100 | 232,000 | 192,900 | 196,000 | 180,300 |
| Inferior oolite | 7,069,100 | 8,368,900 | 7,184,000 | 6,726,900 | 6,834,800 | 5,733,200 |
| Sierra Leone (c)— | | | | | | |
| Concentrates | 2,168,160 | 2,355,870 | 2,387,508 | 2,388,201 | 2,426,532 | 2,609,888 |
| Fines | 55,483 | 63,954 | — | — | — | — |
| Ferromax | 824 | 1,422 | 1,053 | 525 | 533 | — |
| OTHER COUNTRIES | | | | | | |
| France— | | | | | | |
| Phosphoric | 45,315,739 | 51,448,000 | 52,033,000 | 53,486,000 | 54,344,000 | 42,692,000 |
| Medium phosphoric | 3,086,871 | 2,898,000 | 2,505,000 | 2,372,000 | 2,410,000 | 11,268,000 |
| Non-phosphoric | 41,644 | 19,000 | 12,000 | 50,000 | 51,000 | 1,902,000 |
| Luxemburg— | | | | | | |
| Siliceous iron ore | 2,862,828 | 2,887,314 | 3,120,384 | 3,068,492 | 3,117,732 | 2,258,165 |
| Calcareous iron ore | 3,067,740 | 3,337,684 | 3,049,369 | 2,526,769 | 2,566,707 | 2,243,067 |
| Ferruginous limestone | 273,780 | 72,405 | 41,154 | 37,420 | 38,020 | 5,772 |
| Portugal— | | | | | | |
| Hematite | 55,000 | 58,000 | 39,208 | 28,120 | 28,572 | 6,465 |
| Magnetite | 86,000 | 87,000 | 66,363 | 42,623 | 43,307 | 44,931 |
| Manganiferous iron ore | 53,000 | 52,000 | 55,273 | 53,117 | 53,970 | 48,010 |
| Sweden— | | | | | | |
| Manganiferous iron ore | 111,000 | 81,000 | 80,000 | 10,000 | 10,000 | 21,000 |
| Other iron ore | 27,778,000 | 31,827,000 | 32,581,000 | 31,001,600 | 31,499,100 | 34,346,000 |
| <i>By phosphorus content (a)</i> | | | | | | |
| 0·0% | 269,672 | 269,672 | 298,000 | 283,000 | 288,000 | 280,000 |
| 0·0% to under 0·006% | 1,692,637 | 1,433,064 | 1,502,000 | 1,855,000 | 1,885,000 | 1,785,000 |
| 0·006% to under 0·04% | 3,114,349 | 2,012,655 | 4,505,000 | 4,967,000 | 5,047,000 | 6,011,000 |
| 0·04% to under 0·1% | 3,361,481 | 5,703,194 | 3,124,000 | 4,383,000 | 4,453,000 | 5,757,000 |
| 0·1% to under 0·7% | 6,062,642 | 7,692,401 | 7,595,000 | 6,534,000 | 6,639,000 | 8,036,000 |
| 0·7% to under 1% | 2,724,848 | 3,531,685 | 5,197,000 | 4,819,000 | 4,896,000 | 3,401,000 |
| 1% and over | 10,663,845 | 11,265,151 | 10,440,000 | 8,170,000 | 8,301,000 | 9,097,000 |
| South Africa— | | | | | | |
| Hematite | 7,614,987 | 7,190,795 | 6,796,855 | 7,111,121 | 7,225,233 | 8,268,125 |
| Magnetite | — | 911,911 | 1,852,035 | 1,935,925 | 1,966,991 | 2,228,222 |
| United States— | | | | | | |
| Ore containing less than 5% Mn— | | | | | | |
| Hematite (b) | 40,991,000 | 34,627,000 | 34,958,000 | 33,584,000 | 34,123,000 | } 82,298,000 |
| Magnetite (b) | 40,656,000 | 49,331,000 | 51,299,000 | 53,792,000 | 54,655,000 | |
| Limonite | 1,760,000 | 1,177,000 | 1,343,000 | 1,550,000 | 1,575,000 | |
| Pyrite cinder and sinter | 772,000 | 728,000 | 729,000 | 835,000 | 848,000 | |
| Manganiferous iron ore (d) (5% to under 35% Mn content) | | | | | | |
| | 289,000 | 245,000 | 385,000 | 329,000 | 334,000 | 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.

(d) Shipments.

EXPORTS OF IRON ORE
(including Manganiferous Iron Ores)

| Exporting Country | Long tons | | | | Tonnes | |
|-------------------------------|-------------|-------------|--------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom .. | 213 | 1,198 | 334 | 103 | 105 | 93 |
| Sierra Leone .. | 2,224,667 | 2,495,451 | r 2,388,561 | 2,388,726 | 2,427,065 | 2,609,888 |
| Canada .. | 31,406,52 | 36,010,719 | 27,906,105 | 38,726,592 | 39,348,055 | 34,163,854 |
| Hong Kong .. | 167,01 | 168,529 | 183,270 | 175,069 | 177,878 | 179,942 |
| India (b) .. | 13,516,997 | 15,498,348 | 16,285,529 | 20,854,558 | 21,189,221 | 19,914,396 |
| Malaysia (West) .. | 5,245,852 | 5,106,707 | 5,262,304 | 4,823,618 | 4,901,037 | n.a. |
| Australia (e)— | | | | | | |
| Iron ore .. | d 5,468,386 | d12,325,812 | d 20,071,987 | d33,244,279 | d33,777,850 | d48,347,675 |
| Burnt pyrites .. | — | — | — | 39,715 | 40,352 | — |
| Irish Republic— | | | | | | |
| Burnt pyrites .. | — | 1,491 | — | 2,156 | 2,191 | 732 |
| OTHER COUNTRIES | | | | | | |
| Albania— | | | | | | |
| Iron ore .. | 386,000 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Austria .. | 389 | 572 | 4,244 | 631 | 641 | 600 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Iron ore .. | 61,126 | 16,675 | 64,891 | 35,373 | 35,941 | 75,362 |
| Burnt pyrites .. | 226,790 | 266,959 | 220,905 | 282,486 | 287,019 | 228,843 |
| Denmark— | | | | | | |
| Bog ore (a) .. | 27,171 | 16,000 | 23,889 | 20,574 | 20,904 | 9,716 |
| Burnt pyrites .. | 81,975 | 100,139 | 117,325 | 109,641 | 111,401 | 98,780 |
| Finland— | | | | | | |
| Iron ore .. | 12,008 | 12,280 | 121,448 | 178,206 | 181,066 | 27,251 |
| Burnt pyrites .. | 5,530 | 14,125 | 4,978 | 2,364 | 2,402 | n.a. |
| France— | | | | | | |
| Iron ore .. | 17,260,172 | 18,003,976 | 18,223,035 | 18,348,811 | 18,643,263 | 18,303,805 |
| Burnt pyrites .. | 223,365 | 206,440 | 180,334 | 215,616 | 219,076 | 149,785 |
| Germany (Federal)— | | | | | | |
| Iron ore .. | 326,973 | 18,035 | 17,170 | 9,397 | 9,548 | 8,658 |
| Burnt pyrites .. | 50,606 | 21,638 | 11,865 | 11,698 | 11,886 | 28,573 |
| Greece— | | | | | | |
| Iron ore .. | — | 591 | — | — | — | — |
| Burnt pyrites .. | 57,481 | 34,172 | 58,299 | 73,659 | 74,841 | 104,216 |
| Italy— | | | | | | |
| Iron ore .. | 19 | 23 | 126 | 76 | 77 | 64 |
| Burnt pyrites .. | 706,466 | 622,871 | 361,143 | 432,493 | 439,433 | 287,082 |
| Netherlands— | | | | | | |
| Iron ore .. | 3,277 | 3,241 | 6,993 | 95,630 | 97,165 | 20,712 |
| Burnt iron pyrites .. | 88,911 | 69,045 | 77,307 | 85,501 | 86,873 | 28,393 |
| Norway— | | | | | | |
| Iron ore .. | 2,345,625 | 2,697,254 | 2,688,547 | 2,917,056 | 2,963,866 | 2,742,399 |
| Burnt pyrites .. | 120,555 | 137,190 | 138,169 | 150,398 | 152,812 | 160,040 |
| Portugal— | | | | | | |
| Burnt pyrites .. | — | — | 4,922 | 9,029 | 9,174 | 5,475 |
| Spain (c) .. | 1,516,294 | 1,825,015 | 2,307,208 | 2,617,384 | 2,659,385 | 3,089,094 |
| Sweden— | | | | | | |
| Iron ore .. | 22,692,000 | 28,306,700 | r 31,220,000 | 27,529,226 | 27,971,000 | 26,179,000 |
| Burnt pyrites .. | 294,000 | 273,000 | r 260,815 | 441,909 | 449,000 | 378,000 |
| Switzerland (c) .. | 14,338 | 10,308 | 13,037 | 5,010 | 5,091 | 5,506 |
| U.S.S.R.— | | | | | | |
| Iron ore .. | 24,167,200 | 31,692,000 | 32,549,000 | 35,530,000 | 36,100,000 | 36,500,000 |

(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.)

| Exporting Country | Long tons | | | | Tonnes | |
|------------------------|------------|-------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Yugoslavia— | | | | | | |
| Iron ore | 89,714 | 95,808 | 151,318 | 176,039 | 178,864 | 121,041 |
| Burnt pyrites | 516 | 2,332 | 1,173 | 83 | 84 | 63 |
| Algeria— | | | | | | |
| Iron ore | 2,400,000 | 3,052,692 | 2,773,566 | 1,944,102 | 1,975,299 | 1,834,000 |
| Burnt pyrites | 114,365 | 102,286 | 9,547 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Angola | 768,290 | 2,412,705 | 5,020,000 | 6,234,863 | 6,334,914 | 5,497,790 |
| Guinea | 14,479 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Liberia | 17,163,135 | 18,930,608 | 20,272,654 | 23,189,061 | 23,561,186 | 20,651,214 |
| Mauritania | 7,330,200 | 7,581,000 | 8,441,000 | 9,074,300 | 9,219,900 | 8,600,638 |
| Morocco— | | | | | | |
| Iron ore | 901,297 | 646,243 | 853,994 | 788,484 | 801,137 | 456,969 |
| Burnt pyrites | 5,049 | 837 | <i>n.a.</i> | 234 | 238 | 60 |
| South Africa | 2,350,630 | 2,677,814 | 2,471,639 | 2,964,076 | 3,011,641 | 3,343,221 |
| Sudan | 8,612 | 9,857 | 8,610 | <i>n.a.</i> | <i>n.a.</i> | 4,100 |
| Tunisia | 762,642 | 643,621 | 558,497 | 618,524 | 628,449 | 812,243 |
| Mexico | 77 | 134 | 24 | 353 | 359 | 8 |
| United States | 5,943,198 | 5,926,729 | 5,159,823 | 5,397,491 | 5,484,105 | 3,089,517 |
| Brazil | 14,053,619 | 14,812,045 | 21,138,359 | 27,618,202 | 28,061,393 | 31,138,500 |
| Chile | 9,737,628 | 10,331,308 | 9,492,706 | 9,751,725 | 9,908,211 | <i>n.a.</i> |
| Peru | 5,230,481 | 5,122,828 | 5,756,856 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Venezuela | 16,226,490 | 14,814,861 | 18,691,982 | 20,761,000 | 21,094,000 | <i>n.a.</i> |
| Korea (South) | 657,835 | 759,685 | 661,934 | 506,503 | 514,631 | 420,837 |
| Philippine Republic— | | | | | | |
| Iron ore | 1,527,959 | 1,491,646 | 1,523,022 | 1,712,534 | 1,740,015 | 2,162,450 |
| Burnt pyrites | 11,623 | 19,273 | 61,419 | 90,439 | 91,890 | 50,841 |
| Thailand | 522,166 | 395,844 | 484,864 | 51,508 | 52,335 | 4,500 |
| Turkey | 99,523 | 62,271 | 9,251 | 14,800 | 15,000 | <i>n.a.</i> |
| New Caledonia | 195,106 | 194,435 | — | — | — | — |

IMPORTS OF IRON ORE
(including Manganiferous Iron Ore)

| Importing Country | Long tons | | | | Tonnes | |
|-------------------------------|------------|------------|------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Iron ore | 15,521,447 | 17,246,957 | 17,972,830 | 19,594,560 | 19,909,049 | 17,456,919 |
| Burnt pyrites | 553,417 | 343,456 | 196,676 | 53,601 | 54,461 | 281,997 |
| Kenya | 5,500 | — | 5,671 | 9,249 | 9,398 | 100 |
| Canada | 2,400,669 | 2,749,588 | 2,260,356 | 2,125,594 | 2,159,704 | 1,383,545 |
| Hong Kong | 1,984 | — | 6,093 | — | — | — |
| India (d) | — | — | 166 | 290 | 295 | 231 |
| Singapore | — | — | 70 | 37,327 | 37,926 | 62,133 |
| Australia (a) | 204,056 | 168,230 | 116,077 | 178 | 181 | 2,393 |
| Irish Republic | 555 | 518 | 456 | 323 | 328 | 354 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Iron ore | 889,978 | 1,352,805 | 1,580,063 | 2,078,405 | 2,111,757 | 1,842,355 |
| Burnt pyrites | 329,489 | 241,538 | 219,031 | 234,479 | 238,242 | 275,967 |
| Belgium-Luxemburg E.U.— | | | | | | |
| Iron ore | 21,533,065 | 25,921,327 | 27,082,154 | 28,707,965 | 29,168,655 | 28,151,800 |
| Burnt pyrites | 125,126 | 149,968 | 124,179 | 153,237 | 155,696 | 132,409 |
| Czechoslovakia | 10,202,000 | 10,971,000 | 10,546,000 | 12,523,000 | 12,724,000 | 12,592,000 |
| Denmark (b) | 7,517 | 6,400 | 15,416 | 7,063 | 7,176 | 7,258 |
| Finland | 627,820 | 618,349 | 1,187,552 | 731,886 | 743,631 | 895,359 |
| France— | | | | | | |
| Iron ore | 4,766,596 | 4,937,516 | 6,831,325 | 9,482,970 | 9,635,144 | 9,369,637 |
| Burnt pyrites | 44,873 | 33,752 | 31,689 | 57,718 | 58,644 | 68,473 |
| Germany (Federal)— | | | | | | |
| Iron ore | 31,357,416 | 39,018,272 | 42,735,354 | 47,063,117 | 47,818,360 | 40,321,893 |
| Burnt pyrites | 1,587,537 | 1,760,999 | 1,609,093 | 1,537,757 | 1,562,434 | 1,184,076 |
| Germany (East) (c) | 1,524,500 | 1,401,400 | 1,298,955 | 1,466,074 | 1,489,600 | 1,560,700 |
| Greece | 175,245 | 362,923 | 463,641 | 544,001 | 552,731 | 432,147 |
| Hungary | 2,763,652 | 2,785,304 | 2,867,850 | 3,069,372 | 3,118,626 | 3,156,000 |
| Italy | 9,769,503 | 9,909,465 | 10,785,153 | 10,685,860 | 10,857,341 | 11,157,600 |
| Netherlands | 3,583,135 | 4,282,405 | 4,883,299 | 5,330,363 | 5,415,900 | 5,991,261 |
| Norway | 7,606 | 13,633 | 46,905 | 99,026 | 100,615 | 10,186 |
| Poland | 9,897,000 | 10,931,000 | 11,392,000 | 11,656,000 | 11,843,000 | 12,430,000 |
| Portugal | 42,449 | 99,991 | 146,031 | 191,616 | 194,691 | 340,723 |
| Roumania | 3,307,032 | 4,474,202 | 5,303,000 | 6,168,800 | 6,267,800 | 6,939,400 |
| Spain | 588,547 | 584,750 | 963,366 | 2,392,668 | 2,431,064 | 3,247,955 |
| Sweden— | | | | | | |
| Iron Ore | 3,000 | 80,000 | 46,000 | 132,000 | 134,000 | 2,000 |
| Burnt pyrites | 3,000 | 5,000 | 1,968 | 2,953 | 3,000 | 6,000 |
| Switzerland (b) | 21,149 | 23,691 | 37,651 | 33,043 | 33,573 | 49,377 |
| Yugoslavia | 126,182 | 197,636 | 257,457 | 208,215 | 211,556 | 194,978 |
| Morocco (b) | 443 | 1,526 | 886 | 1,230 | 1,250 | 955 |
| United States— | | | | | | |
| Iron ore | 44,627,059 | 43,940,547 | 40,732,000 | 44,875,996 | 45,596,123 | 40,768,078 |
| Burnt pyrites | | | | | | |
| Argentina | 866,155 | 606,001 | 459,826 | 633,183 | 643,344 | 1,591,970 |
| Formosa | 66,565 | 49,037 | 56,846 | 72,200 | 73,359 | n.a. |
| Japan— | | | | | | |
| Iron ore | 55,790,332 | 67,066,569 | 81,930,146 | 100,457,672 | 102,070,384 | 114,913,877 |
| Burnt pyrites | 9,389 | 21,230 | 2,510 | 19,337 | 19,647 | 37,243 |

(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*

| Producing Country | Long tons | | | | Tonnes | |
|--------------------------------|--------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | 15,153,000 | 16,431,700 | 16,389,700 | 17,392,600 | 17,671,700 | 15,416,300 |
| Rhodesia | 256,000 | <i>n.a.</i> | (<i>d</i>) 266,000 | (<i>d</i>) 276,000 | (<i>d</i>) 280,000 | (<i>d</i>) 280,000 |
| Canada | 6,356,067 | 7,633,494 | 6,844,216 | 8,299,419 | 8,432,624 | 8,009,042 |
| India | 6,957,588 | 7,364,000 | 7,384,300 | 7,117,400 | 7,231,800 | 6,865,700 |
| Australia (<i>c</i>) | 4,977,334 | 5,483,000 | 6,010,000 | 6,051,000 | 6,148,000 | 6,128,000 |
| TOTAL | 33,691,000 | 37,168,000 | 36,840,000 | 39,132,000 | 39,758,000 | 36,700,000 |
| OTHER COUNTRIES | | | | | | |
| Austria | 2,111,400 | 2,440,000 | 2,772,000 | 2,923,000 | 2,970,000 | 2,855,000 |
| Belgium | 8,761,394 | 10,206,220 | 11,014,000 | 10,674,000 | 10,845,000 | 10,407,000 |
| Bulgaria | 1,012,000 | 1,100,000 | 1,080,000 | 1,232,000 | 1,252,000 | 1,341,000 |
| Czechoslovakia | 6,809,000 | 6,907,000 | 6,994,000 | 7,531,000 | 7,652,000 | 8,073,000 |
| Finland | 1,021,600 | 1,088,000 | 1,214,000 | 1,204,000 | 1,223,000 | 1,034,000 |
| France (<i>a</i>) | 15,462,067 | 16,190,198 | 17,924,458 | 18,917,810 | 19,221,385 | 18,344,000 |
| Germany— | | | | | | |
| Federal Republic | 26,933,000 | 29,826,000 | 33,231,000 | 33,097,000 | 33,628,000 | 29,990,000 |
| Eastern | 2,485,000 | 2,296,000 | 2,065,000 | 1,962,000 | 1,994,000 | 2,027,400 |
| Hungary | 1,631,000 | 1,623,000 | <i>r</i> 1,733,000 | 1,806,000 | 1,835,000 | 1,988,000 |
| Italy | 7,346,375 | 7,867,079 | 7,821,963 | 8,393,800 | 8,528,520 | 8,728,000 |
| Luxemburg | 3,899,996 | 4,239,715 | 4,795,323 | 4,737,927 | 4,813,957 | 4,588,403 |
| Netherlands | 2,545,000 | 2,776,000 | 3,406,000 | 3,537,000 | 3,594,000 | 3,759,000 |
| Norway | 1,212,481 | 1,366,379 | 1,418,194 | 1,303,742 | 1,324,663 | 1,192,132 |
| Poland | 6,477,000 | 6,732,000 | 6,917,000 | 7,181,000 | 7,296,000 | 7,497,000 |
| Portugal | 280,836 | 284,047 | 339,172 | 310,416 | 315,398 | 363,000 |
| Roumania | 2,417,000 | 2,945,000 | 3,422,000 | 4,144,000 | 4,210,000 | 4,382,000 |
| Spain | 2,722,000 | 2,824,000 | 3,342,000 | 4,210,000 | 4,278,000 | 4,955,000 |
| Sweden | 2,534,953 | 2,767,600 | 2,742,000 | 2,808,300 | 2,853,400 | 2,828,000 |
| Switzerland | 24,000 | 22,000 | 25,000 | 28,000 | 28,000 | 32,000 |
| U.S.S.R. | 73,630,000 | 77,600,000 | 80,342,000 | 84,576,000 | 85,933,000 | 89,254,000 |
| Yugoslavia | 1,236,000 | 1,266,000 | 1,267,487 | 1,355,000 | 1,377,000 | 1,630,000 |
| Egypt | 197,000 | (<i>d</i>) 200,000 | 416,000 | 447,000 | 454,000 | (<i>d</i>) 450,000 |
| South Africa | 3,718,900 | 4,055,900 | 4,286,000 | 4,277,500 | 4,346,100 | 4,416,500 |
| Mexico | 1,318,669 | 1,570,000 | 2,100,000 | 2,316,000 | 2,353,000 | 2,415,000 |
| United States | 79,885,000 | <i>r</i> 81,596,000 | <i>r</i> 87,171,000 | 84,650,000 | 86,008,000 | 75,721,000 |
| Argentina | 600,000 | 559,666 | <i>r</i> 602,000 | 833,000 | 846,000 | 890,000 |
| Brazil | 2,950,000 | 3,300,000 | 3,660,000 | 4,139,000 | 4,205,000 | 4,763,000 |
| Chile (<i>b</i>) | 498,000 | 434,600 | 476,000 | 449,000 | 456,000 | 499,845 |
| Colombia | 203,352 | 201,938 | 198,197 | 232,000 | 236,000 | 197,000 |
| Peru (<i>b</i>) | 29,000 | 110,000 | 170,000 | 85,000 | 86,000 | 90,000 |
| Venezuela | 416,000 | 604,000 | 512,000 | 502,000 | 510,000 | (<i>d</i>) 510,000 |
| China (<i>d</i>) | 14,000,000 | 19,000,000 | 20,000,000 | 22,000,000 | 22,000,000 | 27,000,000 |
| Formosa | 85,408 | 76,590 | 78,459 | 60,074 | 61,039 | 77,000 |
| Japan | 40,400,000 | 46,713,000 | 58,505,000 | 68,612,000 | 69,713,000 | 74,635,000 |
| Korea (South) | 22,039 | 22,300 | 51,000 | 59,196 | 60,146 | 23,000 |
| Korea (North) | <i>d</i> 1,722,000 | <i>d</i> 2,000,000 | <i>d</i> 2,214,000 | <i>d</i> 2,400,000 | <i>d</i> 2,400,000 | <i>d</i> 2,500,000 |
| Thailand | 6,000 | 17,000 | 11,000 | 11,000 | 11,000 | 14,000 |
| Turkey | 842,000 | 896,000 | <i>r</i> 933,000 | 1,017,000 | 1,033,000 | 883,000 |
| TOTAL | 317,000,000 | 343,000,000 | 376,000,000 | 391,000,000 | 397,000,000 | 400,000,000 |
| WORLD'S TOTAL | 351,000,000 | 380,000,000 | 413,000,000 | 430,000,000 | 437,00,000 | 437,000,000 |

* 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

| Producing Country | Long tons | | | | Tonnes | |
|--|-------------|-------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Hematite | 641,500 | 887,600 | 863,200 | 936,800 | 951,800 | 828,300 |
| Basic | 13,681,100 | 14,925,300 | 14,776,700 | 15,588,800 | 15,839,000 | 13,963,500 |
| Foundry | } 678,700 | } 453,700 | } 596,100 | } 699,000 | } 710,200 | } 471,200 |
| Forge | | | | | | |
| Direct castings | | | | | | |
| Blast furnace ferro-alloys— | | | | | | |
| Spiegeleisen | } 151,700 | } 165,200 | } 153,700 | } 168,000 | } 170,700 | } 153,300 |
| Ferro-manganese | | | | | | |
| Canada— | | | | | | |
| Basic | 5,516,909 | 6,751,729 | 5,854,432 | } 7,388,563 | } 7,507,149 | } 7,108,367 |
| Foundry | 475,394 | 500,446 | 561,329 | | | |
| Malleable | 213,771 | 232,290 | 246,041 | } 186,960 | } 189,960 | } 192,958 |
| Ferro-alloys (a) | 149,993 | 149,029 | 184,414 | | | |
| India— | | | | | | |
| Basic | } 6,802,000 | } 7,200,000 | } 7,200,000 | } 6,902,000 | } 7,013,000 | } 6,661,000 |
| Foundry | | | | | | |
| Other pig-iron | | | | | | |
| Direct castings | | | | | | |
| Ferro-manganese | 133,684 | 143,507 | 152,458 | 172,838 | 175,612 | 163,902 |
| Ferro-silicon | 19,881 | 20,176 | 26,758 | 27,154 | 27,590 | 29,359 |
| Ferro-chrome | 68 | 317 | 5,107 | 15,121 | 15,364 | 11,011 |
| Australia— | | | | | | |
| Pig-iron | 4,977,334 | 5,483,000 | 6,010,000 | 6,051,000 | 6,148,000 | 6,128,000 |
| Ferro-manganese (b) | 56,168 | 36,317 | 49,455 | 41,897 | 42,569 | 38,852 |
| Ferro-silicon (b) | 8,807 | 10,052 | 9,382 | 9,257 | 9,406 | 9,960 |
| Silico-manganese (b) | 18,940 | 14,870 | 16,036 | 22,822 | 23,188 | 21,316 |
| Ferro-chrome (b) | 2,182 | 2,472 | 2,408 | 2,135 | 2,169 | 313 |
| Ferro-nickel (b) | — | — | 19 | 1,336 | 1,357 | 349 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Basic | 2,071,705 | 2,406,793 | 2,749,960 | 2,866,443 | } 2,912,441 | } 2,849,124 |
| Hematite | 34,024 | 27,951 | 21,111 | 50,972 | | |
| Electric furnace ferro-alloys | 5,700 | 5,500 | 6,000 | 5,610 | 5,700 | 5,300 |
| Belgium— | | | | | | |
| Basic | 8,655,058 | 9,994,616 | 10,896,000 | 10,571,000 | 10,741,000 | 10,344,000 |
| Foundry | 93,134 | 99,405 | 101,000 | 99,000 | 101,000 | 62,400 |
| Ferro-alloys | 13,202 | 13,780 | 17,000 | 3,000 | 3,000 | n.a. |
| Czechoslovakia— | | | | | | |
| Basic | 6,157,000 | 6,322,000 | 6,434,000 | 7,015,000 | 7,128,000 | 7,507,000 |
| Foundry | 513,000 | 439,000 | 444,000 | 387,000 | 393,000 | 435,000 |
| Blast furnace ferro-alloys | 44,000 | 48,000 | 21,000 | 27,000 | 27,000 | 19,000 |
| Electric furnace— | | | | | | |
| ferro-alloys | 95,000 | 98,000 | 95,000 | 102,000 | 104,000 | 112,000 |
| France— | | | | | | |
| Phosphoric (over 1.4% P)— | | | | | | |
| Basic | 11,893,889 | 12,486,121 | 13,115,377 | 13,096,296 | 13,306,453 | 12,691,000 |
| Foundry | 106,911 | 90,957 | 106,452 | 58,902 | 59,847 | 52,000 |
| Semi-phosphoric (from 0.5% to 1.4% P)— | | | | | | |
| Foundry | 96,341 | 94,207 | 93,729 | 147,438 | 149,804 | 169,000 |
| Open hearth, basic | (c) | (c) | (c) | (c) | (c) | (c) |

(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.)

| Producing Country | Long tons | | | | Tonnes | |
|---|------------|------------|------------|------------|------------|------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| France (cont.)— | | | | | | |
| Hematite (less than 0.5%P)— | | | | | | |
| Foundry | 615,195 | 571,367 | 709,495 | 869,531 | 883,484 | 875,000 |
| Open hearth and Bessemer | 2,322,088 | 2,466,278 | 3,330,972 | 4,103,800 | 4,169,654 | 3,993,000 |
| Blast furnace ferro-alloys— | | | | | | |
| Spiegeleisen | 56,529 | 368,056 | 420,640 | 478,773 | 486,456 | 445,000 |
| Ferro-manganese | 258,340 | | | | | |
| Other pig-iron | 113,212 | 112,773 | 147,793 | 163,070 | 165,687 | 119,000 |
| Electric furnace and alumino-thermic ferro-alloys— | | | | | | |
| Ferro-silicon (50% Si) | 112,569 | 128,901 | 147,421 | 169,000 | 172,000 | 182,807 |
| Silico-spiegeleisen and silico-manganese | 15,059 | 8,492 | 11,934 | 14,900 | 15,140 | 13,140 |
| Ferro-chrome | 93,586 | 96,116 | 105,863 | 100,822 | 102,440 | 90,212 |
| Silico-chrome | | | | | | |
| Ferro-titanium | 6,400 | 7,650 | 9,900 | 10,265 | 10,430 | 7,030 |
| Ferro-tungston, ferro-molybdenum, ferro-vanadium (W, Mo, V content) | | | | | | |
| Other ferro-alloys | | | | | | |
| Other ferro-alloys | 43,100 | 44,820 | 46,480 | 53,340 | 54,200 | 55,380 |
| Germany (Federal)— | | | | | | |
| Hematite and malleable | | | | | | |
| Basic | 999,000 | 1,080,000 | 1,157,000 | 1,323,000 | 1,344,000 | 997,000 |
| Foundry | 13,272,000 | 14,023,000 | 15,102,000 | 13,512,000 | 13,729,000 | 11,819,000 |
| Stahleisen | 244,000 | 275,000 | 300,000 | 319,000 | 324,000 | 280,000 |
| Spiegeleisen (blast-furnace) | 11,798,000 | 13,709,000 | 15,607,000 | 17,116,000 | 17,391,000 | 16,122,000 |
| Ferro-manganese (blast furnace) | 250,000 | 323,000 | 234,000 | 247,000 | 251,000 | 210,000 |
| Siegerland special | 370,000 | 418,000 | 435,000 | 580,000 | 589,000 | 562,000 |
| Other pig-iron | | | | | | |
| Ferro-silicon (blast-furnace) | 129,648 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Electric furnace and alumino-thermic ferro-alloys | | | | | | |
| Germany (East)— | | | | | | |
| Foundry | 602,200 | 2,296,000 | 2,065,000 | 1,963,000 | 1,994,000 | 2,027,400 |
| Open hearth | 1,408,100 | | | | | |
| Basic Bessemer | 464,200 | | | | | |
| Spiegeleisen | 10,600 | | | | | |
| Other | — | | | | | |
| Hungary— | | | | | | |
| Basic | 1,614,000 | 1,599,000 | 1,708,000 | 1,769,000 | 1,798,000 | 1,890,000 |
| Foundry | 9,000 | 12,000 | 18,000 | 24,000 | 24,000 | 80,000 |
| Spiegeleisen | 2,000 | 1,000 | — | — | — | n.a. |
| Ferro-manganese | 7,558 | 10,904 | 112 | 5,911 | 6,006 | 7,000 |
| Ferro-silicon | 6,544 | 6,573 | 6,420 | 7,156 | 7,271 | n.a. |
| Italy— | | | | | | |
| Pig-iron | 7,177,487 | 7,700,748 | 7,657,635 | 8,199,952 | 8,331,561 | 8,536,336 |
| Spiegeleisen | 4,120 | 4,761 | 4,259 | 3,820 | 3,881 | 4,553 |
| Ferro-manganese | 25,511 | 25,103 | 22,507 | 27,148 | 27,584 | 24,658 |
| Ferro-silicon | 62,172 | 58,787 | 63,032 | 76,782 | 78,014 | 83,432 |
| Silico-manganese | 32,488 | 32,412 | 28,428 | 34,362 | 34,913 | 27,818 |
| Ferro-chrome | 31,398 | 34,041 | 33,257 | 35,782 | 36,356 | 35,292 |
| Ferro-titanium | 203 | 135 | 422 | 592 | 601 | 673 |
| Ferro-tungsten | — | 11 | 9 | 56 | 57 | — |
| Ferro-vanadium | 170 | 69 | 129 | 92 | 93 | 218 |
| Ferro-molybdenum | 665 | 347 | 1,243 | 1,524 | 1,548 | 795 |

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

| Producing Country | Long tons | | | | Tonnes | |
|--|------------|------------|------------|------------|------------|------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Italy (cont.)— | | | | | | |
| Silico-aluminium .. | 711 | 263 | 501 | 779 | 812 | n.a. |
| Silicon pig iron (10-12% Si) .. | 1,947 | 1,410 | 2,641 | 2,450 | 2,489 | 1,864 |
| Silico-spiegeleisen .. | 1,949 | 1,850 | 2,538 | 2,082 | 2,115 | 2,232 |
| Silico-chrome .. | — | — | — | — | — | — |
| Calcium silicide .. | 4,699 | 4,566 | 4,529 | 4,814 | 4,891 | 5,566 |
| Ferro-phosphorus .. | 1,176 | 1,204 | 832 | 1,072 | 1,089 | n.a. |
| Luxemburg— | | | | | | |
| Basic .. | 3,899,996 | 4,239,715 | 4,795,323 | 4,737,927 | 4,813,957 | 4,588,403 |
| Norway— | | | | | | |
| Pig-iron .. | 626,776 | 663,433 | 671,104 | 626,307 | 636,357 | 618,737 |
| Ferro-silicon .. | 283,304 | 350,800 | 347,562 | 240,247 | 244,102 | } 573,395 |
| Ferro-manganese .. | 133,226 | 166,598 | 205,502 | } 437,188 | } 444,204 | |
| Ferro-silico-manganese | 131,800 | 139,713 | 144,310 | | | |
| Ferro-chrome and silico- chrome .. | 32,222 | 38,699 | 40,927 | | | |
| Other ferro-alloys .. | 5,153 | 7,136 | 8,789 | | | |
| Portugal— | | | | | | |
| Basic .. | 263,060 | 262,848 | 313,185 | 286,238 | 290,831 | 337,000 |
| Foundry .. | 10,395 | 13,897 | 15,445 | 16,887 | 17,158 | 19,000 |
| Ferro-manganese .. | 938 | 800 | 1,597 | 1,151 | 1,170 | } 7,000 |
| Ferro-silicon .. | 6,079 | 6,207 | 8,576 | 5,838 | 5,932 | |
| Ferro-tungsten .. | 364 | 295 | 368 | 302 | 307 | |
| Spain— | | | | | | |
| Pig-iron .. | 2,644,000 | 2,735,000 | 3,248,000 | 4,099,000 | 4,165,000 | 4,825,000 |
| Ferro-manganese .. | 40,284 | 40,294 | 44,092 | 57,870 | 58,799 | 62,799 |
| Ferro-silicon .. | 21,873 | 20,483 | 24,703 | 28,793 | 29,255 | 34,791 |
| Ferro-tungsten .. | } 15,649 | } 28,345 | } 24,999 | } 23,798 | } 24,180 | } 32,410 |
| Ferro-chrome .. | | | | | | |
| Ferro-phosphorus .. | | | | | | |
| Other ferro-alloys .. | | | | | | |
| Sweden— | | | | | | |
| Pig-iron .. | 2,320,381 | 2,441,500 | 2,489,649 | 2,566,400 | 2,607,600 | 2,579,000 |
| Ferro-manganese .. | 38,772 | 34,300 | 28,936 | 31,300 | 31,800 | 36,800 |
| Ferro-silicon .. | 29,857 | 38,100 | 40,451 | 46,100 | 46,800 | 40,900 |
| Ferro-silico-manganese | 24,919 | 29,800 | 39,467 | 32,200 | 32,700 | 41,100 |
| Ferro-chrome .. | 53,980 | 59,800 | 61,414 | 62,700 | 63,700 | 63,700 |
| Ferro-tungsten .. | 316 | 492 | 492 | 500 | 500 | 500 |
| Ferro-molybdenum .. | 2,141 | 2,700 | 3,445 | 3,400 | 3,500 | 2,800 |
| Ferro-vanadium .. | 356 | 500 | 689 | 700 | 700 | 400 |
| Metallic silicon .. | 8,781 | 8,100 | 9,547 | 11,900 | 12,100 | 13,300 |
| Silico-chrome .. | 55,329 | 61,300 | 67,910 | 53,100 | 54,000 | 49,500 |
| Other ferro-alloys .. | 122 | — | — | — | — | — |
| U. S. S. R.— | | | | | | |
| Basic .. | 63,134,000 | 66,721,000 | 70,391,000 | 74,454,000 | 75,649,000 | 79,044,000 |
| Foundry .. | 9,161,000 | 9,437,000 | 8,789,000 | 9,015,000 | 9,160,000 | 9,203,000 |
| Spiegeleisen .. | 90,000 | 74,000 | 85,000 | 100,000 | 102,000 | 124,000 |
| Ferro-manganese .. | 897,000 | 929,000 | 865,000 | 953,000 | 968,000 | 856,000 |
| Other blast furnace ferro-alloys .. | 349,000 | 383,000 | 216,000 | 53,000 | 54,000 | 27,000 |
| Yugoslavia— | | | | | | |
| Pig-iron .. | 1,158,000 | 1,182,000 | 1,179,079 | 1,255,000 | 1,275,000 | 1,514,000 |
| Ferro-alloys .. | 77,422 | 83,658 | 88,407 | 100,000 | 102,000 | 116,000 |
| South Africa— | | | | | | |
| Pig-iron .. | 3,366,200 | 3,713,100 | 3,868,700 | 3,884,600 | 3,946,900 | 3,970,800 |
| Ferro-alloys .. | 352,700 | 342,900 | 417,300 | 392,900 | 399,200 | 445,700 |
| Mexico— | | | | | | |
| Ferro-manganese .. | n.a. | n.a. | 40,884 | 55,036 | 55,919 | 44,434 |
| Ferro-silicon .. | n.a. | n.a. | 11,767 | 11,010 | 11,187 | 14,326 |
| Ferro-silico-manganese | n.a. | n.a. | 4,748 | 6,005 | 6,101 | 6,908 |
| Ferro-chrome .. | n.a. | n.a. | — | 1,710 | 1,737 | 1,523 |

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

| Producing Country | Long tons | | | | Tonnes | |
|---|-------------|-------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| United States— | | | | | | |
| Basic | 72,629,000 | 74,461,000 | 80,257,600 | 77,177,000 | 78,415,000 | 70,162,000 |
| Bessemer | 1,537,000 | 1,283,000 | 1,166,100 | 1,292,000 | 1,313,000 | 1,102,000 |
| Low phosphorus | 148,000 | 151,000 | 85,700 | 130,000 | 132,000 | 132,000 |
| Foundry | 1,384,000 | 1,371,000 | 1,651,800 | 1,524,000 | 1,548,000 | 1,101,000 |
| Malleable | 1,634,000 | 1,611,000 | 1,300,000 | 1,263,000 | 1,283,000 | 1,212,000 |
| Other pig-iron | 332,000 | 391,000 | 375,900 | 252,000 | 256,000 | 44,000 |
| Ferro-manganese and spiegeleisen | 842,000 | 804,000 | 760,731 | 711,000 | 722,000 | 718,000 |
| Ferro-silicon and silvery pig-iron | (a) 471,000 | (a) 487,000 | (a) 518,000 | (a) 491,000 | (a) 499,000 | (a) 451,000 |
| Ferro-chrome | 234,000 | 226,000 | 224,000 | 245,000 | 249,000 | 196,000 |
| Silico-manganese | 205,000 | 277,000 | 258,000 | 220,000 | 223,000 | 210,000 |
| Other ferro-alloys | 649,760 | 603,700 | 525,000 | 549,000 | 558,000 | 394,000 |
| Argentina— | | | | | | |
| Pig-iron | 587,000 | 565,000 | 574,000 | 802,000 | 815,000 | 860,000 |
| Ferro-manganese | <i>n.a.</i> | <i>n.a.</i> | 13,986 | 18,010 | 18,299 | 13,102 |
| Ferro-silicon | <i>n.a.</i> | <i>n.a.</i> | 5,536 | 4,205 | 4,272 | 10,607 |
| Ferro-silico-manganese | <i>n.a.</i> | <i>n.a.</i> | 4,204 | 3,277 | 3,330 | 4,695 |
| Brazil— | | | | | | |
| Pig-iron | 3,050,000 | 3,316,000 | 3,837,000 | 4,138,831 | 4,205,247 | 4,737,167 |
| Ferro-chrome | <i>n.a.</i> | <i>n.a.</i> | 2,186 | 3,244 | 3,296 | 10,186 |
| Ferro-columbium | 520 | 1,126 | <i>n.a.</i> | — | — | 1,475 |
| Ferro-manganese | <i>n.a.</i> | <i>n.a.</i> | 38,721 | 42,127 | 42,803 | 72,217 |
| Ferro-nickel | <i>n.a.</i> | <i>n.a.</i> | 5,246 | 10,483 | 10,651 | 11,124 |
| Ferro-silicon | <i>n.a.</i> | <i>n.a.</i> | 18,593 | 18,030 | 18,319 | 11,451 |
| Ferro-silico-manganese | <i>n.a.</i> | <i>n.a.</i> | 8,145 | 15,192 | 15,436 | 18,482 |
| Chile— | | | | | | |
| Pig-iron | 498,000 | 434,600 | 476,000 | 449,000 | 456,000 | 499,845 |
| Ferro-manganese | <i>n.a.</i> | <i>n.a.</i> | 6,415 | 4,642 | 4,716 | 6,318 |
| Ferro-silicon | <i>n.a.</i> | <i>n.a.</i> | 2,423 | 2,647 | 2,689 | 3,298 |
| Ferro-silico-manganese | <i>n.a.</i> | <i>n.a.</i> | 2,332 | 3,149 | 3,200 | 2,239 |
| Ferro-molybdenum | <i>n.a.</i> | <i>n.a.</i> | 815 | 1,004 | 1,020 | 905 |
| Japan— | | | | | | |
| Pig-iron | 39,462,000 | 45,664,000 | 57,229,000 | 66,973,800 | 68,048,500 | 72,745,000 |
| Spiegeleisen | 700 | 400 | 300 | <i>n.a.</i> | <i>n.a.</i> | — |
| Ferro-chrome | 194,300 | 211,000 | 255,000 | 355,000 | 361,500 | — |
| Ferro-manganese | 297,800 | 339,000 | 375,000 | 437,500 | 444,500 | — |
| Ferro-molybdenum | 2,000 | 2,200 | 2,500 | 3,100 | 3,200 | — |
| Ferro-phosphorus | 2,400 | 2,400 | 2,100 | <i>n.a.</i> | <i>n.a.</i> | — |
| Ferro-silicon | 144,000 | 164,000 | 221,000 | 297,500 | 302,300 | 1,889,800 |
| Ferro-tungsten | 1,100 | 800 | 1,200 | 1,300 | 1,300 | — |
| Ferro-nickel | 105,200 | 132,000 | 177,000 | 260,500 | 264,700 | — |
| Silico-manganese | 173,100 | 187,000 | 226,000 | 266,000 | 270,000 | — |
| Calcium-silicon | 7,800 | 9,700 | 11,200 | <i>n.a.</i> | <i>n.a.</i> | — |
| Turkey— | | | | | | |
| Pig-iron | 834,000 | 896,000 | 933,000 | 1,009,000 | 1,025,000 | 882,000 |
| Ferro-chrome | 8,337 | 8,400 | 9,050 | 9,300 | 9,500 | <i>n.a.</i> |

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

PRODUCTION OF STEEL INGOTS AND CASTINGS*

| Producing Country | Long tons | | | | Tonnes | |
|-------------------------------|---------------------|--------------------|-------------------|--------------------|--------------------|-------------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom .. | 23,895,200 | 25,862,200 | 26,422,300 | 27,869,200 | 28,316,500 | 24,173,500 |
| Rhodesia (c) .. | 134,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Canada .. | 8,666,457 | 10,045,532 | 9,202,278 | 11,023,332 | 11,200,256 | 11,040,033 |
| India .. | <i>c)</i> 6,216,000 | 6,600,000 | 6,366,000 | 6,134,000 | 6,232,000 | 5,876,000 |
| Australia (d) .. | 6,167,000 | 6,399,000 | 6,906,000 | 6,714,000 | 6,822,000 | 6,736,000 |
| TOTAL .. | 45,100,000 | 49,050,000 | 49,040,000 | 51,740,000 | 52,570,000 | 47,960,000 |
| Irish Republic .. | 64,000 | 66,000 | 75,000 | 76,500 | 77,700 | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Austria .. | 2,975,224 | 3,412,719 | 3,864,000 | 4,015,000 | 4,079,000 | 3,960,000 |
| Belgium .. | 9,546,000 | 11,400,000 | 12,629,000 | 12,407,000 | 12,606,000 | 12,444,000 |
| Bulgaria .. | 1,219,000 | 1,438,000 | 1,491,000 | 1,772,000 | 1,800,000 | 1,948,000 |
| Czechoslovakia .. | 9,844,000 | 10,388,000 | 10,631,000 | 11,298,000 | 11,480,000 | 12,064,000 |
| Denmark .. | 395,000 | 450,000 | 474,000 | 466,000 | 473,000 | 471,000 |
| Finland .. | 421,000 | 696,000 | 898,000 | 1,151,000 | 1,169,000 | 1,025,000 |
| France .. | 19,344,752 | 20,087,668 | 22,155,833 | 23,397,737 | 23,773,201 | 22,858,556 |
| Germany— | | | | | | |
| Federal Republic .. | 36,164,000 | 40,509,000 | 44,600,000 | 44,329,000 | 45,041,000 | 40,313,000 |
| Eastern .. | 4,176,000 | 4,622,000 | 4,748,000 | 4,972,900 | 5,052,700 | 5,350,100 |
| Greece .. | 269,000 | 215,000 | 443,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Hungary .. | 2,696,000 | 2,857,000 | 2,984,000 | 3,107,000 | 3,157,000 | 3,110,000 |
| Italy .. | 15,648,746 | 16,683,992 | 16,168,669 | 17,004,386 | 17,277,264 | 17,451,926 |
| Luxemburg .. | 4,410,262 | 4,757,753 | 5,433,769 | 5,376,183 | 5,462,455 | 5,241,235 |
| Netherlands .. | 3,350,000 | 3,648,000 | 4,639,000 | 4,962,000 | 5,042,000 | 5,083,000 |
| Norway .. | 766,000 | 810,000 | 840,000 | 856,000 | 870,000 | 863,000 |
| Poland .. | 10,289,000 | 10,833,000 | 11,100,000 | 11,606,000 | 11,792,000 | 12,738,000 |
| Portugal .. | 305,864 | 307,000 | 394,000 | 379,000 | 385,000 | 412,000 |
| Roumania .. | 4,023,000 | 4,676,000 | 5,453,000 | 6,414,000 | 6,517,000 | 6,803,000 |
| Spain .. | 4,279,000 | 4,862,000 | 5,818,000 | 7,271,563 | 7,388,250 | 7,758,852 |
| Sweden .. | 4,570,000 | 5,014,000 | 5,239,000 | 5,409,000 | 5,496,000 | 5,281,000 |
| Switzerland .. | 438,000 | 446,000 | 492,000 | 516,000 | 524,000 | 532,000 |
| U.S.S.R. .. | 100,620,000 | 104,850,000 | 108,549,000 | 114,056,000 | 115,886,000 | 120,637,000 |
| Yugoslavia .. | 1,803,000 | 1,965,000 | 2,185,000 | 2,193,000 | 2,228,000 | 2,672,000 |
| Egypt .. | 196,000 | 187,000 | 482,000 | 223,000 | 227,000 | (e) 500,000 |
| South Africa (a) .. | 3,521,300 | 3,869,700 | 4,428,800 | 4,682,300 | 4,757,400 | 4,920,900 |
| Mexico .. | 2,991,642 | 3,200,000 | 3,400,000 | 3,800,000 | 3,840,000 | 3,774,346 |
| United States (b) .. | 113,584,000 | 117,378,000 | 126,127,300 | 117,420,000 | 119,304,000 | 109,263,000 |
| Argentina (c) .. | 1,304,000 | 1,548,279 | 1,673,656 | 1,746,154 | 1,774,175 | 1,854,942 |
| Brazil .. | 3,500,000 | 4,300,000 | 4,847,000 | 5,305,000 | 5,390,000 | 5,998,000 |
| Chile (c) .. | 586,881 | 517,300 | 592,000 | 538,000 | 547,000 | 609,635 |
| Colombia .. | 256,000 | 195,000 | 263,000 | 234,000 | 238,000 | 248,000 |
| Peru .. | 75,000 | 104,000 | 190,000 | 93,000 | 94,000 | <i>n.a.</i> |
| Uruguay .. | 13,300 | 8,400 | 14,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Venezuela .. | 656,000 | 735,000 | 833,000 | 912,000 | 927,000 | <i>n.a.</i> |
| Burma (e) .. | 21,000 | 21,000 | 21,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| China (e) .. | 11,000,000 | 15,000,000 | 16,000,000 | 17,000,000 | 17,000,000 | 17,000,000 |
| Formosa .. | <i>e</i> 246,000 | <i>e</i> 246,000 | 267,000 | 289,000 | 294,000 | 392,000 |
| Israel .. | 84,000 | 100,000 | 120,000 | 120,000 | 120,000 | <i>n.a.</i> |
| Japan .. | 61,172,000 | 65,837,000 | 80,868,000 | 91,848,000 | 93,322,000 | 88,558,000 |
| Korea (North) .. | <i>e</i> 1,427,000 | <i>e</i> 1,723,000 | 1,968,000 | <i>e</i> 2,200,000 | <i>e</i> 2,200,000 | <i>n.a.</i> |
| Korea (South) .. | 324,000 | 360,000 | 513,000 | 473,000 | 481,000 | 471,000 |

* For details see page 160.

(a) Excluding steel castings for which the amounts produced for sale were as follows: (Long tons): 1967—146,000; 1968—125,800; 1969—117,700; 1970—162,600. (Tonnes): 1970—165,200; 1971—182,200.

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

(c) Ingots only.

(d) Including recovery from scrap.

(e) United States Bureau of Mines' estimate.

PRODUCTION OF STEEL INGOTS AND CASTINGS (cont.)

| Producing Country | Long tons | | | | Tonnes | |
|----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Thailand | 3,000 | 5,000 | 4,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Turkey (a) | 981,000 | 1,092,000 | 1,151,000 | 1,291,000 | 1,312,000 | 1,122,000 |
| TOTAL | 440,000,000 | 471,000,000 | 514,000,000 | 532,000,000 | 540,000,000 | 527,000,000 |
| WORLD'S TOTAL .. | 485,000,000 | 520,000,000 | 563,000,000 | 583,000,000 | 593,000,000 | 575,000,000 |

(a) Ingots only.

**DETAILS OF PRODUCTION OF STEEL INGOTS AND CASTINGS
IN CERTAIN COUNTRIES**

| Producing Country | Long tons | | | | Tonnes | |
|----------------------------------|-------------|------------|------------|--------------|------------|------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Open hearth, acid .. | 131,700 | 154,200 | 166,100 | } 13,163,600 | 13,374,900 | 10,177,500 |
| do. basic .. | 13,518,400 | 14,028,400 | 13,785,600 | | | |
| Converters— | | | | | | |
| Kaldo | 639,500 | 676,100 | 742,800 | 785,700 | 798,300 | 587,900 |
| L.D. | 4,923,400 | 5,510,900 | 5,871,800 | 7,832,900 | 7,958,600 | 8,419,000 |
| Other (a) .. . | 1,263,800 | 1,341,600 | 995,200 | 656,600 | 667,100 | 624,100 |
| Electric | 3,418,400 | 4,151,000 | 4,860,800 | 5,430,400 | 5,517,600 | 4,365,000 |
| Canada— | | | | | | |
| Ingots— | | | | | | |
| Open hearth, basic and oxygen .. | 7,530,683 | 8,659,364 | 7,649,434 | 9,396,854 | 9,547,674 | 9,312,981 |
| do. electric .. | 999,645 | 1,259,035 | 1,414,714 | 1,455,299 | 1,478,656 | 1,540,789 |
| Castings— | | | | | | |
| Open hearth, basic .. | } 131,129 | 127,133 | 138,130 | 171,179 | 173,926 | 186,263 |
| Electric | | | | | | |
| India— | | | | | | |
| Ingots— | | | | | | |
| Open hearth, basic .. | } 6,216,000 | 6,600,000 | 6,366,000 | 6,002,000 | 6,098,000 | 5,015,000 |
| Electric | | | | | | |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Open hearth | 594,763 | 607,328 | 713,000 | 653,000 | 663,000 | 650,000 |
| Electric | 388,085 | 423,248 | 467,000 | 486,000 | 494,000 | 456,000 |
| L.D. | 1,992,376 | 2,382,143 | 2,685,000 | 2,876,000 | 2,922,000 | 2,854,000 |
| Belgium— | | | | | | |
| Ingots, open hearth .. | 211,472 | 188,000 | 270,000 | 276,000 | 280,000 | 238,000 |
| do. Bessemer, basic .. | 6,339,768 | 6,408,000 | 6,115,500 | 5,162,000 | 5,245,000 | 4,308,000 |
| do. electric | 285,813 | 307,000 | 343,000 | 444,000 | 451,000 | 470,000 |
| do. oxygen | 2,645,852 | 4,401,000 | 5,687,000 | 6,525,000 | 6,630,000 | 7,428,000 |
| Czechoslovakia— | | | | | | |
| Open hearth | 7,318,000 | 7,374,000 | 7,417,000 | 7,717,000 | 7,841,000 | 8,149,000 |
| Bessemer | 243,000 | 242,000 | 241,000 | 227,000 | 231,000 | 230,000 |
| Electric | 1,240,000 | 1,252,000 | 1,250,000 | 1,323,000 | 1,344,000 | 1,434,000 |
| Oxygen | 1,043,000 | 1,520,000 | 1,743,000 | 2,031,000 | 2,064,000 | 2,251,000 |
| Denmark— | | | | | | |
| Ingots, open hearth .. | } 379,900 | 432,000 | 457,000 | 447,000 | 454,000 | 453,000 |
| Castings do. .. . | | | | | | |
| do. electric | 14,800 | 17,700 | 18,700 | 19,000 | 19,000 | 18,000 |
| Finland— | | | | | | |
| Ingots | 405,000 | 680,000 | } 898,000 | 1,151,000 | 1,169,000 | 1,025,000 |
| Castings | 16,000 | 16,000 | | | | |
| France— | | | | | | |
| Ingots and castings— | | | | | | |
| Bessemer, acid .. . | 66,110 | 56,313 | 59,694 | 60,216 | 61,182 | 68,988 |
| do. basic | 9,952,647 | 10,341,283 | 10,495,893 | 9,616,310 | 9,770,623 | 8,120,352 |
| Open hearth, acid .. | } 4,216,285 | 4,008,154 | 4,397,525 | 4,367,795 | 4,437,885 | 3,779,758 |
| do. basic | | | | | | |
| Electric | 1,874,619 | 2,035,258 | 2,333,929 | 2,570,230 | 2,611,475 | 2,412,548 |
| Kaldo, L.D., etc. .. | 3,235,090 | 3,646,660 | 4,868,793 | 6,783,186 | 6,892,036 | 8,476,910 |
| Of which— | | | | | | |
| Ingots | 19,004,481 | 19,708,471 | 21,725,025 | 22,950,963 | 23,319,258 | 22,367,754 |
| Castings | 340,271 | 379,197 | 430,809 | 446,774 | 453,943 | 490,802 |

(a) Bessemer acid, rotor, etc.

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

| Producing Country | Long tons | | | | Tonnes | |
|--------------------------------------|------------|------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Germany (Federal)— | | | | | | |
| Ingots— | | | | | | |
| Open hearth | 13,335,000 | 14,257,000 | 13,229,000 | 11,573,000 | 11,759,000 | 8,490,000 |
| Bessemer, basic | 8,333,000 | 7,543,000 | 6,699,000 | 3,582,000 | 3,640,000 | 2,831,000 |
| Electric | 3,059,000 | 3,069,000 | 3,458,000 | 3,721,000 | 3,781,000 | 3,425,000 |
| Oxygen | 11,379,000 | 15,017,000 | 20,509,000 | 24,739,000 | 25,136,000 | 24,908,000 |
| Castings— | | | | | | |
| Open hearth | 49,000 | 57,000 | 73,000 | 60,000 | 61,000 | 47,000 |
| Electric | 462,000 | 557,000 | 622,000 | 645,000 | 655,000 | 605,000 |
| Other | 8,000 | 9,000 | 10,000 | 9,000 | 9,000 | 7,000 |
| Germany (East)— | | | | | | |
| Open hearth | 3,834,000 | 4,622,000 | 4,748,000 | 4,972,900 | 5,052,700 | 5,350,100 |
| Bessemer, basic | 367,700 | | | | | |
| Electric | 474,500 | | | | | |
| Italy— | | | | | | |
| Ingots | 15,401,724 | 16,436,060 | 15,907,762 | 16,729,915 | 16,998,388 | 17,196,516 |
| Castings | 237,180 | 247,932 | 260,906 | 274,471 | 278,876 | 255,410 |
| Luxembourg— | | | | | | |
| Bessemer, basic and oxygen | | | | | | |
| | 4,369,809 | 4,691,179 | 3,439,847 | 3,256,736 | 3,308,997 | 3,179,877 |
| Electric | 40,453 | 66,574 | 95,435 | 96,194 | 97,738 | 66,017 |
| L.D.A.C. | n.a. | n.a. | 1,898,487 | 2,023,253 | 2,055,720 | 1,995,341 |
| Norway— | | | | | | |
| Ingots | 750,501 | 768,890 | 804,000 | 817,000 | 830,000 | 823,000 |
| Castings | 27,000 | 42,000 | 36,000 | 39,000 | 40,000 | 40,000 |
| Portugal— | | | | | | |
| Ingots— | | | | | | |
| L.D. | 261,855 | 268,072 | 321,276 | 296,343 | 301,099 | 333,000 |
| Electric | 35,178 | 29,161 | 61,874 | 69,020 | 70,128 | 78,000 |
| Castings | 8,831 | 10,000 | 10,800 | 14,000 | 14,000 | 1,000 |
| Spain— | | | | | | |
| Open hearth and Bessemer | | | | | | |
| | 1,994,000 | 1,925,000 | 1,881,000 | 1,921,220 | 1,952,050 | 1,664,482 |
| Electric | 1,378,000 | 1,696,000 | 2,067,000 | 2,557,465 | 2,598,505 | 2,614,015 |
| Oxygen | 907,000 | 1,241,000 | 1,870,000 | 2,792,877 | 2,837,695 | 3,480,355 |
| Sweden— | | | | | | |
| Open hearth, acid do. basic | 418,118 | 459,000 | 1,332,000 | 1,258,000 | 1,278,000 | 1,190,000 |
| | 1,013,338 | 900,000 | | | | |
| Bessemer, basic | 94,550 | 46,000 | 35,000 | 29,000 | 30,000 | 23,000 |
| Electric | 1,717,866 | 1,957,000 | 2,154,000 | 2,242,000 | 2,278,000 | 2,150,000 |
| Other | 1,534,434 | 1,652,000 | 1,718,000 | 1,880,000 | 1,910,000 | 1,918,000 |
| U.S.S.R.— | | | | | | |
| Open hearth | 80,476,000 | 82,498,000 | 82,449,000 | 82,725,000 | 84,052,000 | 84,781,000 |
| Bessemer | 1,851,000 | 1,811,000 | 1,439,000 | 1,170,000 | 1,189,000 | 1,155,000 |
| Electric | 9,082,000 | 9,380,000 | 9,736,000 | 10,541,000 | 10,710,000 | 11,455,000 |
| Other | 9,211,000 | 11,160,000 | 14,949,000 | 19,620,000 | 19,935,000 | 23,246,000 |
| of which— | | | | | | |
| Ingots | 94,438,000 | 98,166,000 | 101,632,000 | 107,019,000 | 108,736,000 | 112,984,000 |
| Castings | 6,478,000 | 6,684,000 | 6,942,000 | 7,037,000 | 7,150,000 | 7,653,000 |
| Yugoslavia— | | | | | | |
| Open hearth | 1,525,519 | 1,573,000 | 1,593,000 | 1,585,000 | 1,610,000 | 1,875,000 |
| Electric | 277,546 | 392,000 | 592,000 | 608,000 | 618,000 | 797,000 |
| South Africa— | | | | | | |
| Ingots— | | | | | | |
| Open hearth (including duplex) | 1,747,200 | 1,884,700 | 1,834,100 | 1,785,000 | 1,813,600 | 1,790,900 |
| Oxygen | 1,256,900 | 1,371,400 | 1,612,400 | 1,578,200 | 1,603,500 | 1,390,900 |
| Electric | 517,200 | 613,700 | 982,300 | 1,155,600 | 1,174,100 | 1,556,900 |
| Castings (a) | 97,400 | 125,800 | 117,700 | 162,600 | 165,200 | 182,200 |

(a) Produced for sale.

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

Long tons | Tonnes

| Producing Country | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|---------------------------------|-------------|--------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| United States— | | | | | | |
| Ingots and castings (a)— | | | | | | |
| Open hearth, acid .. | 125,000 | } 58,782,000 | 54,369,900 | 42,876,700 | 43,564,400 | 32,258,000 |
| do. basic .. | 62,991,000 | | | | | |
| Bessemer | (b) | | | | | |
| Oxygen | 36,995,000 | 43,582,000 | 53,782,400 | 56,544,000 | 57,451,000 | 58,008,000 |
| Electric | 13,473,000 | 15,013,000 | 17,975,000 | 18,002,000 | 18,291,000 | 18,997,000 |
| Of which— | | | | | | |
| Ingots | 113,410,000 | 117,223,000 | 125,973,000 | 117,278,000 | 119,159,000 | 109,020,000 |
| Castings | 173,000 | 155,000 | 154,000 | 145,000 | 147,000 | 243,000 |
| Brazil— | | | | | | |
| Ingots— | | | | | | |
| Open hearth | n.a. | n.a. | 2,029,000 | 2,221,142 | 2,256,785 | 2,448,892 |
| L.D. | n.a. | n.a. | 1,837,000 | 1,941,441 | 1,972,395 | 2,203,849 |
| Electric | n.a. | n.a. | 930,000 | 1,070,108 | 1,087,280 | 1,258,374 |
| Bessemer | n.a. | n.a. | n.a. | 72,536 | 73,700 | 86,004 |
| Japan— | | | | | | |
| Open hearth | 8,899,100 | 5,344,000 | 5,157,000 | 3,794,000 | 3,855,000 | 2,090,000 |
| Oxygen | 40,000,000 | 48,494,000 | 62,000,000 | 72,681,000 | 73,847,000 | 70,839,000 |
| Electric | 11,181,500 | 11,996,000 | 13,518,000 | 15,373,000 | 15,620,000 | 15,628,000 |

(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.

| Exporting Country and Description | Long tons | | | | Tonnes | |
|---|-------------|-------------|----------------|----------|---------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Pig-iron— | | | | | | |
| Forge and foundry .. | 8,637 | 15,783 | 5,372 | 9,888 | 10,047 | 2,697 |
| Refined | 6,516 | 5,798 | 12,866 | } 54,548 | 55,423 | 14,074 |
| Other | 116,924 | 43,750 | 72,524 | | | |
| Iron and steel powders, shot and sponge .. | 15,614 | 18,163 | 20,461 | 23,262 | 23,635 | 24,620 |
| Spiegeleisen | 10 | 31 | 96 | — | — | — |
| Ferro-manganese .. | 17,794 | 22,463 | 340 | 2,226 | 2,262 | 308 |
| Ferro-tungsten .. | 1,176 | 1,366 | 1,638 | 2,258 | 2,294 | 3,825 |
| Ferro-molybdenum .. | 209 | 671 | 1,272 | 1,653 | 1,680 | 602 |
| Ferro-titanium .. | 977 | 1,456 | 1,282 | 1,543 | 1,568 | 1,204 |
| Ferro-vanadium .. | 41 | 42 | 55 | 55 | 56 | 111 |
| Ferro-niobium and ferro-niobium-tantalum .. | 175 | 152 | 281 | 203 | 206 | 321 |
| Other ferro-alloys .. | 4,721 | 3,432 | 4,286 | 6,455 | 6,559 | 7,600 |
| Ingots, blooms, billets .. | 277,071 | 208,488 | 114,336 | 142,450 | 144,736 | 192,173 |
| Old and scrap (a) .. | 1,116,374 | 901,339 | 551,525 | 402,886 | 409,352 | 1,022,130 |
| Channel Islands— | | | | | | |
| Scrap (c) | 2,518 | 2,930 | 2,081 | 3,468 | 3,524 | 3,540 |
| Malta— | | | | | | |
| Scrap | 7,142 | 6,331 | 9,187 | 11,058 | 11,236 | 3,646 |
| Kenya— | | | | | | |
| Scrap | 5,490 | 2,368 | 3,680 | 6,696 | 6,804 | 1,791 |
| Nigeria— | | | | | | |
| Scrap | 6,656 | 7,409 | 20,173 | 12,338 | 12,536 | 17,082 |
| Tanzania— | | | | | | |
| Scrap | 3,633 | 1,273 | 3,428 | 2,958 | 3,005 | 967 |
| Barbados— | | | | | | |
| Scrap | <i>n.a.</i> | <i>n.a.</i> | — | 100 | 102 | <i>n.a.</i> |
| Trinidad and Tobago— | | | | | | |
| Old and scrap .. | 2,877 | 461 | <i>r</i> 7,254 | 16,335 | 16,597 | 4,263 |
| Canada— | | | | | | |
| Pig-iron | 433,656 | 489,860 | 644,325 | 573,926 | 583,136 | 498,456 |
| Ferro-manganese .. | 3,874 | 909 | 4,921 | 502 | 510 | 346 |
| Ferro-silicon | 37,437 | 42,156 | 43,303 | 44,629 | 45,345 | 47,017 |
| Other ferro-alloys .. | 1,056 | 571 | 2,875 | 3,656 | 3,715 | 3,083 |
| Ingots, blooms, billets .. | 156,988 | 266,297 | 153,400 | 148,115 | 150,492 | 187,556 |
| Old and scrap | 389,044 | 385,976 | 651,781 | 606,616 | 616,350 | 552,122 |
| Tin-plate scrap .. | 21,055 | 14,683 | 18,763 | 21,610 | 21,957 | 21,474 |
| Hong Kong— | | | | | | |
| Old and scrap .. | 115,310 | 109,773 | 111,604 | 192,448 | 195,534 | 147,889 |
| Tinplate scrap .. | 1,276 | 3,923 | 2,518 | 2,297 | 2,334 | 1,892 |
| India(b)— | | | | | | |
| Pig-iron | 550,724 | 756,153 | 497,764 | 494,104 | 502,033 | 203,448 |
| Ferro-manganese .. | 28,833 | 69,150 | 113,618 | 88,977 | 90,405 | 17,707 |
| Ingots, blooms, billets .. | 47,750 | 116,873 | 11,006 | 57,278 | 58,197 | 411 |
| Old and scrap | 563,398 | 395,444 | 346,724 | 226,719 | 230,356 | 146,028 |
| Malaysia (West)— | | | | | | |
| Scrap | 36,642 | 25,121 | 23,729 | 15,469 | 15,717 | 6,225 |
| Singapore— | | | | | | |
| Pig-iron | 1,433 | 909 | 250 | 214 | 217 | 95 |
| Ingots, blooms, etc. .. | 1,100 | 3,266 | 1,914 | 1,613 | 1,639 | 3,614 |
| Scrap | 3,535 | 592 | 1,105 | 4,831 | 4,909 | 565 |

(a) Excluding ships intended for breaking up as follows (gross tonnage): (Long tons): 1967—89,130; 1968—39,730; 1969—47,379; 1970—45,563. (Tonnes): 1970—46,294; 1971—

(b) Years ended March 31 following that stated.

(c) Jersey only.

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

| Exporting Country and Description | Long tons | | | | Tonnes | |
|--|-----------|-------------|-----------|-----------|-----------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Australia (a)— | | | | | | |
| Pig-iron | 129,751 | 182,929 | 346,183 | 285,824 | 290,411 | 389,360 |
| Ferro-alloys | 16,922 | 314 | 304 | 179 | 182 | 2,540 |
| Ingots, blooms, billets | 365,359 | 343,461 | 424,838 | 443,506 | 450,623 | 117,206 |
| Old and scrap | 338,005 | 344,917 | 419,419 | 509,975 | 518,160 | 458,892 |
| Tin-plate scrap | 65,123 | 78,231 | 62,563 | 10,922 | 11,097 | 9,420 |
| New Zealand (a)— | | | | | | |
| Scrap | 5,448 | 5,532 | 5,726 | 6,987 | 7,099 | 8,323 |
| Irish Republic— | | | | | | |
| Old and scrap | 31,533 | 20,056 | 11,182 | 11,358 | 11,540 | 9,863 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Pig-iron | 8,811 | 14,403 | 33,870 | 24,664 | 25,060 | 11,700 |
| Ferro-alloys | 4,317 | 5,034 | 5,101 | 5,271 | 5,356 | 4,081 |
| Ingots and blooms | 6,052 | 42,353 | 9,399 | 2,102 | 2,136 | 1,172 |
| Scrap | 11,377 | 6,021 | 4,961 | 6,209 | 6,309 | 4,498 |
| Belgium-Luxembourg | | | | | | |
| E.U.— | | | | | | |
| Pig-iron | 89,882 | 79,021 | 53,174 | 18,272 | 18,565 | 16,362 |
| Spiegeleisen | 3,150 | 2,542 | 2,923 | 4,256 | 4,324 | 960 |
| Ferro-manganese | 64,106 | 60,164 | 65,716 | 68,309 | 69,405 | 54,768 |
| Other ferro-alloys | 2,179 | 2,728 | 4,474 | 4,774 | 4,851 | 6,360 |
| Ingots | 6,948 | 7,391 | 109,687 | 58,540 | 59,479 | 23,339 |
| Blooms, billets, etc. | 552,521 | 639,173 | 798,003 | 726,643 | 738,304 | 659,531 |
| Old and scrap | 805,505 | 774,821 | 679,420 | 729,604 | 741,312 | 458,373 |
| Bulgaria— | | | | | | |
| Pig-iron | 75,587 | 17,224 | 13,900 | 40,000 | 40,600 | <i>n.a.</i> |
| Denmark— | | | | | | |
| Blooms, billets, etc. | 2,344 | 2,485 | 3,332 | 2,896 | 2,942 | 2,246 |
| Old and scrap | 61,589 | 70,922 | 23,203 | 22,162 | 22,518 | 34,375 |
| Finland— | | | | | | |
| Pig-iron | 779,296 | 674,116 | 558,282 | 310,042 | 315,017 | 192,723 |
| Ferro-chrome and ferro-silico-chrome | — | 580 | 19,359 | 29,000 | 29,465 | 26,390 |
| Blooms, billets, etc. | 2,330 | 323 | 45,449 | 201,434 | 204,667 | 179,291 |
| Old and scrap | 4,828 | 10,231 | 6,172 | 4,332 | 4,402 | 3,194 |
| France— | | | | | | |
| Pig-iron | 70,546 | 45,756 | 40,832 | 146,475 | 148,826 | 144,656 |
| Spiegeleisen | 7,492 | 7,162 | 2,436 | 2,860 | 2,906 | 831 |
| Ferro-manganese | 167,227 | 204,910 | 227,058 | 295,642 | 300,386 | 238,693 |
| Ferro-silicon | 23,557 | 29,469 | 42,628 | 46,654 | 47,403 | 45,426 |
| Ferro-chrome | 19,536 | 21,318 | 12,711 | 11,209 | 11,389 | 14,982 |
| Other ferro-alloys | 23,067 | 30,066 | 40,840 | 62,414 | 63,416 | 62,995 |
| Ingots | 109,488 | 105,305 | 130,363 | 138,004 | 140,219 | 128,107 |
| Blooms, billets, etc. | 448,157 | 286,278 | 344,247 | 609,791 | 619,576 | 629,520 |
| Old and scrap | 2,156,413 | 2,157,290 | 2,193,934 | 2,595,228 | 2,636,874 | 2,740,807 |
| Germany (Federal)— | | | | | | |
| Pig-iron | 1,275,273 | 803,063 | 960,818 | 867,476 | 881,397 | 622,070 |
| Spiegeleisen | 12,278 | 13,804 | 11,156 | 15,278 | 15,523 | 3,047 |
| Ferro-alloys | 69,465 | 112,492 | 91,528 | 95,617 | 97,151 | 97,543 |
| Ingots, blooms, billets | 1,333,789 | 1,095,943 | 895,543 | 706,446 | 717,782 | 1,219,372 |
| Old and scrap | 2,091,848 | 1,817,670 | 1,801,539 | 2,173,884 | 2,208,768 | 2,142,809 |
| Hungary— | | | | | | |
| Pig iron | 78,240 | 62,431 | 16,327 | 47,817 | 48,584 | 128,921 |
| Iceland— | | | | | | |
| Scrap | 1,760 | <i>n.a.</i> | 3,568 | 1,486 | 1,510 | 1,157 |

(a) Years ended June 30 of that stated.

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

| Exporting Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|------------------|------------------|------------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Italy— | | | | | | |
| Pig-iron | 157 | 470 | 148 | 5,135 | 5,217 | 1,251 |
| Spiegeleisen | 6 | 67 | 52 | — | — | 61 |
| Ferro-manganese | 8,478 | 17,042 | 7,758 | 6,079 | 6,177 | 5,874 |
| Ferro-molybdenum | 1 | 129 | 859 | 854 | 868 | 514 |
| Ferro-silicon | 1,442 | 1,336 | 1,185 | 2,303 | 2,340 | 3,099 |
| Ferro-silico-manganese | 117 | 139 | 163 | 566 | 575 | 243 |
| Ferro-chrome | 7,498 | 7,116 | 7,329 | 5,911 | 6,006 | 6,034 |
| Ferro-vanadium | <i>n.a.</i> | 1 | 41 | 20 | 20 | 72 |
| Other ferro-alloys | 595 | 279 | 365 | 779 | 792 | 415 |
| Ingots | 14,588 | 30,701 | 28,943 | 47,929 | 48,698 | 32,451 |
| Blooms, billets, etc. | | | | | | |
| Scrap | | | | | | |
| | 2,504 | 6,819 | 18,393 | 13,538 | 13,755 | 9,052 |
| Netherlands— | | | | | | |
| Pig-iron | 291,919 | 118,919 | 54,971 | 1,569 | 1,594 | 700 |
| Sponge iron and powder | 18 | 2 | 86 | 6 | 6 | 24 |
| Ferro-alloys | 658 | 788 | 217 | 424 | 431 | 1,364 |
| Ingots, blooms and billets | <i>r</i> 328,304 | <i>r</i> 410,636 | <i>r</i> 621,581 | 150,017 | 152,424 | 205,177 |
| Old and scrap | 556,792 | 699,557 | 673,602 | 802,166 | 815,038 | 666,906 |
| Norway— | | | | | | |
| Pig-iron | 152,893 | 189,673 | 177,904 | 147,346 | 149,711 | 126,983 |
| Ferro-chrome | 27,065 | 33,690 | 37,894 | 31,989 | 32,502 | 24,489 |
| Ferro-manganese | 118,611 | 141,483 | 185,147 | 152,628 | 155,077 | 187,542 |
| Ferro-silicon | 263,125 | 323,615 | 340,971 | 213,023 | 216,441 | 190,112 |
| Ferro-silico-manganese | 111,466 | 129,790 | 141,217 | 125,257 | 127,267 | 130,824 |
| Other ferro-alloys | 4,714 | 12,771 | 10,281 | 3,688 | 3,747 | 1,486 |
| Ingots, blooms, billets | <i>r</i> 172,336 | <i>r</i> 161,057 | <i>r</i> 171,854 | 164,690 | 167,333 | 180,889 |
| Old and scrap | 6,267 | 29,166 | 36,900 | 34,424 | 34,976 | 18,421 |
| Poland— | | | | | | |
| Pig-iron | 262,883 | 423,611 | 449,783 | 360,842 | 366,633 | 90,459 |
| Ferro-alloys | 284 | 1,042 | 2,276 | 1,416 | 1,439 | 1,002 |
| Portugal— | | | | | | |
| Pig-iron | 8 | 197 | 201 | 30 | 30 | 140 |
| Ferro-alloys | 7,789 | 6,085 | 8,345 | 6,763 | 6,872 | 5,166 |
| Old and scrap | 13,295 | 35,391 | 14,707 | 5,893 | 5,988 | 2,707 |
| Spain— | | | | | | |
| Pig-iron | 14,418 | 111,972 | 40,598 | 20,142 | 20,465 | <i>n.a.</i> |
| Ferro-silicon | 9,275 | 11,476 | 4,722 | 1,456 | 1,479 | 793 |
| Other ferro-alloys | 4,399 | 12,004 | 7,764 | 4,810 | 4,887 | 9,060 |
| Ingots, blooms, billets | — | 1,173 | 27,900 | 28,897 | 29,361 | 76,050 |
| Sweden— | | | | | | |
| Pig-iron | 81,342 | 40,866 | 70,168 | 1,594 | 1,620 | 3,031 |
| Sponge iron | 51,189 | 55,009 | 68,804 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ferro-manganese | 12,561 | 15,052 | 25,440 | 9,120 | 9,266 | 13,548 |
| Ferro-silicon | 3,907 | 6,074 | 13,697 | 19,343 | 19,654 | 18,066 |
| Ferro-silico-manganese | 471 | 29 | 2,459 | 787 | 800 | 6,529 |
| Ferro-chrome | 22,979 | 22,591 | 21,372 | 20,503 | 20,832 | 18,161 |
| Ferro-tungsten | 104 | 142 | 1 | 1 | 1 | 12 |
| Other ferro-alloys | 9,425 | 5,804 | 11,301 | 8,367 | 8,501 | 7,906 |
| Ingots | 55,114 | 54,667 | 82,419 | 86,433 | 87,820 | 71,349 |
| Blooms, billets, etc. | | | | | | |
| Old and scrap | | | | | | |
| | 16,975 | 11,244 | 15,687 | 14,308 | 14,538 | 12,890 |
| Switzerland— | | | | | | |
| Pig-iron | 3 | 185 | 2 | 1 | 1 | 141 |
| Ferro-alloys | 11,761 | 9,260 | 11,429 | 12,076 | 12,270 | 6,568 |
| Old and scrap | 30,027 | 28,713 | 26,821 | 26,273 | 26,695 | 30,016 |
| U.S.S.R.— | | | | | | |
| Pig iron | 4,362,100 | 4,450,700 | 4,617,000 | 4,724,191 | 4,800,000 | 5,100,000 |
| Ferro-manganese | 85,626 | 95,665 | 105,800 | 116,628 | 118,500 | 374,000 |
| Ferro-silicon | 98,800 | 110,000 | 116,500 | 122,927 | 124,900 | 124,000 |
| Other ferro-alloys | 32,800 | 34,700 | 38,600 | 45,300 | 46,000 | 43,500 |
| Steel ingots and billets | 1,025,937 | 943,460 | 1,106,800 | 1,194,433 | 1,213,600 | 1,100,500 |
| Scrap | 666,900 | 653,600 | 1,304,300 | 1,377,889 | 1,400,000 | 1,700,000 |

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

| Exporting Country and Description | Long tons | | | | Tonnes | |
|---|-----------|-----------|-----------|-----------|-----------|-----------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Yugoslavia— | | | | | | |
| Pig-iron | 75,746 | — | — | — | — | 40 |
| Ferro-chrome | 8,028 | 8,303 | 5,811 | 9,998 | 10,158 | 6,726 |
| Ferro-manganese | 389 | 20 | 1,344 | 1,181 | 1,200 | n.a. |
| Silico-manganese | 11,215 | 16,484 | 14,866 | 14,217 | 14,445 | 12,954 |
| Ferro-silicon | 16,312 | 24,254 | 23,501 | 21,639 | 21,986 | 22,224 |
| Steel ingots | — | 3,687 | 26,233 | 5,389 | 5,475 | 761 |
| Scrap | 32,664 | 18,564 | 3,424 | 4,992 | 5,072 | 5,025 |
| Morocco— | | | | | | |
| Old and scrap | 34,353 | 25,026 | 37,917 | 42,707 | 43,392 | 30,775 |
| Mozambique— | | | | | | |
| Scrap | 4,989 | 5,505 | 9,065 | 12,271 | 12,468 | n.a. |
| Senegal— | | | | | | |
| Scrap | 3,550 | 1,199 | 6,494 | 9,193 | 9,341 | 9,066 |
| South Africa— | | | | | | |
| Pig-iron | 918,499 | 661,975 | 602,084 | 447,603 | 454,786 | 371,868 |
| Ferro-manganese | 125,816 | 127,603 | 249,937 | 210,054 | 213,424 | 170,082 |
| Ferro-silicon | 26,553 | 16,616 | 12,709 | 10,365 | 10,531 | 8,536 |
| Ferro-chrome | 88,911 | 74,706 | 105,775 | 86,441 | 87,828 | 88,911 |
| Other ferro-alloys | 2,324 | 2,161 | 14,866 | 10,835 | 11,009 | 5,993 |
| Ingots, blooms, billets .. | 792 | 1,129 | 69,985 | 19,065 | 19,371 | 714 |
| Sudan— | | | | | | |
| Scrap | 7,733 | 1,565 | 2,441 | 4,962 | 5,042 | 2,000 |
| Tunisia— | | | | | | |
| Scrap | 21,489 | 18,922 | 12,582 | 16,706 | 16,974 | 4,581 |
| Mexico— | | | | | | |
| Ferro-alloys | — | — | — | 1,669 | 1,696 | n.a. |
| United States— | | | | | | |
| Pig-iron | 6,653 | 9,769 | 39,251 | 276,557 | 280,995 | 30,993 |
| Spiegeleisen | n.a. | n.a. | n.a. | 778 | 790 | 761 |
| Powders and sponge | 7,178 | 6,869 | 12,079 | 15,800 | 16,054 | 12,909 |
| Ferro-phosphorus | 20,447 | 32,775 | 33,349 | 29,560 | 30,034 | 31,852 |
| Ferro-manganese | 1,662 | 3,312 | 1,571 | 19,416 | 19,728 | 4,106 |
| Ferro-chrome | 12,012 | 24,221 | 21,940 | 25,332 | 25,739 | 8,313 |
| Ferro-molybdenum | 684 | 385 | 650 | 900 | 914 | 614 |
| Ferro-vanadium | 314 | 247 | 575 | 1,923 | 1,954 | 613 |
| Ferro-silicon | 10,512 | 16,404 | 5,792 | 39,906 | 40,546 | 23,139 |
| Other ferro-alloys | 7,122 | 10,078 | 30,408 | 17,825 | 18,111 | 9,893 |
| Steel ingots, slabs, blooms, billets and sheet bars | 275,337 | 496,580 | 1,624,223 | 2,778,483 | 2,823,069 | 794,381 |
| Scrap (a) | 6,816,662 | 5,867,815 | 8,192,801 | 9,254,306 | 9,402,810 | 5,675,716 |
| Argentina— | | | | | | |
| Ingots, blooms, billets .. | 3,823 | n.a. | 4 | 331 | 336 | 3 |
| Brazil— | | | | | | |
| Pig-iron | 259,564 | 65,531 | 49,084 | 163,223 | 165,842 | n.a. |
| Ferro-manganese | 305 | 79 | 148 | 4,498 | 4,570 | n.a. |
| Other ferro-alloys | 2,439 | 1,536 | 4,857 | 8,678 | 8,817 | n.a. |
| Chile— | | | | | | |
| Ferro-manganese | 1,436 | 497 | 198 | 619 | 629 | n.a. |
| Ferro-silicon | 297 | 476 | n.a. | 148 | 150 | n.a. |
| Ferro-molybdenum | 467 | 485 | 873 | 1,005 | 1,021 | n.a. |
| Ingots, blooms, billets .. | 32,591 | 18,016 | 3,425 | 6,378 | 6,480 | n.a. |
| Formosa— | | | | | | |
| Pig-iron | 4,168 | n.a. | n.a. | 1,083 | 1,100 | 300 |
| Ferro-manganese | 62 | 15 | 295 | 1,092 | 1,110 | 3,494 |
| Ferro-silicon | 305 | 325 | 108 | 4,366 | 4,436 | 6,364 |
| Scrap | 2,346 | 852 | 13,802 | 33,303 | 33,837 | 11,710 |
| Israel— | | | | | | |
| Scrap | 952 | 1,245 | 1,949 | 2,095 | 2,129 | 1,649 |

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

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

| Exporting Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|--------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Japan— | | | | | | |
| Pig-iron | 5,668 | 676 | 718 | 47 | 48 | 432,747 |
| Ferro-chrome | 6,228 | 5,515 | 3,046 | 1,932 | 1,963 | 27,566 |
| Ferro-manganese | 4,736 | 7,043 | 11,149 | 8,227 | 8,359 | 19,225 |
| Ferro-silicon | 2,350 | 1,480 | 2,796 | 1,316 | 1,337 | 10,041 |
| Ferro-silico-manganese | 343 | 1,275 | 1,231 | 1,207 | 1,226 | 4,602 |
| Ferro-nickel | 5 | 616 | 2,264 | — | — | 2,232 |
| Ferro-titanium | 272 | 399 | 575 | 582 | 591 | 301 |
| Ferro-vanadium | 41 | 127 | 1 | — | — | 42 |
| Other ferro-alloys | 705 | 2,647 | 2,068 | 2,520 | 2,560 | 4,333 |
| Ingots, blooms, billets .. | 49,853 | 49,582 | 348,182 | 460,215 | 467,600 | 1,090,673 |
| Scrap | 4,424 | 42,982 | 79,099 | 81,496 | 82,804 | 373,133 |
| Lebanon— | | | | | | |
| Scrap | 30,032 | 25,756 | 24,087 | 61,226 | 62,208 | 45,818 |
| Southern Yemen— | | | | | | |
| Scrap | 507 | 333 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Thailand— | | | | | | |
| Scrap | — | — | 87 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Turkey— | | | | | | |
| Old and scrap | 1,838 | 883 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ferro-chrome | 5,123 | 9,678 | 7,096 | 7,366 | 7,484 | <i>n.a.</i> |

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

| Importing Country and Description | Long tons | | | | Tonnes | |
|-----------------------------------|-----------|---------|---------|---------|---------|-----------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Pig-iron— | | | | | | |
| Forge and foundry .. | 28,292 | 28,975 | 10,757 | 7,523 | 7,644 | 28,526 |
| Hematite | 197,735 | 151,907 | 122,547 | 53,601 | 54,461 | 44,313 |
| Basic | 35,971 | 38,790 | 23,132 | 16,155 | 16,414 | 28,320 |
| Other | 1,948 | 2,567 | 12,080 | 18,999 | 19,304 | 41,207 |
| Sponge-iron | 8,686 | 11,053 | 13,160 | 12,554 | 12,755 | 10,992 |
| Ferro-manganese .. | 73,324 | 66,381 | 94,366 | 74,714 | 75,913 | 78,505 |
| Ferro-silicon | 94,732 | 110,756 | 107,051 | 122,857 | 124,829 | 102,535 |
| Ferro-silicon-chrome .. | 5,998 | 4,299 | 7,773 | 8,387 | 8,522 | 4,503 |
| Ferro-chrome | 44,627 | 58,464 | 65,338 | 69,002 | 70,109 | 53,326 |
| Ferro-vanadium | 141 | 482 | 788 | 1,315 | 1,336 | 200 |
| Silico-manganese .. | 24,390 | 26,632 | 30,147 | 28,038 | 28,488 | 24,422 |
| Other ferro-alloys .. | 7,365 | 8,846 | 17,919 | 22,083 | 22,437 | 11,448 |
| Iron and steel ingots, etc. | 113,298 | 88,925 | 424,119 | 194,169 | 197,285 | 18,380 |
| Blooms, billets, slabs— | | | | | | |
| Iron | 166,220 | 376,329 | 576,307 | 814,485 | 827,557 | 383,347 |
| Steel | | | | | | |
| Old and scrap (a) .. | 3,154 | 3,118 | 288,580 | 260,802 | 264,988 | 293,435 |
| Malta— | | | | | | |
| Ingots, etc. | r 2,446 | r 3,445 | r 4,114 | 6,256 | 6,357 | 4,005 |
| Ghana— | | | | | | |
| Pig-iron | 394 | 1,236 | 257 | 793 | 805 | n.a. |
| Ferro-manganese .. | 45 | 75 | 81 | 131 | 133 | n.a. |
| Ingots, blooms, etc. .. | 315 | 83 | 404 | 176 | 179 | n.a. |
| Kenya— | | | | | | |
| Pig-iron and Ferro-alloys | 1,340 | 946 | 568 | 771 | 783 | 1,270 |
| Ingots, blooms, etc. .. | 148 | 266 | 16 | 6,837 | 6,947 | 18,461 |
| Mauritius— | | | | | | |
| Pig-iron, ingots, etc. .. | 53 | 1,076 | 747 | 4,172 | 4,239 | 3,174 |
| Nigeria— | | | | | | |
| Ingots, blooms etc. .. | 817 | 1,359 | 2,577 | 10,846 | 11,020 | 16,621 |
| Tanzania— | | | | | | |
| Pig-iron and Ferro-alloys | 1,607 | 998 | 1,336 | 1,477 | 1,501 | 1,242 |
| Ingots, blooms, etc. .. | 202 | 1 | — | 1 | 1 | — |
| Uganda— | | | | | | |
| Pig-iron and Ferro-alloys | 567 | 543 | 521 | 567 | 576 | 1,197 |
| Ingots, blooms, etc. .. | 492 | 1,568 | 607 | 44 | 45 | 12 |
| Zambia— | | | | | | |
| Pig-iron | 2,311 | 1,234 | 2,745 | 2,671 | 2,714 | n.a. |
| Ferro-alloys | 478 | 354 | 962 | 573 | 582 | n.a. |
| Ingots | 95 | 142 | 11 | n.a. | n.a. | n.a. |
| Canada— | | | | | | |
| Pig-iron | 25,663 | 32,837 | 20,486 | 86 | 87 | 608 |
| Sponge iron | 1,771 | 1,918 | 2,517 | 2,378 | 2,416 | 2,148 |
| Ferro-manganese and | 14,325 | 24,947 | 21,896 | 17,608 | 17,891 | 19,557 |
| spiegeleisen | | | | | | |
| Ferro-chrome | 19,411 | 13,433 | 22,431 | 20,485 | 20,814 | 36,202 |
| Ferro-silicon | 5,182 | 8,764 | 8,080 | 9,326 | 9,476 | 9,417 |
| Ferro-tungsten | 86 | 53 | 94 | 89 | 91 | 101 |
| Ferro-vanadium | 346 | 237 | 349 | 168 | 171 | 90 |
| Silico-manganese and | 3,752 | 1,200 | 4,071 | 960 | 975 | 1,624 |
| silico-spiegel | | | | | | |
| Other ferro-alloys .. | 3,168 | 4,020 | 3,999 | 6,554 | 6,659 | 4,920 |
| Ingots, blooms, billets .. | 29,190 | 8,646 | 268,890 | 223,662 | 227,251 | 253,111 |
| Scrap | 503,276 | 572,507 | 635,581 | 738,815 | 750,671 | 1,077,387 |
| Jamaica— | | | | | | |
| Pig-iron | 429 | 362 | 177 | 172 | 175 | 204 |

(a) Excluding ships intended for breaking up as follows (gross tonnage): (Long tons): 1967—1,048; 1968—8,342; 1969—17,014; 1970—9,655. (Tonnes): 1970—9,810; 1971—18,717

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

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|--------|---------|--------|--------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Trinidad and Tobago— | | | | | | |
| Pig-iron | 28 | 8 | 12 | 135 | 137 | 1 |
| Ingots, etc. | 595 | 990 | 1,600 | 1,258 | 1,278 | 380 |
| Guyana— | | | | | | |
| Pig-iron, ingots, etc. .. | 853 | 26 | 195 | 328 | 333 | 395 |
| Ceylon— | | | | | | |
| Pig-iron | 997 | 2,016 | 342 | n.a. | n.a. | n.a. |
| Ingots, blooms, billets etc. | 5,822 | 3,026 | n.a. | n.a. | n.a. | n.a. |
| Cyprus— | | | | | | |
| Pig-iron | 355 | 372 | 531 | 297 | 302 | 205 |
| Ingots, etc. | 388 | 1,267 | 31 | 56 | 57 | 105 |
| Hong Kong— | | | | | | |
| Pig-iron | 2,810 | 8,074 | 1,043 | 7,338 | 7,456 | 20,403 |
| Ingots, blooms, billets .. | 25,961 | 2,177 | 24,521 | 22,717 | 23,082 | 55,081 |
| Old and scrap | 47,389 | 61,746 | 24,005 | 85,468 | 86,840 | 110,480 |
| Tinplate scrap | 55 | 560 | (a) 178 | 49 | 50 | 141 |
| India (b)— | | | | | | |
| Pig-iron | 315 | 320 | 3 | — | — | — |
| Ingots, blooms, billets .. | 20,759 | 20,812 | 11,006 | 23,895 | 24,279 | 117,604 |
| Ferro-chrome | 1,185 | 459 | 1,411 | 13 | 13 | 219 |
| Ferro-manganese | 317 | 114 | 34 | — | — | — |
| Ferro-silicon | 89 | 51 | 24 | 76 | 77 | 6,794 |
| Other ferro-alloys | 1,339 | 885 | 468 | 875 | 889 | 423 |
| Old and scrap | 10,444 | 11,373 | 10,490 | 7,311 | 7,428 | 18,150 |
| Malaysia (West)— | | | | | | |
| Pig-iron | 5,602 | 3,035 | 10 | 12 | 12 | 171 |
| Ingots, slabs, etc. | 11,906 | 17,901 | 161 | 7,761 | 7,886 | 21,405 |
| Scrap | 5,593 | 219 | 1,110 | 82 | 83 | 2,873 |
| Sabah— | | | | | | |
| Ingots, etc. | 116 | 93 | 85 | 31 | 31 | 316 |
| Singapore— | | | | | | |
| Pig-iron | 20,512 | 19,962 | 5,619 | 7,255 | 7,371 | 20,077 |
| Ferro-alloys | 1,552 | 791 | 928 | 1,144 | 1,162 | 1,757 |
| Ingots, blooms, etc. | 22,449 | 27,813 | 32,048 | 31,854 | 32,365 | 46,416 |
| Scrap | 35,260 | 24,298 | 31,109 | 32,733 | 33,258 | 59,249 |
| Australia— | | | | | | |
| Ferro-manganese | 4,955 | 10,482 | 6,352 | 7,691 | 7,814 | 11,343 |
| Ferro-chrome | 3,430 | 3,487 | 5,877 | 12,879 | 13,086 | 6,900 |
| Ferro-molybdenum | 131 | 163 | 131 | 277 | 281 | 223 |
| Ferro-silicon | 9,291 | 6,227 | 7,600 | 13,388 | 13,603 | 10,701 |
| Other ferro-alloys | 5,684 | 3,059 | 2,913 | 5,860 | 5,954 | 5,854 |
| Ingots and billets, etc.(c) | 79 | 179 | 274 | 328 | 333 | 1,151 |
| Scrap (c) | (a) 8 | 112 | 136 | 1,531 | 1,548 | 1,000 |
| New Zealand (c)— | | | | | | |
| Pig-iron | 6,794 | 5,612 | 6,449 | 7,502 | 7,622 | 9,447 |
| Ferro-manganese | 742 | 429 | 1,131 | 2,097 | 2,131 | n.a. |
| Other ferro-alloys | 622 | 360 | 550 | 1,136 | 1,154 | n.a. |
| Billets and blooms | 41 | 44 | 1,176 | 123 | 125 | n.a. |
| Solomon Islands— | | | | | | |
| Billets and blooms | 806 | 1,098 | 942 | 1,172 | 1,191 | 1,522 |
| Irish Republic— | | | | | | |
| Pig-iron and sponge iron | 27,490 | 21,188 | 21,713 | 17,938 | 18,226 | 21,330 |
| Ferro-alloys | 646 | 1,351 | 585 | 1,762 | 1,790 | 1,196 |
| Ingots, blooms, billets, etc. | 1,703 | 8,497 | 5,768 | 6,410 | 6,513 | 9,794 |

(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.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|-------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES | | | | | | |
| Albania— | | | | | | |
| Pig-iron | 4,262 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Austria— | | | | | | |
| Pig-iron | 94,954 | 108,074 | 98,065 | 81,573 | 82,882 | 73,848 |
| Spiegeleisen | 1,765 | 2,650 | 2,768 | 614 | 624 | 569 |
| Ferro-manganese | 11,291 | 13,842 | 19,271 | 17,297 | 17,575 | 16,734 |
| Ferro-silicon | 9,400 | 11,022 | 13,937 | 14,615 | 14,850 | 13,085 |
| Other ferro-alloys | 20,262 | 24,394 | 33,026 | 29,919 | 30,399 | 21,583 |
| Ingots and blooms | 88,626 | 153,886 | 57,580 | 72,580 | 73,745 | 117,967 |
| Scrap | 12,366 | 60,443 | 94,701 | 78,090 | 79,343 | 82,607 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Pig-iron | 167,748 | 193,034 | 210,513 | 229,913 | 233,603 | 159,882 |
| Sponge-iron | 3,152 | 1,758 | 1,386 | 236 | 240 | 340 |
| Spiegeleisen | 14,749 | 19,382 | 21,076 | 17,789 | 18,075 | 1,929 |
| Ferro-chrome, etc. | 6,721 | 7,077 | 8,727 | 14,751 | 14,988 | 15,200 |
| Ferro-manganese | 73,062 | 74,031 | 83,434 | 85,602 | 86,976 | 84,425 |
| Ferro-silico-manganese | 5,924 | 10,066 | 11,631 | 9,903 | 10,062 | 9,452 |
| Ferro-molybdenum | 83 | 85 | 122 | 155 | 158 | 168 |
| Ferro-silicon | 17,631 | 26,159 | 30,771 | 37,095 | 37,690 | 29,568 |
| Ferro-tungsten | 33 | 10 | 25 | 40 | 41 | 20 |
| Other ferro-alloys | 2,273 | 3,222 | 3,044 | 3,193 | 3,243 | 3,473 |
| Ingots | 219,193 | 110,287 | 150,003 | 137,745 | 139,956 | 130,086 |
| Blooms, billets, etc. | 150,920 | 149,705 | 169,048 | 277,400 | 281,852 | 143,442 |
| Old and scrap | 193,770 | 278,861 | 568,953 | 823,136 | 836,345 | 629,563 |
| Bulgaria— | | | | | | |
| Pig-iron | 157,781 | 245,029 | 302,419 | 290,491 | 295,153 | <i>n.a.</i> |
| Czechoslovakia— | | | | | | |
| Pig iron | 200,000 | 413,000 | 694,000 | 767,000 | 779,000 | 745,000 |
| Denmark— | | | | | | |
| Pig-iron | 30,555 | 20,754 | 22,715 | 30,003 | 30,484 | 15,195 |
| Ferro-chrome | 401 | 593 | 798 | 710 | 721 | 1,067 |
| Ferro-manganese | 2,197 | 5,704 | 5,879 | 7,774 | 7,899 | 8,397 |
| Ferro-silicon | 3,967 | 5,694 | 4,145 | 5,231 | 5,315 | 4,485 |
| Other ferro-alloys | 126 | 122 | 216 | 1,051 | 1,068 | 706 |
| Ingots, blooms, billets | 91,470 | 153,782 | 148,596 | 169,383 | 172,101 | 133,003 |
| Old and scrap | 593 | 1,018 | 41,423 | 26,863 | 27,294 | 2,533 |
| Finland— | | | | | | |
| Pig-iron | 4,720 | 714 | 1,535 | 945 | 960 | 934 |
| Blooms, billets, etc. | 50,398 | 20,152 | 34,974 | 59,443 | 60,397 | 14,960 |
| Ferro-manganese | 2,153 | 3,194 | 3,623 | 5,931 | 6,026 | 4,634 |
| Other ferro-alloys | 8,588 | 6,836 | 16,910 | 18,015 | 18,304 | 17,748 |
| Old and scrap | 108,873 | 66,789 | 91,463 | 133,955 | 136,105 | 116,574 |
| France— | | | | | | |
| Pig-iron—hematite | 132,084 | 205,635 | 193,987 | 120,607 | 122,542 | 175,673 |
| do. other | 24,205 | 23,732 | 27,761 | 10,270 | 10,435 | 63,407 |
| Sponge-iron | 7,381 | 1,823 | 1,584 | 3,146 | 3,197 | 2,488 |
| Spiegeleisen | 4,303 | 2,395 | 3,329 | 4,173 | 4,240 | 20 |
| Ferro-manganese | 21,546 | 20,128 | 24,786 | 27,288 | 27,726 | 25,621 |
| Ferro-silicon | 687 | 1,415 | 2,695 | 2,024 | 2,057 | 584 |
| Ferro-chrome | 3,061 | 4,311 | 10,165 | 10,077 | 10,239 | 6,962 |
| Ferro-nickel | 44,100 | 49,470 | 65,616 | 89,180 | 90,611 | 82,806 |
| Other ferro-alloys | 1,965 | 3,037 | 2,378 | 2,479 | 2,519 | 1,328 |
| Ingots | 129,311 | 81,119 | 219,244 | 251,896 | 255,938 | 280,164 |
| Blooms, billets, etc. | 481,273 | 463,191 | 552,299 | 474,366 | 481,978 | 341,172 |
| Old and scrap | 456,607 | 366,314 | 456,922 | 411,497 | 418,101 | 250,876 |
| Germany (Federal)— | | | | | | |
| Pig-iron | 136,749 | 195,534 | 163,176 | 163,108 | 165,726 | 119,098 |
| Spiegeleisen | 3,331 | 3,159 | 766 | 206 | 209 | 246 |
| Ferro-alloys | 250,946 | 366,948 | 421,382 | 470,013 | 477,555 | 382,051 |
| Ingots, blooms, billets | 342,746 | 646,436 | 845,431 | 1,144,500 | 1,162,866 | 498,104 |
| Old and scrap | 1,086,015 | 1,617,604 | 1,188,902 | 1,405,694 | 1,428,251 | 1,042,408 |
| Germany (East)— | | | | | | |
| Pig-iron | 708,600 | <i>n.a.</i> | 624,600 | 736,500 | 748,300 | 830,500 |

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

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-------------|-------------|-----------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Greece— | | | | | | |
| Pig-iron | 27,310 | 32,464 | 25,706 | 22,041 | 22,395 | 19,669 |
| Spiegeleisen | 572 | 80 | 158 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ferro-alloys | 1,866 | 1,923 | 2,038 | 4,610 | 4,684 | 3,140 |
| Ingots, blooms, slabs, etc. | 48,216 | 124,233 | 57,338 | 87,949 | 89,360 | 40,641 |
| Old and scrap | 732 | 10,807 | 10,111 | 11,452 | 11,636 | 14,292 |
| Hungary— | | | | | | |
| Pig iron | 160,426 | 192,800 | 202,544 | 189,315 | 192,353 | 197,347 |
| Ferro-chrome | 9,303 | 8,108 | 6,837 | 8,122 | 8,252 | 6,128 |
| Ferro-manganese | 12,233 | 25,454 | 23,917 | 28,840 | 29,303 | 22,443 |
| Ferro-silicon | 2,371 | 2,406 | 2,947 | 2,827 | 2,872 | 2,890 |
| Other ferro-alloys | <i>n.a.</i> | <i>n.a.</i> | 4,409 | 4,440 | 4,511 | 5,301 |
| Ingots | <i>n.a.</i> | <i>n.a.</i> | 207,420 | 210,852 | 214,236 | 208,808 |
| Italy— | | | | | | |
| Pig-iron | 1,030,248 | 830,254 | 746,953 | 902,691 | 917,177 | 743,812 |
| Spiegeleisen | 24,861 | 29,025 | 31,537 | 12,392 | 12,591 | 4,866 |
| Ferro-chrome | 23,336 | 19,886 | 25,525 | 30,283 | 30,769 | 22,013 |
| Ferro-manganese | 85,550 | 86,054 | 111,672 | 109,298 | 111,052 | 117,411 |
| Ferro-molybdenum | 797 | 625 | 870 | 791 | 804 | 641 |
| Ferro-silicon | 19,979 | 25,477 | 30,343 | 24,540 | 24,934 | 24,293 |
| Ferro-silico-manganese | 12,005 | 15,638 | 21,234 | 17,907 | 18,194 | 18,516 |
| Ferro-titanium | 502 | 626 | 987 | 1,481 | 1,505 | 757 |
| Ferro-tungsten | 165 | 596 | 367 | 215 | 219 | 106 |
| Ferro-vanadium | 616 | 254 | 352 | 442 | 449 | 304 |
| Other ferro-alloys | 6,664 | 4,023 | 15,414 | 19,385 | 19,696 | 16,482 |
| Ingots | 460,633 | 368,489 | 612,192 | 848,995 | 862,619 | 717,253 |
| Blooms, billets, etc. | | | | | | |
| Old and scrap | | | | | | |
| Ingots | 4,891,020 | 5,014,093 | 5,052,207 | 5,075,937 | 5,157,391 | 5,478,632 |
| Netherlands— | | | | | | |
| Pig-iron | 19,408 | 23,184 | 37,757 | 121,190 | 123,135 | 66,945 |
| Sponge iron and powder | 2,456 | 2,856 | 3,725 | 4,050 | 4,115 | 5,400 |
| Spiegeleisen | 317 | 201 | 373 | 142 | 144 | 100 |
| Ferro-manganese | 23,255 | 24,020 | 33,614 | 38,736 | 39,358 | (a) 35,280 |
| Ferro-chrome | 1,106 | 2,294 | 2,286 | 2,607 | 2,649 | 2,967 |
| Ferro-silicon | 6,460 | 7,824 | 10,228 | 7,465 | 7,585 | (a) 7,261 |
| Ferro-silico-manganese | 899 | 1,147 | 1,155 | 2,372 | 2,410 | 1,677 |
| Ferro-molybdenum | 55 | 34 | 61 | 38 | 39 | 28 |
| Other ferro-alloys | 979 | 708 | 1,772 | 982 | 998 | (a) 399 |
| Ingots, blooms, billets | r 413,573 | r 119,492 | r 64,893 | 270,166 | 274,501 | 484,345 |
| Old and scrap | 161,518 | 150,761 | 311,340 | 293,656 | 298,368 | 213,426 |
| Norway— | | | | | | |
| Pig-iron | 15,400 | 15,991 | 12,432 | 10,446 | 10,614 | 8,331 |
| Ferro-alloys | 2,461 | 1,651 | 10,689 | 5,343 | 5,429 | 6,971 |
| Ingots, blooms, billets | r 3,852 | r 8,060 | r 6,693 | 6,043 | 6,140 | 5,222 |
| Old and scrap | 23,642 | 12,750 | 20,522 | 45,384 | 46,112 | 51,963 |
| Poland— | | | | | | |
| Pig-iron | 683,136 | 928,826 | 1,192,515 | 1,461,384 | 1,484,835 | 1,552,409 |
| Ferro-alloys | 5,836 | 7,838 | 10,242 | 19,262 | 19,571 | 8,972 |
| Scrap | 2,999 | 3,732 | 4,381 | 5,658 | 5,749 | 6,123 |
| Portugal— | | | | | | |
| Iron and steel ingots | 39 | 800 | 708 | 94 | 95 | 44 |
| Old and scrap | 4,501 | 3,675 | 5,020 | 9,487 | 9,639 | 10,278 |
| Roumania— | | | | | | |
| Ferro-alloys | 67,418 | 74,800 | 87,600 | 100,400 | 102,000 | 120,800 |
| Spain— | | | | | | |
| Pig-iron | 13,474 | 12,744 | 11,865 | 65,343 | 66,392 | 24,558 |
| Ferro-manganese | 949 | 950 | 2,178 | 967 | 983 | 827 |
| Other ferro-alloys | 4,161 | 7,450 | 13,776 | 14,913 | 15,152 | 12,506 |
| Ingots and blooms | 677,387 | 531,175 | 537,280 | 388,879 | 395,119 | 49,400 |
| Old and scrap | 345,758 | 587,595 | 1,217,376 | 1,342,327 | 1,363,868 | 698,479 |

(a) Excludes imports from Belgium and Luxemburg, if any.

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

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|---------|---------|---------|---------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Sweden— | | | | | | |
| Pig-iron | 230,830 | 273,640 | 257,485 | 349,245 | 354,849 | 342,191 |
| Sponge iron | — | — | 4,121 | 7,137 | 7,251 | — |
| Spiegeleisen | 108 | — | — | — | — | — |
| Ferro-manganese | 20,834 | 30,458 | 26,291 | 31,374 | 31,878 | 34,165 |
| Ferro-chrome | 13,744 | 18,643 | 30,108 | 20,811 | 21,145 | 22,622 |
| Ferro-silicon | 8,056 | 8,721 | 14,119 | 18,678 | 18,978 | 14,882 |
| Ferro-silico-manganese | 7,382 | 11,847 | 10,278 | 10,357 | 10,523 | 11,669 |
| Ferro-tungsten | 380 | 272 | 655 | 652 | 663 | 626 |
| Other ferro-alloys | 10,910 | 14,406 | 16,389 | 19,623 | 19,938 | 18,866 |
| Blooms, billets, etc. | 9,796 | 14,126 | 56,110 | 37,067 | 37,662 | 27,961 |
| Old and scrap | 92,963 | 77,402 | 419,520 | 473,313 | 480,908 | 184,115 |
| Switzerland— | | | | | | |
| Pig-iron | 51,881 | 56,903 | 63,249 | 83,794 | 85,139 | 63,165 |
| Ferro-alloys | 10,930 | 17,690 | 16,879 | 18,180 | 18,472 | 17,106 |
| Ingots, blooms, billets | 147,224 | 170,412 | 177,765 | 265,412 | 269,671 | 196,831 |
| Old, filings and scrap | 22,436 | 26,491 | 21,370 | 50,358 | 51,166 | 27,490 |
| U.S.S.R.— | | | | | | |
| Pig-iron | 151,568 | 62,399 | 47,000 | 68,200 | 69,300 | 71,600 |
| Ferro-alloys | 7,086 | 8,464 | 7,000 | 5,800 | 5,900 | 10,000 |
| Yugoslavia— | | | | | | |
| Pig-iron | 138,700 | 141,414 | 208,833 | 163,297 | 165,918 | 188,603 |
| Ferro-alloys | 1,597 | 4,378 | 3,417 | 3,670 | 3,729 | 4,010 |
| Ingots, blooms, billets | 84,016 | 107,819 | 140,565 | 98,554 | 100,136 | 282,805 |
| Scrap | 32,427 | 105,159 | 138,136 | 144,410 | 146,727 | 250,625 |
| Algeria— | | | | | | |
| Ferro-manganese | 134 | 231 | 221 | 723 | 735 | n.a. |
| Ferro-silicon | 203 | 116 | 162 | 454 | 461 | n.a. |
| Ferro-silico-manganese | 10 | 15 | 20 | 34 | 35 | n.a. |
| Egypt— | | | | | | |
| Pig-iron and spiegeleisen | 24,811 | 84,442 | 51,942 | 41,541 | 42,208 | 47,807 |
| Ferro-alloys | 13,730 | 9,862 | 6,180 | 3,430 | 3,485 | 3,315 |
| Ingots, billets, etc. | 89,236 | 38,022 | 29,829 | 2,942 | 2,989 | 1,499 |
| Scrap | 51,055 | 34,904 | 31,952 | 95,195 | 96,723 | 63,267 |
| Morocco— | | | | | | |
| Pig-iron | 923 | 1,417 | 940 | 2,138 | 2,172 | 1,050 |
| Ferro-manganese | 95 | 99 | 124 | 172 | 175 | 199 |
| Ferro-silicon | 63 | 49 | 71 | 65 | 66 | 59 |
| Ferro-silico-manganese | 25 | 20 | 30 | 48 | 49 | 75 |
| Ferro-chrome | 7 | 10 | 4 | 11 | 11 | 14 |
| Scrap, etc. | 5 | — | 60 | 1 | 1 | 31 |
| South Africa— | | | | | | |
| Pig-iron (a) | 87,348 | 144,991 | 32 | 3,502 | 3,558 | 2,736 |
| Ferro-silicon | 1,560 | 3,509 | 1,566 | 1,755 | 1,783 | 1,657 |
| Ferro-chrome | 41 | 1,105 | 3,551 | 1,872 | 1,902 | 2,124 |
| Other ferro-alloys | 288 | 294 | 509 | 2,874 | 2,920 | 3,446 |
| Ingots, blooms, etc. | 36,053 | 80,923 | 15,157 | 111,587 | 113,378 | 64,307 |
| Scrap | 9,369 | 18,394 | 18,218 | 5,140 | 5,222 | 29,146 |
| Sudan— | | | | | | |
| Crude iron and steel | 39 | 12 | 87 | 20 | 20 | 48 |
| Tunisia— | | | | | | |
| Pig-iron | 104 | 190 | 791 | 58 | 59 | 105 |
| Ferro-alloys | 318 | 772 | 543 | 941 | 956 | 682 |
| Old and scrap | 64 | 122 | 543 | 504 | 512 | 232 |
| Costa-Rica— | | | | | | |
| Ingots, blooms, etc. | 9,345 | 15,354 | 17,789 | 22,299 | 22,657 | 12,529 |
| Honduras— | | | | | | |
| Ingots, blooms, etc. | 10,636 | 7,279 | 10,804 | 12,757 | 12,962 | n.a. |
| Mexico— | | | | | | |
| Pig-iron | 9,787 | 3,520 | 1,672 | 1,086 | 1,103 | 5,115 |
| Ferro-manganese | 423 | 410 | 582 | 894 | 908 | 1,311 |
| Ferro-silicon | 1,555 | 325 | 353 | 423 | 430 | 305 |
| Ferro-chrome | 379 | 491 | 816 | 1,514 | 1,538 | 1,107 |

(a) Including cast iron.

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

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|-----------|-----------|---------|---------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Mexico (cont.)— | | | | | | |
| Ferro-molybdenum .. | 18 | 39 | 72 | 64 | 65 | — |
| Ferro-vanadium .. | 156 | 328 | 192 | 199 | 202 | 190 |
| Ferro-nickel .. | 568 | 152 | 163 | 539 | 548 | 232 |
| Other ferro-alloys .. | 68 | 114 | 188 | 290 | 294 | 198 |
| Ingots, blooms, billets .. | 113,993 | 137,651 | 86,526 | 70,706 | 71,841 | 43,281 |
| Scrap .. | 686,227 | 451,042 | 480,541 | 705,409 | 716,729 | 507,750 |
| Tin-plate scrap .. | | | | | | |
| Salvador— | | | | | | |
| Ingots, blooms, billets .. | 24,845 | 35,749 | 29,716 | 19,321 | 19,631 | 35,954 |
| Scrap .. | 1,003 | 1,462 | 123 | 237 | 241 | 599 |
| United States— | | | | | | |
| Pig-iron .. | 540,388 | 701,695 | 363,007 | 222,537 | 226,108 | 277,889 |
| Ferro-chrome .. | r 51,324 | r 53,407 | r 51,276 | 36,879 | 37,471 | 77,280 |
| Ferro-manganese .. | r 192,660 | r 182,455 | r 269,612 | 259,774 | 263,942 | 220,245 |
| Ferro-silicon .. | r 27,083 | r 22,223 | r 30,012 | 20,004 | 20,320 | 22,196 |
| Ferro-titanium .. | 137 | 178 | 492 | 65 | 66 | 79 |
| Ferro-tungsten .. | 151 | — | — | 2 | 2 | 13 |
| Ferro-silico-chrome .. | — | 1,725 | 710 | — | — | 700 |
| Ferro-silico-manganese .. | 31,193 | 22,689 | 28,607 | 12,981 | 13,189 | 27,150 |
| Ferro-vanadium .. | 7 | 535 | 341 | 21 | 21 | 63 |
| Ferro-zirconium .. | 648 | 260 | 393 | 589 | 598 | 1,021 |
| Ferro-nickel .. | 2,322 | 9,423 | 14,014 | 12,724 | 12,928 | 23,798 |
| Sponge iron .. | 4,689 | 7,246 | 7,323 | 13,555 | 13,773 | 10,059 |
| Bar-iron, slabs, blooms, etc. .. | 131,845 | 183,551 | 131,020 | 152,746 | 155,196 | 249,147 |
| Steel ingots, blooms, etc. .. | | | | | | |
| Scrap .. | 182,791 | 227,737 | 256,371 | 249,000 | 253,000 | n.a. |
| Tin-plate scrap .. | 12,078 | 15,827 | 21,293 | 20,000 | 20,000 | n.a. |
| Argentina— | | | | | | |
| Pig-iron .. | r 96,984 | r 276,009 | r 356,679 | 121,058 | 123,001 | 86,625 |
| Ferro-manganese .. | 298 | 624 | 398 | 503 | 511 | 729 |
| Ferro-silicon .. | 207 | 131 | 31 | 33 | 34 | 16 |
| Ferro-silico-manganese .. | 199 | 189 | 23 | 8 | 8 | 112 |
| Ferro-molybdenum .. | 146 | 116 | 103 | 202 | 205 | 165 |
| Ferro-titanium .. | 57 | 67 | 95 | 133 | 135 | 98 |
| Ingots .. | 146,505 | 4,909 | 208 | n.a. | n.a. | n.a. |
| Blooms and billets .. | 349,209 | 323,542 | 737,068 | 779,923 | 792,438 | 695,603 |
| Old and scrap .. | 29,413 | 182 | 195 | 5,283 | 5,368 | 57,187 |
| Brazil— | | | | | | |
| Ferro-manganese .. | r 449 | 142 | 595 | 523 | 531 | n.a. |
| Ferro-silicon .. | 353 | 186 | 488 | 1,821 | 1,850 | n.a. |
| Ferro-chrome .. | 777 | 1,573 | 1,433 | 1,639 | 1,665 | n.a. |
| Ferro-molybdenum .. | 126 | 101 | 204 | 217 | 220 | n.a. |
| Ferro-vanadium .. | 38 | 29 | 57 | 34 | 35 | n.a. |
| Other ferro-alloys .. | 205 | 388 | 652 | 671 | 682 | n.a. |
| Chile— | | | | | | |
| Pig-iron (a) .. | 880 | 2,720 | 614 | 1,104 | 1,122 | n.a. |
| Ferro-manganese .. | 1,462 | 2 | n.a. | 1,015 | 1,031 | n.a. |
| Ferro-chrome .. | 269 | 192 | 542 | 595 | 605 | n.a. |
| Other ferro-alloys .. | 59 | 102 | 155 | 97 | 99 | n.a. |
| Colombia— | | | | | | |
| Pig-iron .. | 1,327 | 1,569 | 1,613 | n.a. | n.a. | n.a. |
| Ingots, etc. .. | 305 | r 27,161 | 41,042 | n.a. | n.a. | n.a. |
| Blooms, billets, etc. .. | | | | | | |
| Ferro-manganese .. | 1,666 | 4,348 | 2,208 | n.a. | n.a. | n.a. |
| Ferro-silico-manganese .. | 51 | 119 | 99 | n.a. | n.a. | n.a. |
| Ferro-silicon .. | 906 | 1,158 | 1,147 | n.a. | n.a. | n.a. |
| Ferro-chrome .. | 66 | 52 | 29 | n.a. | n.a. | n.a. |
| Other ferro-alloys .. | 55 | 88 | 96 | n.a. | n.a. | n.a. |

(a) Including Spiegeleisen.

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

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Peru— | | | | | | |
| Pig-iron | 214 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Ferro-manganese | 356 | 665 | 417 | n.a. | n.a. | n.a. |
| Ferro-chrome | 84 | 181 | 58 | n.a. | n.a. | n.a. |
| Ferro-silicon | 602 | 419 | 406 | n.a. | n.a. | n.a. |
| Other ferro-alloys | 176 | 135 | 39 | n.a. | n.a. | n.a. |
| Uruguay— | | | | | | |
| Ingots etc. | 23,246 | 53,449 | 40,669 | 42,633 | 43,317 | 38,190 |
| Ferro-alloys | 195 | 199 | 277 | 281 | 286 | 163 |
| Venezuela— | | | | | | |
| Pig-iron | 62 | 89 | 105 | n.a. | n.a. | n.a. |
| Ferro-alloys | 3,527 | 8,249 | 7,446 | n.a. | n.a. | n.a. |
| Scrap | 4,635 | 30,603 | 47,098 | n.a. | n.a. | n.a. |
| Ingots, blooms and billets | 5,222 | 6,608 | 6,445 | n.a. | n.a. | n.a. |
| Formosa— | | | | | | |
| Ingots, blooms, billets .. | 48,814 | 20,696 | 38,208 | 32,064 | 32,579 | 56,567 |
| Ferro-manganese | 82 | 147 | 243 | 143 | 145 | 235 |
| Ferro-silicon | 20 | 254 | 244 | 129 | 131 | 134 |
| Ferro-chrome | 58 | 144 | 87 | 105 | 107 | 96 |
| Other ferro-alloys | 93 | 237 | 199 | 173 | 176 | 186 |
| Old and scrap | 200,221 | 196,061 | 213,626 | 205,915 | 209,219 | 505,528 |
| Iran (a)— | | | | | | |
| Pig-iron | 22,305 | 25,104 | 23,366 | 7,492 | 7,612 | 12,564 |
| Old and scrap | 5,088 | 5,935 | 3,782 | 7,565 | 7,686 | 8,436 |
| Israel— | | | | | | |
| Pig-iron | 3,994 | 16,600 | 13,768 | 18,963 | 19,267 | 10,147 |
| Spiegeleisen | n.a. | n.a. | 246 | 292 | 297 | 113 |
| Ferro-manganese | 417 | 472 | 781 | 504 | 512 | 755 |
| Other ferro-alloys | 129 | 865 | 530 | 826 | 839 | 435 |
| Japan— | | | | | | |
| Pig-iron | 6,347,989 | 4,385,734 | 3,319,030 | 2,809,337 | 2,854,419 | 1,182,884 |
| Ferro-manganese | 9,243 | 2,355 | 24,171 | 47,115 | 47,871 | 2,156 |
| Ferro-silicon | 31,094 | 43,965 | 30,503 | 22,000 | 22,353 | 2,407 |
| Ferro-chrome | 3,589 | 3,431 | 9,545 | 25,141 | 25,545 | 5,118 |
| Ferro-Nickel | 2,782 | 1,129 | 308 | 4,650 | 4,725 | 4,087 |
| Ferro-molybdenum | 489 | 108 | 124 | 504 | 512 | 616 |
| Ferro-tungsten | 183 | 25 | 46 | 373 | 379 | 63 |
| Other ferro-alloys | 22,108 | 10,727 | 18,838 | 46,778 | 47,529 | 33,586 |
| Ingots, blooms, billets.. | 278,554 | 95,256 | 103,763 | 78,558 | 79,819 | 28,875 |
| Old and scrap | 6,602,009 | 3,877,196 | 4,801,132 | 5,701,056 | 5,792,541 | 2,551,769 |
| Jordan— | | | | | | |
| Ingots, blooms, billets.. | 66,981 | 1,993 | r 33,613 | 23,302 | 23,676 | 5,037 |
| Korea (South)— | | | | | | |
| Pig iron | 45,682 | 77,753 | 57,498 | 7,259 | 7,375 | 53,166 |
| Ferro-alloys | 10,424 | 648 | 868 | n.a. | n.a. | 470 |
| Scrap | 308,129 | 384,753 | 689,809 | 826,672 | 839,938 | 755,325 |
| Ingots, blooms, etc. .. | 41,642 | 351,025 | 310,786 | 319,979 | 325,114 | 83,899 |
| Lebanon— | | | | | | |
| Pig-iron | 5,110 | 11,575 | 10,522 | 1,354 | 1,376 | 7,023 |
| Ferro-alloys | 18 | 130 | 14 | 11 | 11 | 40 |
| Old and scrap | 2,133 | 4,823 | 3,358 | 33,795 | 34,337 | 24,318 |
| Ingots, blooms, etc. .. | 85,049 | 98,475 | 100,192 | 108,484 | 110,225 | 131,143 |
| Philippine Republic— | | | | | | |
| Pig-iron | 12,463 | 18,362 | 14,050 | 12,119 | 12,313 | 18,655 |
| Ferro-alloys | 1,959 | 2,537 | 2,329 | 5,035 | 5,116 | 5,089 |
| Ingots, blooms, billets.. | 181,032 | 244,411 | 250,354 | 392,891 | 399,196 | 184,515 |
| Syria— | | | | | | |
| Pig-iron | 1,038 | 1,412 | 2,095 | 1,505 | 1,529 | 1,388 |
| Scrap | 312 | 1,912 | 1,902 | 459 | 466 | 2,154 |
| Thailand— | | | | | | |
| Pig-iron | 950 | 91 | 61 | 705 | 716 | 1,172 |
| Ferro-alloys | 1,706 | 3,432 | 3,443 | 3,823 | 3,885 | 4,954 |

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

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

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|---------|---------|---------|---------|------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Turkey— | | | | | | |
| Pig-iron | 20,977 | 25,670 | 31,444 | 71,140 | 72,282 | n.a. |
| Blooms, billets, etc. .. | 124,463 | 164,621 | 162,323 | 152,283 | 154,727 | n.a. |
| Ferro-manganese | 5,478 | 4,807 | 9,123 | 10,865 | 11,039 | n.a. |
| Ferro-silicon | 1,573 | 1,932 | 3,767 | 2,678 | 2,721 | n.a. |
| Ferro-chrome | 19 | 25 | n.a. | 1 | 1 | n.a. |
| Other ferro-alloys | 545 | 1,870 | 763 | 157 | 160 | n.a. |
| Scrap | 38,411 | 63,357 | 38,304 | 75,314 | 76,523 | n.a. |

LEAD
PRODUCTION OF LEAD ORE
(Metal content)

| Producing Country | Long tons | | | | Tonnes | |
|-------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom .. | 3,200 | 3,200 | 3,000 | 4,000 | 4,000 | 5,000 |
| Nigeria (a) .. | 600 | — | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Zambia (b) .. | 19,100 | 23,745 | 22,644 | 26,900 | 27,300 | 27,700 |
| Canada .. | 311,875 | 324,425 | 297,235 | 351,554 | 357,196 | 393,233 |
| India .. | 3,932 | 3,510 | 3,248 | 2,350 | 2,388 | 3,300 |
| Australia .. | 375,779 | r 382,671 | 444,899 | 449,528 | 456,743 | 402,687 |
| TOTAL .. | 685,700 | 722,300 | 757,200 | 826,900 | 840,200 | 832,000 |
| Irish Republic .. | 58,704 | 59,722 | 57,760 | 61,880 | 62,873 | 51,592 |
| OTHER COUNTRIES | | | | | | |
| Austria .. | 5,549 | 6,673 | 6,023 | 5,908 | 6,003 | 6,400 |
| Bulgaria .. | 85,000 | 84,800 | r 90,000 | 94,000 | 95,500 | 100,000 |
| Czechoslovakia .. | 6,100 | 6,820 | 6,530 | 6,880 | 6,990 | 7,000 |
| Finland (f) .. | 4,711 | 4,453 | 4,481 | 4,925 | 5,005 | 4,739 |
| France .. | 26,924 | 26,689 | 29,800 | 28,921 | 29,385 | 29,766 |
| Germany— | | | | | | |
| Federal Republic .. | 58,704 | 51,936 | 38,921 | 38,034 | 38,644 | 39,754 |
| East (d) .. | 11,000 | 10,000 | 10,000 | 10,000 | 10,000 | 5,000 |
| Greece .. | 8,128 | 8,551 | 8,170 | 9,000 | 9,000 | 10,100 |
| Hungary .. | 1,400 | 1,500 | 1,670 | (e) 1,708 | (e) 1,735 | <i>n.a.</i> |
| Italy .. | 33,398 | 34,889 | 36,300 | 34,600 | 35,200 | 31,600 |
| Norway .. | 3,268 | 3,475 | 3,458 | 2,966 | 3,014 | 3,160 |
| Poland .. | r 54,300 | r 58,600 | r 63,300 | 66,100 | 67,200 | 69,500 |
| Portugal .. | 1,569 | 1,895 | 1,774 | 1,533 | 1,558 | 1,383 |
| Roumania (d) .. | 20,000 | 30,000 | 40,000 | 39,000 | 40,000 | 40,000 |
| Spain .. | 62,685 | 72,876 | 70,616 | 71,567 | 72,715 | 69,527 |
| Sweden .. | 72,456 | 70,894 | 78,696 | 77,075 | 78,312 | 79,500 |
| U.S.S.R. (b) (d) .. | 400,000 | 400,000 | 400,000 | 520,000 | 530,000 | 550,000 |
| Yugoslavia .. | 106,371 | 110,002 | 116,179 | 124,692 | 126,693 | 124,347 |
| Algeria .. | 3,523 | 5,258 | 7,821 | 6,420 | 6,523 | 4,700 |
| Congo (Brazza) .. | 1,500 | 689 | 2,200 | (e) 500 | (e) 500 | <i>n.a.</i> |
| Morocco .. | 76,466 | 78,800 | 75,452 | 77,351 | 78,592 | 87,803 |
| South Africa .. | 18 | — | — | — | — | — |
| South West Africa (d) .. | 70,000 | 60,000 | 75,000 | 69,400 | 70,500 | 73,000 |
| Tunisia .. | 12,665 | 14,254 | 22,467 | 22,177 | 22,533 | 20,700 |
| Guatemala (f) .. | 1,142 | 464 | 280 | 500 | 500 | 153 |
| Honduras .. | 11,500 | 12,967 | 13,839 | 17,326 | 17,604 | 17,940 |
| Mexico (f) .. | 165,048 | 171,416 | 168,193 | 173,800 | 176,600 | 156,800 |
| United States (f) .. | 282,974 | 320,675 | 448,100 | 510,506 | 518,674 | 520,156 |
| Argentina .. | 31,789 | 26,130 | r 38,081 | 35,025 | 35,588 | 38,000 |
| Bolivia (c) .. | 19,636 | 21,600 | 24,600 | 25,400 | 25,800 | 23,200 |
| Brazil (e) .. | 23,088 | 20,850 | r 26,591 | 27,157 | 27,098 | 27,000 |
| Chile .. | 400 | 970 | 819 | 790 | 803 | 881 |
| Colombia .. | 1,068 | 728 | 403 | 576 | 585 | 411 |

(a) Excluding native production.

(b) Smelter.

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

(d) Estimated.

(e) United States Bureau of Mines' estimate.

(f) Amount estimated as recoverable.

PRODUCTION OF LEAD ORE (cont.)

| Producing Country | Long tons | | | | Tonnes | |
|----------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Peru (a) | 157,193 | 152,083 | 152,102 | 154,294 | 156,770 | 147,400 |
| Burma | 14,800 | 16,964 | 9,566 | 9,362 | 9,512 | 10,000 |
| China (c) | 90,000 | 100,000 | 100,000 | 100,000 | 100,000 | 120,000 |
| Iran (c) (d) | 14,554 | r 21,738 | r 21,357 | 22,578 | 22,940 | 30,000 |
| Japan | 62,473 | 61,900 | 62,500 | 63,390 | 64,407 | 70,600 |
| Korea (South) | 8,700 | 9,178 | 9,450 | 10,385 | 10,552 | 10,581 |
| Korea (North) (b) | 65,000 | 70,000 | 70,000 | 69,000 | 70,000 | 70,000 |
| Philippine Republic | 88 | 83 | 66 | 14 | 14 | — |
| Thailand | 3,500 | 2,900 | 1,665 | 1,195 | 1,214 | 1,386 |
| Turkey | 1,144 | 4,814 | 1,411 | 2,880 | 2,920 | n.a. |
| TOTAL | 2,200,000 | 2,200,000 | 2,300,000 | 2,600,000 | 2,600,000 | 2,600,000 |
| WORLD'S TOTAL | 2,900,000 | 3,000,000 | 3,100,000 | 3,400,000 | 3,500,000 | 3,500,000 |

(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

| Producing Country | Long tons | | | | Tonnes | |
|-------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom (g) .. | 26,400 | 31,386 | 38,439 | 43,077 | 43,768 | 38,628 |
| Zambia | 19,100 | 23,745 | 22,644 | 26,900 | 27,300 | 27,700 |
| Canada | 172,530 | 180,446 | 167,092 | 182,705 | 185,638 | 168,357 |
| India | 2,435 | 1,347 | 1,927 | 1,833 | 1,862 | 1,539 |
| Australia (c) .. | 292,030 | 291,366 | 338,908 | 345,474 | 351,019 | 323,620 |
| TOTAL | 511,123 | 528,794 | 568,840 | 601,380 | 611,030 | 560,000 |
| OTHER COUNTRIES | | | | | | |
| Austria (b) | 10,544 | 11,156 | 11,600 | 13,300 | 13,500 | 14,913 |
| Belgium (b) | 106,097 | 108,324 | 108,797 | 104,349 | 106,024 | 93,924 |
| Bulgaria | 95,000 | 91,200 | 93,000 | 97,000 | 98,600 | 102,000 |
| Czechoslovakia .. | 17,249 | 17,591 | 18,036 | 17,337 | 17,615 | 17,610 |
| France | 112,209 | 98,356 | 106,200 | 118,000 | 119,900 | 108,310 |
| Germany—Federal | 134,152 | 118,123 | 123,821 | (a) 137,000 | (a) 137,000 | (a) 131,000 |
| do. East (a) (b) .. | 25,000 | 25,000 | 25,000 | 25,000 | 25,000 | 20,000 |
| Greece | 6,400 | 8,220 | 11,800 | 14,038 | 14,263 | 17,119 |
| Italy | 59,544 | 56,645 | 61,340 | 53,431 | 54,288 | 48,392 |
| Norway | 1,400 | 1,300 | 1,200 | 1,000 | 1,000 | 680 |
| Poland | 43,600 | 41,300 | 49,900 | 53,600 | 54,500 | 60,200 |
| Portugal | 1,056 | 1,208 | 1,111 | 563 | 572 | 1,200 |
| Roumania (a) .. . | 40,000 | 40,000 | 40,000 | 39,000 | 40,000 | 40,000 |
| Spain | 51,730 | 63,112 | 80,410 | 67,597 | 68,682 | 72,146 |
| Sweden | 41,000 | 43,000 | 41,000 | 42,797 | 43,484 | 39,323 |
| U.S.S.R. (a) .. . | 410,000 | 410,000 | 410,000 | 520,000 | 530,000 | 550,000 |
| Yugoslavia | 100,281 | 106,998 | 121,561 | 110,459 | 112,232 | 118,748 |
| Morocco | 21,021 | 23,784 | 26,408 | 24,500 | 24,900 | 16,100 |
| South West Africa | 69,300 | 54,600 | 68,400 | 66,800 | 67,900 | 68,400 |
| Tunisia | 14,000 | 14,000 | 14,000 | 21,100 | 21,400 | 18,800 |
| Guatemala | 70 | 196 | 221 | 74 | 75 | 89 |
| Mexico | 165,712 | 177,420 | 173,075 | 177,500 | 180,300 | 158,800 |
| United States (e) .. | 339,191 | 417,241 | r 570,228 | 595,295 | 604,843 | 593,600 |
| Argentina | 21,652 | 24,643 | 21,652 | 21,308 | 21,650 | n.a. |
| Bolivia (f) | 13 | — | — | n.a. | n.a. | n.a. |
| Brazil | 4,085 | 15,912 | 18,424 | 18,981 | 19,285 | 25,700 |
| Peru | 80,523 | 85,056 | 76,692 | 71,100 | 72,200 | 67,500 |
| Burma | 13,000 | 9,450 | 9,808 | 9,551 | 9,704 | (a) 12,000 |
| China (a) (b) .. . | 90,000 | 100,000 | 100,000 | 100,000 | 100,000 | 120,000 |
| Japan | 147,604 | (b) 161,974 | (b) 183,668 | 172,007 | 174,767 | 215,054 |
| Korea (North) (a) | 55,000 | 55,000 | 55,000 | 54,000 | 55,000 | 55,000 |
| Turkey | 500 | 1,600 | 1,200 | 3,400 | 3,500 | 3,200 |
| TOTAL | 2,200,000 | 2,400,000 | 2,600,000 | 2,800,000 | 2,800,000 | 2,800,000 |
| WORLD'S TOTAL .. | 2,700,000 | 2,900,000 | 3,200,000 | 3,300,000 | 3,400,000 | 3,400,000 |

(a) Estimated.

(b) Including secondary metal.

(c) Including lead in base bullion as follows:

| Year | Long tons | Year | Long tons | Tonnes |
|--------------|-----------|--------------|-----------|---------|
| 1967 | 101,167 | 1970 | 168,241 | 170,941 |
| 1968 | 116,133 | 1971 | .. | 160,386 |
| 1969 | 153,134 | | | |

(d) United States Bureau of Mines' estimate.

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

| Year | Long tons | Year | Long tons | Tonnes |
|--------------|-----------|--------------|-----------|---------|
| 1967 | 494,439 | 1970 | 533,384 | 541,939 |
| 1968 | 491,856 | 1971 | .. | 517,000 |
| 1969 | r 539,201 | | | |

(f) Exports.

(g) Source: World Bureau of Metal Statistics.

EXPORTS OF LEAD, ETC *

| Exporting Country and Description | Long tons | | | | Tonnes | |
|--|-----------|-----------|-----------|-----------|-----------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Unwrought | 61,028 | 90,931 | 124,561 | 135,178 | 137,348 | 130,610 |
| do. alloys | 10,153 | 10,202 | 16,004 | 15,530 | 15,779 | 20,961 |
| Semi-manufactures (a) | 1,901 | 1,897 | 2,553 | 2,330 | 2,367 | 2,619 |
| White lead | 920 | 1,209 | 1,112 | 1,265 | 1,285 | 1,561 |
| Red lead, etc. | 5,145 | 5,001 | 6,116 | 7,261 | 7,378 | 6,331 |
| Nigeria— | | | | | | |
| Ore and concentrates .. | 908 | 51 | — | 5 | 5 | 150 |
| Zambia— | | | | | | |
| Unwrought | 17,141 | 16,096 | 25,482 | 21,717 | 22,065 | 26,120 |
| Canada— | | | | | | |
| Ore (Pb content) | 112,673 | 128,440 | 125,157 | 148,136 | 150,513 | 180,818 |
| Unwrought | 118,143 | 123,912 | 95,616 | 136,447 | 138,637 | 124,179 |
| Scrap (a) | 5,387 | 5,115 | 5,636 | 5,127 | 5,209 | 5,305 |
| Hong Kong— | | | | | | |
| Scrap | 892 | 549 | 603 | 1,588 | 1,613 | 1,609 |
| Singapore— | | | | | | |
| Semi-manufactures (a) | 238 | 234 | 175 | 132 | 134 | 262 |
| Australia— | | | | | | |
| Ores and concentrates (Pb content) | r 86,820 | r 83,633 | r 68,451 | 78,987 | 80,255 | 54,300 |
| Base bullion (Pb content) r | 100,394 | r 107,325 | r 135,605 | 164,045 | 166,678 | 165,104 |
| Unwrought (b) | 152,145 | 151,042 | 115,415 | 160,346 | 162,920 | 123,369 |
| do. alloys (b) | 3,311 | 3,420 | 4,203 | 6,112 | 6,210 | 3,189 |
| Scrap (a) (b) | 97 | 210 | 120 | 434 | 441 | 865 |
| Semi-manufactures (b) .. (a) | 287 | (a) 634 | (a) 2,575 | (a) 2,586 | (a) 2,627 | 3,672 |
| Red and white lead, etc. (b) | 1,419 | 1,304 | 1,674 | 2,771 | 2,816 | 2,252 |
| Irish Republic— | | | | | | |
| Ore and concentrates .. | 133,435 | 153,966 | 145,966 | 143,464 | 145,767 | 116,858 |
| Scrap | 401 | 318 | 208 | 258 | 262 | 5,000 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Unwrought (a) | 2,690 | 1,568 | 2,422 | 1,833 | 1,863 | 2,823 |
| Scrap | 66 | — | — | 47 | 48 | 1,010 |
| Red and white lead, etc. | 1,310 | 1,404 | 1,147 | 1,404 | 1,427 | 1,259 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Ore | 1,034 | 15 | 1,302 | 33,840 | 34,383 | 1,758 |
| Unwrought | 48,254 | 52,601 | 42,407 | 50,391 | 51,200 | 42,896 |
| do. alloys | 8,899 | 10,488 | 10,304 | 12,324 | 12,522 | 6,359 |
| Scrap | 2,226 | 5,209 | 11,882 | 7,640 | 7,763 | 5,513 |
| Semi-manufactures (a) | 7,164 | 6,676 | 6,288 | 5,508 | 5,596 | 5,957 |
| Red and white lead, etc. | 5,718 | 7,063 | 6,040 | 7,450 | 7,570 | 5,136 |
| Bulgaria | | | | | | |
| Metal | 32,832 | 32,596 | 28,198 | 21,769 | 22,118 | n.a. |
| Denmark— | | | | | | |
| Unwrought | 2,247 | 2,728 | 2,149 | 1,198 | 1,217 | 595 |
| do. alloys | 3,341 | 2,921 | 2,316 | 2,523 | 2,564 | 3,272 |
| Scrap | 20 | — | 56 | — | — | 153 |
| Semi-manufactures (a) | 39 | 76 | 114 | 119 | 121 | 177 |

*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.)

| Exporting Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|--------|--------|--------|--------|--------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Finland— | | | | | | |
| Unwrought (a) .. | 1 | 82 | 32 | 158 | 161 | 284 |
| France— | | | | | | |
| Ore | 3,833 | 3,555 | 4,265 | 2,132 | 2,166 | 1,156 |
| Unwrought | 15,171 | 13,864 | 13,474 | 14,525 | 14,758 | 21,082 |
| do. alloys | 2,567 | 2,645 | 5,319 | 12,746 | 12,951 | 9,077 |
| Scrap | 9,463 | 10,369 | 14,438 | 21,982 | 22,335 | 9,417 |
| Semi-manufactures (a) | 886 | 1,118 | 925 | 1,408 | 1,431 | 1,440 |
| Red and white lead, etc. | 7,661 | 8,082 | 9,284 | 8,858 | 9,000 | 10,244 |
| Germany (Federal)— | | | | | | |
| Ore | 5,548 | 5,312 | 7,478 | 1,854 | 1,884 | 2,806 |
| Unwrought (a) | 79,081 | 43,584 | 31,765 | 51,797 | 52,628 | 72,134 |
| Scrap (a) | 19,854 | 10,003 | 7,507 | 15,279 | 15,524 | 15,409 |
| Semi-manufactures (a) | 7,070 | 7,286 | 7,188 | 5,745 | 5,837 | 6,105 |
| Red and white lead | 9,325 | 8,507 | 9,628 | 8,158 | 8,289 | 8,008 |
| Greece— | | | | | | |
| Ore | 10,937 | 12,959 | 11,434 | 13,533 | 13,750 | 11,790 |
| Italy— | | | | | | |
| Ore | 3,403 | 3,245 | 7,409 | 13,158 | 13,369 | 14,813 |
| Unwrought (a) | 18 | 3 | 18 | 338 | 344 | 730 |
| Semi-manufactures (a) | 245 | 65 | 695 | 98 | 100 | 177 |
| Red and white lead | 258 | 1,425 | 552 | 48 | 49 | 48 |
| Netherlands— | | | | | | |
| Unwrought | 6,291 | 6,356 | 3,458 | 6,752 | 6,860 | 8,967 |
| do. alloys | 4,914 | 9,990 | 10,912 | 9,139 | 9,286 | 9,343 |
| Scrap (a) | 6,545 | 8,024 | 8,483 | 9,240 | 9,388 | 7,766 |
| Semi-manufactures (a) | 1,981 | 1,594 | 1,311 | 1,502 | 1,526 | 1,883 |
| Red and white lead | 2,947 | 3,792 | 4,206 | 3,632 | 3,690 | 2,897 |
| Norway— | | | | | | |
| Ore | 7,006 | 6,317 | 7,186 | 6,374 | 6,476 | 5,380 |
| Unwrought (a) | 524 | 513 | 184 | 412 | 419 | 218 |
| Semi-manufactures (a) | 192 | 396 | 39 | 99 | 101 | 69 |
| Scrap | 3,952 | 4,733 | 4,626 | 4,320 | 4,389 | 4,276 |
| Poland— | | | | | | |
| Concentrates | 18,604 | 9,092 | 6,389 | 13,915 | 14,138 | 10,304 |
| Portugal— | | | | | | |
| Unwrought (a) | 29 | 35 | 62 | 109 | 111 | 244 |
| Semi-manufactures (a) | 157 | 184 | 266 | 210 | 213 | 213 |
| Red and white lead | 99 | 10 | 13 | 18 | 18 | 121 |
| Spain— | | | | | | |
| Unwrought (a) | 16 | — | 151 | 68 | 69 | 45 |
| Semi-manufactures (a) | 20 | 71 | 97 | 156 | 159 | 87 |
| Sweden— | | | | | | |
| Ore | 35,355 | 47,742 | 46,130 | 46,469 | 47,215 | 70,452 |
| Unwrought | 13,579 | 12,484 | 9,082 | 8,609 | 8,747 | 25,291 |
| do. alloys | 37 | 869 | 3,498 | 1,071 | 1,088 | 1,444 |
| Scrap | 49 | 83 | 54 | 748 | 760 | 120 |
| Semi-manufactures (a) | 4 | 20 | 34 | 10 | 10 | 30 |
| Red and white lead | 1,932 | 2,557 | 1,121 | 1,178 | 1,197 | 765 |
| Switzerland— | | | | | | |
| Unwrought | 19 | 376 | 117 | 210 | 213 | 529 |
| Scrap | 5,203 | 5,321 | 8,235 | 7,052 | 7,165 | 6,089 |
| Semi-manufactures | 252 | 607 | 359 | 253 | 257 | 221 |
| U.S.S.R.— | | | | | | |
| Unwrought | 85,528 | 89,460 | 96,400 | 90,941 | 92,400 | 93,200 |
| Yugoslavia— | | | | | | |
| Unwrought | 45,393 | 47,773 | 65,137 | 55,393 | 56,282 | 49,749 |
| do. alloys | 8,189 | 6,502 | 1,062 | 1,138 | 1,156 | 805 |
| Semi-manufactures (a) | 1,525 | 609 | 1,768 | 707 | 718 | 221 |
| Red lead | 351 | 657 | 1,306 | 629 | 639 | 50 |

(a) Including alloys.

EXPORTS OF LEAD, ETC. (cont.)

| Exporting Country and Description | Long tons | | | | Tonnes | |
|--|-----------|---------|---------|--------|--------|--------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Algeria— | | | | | | |
| Ore | 6,531 | 4,049 | 7,342 | 5,446 | 5,533 | 7,479 |
| Congo (Brazza)— | | | | | | |
| Ore | 5 | — | — | — | — | n.a. |
| Morocco— | | | | | | |
| Ore | 85,066 | 86,697 | 74,310 | 74,036 | 75,224 | 85,014 |
| Unwrought | 19,744 | 22,388 | 24,684 | 22,146 | 22,501 | 16,071 |
| Scrap | — | — | — | 59 | 60 | n.a. |
| Senegal— | | | | | | |
| Unwrought and scrap .. | 160 | 151 | 293 | 262 | 266 | 140 |
| South Africa— | | | | | | |
| Lead concentrates .. | n.a. | n.a. | 1,481 | 9,118 | 9,264 | 2,540 |
| Unwrought | 64,552 | 48,131 | 53,631 | 47,543 | 48,306 | 60,782 |
| Semi-manufactures .. | 50 | 170 | 154 | 94 | 96 | 94 |
| Red lead | 92 | 81 | 124 | 156 | 158 | 100 |
| Sudan— | | | | | | |
| Scrap | n.a. | 222 | 505 | 251 | 255 | 1,140 |
| Tunisia— | | | | | | |
| Unwrought (a) | 11,656 | 12,402 | 14,501 | 19,097 | 19,403 | 13,756 |
| Scrap | 380 | 40 | n.a. | n.a. | n.a. | n.a. |
| Guatemala— | | | | | | |
| Ore | 198 | 266 | 652 | 426 | 433 | — |
| Honduras— | | | | | | |
| Ore and concentrates .. r | 10,020 | 19,878 | 21,045 | 27,528 | 27,970 | n.a. |
| Mexico— | | | | | | |
| Ores and concentrates .. | 905 | 1,284 | 1,281 | 1,554 | 1,579 | 573 |
| Unwrought— | | | | | | |
| Refined | 83,440 | 80,710 | 71,816 | 76,410 | 77,636 | 67,315 |
| Base bullion | 11,893 | 12,950 | 10,708 | 9,757 | 9,914 | 8,958 |
| Antimonial | 16 | — | 241 | 120 | 122 | 16 |
| Semi-manufactures .. | — | — | 1,026 | 1,154 | 1,173 | 828 |
| Red and white lead .. | 33,393 | 36,153 | 46,304 | 40,033 | 40,675 | 40,830 |
| United States— | | | | | | |
| Ore, matte and base bullion (Pb content) .. | n.a. | 7 | n.a. | n.a. | n.a. | n.a. |
| Unwrought (a) | 3,806 | 4,363 | 2,308 | 4,437 | 4,508 | 3,419 |
| Scrap | 351 | 837 | 2,089 | 3,763 | 3,823 | 8,684 |
| Semi-manufactures (a) | 2,030 | 3,031 | 2,127 | 2,480 | 2,520 | 1,956 |
| Red and white lead, etc. | 1,705 | 1,676 | 1,507 | 1,677 | 1,704 | 2,236 |
| Argentina— | | | | | | |
| Ore | 56 | n.a. | 2,346 | n.a. | n.a. | n.a. |
| Concentrates | 593 | 623 | 1,701 | 1,165 | 1,184 | 615 |
| Bolivia— | | | | | | |
| Ore, etc. (Pb content) .. | 19,623 | 21,600 | 24,600 | 25,400 | 25,800 | 23,200 |
| Unwrought | 13 | — | — | n.a. | n.a. | n.a. |
| Brazil— | | | | | | |
| Ore | n.a. | n.a. | 3,937 | 4,400 | 4,500 | n.a. |
| Chile— | | | | | | |
| Ore and concentrates .. | 2,046 | n.a. | 377 | 475 | 483 | n.a. |
| Colombia— | | | | | | |
| Ore | r 456 | r 1,207 | r 591 | n.a. | n.a. | n.a. |
| Ecuador— | | | | | | |
| Concentrates | 1,336 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Peru— | | | | | | |
| Ore and concentrates (Pb content) | 138,478 | 152,174 | 164,000 | n.a. | n.a. | n.a. |
| Unwrought— | | | | | | |
| Refined (Pb content) .. | 77,932 | 77,402 | 73,200 | 64,800 | 65,800 | n.a. |
| Burma— | | | | | | |
| Ore | 756 | 360 | 216 | n.a. | n.a. | n.a. |
| Unwrought | 8,702 | 10,715 | 10,847 | 2,646 | 2,688 | 7,423 |

(a) Including alloys.

EXPORTS OF LEAD, ETC. (cont.)

| Exporting Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|--------|--------|--------|--------|--------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Iran (b)— | | | | | | |
| Ore | 46,735 | 35,606 | 65,585 | 88,055 | 89,468 | 99,139 |
| Japan— | | | | | | |
| Unwrought (a) .. | 867 | 3,053 | 2,352 | 5,563 | 5,652 | 5,337 |
| Semi-manufactures (a) .. | 6,986 | 1,693 | 467 | 932 | 947 | 551 |
| Red lead .. | 21 | 234 | 114 | 120 | 122 | 84 |
| Korea (South)— | | | | | | |
| Ore | 12,619 | 19,615 | 17,591 | 16,936 | 17,208 | 21,285 |
| Thailand— | | | | | | |
| Ore | 9,074 | 7,633 | 3,455 | 3,313 | 3,366 | 1,620 |
| Turkey— | | | | | | |
| Ore | 3,476 | 8,232 | 16,951 | 15,355 | 15,601 | n.a. |

(a) Including alloys.

(b) Years ended March 20 following that stated.

IMPORTS OF LEAD, ETC.*

| Importing Country and Description | Long tons | | | | Tonnes | |
|---|-----------|---------|---------|---------|---------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ore and concentrates (Pb content) (b) .. | 24,551 | 48,223 | 46,725 | 34,795 | 35,353 | 42,976 |
| Unwrought (a) | 176,913 | 210,848 | 225,866 | 251,828 | 255,869 | 231,426 |
| Scrap (a) | 2,679 | 1,884 | 1,428 | 4,467 | 4,539 | 2,776 |
| Semi-manufactures (a) | 424 | 1,006 | 875 | 924 | 939 | 923 |
| Channel Islands— | | | | | | |
| Unwrought and semi- manufactures (a) .. | 1,581 | 202 | 1,740 | 198 | 201 | 163 |
| Ghana— | | | | | | |
| Unwrought (a) .. | 1 | 40 | 1 | 51 | 52 | n.a. |
| Semi-manufactures (a) | 379 | 117 | 269 | 110 | 112 | n.a. |
| Kenya— | | | | | | |
| Unwrought (a) .. | 299 | 247 | 281 | 510 | 518 | 599 |
| Semi-manufactures (a) | 9 | 28 | 29 | 26 | 27 | 50 |
| Mauritius— | | | | | | |
| Unwrought (a) .. | 6 | 12 | 14 | 1 | 1 | 5 |
| Semi-manufactures (a) | 57 | 7 | 26 | 30 | 30 | 55 |
| Nigeria— | | | | | | |
| Unwrought and semi- manufactures (a) .. | 456 | 365 | 894 | 522 | 530 | 2,149 |
| Sierra Leone— | | | | | | |
| Semi-manufactures (a) | 62 | 26 | 30 | 29 | 29 | 50 |
| Tanzania— | | | | | | |
| Unwrought (a) .. | 24 | 54 | 64 | 119 | 121 | 357 |
| Semi-manufactures (a) | 5 | 10 | 20 | 9 | 9 | 17 |
| Uganda— | | | | | | |
| Unwrought (a) .. | 118 | 29 | 67 | 42 | 43 | 66 |
| Semi-manufactures (a) | 2 | 10 | 10 | 9 | 9 | 12 |
| Barbados— | | | | | | |
| Unwrought (a) .. | — | 6 | — | 13 | 13 | n.a. |
| Semi-manufactures (a) | 145 | 84 | 103 | 62 | 63 | n.a. |
| Jamaica— | | | | | | |
| Unwrought (a) .. | 29 | 199 | 335 | 190 | 193 | 94 |
| Semi-manufactures (a) | 53 | 119 | 248 | 117 | 119 | 247 |
| Trinidad and Tobago— | | | | | | |
| Unwrought (a) .. | 60 | — | 19 | 5 | 5 | — |
| Semi-manufactures (a) | 19 | 36 | 28 | 130 | 132 | 155 |
| Red and white lead, etc. | 30 | 10 | 13 | 6 | 6 | 18 |
| Canada— | | | | | | |
| Unwrought | 391 | 136 | 116 | 1,964 | 1,996 | 4,202 |
| Semi-manufactures, etc. | 271 | 355 | 365 | 341 | 347 | 337 |
| Red and white lead, etc. | 2,179 | 2,352 | 2,912 | 1,677 | 1,704 | 2,748 |
| Guyana— | | | | | | |
| Semi-manufactures (a) | 40 | 46 | 25 | 42 | 43 | 29 |
| Ceylon— | | | | | | |
| Unwrought (a) .. | 525 | 429 | 342 | n.a. | n.a. | n.a. |
| Semi-manufactures (a) | 22 | 71 | 53 | n.a. | n.a. | n.a. |
| Cyprus— | | | | | | |
| Semi-manufactures (a) | 96 | 121 | 153 | 237 | 240 | 342 |
| Hong Kong— | | | | | | |
| Unwrought | 321 | 88 | 507 | 442 | 449 | 429 |
| Scrap | 3 | 158 | 372 | 293 | 298 | 1,399 |
| Semi-manufactures .. | 103 | 36 | 124 | 111 | 113 | 115 |
| Red and white lead .. | 104 | 111 | 179 | 81 | 82 | 181 |

*See footnote on p. 179 concerning the descriptions "unwrought" lead and "semi-manufactures" used in these tables.

(a) Including alloys.

(b) Source: World Bureau of Metal Statistics.

IMPORTS OF LEAD, ETC. (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|---|-----------|---------|---------|---------|---------|--------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| India (b)— | | | | | | |
| Ore | 27 | 27 | 95 | 88 | 89 | 106 |
| Unwrought | 33,923 | 31,820 | 27,738 | 39,330 | 39,961 | 34,665 |
| do. alloys | 221 | 130 | 375 | 180 | 183 | 454 |
| Semi-manufactures (a) | 249 | 331 | 553 | 184 | 187 | 101 |
| Malaysia (West)— | | | | | | |
| Unwrought (a) | 153 | 152 | 179 | 175 | 178 | 144 |
| Semi-manufactures (a) | 301 | 530 | 1,096 | 1,042 | 1,059 | 777 |
| Sabah— | | | | | | |
| Semi-manufactures (a) | 52 | 59 | 45 | 51 | 52 | 52 |
| Singapore— | | | | | | |
| Semi-manufactures (a) | 191 | 248 | 282 | 194 | 197 | 237 |
| Australia (c)— | | | | | | |
| Unwrought and semi-manufactures (a) | 43 | 504 | 126 | 316 | 321 | 96 |
| Red and white lead, etc. | 13 | 33 | 19 | 29 | 29 | 30 |
| Fiji— | | | | | | |
| Unwrought and semi-manufactures (a) | 68 | 59 | 4 | — | — | — |
| New Zealand (c)— | | | | | | |
| Unwrought (a) | 5,616 | 4,391 | 4,413 | 5,808 | 5,901 | n.a. |
| Semi-manufactures (a) | 23 | 19 | 9 | 23 | 23 | n.a. |
| Red and white lead, etc. | 870 | 480 | 569 | 776 | 788 | n.a. |
| Irish Republic— | | | | | | |
| Unwrought (a) | 334 | 996 | 943 | 1,186 | 1,205 | 388 |
| Semi-manufactures (a) | 82 | 134 | 318 | 355 | 361 | 456 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Ore | 3,051 | 2,553 | 3,198 | 5,994 | 6,090 | 4,941 |
| Unwrought (a) | 12,791 | 14,449 | 14,406 | 19,023 | 19,328 | 15,385 |
| Scrap | 953 | 1,017 | 1,736 | 1,226 | 1,246 | 63 |
| Semi-manufactures (a) | r 352 | r 675 | r 484 | 544 | 553 | 475 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Ore | 128,103 | 177,869 | 128,223 | 191,294 | 194,364 | 96,665 |
| Unwrought | 6,683 | 11,318 | 9,897 | 12,154 | 12,349 | 13,583 |
| do. alloys | 1,331 | 3,984 | 4,782 | 4,576 | 4,650 | 8,661 |
| Scrap | 8,443 | 11,715 | 10,658 | 13,496 | 13,713 | 10,202 |
| Semi-manufactures (a) | 908 | 875 | 902 | 838 | 851 | 1,504 |
| Red and white lead, etc. | 2,086 | 2,659 | 3,233 | 3,822 | 3,883 | 2,235 |
| Denmark— | | | | | | |
| Unwrought | 10,546 | 10,759 | 9,919 | 10,605 | 10,775 | 12,075 |
| do. alloys | 623 | 327 | 738 | 549 | 558 | 1,756 |
| Scrap | 7,824 | 5,920 | 9,644 | 7,414 | 7,533 | 4,370 |
| Semi-manufactures (a) | 621 | 577 | 675 | 860 | 874 | 938 |
| Red and white lead | 360 | 404 | 308 | 162 | 165 | 191 |
| Finland— | | | | | | |
| Unwrought (a) | 8,394 | 8,352 | 10,366 | 12,068 | 12,262 | 8,411 |
| Semi-manufactures (a) | 912 | 1,571 | 1,936 | 836 | 850 | 883 |
| Red and white lead, etc. | 473 | 509 | 686 | 799 | 812 | 958 |

(a) Including alloys.

(c) Years ended June 30 of that stated.

(b) Years ended March 31 following that stated.

IMPORTS OF LEAD, ETC. (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|---------|---------|---------|---------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| France— | | | | | | |
| Ore | 126,427 | 126,356 | 121,781 | 135,645 | 137,822 | 149,886 |
| Unwrought | 35,403 | 42,130 | 51,470 | 43,442 | 44,139 | 38,409 |
| do. alloys | 3,575 | 4,171 | 6,055 | 6,481 | 6,585 | 4,203 |
| Scrap | 4,444 | 3,232 | 4,902 | 6,126 | 6,224 | 5,488 |
| Semi-manufactures (a) | 737 | 722 | 456 | 497 | 505 | 611 |
| Red and white lead, etc. | 2,133 | 2,530 | 2,801 | 2,530 | 2,571 | 1,071 |
| Germany (Federal)— | | | | | | |
| Ore | 219,687 | 245,967 | 228,087 | 278,832 | 283,307 | 223,009 |
| Unwrought (a) | 80,187 | 80,948 | 110,472 | 124,284 | 126,278 | 126,443 |
| Scrap (a) | 2,581 | 8,843 | 20,499 | 25,898 | 26,314 | 13,232 |
| Semi-manufactures (a) | 1,569 | 1,823 | 1,848 | 1,772 | 1,800 | 2,947 |
| Red and white lead, etc. | 2,548 | 3,206 | 3,371 | 4,363 | 4,433 | 5,633 |
| Greece— | | | | | | |
| Ore | 8,158 | 9,316 | 14,484 | n.a. | n.a. | 20,474 |
| Unwrought | 1,842 | 2,115 | 4,191 | 8,082 | 8,212 | 8,173 |
| Semi-manufactures (a) | 132 | 152 | 88 | n.a. | n.a. | 155 |
| Red and White lead .. | 923 | 805 | 212 | 157 | 160 | n.a. |
| Hungary— | | | | | | |
| Unwrought | n.a. | 12,772 | 13,664 | 15,311 | 15,557 | 14,875 |
| Iceland— | | | | | | |
| Unwrought | 155 | 74 | 56 | 85 | 86 | 72 |
| Semi-manufactures (a) | 90 | 69 | 86 | 99 | 101 | 84 |
| Red and white lead .. | 6 | n.a. | (b) 15 | (b) 12 | (b) 12 | (b) 15 |
| Italy— | | | | | | |
| Ore | 20,521 | 53,450 | 30,462 | 31,430 | 31,934 | 28,165 |
| Unwrought (a) | 58,652 | 24,640 | 64,118 | 119,177 | 121,089 | 126,570 |
| Scrap | 29,752 | 10,414 | 19,891 | 30,598 | 31,089 | 19,769 |
| Semi-manufactures (a) | 1,758 | 6,499 | 1,695 | 754 | 766 | 340 |
| Red and white lead .. | 4,864 | 5,005 | 11,245 | 15,013 | 15,254 | 8,850 |
| Netherlands— | | | | | | |
| Ore | 11 | 5 | 7 | 5 | 5 | n.a. |
| Unwrought | 41,085 | 36,407 | 39,336 | 42,560 | 43,243 | 54,346 |
| do. alloys | 13,685 | 13,147 | 20,915 | 18,729 | 19,030 | 16,416 |
| Scrap (a) | 5,135 | 4,464 | 2,346 | 3,876 | 3,938 | 6,287 |
| Semi-manufactures (a) | 3,474 | 3,449 | 6,368 | 2,463 | 2,503 | 2,532 |
| Red and white lead .. | 4,708 | 3,827 | 4,574 | 4,624 | 4,698 | 2,538 |
| Norway— | | | | | | |
| Unwrought | 9,377 | 7,427 | 7,554 | 8,085 | 8,215 | 7,740 |
| do. alloys | 2,172 | 2,870 | 2,964 | 2,877 | 2,923 | 3,310 |
| Semi-manufactures (a) | 1,012 | 1,187 | 1,185 | 1,216 | 1,236 | 1,112 |
| Red and white lead .. | 1,013 | 1,004 | 886 | 1,957 | 1,989 | 1,955 |
| Poland— | | | | | | |
| Unwrought | 16,819 | 18,382 | 14,668 | 13,954 | 14,178 | 18,590 |
| Portugal— | | | | | | |
| Unwrought (a) | 7,509 | 7,487 | 8,889 | 9,378 | 9,529 | 11,937 |
| Scrap | 88 | 44 | 67 | 78 | 79 | 162 |
| Semi-manufactures (a) | 17 | 40 | 29 | 60 | 61 | 180 |
| Red and white lead, etc. | 82 | 51 | 86 | 65 | 66 | 110 |
| Spain— | | | | | | |
| Ore | — | 11 | — | 4,946 | 5,025 | 8,820 |
| Unwrought (a) | 456 | 39 | 62 | 5,202 | 5,286 | 2,262 |
| Scrap | 35 | 13 | 51 | 10 | 10 | 12 |
| Red and white lead .. | 158 | 62 | (b) 22 | (b) 2 | (b) 2 | (b) 1 |
| Sweden— | | | | | | |
| Unwrought | 6,498 | 4,865 | 5,836 | 4,868 | 4,946 | 5,401 |
| do. alloys | 1,076 | 507 | 1,223 | 2,040 | 2,073 | 2,846 |
| Scrap | 18 | 896 | 882 | 1,171 | 1,190 | 1,397 |
| Semi-manufactures (a) | 1,492 | 1,868 | 1,304 | 1,848 | 1,878 | 1,613 |
| Red and white lead .. | 1,655 | 1,746 | 1,328 | 1,610 | 1,636 | 1,219 |

(a) Including alloys.

(b) Oxide only.

IMPORTS OF LEAD, ETC. (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--|-----------|---------|---------|---------|---------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Switzerland— | | | | | | |
| Unwrought | 19,918 | 19,903 | 25,555 | 25,617 | 26,028 | 22,794 |
| Semi-manufactures | 558 | 607 | 769 | 726 | 738 | 1,059 |
| Red and white lead | 552 | 564 | 825 | 728 | 740 | 673 |
| U.S.S.R.— | | | | | | |
| Unwrought | 31,789 | 38,483 | 24,408 | 38,187 | 38,800 | 43,000 |
| Yugoslavia— | | | | | | |
| Ore | 6,676 | 12,066 | 2,788 | — | — | 445 |
| Unwrought | 1,351 | 8,411 | 4,543 | 5,207 | 5,291 | 8,852 |
| Scrap | 1,740 | 150 | 460 | 22 | 22 | <i>n.a.</i> |
| Algeria— | | | | | | |
| Unwrought | 1,389 | 2,335 | 2,334 | 3,603 | 3,661 | <i>n.a.</i> |
| Semi-manufactures | 72 | 100 | 174 | 360 | 366 | <i>n.a.</i> |
| Angola— | | | | | | |
| Semi-manufactures | 179 | 216 | 292 | 261 | 265 | 311 |
| Red and white lead | 49 | 62 | 73 | 40 | 41 | 63 |
| Egypt— | | | | | | |
| Unwrought and scrap | 6,138 | 4,643 | 8,001 | 5,468 | 5,556 | 11,280 |
| Malagasy Republic— | | | | | | |
| Unwrought (a) | 135 | 246 | 247 | 218 | 221 | <i>n.a.</i> |
| Semi-manufactures (a) | 64 | 49 | 52 | 235 | 239 | <i>n.a.</i> |
| Red and white lead | 15 | 11 | 14 | 24 | 24 | <i>n.a.</i> |
| Morocco— | | | | | | |
| Semi-manufactures (a) | 47 | 59 | 60 | 87 | 88 | 116 |
| Red and white lead | 145 | 173 | 160 | 234 | 238 | 190 |
| Mozambique— | | | | | | |
| Semi-manufactures (a) | 153 | 161 | 121 | 262 | 266 | <i>n.a.</i> |
| Red and white lead | 39 | 30 | 33 | 31 | 31 | <i>n.a.</i> |
| South Africa— | | | | | | |
| Unwrought | 5,412 | 4,207 | 7,152 | 10,327 | 10,493 | 10,628 |
| Scrap | 3,139 | 4,762 | 3,812 | 5,410 | 5,497 | 2,047 |
| Semi-manufactures | 1,287 | 2,620 | 3,506 | 119 | 122 | 192 |
| Red and white lead | (b) 83 | (b) 111 | 88 | (b) 81 | (b) 82 | (b) 157 |
| Sudan— | | | | | | |
| Semi-manufactures (a) | 63 | 200 | 250 | 217 | 220 | 538 |
| Costa Rica— | | | | | | |
| Unwrought (a) | 30 | 82 | 65 | 88 | 89 | 45 |
| Honduras— | | | | | | |
| Unwrought (a) | 23 | 49 | 19 | 37 | 38 | 49 |
| Semi-manufactures (a) | 33 | 13 | 32 | 20 | 20 | 105 |
| Mexico— | | | | | | |
| Unwrought | 38 | 12 | 7 | 13 | 13 | 9 |
| Nicaragua— | | | | | | |
| Unwrought (a) | 109 | 117 | 91 | 191 | 194 | 121 |
| Salvador— | | | | | | |
| Unwrought (a) | 150 | 48 | 121 | 115 | 117 | 199 |
| Semi-manufactures (a) | 219 | 194 | 178 | 167 | 170 | 130 |
| United States— | | | | | | |
| Ore, matte and flue dust (Pb content) | 128,711 | 86,807 | 102,843 | 38,184 | 38,797 | 80,000 |
| Bullion and base bullion (Pb content) | 508 | r 7 | r 1,779 | 1,050 | 1,067 | <i>n.a.</i> |
| Unwrought (Pb content) do. alloys (Pb content) | 310,452 | 292,584 | 239,232 | 210,427 | 213,804 | 168,219 |
| Scrap (Pb content) | 14,189 | 8,843 | 9,757 | 7,985 | 8,113 | 6,478 |
| Semi-manufactures | 7,931 | 3,470 | 5,818 | 2,330 | 2,367 | 1,396 |
| Red and white lead, etc. | 1,971 | 2,019 | 1,792 | 1,861 | 1,891 | 1,342 |
| Argentina— | 26,982 | 28,026 | 26,338 | 18,465 | 18,762 | 17,820 |
| Unwrought | 543 | 1,840 | 1,176 | 1,639 | 1,665 | 663 |
| Red lead | 2 | 12 | 11 | 30 | 30 | 54 |

(a) Including alloys.

(b) Red lead only.

IMPORTS OF LEAD, ETC. (cont.)

Long tons Tonnes

| Importing Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|------------------------------------|----------------|----------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Brazil— | | | | | | |
| Unwrought | 6,405 | 11,575 | 12,414 | 1,310 | 1,331 | <i>n.a.</i> |
| do. alloys | | | | | | |
| Red and white lead .. | 874 | 1,099 | 1,609 | 634 | 644 | <i>n.a.</i> |
| Chile— | | | | | | |
| Unwrought | 842 | 1,956 | 2,549 | 2,739 | 2,783 | <i>n.a.</i> |
| Semi-manufactures (a) | 658 | 1,035 | 686 | 134 | 136 | <i>n.a.</i> |
| Red and white lead .. | 30 | 51 | 15 | 13 | 13 | <i>n.a.</i> |
| Colombia— | | | | | | |
| Unwrought (a) | <i>r</i> 1,482 | 1,760 | 2,250 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Semi-manufactures (a) | <i>r</i> 23 | <i>r</i> 31 | 53 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Red and white lead .. | <i>r</i> 1,104 | <i>r</i> 1,946 | 1,330 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ecuador— | | | | | | |
| Unwrought | 253 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Red and white lead .. | 165 | 120 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Peru— | | | | | | |
| Semi-manufactures (a) | 37 | 48 | 37 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Red and white lead .. | 4 | 21 | 8 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Uruguay— | | | | | | |
| Unwrought | 1,092 | 716 | 1,018 | 977 | 993 | 1,037 |
| Red and white lead, etc. | 115 | 86 | 187 | 193 | 196 | 108 |
| Venezuela— | | | | | | |
| Unwrought | 4,896 | 4,560 | 2,337 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Semi-manufactures .. | 544 | 447 | 337 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Red and white lead .. | 970 | 836 | 292 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Burma— | | | | | | |
| Semi-manufactures .. | 13 | — | 5 | 9 | 9 | 14 |
| Formosa— | | | | | | |
| Unwrought (a) | 5,328 | 3,951 | 2,634 | 4,058 | 4,123 | 5,645 |
| Semi-manufactures (a) | 35 | 122 | 263 | 33 | 34 | 141 |
| Red and white lead, etc. | 93 | <i>n.a.</i> | 107 | 40 | 41 | 157 |
| Iran (b)— | | | | | | |
| Unwrought | 3,315 | 3,513 | 4,416 | 7,568 | 7,689 | 8,246 |
| Semi-manufactures .. | 29 | 42 | 62 | 32 | 33 | 34 |
| Red and white lead .. | 593 | 1,313 | 1,130 | 518 | 526 | 697 |
| Iraq— | | | | | | |
| Semi-manufactures .. | 28 | 21 | 64 | 24 | 24 | <i>n.a.</i> |
| Israel— | | | | | | |
| Unwrought | 1,178 | 2,285 | 1,727 | 1,799 | 1,828 | 1,096 |
| Scrap | — | 57 | 190 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Semi-manufactures .. | 408 | 234 | 296 | 1,465 | 1,489 | 1,556 |
| Red and white lead .. | 606 | 733 | 766 | 732 | 744 | 1,001 |
| Japan— | | | | | | |
| Ore | 128,072 | 141,880 | 177,006 | 206,838 | 210,157 | 225,427 |
| Unwrought | 17,854 | 11,411 | 8,286 | 1,666 | 1,693 | 3,588 |
| Scrap (a) | 1,108 | 768 | 1,981 | 2,597 | 2,639 | 1,759 |
| Semi-manufactures (a) | 3 | 4 | 21 | 36 | 37 | 41 |
| Red lead | 14 | 22 | 29 | 74 | 75 | 176 |
| Jordan— | | | | | | |
| Unwrought | 423 | 441 | 874 | 1,259 | 1,279 | 1,360 |
| Red lead | 175 | 264 | 685 | 849 | 863 | 460 |
| Korea (South)— | | | | | | |
| Unwrought and semi-manufactures .. | 655 | 1,857 | 1,676 | <i>n.a.</i> | <i>n.a.</i> | 2,941 |
| Lebanon— | | | | | | |
| Unwrought and scrap .. | 1,252 | 1,394 | 1,187 | 1,149 | 1,167 | 1,188 |
| Semi-manufactures (a) | 53 | 22 | 16 | 25 | 25 | 15 |
| Philippine Republic— | | | | | | |
| Unwrought (a) | 4,264 | 5,799 | 5,430 | 5,626 | 5,716 | 6,484 |
| Semi-manufactures (a) | 299 | 230 | 152 | 209 | 212 | 381 |

(a) Including alloys.

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

IMPORTS OF LEAD, ETC. (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|-------|---------|-------|--------|-------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Syria— | | | | | | |
| Unwrought | 374 | 814 | 425 | 606 | 616 | 1,113 |
| Red and white lead .. | 56 | 147 | 203 | 151 | 153 | 270 |
| Thailand— | | | | | | |
| Unwrought | 1,598 | 2,884 | r 2,710 | 2,726 | 2,770 | 4,628 |
| Semi-manufactures (a) | 71 | 251 | 282 | 192 | 195 | 198 |
| Turkey— | | | | | | |
| Unwrought (a) | 4,495 | 4,273 | 3,481 | 2,884 | 2,930 | n.a. |
| Scrap | 277 | 236 | 163 | 149 | 151 | n.a. |
| Semi-manufactures (a) | 10 | 1 | 148 | 179 | 182 | n.a. |
| Red and white lead .. | 1,236 | 223 | 118 | 64 | 65 | n.a. |

(a) Including alloys.

LITHIUM MINERALS
PRODUCTION OF LITHIUM MINERALS

| Producing Country and Description | Long tons | | | | Tonnes | |
|--|-----------|-------------|-------|-------|--------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Uganda— Amblygonite | (a) 50 | 44 | 6 | — | — | — |
| Canada— Lithium minerals (Li ₂ O content) | 195 | — | — | — | — | — |
| Australia— Petalite | 667 | 738 | 710 | 771 | 783 | 1,674 |
| OTHER COUNTRIES | | | | | | |
| Mozambique— Amblygonite | 5 | 5 | 1 | 13 | 13 | <i>n.a.</i> |
| Lepidolite | 246 | 591 | 385 | 24 | 24 | 700 |
| South Africa— Spodumene | — | 36 | 35 | — | — | 1 |
| Argentina— Lithium minerals | 243 | 125 | 346 | 357 | 362 | <i>n.a.</i> |
| Brazil— Spodumene (a) | 49 | — | 49 | — | — | <i>n.a.</i> |
| Other lithium minerals (a) | 6,022 | <i>n.a.</i> | 1,476 | 3,593 | 3,651 | <i>n.a.</i> |

Lithium minerals are also produced in Rhodesia, South West Africa and the United States and lithium chemicals recovered from Searles Lake brines in California.

(a) Exports.

EXPORTS OF LITHIUM MINERALS

| Exporting Country and Description | Long tons | | | | Tonnes | |
|---|-----------|-------------|-------|-------|--------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Uganda— Amblygonite | 50 | — | 50 | — | — | — |
| OTHER COUNTRIES | | | | | | |
| Germany (Federal)— Lithium minerals .. | 148 | 126 | 79 | 209 | 212 | 155 |
| Mozambique— Lepidolite | 99 | 547 | 502 | 139 | 141 | <i>n.a.</i> |
| South Africa— Lithium minerals .. | — | — | — | — | — | 125 |
| Argentina— Lithium minerals .. | 28 | 39 | 88 | 20 | 20 | 15 |
| Brazil— Spodumene | 49 | — | 49 | — | — | <i>n.a.</i> |
| Other lithium minerals | 6,022 | <i>n.a.</i> | 1,476 | 3,593 | 3,651 | <i>n.a.</i> |

IMPORTS OF LITHIUM MINERALS*

| Importing Country | Long tons | | | | Tonnes | |
|------------------------|-------------|-------------|-------|--------|--------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg E.U. | 635 | 753 | 1,307 | 2,369 | 2,407 | 653 |
| France | 2,498 | 2,559 | 2,989 | 4,611 | 4,685 | 2,043 |
| Germany (Federal) .. | 6,207 | 10,621 | 7,554 | 10,672 | 10,843 | 6,543 |
| Italy | 992 | 4,851 | 5,105 | 478 | 486 | 349 |
| Spain | 360 | 419 | 347 | 263 | 267 | 149 |
| South Africa | <i>n.a.</i> | <i>n.a.</i> | 126 | 577 | 586 | 2,523 |
| United States | 23,154 | 10,172 | 1,239 | 1,915 | 1,946 | <i>n.a.</i> |

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

MAGNESITE AND DOLOMITE
PRODUCTION OF MAGNESITE AND DOLOMITE

| Producing Country and Description | Long tons | | | | Tonnes | |
|-----------------------------------|------------|------------|------------|------------|------------|------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Dolomite, crude (a) .. | 4,700,000 | 4,900,000 | 5,700,000 | 6,700,000 | 6,800,000 | 6,000,000 |
| Kenya— | | | | | | |
| Magnesite, crude .. | 415 | 67 | 495 | 4 | 4 | 221 |
| Rhodesia— | | | | | | |
| Magnesite, crude .. | (c) 39,000 | (a) 20,000 | (a) 20,000 | (a) 20,000 | (a) 20,000 | n.a. |
| Tanzania— | | | | | | |
| Magnesite, crude .. | 2,006 | 1,424 | 1,522 | 763 | 775 | 982 |
| Canada— | | | | | | |
| Dolomitic magnesite (b) | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| | £1,355,090 | £1,173,971 | £1,156,248 | £1,330,300 | £1,330,300 | £1,084,600 |
| Ceylon— | | | | | | |
| Dolomite | 13,194 | 7,773 | 5,610 | 3,345 | 3,399 | 6,950 |
| India— | | | | | | |
| Magnesite, crude .. | 242,000 | 249,000 | 290,841 | 348,695 | 354,291 | 296,473 |
| Dolomite | 1,125,932 | 1,240,000 | 1,254,695 | 1,130,342 | 1,148,481 | 1,310,579 |
| Pakistan— | | | | | | |
| Magnesite | (c) 2,010 | 1,605 | (c) 1,000 | (c) 1,000 | (c) 1,000 | (c) 220 |
| Australia— | | | | | | |
| Magnesite, crude .. | 23,653 | 23,146 | 23,153 | 22,106 | 22,461 | 18,092 |
| Dolomite | 290,659 | 316,731 | 291,838 | 323,180 | 328,367 | 355,435 |
| New Zealand— | | | | | | |
| Magnesite, crude .. | 568 | 792 | — | 476 | 484 | 1,047 |
| Dolomite | 8,310 | 8,116 | 9,917 | 10,111 | 10,272 | 8,311 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Magnesite— | | | | | | |
| Crude | 1,511,061 | 1,522,254 | 1,583,018 | 1,583,923 | 1,609,340 | 1,556,459 |
| Caustic (d) .. | 125,099 | 114,724 | 116,699 | 121,915 | 123,871 | 137,685 |
| do. powder (d) .. | 48,455 | 58,072 | 63,162 | 55,633 | 56,526 | n.a. |
| Dead-burned (d) .. | 442,498 | 474,464 | 516,665 | 537,698 | 546,326 | 507,771 |
| Bricks (d) | 234,704 | 275,062 | 345,281 | 393,325 | 399,637 | 392,876 |
| Belgium— | | | | | | |
| Dolomite— | | | | | | |
| Crude | 939,275 | 1,133,274 | 1,330,000 | 1,479,687 | 1,503,432 | 1,574,770 |
| Calcined | 299,199 | 365,381 | 382,293 | 366,479 | 372,360 | 346,250 |
| France— | | | | | | |
| Dolomite, crude .. | 1,444,989 | 1,422,700 | 1,557,483 | 1,567,523 | 1,592,677 | n.a. |
| Germany (Federal)— | | | | | | |
| Dolomite | 179,259 | 243,842 | 258,086 | 251,695 | 255,734 | 307,294 |
| Greece— | | | | | | |
| Magnesite— | | | | | | |
| Crude | 363,093 | r 433,722 | r 561,711 | 704,000 | 715,000 | 952,523 |
| Caustic (d) .. | 34,194 | r 37,760 | r 50,307 | 55,585 | 56,477 | 37,735 |
| Dead-burned (d) .. | 96,394 | 131,000 | 166,000 | 216,446 | 219,919 | 274,832 |
| Hungary— | | | | | | |
| Dolomite | 640,000 | 627,000 | 619,000 | 688,000 | 699,000 | n.a. |
| Italy— | | | | | | |
| Magnesite, crude .. | 4,864 | — | — | n.a. | n.a. | n.a. |
| Dolomite— | | | | | | |
| Metallurgical .. | 58,767 | 61,058 | 82,382 | n.a. | n.a. | n.a. |
| Refractory, etc. .. | 1,091,797 | 1,141,492 | 1,081,396 | n.a. | n.a. | n.a. |
| Norway— | | | | | | |
| Dolomite | 433,645 | 382,697 | 415,654 | 398,998 | 405,401 | 420,697 |

(a) Estimated.

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

(c) United States Bureau of Mines' estimate.

(d) Derived from crude shown and not additional.

PRODUCTION OF MAGNESITE AND DOLOMITE (cont.)

| Producing Country and Description | Long tons | | | | Tonnes | |
|---|-----------|-----------|-----------|-----------|-----------|-----------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Portugal— Dolomite | 5,256 | 12,003 | 2,854 | 8,257 | 8,390 | 23,385 |
| Spain— Magnesite | 121,000 | 247,000 | 225,462 | 218,932 | 222,445 | n.a. |
| Sweden— Dolomite— Crude | 200,384 | 275,086 | 293,404 | 284,140 | 288,700 | 187,786 |
| Calcined (a) | 49,400 | 49,998 | 43,994 | 44,100 | 44,800 | 49,875 |
| Yugoslavia— Magnesite, crude | 418,053 | 393,993 | 469,466 | 503,770 | 511,854 | 492,716 |
| South Africa— Magnesite, crude | 78,749 | 58,853 | 47,361 | 82,923 | 84,254 | 78,663 |
| Mexico— Magnesite | — | — | 218 | 8,035 | 8,164 | 11,601 |
| Dolomite | 344,364 | 371,204 | 467,527 | 466,974 | 474,468 | 453,362 |
| United States— Magnesite— Dead-burned (b) | 614,022 | 590,081 | 658,000 | 716,000 | 727,000 | 569,000 |
| Dolomite— Dead-burned (b) | 1,679,000 | 1,637,000 | 1,666,000 | 1,226,000 | 1,246,000 | 925,000 |
| Argentina— Dolomite | 194,891 | 126,214 | 159,428 | 211,029 | 214,415 | n.a. |
| Brazil— Magnesite | 107,528 | 135,643 | 200,000 | 230,000 | 234,000 | 200,000 |
| Dolomite | 221,419 | 347,514 | 695,375 | n.a. | n.a. | n.a. |
| Colombia— Dolomite | 11,373 | 12,000 | 12,705 | 13,340 | 13,554 | 13,889 |
| Peru— Dolomite | 4,700 | 4,481 | 8,013 | 5,042 | 5,123 | n.a. |
| Uruguay— Dolomitic limestone | 14,683 | 16,815 | 33,668 | 40,388 | 41,036 | n.a. |
| Formosa— Dolomite | 56,072 | 73,023 | 58,138 | 62,000 | 63,000 | n.a. |
| Japan— Dolomite | 2,110,500 | 2,186,235 | 2,314,900 | 2,534,507 | 2,575,178 | 2,705,599 |
| Philippine Republic— Dolomite | 6,687 | 6,100 | 4,750 | n.a. | n.a. | 11,488 |
| Turkey— Magnesite | 90,107 | 115,841 | 215,574 | 283,427 | 287,975 | 285,000 |
| Dolomite | 197,000 | n.a. | n.a. | 277,000 | 281,000 | n.a. |
| New Caledonia— Magnesite | 1,533 | 654 | 1,274 | 1,082 | 1,099 | n.a. |

Magnesite is known to have been produced in Bulgaria, Czechoslovakia, Poland, U.S.S.R., Iran, Chile, 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.

(b) Sold or used by producers.

PRODUCTION OF MAGNESIUM

| Producing Country | Long tons | | | | Tonnes | |
|-------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom (a) .. | 4,000 | 3,500 | 2,900 | 2,800 | 2,800 | 2,500 |
| Canada | 8,062 | 8,865 | 9,498 | 9,244 | 9,392 | 6,579 |
| OTHER COUNTRIES | | | | | | |
| France | 4,133 | 4,407 | r 4,345 | 4,541 | 4,614 | 7,216 |
| Italy | 6,217 | 6,489 | r 6,333 | 7,460 | 7,580 | 7,707 |
| Norway | 29,973 | 30,792 | 31,495 | 34,821 | 35,380 | 36,450 |
| U.S.S.R. (b) | 35,000 | 40,000 | 44,000 | 44,000 | 45,000 | 45,000 |
| United States | 86,970 | 87,835 | 89,184 | 100,006 | 101,610 | 112,023 |
| Japan | 6,642 | 5,568 | 9,234 | 10,174 | 10,337 | 9,690 |
| World's Total* .. | 181,000 | 188,000 | 197,000 | 211,000 | 214,000 | 227,000 |

*Excluding magnesium known to have been produced in China.

(a) Including re-melt alloys.

(b) "Metallgesellschaft" estimate.

EXPORTS OF MAGNESITE, ETC.*

| Exporting Country and Description | Long tons | | | | Tonnes | |
|-----------------------------------|--------------|--------------|--------------|--------------|--------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Crude and calcined | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 14,397 | 14,628 | 4,489 |
| Magnesium and alloys | 1,109 | 908 | 1,052 | 910 | 925 | 923 |
| Oxide | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 20,157 | 20,481 | 28,465 |
| Dolomite | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 16,617 | 16,884 | 1,319 |
| Tanzania— | | | | | | |
| Crude | 1,177 | 1,062 | 1,345 | 879 | 893 | 476 |
| Canada— | | | | | | |
| Magnesium | (£1,247,637) | (£1,642,257) | (£1,821,000) | (£2,221,000) | (£2,221,000) | (£903,632) |
| India (c)— | | | | | | |
| Crude and calcined | 17,796 | 23,798 | 28,474 | 33,980 | 34,525 | 19,800 |
| Malaysia (West)— | | | | | | |
| Dolomite | 2,381 | 2,516 | 1,291 | 1,148 | 1,166 | 2,588 |
| Singapore— | | | | | | |
| Crude | 1,308 | 1,461 | 2,215 | 1,654 | 1,680 | 722 |
| Australia (b)— | | | | | | |
| Crude and calcined | 1,889 | 1,874 | 1,975 | 936 | 951 | 2,317 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Crude | 379 | 627 | 944 | 1,641 | 1,667 | 888 |
| Caustic | 78,365 | 71,320 | 72,765 | 68,856 | 69,961 | 78,281 |
| Dead-burned | 180,415 | 174,854 | 161,643 | 139,580 | 141,820 | 112,542 |
| Bricks | 80,774 | 96,959 | 117,739 | 130,936 | 133,037 | 102,237 |
| Dolomite | 31,786 | 8,409 | 16,473 | 10,901 | 11,076 | 9,483 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Crude | — | — | — | 398 | 404 | 105 |
| Calcined | 1 | 23 | 55 | 610 | 620 | 1,085 |
| Carbonate | 63 | 13 | 8 | — | — | 23 |
| Chloride | 5 | 7 | — | 2 | 2 | 12 |
| Oxide and hydroxide | 7 | 52 | 454 | 134 | 136 | 638 |
| Sulphate | 323 | 61 | 262 | 429 | 436 | 904 |
| Dolomite, crude | 422,671 | 593,125 | 675,250 | 729,067 | 740,766 | 767,938 |
| do. calcined | 190,328 | 178,461 | 184,675 | 187,343 | 190,349 | 202,519 |
| Czechoslovakia | 213,000 | 259,000 | 346,000 | 330,000 | 335,000 | 293,000 |
| France— | | | | | | |
| Crude and calcined | 328 | 2,517 | 592 | 681 | 692 | 1,509 |
| Magnesium metal (a) | 148 | 338 | 660 | 647 | 657 | 820 |
| Carbonate | 1,160 | 999 | 1,394 | 1,177 | 1,196 | 1,138 |
| Chloride | 2,703 | 2,760 | 3,654 | 2,276 | 2,313 | 658 |
| Oxide and hydroxide | 1,928 | 2,118 | 3,706 | 4,474 | 4,546 | 5,606 |
| Sulphate | 210 | 167 | 99 | 144 | 146 | 212 |
| Dolomite, crude | 52,903 | 60,243 | 69,673 | 58,128 | 59,061 | 85,691 |
| do. calcined | 4,306 | 15,370 | 20,253 | 7,876 | 8,002 | 7,031 |
| Germany (Federal)— | | | | | | |
| Crude and calcined | 8,821 | 9,527 | 11,866 | 8,874 | 9,016 | 9,348 |
| Magnesium metal | 304 | 1,026 | 2,211 | 1,650 | 1,677 | 2,008 |
| Carbonate | 244 | 254 | 215 | 377 | 383 | 819 |
| Chloride | 82,531 | 96,824 | 103,804 | 109,092 | 110,843 | 103,495 |
| Oxide and hydroxide | 1,956 | 1,998 | 2,600 | 2,568 | 2,609 | 2,638 |
| Sulphate | 34,142 | 34,227 | 35,726 | 38,759 | 39,381 | 33,549 |
| Dolomite | 84,564 | 72,648 | 72,458 | 130,453 | 132,546 | 82,197 |
| Kieserite | 234,407 | 233,453 | 270,946 | 300,351 | 305,171 | 309,626 |
| Germany (East)— | | | | | | |
| Sulphate | 27,717 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Greece— | | | | | | |
| Crude | 16,722 | 15,821 | 19,020 | 17,472 | 17,752 | 13,650 |
| Calcined | 129,160 | 172,068 | 212,973 | 274,777 | 279,186 | 275,335 |

* Magnesite unless otherwise stated.

(a) Including alloys and scrap.

(b) Years ended June 30 of that stated.

(c) Years ended March 31 following that stated.

EXPORTS OF MAGNESITE, ETC. (cont.)

| Exporting Country and Description | Long tons | | | | Tonnes | |
|--|-----------|---------|--------|---------|---------|------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Italy— | | | | | | |
| Crude | 9 | 6 | 71 | 29 | 29 | 4 |
| Calcined | 70 | 19 | 50 | 29 | 29 | 3 |
| Magnesium metal in- cluding alloyed | 3,117 | 6,999 | 4,854 | 3,755 | 3,815 | 4,412 |
| Carbonate | 51 | 66 | 67 | 161 | 164 | 154 |
| Chloride | 48 | 27 | 6 | 27 | 27 | 4 |
| Oxide | 21,947 | 15,722 | 387 | 596 | 606 | 580 |
| Dolomite, crude | 2,930 | 1,711 | 2,001 | 2,047 | 2,080 | 2,139 |
| do. calcined | 11,921 | 12,758 | 16,635 | 17,892 | 18,179 | 19,298 |
| Netherlands— | | | | | | |
| Crude | 875 | 973 | 991 | 1,526 | 1,551 | (c) 1,019 |
| Magnesium metal | 262 | 319 | 622 | 434 | 441 | 517 |
| Calcined | 16,840 | 15,670 | 18,248 | 20,588 | 20,918 | (c) 21,414 |
| Chloride | 984 | 1,426 | 1,078 | 989 | 1,005 | 904 |
| Sulphate | 282 | 283 | 244 | 336 | 341 | 282 |
| Norway— | | | | | | |
| Magnesium metal | 29,636 | 27,070 | n.a. | n.a. | n.a. | n.a. |
| Dolomite, crude | 89,645 | 93,966 | 79,913 | 63,814 | 64,838 | 66,913 |
| Poland— | | | | | | |
| Dolomite | 3,300 | 3,181 | n.a. | n.a. | n.a. | n.a. |
| Spain— | | | | | | |
| Crude and calcined | 10,263 | 12,446 | 35,790 | 53,467 | 54,325 | 58,267 |
| Dolomite, crude | 24,986 | 10,880 | 16,597 | 18,492 | 18,789 | 17,939 |
| Sweden— | | | | | | |
| Crude and calcined | 61 | 92 | 4 | 51 | 52 | 50 |
| Dolomite | 4,576 | 9,272 | 3,319 | 4,481 | 4,553 | 4,146 |
| Bricks | 204 | 6 | 25 | 21 | 21 | 16 |
| U.S.S.R.— | | | | | | |
| Magnesium metal | 8,400 | 14,271 | 14,800 | 16,535 | 16,800 | 14,800 |
| Yugoslavia— | | | | | | |
| Crude | — | 248 | 863 | 1,555 | 1,580 | 896 |
| Ground and dead-burned | 83,141 | 105,867 | 81,789 | 103,779 | 105,444 | 42,726 |
| Bricks | 22,673 | 29,230 | 44,858 | 49,542 | 50,337 | 55,298 |
| South Africa— | | | | | | |
| Crude and calcined | 3,021 | 1,905 | 129 | 622 | 632 | 210 |
| Dolomite | 11,691 | 10,863 | 11,047 | 2,585 | 2,626 | 2,259 |
| United States— | | | | | | |
| Crude and calcined | 6,953 | 6,414 | 7,796 | 9,008 | 9,153 | 6,396 |
| Dead-burned | 57,472 | 51,033 | 50,076 | 79,330 | 80,603 | 48,487 |
| Magnesium metal (a) | 10,705 | 16,430 | 24,407 | 31,904 | 32,416 | 22,054 |
| Dolomite | 100,884 | 90,802 | 83,256 | 68,936 | 70,042 | 79,278 |
| Argentina— | | | | | | |
| Dolomite | 2,363 | 1,496 | 2,687 | 1,466 | 1,490 | 1,835 |
| Brazil | 4,626 | 4,506 | 10,772 | 17,236 | 17,513 | n.a. |
| Uruguay— | | | | | | |
| Dolomite, crude | n.a. | 12,007 | 28,719 | 26,468 | 26,893 | 8,340 |
| Formosa— | | | | | | |
| Carbonate | 875 | 243 | 307 | 620 | 630 | 904 |
| Japan— | | | | | | |
| Crude and calcined | 16,903 | 10,579 | 188 | 730 | 742 | 408 |
| Dolomite | 3,568 | 2,832 | 4,093 | 4,742 | 4,818 | 3,286 |
| Magnesium metal | 72 | 76 | 958 | 75 | 76 | 49 |
| Carbonate | 4,339 | 5,060 | 5,517 | 8,063 | 8,192 | 9,914 |
| Chloride and sulphate | 221 | 265 | n.a. | n.a. | n.a. | n.a. |
| Oxide (b) | n.a. | n.a. | 47,576 | 59,485 | 60,440 | 81,552 |
| Korea (South)— | | | | | | |
| Dolomite | 11,404 | 10,680 | 15,610 | 26,455 | 26,880 | 23,200 |
| Turkey— | | | | | | |
| Crude | 21,958 | 31,973 | 34,615 | 47,084 | 47,840 | n.a. |
| Calcined | 14,286 | 22,627 | 24,334 | 46,550 | 47,297 | n.a. |
| Oxide | 315 | 128 | n.a. | n.a. | n.a. | n.a. |

(a) Including alloys and scrap.

(b) Described as "Magnesia clinker".

(c) Excludes exports to Belgium and Luxemburg, if any.

IMPORTS OF MAGNESITE, ETC.*

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|------------|------------|------------|------------|------------|------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Dead burned | 31,939 | 44,860 | 85,776 | 77,125 | 78,363 | 76,698 |
| Caustic | } 29,128 | } 31,284 | } 36,425 | } 39,962 | } 40,603 | } 42,438 |
| Other | | | | | | |
| Magnesium (c) | | | | | | |
| Chloride | 6,060 | 6,089 | 5,592 | 5,370 | 5,456 | 4,308 |
| Dolomite | 4,088 | 4,527 | 4,746 | 4,141 | 4,208 | 4,088 |
| Dolomite | 21,763 | 22,636 | 26,623 | 21,483 | 21,828 | 24,167 |
| Zambia— | | | | | | |
| Crude | n.a. | n.a. | 143 | 17 | 17 | n.a. |
| Salts | 632 | 387 | 224 | n.a. | n.a. | n.a. |
| Canada— | | | | | | |
| Calcined and dead-burned | 34,145 | 37,878 | 42,213 | 60,708 | 61,682 | 47,342 |
| Magnesium metal | 1,333 | 2,146 | 1,806 | 1,818 | 1,847 | 1,657 |
| do. alloys | 184 | 270 | 385 | 229 | 233 | 138 |
| Oxide | 887 | 1,239 | n.a. | n.a. | n.a. | n.a. |
| Bricks | (£465,501) | (£822,863) | (£701,000) | (£945,000) | (£945,000) | (£748,000) |
| Dolomite, calcined | 9,318 | 8,845 | 6,839 | 5,772 | 5,865 | 3,444 |
| Trinidad and Tobago— | | | | | | |
| Crude | 76 | 99 | 45 | 148 | 150 | — |
| Hong Kong— | | | | | | |
| Crude | 161 | 56 | 92 | 129 | 131 | 393 |
| Magnesium carbonate | 1,302 | 1,542 | 1,859 | 1,538 | 1,563 | 1,979 |
| India (b)— | | | | | | |
| Crude and calcined | 71 | 103 | 6 | 52 | 53 | 30 |
| Magnesium metal | 123 | 64 | 184 | 137 | 139 | 403 |
| Carbonate | 231 | 80 | 47 | 12 | 12 | 4 |
| Chloride | — | 4 | — | — | — | — |
| Oxides | 40 | 51 | 378 | 81 | 82 | 166 |
| Malaysia (West)— | | | | | | |
| Crude | 204 | 200 | 319 | 234 | 238 | 191 |
| Dolomite | 145 | 42 | 76 | 211 | 214 | 82 |
| Singapore— | | | | | | |
| Crude | 93 | 13 | 93 | 212 | 215 | 67 |
| Dolomite | 2,831 | 3,791 | 4,111 | 3,150 | 3,201 | 2,641 |
| Australia (a)— | | | | | | |
| Crude and calcined | 17,218 | 26,301 | 20,282 | 12,626 | 12,829 | 215 |
| Magnesium metal and powder | 1,028 | 603 | 1,009 | 1,577 | 1,602 | 1,280 |
| Oxide | 3,347 | 453 | 5,109 | 9,528 | 9,680 | 39,280 |
| Carbonate | 187 | 195 | 209 | 175 | 178 | 194 |
| Dolomite | 448 | 673 | 862 | 1,020 | 1,036 | 443 |
| New Zealand (a)— | | | | | | |
| Crude | 267 | 397 | 303 | 261 | 265 | n.a. |
| Magnesium metal | 2 | 7 | 22 | 61 | 62 | 64 |
| Sulphate | 613 | 528 | 825 | 622 | 632 | n.a. |
| Carbonate | 107 | 178 | 150 | 214 | 217 | n.a. |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Crude | 3,925 | 7,421 | 21,003 | 33,662 | 34,202 | 13,259 |
| Caustic and dead burned | 23,411 | 35,003 | 43,402 | 71,356 | 72,501 | 78,076 |
| Magnesium metal | 536 | 886 | 2,731 | 3,889 | 3,952 | 849 |
| Chloride | 1,228 | 1,102 | 1,340 | 1,359 | 1,381 | 1,330 |
| Dolomite | 3,254 | 3,451 | 3,242 | 3,144 | 3,195 | 3,131 |
| Sulphate | 1,066 | 1,512 | 1,292 | 1,607 | 1,633 | 1,744 |

* 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.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|-------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Crude | 210 | 203 | 1,161 | 272 | 276 | 219 |
| Calcined | 3,334 | 4,325 | 8,444 | 8,302 | 8,435 | 10,372 |
| Magnesium metal | 627 | 880 | 1,068 | 1,523 | 1,548 | 1,162 |
| Carbonate | 224 | 245 | 161 | 156 | 159 | 159 |
| Chloride | 2,076 | 4,395 | 7,801 | 7,110 | 7,224 | 6,676 |
| Oxide and hydroxide | 1,026 | 1,450 | 1,498 | 1,905 | 1,936 | 1,769 |
| Sulphate | 1,622 | 1,589 | 1,440 | 1,639 | 1,665 | 3,314 |
| Dolomite, crude | 24,695 | 40,999 | 15,853 | 14,101 | 14,327 | 34,346 |
| do. calcined | 14,438 | 4,467 | 4,922 | 10,840 | 11,014 | 7,881 |
| Denmark— | | | | | | |
| Crude | 4,062 | 5,109 | 6,275 | 8,436 | 8,571 | 7,458 |
| Carbonate | 62 | 53 | 51 | 35 | 36 | 69 |
| Chloride | 1,007 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sulphate | 1,577 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Dolomite | 21,253 | 21,722 | 21,588 | 31,726 | 32,235 | 29,871 |
| Finland— | | | | | | |
| Crude and calcined | 2,027 | 2,924 | 2,344 | 2,924 | 2,971 | 2,240 |
| Bricks | 8,813 | 5,480 | 8,785 | 8,455 | 8,591 | 11,237 |
| Carbonate | 214 | 129 | 111 | 1,148 | 1,167 | 131 |
| Chloride | 800 | 1,204 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sulphate | 3,733 | 2,386 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Dolomite crude | 15 | 1,949 | 3,377 | 6,157 | 6,255 | 5,889 |
| France— | | | | | | |
| Crude | 1,044 | 55 | 487 | 56 | 57 | 82 |
| Calcined | 37,954 | 41,911 | 47,453 | 55,693 | 56,587 | 55,911 |
| Bricks | 31,724 | 34,299 | 49,952 | 69,030 | 70,138 | 76,744 |
| Magnesium metal (a) | 1,126 | 1,296 | 1,249 | 2,733 | 2,777 | 1,071 |
| Carbonate | 246 | 302 | 232 | 632 | 642 | 539 |
| Chloride | 2,832 | 3,675 | 4,461 | 4,409 | 4,480 | 8,866 |
| Oxide and hydroxide | 785 | 951 | 790 | 923 | 938 | 885 |
| Sulphate | 2,975 | 3,798 | 3,734 | 4,806 | 4,883 | 5,105 |
| Dolomite, crude | 51,052 | 56,274 | 61,038 | 51,711 | 52,541 | 74,219 |
| do. calcined | 118,996 | 122,320 | 123,726 | 113,056 | 114,870 | 105,251 |
| Germany (Federal)— | | | | | | |
| Crude | 1,484 | 1,437 | 1,330 | 1,706 | 1,733 | 1,654 |
| Caustic | 98,257 | 100,235 | 102,768 | 111,486 | 113,275 | 108,638 |
| Dead-burned | 199,228 | 293,217 | 355,532 | 304,874 | 309,766 | 280,314 |
| Magnesium metal (a) | 32,264 | 41,185 | 49,291 | 52,214 | 53,052 | 47,219 |
| Carbonate | 793 | 1,001 | 1,029 | 1,098 | 1,116 | 1,944 |
| Chloride | 26 | 104 | 133 | 58 | 59 | 46 |
| Oxide and hydroxide | 1,686 | 2,929 | 2,484 | 3,026 | 3,075 | 2,726 |
| Sulphate | 131 | 114 | 162 | 204 | 207 | 63 |
| Dolomite | 237,515 | 300,451 | 423,343 | 316,029 | 321,100 | 276,136 |
| Greece— | | | | | | |
| Crude and calcined | 388 | 323 | 677 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Magnesium metal | 55 | 160 | 77 | 185 | 188 | 152 |
| Chloride | 97 | 72 | 187 | 421 | 428 | 608 |
| Sulphate | 266 | 223 | 265 | 356 | 362 | 243 |
| Dolomite | 758 | 1,086 | 1,660 | 848 | 862 | 727 |
| Hungary— | | | | | | |
| Dead-burned | 74,580 | 77,588 | 80,064 | 83,044 | 84,377 | 91,356 |
| Italy— | | | | | | |
| Crude | 15,236 | 13,199 | 13,612 | 11,184 | 11,364 | 8,812 |
| Calcined | 36,906 | 39,683 | 33,929 | 43,613 | 44,313 | 44,097 |
| Chloride | 5,103 | 6,653 | 5,191 | 5,430 | 5,517 | 4,974 |
| Oxide | 813 | 838 | 1,239 | 4,493 | 4,565 | 1,545 |
| Sulphate | 7,985 | 7,773 | 8,812 | 6,203 | 6,303 | 6,097 |
| Dolomite | 1,397 | 1,233 | 1,617 | 1,223 | 1,243 | 2,426 |

(a) Including alloys and scrap.

IMPORTS OF MAGNESITE, ETC. (cont.)

Long tons Tonnes

| Importing Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Netherlands— | | | | | | |
| Crude | 1,747 | 2,509 | 3,452 | 3,641 | 3,700 | (b) 2,315 |
| Calcined | 20,247 | 32,265 | 34,864 | 35,358 | 35,926 | (b) 28,961 |
| Magnesium metal | 480 | 494 | 958 | 937 | 952 | 959 |
| Carbonate | 423 | 441 | 496 | 436 | 443 | 436 |
| Oxide and hydroxide | 366 | 458 | 615 | 775 | 788 | (b) 920 |
| Sulphate | 4,890 | 4,921 | 5,038 | 5,179 | 5,262 | 4,041 |
| Chloride | 3,477 | 4,016 | 4,559 | 4,634 | 4,708 | 5,460 |
| Dolomite, crude | 380,798 | 427,712 | 632,516 | 677,888 | 688,766 | 701,190 |
| do. calcined | 51,189 | 32,265 | 42,664 | 50,303 | 51,110 | 52,220 |
| Norway— | | | | | | |
| Crude and calcined | 2,311 | 5,048 | 5,429 | 4,885 | 4,963 | 3,699 |
| Chloride | 55,319 | 60,708 | 61,997 | 76,928 | 78,163 | 71,678 |
| Sulphate | 236 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Dolomite | 2,930 | 2,539 | 2,298 | 2,852 | 2,898 | 3,562 |
| Kieserite | <i>n.a.</i> | 56,858 | 50,264 | 60,441 | 61,411 | 57,790 |
| Poland— | | | | | | |
| Calcined and caustic | 102,502 | 150,344 | 134,658 | 202,907 | 206,163 | 160,551 |
| Magnesium metal | 464 | 394 | 681 | 690 | 701 | 1,001 |
| Chloride | 7,097 | 6,311 | 5,846 | 5,339 | 5,425 | 5,312 |
| Portugal— | | | | | | |
| Crude and calcined | 361 | 467 | 435 | 636 | 646 | 338 |
| Carbonate | 91 | 125 | 144 | 120 | 122 | 112 |
| Oxide | 168 | 29 | 14 | 30 | 30 | 46 |
| Sulphate | 1,128 | 914 | 1,139 | 942 | 957 | 932 |
| Spain— | | | | | | |
| Crude and calcined | 6,318 | 18,728 | 23,132 | 35,307 | 35,874 | 40,243 |
| Magnesium metal | 321 | 325 | 688 | 540 | 549 | 543 |
| Dolomite, crude | 1,386 | 1,631 | 1,920 | 858 | 872 | 1,526 |
| do. calcined | 72 | 10 | 354 | 2,981 | 3,029 | 2,330 |
| Sweden— | | | | | | |
| Crude and calcined | 7,135 | 5,905 | 7,104 | 12,570 | 12,772 | 10,989 |
| Bricks | 35,922 | 37,401 | 46,189 | 51,076 | 51,896 | 45,168 |
| Magnesium metal | 695 | 647 | 677 | 611 | 621 | 793 |
| Carbonate | 156 | 187 | 192 | 162 | 165 | 203 |
| Chloride | 4,091 | 7,254 | 7,885 | 8,691 | 8,831 | 12,342 |
| Sulphate | 13,023 | 14,311 | 13,232 | 13,305 | 13,519 | 11,991 |
| Dolomite | 23,996 | 25,755 | 23,830 | 20,057 | 20,379 | 18,347 |
| Switzerland— | | | | | | |
| Calcined | 3,309 | 3,283 | 3,724 | 3,949 | 4,012 | 4,467 |
| Magnesium metal | 1,018 | 773 | 1,121 | 1,450 | 1,473 | 987 |
| Carbonate | 169 | 187 | 205 | 225 | 229 | 261 |
| Chloride | 3,255 | 3,276 | 3,092 | 3,222 | 3,274 | 3,082 |
| Sulphate | 682 | 737 | 697 | 618 | 628 | 767 |
| Dolomite, calcined | 12,476 | 12,430 | 12,867 | 13,065 | 13,275 | 13,814 |
| U.S.S.R.— | | | | | | |
| Crude (a) | 156,390 | 208,061 | 271,800 | 204,000 | 207,300 | 375,500 |
| Yugoslavia— | | | | | | |
| Bricks | 622 | 12 | 1,899 | 918 | 933 | 4,645 |
| Magnesium metal | 468 | 413 | 605 | 882 | 896 | 515 |
| Carbonate | 43 | 82 | 107 | 106 | 108 | <i>n.a.</i> |
| Dolomite | 2,307 | 3,687 | 5,491 | 5,739 | 5,831 | 5,679 |
| Angola— | | | | | | |
| Sulphate | 58 | 80 | 56 | 22 | 22 | 114 |
| Egypt— | | | | | | |
| Magnesite and dolomite | <i>n.a.</i> | 1,101 | 939 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Morocco— | | | | | | |
| Crude | 63 | 53 | 57 | 49 | 50 | 200 |
| Chloride | 937 | 3 | 4 | 5 | 5 | 10 |
| Sulphate | 265 | 426 | 707 | 320 | 325 | 644 |
| Dolomite | 647 | 560 | 1,435 | 1,014 | 1,030 | 1,106 |

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

(b) Excludes imports from Belgium and Luxemburg, if any.

IMPORTS OF MAGNESITE, ETC. (cont.)

Long tons Tonnes

| Importing Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|-----------------------------------|----------------|----------------|-----------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| South Africa— | | | | | | |
| Crude | } 54,261 | 77,996 | { 77,850 | 103,129 | 104,784 | 122,947 |
| Calcined | | | | | | |
| Carbonate | <i>n.a.</i> | <i>n.a.</i> | 214 | 171 | 174 | 272 |
| Oxide | <i>n.a.</i> | <i>n.a.</i> | 127 | 100 | 102 | 140 |
| Magnesium metal | 348 | 226 | 418 | 585 | 594 | 333 |
| Dolomite | <i>n.a.</i> | 1,240 | 145 | 243 | 247 | 517 |
| Mexico— | | | | | | |
| Calcined | 31,296 | 57,895 | 12,805 | 31,449 | 31,954 | 8,883 |
| Magnesium metal | 332 | 768 | 662 | 1,399 | 1,421 | 572 |
| Oxide | 592 | 600 | 759 | 905 | 920 | 572 |
| Sulphate | 73 | 148 | 109 | 238 | 242 | 88 |
| United States— | | | | | | |
| Crude | 292 | <i>n.a.</i> | 18 | 19 | 19 | 6 |
| Calcined | 8,187 | 10,525 | 13,605 | 10,246 | 10,410 | 10,449 |
| Dead-burned | 67,898 | 77,102 | <i>r</i> 86,906 | 114,458 | 116,294 | 117,050 |
| Bricks | 20,338 | 15,270 | 20,593 | 20,998 | 21,335 | 18,446 |
| Magnesium metal, etc. | 6,483 | 2,096 | 2,030 | 1,286 | 1,307 | 1,274 |
| Oxide | 57 | 478 | 92 | 466 | 472 | 570 |
| Carbonate, precipitated | 804 | 1,133 | 747 | 721 | 733 | 125 |
| Chloride | 403 | 519 | 573 | 736 | 748 | 411 |
| Sulphate | } 28,316 | 39,519 | 39,004 | 31,196 | 31,696 | 41,365 |
| Kieserite | | | | | | |
| Argentina— | | | | | | |
| Crude and calcined | 2,675 | 4,488 | 13,162 | 21,085 | 21,423 | 12,778 |
| Dolomite | 17,041 | 12,077 | 23,743 | 43,226 | 43,920 | 13,332 |
| Carbonate | 373 | <i>r</i> 219 | <i>r</i> 309 | 354 | 360 | 384 |
| Chloride | 152 | 275 | 380 | 295 | 300 | 237 |
| Oxide | 57 | 84 | 87 | 132 | 134 | 189 |
| Magnesium metal | 255 | 248 | 667 | 371 | 377 | 688 |
| Brazil— | | | | | | |
| Magnesium metal | 1,954 | 3,021 | 5,129 | 6,657 | 6,764 | <i>n.a.</i> |
| Carbonate | 263 | 401 | 230 | 343 | 348 | <i>n.a.</i> |
| Chloride | 64 | 131 | 73 | 65 | 66 | <i>n.a.</i> |
| Oxide | 106 | 153 | 178 | 279 | 283 | <i>n.a.</i> |
| Sulphate | 146 | 432 | 430 | 364 | 370 | <i>n.a.</i> |
| Dolomite | 110 | 525 | 1,007 | 1,227 | 1,247 | <i>n.a.</i> |
| Chile— | | | | | | |
| Crude | } 2,700 | { 14 | 199 | 3 | 3 | <i>n.a.</i> |
| Calcined | | | | | | |
| Dolomite, crude | 33,590 | 37,263 | 9,566 | 5,177 | 5,260 | <i>n.a.</i> |
| do. calcined | 50,413 | 47,998 | 19,467 | 19,037 | 19,342 | <i>n.a.</i> |
| Colombia— | | | | | | |
| Crude and calcined | <i>r</i> 72 | <i>r</i> 121 | 74 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Carbonate | <i>r</i> 6 | 12 | 9 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Chloride | <i>r</i> 101 | <i>r</i> 98 | 105 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Oxide | <i>r</i> 125 | <i>r</i> 328 | 386 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sulphate | <i>r</i> 192 | <i>r</i> 246 | 873 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Dolomite | <i>r</i> 3,428 | <i>r</i> 4,910 | 3,965 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Peru— | | | | | | |
| Crude and calcined | 3,183 | 1,004 | 1,503 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Carbonate | 23 | 12 | 16 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Oxide | } 93 | 78 | 63 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Hydroxide | | | | | | |
| Sulphate | 630 | 301 | 336 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Chloride | 13 | 28 | 43 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Venezuela— | | | | | | |
| Crude | 1,771 | 3,402 | 3,630 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sulphate | 255 | 260 | 135 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Formosa— | | | | | | |
| Carbonate | 210 | 231 | 358 | 338 | 343 | 407 |

IMPORTS OF MAGNESITE, ETC. (cont.)

Long tons | Tonnes

| Importing Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|-----------------------------------|--------|--------|--------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Iran (a)— | | | | | | |
| Sulphate | 220 | 473 | 289 | 306 | 311 | 576 |
| Israel— | | | | | | |
| Crude | 1,118 | 1,603 | 1,495 | 1,091 | 1,108 | 586 |
| Japan— | | | | | | |
| Crude | 3,957 | 4,711 | 3,981 | 3,192 | 3,243 | 2,803 |
| Dead-burned | 30,487 | 19,608 | 22,919 | 54,939 | 55,821 | 34,179 |
| Magnesium metal | 828 | 436 | 100 | 2,158 | 2,193 | 1,005 |
| Dolomite | 11,912 | 10,998 | 16,295 | 26,882 | 27,313 | 23,545 |
| Philippine Republic— | | | | | | |
| Crude and calcined | 569 | 981 | 1,076 | 1,757 | 1,785 | 928 |
| Sulphate | 622 | 133 | 62 | 186 | 189 | 73 |
| Dolomite | 3,785 | 4,385 | 5,727 | 3,679 | 3,738 | 3,977 |
| Syria— | | | | | | |
| Sulphate | 69 | 152 | 187 | 16 | 16 | 175 |
| Thailand— | | | | | | |
| Chloride | 87 | 268 | 77 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sulphate | 561 | 733 | 410 | 486 | 494 | 1,190 |
| Turkey— | | | | | | |
| Crude | 1 | 3 | 63 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Carbonate | 213 | 151 | 216 | 164 | 167 | <i>n.a.</i> |
| Chloride | 248 | 444 | 240 | 412 | 419 | <i>n.a.</i> |
| Oxide | 23 | 82 | 22 | 55 | 56 | <i>n.a.</i> |
| Sulphate | 415 | 552 | 504 | 720 | 732 | <i>n.a.</i> |

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

(b) Including alloys.

MANGANESE
PRODUCTION OF MANGANESE ORE
(including Ferruginous Manganese Ore)

Long tons | Tonnes

Long tons | Tonnes

| Producing Country | 1967 | | | | | 1968 | | | | | 1969 | | | | | 1970 | | | | | 1971 | | | | | | | | | |
|-------------------------------|-----------------------------|-----------|-----------|------------|------------|--------------|-----------|-----------|-----------|-----------|-----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------|--|-----------------------------|--|--|--|--|--------|--|--|--|--|
| | Long tons | | | | | Tonnes | | | | | Long tons | | | | | Tonnes | | | | | Long tons | | | | | Tonnes | | | | |
| | Estimated Manganese Content | | | | | | | | | | Estimated Manganese Content | | | | | | | | | | Estimated Manganese Content | | | | | | | | | |
| COMMONWEALTH COUNTRIES | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Botswana .. | 4,186 | 9,840 | 21,900 | 47,548 | 48,310 | 34,348 | n.a. | 245,000 | n.a. | 200,000 | n.a. | 157,000 | n.a. | 188,000 | n.a. | 191,000 | n.a. | 287,000 | n.a. | | | | | | | | | | | |
| Ghana .. | 490,500 | 407,000 | 327,500 | 392,300 | 398,600 | (a)598,500 | 13,000 | 74,000 | 13,500 | 14,000 | n.a. | 14,000 | n.a. | — | n.a. | — | n.a. | — | n.a. | | | | | | | | | | | |
| Zambia .. | 24,955 | 24,999 | 25,254 | — | — | — | 15,000 | 640,000 | 54,000 | 54,000 | n.a. | n.a. | n.a. | 602,000 | n.a. | 612,000 | n.a. | 651,200 | n.a. | | | | | | | | | | | |
| Guyana .. | 175,724 | 128,695 | n.a. | n.a. | n.a. | n.a. | 15,000 | 1,433,194 | 1,456,192 | 1,550,556 | 203,775 | 542,300 | 641,000 | 602,000 | 75,800 | 77,000 | 612,000 | 651,200 | n.a. | | | | | | | | | | | |
| India .. | 1,512,725 | 1,526,400 | 1,291,125 | 1,433,194 | 213,535 | 216,962 | 15,000 | 170,400 | 170,400 | 203,775 | 390 | 60,500 | 18,000 | 75,800 | — | — | 77,000 | 72,300 | n.a. | | | | | | | | | | | |
| Goa .. | 42,106 | 50,600 | 170,400 | — | — | — | n.a. | — | — | 390 | n.a. | n.a. | n.a. | — | — | — | — | — | n.a. | | | | | | | | | | | |
| Malaysia (West) .. | 84,000 | 45,000 | 10,171 | — | — | — | 258,553 | 751,113 | 751,113 | 1,050,253 | 340,000 | 422,000 | 352,000 | 352,000 | 358,000 | 358,000 | 484,000 | 484,000 | n.a. | | | | | | | | | | | |
| Australia .. | 559,967 | 732,077 | r 875,241 | 739,248 | 23,171 | 7,657 | 2,800 | 23,171 | 23,171 | 7,657 | 4,100 | 9,700 | 7,900 | 7,900 | 8,100 | 8,100 | 2,600 | 2,600 | n.a. | | | | | | | | | | | |
| Fiji .. | 5,845 | 8,705 | 20,482 | 22,805 | 16,006 | 40,771 | 18,000 | 16,006 | 16,263 | 40,771 | 13,000 | — | 6,900 | 6,900 | 7,000 | 7,000 | 17,000 | 17,000 | n.a. | | | | | | | | | | | |
| New Hebrides (b) | 71,072 | 41,807 | — | 16,006 | — | — | 18,000 | — | — | — | — | — | — | — | — | — | — | — | — | | | | | | | | | | | |
| TOTAL .. | 2,960,000 | 2,962,000 | 2,853,000 | 2,940,000 | 2,988,000 | 3,614,000 | — | — | — | — | — | — | — | — | — | — | — | — | — | | | | | | | | | | | |
| OTHER COUNTRIES | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bulgaria .. | 43,000 | 40,000 | r 38,000 | 32,000 | 33,000 | (a)30,000 | n.a. | — | — | — | — | 11,500 | 12,200 | 10,100 | 10,300 | 10,300 | 9,600 | 9,600 | n.a. | | | | | | | | | | | |
| Czechoslovakia .. | 79,000 | 85,000 | 82,000 | 85,000 | 86,000 | 48,000 | 15,000 | — | — | — | — | 14,000 | 15,000 | 15,000 | 15,000 | 15,000 | 8,000 | 8,000 | n.a. | | | | | | | | | | | |
| France .. | 2,268 | 2,561 | 2,432 | 2,571 | 2,612 | n.a. | 501 | — | — | — | — | 535 | 563 | 488 | 496 | 496 | n.a. | n.a. | n.a. | | | | | | | | | | | |
| Greece .. | 7,590 | 7,200 | 6,280 | 6,420 | 6,523 | 6,127 | 3,500 | — | — | — | — | 3,100 | 3,500 | 3,150 | 3,200 | 3,200 | 3,000 | 3,000 | n.a. | | | | | | | | | | | |
| Hungary .. | 206,000 | 153,000 | 153,000 | 166,000 | 169,000 | 170,000 | n.a. | — | — | — | — | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | | | | | | | | | | | |
| Italy .. | 46,354 | 50,018 | 52,132 | 49,300 | 50,091 | 30,604 | 12,000 | — | — | — | — | 13,600 | 13,300 | 12,300 | 12,500 | 12,500 | 7,600 | 7,600 | n.a. | | | | | | | | | | | |
| Portugal .. | 9,677 | 9,512 | 6,819 | 5,439 | 5,526 | 4,734 | 3,503 | — | — | — | — | 2,973 | 3,681 | 2,150 | 2,150 | 2,200 | 1,800 | 1,800 | n.a. | | | | | | | | | | | |
| Roumania .. | (a)79,000 | (a)79,000 | (a)79,000 | (a)125,000 | (a)127,000 | (a)127,000 | 28,000 | — | — | — | — | 28,000 | 28,000 | 27,500 | 28,000 | 28,000 | 28,000 | 28,000 | n.a. | | | | | | | | | | | |
| Spain .. | 8,332 | 12,696 | 22,538 | 10,509 | 10,678 | 18,006 | 2,700 | — | — | — | — | 4,100 | 4,100 | 3,500 | 3,500 | 3,560 | 5,400 | 5,400 | n.a. | | | | | | | | | | | |
| Sweden .. | 18,516 | 11,500 | 8,661 | — | — | — | 2,426 | — | — | — | — | 1,280 | 1,700 | — | — | — | — | — | — | | | | | | | | | | | |
| U.S.S.R. .. | 7,062,000 | 6,460,000 | 6,875,000 | 6,733,000 | 6,841,000 | (a)7,700,000 | 3,180,000 | — | — | — | — | 3,114,000 | 3,030,000 | 3,030,000 | 3,080,000 | 3,080,000 | 3,465,000 | 3,465,000 | n.a. | | | | | | | | | | | |
| Yugoslavia .. | 9,643 | 13,913 | 12,136 | 14,551 | 14,785 | 16,113 | n.a. | — | — | — | — | 4,556 | 4,517 | 4,517 | 4,589 | 4,589 | 5,716 | 5,716 | n.a. | | | | | | | | | | | |
| Angola .. | 32,656 | 9,005 | 28,611 | 23,000 | 23,000 | 23,000 | 14,000 | — | — | — | — | 12,000 | 9,000 | 9,000 | 9,000 | 9,000 | 9,000 | 9,000 | n.a. | | | | | | | | | | | |

(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): 1967—70,272; 1968—48,576; 1969—n.a.; 1970—n.a.; 1971—nil.

PRODUCTION OF MANGANESE ORE (cont.)

| Producing Country | Long tons | | Tonnes | | Estimated Manganese Content | | | | | | |
|--------------------------------|------------|------------|------------|------------|-----------------------------|-------------|---------|-----------|-----------|-----------|--|
| | Tonnes | | Tonnes | | Tonnes | | | | | | |
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1970 | 1969 | 1970 | 1970 | 1971 | |
| OTHER COUNTRIES—(cont.) | | | | | | | | | | | |
| Egypt .. | 73,978 | 3,894 | 4,000 | 4,249 | 4,317 | 4,278 | 1,000 | 1,200 | 1,200 | 1,100 | |
| Gabon .. | 1,128,885 | 1,233,801 | 1,370,900 | 1,430,405 | 1,453,359 | 1,866,479 | 637,000 | 760,000 | 770,000 | 933,000 | |
| Ivory Coast .. | 147,073 | 114,897 | 125,033 | 22,696 | 23,060 | 1,866,479 | 56,000 | 11,000 | 11,000 | — | |
| Morocco .. | 281,619 | 157,681 | 128,514 | 110,601 | 112,376 | 101,456 | 71,000 | 64,000 | 55,000 | 51,000 | |
| South Africa .. | 2,087,294 | 2,388,857 | 2,601,466 | 2,975,457 | 3,023,204 | 3,418,173 | 955,000 | 1,040,600 | 1,190,000 | 1,367,000 | |
| South West Africa .. | 27,000 | 13,000 | n.a. | n.a. | n.a. | n.a. | 6,000 | n.a. | n.a. | n.a. | |
| Sudan .. | 2,455 | (a) 4,900 | 839 | 1,142 | 1,160 | (a) 1,200 | 2,000 | 300 | 500 | 500 | |
| Zaire Republic .. | 267,000 | 316,700 | 306,510 | 341,470 | 346,950 | 329,000 | 152,000 | 147,000 | 163,870 | 166,500 | |
| Mexico .. | a 109,000 | a 58,411 | 141,200 | a 269,600 | a 273,900 | (a) 266,900 | 26,284 | 59,186 | 97,052 | 96,081 | |
| United States (c) .. | 269,415 | 228,543 | 384,500 | 328,800 | 334,100 | 179,900 | 35,000 | 53,600 | 44,600 | 24,100 | |
| Argentina .. | 35,958 | 33,183 | 35,934 | 31,114 | 31,613 | 32,000 | 10,000 | 11,000 | 10,000 | 11,000 | |
| Brazil .. | 1,336,916 | 2,063,482 | 1,979,060 | 2,006,119 | 2,038,311 | 2,602,000 | 928,000 | 890,000 | 903,000 | 1,171,000 | |
| Chile .. | 14,620 | 23,467 | 23,525 | 26,301 | 26,723 | 23,838 | 11,000 | 10,000 | 11,000 | 9,900 | |
| Peru .. | 1,146 | 7,040 | 11,811 | 1,892 | 1,922 | 7,803 | 3,000 | 5,000 | 800 | 3,000 | |
| China (a) .. | 690,000 | 890,000 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 270,000 | 300,000 | 300,000 | 300,000 | |
| Indonesia .. | (a) 11,000 | 2,100 | 6,300 | 10,600 | 10,800 | 12,000 | 900 | 2,600 | 4,000 | 5,000 | |
| Iran (b) .. | (a) 40,000 | 25,000 | r 21,000 | 20,000 | 20,000 | 20,000 | n.a. | n.a. | n.a. | n.a. | |
| Japan .. | r 280,202 | 307,364 | 296,060 | 266,160 | 270,431 | 285,005 | 100,000 | 100,000 | 78,200 | 79,500 | |
| Korea (South) .. | 7,127 | 3,383 | 2,278 | 2,359 | 2,397 | 2,134 | 1,400 | 900 | 1,000 | 850 | |
| Philippine Republic .. | 78,923 | 65,000 | 20,000 | 5,040 | 5,121 | 5,133 | 34,000 | 9,000 | 2,000 | 2,100 | |
| Thailand .. | 77,324 | 40,419 | 29,463 | 23,488 | 23,865 | 13,982 | 21,400 | 14,100 | 11,500 | 6,711 | |
| Turkey .. | 41,207 | 25,000 | 13,473 | 9,344 | 9,494 | 12,900 | 9,000 | 5,000 | 3,000 | 4,000 | |
| TOTAL | 15,000,000 | 15,000,000 | 15,800,000 | 16,000,000 | 16,200,000 | 18,400,000 | | | | | |
| WORLD'S TOTAL | 18,000,000 | 18,000,000 | 18,600,000 | 19,000,000 | 19,200,000 | 21,900,000 | | | | | |

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.

| Exporting Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-------------|-------------|-------------|-----------|-----------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ore and concentrates | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 4,536 | 4,609 | 2,375 |
| Spiegeleisen | 10 | 31 | 96 | — | — | — |
| Ferro-manganese | 17,794 | 22,463 | 340 | 2,226 | 2,262 | 308 |
| Ghana— | | | | | | |
| Ore | 445,310 | 438,856 | 324,198 | 396,974 | 403,345 | <i>n.a.</i> |
| Zambia— | | | | | | |
| Ore | 24,325 | 17,211 | — | — | — | — |
| Canada— | | | | | | |
| Ferro-manganese | 3,874 | 909 | 4,921 | 502 | 510 | 346 |
| Guyana— | | | | | | |
| Ore and concentrates | 191,668 | 97,593 | — | — | — | — |
| India (b)— | | | | | | |
| Ore | 451,018 | 556,430 | 465,176 | 537,406 | 546,030 | 382,055 |
| Ferruginous manganese ore | 578,363 | 737,273 | 676,132 | 1,069,177 | 1,086,334 | 661,169 |
| Ferro-manganese | 28,833 | 69,150 | 113,618 | 86,122 | 87,504 | 17,707 |
| Malaysia (West)— | | | | | | |
| Ore | 59,329 | 40,102 | 44,948 | — | — | 12,904 |
| Singapore— | | | | | | |
| Ore | 1,739 | 2,049 | 2,413 | 1,005 | 1,021 | 737 |
| Australia (a)— | | | | | | |
| Ore | 271,524 | 393,725 | 629,531 | 638,685 | 648,936 | 703,828 |
| Fiji— | | | | | | |
| Ore | 4,360 | 10,407 | 11,117 | 38,214 | 38,827 | 6,177 |
| New Hebrides— | | | | | | |
| Concentrates— | | | | | | |
| Unsintered | — | — | — | 26,194 | 26,614 | — |
| Sintered | 73,429 | 58,241 | — | 1,900 | 1,930 | — |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Ore | 2,545 | 2,971 | 11,170 | 12,919 | 13,126 | 6,225 |
| Ferro-manganese | 64,106 | 60,164 | 65,715 | 68,309 | 69,405 | 54,768 |
| Spiegeleisen | 3,150 | 2,542 | 2,923 | 4,256 | 4,324 | 960 |
| France— | | | | | | |
| Ore (c) | 1,118 | 495 | 585 | 1,289 | 1,310 | 320 |
| Metal | 3,270 | 4,600 | 6,374 | 6,225 | 6,325 | 3,986 |
| Ferro-manganese | 167,227 | 204,910 | 227,058 | 295,642 | 300,386 | 238,693 |
| Spiegeleisen | 7,492 | 7,162 | 2,436 | 2,860 | 2,906 | 831 |
| Germany (Federal)— | | | | | | |
| Ore | 601 | 5,811 | 4,352 | 396 | 402 | 4,625 |
| Metal | 12 | 31 | 68 | 139 | 141 | 187 |
| Ferro-manganese | 39,852 | 74,306 | 44,194 | 38,515 | 39,133 | 38,165 |
| Spiegeleisen | 12,278 | 13,804 | 11,156 | 15,278 | 15,523 | 3,047 |
| Greece— | | | | | | |
| Ore | 6,019 | 5,579 | 4,937 | 3,941 | 4,400 | 4,749 |
| Italy— | | | | | | |
| Ore (c) | 295 | 221 | 38 | 5 | 5 | 458 |
| Ferro-manganese | 8,478 | 17,042 | 7,758 | 6,079 | 6,177 | 5,874 |
| Netherlands— | | | | | | |
| Ore | 18,436 | 21,439 | 24,686 | 33,714 | 34,255 | 37,999 |
| Norway— | | | | | | |
| Ore | 2,000 | 1,600 | 200 | 930 | 945 | 100 |
| Ferro-manganese | 118,611 | 141,483 | 185,147 | 152,628 | 155,077 | 187,542 |
| Ferro-silico-manganese | 111,466 | 129,789 | 141,217 | 125,257 | 127,267 | 130,824 |
| Portugal— | | | | | | |
| Ore | 6,333 | 5,703 | 9,112 | 2,953 | 3,000 | 1,004 |

(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.)

| Exporting Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-------------|------------------|------------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Roumania— | | | | | | |
| Ore | 58,659 | 65,548 | 47,300 | 28,400 | 28,900 | 49,200 |
| Sweden— | | | | | | |
| Ore | 4,256 | 3,040 | 2,358 | 514 | 522 | 293 |
| Metal | 9 | 28 | 79 | 43 | 44 | 65 |
| Ferro-manganese .. | 12,561 | 15,052 | 25,440 | 9,120 | 9,266 | 13,548 |
| Ferro-silico-manganese | 494 | 27 | 2,459 | 787 | 800 | 6,529 |
| U.S.S.R.— | | | | | | |
| Ore | 1,230,258 | 1,131,830 | 1,178,000 | 1,181,048 | 1,200,000 | 1,400,000 |
| do. (dioxide) .. . | 16,700 | 18,600 | 17,900 | 15,649 | 15,900 | 16,800 |
| Ferro-manganese .. | 85,600 | 95,600 | 105,800 | 116,628 | 118,500 | 374,000 |
| Yugoslavia— | | | | | | |
| Ferro-manganese .. | 389 | 20 | 1,344 | 1,181 | 1,200 | <i>n.a.</i> |
| Silico-manganese .. | 11,216 | 16,484 | 14,866 | 14,217 | 14,445 | 12,954 |
| Angola— | | | | | | |
| Ore | 12,895 | 37,308 | 27,043 | 20,266 | 20,591 | 11,262 |
| Egypt— | | | | | | |
| Ore | 30,510 | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Gabon— | | | | | | |
| Ore | 1,207,049 | 1,142,503 | 1,524,235 | 713,396 | 724,844 | 1,750,000 |
| Ivory Coast— | | | | | | |
| Ore | 103,919 | 130,889 | 53,058 | 73,061 | 74,233 | <i>n.a.</i> |
| Morocco— | | | | | | |
| Ore | 211,171 | 166,127 | 130,367 | 113,632 | 115,455 | 91,788 |
| South Africa— | | | | | | |
| Ore | 1,425,916 | 1,716,764 | 1,881,488 | 2,092,297 | 2,125,872 | 2,681,403 |
| Metal | 7,870 | 7,912 | 9,181 | 8,717 | 8,857 | 9,782 |
| Ferro-manganese .. | 125,816 | 127,603 | 249,937 | 210,053 | 213,424 | 170,082 |
| Zaire Republic— | | | | | | |
| Ore (a) | 271,500 | <i>r</i> 197,200 | <i>r</i> 239,300 | 433,000 | 440,000 | <i>n.a.</i> |
| Mexico— | | | | | | |
| Ore | 10,284 | 6,848 | 4,132 | 80,120 | 81,406 | 61,674 |
| <i>Mn content</i> | 6,085 | 3,988 | 2,653 | 25,127 | 25,530 | 26,324 |
| United States— | | | | | | |
| Ore | 13,728 | 16,518 | 42,595 | 18,119 | 18,410 | 50,270 |
| Metal | 1,239 | 1,891 | 2,206 | 2,652 | 2,695 | 1,091 |
| Ferro-manganese .. | 1,662 | 3,312 | 1,570 | 19,416 | 19,728 | 4,106 |
| Spiegeleisen | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 778 | 790 | 761 |
| Brazil— | | | | | | |
| Ore | 533,453 | 1,106,158 | 847,027 | 1,562,998 | 1,588,079 | <i>n.a.</i> |
| Ferro-manganese .. | 305 | 79 | 148 | 4,498 | 4,570 | <i>n.a.</i> |
| Chile— | | | | | | |
| Ferro-manganese .. | 1,436 | 497 | 198 | 619 | 629 | <i>n.a.</i> |
| Peru— | | | | | | |
| Ore | 188 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Formosa— | | | | | | |
| Ferro-manganese .. | 62 | 15 | 295 | 1,092 | 1,110 | 3,494 |
| Iran (b)— | | | | | | |
| Ore | 10,654 | 32,282 | 935 | 9,000 | 9,144 | 12,320 |
| Japan— | | | | | | |
| Ore | 924 | 1,334 | 2,241 | 2,900 | 2,947 | 3,142 |
| Ferro-manganese .. | 4,736 | 7,044 | 11,149 | 8,227 | 8,359 | 19,225 |
| Ferro-silico-manganese | 343 | 1,275 | 1,231 | 1,207 | 1,226 | 4,602 |
| Philippine Republic— | | | | | | |
| Ore | 74,634 | 49,726 | 35,787 | 5,115 | 5,197 | 8,877 |
| Thailand— | | | | | | |
| Ore | 79,084 | 9,680 | 8,480 | 6,956 | 7,068 | 7,289 |
| Turkey— | | | | | | |
| Ore | 5,738 | 8,154 | 4,324 | 5,000 | 5,080 | <i>n.a.</i> |

(a) Estimated.

(b) Years ended March 20 following that stated.

IMPORTS OF MANGANESE ORE, ETC.

| Importing Country and Description | Long tons | | | | Tonnes | |
|--|-----------|---------|---------|-----------|-----------|-----------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ore | 404,526 | 473,650 | 430,918 | 513,188 | 521,425 | 428,887 |
| Metal | 2,494 | 2,246 | 3,491 | 3,229 | 3,280 | 2,254 |
| Ferro-manganese | 73,324 | 66,381 | 94,366 | 74,714 | 75,913 | 78,505 |
| Spiegeleisen | — | — | — | — | — | — |
| Silico-manganese | 24,390 | 26,632 | 30,147 | 28,038 | 28,488 | 24,422 |
| Canada— | | | | | | |
| Ores and concentrates (Mn content) | 73,803 | 61,795 | 96,388 | 113,235 | 115,052 | 100,593 |
| Metal | 1,986 | 2,922 | 2,755 | 2,273 | 2,310 | 3,196 |
| Ferro-manganese and spiegeleisen | 14,325 | 24,947 | 21,896 | 17,608 | 17,891 | 19,557 |
| Silico-manganese and silico-spiegel | 3,752 | 1,200 | 4,071 | 960 | 975 | 1,624 |
| Hong Kong— | | | | | | |
| Ore | 10 | 1 | 132 | 98 | 100 | 340 |
| India (c)— | | | | | | |
| Ore | 3,147 | 6,958 | 7,592 | 5,775 | 5,868 | 6,785 |
| Ferro-manganese | 317 | 114 | 34 | — | — | — |
| Malaysia (West)— | | | | | | |
| Ore | 1,622 | 1,836 | 2,252 | 1,603 | 1,629 | 1,187 |
| Singapore— | | | | | | |
| Ore | 4,032 | 8,919 | 3,699 | 5,508 | 5,596 | 11,351 |
| Australia (b)— | | | | | | |
| Ore | 7,370 | 8,260 | 6,849 | 8,311 | 8,444 | 4,531 |
| Metal | 353 | 330 | 438 | 652 | 662 | 686 |
| Ferro-manganese | 2,775 | 10,459 | 9,998 | 6,592 | 6,698 | 9,834 |
| New Zealand (b)— | | | | | | |
| Ferro-manganese | 742 | 429 | 1,131 | 2,097 | 2,131 | n.a. |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Ore | 580 | 794 | 780 | 922 | 937 | 739 |
| Spiegeleisen | 1,765 | 2,650 | 2,745 | 614 | 624 | 569 |
| Ferro-manganese | 11,291 | 15,327 | 19,271 | 17,297 | 17,575 | 16,734 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Ore (a) | 280,990 | 301,653 | 356,797 | 344,256 | 349,780 | 463,347 |
| Ferro-manganese | 73,062 | 74,031 | 83,434 | 85,602 | 86,976 | 84,425 |
| Ferro-silico-manganese | 5,924 | 10,066 | 11,631 | 9,903 | 10,062 | 9,452 |
| Spiegeleisen | 14,749 | 19,382 | 21,076 | 17,789 | 18,075 | 1,929 |
| Czechoslovakia— | | | | | | |
| Ore | 301,000 | 405,000 | 379,000 | 199,000 | 202,000 | 313,000 |
| Denmark— | | | | | | |
| Ore | 8,517 | 9,203 | 8,962 | 11,379 | 11,562 | 5,763 |
| Ferro-manganese | 2,197 | 5,704 | 5,879 | 7,774 | 7,899 | 8,397 |
| Ferro-silico-manganese | 2,855 | 2,785 | 4,109 | 2,959 | 3,007 | 3,073 |
| Finland— | | | | | | |
| Ferro-manganese | 2,153 | 3,194 | 3,623 | 5,931 | 6,026 | 4,634 |
| France— | | | | | | |
| Ore (a) | 678,933 | 875,903 | 960,429 | 1,077,833 | 1,095,129 | 1,117,022 |
| Metal | 665 | 337 | 404 | 315 | 320 | 235 |
| Ferro-manganese | 21,546 | 20,128 | 24,786 | 27,288 | 27,726 | 25,621 |
| Spiegeleisen | 4,303 | 2,395 | 3,329 | 4,173 | 4,240 | 20 |
| Germany (Federal)— | | | | | | |
| Ore | 347,500 | 572,725 | 313,890 | 397,231 | 403,605 | 459,082 |
| do. (ferruginous) | 314,234 | 373,837 | 385,425 | 304,411 | 309,296 | 361,671 |
| Metal | 2,615 | 4,225 | 4,810 | 5,106 | 5,188 | 3,756 |
| Ferro-manganese | 71,605 | 109,118 | 142,177 | 159,657 | 162,219 | 125,546 |
| Spiegeleisen | 3,331 | 3,159 | 766 | 206 | 209 | 246 |

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

(c) Years ended March 31 following that stated.

IMPORTS OF MANGANESE ORE, ETC. (cont.)

Long tons

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|-----------|-----------|-----------|-----------|------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Germany (East)— | | | | | | |
| Ore (b) | 75,236 | 49,317 | 72,889 | 67,177 | 68,255 | 74,800 |
| Greece— | | | | | | |
| Ore | 8 | 171 | 3,052 | n.a. | n.a. | 3,941 |
| Hungary— | | | | | | |
| Ferro-manganese .. | 12,233 | 25,454 | 23,917 | 28,840 | 29,303 | 22,443 |
| Italy— | | | | | | |
| Ore (a) | 150,549 | 166,829 | 158,035 | 181,473 | 184,385 | 290,503 |
| Metal | 1,384 | 1,874 | 1,997 | 1,826 | 1,855 | 1,503 |
| Spiegeleisen | 24,861 | 29,025 | 31,537 | 12,392 | 12,591 | 4,866 |
| Ferro-manganese .. | 85,550 | 86,054 | 111,672 | 109,298 | 111,052 | 117,411 |
| Ferro-silico-manganese | 12,005 | 15,638 | 21,234 | 17,907 | 18,194 | 18,516 |
| Netherlands— | | | | | | |
| Ore | 42,095 | 35,564 | 57,007 | 109,639 | 111,398 | 119,021 |
| Ferro-manganese .. | 23,255 | 24,020 | 33,614 | 38,736 | 39,358 | (c) 35,280 |
| Ferro-silico-manganese | 899 | 1,147 | 1,155 | 2,372 | 2,410 | (c) 1,677 |
| Spiegeleisen | 317 | 201 | 373 | 142 | 144 | 100 |
| Norway— | | | | | | |
| Ore | 526,259 | 640,356 | 617,122 | 536,105 | 544,708 | 735,699 |
| Poland— | | | | | | |
| Ore | 348,434 | 345,530 | 387,621 | 383,238 | 389,388 | 401,200 |
| Spain— | | | | | | |
| Ore | 132,715 | 181,277 | 139,834 | 197,186 | 200,350 | 173,993 |
| Ferro-manganese .. | 949 | 950 | 2,178 | 967 | 983 | 827 |
| Sweden— | | | | | | |
| Ore | 106,621 | 86,033 | 67,097 | 112,978 | 114,791 | 150,058 |
| Metal | 1,193 | 1,486 | 2,477 | 2,747 | 2,791 | 1,801 |
| Ferro-manganese .. | 20,834 | 30,458 | 26,291 | 31,374 | 31,878 | 34,165 |
| Spiegeleisen | 108 | — | — | — | — | — |
| Ferro-silico-manganese | 7,382 | 11,847 | 10,278 | 10,357 | 10,523 | 11,669 |
| Yugoslavia— | | | | | | |
| Ore | 48,218 | 34,981 | 52,490 | 47,478 | 48,240 | 43,055 |
| Metal | 50 | 64 | 151 | 188 | 191 | 175 |
| Ferro-manganese .. | 2,075 | 2,489 | 166 | 559 | 568 | 1,190 |
| Morocco— | | | | | | |
| Ferro-manganese .. | 95 | 99 | 124 | 172 | 179 | 199 |
| Ferro-silico-manganese | 25 | 20 | 30 | 48 | 49 | 75 |
| South Africa— | | | | | | |
| Ore | 419 | 383 | 653 | 1,769 | 1,797 | 277 |
| Mexico— | | | | | | |
| Ferro-manganese .. | 423 | 410 | 582 | 894 | 908 | 1,311 |
| United States— | | | | | | |
| Ore (over 35% Mn) .. | 1,844,547 | 1,630,000 | 1,733,067 | 1,549,154 | 1,574,013 | 1,736,582 |
| Mn content | 871,215 | 776,822 | 876,865 | 755,864 | 767,993 | 851,046 |
| Ore (10% to 35% Mn) .. | 4,881 | 34,732 | 5,570 | — | — | n.a. |
| Mn content | 1,556 | 10,526 | 640 | — | — | n.a. |
| Metal | 1,998 | 2,842 | 1,224 | 1,140 | 1,158 | 2,613 |
| Ferro-manganese .. | 192,660 | 182,455 | 269,612 | 259,774 | 263,942 | 220,245 |
| Mn content | 149,596 | 142,043 | r 213,522 | 202,659 | 205,911 | 171,694 |
| Silico-manganese .. | 31,193 | 22,689 | 28,607 | 12,981 | 13,189 | 27,150 |
| Mn content | r 20,942 | 15,076 | 19,050 | 8,593 | 8,731 | 18,116 |
| Argentina— | | | | | | |
| Ore and concentrate .. | 11,324 | 53,537 | 19,849 | 33,635 | 34,175 | 35,958 |
| Ferro-manganese .. | 298 | 624 | 398 | 503 | 511 | 729 |
| Brazil— | | | | | | |
| Ore | 282 | 292 | 3,367 | 532 | 541 | n.a. |
| Ferro-manganese .. | r 449 | 142 | 595 | 523 | 531 | n.a. |
| Chile— | | | | | | |
| Ferro-manganese .. | 1,462 | 2 | n.a. | 1,015 | 1,031 | n.a. |
| Silico-manganese .. | 5 | n.a. | n.a. | 2 | 2 | n.a. |

(a) Including manganiferous iron ore.

(b) Mn content.

(c) Excludes imports from Belgium and Luxemburg, if any.

IMPORTS OF MANGANESE ORE, ETC. (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|-----------|-----------|-----------|-----------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Japan— | | | | | | |
| Ore | 1,482,975 | 1,725,459 | 1,992,972 | 2,543,015 | 2,583,823 | 3,243,311 |
| Manganiferous iron ore | 324,889 | 221,134 | 153,855 | 72,644 | 73,810 | 71,269 |
| Ferro-manganese .. | 9,243 | 2,355 | 24,171 | 47,115 | 47,871 | 2,156 |
| Philippine Republic— | | | | | | |
| Ore and concentrate .. | 1,970 | 2,000 | 4,000 | 4,031 | 4,096 | 4,481 |
| Turkey— | | | | | | |
| Ferro-manganese .. | 5,478 | 4,807 | 9,123 | 10,865 | 11,039 | <i>n.a.</i> |

MERCURY
PRODUCTION OF MERCURY

| Producing Country | Lb. avdp. | | | | Kilogrammes | |
|-------------------------------|-------------------|-------------------|-------------------|-------------------|------------------|-------------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Canada | — | 327,940 | 1,520,000 | 1,824,000 | 827,350 | (c) 620,000 |
| OTHER COUNTRIES | | | | | | |
| Czechoslovakia | 15,000 | 9,000 | 33,000 | 366,000 | 166,000 | 194,000 |
| Italy | 3,653,440 | 4,052,160 | r 3,703,840 | 3,380,000 | 1,533,000 | 1,469,000 |
| Roumania | 14,440 | — | — | — | — | — |
| Spain | 3,724,000 | 4,352,000 | 4,895,000 | 3,400,000 | 1,542,200 | 2,048,000 |
| U.S.S.R. (c) | 3,400,000 | 3,400,000 | 3,600,000 | 3,650,000 | 1,655,000 | 1,724,000 |
| Yugoslavia | 1,201,536 | 1,124,357 | 1,089,083 | 1,175,000 | 533,000 | 571,000 |
| Tunisia | 22,156 | 23,479 | 18,519 | 7,600 | 3,450 | 11,710 |
| Mexico | 1,095,360 | r 1,307,341 | r 1,710,787 | 2,299,422 | 1,043,000 | 1,220,000 |
| United States | 1,807,600 | 2,194,400 | 2,231,400 | 2,075,000 | 941,000 | 607,660 |
| Bolivia (a) | 11,000 | 10,000 | 5,000 | 900 | 408 | n.a. |
| Chile | 13,995 | 39,013 | 21,771 | 29,451 | 13,359 | 17,307 |
| Colombia | 14,492 | 24,990 | 23,734 | 16,319 | 7,402 | 6,659 |
| Peru | 228,399 | 229,662 | 272,992 | 242,868 | 110,163 | 62,000 |
| China (c) | 1,500,000 | 1,500,000 | 1,500,000 | 1,500,000 | 680,000 | 680,000 |
| Japan | 660,000 | 583,400 | 497,300 | 445,479 | 202,066 | (c) 196,000 |
| Philippine Republic | 198,400 | 269,344 | 264,328 | 353,248 | 160,231 | 173,055 |
| Turkey | 340,614 | 355,399 | 497,363 | 653,000 | 296,000 | 327,000 |
| WORLD'S TOTAL (b) .. | 18,000,000 | 20,000,000 | 21,000,000 | 21,000,000 | 9,500,000 | 10,500,000 |

(a) Exports.

(b) Estimated.

(c) United States Bureau of Mines' estimate.

EXPORTS OF MERCURY, ETC.

| Exporting Country and Description | Lb. avdp. | | | | Kilogrammes | |
|---|-------------|-------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— Mercury | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 241,987 | 109,763 | 54,166 |
| OTHER COUNTRIES | | | | | | |
| Austria— Mercury | 24,900 | 37,250 | 24,470 | 20,723 | 9,400 | 9,300 |
| Belgium-Luxemburg E.U.— Mercury | 15,400 | 38,600 | 40,000 | 44,754 | 20,300 | 19,800 |
| Mercury compounds .. | 200 | 200 | 400 | 2,645 | 1,200 | 400 |
| France— Mercury | 20,000 | 22,000 | 9,000 | 39,684 | 18,000 | 5,000 |
| Mercury compounds .. | 4,000 | 2,200 | 2,200 | 41,888 | 19,000 | 7,000 |
| Germany (Federal)— Mercury | 87,300 | 73,900 | 39,000 | 78,705 | 35,700 | 45,700 |
| Italy— Mercury | 2,809,600 | 2,681,400 | 2,588,700 | 1,177,220 | 533,978 | 524,100 |
| Mercury compounds .. | 661 | 220 | 1,323 | 2,513 | 1,140 | 100 |
| Netherlands— Mercury | 85,980 | 50,706 | 22,046 | 17,637 | 8,000 | 13,000 |
| Mercury oxide | — | — | 2,200 | — | — | 1,000 |
| Spain— Mercury | 3,839,764 | 3,266,121 | 3,187,884 | 3,289,296 | 1,492,000 | 1,134,000 |
| Mercury compounds .. | 415,238 | 465,308 | 471,789 | 403,446 | 183,000 | 139,000 |
| Sweden— Mercury | 18,000 | 24,250 | 17,637 | 17,637 | 8,000 | 16,000 |
| Switzerland— Mercury | 7,161 | 10,276 | 4,647 | 5,649 | 2,562 | 3,380 |
| U.S.S.R.— Mercury | 46,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Yugoslavia— Mercury | 1,115,766 | 1,077,057 | 1,122,862 | 1,058,688 | 480,213 | 492,501 |
| Mercury compounds .. | 56,859 | 91,807 | <i>n.a.</i> | 27,525 | 12,485 | 735 |
| Mexico— Mercury | 965,000 | 1,032,000 | 2,441,000 | 2,663,144 | 1,207,982 | 1,275,607 |
| United States— Mercury | 199,682 | 569,696 | 38,497 | 353,648 | 160,412 | 249,307 |
| Bolivia— Mercury | 11,000 | 10,000 | 5,000 | 900 | 408 | <i>n.a.</i> |
| Peru— Mercury | 225,595 | 267,087 | 160,294 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Japan— Mercury | 65,832 | 36,978 | 83,260 | 27,833 | 12,625 | 33,386 |
| Philippine Republic— Mercury | 187,000 | 210,000 | 239,395 | 341,992 | 155,125 | 154,986 |
| Turkey— Mercury | 340,523 | 231,666 | 496,371 | 596,308 | 270,481 | <i>n.a.</i> |

IMPORTS OF MERCURY, ETC.

| Importing Country and Description | Lb. avdp. | | | | Kilogrammes | |
|--------------------------------------|-----------|-----------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Mercury | 1,101,330 | 1,118,482 | 1,450,886 | 761,074 | 345,217 | 429,430 |
| Canada— | | | | | | |
| Mercury | 356,300 | 197,900 | 133,600 | 153,300 | 69,500 | 55,338 |
| Hong Kong— | | | | | | |
| Mercury | 24,006 | 34,751 | 31,911 | 34,518 | 15,657 | 19,945 |
| India (b)— | | | | | | |
| Mercury | 582,814 | 417,315 | 435,442 | 350,550 | 159,007 | 248,721 |
| Malaysia (West)— | | | | | | |
| Mercury | 3,758 | 2,558 | 4,626 | 4,905 | 2,225 | 821 |
| Australia (a)— | | | | | | |
| Mercury | 141,970 | 113,380 | 77,023 | 76,915 | 34,888 | 44,233 |
| Mercury compounds .. | 3,356 | 4,463 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| New Zealand (a)— | | | | | | |
| Mercury | 10,864 | 8,100 | 5,684 | 20,668 | 9,375 | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Mercury | 24,700 | 15,653 | 16,755 | 29,300 | 13,300 | 22,100 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Mercury | 310,000 | 205,000 | 548,290 | 268,700 | 121,900 | 162,400 |
| Mercury compounds .. | 10,400 | 16,755 | 27,116 | 49,100 | 22,300 | 10,700 |
| Denmark— | | | | | | |
| Mercury | 39,683 | 28,660 | 44,092 | 45,000 | 20,400 | 11,200 |
| Mercury compounds .. | 15,432 | 15,432 | 13,228 | 7,300 | 3,300 | 4,600 |
| Finland— | | | | | | |
| Mercury | 48,502 | 37,479 | 136,687 | 117,000 | 53,100 | 18,300 |
| France— | | | | | | |
| Mercury | 739,000 | 696,600 | 718,700 | 696,600 | 316,000 | 376,000 |
| Mercury compounds .. | 55,000 | 55,100 | 64,900 | 40,000 | 18,000 | 23,000 |
| Germany (Federal)— | | | | | | |
| Mercury | 945,600 | 1,148,600 | 1,708,300 | 1,918,000 | 870,000 | 601,000 |
| Greece— | | | | | | |
| Mercury | 22,000 | 6,600 | 19,200 | 6,200 | 2,800 | 1,250 |
| Italy— | | | | | | |
| Mercury | 87,083 | 49,824 | 48,722 | 378,406 | 171,642 | 133,500 |
| Mercury compounds .. | 19,400 | 18,959 | 18,299 | 19,939 | 9,044 | 9,200 |
| Netherlands— | | | | | | |
| Mercury | 101,413 | 99,208 | 152,119 | 137,000 | 62,000 | 38,000 |
| Mercury compounds .. | 125,663 | 158,730 | 147,710 | 183,000 | 83,000 | 78,000 |
| Norway— | | | | | | |
| Mercury | 46,000 | 57,000 | 75,000 | 66,000 | 30,000 | 8,000 |
| Poland— | | | | | | |
| Mercury | 769,400 | 509,268 | 504,858 | 520,000 | 236,000 | 322,000 |
| Portugal— | | | | | | |
| Mercury | 15,873 | 17,637 | 63,934 | 68,000 | 31,000 | 32,900 |
| Mercury compounds .. | 4,409 | 2,204 | 3,306 | 4,400 | 2,000 | 1,300 |
| Sweden— | | | | | | |
| Mercury | 90,400 | 302,033 | 121,254 | 123,000 | 56,000 | 54,000 |
| Switzerland— | | | | | | |
| Mercury | 23,239 | 60,102 | 57,025 | 154,326 | 70,001 | 31,442 |
| Yugoslavia— | | | | | | |
| Mercury | 650 | 54,875 | 120,422 | 28,911 | 13,114 | <i>n.a.</i> |
| Mercury compounds .. | 26,660 | 77,287 | 44,348 | 7,284 | 3,304 | <i>n.a.</i> |
| Angola— | | | | | | |
| Mercury | 1,245 | 1,144 | 333 | 1,673 | 759 | 1,299 |
| Mercury compounds .. | 20 | 223 | 13,040 | 36,917 | 16,745 | 13,421 |

(a) Years ended June 30 of that stated.

(b) Years ended March 31 following that stated.

IMPORTS OF MERCURY, ETC. (cont.)

| Importing Country and Description | Lb. avdp. | | | | Kilogrammes | |
|--------------------------------------|-----------|-----------|-----------|-----------|-------------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Morocco— | | | | | | |
| Mercury | 267 | 935 | r 88 | 4,464 | 2,025 | 3,002 |
| Mercury compounds .. | 293 | 434 | 1,038 | 483 | 219 | 248 |
| Mozambique— | | | | | | |
| Mercury | 55 | 192 | 212 | 223 | 101 | n.a. |
| South Africa— | | | | | | |
| Mercury | 85,519 | 93,699 | 98,921 | 77,817 | 35,297 | 51,214 |
| Tunisia— | | | | | | |
| Mercury | 683 | 2,641 | 655 | 7,432 | 3,371 | n.a. |
| Costa Rica— | | | | | | |
| Mercury Compounds .. | 1,065 | 994 | 1,470 | 1,411 | 640 | 480 |
| United States— | | | | | | |
| Mercury | 1,824,885 | 1,722,860 | 2,379,857 | 1,669,873 | 757,441 | 980,743 |
| Mercury compounds .. | 69 | 169 | 9,022 | 136 | 62 | n.a. |
| Argentina— | | | | | | |
| Mercury | 18,867 | 12,531 | 41,921 | 47,657 | 21,617 | 31,957 |
| Mercury compounds .. | 293 | 2,619 | 7,650 | 845 | 383 | 327 |
| Brazil— | | | | | | |
| Mercury | 54,476 | 185,179 | 127,868 | 235,039 | 106,612 | n.a. |
| Mercury compounds .. | 1,334 | 218 | 847 | 20,845 | 9,455 | n.a. |
| Chile— | | | | | | |
| Mercury | 413 | 1,021 | n.a. | 35,898 | 16,283 | n.a. |
| Mercury compounds .. | 4,995 | n.a. | n.a. | 1,166 | 529 | n.a. |
| Colombia— | | | | | | |
| Mercury | r 16,841 | r 4,059 | 27,485 | n.a. | n.a. | n.a. |
| Mercury compounds .. | r 6,918 | r 4,901 | 21,740 | n.a. | n.a. | n.a. |
| Peru— | | | | | | |
| Mercury | 2,533 | 150 | 604 | n.a. | n.a. | n.a. |
| Mercury compounds .. | 1,614 | 2,152 | 1,717 | n.a. | n.a. | n.a. |
| Uruguay— | | | | | | |
| Mercury | — | n.a. | 5,732 | 7,937 | 3,600 | 1,300 |
| Venezuela— | | | | | | |
| Mercury | 4,204 | 6,493 | 3,787 | n.a. | n.a. | n.a. |
| Mercury compounds .. | 15,646 | 11,576 | 11,449 | n.a. | n.a. | n.a. |
| Formosa— | | | | | | |
| Mercury | 71,670 | 107,037 | 83,928 | 120,156 | 54,501 | 128,976 |
| Iran (a)— | | | | | | |
| Mercury | 981 | 96,904 | 20,895 | 720 | 327 | 15,313 |
| Japan— | | | | | | |
| Mercury | 2,443,456 | 1,981,254 | 1,943,081 | 2,744,371 | 1,244,820 | 518,648 |
| Philippine Republic— | | | | | | |
| Mercury | 1,129 | 805 | 714 | 858 | 389 | 259 |
| Thailand— | | | | | | |
| Mercury | 1,208 | 19,460 | 531,308 | 9,762 | 4,428 | 5,119 |
| Mercury compounds .. | 4,601 | 5,505 | 11,023 | n.a. | n.a. | n.a. |
| Turkey— | | | | | | |
| Mercury compounds .. | 5,822 | 6,605 | 13,702 | 7,145 | 3,241 | n.a. |

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

MICA
PRODUCTION OF MICA

Lb. avdp. Kilogrammes

| Producing Country | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|---|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Kenya— | | | | | | |
| Block and sheet | — | 818 | — | — | — | — |
| Tanzania— | | | | | | |
| Sheet | 170,900 | 157,800 | 212,800 | 126,500 | 57,390 | 37,370 |
| Waste | 276,800 | 526,800 | 253,120 | — | — | — |
| India— | | | | | | |
| Crude | 40,018,298 | 38,949,057 | 38,858,667 | 36,343,000 | 16,485,000 | 14,468,000 |
| Waste | 11,177,434 | 9,861,274 | 11,724,180 | 11,709,000 | 5,311,000 | 4,094,000 |
| OTHER COUNTRIES | | | | | | |
| France | 630,560 | 3,358,900 | 4,560,000 | 6,830,000 | 3,098,000 | (c)2,086,000 |
| Norway (a)— | | | | | | |
| Crude | 9,886,000 | 10,613,052 | 8,417,248 | 9,541,604 | 4,328,000 | 3,478,000 |
| Waste | — | — | 93,000 | 44,092 | 20,000 | — |
| Portugal | — | 4,665,000 | 2,573,000 | 4,266,000 | 1,935,000 | 810,000 |
| Yugoslavia | 261,598 | 316,315 | 298,870 | 501,479 | 227,467 | 554,026 |
| Malagasy Republic— | | | | | | |
| Phlogopite (block and splittings) | 1,633,000 | 1,776,000 | 1,827,632 | 2,107,000 | 956,000 | 556,000 |
| Mozambique | 220,000 | 375,540 | 768,999 | 557,375 | 252,821 | 950,000 |
| South Africa— | | | | | | |
| Sheet | 9,331 | 20,386 | 220,229 | 23,387 | 10,608 | 2,966 |
| Waste | 10,180,000 | 17,456,000 | 13,998,000 | 16,647,100 | 7,550,990 | 7,160,000 |
| Mexico | 1,949,000 | 1,625,000 | 1,310,000 | 1,095,102 | 496,730 | 623,428 |
| United States (d)— | | | | | | |
| Sheet (uncut) | 20,000 | 15,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 8,000 |
| Scrap (b) | 237,006,000 | 250,646,000 | 266,116,480 | 237,686,400 | 107,812,000 | 115,288,000 |
| Argentina— | | | | | | |
| Sheet | 299,488 | 208,320 | 262,961 | 198,220 | 89,911 | (c) 170,000 |
| Waste | 2,210,656 | 1,317,120 | 1,263,524 | 2,896,340 | 1,313,759 | (c)1,500,000 |
| Brazil | 2,295,000 | 3,677,000 | 3,922,000 | 4,000,000 | 1,814,000 | (c)4,000,000 |
| TOTAL* | 310,000,000 | 336,000,000 | 349,000,000 | 335,000,000 | 152,000,000 | 156,000,000 |

*Excluding mica known to have been produced in South West Africa, Roumania, U.S.S.R. and China. The following amounts of damourite were produced in Australia, (lb. avdp.): 1967—1,091,000; 1968—1,088,640; 1969—1,308,160; 1970—918,400. (Kilogrammes): 1970—416,580; 1971—466,000.

(a) Exports.

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

(c) United States Bureau of Mines' estimate.

(d) Sold or used by producers.

EXPORTS OF MICA

| Exporting Country and Description | Lb. avdp. | | | | Kilogrammes | |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Unmanufactured (d) .. | 1,693,000 | 1,136,016 | 11,778,928 | 12,622,400 | 5,725,420 | 5,418,595 |
| Manufactured | 152,320 | 283,584 | 584,864 | 500,640 | 227,087 | 153,017 |
| Tanzania— | | | | | | |
| Unmanufactured (a) .. | 587,000 | 572,400 | 438,600 | 129,191 | 58,600 | 39,500 |
| Zambia— | | | | | | |
| Block or sheet | 2,808 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Waste | 4,383 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Hong Kong— | | | | | | |
| Manufactured | — | 336 | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ceylon— | | | | | | |
| Scrap | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 1,077,440 | 488,718 | 314,975 |
| India— | | | | | | |
| Blocks | 3,553,851 | 3,816,053 | 3,945,000 | 3,794,154 | 1,721,000 | 1,359,167 |
| Splittings | 12,184,948 | 13,596,627 | 14,740,599 | 11,814,569 | 5,359,000 | 6,197,790 |
| Condenser Films .. | 200,621 | 188,826 | 236,752 | 246,917 | 112,000 | 95,787 |
| Powder, scrap, waste | 30,736,845 | 31,276,631 | 26,863,874 | 46,276,624 | 20,602,000 | 17,589,937 |
| Manufactured (c) .. | 503,018 | 398,860 | 474,432 | 390,480 | 117,119 | 199,610 |
| Singapore— | | | | | | |
| Unmanufactured (a) .. | — | 22 | — | 50,064 | 22,709 | 89,423 |
| Manufactured | 721 | 641 | 128 | 136 | 62 | 1,878 |
| Australia (b)— | | | | | | |
| Manufactured | (£21,600) | (£15,770) | (£18,666) | (£12,600) | (£12,600) | (£18,666) |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Unmanufactured .. | 4,600 | 70,300 | 6,600 | 10,803 | 4,900 | 11,600 |
| Manufactured | 21,200 | 22,900 | 52,700 | 51,588 | 23,400 | 20,700 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Unmanufactured (a) .. | 193,600 | 162,040 | 153,900 | 222,226 | 100,800 | 88,000 |
| Manufactured | 655,900 | 873,700 | 1,030,881 | 1,145,081 | 519,400 | 582,300 |
| Denmark— | | | | | | |
| Ground | 66,138 | 81,571 | 48,501 | — | — | 1,000 |
| Manufactured | — | — | — | — | — | — |
| Finland— | | | | | | |
| Unmanufactured (a) .. | 55,000 | 97,000 | 123,000 | — | — | 50,000 |
| France— | | | | | | |
| Unmanufactured (a) .. | 86,000 | 146,000 | 174,000 | 238,099 | 108,000 | 59,000 |
| Ground | 1,905,000 | 3,159,000 | 2,273,000 | 3,048,992 | 1,383,000 | 1,364,000 |
| Manufactured | 721,000 | 930,300 | 1,019,000 | 1,296,318 | 588,000 | 593,000 |
| Germany (Federal)— | | | | | | |
| Unmanufactured (a) .. | 1,506,000 | 1,444,000 | 2,000,000 | 1,848,355 | 838,400 | 912,000 |
| Manufactured | 298,200 | 445,600 | 680,100 | 383,221 | 173,826 | 117,884 |
| Italy— | | | | | | |
| Ground | 567,200 | 782,600 | 214,700 | 154,685 | 70,164 | 25,600 |
| Waste | 155,600 | 105,600 | 1,652,400 | 814,004 | 369,226 | 223,600 |
| Manufactured | 58,860 | 42,900 | 53,900 | 91,600 | 41,549 | 19,300 |
| Netherlands— | | | | | | |
| Unmanufactured (d) .. | 220,500 | 211,600 | 198,400 | 165,320 | 75,000 | 49,000 |
| Manufactured | 6,600 | 4,400 | 4,400 | 35,274 | 16,000 | 18,000 |
| Norway— | | | | | | |
| Unmanufactured .. | 9,886,000 | 10,613,052 | 8,417,248 | 9,541,604 | 4,328,000 | 3,478,000 |
| Waste | — | — | 93,000 | 44,092 | 20,000 | — |
| Spain— | | | | | | |
| Manufactured | 46,425 | 63,963 | 50,706 | 196,211 | 89,000 | 112,000 |
| Sweden— | | | | | | |
| Unmanufactured .. | — | 6,600 | 13,200 | 13,228 | 6,000 | 31,000 |

(a) Including waste.

(b) Years ended June 30 of that stated.

(c) Years ended March 31 following that stated.

(d) Including splittings and waste.

EXPORTS OF MICA (cont.)

| Exporting Country and Description | Lb. avdp. | | | | Kilogrammes | |
|--------------------------------------|------------|------------|------------|------------|-------------|-----------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Switzerland— | | | | | | |
| Unmanufactured (a) .. | 131,537 | 235,749 | 204,543 | 162,851 | 73,868 | 82,108 |
| Manufactured | 459,972 | 371,567 | 477,100 | 567,847 | 257,571 | 321,264 |
| Angola— | | | | | | |
| Unmanufactured | } | — | — | 139,257 | 63,165 | n.a. |
| Waste | | | | | | |
| Malagasy Republic— | | | | | | |
| Unmanufactured .. | 2,242,736 | 3,120,017 | 5,112,132 | 2,647,751 | 1,200,990 | n.a. |
| Mozambique— | | | | | | |
| Unmanufactured .. | 109,528 | 690,933 | 451,948 | 1,673,308 | 759,000 | 505,000 |
| South Africa— | | | | | | |
| Unmanufactured (a) .. | 16,510,416 | 20,712,000 | 21,296,000 | 14,956,100 | 6,783,900 | 5,196,000 |
| United States— | | | | | | |
| Unmanufactured (a) | } | 27,014,321 | 11,810,008 | 17,459,607 | 7,919,500 | 6,524,190 |
| Ground | | | | | | |
| Manufactured | | | | | | |
| Unmanufactured .. | 526,690 | 474,509 | 638,830 | 1,260,780 | 571,880 | 362,400 |
| Argentina— | | | | | | |
| Unmanufactured .. | 690,600 | 1,156,126 | 728,213 | 1,990,809 | 903,010 | 1,918,912 |
| Brazil— | | | | | | |
| Unmanufactured .. | 1,317,542 | 1,345,638 | 3,963,911 | 4,087,343 | 1,853,988 | 4,000,000 |
| Manufactured | 12,070 | 28,274 | 12,754 | 16,744 | 7,595 | n.a. |
| Waste | 976,229 | 2,330,749 | 2,384,383 | n.a. | n.a. | n.a. |
| Formosa— | | | | | | |
| Manufactured | n.a. | 330,914 | 2,866 | 110,231 | 50,000 | n.a. |
| Japan— | | | | | | |
| Unmanufactured (a) .. | 224,872 | 229,281 | 218,257 | 103,617 | 46,999 | 44,000 |
| Manufactured | 201,573 | 49,743 | 95,100 | 72,918 | 33,075 | 155,400 |

(a) Including waste.

IMPORTS OF MICA

| Importing Country and Description | Lb. avdp. | | | | Kilogrammes | |
|-----------------------------------|------------|------------|------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Block | 264,000 | 565,152 | 831,040 | 819,840 | 371,873 | 195,082 |
| Splittings | 898,000 | 1,647,744 | 2,082,528 | 1,274,560 | 578,131 | 1,142,040 |
| Ground and waste | 11,101,000 | 15,967,504 | 22,206,800 | 27,182,400 | 12,329,733 | 13,534,802 |
| Manufactured | 321,000 | 567,280 | 562,128 | 540,176 | 245,020 | 230,389 |
| Kenya— | | | | | | |
| Unmanufactured (a) | 48,400 | 71,100 | 50,300 | 54,700 | 24,800 | 73,700 |
| Malawi— | | | | | | |
| Manufactured | 12,240 | 12,160 | 11,565 | 8,998 | 4,081 | 11,996 |
| Mauritius— | | | | | | |
| Unmanufactured | 481 | 569 | 1,797 | 1,323 | 600 | — |
| Manufactured | 11 | 218 | 761 | 66 | 30 | 3,684 |
| Nigeria— | | | | | | |
| Manufactured | 20,384 | 28,000 | 322,336 | 685,104 | 310,758 | 283,122 |
| Tanzania— | | | | | | |
| Unmanufactured (a) | 21,800 | 51,900 | 28,600 | 40,124 | 18,200 | 1,500 |
| Zambia— | | | | | | |
| Block or sheet | 28 | — | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Canada— | | | | | | |
| Unmanufactured | 6,984,700 | 6,570,300 | 7,601,400 | 7,544,100 | 3,421,900 | 4,757,500 |
| Manufactured | (£245,072) | (£205,812) | (£166,000) | (£111,000) | (£111,000) | (£152,000) |
| Jamaica— | | | | | | |
| Unmanufactured | 412,084 | 247,246 | 185,992 | 187,205 | 84,915 | 136,691 |
| Manufactured | 1,933 | 1,418 | 1,419 | 34,137 | 15,484 | 13,457 |
| Trinidad and Tobago— | | | | | | |
| Unmanufactured (a) | 55,600 | 58,900 | 24,300 | 59,400 | 26,900 | 44,271 |
| Manufactured | 29 | 508 | — | (c) 59 | (c) 26 | 323 |
| Hong Kong— | | | | | | |
| Unmanufactured | (c) 16,800 | (c) 6,608 | (c) 97,776 | (c) 95,088 | (c) 43,131 | 9,144 |
| Manufactured | 36,064 | 12,992 | 20,832 | 32,928 | 14,936 | 9,906 |
| India— | | | | | | |
| Manufactured | 1,874 | 2,586 | 2,892 | 17,840 | 8,092 | 9,304 |
| Malaysia (West)— | | | | | | |
| Unmanufactured (a) | 3,450 | 16,643 | 21,952 | 6,653 | 3,018 | 5,080 |
| Manufactured | 4,570 | 8,702 | 11,407 | 37,015 | 16,790 | 14,459 |
| Sarawak— | | | | | | |
| Unmanufactured (a) | — | — | 1,366 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Singapore— | | | | | | |
| Unmanufactured (a) | 14,358 | 87,091 | 736,960 | 1,120,403 | 508,206 | 1,313,661 |
| Manufactured | 2,860 | 2,539 | 2,680 | 3,942 | 1,788 | 7,012 |
| Australia (b)— | | | | | | |
| Block or sheet | 42,903 | 40,232 | 26,734 | 22,562 | 10,234 | 7,965 |
| Splittings | 172,071 | 199,200 | 208,355 | 153,600 | 69,672 | 88,435 |
| Ground | 757,220 | 719,259 | 380,243 | 541,858 | 245,783 | 381,182 |
| Waste | 867,047 | 1,409,001 | 1,261,910 | 1,214,975 | 551,104 | 659,214 |
| Manufactured | (£14,000) | (£22,431) | (£31,000) | (£37,799) | (£37,799) | (£35,466) |
| New Zealand (b)— | | | | | | |
| Unmanufactured (a) | (£12,246) | (£13,285) | (£16,452) | (£12,041) | (£12,041) | <i>n.a.</i> |
| Manufactured | (£30,161) | (£19,803) | (£44,704) | (£49,478) | (£49,478) | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Unmanufactured (a) | 522,900 | 964,302 | 661,607 | 659,600 | 299,200 | 316,800 |
| Manufactured | 71,000 | 70,327 | 81,791 | 103,200 | 46,800 | 42,800 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Unmanufactured (a) | 2,958,400 | 4,016,381 | 6,523,257 | 4,797,900 | 2,176,300 | 1,514,900 |
| Manufactured | 37,700 | 93,917 | 67,992 | 189,800 | 86,100 | 81,800 |

(a) Including waste.

(b) Years ended June 30 of that stated.

(c) Excess of re-exports.

IMPORTS OF MICA (cont.)

Lb. avdp. | Kilogrammes

| Importing Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|-----------------------------------|------------|------------|------------|------------------------|------------------------|--------------------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Denmark— | | | | | | |
| Unmanufactured .. | 13,228 | } 888,463 | 776,019 | 852,300 | 386,600 | 370,300 |
| Ground | 751,776 | | 487,217 | 252,200 | 114,400 | 57,900 |
| Manufactured .. | 138,891 | 255,736 | | | | |
| Finland— | | | | | | |
| Unmanufactured (a) .. | 1,095,543 | 1,386,646 | 1,532,197 | 1,658,100 | 752,100 | 987,100 |
| Manufactured | 52,911 | 61,729 | 68,342 | 60,800 | 27,600 | 32,900 |
| France— | | | | | | |
| Unmanufactured (a) .. | 8,051,000 | 6,355,900 | 7,171,600 | 7,306,000 | 3,314,000 | 2,978,000 |
| Ground | 4,259,000 | 5,041,900 | 3,650,900 | 3,644,000 | 1,653,000 | 1,609,000 |
| Manufactured | 123,000 | 152,000 | 185,200 | 190,000 | 86,000 | 85,000 |
| Germany (Federal)— | | | | | | |
| Unmanufactured (a) .. | 12,474,000 | 17,858,000 | 18,864,700 | 20,080,600 | 9,108,400 | 7,895,800 |
| Manufactured | 414,990 | 639,000 | 1,010,800 | 996,392 | 451,956 | 482,130 |
| Greece— | | | | | | |
| Unmanufactured .. | 48,713 | 94,775 | 95,936 | 140,734 | 63,836 | 39,451 |
| Manufactured | 18,924 | 9,288 | 11,855 | 23,137 | 10,495 | 7,350 |
| Italy— | | | | | | |
| Unmanufactured (a) .. | 3,848,494 | 2,641,124 | 3,638,284 | 1,315,198 | 596,564 | 1,039,100 |
| Ground | 2,273,638 | 3,074,068 | 1,996,724 | 1,997,729 | 906,155 | 939,000 |
| Manufactured | 300,049 | 357,590 | 509,267 | 472,649 | 214,390 | 199,800 |
| Netherlands— | | | | | | |
| Unmanufactured (a) .. | 2,061,322 | 3,721,402 | 2,400,833 | 2,912,000 | 1,321,000 | 1,129,000 |
| Manufactured | 119,050 | 125,663 | 141,096 | 141,000 | 64,000 | 48,000 |
| Norway— | | | | | | |
| Unmanufactured .. | 148,000 | 723,000 | 2,873,000 | 4,224,000 | 1,916,000 | 1,076,000 |
| Waste | 10,598,000 | 11,675,000 | 5,406,000 | 5,545,000 | 2,515,000 | 2,702,000 |
| Manufactured | 86,000 | 79,000 | 115,000 | 68,000 | 31,000 | 27,000 |
| Poland— | | | | | | |
| Unmanufactured .. | 2,332,000 | 2,482,400 | 2,621,200 | 3,325,000 | 1,508,000 | 1,658,000 |
| Portugal— | | | | | | |
| Unmanufactured .. | 203,928 | 122,079 | 308,647 | 432,000 | 196,000 | 229,800 |
| Manufactured | 16,535 | 13,228 | 30,865 | 15,400 | 7,000 | 12,400 |
| Spain | | | | | | |
| Unmanufactured .. | 1,553,323 | 1,647,177 | 2,548,544 | 2,317,000 | 1,051,000 | 1,060,000 |
| Sweden— | | | | | | |
| Unmanufactured (a) .. | 2,097,000 | 2,473,586 | 2,303,830 | 2,698,000 | 1,224,000 | 1,114,000 |
| Manufactured | 84,000 | 136,687 | 116,844 | 178,000 | 81,000 | 83,000 |
| Switzerland— | | | | | | |
| Unmanufactured (a) .. | 1,411,020 | 1,407,576 | 1,668,054 | 1,700,846 | 771,491 | 678,329 |
| Manufactured | 471,749 | 415,847 | 276,782 | 568,583 | 257,905 | 327,160 |
| U.S.S.R.— | | | | | | |
| Unmanufactured .. | 341,700 | 352,700 | 919,300 | 1,065,000 | 483,000 | 478,000 |
| Yugoslavia— | | | | | | |
| Unmanufactured .. | 1,182,238 | 153,872 | 189,419 | 363,500 | 164,900 | 158,163 |
| Manufactured | 78,026 | 67,565 | 169,150 | 1,027,524 | 466,077 | 102,577 |
| Algeria— | | | | | | |
| Unmanufactured .. | 68,277 | 111,307 | 207,689 | 199,988 | 90,713 | n.a. |
| Malagasy Republic— | | | | | | |
| Unmanufactured .. | 5,710 | n.a. | 18,949 | 33,069 | 14,999 | n.a. |
| Morocco— | | | | | | |
| Ground | 13,283 | 37,712 | 36,338 | 60,232 | 27,320 | 20,866 |
| Manufactured | — | 337 | 2,024 | 4,201 | 1,905 | 1,203 |
| South Africa— | | | | | | |
| Unmanufactured .. | 421,500 | 468,700 | 390,748 | ^a 1,489,776 | ^(a) 675,751 | ^(a) 1,209,328 |
| Manufactured | (£231,314) | (£202,698) | (£221,003) | (£181,337) | (£181,337) | (£143,419) |
| Mica and micanite sheets | (b) | (b) | (b) | (b) | (b) | (b) |
| Sudan— | | | | | | |
| Unmanufactured .. | n.a. | 2,200 | 35,274 | 28,660 | 12,999 | 5,000 |
| Manufactured | 22 | 44 | 974 | n.a. | n.a. | n.a. |

(a) Including waste.

(b) Included with "manufactured".

IMPORTS OF MICA (cont.)

| Importing Country and Description | Lb. avdp. | | | | Kilogrammes | |
|--------------------------------------|--------------|------------|------------|------------|-------------|-----------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Tunisia— | | | | | | |
| Unmanufactured | } 33,770 | n.a. | 31,696 | 41,888 | 19,000 | 17,770 |
| Ground | | | | | | |
| Manufactured .. | 1,594 | 2,130 | 9,857 | 1,561 | 708 | 333 |
| Costa Rica— | | | | | | |
| Unmanufactured | 4,872 | 15,814 | 743 | 1,444 | 655 | 957 |
| Manufactured .. | 176 | n.a. | 181 | 293 | 133 | 275 |
| Guatemala— | | | | | | |
| Unmanufactured | 35,554 | 57,524 | 15,254 | 26,147 | 11,860 | 6,073 |
| Manufactured .. | 68 | 212 | 282 | 567 | 257 | 18 |
| Mexico— | | | | | | |
| Unmanufactured | } 412,181 | 725,320 | 589,889 | 584,289 | 265,029 | 342,186 |
| Waste | | | | | | |
| United States— | | | | | | |
| Unmanufactured | 592,243 | 361,952 | 348,415 | 193,531 | 87,784 | 166,188 |
| Ground | 226,501 | 113,600 | 55,115 | 4,480 | 2,032 | 47,999 |
| Waste | 1,016,097 | 3,097,165 | 3,077,850 | 6,047,947 | 2,743,303 | 3,304,220 |
| Films and splittings | 6,025,548 | 5,937,108 | 6,347,084 | 4,925,966 | 2,234,381 | 2,292,691 |
| Other manufactures | 271,104 | 272,832 | r 371,021 | 281,400 | 127,600 | 133,206 |
| Argentina— | | | | | | |
| Unmanufactured | 27,084 | 44,983 | 48,301 | 96,576 | 43,806 | 41,288 |
| Manufactured .. | 22,077 | 22,930 | 18,929 | 22,791 | 10,338 | 8,082 |
| Brazil— | | | | | | |
| Unmanufactured | 220 | 65,206 | 21,663 | 47,069 | 21,350 | n.a. |
| Manufactured .. | 49,134 | 19,978 | 16,330 | 41,813 | 18,966 | n.a. |
| Chile— | | | | | | |
| Unmanufactured | 42,329 | 134,482 | 242,888 | 111,069 | 50,380 | n.a. |
| Manufactured .. | 13,854 | 4,631 | 9,575 | 14,773 | 6,701 | n.a. |
| Colombia— | | | | | | |
| Unmanufactured | r 267,493 | r 477,563 | 72,889 | n.a. | n.a. | n.a. |
| Manufactured .. | r 47,962 | r 45,212 | 15,990 | n.a. | n.a. | n.a. |
| Peru— | | | | | | |
| Ground and waste | 354,371 | 156,834 | 305,852 | n.a. | n.a. | n.a. |
| Venezuela— | | | | | | |
| Unmanufactured | 1,075,565 | 792,473 | 445,798 | n.a. | n.a. | n.a. |
| Manufactured .. | 12,341 | 8,014 | 20,590 | n.a. | n.a. | n.a. |
| Formosa— | | | | | | |
| Manufactured .. | 245,374 | 110,452 | 85,760 | 61,288 | 27,800 | 58,200 |
| Iran (a)— | | | | | | |
| Unmanufactured | } 324,884 | 558,082 | 28,457 | 132,760 | 60,218 | 173,401 |
| Manufactured .. | | | | | | |
| Japan— | | | | | | |
| Unmanufactured | } 10,523,000 | 35,033,653 | 10,295,587 | 15,458,810 | 7,011,900 | 3,008,000 |
| Ground | | | | | | |
| Waste | | | | | | |
| Manufactured .. | | | | | | |
| Unmanufactured | 8,574 | n.a. | 31,660 | 60,374 | 27,385 | 19,395 |
| Lebanon— | | | | | | |
| Unmanufactured | 13,977 | 19,773 | 34,031 | 62,545 | 28,369 | 21,987 |
| Philippine Republic— | | | | | | |
| Unmanufactured | 121,254 | 135,514 | 140,917 | 96,803 | 43,909 | 80,111 |
| Thailand— | | | | | | |
| Unmanufactured | 37,479 | 79,408 | 72,751 | 85,334 | 38,707 | 87,697 |
| Manufactured .. | 16,581 | 11,107 | 13,312 | 20,732 | 9,404 | 3,722 |
| Turkey— | | | | | | |
| Unmanufactured | 98,822 | 58,202 | 36,171 | 45,411 | 20,598 | n.a. |
| Manufactured .. | 55,126 | 31,405 | 38,821 | 71,622 | 32,487 | n.a. |

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

MOLYBDENUM
PRODUCTION OF MOLYBDENUM ORE
(MoS₂ content or equivalent)

| Producing Country | Long tons | | | | Tonnes | |
|-------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Canada (a) | 15,905 | 16,727 | 22,555 | 25,128 | 25,531 | 21,413 |
| Australia | — | — | 76 | 96 | 98 | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Norway | 479 | 393 | 472 | 497 | 505 | 549 |
| U.S.S.R. (b) | 11,000 | 11,000 | 12,000 | 12,000 | 12,000 | 13,000 |
| Mexico | 103 | 130 | 331 | 231 | 235 | 131 |
| United States | 67,037 | 69,529 | 74,261 | 82,853 | 84,182 | 82,852 |
| Chile | 7,781 | 6,325 | 7,941 | 9,350 | 9,500 | 10,580 |
| Peru | 1,517 | 1,322 | 368 | 996 | 1,012 | 1,346 |
| China (b) | 2,500 | 2,500 | 2,500 | 2,500 | 2,600 | <i>n.a.</i> |
| Japan | 473 | 461 | 440 | 434 | 441 | 443 |
| Korea (South) | 457 | 331 | 213 | 189 | 192 | 177 |
| Philippine Republic | 70 | 70 | 25 | 53 | 54 | 6 |
| TOTAL* | 107,300 | 106,900 | 119,700 | 136,200 | 138,200 | 133,200 |

*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.

| Exporting Country and Description | Long tons | | | | Tonnes | |
|---|-----------|--------|--------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Metal | 35 | 38 | 101 | 60 | 61 | 51 |
| Ferro-molybdenum .. | 209 | 671 | 1,272 | 1,653 | 1,680 | 602 |
| Canada— | | | | | | |
| Ore and concentrates (MO content) | 10,622 | 10,136 | 11,461 | 13,542 | 13,759 | 10,408 |
| OTHER COUNTRIES | | | | | | |
| France— | | | | | | |
| Ferro-molybdenum .. | 318 | 446 | 718 | 919 | 934 | 275 |
| Oxide and molybdates .. | 31 | 78 | 62 | 173 | 176 | 201 |
| Germany (Federal)— | | | | | | |
| Ore | 25 | 3 | 105 | 261 | 265 | 448 |
| Metal | 74 | 112 | 163 | 258 | 262 | 152 |
| Italy— | | | | | | |
| Ferro-molybdenum .. | 1 | 129 | 859 | 854 | 868 | 514 |
| Netherlands— | | | | | | |
| Metal | 90 | 86 | 112 | 135 | 137 | 194 |
| Norway— | | | | | | |
| Ore | 494 | 410 | 487 | 498 | 506 | 550 |
| Sweden— | | | | | | |
| Ferro-molybdenum .. | 684 | 591 | 802 | 914 | 929 | 785 |
| Mexico— | | | | | | |
| Ore and concentrates (MoS ₂ content) .. | 19 | 42 | 141 | 15 | 15 | 6 |
| United States— | | | | | | |
| Ore and concentrates (MoS ₂ content) .. | 13,393 | 12,949 | 25,703 | 24,882 | 25,282 | 20,994 |
| Metal, alloys and scrap .. | 22 | 131 | 10 | 299 | 304 | 101 |
| Ferro-molybdenum .. | 684 | 385 | 650 | 899 | 914 | 614 |
| Wire, powder and semi- fabricated | 253 | 88 | 479 | 252 | 257 | 365 |
| Chile— | | | | | | |
| Concentrates | 7,201 | 5,730 | 2,693 | 5,534 | 5,623 | <i>n.a.</i> |
| Ferro-molybdenum .. | 467 | 485 | 873 | 1,005 | 1,021 | <i>n.a.</i> |
| Oxide | 1,372 | 1,128 | 1,220 | 2,043 | 2,076 | <i>n.a.</i> |
| Peru— | | | | | | |
| Ore (MoS ₂ content) .. | 1,917 | 1,156 | 652 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Korea (South)— | | | | | | |
| Ore | 506 | 501 | 362 | 234 | 238 | 141 |
| Philippine Republic— | | | | | | |
| Concentrates | 45 | 104 | 23 | 29 | 29 | 11 |

IMPORTS OF MOLYBDENUM ORE, ETC.

Long tons Tonnes

| Importing Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|-----------------------------------|-------------|--------|-----------|-----------|-----------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ore and concentrates .. | 8,880 | 8,189 | 12,675 | 11,531 | 11,716 | 7,824 |
| Metal | 84 | 105 | 107 | 163 | 166 | 124 |
| Canada— | | | | | | |
| Oxide | 202 | 607 | 34 | 33 | 34 | 29 |
| Australia (a)— | | | | | | |
| Oxide | 74 | 192 | 30 | 25 | 25 | 3 |
| Ferro-molybdenum .. | 193 | 182 | 85 | 243 | 247 | 234 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Oxide | 332 | 488 | 789 | 691 | 702 | 637 |
| Ferro-molybdenum .. | 5 | 30 | 20 | 2 | 2 | 21 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Oxide | 29 | 7 | 42 | 36 | 37 | 84 |
| Ferro-molybdenum .. | 83 | 85 | 122 | 155 | 158 | 168 |
| Denmark— | | | | | | |
| Ferro-molybdenum .. | 27 | 15 | 25 | 19 | 19 | 27 |
| Finland— | | | | | | |
| Ferro-molybdenum .. | 102 | 103 | 143 | 226 | 230 | 193 |
| France— | | | | | | |
| Ore | 5,350 | 4,446 | 7,583 | 9,282 | 9,431 | 5,391 |
| Metal and alloys .. | 81 | 82 | 103 | 91 | 93 | 100 |
| Oxide and molybdates .. | 32 | 82 | 128 | 88 | 90 | 68 |
| Germany (Federal)— | | | | | | |
| Ore | 9,420 | 11,770 | 18,730 | 15,724 | 15,976 | 12,453 |
| Metal | 245 | 222 | 438 | 404 | 411 | 372 |
| Hungary— | | | | | | |
| Ferro-molybdenum .. | <i>n.a.</i> | 199 | 340 | 317 | 322 | 213 |
| Italy— | | | | | | |
| Ore | 2,479 | 2,401 | 3,353 | 4,575 | 4,648 | 3,769 |
| Metal | 1 | 2 | 44 | 46 | 47 | 43 |
| Ferro-molybdenum .. | 797 | 625 | 870 | 791 | 804 | 641 |
| Netherlands— | | | | | | |
| Metal | 8 | 15 | 27 | 72 | 73 | 55 |
| Ferro-molybdenum .. | 55 | 34 | 61 | 38 | 39 | 28 |
| Oxide and molybdates .. | 88 | 233 | 221 | 350 | 356 | 185 |
| Poland— | | | | | | |
| Concentrates | 156 | 437 | 590 | 277 | 282 | 489 |
| Sweden— | | | | | | |
| Ore | 3,414 | 2,085 | (b) 6,509 | (b) 7,371 | (b) 7,489 | (b) 5,266 |
| Metal | 23 | 28 | 35 | 38 | 39 | 36 |
| Ferro-molybdenum .. | 932 | 1,191 | 1,615 | 1,683 | 1,701 | 898 |
| United States— | | | | | | |
| Metal | 1 | 1 | — | 2 | 2 | 61 |
| Semi-fabricated .. | 5 | 9 | 11 | 13 | 13 | <i>n.a.</i> |
| Argentina— | | | | | | |
| Oxide and molybdates .. | 24 | 31 | 98 | 64 | 65 | 63 |
| Japan— | | | | | | |
| Ore and concentrates .. | 8,648 | 9,388 | 12,044 | 14,882 | 15,121 | 12,814 |
| Molybdenum metal .. | 33 | 51 | 104 | 142 | 144 | 44 |
| Ferro-molybdenum .. | 489 | 108 | 124 | 504 | 512 | 616 |

(a) Years ended June 30 of that stated.

(b) Including roasted molybdenum concentrates.

NICKEL
PRODUCTION OF NICKEL ORE
(Metal content)

| Producing Country | Long tons | | | | Tonnes | |
|-------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Rhodesia | <i>n.a.</i> | 1,480 | 3,940 | (a) 10,700 | (a) 10,900 | (a) 11,800 |
| Canada (b) | 222,006 | 236,034 | 190,725 | 273,108 | 277,491 | 266,664 |
| Australia | 2,061 | 4,573 | 11,004 | 29,295 | 29,765 | 32,537 |
| TOTAL | 224,000 | 240,600 | 205,300 | 313,200 | 318,200 | 311,100 |
| OTHER COUNTRIES | | | | | | |
| Finland (c) | 3,560 | 3,349 | 3,600 | 5,030 | 5,111 | 3,600 |
| Greece | 2,124 | 3,676 | 8,138 | 8,464 | 8,600 | 10,680 |
| Poland (d) | 1,500 | 1,500 | 1,500 | 1,500 | 1,500 | 1,500 |
| U.S.S.R. (d) | 90,000 | 100,000 | 105,000 | 108,000 | 110,000 | 120,000 |
| Morocco | (a) 370 | 300 | 300 | 140 | 142 | (a) 200 |
| South Africa | 5,600 | 7,400 | 8,900 | 11,374 | 11,557 | 12,757 |
| Cuba (a) (e) | 30,357 | 33,170 | 34,643 | 34,640 | 35,200 | 36,000 |
| United States (f) | 13,049 | 13,530 | r 14,116 | 13,891 | 14,114 | 14,201 |
| Brazil (i) | 1,054 | 1,060 | 1,100 | 2,466 | 2,506 | 2,800 |
| Burma (g) | 50 | 28 | 30 | 21 | 21 | (a) 18 |
| Indonesia | 5,900 | 8,200 | 7,500 | 18,000 | 18,000 | 27,000 |
| Philippine Republic | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 101 | 103 | 222 |
| New Caledonia (h) | 81,000 | 112,000 | 115,200 | 136,000 | 138,000 | 138,900 |
| TOTAL* | 230,000 | 263,000 | 290,000 | 340,000 | 345,000 | 368,000 |
| WORLD'S TOTAL* | 450,000 | 500,000 | 495,000 | 653,000 | 663,000 | 679,000 |

*Ores containing nickel are also produced in Albania and East Germany. 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:

| Year | Long tons | Year | Long tons | Tonnes |
|------------|-----------|------------|-----------|--------|
| 1967 | 18,510 | 1970 | 20,678 | 21,010 |
| 1968 | 12,554 | 1971 | | 26,904 |
| 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:

| Year | Long tons | Year | Long tons | Tonnes |
|------------|-----------|------------|-----------|--------|
| 1967 | 33,951 | 1970 | 43,129 | 43,819 |
| 1968 | 37,123 | 1971 | | 46,019 |
| 1969 | 39,166 | | | |

(i) Content of ferro-nickel.

EXPORTS OF NICKEL*

| Exporting Country and Description | Long tons | | | | Tonnes | |
|---|-------------|-------------|-------------|---------|---------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Matte and other intermediate products of nickel metallurgy .. | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 6,577 | 6,683 | 3,309 |
| Unwrought (a) .. | 30,203 | 33,483 | 23,114 | 32,878 | 33,406 | 31,728 |
| Semi-manufactures .. | 4,494 | 11,575 | 11,933 | 11,464 | 11,648 | 11,894 |
| do. alloys .. | 4,973 | | | | | |
| Scrap (a) .. | 2,407 | 3,289 | 3,417 | 2,489 | 2,529 | 2,262 |
| Nickel oxide .. | 126 | 285 | 46 | 755 | 767 | 1,005 |
| Canada— | | | | | | |
| Matte or speiss (Ni content) .. | 74,698 | 85,292 | 68,728 | 86,303 | 87,688 | 101,700 |
| Unwrought .. | 114,874 | 113,479 | 93,074 | 136,789 | 138,984 | 113,725 |
| Scrap (a) .. | 1,797 | 3,684 | 4,499 | 3,854 | 3,916 | 1,867 |
| Semi-manufactures (a) .. | 3,964 | 3,482 | 2,936 | 3,259 | 3,311 | 2,288 |
| Nickel oxide (Ni content) .. | 30,539 | 37,552 | 25,901 | 39,193 | 39,822 | 38,690 |
| Hong Kong— | | | | | | |
| Scrap .. | 94 | 26 | 29 | 6 | 6 | 16 |
| Australia (c) .. | | | | | | |
| Unwrought and semi-manufactures (a) .. | <i>n.a.</i> | 63 | 142 | 392 | 398 | 1,574 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Unwrought .. | 23 | 46 | 265 | 189 | 192 | 159 |
| do. alloys .. | — | 13 | 455 | 188 | 191 | 418 |
| Scrap (a) .. | 589 | 799 | 845 | 788 | 801 | 813 |
| Semi-manufactures (a) (b) .. | 266 | 205 | 835 | 464 | 472 | 674 |
| Denmark— | | | | | | |
| Unwrought .. | — | — | 1 | 4 | 4 | — |
| Scrap (a) .. | 245 | 192 | 309 | 198 | 201 | 151 |
| Finland— | | | | | | |
| Unwrought .. | 2,604 | 2,881 | 3,490 | 3,636 | 3,694 | 3,402 |
| France— | | | | | | |
| Matte and speiss .. | 252 | 160 | 153 | 208 | 211 | 67 |
| Unwrought .. | 8,382 | 5,677 | 3,981 | 5,066 | 5,147 | 4126 |
| do. alloys .. | 27 | 57 | 97 | 211 | 214 | 213 |
| Scrap (a) .. | 2,267 | 1,819 | 1,614 | 1,661 | 1,688 | 1,046 |
| Semi-manufactures (a) .. | 2,574 | 2,417 | 2,926 | 3,493 | 3,549 | 3,183 |
| Germany (Federal)— | | | | | | |
| Unwrought and scrap (a) .. | 3,011 | 2,418 | 2,698 | 2,874 | 2,920 | 5,148 |
| Semi-manufactures (a) .. | 6,621 | 6,749 | 7,638 | 8,006 | 8,135 | 9,406 |
| Greece— | | | | | | |
| Unwrought .. | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 2 | 2 | — |
| Italy— | | | | | | |
| Semi-manufactures (a) .. | 803 | 620 | 638 | 633 | 643 | 922 |
| Netherlands— | | | | | | |
| Scrap (a) .. | 2,136 | 2,202 | 2,022 | 1,852 | 1,882 | 2,201 |
| Semi-manufactures (a) .. | 196 | 188 | 841 | 2,918 | 2,965 | 3,850 |
| Norway— | | | | | | |
| Unwrought .. | 28,753 | 29,965 | 34,860 | 36,459 | 37,044 | 40,092 |
| Scrap .. | 84 | 178 | 199 | 174 | 177 | 158 |
| Semi-manufactures (a) .. | 235 | 197 | 201 | 163 | 166 | 120 |

*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.)

| Exporting Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-------------|-------------|-------------|-----------|-----------|-----------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Sweden— | | | | | | |
| Unwrought | 434 | 482 | 157 | 829 | 842 | 525 |
| Scrap (a) | 721 | 639 | 497 | 487 | 495 | 491 |
| Semi-manufactures (a) | 1,275 | 1,267 | 1,620 | 1,212 | 1,232 | 1,852 |
| Switzerland— | | | | | | |
| Unwrought and scrap (a) | 583 | 647 | 1,197 | 1,151 | 1,170 | 644 |
| Semi-manufactures (a) | 935 | 1,279 | 1,397 | 1,078 | 1,095 | 843 |
| South Africa— | | | | | | |
| Unwrought | 3,517 | 8,531 | 5,085 | 3,399 | 3,454 | 4,801 |
| United States— | | | | | | |
| Unwrought (a) | 6,655 | 5,802 | 1,653 | 5,449 | 5,537 | 3,890 |
| Semi-manufactures (a) | 6,027 | 6,323 | 10,076 | 8,731 | 8,872 | 10,948 |
| Scrap (a) | 12,404 | 14,949 | 16,097 | 11,651 | 11,838 | 5,485 |
| Burma— | | | | | | |
| Unwrought | 181 | 127 | <i>n.a.</i> | 163 | 166 | 2,207 |
| Japan— | | | | | | |
| Ferro-nickel | 5 | 616 | 2,264 | — | — | 2,232 |
| Unwrought (a) | 5 | 1 | 99 | 399 | 406 | 182 |
| Semi-manufactures (a) | 1,857 | 498 | 390 | 811 | 825 | 661 |
| Philippine Republic— | | | | | | |
| Ore and concentrates .. | <i>n.a.</i> | <i>n.a.</i> | 70 | 492 | 500 | 769 |
| New Caledonia— | | | | | | |
| Ore | 1,484,452 | 2,450,075 | 3,016,017 | 4,061,496 | 4,126,671 | 3,800,000 |
| Matte | 16,411 | 19,684 | 19,684 | 19,584 | 19,899 | 20,250 |
| Ferro-nickel | 72,419 | 81,099 | 98,420 | 110,176 | 111,944 | 116,324 |

(a) Including alloys.

IMPORTS OF NICKEL*

| Importing Country and Description | Long tons | | | | Tonnes | |
|---|-----------|--------|--------|--------|--------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ores and concentrates .. | 57,487 | 57,461 | 45,094 | — | — | — |
| Matte and other intermediate products of nickel metallurgy .. | | | | | | |
| Unwrought | 23,286 | 23,368 | 15,400 | 33,991 | 34,537 | 45,582 |
| do. alloys | 690 | 218 | 399 | 512 | 520 | 429 |
| Semi-manufactures (a) .. | 1,169 | 1,303 | 1,870 | 1,341 | 1,363 | 3,357 |
| Scrap (a) | 4,576 | 4,246 | 5,345 | 4,886 | 4,964 | 2,875 |
| Nickel oxide | 608 | 512 | 374 | 1,370 | 1,392 | 1,484 |
| Canada— | | | | | | |
| Ore, concentrates and scrap (<i>Ni content</i>) .. | 12,781 | 14,271 | 9,278 | 26,498 | 26,923 | 19,722 |
| Unwrought and semi-manufactures (a) | 11,630 | 13,434 | 15,016 | 12,901 | 13,108 | 15,073 |
| Cyprus— | | | | | | |
| Semi-manufactures (a) | 9 | 12 | 5 | 8 | 8 | 7 |
| Hong Kong— | | | | | | |
| Semi-manufactures .. | 79 | 195 | 150 | 193 | 196 | 271 |
| India (c)— | | | | | | |
| Unwrought | 390 | 529 | 160 | 1,535 | 1,560 | 869 |
| do. alloys | 339 | 401 | 456 | 690 | 701 | 323 |
| Scrap (a) | 580 | 542 | 226 | 133 | 135 | 42 |
| Semi-manufactures (a) | 1,234 | 1,524 | 638 | 1,421 | 1,444 | 1,224 |
| Australia (b)— | | | | | | |
| Matte, speiss, etc. .. | 136 | 315 | 584 | 671 | 682 | 1,308 |
| Unwrought | 980 | 1,602 | 1,642 | 1,316 | 1,337 | 1,949 |
| do. alloys | 707 | 684 | 289 | 149 | 152 | 154 |
| Semi-manufactures (a) | 1,141 | 965 | 890 | 837 | 851 | 1,191 |
| New Zealand (b)— | | | | | | |
| Unwrought (a) | 46 | 24 | 105 | 28 | 28 | <i>n.a.</i> |
| Semi-manufactures (a) | 368 | 181 | 168 | 220 | 224 | <i>n.a.</i> |
| Irish Republic— | | | | | | |
| Unwrought (a) | 28 | 41 | 14 | 25 | 25 | 15 |
| Semi-manufactures (a) | 270 | 406 | 442 | 505 | 513 | 352 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Matte and speiss .. | 700 | 746 | 2,055 | 786 | 799 | 533 |
| Unwrought (a) | 1,862 | 2,359 | 2,035 | 2,414 | 2,453 | 1,433 |
| Scrap (a) | 123 | 225 | 80 | 57 | 58 | 176 |
| Semi-manufactures (a) | 516 | 551 | 931 | 1,264 | 1,284 | 889 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Unwrought | 1,020 | 1,267 | 1,288 | 1,418 | 1,441 | 2,112 |
| do. alloys | 273 | 183 | 490 | 1,222 | 1,242 | 421 |
| Scrap (a) | 1,232 | 1,945 | 2,150 | 2,420 | 2,459 | 1,361 |
| Semi-manufactures (a) | 968 | 1,050 | 1,554 | 1,222 | 1,242 | 1,727 |
| Denmark— | | | | | | |
| Unwrought | 82 | 114 | 65 | 87 | 89 | 101 |
| do. alloys | 16 | 10 | 23 | 9 | 9 | 2 |
| Semi-manufactures (a) | 519 | 464 | 595 | 460 | 468 | 392 |

*See footnote on p. 222 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.

IMPORTS OF NICKEL (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|--------|--------|---------|---------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Finland— | | | | | | |
| Unwrought (a) .. | 238 | 128 | 101 | 197 | 200 | 145 |
| France— | | | | | | |
| Matte and speiss .. | 18,322 | 13,173 | 12,996 | 17,904 | 18,191 | 13,661 |
| Ferro-nickel | 44,100 | 49,470 | 65,616 | 89,180 | 90,611 | 82,806 |
| Unwrought | 8,619 | 9,596 | 8,280 | 11,232 | 11,412 | 11,131 |
| do. alloys | 92 | 96 | 508 | 215 | 219 | 153 |
| Scrap (a) | 375 | 234 | 403 | 526 | 535 | 564 |
| Semi-manufactures (a) | 2,446 | 2,572 | 2,550 | 4,151 | 4,218 | 2,149 |
| Germany (Federal)— | | | | | | |
| Ore | 239 | 1 | 184 | 226 | 230 | 120 |
| Matte and speiss .. | 3,978 | 2,555 | 2,208 | 4,179 | 4,246 | 1,990 |
| Unwrought (a) .. | 27,809 | 30,865 | 27,966 | 38,167 | 38,780 | 32,604 |
| Scrap (a) | 6,486 | 8,581 | 15,085 | 7,598 | 7,720 | 5,031 |
| Semi-manufactures (a) | 1,877 | 3,100 | 3,263 | 3,415 | 3,470 | 2,462 |
| Italy— | | | | | | |
| Matte and speiss .. | 1,776 | 4,292 | 4,481 | 5,103 | 5,185 | 2,612 |
| Unwrought (a) .. | 11,870 | 13,336 | 10,595 | 12,596 | 12,798 | 14,133 |
| Scrap | 1,538 | 1,314 | 531 | 423 | 430 | 779 |
| Semi-manufactures (a) | 1,768 | 1,842 | 2,510 | 2,689 | 2,732 | 3,357 |
| Nickel oxide | 139 | 180 | 196 | 2,151 | 2,186 | 918 |
| Netherlands— | | | | | | |
| Unwrought | n.a. | 1,736 | 1,597 | 2,835 | 2,881 | 4,176 |
| do. alloys | 231 | 166 | 188 | 612 | 622 | 575 |
| Scrap (a) | 1,502 | 1,369 | 1,467 | 2,559 | 2,600 | 3,019 |
| Semi-manufactures (a) | 2,181 | 2,827 | 3,499 | 4,435 | 4,506 | 4,996 |
| Nickel oxide | 71 | 209 | 898 | 1,279 | 1,300 | 1,643 |
| Norway— | | | | | | |
| Matte (copper-nickel) .. | 52,673 | 76,488 | 68,734 | 93,081 | 94,575 | 100,036 |
| Scrap (a) | 187 | 686 | 657 | 240 | 244 | 163 |
| Semi-manufactures (a) | 344 | 301 | 299 | 303 | 308 | 317 |
| Portugal— | | | | | | |
| Unwrought and semi-manufactures .. | 203 | 432 | 325 | 368 | 374 | 581 |
| Spain— | | | | | | |
| Matte and speiss .. | 241 | 529 | 481 | 349 | 355 | 363 |
| Unwrought (a) .. | 1,392 | 1,521 | 2,040 | 2,527 | 2,567 | 2,717 |
| Semi-manufactures (a) | 1,049 | 1,425 | 1,682 | 1,429 | 1,452 | 2,907 |
| Sweden— | | | | | | |
| Matte and speiss .. | 964 | 1,015 | 1,240 | 2,105 | 2,139 | 1,254 |
| Unwrought | 12,127 | 13,433 | 12,392 | 18,057 | 18,347 | 14,913 |
| do. alloys | 347 | 347 | 451 | 365 | 371 | 196 |
| Scrap (a) | 1,358 | 2,126 | 3,336 | 1,246 | 1,266 | 409 |
| Semi-manufactures (a) | 872 | 971 | 1,791 | 4,244 | 4,312 | 4,556 |
| Switzerland— | | | | | | |
| Unwrought and scrap (a) | 1,307 | 1,605 | 2,263 | 2,291 | 2,328 | 1,796 |
| Semi-manufactures (a) | 1,095 | 947 | 1,258 | 1,782 | 1,811 | 2,067 |
| Yugoslavia— | | | | | | |
| Unwrought | 396 | 710 | 788 | 514 | 522 | 784 |
| Semi-manufactures (a) | 522 | 708 | 552 | 695 | 706 | 908 |
| Mexico— | | | | | | |
| Unwrought | 70 | 180 | 149 | 482 | 490 | 1,151 |
| Semi-manufactures .. | 1,310 | 920 | 1,391 | 1 115 | 1,133 | 1,287 |
| United States— | | | | | | |
| Ore and matte | — | 1 | 3 | 16 | 16 | 354 |
| Scrap | 985 | 1,762 | 2,847 | 1,919 | 1,950 | 1,212 |
| Unwrought (a) | 24,689 | 96,521 | 88,975 | 104,794 | 106,476 | 91,200 |
| Semi-manufactures (a) | 1,165 | 3,329 | 3,073 | 3,438 | 3,493 | 3,225 |
| Nickel oxide | 5,472 | 5,646 | 3,479 | 5,610 | 5,700 | 5,222 |
| Ferro-nickel | 2,322 | 9,423 | 14,014 | 12,724 | 12,928 | 23,798 |
| Argentina— | | | | | | |
| Unwrought | 130 | 319 | 287 | 319 | 325 | 422 |
| Semi-manufactures .. | 311 | 243 | 277 | 349 | 355 | 329 |

(a) Including alloys.

IMPORTS OF NICKEL (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|-----------|-----------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Brazil— | | | | | | |
| Unwrought (a) .. | 381 | 445 | 315 | 645 | 655 | <i>n.a.</i> |
| Semi-manufactures (a) .. r | 445 | 776 | 676 | 755 | 767 | <i>n.a.</i> |
| Chile— | | | | | | |
| Unwrought | 43 | 52 | 76 | 55 | 56 | <i>n.a.</i> |
| Semi-manufactures (a) .. | 63 | 63 | 40 | 67 | 68 | <i>n.a.</i> |
| Colombia— | | | | | | |
| Unwrought (a) .. r | 7 | r 23 | 3 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Semi-manufactures (a) .. r | 126 | r 172 | 226 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Formosa— | | | | | | |
| Unwrought (a) .. | 143 | 365 | 204 | 286 | 291 | 655 |
| Iran (b)— | | | | | | |
| Semi-manufactures .. | 218 | 121 | 55 | 136 | 138 | 103 |
| Japan— | | | | | | |
| Ore | 1,634,360 | 2,669,371 | 3,341,793 | 4,596,554 | 4,670,316 | 4,903,261 |
| Matte | 9,620 | 12,398 | 16,484 | 18,011 | 18,301 | 15,756 |
| Scrap (a) | 10,650 | 572 | 1,302 | 1,402 | 1,425 | 912 |
| Ferro-nickel | 2,782 | 1,129 | 308 | 4,650 | 4,725 | 4,087 |
| Unwrought (a) .. | 12,082 | 3,597 | 6,730 | 11,249 | 11,430 | 9,356 |
| Semi-manufactures (a) .. | 2,016 | 1,261 | 1,223 | 1,495 | 1,519 | 1,337 |
| Philippine Republic— | | | | | | |
| Semi-manufactures (a) .. | 46 | 72 | 85 | 39 | 40 | 1,186 |
| Turkey— | | | | | | |
| Semi-manufactures (a) .. | 211 | 144 | 84 | 78 | 79 | <i>n.a.</i> |

(a) Including alloys.

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

NITROGEN COMPOUNDS
PRODUCTION OF NITROGEN COMPOUNDS*

| Producing Country and Description | Long tons | | | | Tonnes | |
|---|-----------|-----------|------------|-----------|-----------|-----------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom (a)— Nitrogenous fertilizers expressed as 25% NH ₃ | 3,683,900 | 3,986,900 | 3,705,800 | 3,450,000 | 3,505,000 | 3,592,000 |
| Actual ammonium sulphate | 824,400 | 776,800 | 716,400 | 508,400 | 516,600 | 332,000 |
| Canada— Ammonium sulphate | 258,444 | 266,025 | 291,269 | 305,744 | 310,651 | 313,022 |
| Ammonium nitrate | 628,871 | 670,000 | 625,279 | 693,407 | 704,536 | 842,848 |
| Trinidad (b)— (N content) | | | | | | |
| Nitrogen fertilizers | 45,800 | 49,000 | (c) 74,000 | 74,000 | 75,000 | 80,000 |
| India— Ammonium sulphate (N content) | 82,300 | 109,000 | 136,354 | 117,770 | 119,660 | 118,606 |
| Pakistan— Ammonium sulphate | 45,058 | 45,815 | 46,228 | 56,596 | 57,504 | 59,590 |
| Australia— Ammonium sulphate | 77,680 | 86,720 | 115,060 | 135,190 | 137,360 | 180,438 |
| OTHER COUNTRIES | | | | | | |
| Austria (b)— (N content) | | | | | | |
| Nitrogen fertilizers | 230,816 | 248,561 | 251,546 | 244,132 | 248,050 | 218,900 |
| Belgium— (N content) | | | | | | |
| Synthetic ammonia, etc. | 404,887 | 447,759 | 593,796 | 517,039 | 525,336 | 544,488 |
| Ammonium sulphate | 13,121 | 11,905 | n.a. | n.a. | n.a. | n.a. |
| Mixed fertilizers | 78,670 | 91,720 | n.a. | n.a. | n.a. | n.a. |
| Technical products | 17,326 | 45,884 | 64,296 | 55,013 | 55,896 | n.a. |
| Bulgaria— (N content) | | | | | | |
| Nitrogen fertilizers | 348,000 | 496,000 | 577,000 | 641,000 | 651,000 | n.a. |
| Czechoslovakia— Nitrogen fertilizers (N content) | 241,000 | 257,000 | 294,000 | 318,767 | 323,882 | 336,339 |
| Finland (b)— (N content) | | | | | | |
| Cyanamide | 50 | 33 | 29 | — | — | — |
| Ammonium nitrate | 28,895 | 29,808 | 30,908 | 32,104 | 32,619 | 44,086 |
| Calcium nitrate | 3,536 | 4,654 | 5,322 | 5,409 | 5,496 | 4,762 |
| Other nitrogen fertilizers | 43,863 | 24,098 | 21,542 | 22,463 | 22,823 | 29,714 |
| Mixed fertilizers | 28,951 | 40,998 | 52,934 | 90,761 | 92,217 | 114,203 |
| France (d)— (N content) | | | | | | |
| Ammonium sulphate | 80,400 | 67,700 | 56,940 | 45,244 | 45,970 | 45,030 |
| Cyanamide | 3,070 | 3,430 | 3,580 | 3,267 | 3,320 | 2,280 |
| Sodium nitrate | 900 | 700 | 650 | n.a. | n.a. | n.a. |
| Calcium nitrate | 23,600 | 21,186 | 17,226 | 17,851 | 18,137 | 17,050 |
| Germany (Federal)— Nitrogen fertilizers (N content) | 1,538,145 | 1,542,511 | 1,586,385 | 1,543,197 | 1,567,961 | 1,384,810 |

*Includes by-product ammonium sulphate which is separately recorded as far as available on pages 85-87.

(a) Source: British Sulphate of Ammonia Federation.

(c) Estimated.

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

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

PRODUCTION OF NITROGEN COMPOUNDS (cont.)

| Producing Country and Description | Long tons | | | | Tonnes | |
|---|-----------|-----------|-----------|-----------|-----------|-----------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Germany (East)— (N content) | | | | | | |
| Ammonium sulphate | 157,731 | 163,955 | 150,223 | 164,427 | 167,066 | 163,000 |
| Cyanamide | 15,502 | 11,996 | 10,826 | n.a. | n.a. | n.a. |
| Lime ammonium nitrate | 117,643 | 143,021 | 153,028 | 120,774 | 122,712 | 167,701 |
| Potassium ammonium nitrate | 15,595 | 11,000 | 15,600 | n.a. | n.a. | n.a. |
| Hungary— Nitrogen fertilizers .. | 903,000 | 1,177,000 | 1,441,000 | 1,682,000 | 1,709,000 | 1,841,000 |
| Iceland— | | | | | | |
| Ammonium nitrate (N content) | 7,993 | 8,028 | r 8,028 | 7,583 | 7,705 | n.a. |
| Italy— | | | | | | |
| Ammonium sulphate .. | 1,699,476 | 1,475,561 | 1,410,181 | 1,199,746 | 1,218,999 | 1,197,998 |
| Ammonium sulpho- nitrate | 31,040 | 97,337 | 42,436 | 82,287 | 83,608 | 33,914 |
| Cyanamide | r 86,678 | r 83,290 | r 71,327 | 90,500 | 91,952 | 79,127 |
| Sodium nitrate | 8,667 | 8,357 | 10,269 | 10,805 | 10,978 | 14,123 |
| Potassium nitrate .. | 25,812 | 21,757 | 11,458 | 8,917 | 9,060 | n.a. |
| Calcium nitrate | 324,590 | 297,271 | 238,805 | 257,304 | 261,433 | 220,343 |
| Ammonium nitrate .. | 745,202 | 846,512 | 665,806 | 636,801 | 647,020 | 663,771 |
| Ammonium phosphates | 417,321 | 450,638 | 468,049 | 498,680 | 506,682 | n.a. |
| Netherlands (a)— (N content) | | | | | | |
| Ammonium sulphate .. | 79,144 | 91,308 | 93,315 | 107,390 | 109,113 | 102,737 |
| Ammonium nitrate .. | 302,810 | 352,094 | 352,544 | 345,639 | 351,185 | 366,708 |
| Calcium nitrate | 23,274 | 22,488 | 24,601 | 25,324 | 25,730 | 23,522 |
| Norway— | | | | | | |
| Cyanamide | 4,496 | 3,753 | 3,383 | n.a. | n.a. | n.a. |
| Ammonium nitrate .. | 23,053 | 24,692 | 31,906 | 29,062 | 29,528 | 48,197 |
| Calcium nitrate | 785,444 | 778,381 | 866,639 | 742,864 | 754,785 | 699,975 |
| Lime ammonium nitrate | 109,181 | 112,965 | 81,915 | 51,774 | 52,605 | 22,693 |
| Poland— | | | | | | |
| Ammonium sulphate .. | 254,000 | 277,000 | 276,000 | 283,000 | 288,000 | 308,000 |
| "Saletrzak" | 726,000 | 780,000 | 776,000 | 890,000 | 904,000 | 935,000 |
| Portugal— | | | | | | |
| Cyanamide | 10,036 | 11,672 | 11,392 | 11,177 | 11,356 | n.a. |
| Ammonium sulphate .. | 205,433 | 231,894 | 199,082 | 194,120 | 197,235 | n.a. |
| Ammonium nitrate .. | 225,023 | 223,267 | 279,183 | 305,940 | 310,850 | n.a. |
| Calcium nitrate | 5,033 | 7,567 | 21,786 | 18,243 | 18,536 | n.a. |
| Roumania— | | | | | | |
| Nitrogen fertilizers (N content) | 366,383 | 414,069 | 478,300 | 637,000 | 647,000 | 827,000 |
| Spain— (N content) | | | | | | |
| Cyanamide | 1,597 | 1,570 | 1,870 | 2,354 | 2,392 | n.a. |
| Lime ammonium nitrate | 114,444 | 131,936 | 125,683 | 158,858 | 161,407 | 148,407 |
| Ammonium sulphate .. | 182,285 | 200,477 | 111,314 | 159,398 | 161,956 | 116,478 |
| Ammonium nitrate .. | 19,191 | 18,946 | 40,775 | n.a. | n.a. | n.a. |
| Ammonium sulpho- nitrate | 26,179 | 34,946 | 36,416 | 30,471 | 30,960 | n.a. |
| Sweden— | | | | | | |
| Ammonium nitrate .. | 22,655 | 25,011 | 25,312 | 26,155 | 26,575 | n.a. |
| Ammonium sulphate .. | 10,275 | 9,195 | 9,667 | 10,439 | 10,607 | n.a. |
| Lime ammonium nitrate | 212,343 | 238,324 | 215,944 | 207,086 | 210,409 | n.a. |
| Mixed fertilizers .. | 323,550 | r 336,812 | r 344,072 | 388,300 | 394,531 | n.a. |

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

PRODUCTION OF NITROGEN COMPOUNDS (cont.)

| Producing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|------------|------------|-------------|-----------|-----------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Switzerland (a)— | | | | | | |
| (N content) | | | | | | |
| Cyanamide | 3,200 | 3,400 | 3,400 | 3,100 | 3,100 | 2,000 |
| Ammonium sulphate | 9,300 | 7,900 | 6,400 | 1,000 | 1,000 | 500 |
| Ammonium nitrate .. | 13,400 | 14,800 | 14,300 | 15,250 | 15,500 | 16,000 |
| Calcium nitrate .. | 3,500 | 3,500 | 3,000 | 3,000 | 3,000 | 3,000 |
| Mixed fertilizers .. | 3,000 | 3,400 | 3,700 | 3,500 | 3,600 | 3,600 |
| U.S.S.R.— | | | | | | |
| Nitrogen fertilizers | | | | | | |
| (N content) | 3,700,000 | 3,800,000 | 4,330,000 | 5,337,000 | 5,423,000 | n.a. |
| Yugoslavia— | | | | | | |
| Ammonium nitrate .. | 7,366 | 8,557 | 8,484 | 6,305 | 6,406 | 7,717 |
| Ammonium sulphate .. | 12,598 | 11,986 | 759,000 | 1,311,000 | 1,332,000 | 11,588 |
| Cyanamide | 7,290 | 4,796 | | | | n.a. |
| Lime ammonium nitrate | 477,000 | 572,800 | | | | 669,000 |
| Egypt— | | | | | | |
| Ammonium nitrate .. | 420,560 | 433,051 | n.a. | n.a. | n.a. | 29,898 |
| Calcium nitrate .. | 188,973 | 165,471 | 25,300 | n.a. | n.a. | n.a. |
| Ammonium sulphate .. | 73,259 | 48,296 | 9,277 | 4,325 | 4,394 | 4,580 |
| South Africa— | | | | | | |
| Nitrogen fertilizers | | | | | | |
| (N content) | 88,400 | 141,600 | 220,400 | 236,000 | 240,000 | n.a. |
| Costa Rica (a)— | | | | | | |
| Nitrogen fertilizers | | | | | | |
| (N content) | 10,000 | 16,000 | 19,000 | 16,000 | 16,000 | 16,000 |
| Mexico— | | | | | | |
| Ammonium sulphate .. | 225,609 | 330,874 | 396,906 | 391,000 | 397,300 | 357,489 |
| Ammonium nitrate .. | 157,078 | 161,600 | 156,800 | 146,700 | 149,100 | 156,566 |
| Netherlands Antilles (a)— | | | | | | |
| Nitrogen Fertilizers | | | | | | |
| (N content) | 30,000 | 34,000 | 33,000 | 34,000 | 35,000 | 38,000 |
| United States— | | | | | | |
| Sulphate equivalent of | | | | | | |
| ammonia produced | | | | | | |
| (coke-ovens) | | | | | | |
| | 745,000 | 685,000 | 654,000 | 617,000 | 627,000 | n.a. |
| Actual ammonium | | | | | | |
| sulphate (coke-ovens) | | | | | | |
| | 658,000 | 626,000 | 601,000 | 569,000 | 578,000 | 523,000 |
| Actual ammonium sul- | | | | | | |
| phate (synthetic plants) | | | | | | |
| | 1,730,000 | 1,787,000 | 1,724,000 | 1,694,000 | 1,721,000 | n.a. |
| Anhydrous ammonia | | | | | | |
| (synthetic plants) .. | | | | | | |
| | 10,893,000 | 10,821,000 | 11,351,000 | n.a. | n.a. | n.a. |
| Ammonium nitrate, | | | | | | |
| original | | | | | | |
| | 5,096,000 | 5,122,000 | r 5,260,000 | 5,520,000 | 5,609,000 | n.a. |
| Ammonium phosphate | | | | | | |
| | 5,088,000 | 3,687,000 | r 4,100,000 | 4,654,000 | 4,729,000 | n.a. |
| Argentina (a)— | | | | | | |
| (N content) | | | | | | |
| Ammonium sulphate .. | 922 | 1,322 | 5,810 | 4,383 | 4,483 | 10,154 |
| Other nitrogen | | | | | | |
| fertilizers | | | | | | |
| | 1,703 | 4,793 | 3,582 | 4,640 | 4,714 | n.a. |
| Brazil— | | | | | | |
| Ammonium sulphate .. | 12,281 | 10,231 | 7,298 | 6,707 | 6,815 | n.a. |
| Lime ammonium nitrate | 25,431 | 26,104 | 18,008 | 21,208 | 21,548 | n.a. |
| Chile— | | | | | | |
| Sodium and potassium | | | | | | |
| nitrate (natural) .. | | | | | | |
| | 860,000 | 668,143 | 769,332 | 663,207 | 673,850 | 782,490 |
| Colombia— | | | | | | |
| Nitrogen fertilizers | | | | | | |
| (N content) | 39,000 | 41,117 | 48,755 | 57,000 | 58,000 | 44,488 |
| Peru (a)— | | | | | | |
| Nitrogen fertilizers | | | | | | |
| (N content) (c) .. | (b) 59,000 | 28,000 | r 30,200 | 32,400 | 32,900 | n.a. |

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

(b) Estimated.

(c) Including guano.

PRODUCTION OF NITROGEN COMPOUNDS (cont.)

| Producing Country and Description | Long tons | | | | Tonnes | |
|--|-----------|-----------|-----------|-----------|-----------|-----------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Venezuela— Nitrogen fertilizers (N content) | 15,000 | 16,619 | 13,796 | 9,400 | 9,600 | n.a. |
| Formosa— Cyanamide | 5,695 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Ammonium sulphate | 325,587 | 376,168 | 411,000 | 392,000 | 398,000 | 401,000 |
| Nitro-phosphate | 3,809 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Nitro-chalk | 63,188 | 74,119 | 54,000 | 45,000 | 46,000 | 18,000 |
| Indonesia (a)— Nitrogen fertilizers (N content) | 40,000 | 40,000 | 42,000 | 42,000 | 43,000 | 45,100 |
| Iran (a)— Nitrogen fertilizers (N content) | 25,000 | 27,000 | 23,000 | 25,700 | 26,100 | 28,200 |
| Israel— Ammonium sulphate | 66,660 | 77,642 | 79,731 | 66,753 | 67,824 | 72,588 |
| Japan— Ammonium sulphate | 2,678,000 | 2,672,000 | 2,524,988 | 2,380,000 | 2,418,000 | 2,184,296 |
| Cyanamide | 343,502 | 326,923 | 308,758 | 270,793 | 275,138 | 261,504 |
| Ammonium nitrate | 78,359 | 94,951 | 104,821 | 113,412 | 115,232 | 112,148 |
| Ammonium chloride | 611,076 | 771,822 | 835,672 | 860,793 | 874,611 | 860,669 |
| Korea South (a)— Cyanamide (N content) | 1,461 | 3,518 | 4,367 | 4,641 | 4,715 | 3,620 |
| Kuwait (a)— Ammonium sulphate (N content) | 11,351 | 16,000 | 14,514 | 10,138 | 10,301 | 10,883 |
| Philippine Republic (a)— (N content) Ammonium sulphate | 16,000 | 8,580 | 15,244 | 15,169 | 15,412 | n.a. |
| Other nitrogen fertilizers | 16,000 | 28,390 | 25,400 | 20,000 | 20,000 | n.a. |
| Turkey— Ammonium sulphate | 84,900 | 79,224 | 89,547 | 86,700 | 88,100 | 85,000 |
| Ammonium nitrate | 73,276 | 63,777 | n.a. | n.a. | n.a. | n.a. |

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 years stated.

EXPORTS OF NITROGEN COMPOUNDS

Long tons Tonnes

| Exporting Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|--|--------------|--------------|---------------|---------------|---------------|---------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Natural sodium nitrate.. | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 854 | 868 | 46 |
| Ammonium sulphate .. | 290,834 | 330,437 | 291,907 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ammonium chloride .. | 9,601 | 12,504 | 13,515 | 14,294 | 14,523 | 13,571 |
| Other manufactured nitrogen fertilizers .. | 75,988 | 8,971 | 4,713 | 8,191 | 8,322 | 20,626 |
| Anhydrous and liquid ammonia .. | 15,263 | 24,606 | 30,003 | 23,939 | 24,323 | 23,965 |
| Canada— | | | | | | |
| Anhydrous ammonia .. | 54,865 | 74,618 | 134,991 | 156,260 | 158,768 | 143,510 |
| Ammonium sulphate .. | (£2,275,520) | (£3,014,723) | (£2,858,000) | (£3,037,000) | (£3,037,000) | (£1,991,000) |
| Ammonium nitrate .. | (£3,259,519) | (£4,701,688) | (£5,026,000) | (£6,382,000) | (£6,382,000) | (£6,601,000) |
| Nitrogen-phosphate fertilizers .. | (£8,978,193) | (£9,930,240) | (£11,338,000) | (£15,278,000) | (£15,278,000) | (£17,246,000) |
| Other nitrogen fertilizers | (£5,331,488) | (£7,271,641) | (£9,012,000) | (£2,421,000) | (£2,421,000) | (£2,098,000) |
| Trinidad and Tobago— | | | | | | |
| Ammonium sulphate .. | 108,173 | 46,271 | 49,346 | 37,999 | 38,609 | 36,769 |
| India (a)— | | | | | | |
| Potassium nitrate .. | — | 9 | 19 | 11 | 11 | 33 |
| Malaysia (West)— | | | | | | |
| Nitrogen fertilizers .. | 276 | 107 | 1,081 | 65 | 66 | 331 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg E.U.— | | | | | | |
| Potassium nitrate .. | — | — | 40 | 3 | 3 | 86 |
| Sodium nitrate .. | 43 | 422 | 198 | 1,409 | 1,432 | 324 |
| Calcium nitrate (b) .. | 27 | 394 | 897 | 25 | 25 | 62 |
| Ammonium sulphate (b) .. | 55,567 | 76,076 | 71,993 | 74,188 | 75,379 | 105,869 |
| Ammonium chloride .. | 18 | 26 | 15 | 8 | 8 | 336 |
| Ammonium nitrate (b) .. | 10,320 | 13,867 | 22,036 | 27,377 | 27,816 | 53,900 |
| Cyanamide (b) .. | 3,149 | 3,828 | 3,436 | 5,831 | 5,925 | 5,166 |
| Anhydrous ammonia .. | 60,205 | 145,276 | 222,944 | 129,483 | 131,561 | 130,440 |
| Bulgaria— | | | | | | |
| Nitrogen fertilizers .. | 44,634 | 127,224 | 68,535 | 104,768 | 106,449 | <i>n.a.</i> |
| France— | | | | | | |
| Potassium nitrate .. | 2,773 | 2,426 | 4,365 | 3,838 | 3,900 | 3,818 |
| Sodium nitrate .. | 1,011 | 1,527 | 1,022 | 637 | 647 | 2,145 |
| Calcium nitrate .. | 28,590 | 29,682 | 28,129 | 20,402 | 20,729 | 17,754 |
| Ammonium sulphate .. | 259,910 | 114,820 | 73,905 | 49,466 | 50,260 | 29,465 |
| Ammonium chloride .. | 1,215 | 2,483 | <i>n.a.</i> | 3,022 | <i>n.a.</i> | <i>n.a.</i> |
| Ammonium nitrate .. | 63,121 | 79,574 | 112,802 | 121,615 | 123,567 | 155,445 |
| Cyanamide .. | 705 | 1,393 | 3,199 | 1,689 | 1,716 | <i>n.a.</i> |
| Anhydrous ammonia .. | 12,428 | 7,075 | 50,945 | 182,582 | 185,512 | 180,047 |
| Germany (Federal)— | | | | | | |
| Potassium nitrate .. | 16,688 | 14,949 | 28,955 | 29,232 | 29,701 | 34,356 |
| Sodium nitrate .. | 1,314 | 2,097 | | | | |
| Calcium nitrate .. | 58,972 | 13,007 | 40,820 | 48,829 | 49,613 | 60,429 |
| Ammonium nitrates .. | 688,020 | 702,608 | 692,104 | 450,420 | 457,648 | 273,373 |
| Other nitrogen fertilizers | 911,942 | 809,375 | 785,651 | 734,251 | 746,034 | 615,631 |
| Germany (East)— | | | | | | |
| Nitrogen fertilizers (b) | 69,732 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Anhydrous ammonia .. | 904 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Greece— | | | | | | |
| Anhydrous ammonia .. | 17,336 | 14,426 | 34,288 | 16,368 | 16,631 | — |
| Italy— | | | | | | |
| Potassium nitrate .. | 1,504 | 1,690 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sodium nitrate .. | 275 | 25 | 25 | 3 | 3 | 72 |
| Calcium nitrate .. | 1,482 | <i>n.a.</i> | — | 2 | 2 | 1 |
| Ammonium nitrate .. | 237,289 | 233,859 | 145,221 | 122,050 | 124,009 | 240,074 |
| Ammonium sulphate .. | 900,260 | 543,321 | 656,974 | 514,274 | 522,527 | 597,800 |
| Cyanamide .. | 49 | — | — | 194 | 197 | <i>n.a.</i> |

(a) Years ended March 31 following that stated.

(b) N content.

EXPORTS OF NITROGEN COMPOUNDS (cont.)

| Exporting Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|-----------|---------|---------|---------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Netherlands— | | | | | | |
| Potassium nitrate .. | 302 | 83 | 47 | 271 | 275 | 157 |
| Sodium nitrate .. | 948 | 2,615 | 1,690 | 1,016 | 1,032 | 681 |
| Calcium nitrate (b) .. | 6,714 | 9,330 | 9,670 | 7,933 | 8,060 | (c) 5,943 |
| Ammonium sulphate (b) .. | 89,952 | 91,977 | 88,286 | 95,574 | 97,108 | (c) 125,809 |
| Ammonium chloride .. | 116 | 31 | 67 | 198 | 201 | 255 |
| Ammonium nitrate (b) .. | 1,990 | 542 | — | — | — | (c) 2,559 |
| Lime ammonium nitrate (b) | 56,322 | 83,292 | 83,021 | 67,353 | 68,434 | (c) 31,915 |
| Anhydrous ammonia .. | 80,979 | 125,856 | 192,254 | 364,949 | 370,805 | (c) 215,810 |
| Norway— | | | | | | |
| Calcium nitrate .. | 707,423 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Ammonium nitrate .. | 5,196 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Cyanamide .. | 1,573 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Poland— | | | | | | |
| Ammonium chloride .. | 4,001 | 3,980 | 3,626 | 3,474 | 3,530 | 4,513 |
| Nitrogen fertilizers .. | 84,000 | 156,000 | 319,000 | 446,830 | 454,000 | 853,000 |
| Portugal— | | | | | | |
| Ammonium sulphate .. | 43,903 | 17,754 | 3,217 | 3,121 | 3,171 | 6,165 |
| Ammonium nitrate .. | 43,581 | 32,905 | 54,990 | 54,762 | 55,641 | 56,188 |
| Sodium nitrate .. | 1 | — | 52 | 122 | 124 | 54 |
| Calcium nitrate .. | 4,814 | 5,117 | 4,654 | 10,419 | 10,586 | 1,346 |
| Anhydrous ammonia .. | 24,699 | n.a. | 23,070 | 42,825 | 43,512 | 108,607 |
| Sweden— | | | | | | |
| Ammonium nitrate .. | 3,019 | 1,639 | 1,986 | 3,733 | 3,793 | 3,279 |
| Switzerland— | | | | | | |
| Potassium nitrate (purified) .. | 4 | 5 | 8 | 1 | 1 | 13 |
| Ammonium sulphate, etc. | 21,904 | 21,354 | 9,345 | — | — | 1 |
| U.S.S.R.— | | | | | | |
| Ammonium nitrate .. | 125,486 | 194,774 | 149,000 | 136,608 | 138,800 | 103,300 |
| Ammonium sulphate .. | 682,843 | 737,269 | 774,500 | 868,857 | 882,800 | 813,600 |
| Yugoslavia— | | | | | | |
| Ammonium nitrate .. | n.a. | n.a. | 10 | 6,693 | 6,800 | 21,184 |
| Lime ammonium nitrate .. | n.a. | n.a. | n.a. | 1,476 | 1,500 | 18,880 |
| Cyanamide | 1,044 | 774 | n.a. | 685 | 696 | 2,072 |
| South Africa— | | | | | | |
| Ammonium nitrate .. | 1,608 | 2,533 | 17,260 | 13,179 | 13,390 | 9,821 |
| Ammonium sulphate .. | 13,412 | 11,153 | 8,658 | 6,736 | 6,844 | 9,734 |
| Other nitrogen fertilizers | 39,737 | 26,294 | 60,041 | 24,631 | 25,077 | 23,971 |
| Costa Rica— | | | | | | |
| Nitrogen fertilizers .. | 11,647 | 21,335 | 13,855 | 12,903 | 13,110 | 38,923 |
| United States— | | | | | | |
| Sodium nitrate .. | 246 | 1,030 | 629 | 1,684 | 1,712 | 1,002 |
| Ammonium nitrate .. | 36,564 | 79,396 | 99,591 | 59,473 | 60,428 | 35,160 |
| Ammonium sulphate .. | 935,053 | 1,245,610 | 724,929 | 466,400 | 473,885 | 468,150 |
| Other nitrogen fertilizers | 24,355 | 22,776 | 26,976 | 17,203 | 17,480 | 81,376 |
| Ammonium phosphates | 1,134,000 | 1,133,929 | 841,071 | 912,373 | 927,014 | 1,231,362 |
| Anhydrous ammonia (a) | 386,486 | 714,469 | 274,310 | 878,859 | 892,962 | 449,654 |
| Chile— | | | | | | |
| Sodium nitrate .. | 510,802 | 451,000 | 454,987 | 368,504 | 374,417 | n.a. |
| Potassium nitrate .. | 97,374 | 57,429 | 26,396 | 25,384 | 25,791 | n.a. |
| Formosa— | | | | | | |
| Ammonium chloride .. | 17 | 187 | 202 | 244 | 248 | 50 |
| Other nitrogen fertilizers | 66,513 | 48,597 | 88,586 | 16,981 | 17,253 | 5,550 |
| Anhydrous ammonia .. | 272 | 170 | 645 | 591 | 600 | 374 |

(a) Ammonia content.

(b) N content.

(c) Excludes exports to Belgium and Luxemburg, if any.

EXPORTS OF NITROGEN COMPOUNDS (cont.)

| Exporting Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-------------|-----------|-----------|-----------|-----------|-----------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Israel— | | | | | | |
| Anhydrous ammonia .. | <i>n.a.</i> | 18 | 6 | 4 | 4 | 5 |
| Japan— | | | | | | |
| Cyanamide | 160 | 2,682 | 1,119 | 593 | 603 | 636 |
| Ammonium nitrate .. | 11,530 | 17 666 | 29,697 | 35,586 | 36,158 | 22,945 |
| Ammonium chloride .. | 379,794 | 425,505 | 474,766 | 493,656 | 501,578 | 647,481 |
| Ammonium sulphate .. | 1,591,605 | 1,439,697 | 1,027,715 | 1,015,675 | 1,031,974 | 1,283,265 |
| Anhydrous ammonia .. | 7,781 | 12,229 | 170 | 25,064 | 25,467 | 22,528 |
| Other nitrogen fertilizers | 27,968 | 78,343 | 2,119 | 3,732 | 3,792 | 321 |

IMPORTS OF NITROGEN COMPOUNDS

Long tons Tonnes

| Importing Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|------------------------------------|---------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Natural sodium nitrate .. | 13,414 | 14,094 | 12,570 | 12,461 | 12,661 | 11,761 |
| Manufactured fertilizers— | | | | | | |
| Nitrogenous | 389,896 | 373,440 | 278,921 | 244,078 | 247,995 | <i>n.a.</i> |
| Ammonium phosphate .. | 10,451 | 30,118 | 5,174 | 7,286 | 7,403 | 34,185 |
| Potassium nitrate .. | 3,965 | <i>n.a.</i> | <i>n.a.</i> | 9,763 | 9,919 | 9,163 |
| Anhydrous and liquid ammonia | 155,045 | 272,678 | 363,505 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Malta— | | | | | | |
| Ammonium sulphate .. | 1,087 | 1,754 | 1,717 | 2,131 | 2,165 | 1,670 |
| Gambia— | | | | | | |
| Ammonium sulphate .. | 16 | — | — | — | — | <i>n.a.</i> |
| Ghana— | | | | | | |
| Ammonium sulphate .. | 105 | 1,057 | 3,790 | 2,084 | 2,117 | <i>n.a.</i> |
| Other nitrogen fertilizers | 41 | 58 | 854 | 610 | 620 | <i>n.a.</i> |
| Kenya— | | | | | | |
| Ammonium sulphate .. | 8,659 | 6,258 | 8,882 | 11,312 | 11,494 | 11,226 |
| Other nitrogen fertilizers | 20,145 | 31,059 | 20,692 | 36,624 | 37,212 | 28,776 |
| Malawi— | | | | | | |
| Ammonium sulphate .. | 17,777 | 12,957 | 12,991 | 21,716 | 22,065 | 35,070 |
| Ammonium nitrate .. | 6 | 13 | 50 | 523 | 531 | 223 |
| Mauritius— | | | | | | |
| Nitrogen fertilizers .. | 18,668 | 15,638 | 18,571 | 17,453 | 17,733 | 32,260 |
| Nigeria— | | | | | | |
| Nitrogen fertilizers .. | 28,914 | 12,718 | 4,184 | 7,119 | 7,233 | 5,215 |
| Sierra Leone— | | | | | | |
| Ammonium sulphate .. | 260 | 119 | 194 | 1,278 | 1,299 | 25 |
| Tanzania— | | | | | | |
| Ammonium sulphate .. | 6,820 | 7,354 | 10,297 | 10,908 | 11,083 | 15,302 |
| Other nitrogen fertilizers | 4,247 | 5,929 | 6,224 | 7,586 | 7,708 | 8,928 |
| Uganda— | | | | | | |
| Ammonium sulphate .. | 4,761 | 3,357 | 610 | 473 | 481 | 957 |
| Other nitrogen fertilizers | 2,920 | 2,754 | 2,381 | 3,110 | 3,160 | 6,134 |
| Zambia— | | | | | | |
| Ammonium sulphate .. | 12,101 | 2,361 | 4,369 | 1,861 | 1,891 | <i>n.a.</i> |
| Ammonium nitrate .. | 7,108 | 8,306 | 15,501 | 9,783 | 9,940 | <i>n.a.</i> |
| Canada— | | | | | | |
| Potassium nitrate .. | 1,517 | 2,384 | 3,425 | 2,638 | 2,680 | 2,896 |
| Sodium nitrate .. | 18,610 | 12,916 | 8,242 | 10,550 | 10,719 | 12,056 |
| Ammonium sulphate .. | 20,952 | 16,476 | 26,178 | 36,336 | 36,919 | 39,813 |
| Other nitrogen fertilizers | 12,471 | 23,319 | 14,315 | 5,299 | 5,384 | 5,033 |
| Antigua— | | | | | | |
| Nitrogen fertilizers .. | 85 | 16 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Barbados— | | | | | | |
| Nitrogen fertilizers .. | 9,540 | 6,984 | 4,426 | 1,581 | 1,606 | <i>n.a.</i> |
| British Honduras— | | | | | | |
| Nitrogen fertilizers .. | 623 | 1,309 | 1,599 | 1,535 | 1,559 | 1,770 |
| Grenada— | | | | | | |
| Ammonium sulphate .. | 285 | 251 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Other nitrogen fertilizers | 420 | 699 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Jamaica— | | | | | | |
| Ammonium sulphate .. | 26,323 | 25,282 | 17,943 | 20,145 | 20,468 | 26,767 |
| Other nitrogen fertilizers | 7,043 | 3,405 | 4,484 | 12,302 | 12,499 | 4,221 |
| St. Kitts— | | | | | | |
| Nitrogen fertilizers .. | 99 | 840 | 1,611 | 884 | 898 | 467 |
| St. Lucia— | | | | | | |
| Nitrogen fertilizers .. | 1,387 | 230 | 346 | 280 | 284 | 255 |
| St. Vincent— | | | | | | |
| Ammonium sulphate .. | 2,985 | 716 | 494 | 852 | 866 | <i>n.a.</i> |
| Guyana— | | | | | | |
| Ammonium sulphate .. | 28,052 | 25,017 | 23,101 | 23,006 | 23,375 | 29,218 |

IMPORTS OF NITROGEN COMPOUNDS (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|-----------|---------|---------|---------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Ceylon— | | | | | | |
| Natural sodium nitrate .. | — | — | 546 | n.a. | n.a. | n.a. |
| Ammonium sulphate .. | 129,640 | 161,449 | n.a. | n.a. | n.a. | n.a. |
| Ammonium nitrate .. | 5,349 | 295 | n.a. | n.a. | n.a. | n.a. |
| Cyanamide .. | — | 50 | n.a. | n.a. | n.a. | n.a. |
| Cyprus— | | | | | | 27,560 |
| Ammonium sulphate .. | 17,950 | 29,108 | 24,611 | 21,157 | 21,496 | 11,500 |
| Other nitrogen fertilizers | 8,701 | 16,555 | 15,481 | 21,019 | 21,356 | |
| Hong Kong— | | | | | | |
| Potassium nitrate .. | 634 | 742 | 609 | 595 | 605 | 662 |
| Sodium nitrate .. | 675 | 916 | 694 | 856 | 870 | 826 |
| Ammonium sulphate .. | 1,015 | 720 | 593 | 1,601 | 1,627 | 1,858 |
| Synthetic nitrates .. | 494 | 903 | 543 | 652 | 663 | 943 |
| Ammonium chloride .. | 1,360 | 1,264 | 1,498 | 1,351 | 1,373 | 1,494 |
| India (a)— | | | | | | |
| Potassium nitrate .. | — | — | — | — | — | 6 |
| Sodium nitrate .. | 2,652 | 6,991 | 9,086 | 6,856 | 6,966 | 9,077 |
| Ammonium sulphate .. | 865,755 | 1,280,100 | 553,560 | 156,966 | 159,485 | 148,060 |
| Ammonium nitrate .. | 129,748 | 78,133 | 57,511 | 236,403 | 240,197 | 172,570 |
| Ammonium phosphate | 459,136 | 353,524 | 126,906 | 43,930 | 44,635 | 287,440 |
| Ammonium chloride .. | 46,298 | 46,835 | — | — | — | — |
| Other nitrogen fertilizers | 174,320 | 78,136 | 51,303 | 125,273 | 127,283 | 244,516 |
| Malaysia (West)— | | | | | | |
| Nitrogen fertilizers .. | 120,642 | 56,855 | 43,824 | 38,849 | 39,473 | 22,694 |
| Anhydrous ammonia .. | 6,271 | 2,095 | 8,114 | 12,728 | 12,932 | 8,973 |
| Sabah— | | | | | | |
| Nitrogen fertilizers .. | 2,339 | 325 | 1,661 | 2,191 | 2,226 | 2,146 |
| Sarawak— | | | | | | |
| Ammonium sulphate .. | 5,717 | 4,246 | 3,241 | n.a. | n.a. | n.a. |
| Other nitrogen fertilizers | | | | | | |
| Australia (b)— | | | | | | |
| Potassium nitrate .. | 1,602 | 603 | 368 | 5,187 | 5,270 | 3,537 |
| Sodium nitrate .. | 4,938 | 9,041 | 5,845 | 5,013 | 5,094 | 3,242 |
| Sodium and potassium nitrate .. | 95 | 213 | 192 | 186 | 189 | 234 |
| Ammonium chloride .. | 1,723 | 1,684 | 4,038 | 4,094 | 4,160 | 4,670 |
| Ammonium sulphate .. | 75,013 | 113,231 | 69,650 | 11,932 | 12,124 | 453 |
| Ammonium nitrate .. | 9,804 | 16,152 | 20,540 | 16,353 | 16,616 | 14,647 |
| Cal. ammonium nitrate | 13,817 | 15,286 | 19,473 | 3,554 | 3,611 | 1,042 |
| Other nitrogen fertilizers | 2,444 | 1,393 | 681 | 620 | 630 | 947 |
| Fiji— | | | | | | |
| Nitrogen fertilizers .. | 19,728 | 26,391 | 22,497 | 24,493 | 24,886 | 18,151 |
| New Zealand (b)— | | | | | | |
| Potassium nitrate .. | 517 | 230 | 192 | 301 | 306 | n.a. |
| Sodium nitrate .. | 2,600 | 735 | 1,060 | 450 | 457 | n.a. |
| Calcium nitrate .. | 1,853 | 877 | 1,325 | 863 | 877 | n.a. |
| Ammonium sulphate .. | 12,834 | 10,487 | 18,763 | 24,025 | 24,411 | 21,094 |
| Ammonium nitrate .. | 996 | 1,572 | 1,286 | 2,668 | 2,711 | n.a. |
| Other nitrogen fertilizers | 7,279 | 5,449 | 4,216 | 5,051 | 5,132 | n.a. |
| Anhydrous ammonia .. | 128 | 223 | 599 | 555 | 564 | n.a. |
| Cyanamide .. | 5 | 4 | 5 | — | — | n.a. |
| Irish Republic— | | | | | | |
| Sodium nitrate .. | 736 | 724 | 630 | — | — | 651 |
| Ammonium sulphate .. | 23,005 | 13,378 | 138 | 5,839 | 5,933 | 14,262 |
| Anhydrous ammonia .. | 15,054 | 31,205 | 38,364 | 39,530 | 40,164 | 51,476 |
| Ammonium nitrate .. | 10,785 | 30,879 | 10,681 | 9,117 | 9,263 | 11,564 |
| Other nitrogen fertilizers | 939 | 542 | 623 | 562 | 571 | 5,278 |

(a) Years ended March 31 following that stated.

(b) Years ended June 30 of that stated.

IMPORTS OF NITROGEN COMPOUNDS (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|---------|---------|---------|---------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Calcium nitrate .. | 383 | 487 | 304 | 279 | 284 | 235 |
| Potassium nitrate .. | 487 | 499 | 640 | 840 | 854 | 669 |
| Cyanamide .. | 1,677 | 2,497 | 3,864 | 5,945 | 6,040 | 4,349 |
| Anhydrous ammonia .. | 9,383 | 4,344 | 7,889 | 3,089 | 3,139 | 11,743 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Potassium nitrate .. | 2,614 | 2,433 | 1,873 | 1,970 | 2,002 | 2,001 |
| Sodium nitrate .. | 17,913 | 22,739 | 23,110 | 12,378 | 12,577 | 13,282 |
| Calcium nitrate (a) .. | 2,156 | 2,453 | 3,059 | 2,143 | 2,177 | 1,649 |
| Cyanamide (a) .. | 95 | 163 | 162 | 124 | 126 | 131 |
| Ammonium sulphate (a) .. | 6,260 | 5,484 | 4,170 | 3,585 | 3,643 | 3,365 |
| Ammonium chloride .. | 2,720 | 3,000 | 3,340 | 3,518 | 3,575 | 4,643 |
| Ammonium nitrate (a) .. | 2,993 | 6,771 | 13,960 | 7,921 | 8,048 | 6,934 |
| Anhydrous ammonia .. | 52,882 | 203,234 | 273,043 | 438,850 | 445,892 | 265,723 |
| Bulgaria— | | | | | | |
| Nitrogen fertilizers (a) .. | 39,681 | 4,200 | — | — | — | n.a. |
| Czechoslovakia— | | | | | | |
| Nitrogen fertilizers (a) .. | 52,000 | 84,000 | 84,000 | 95,000 | 97,000 | 79,000 |
| Denmark— | | | | | | |
| Potassium nitrate .. | 1,477 | 1,410 | 1,399 | 1,375 | 1,397 | 1,368 |
| Sodium nitrate .. | 13,940 | 7,699 | 22,412 | 13,519 | 13,736 | 12,580 |
| Calcium nitrate .. | 292,569 | 258,974 | 193,524 | 183,712 | 186,660 | 117,564 |
| Ammonium sulphate .. | 4,631 | 4,366 | 5,387 | 6,116 | 6,214 | 3,842 |
| Ammonium chloride .. | 1,262 | 1,461 | 1,453 | 1,476 | 1,500 | 1,853 |
| Ammonium nitrates .. | 20,821 | 26,757 | 9,125 | 11,002 | 11,179 | 20,223 |
| Cyanamide .. | 54 | 136 | 120 | 131 | 133 | 835 |
| Finland— | | | | | | |
| Potassium nitrate .. | 278 | 926 | 551 | 932 | 947 | 824 |
| Sodium nitrate .. | 476 | 531 | 615 | 825 | 838 | 473 |
| Calcium nitrate .. | 43,514 | 42,914 | 40,102 | 25,241 | 25,646 | 17,812 |
| Ammonium nitrate .. | 4,446 | 4,082 | 4,499 | 4,135 | 4,201 | 5,977 |
| Ammonium sulphate .. | 27,800 | 20,541 | 12,597 | 1,052 | 1,069 | 1,116 |
| Ammonium chloride .. | 1,318 | 602 | 584 | 738 | 750 | 1,131 |
| Anhydrous ammonia .. | 19,949 | 52,958 | 68,925 | 135,472 | 137,646 | 83,651 |
| France— | | | | | | |
| Sodium nitrate .. | 24,088 | 26,894 | 30,012 | 31,280 | 31,782 | 18,461 |
| Calcium nitrate .. | 1,374 | 3,942 | 6,983 | 358 | 364 | 290 |
| Ammonium sulphate .. | 34,118 | 40,192 | 45,621 | 74,292 | 75,484 | 65,779 |
| Ammonium nitrate .. | 8,450 | 3,424 | 8,878 | 2,241 | 2,277 | 3,423 |
| Ammonium chloride .. | 1,826 | 1,891 | 1,888 | 1,855 | 1,885 | 2,200 |
| Anhydrous ammonia .. | 60,586 | 147,851 | 170,903 | 125,881 | 127,901 | 142,413 |
| Cyanamide .. | 8,694 | 10,278 | 11,659 | 19,697 | 20,013 | 25,564 |
| Germany (Federal)— | | | | | | |
| Potassium nitrate .. | 4,235 | 4,387 | 3,860 | 3,508 | 3,564 | 4,464 |
| Sodium nitrate .. | 34 | 64 | 25 | 66 | 67 | 40 |
| Ammonium nitrates .. | 373,177 | 238,707 | 281,811 | 339,019 | 344,459 | 564,019 |
| Ammonium chloride .. | n.a. | 1,067 | 1,412 | 1,974 | 2,006 | 3,878 |
| Other nitrogen fertilizers .. | 8,918 | 4,975 | 5,903 | 3,824 | 3,885 | 14,157 |
| Germany (East)— | | | | | | |
| Nitrogen fertilizers (a) .. | 109,722 | 154,201 | 122,180 | 157,463 | 159,990 | n.a. |
| Greece— | | | | | | |
| Potassium nitrate .. | 91 | 124 | 101 | 540 | 549 | 424 |
| Sodium nitrate .. | 5,846 | 199 | 265 | 1,094 | 1,112 | 437 |
| Ammonium nitrate .. | 60,251 | 91,996 | 78,762 | 64,557 | 65,593 | 81,077 |
| Ammonium sulphate .. | 26,499 | 15,446 | 16,573 | n.a. | n.a. | n.a. |
| Ammonium chloride .. | 247 | 271 | 356 | 246 | 250 | 328 |
| Other nitrogen fertilizers .. | 19,557 | 21,693 | 18,083 | 8,557 | 8,694 | n.a. |
| Anhydrous ammonia .. | 14,871 | 10,455 | 8,055 | 12,631 | 12,834 | 3,148 |
| Hungary— | | | | | | |
| Nitrogen fertilizers .. | 209,636 | 495,056 | 504,094 | 397,879 | 404,264 | 253,000 |
| Iceland— | | | | | | |
| Lime ammonium nitrate .. | 1,777 | 3,598 | 3,706 | 2,954 | 3,001 | 3,449 |

(a) N content.

IMPORTS OF NITROGEN COMPOUNDS (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|---------|---------|---------|---------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Italy— | | | | | | |
| Potassium nitrate .. | 1,744 | 1,846 | 2,322 | 4,821 | 4,898 | 3,957 |
| Sodium nitrate .. | 23,576 | 234 | 104 | 80 | 81 | 40 |
| Ammonium chloride .. | 1,567 | 1,610 | 1,969 | 1,642 | 1,668 | 2,499 |
| Ammonium nitrate .. | 3,201 | 5,134 | 12,685 | 30,203 | 30,688 | 24,244 |
| Ammonium sulphate .. | 1,423 | 1,033 | 861 | 33,609 | 34,149 | 74,158 |
| Cyanamide .. | 674 | 3,898 | 4,144 | 5,537 | 5,626 | 5,835 |
| Netherlands— | | | | | | |
| Potassium nitrate .. | 3,680 | 3,339 | 4,415 | 4,867 | 4,945 | 5,138 |
| Sodium nitrate .. | 54,859 | 7,704 | 32,860 | 28,311 | 28,765 | 30,170 |
| Calcium nitrate (a) .. | — | 37 | 13 | 18 | 18 | — |
| Ammonium sulphate (a) .. | 136 | 121 | 302 | 398 | 404 | 129 |
| Ammonium chloride .. | 2,143 | 2,418 | 2,645 | 2,274 | 2,311 | 2,620 |
| Ammonium nitrate (a) .. | 897 | 998 | 2,365 | 10,947 | 11,123 | 530 |
| Lime ammonium nitrate (a) .. | | | | | | |
| Cyanamide (a) .. | 563 | 423 | 362 | 410 | 417 | 430 |
| Anhydrous ammonia .. | 1,794 | 48,990 | 200,210 | 31,076 | 31,575 | 1,592 |
| Other nitrogen fertilizers (a) .. | 309 | 140 | 181 | 116 | 118 | 461 |
| Norway— | | | | | | |
| Potassium nitrate .. | 663 | 136 | 213 | 205 | 208 | 238 |
| Ammonium chloride .. | 448 | 495 | 581 | 578 | 587 | 684 |
| Ammonium sulphate .. | 260 | 571 | 449 | 397 | 403 | 447 |
| Anhydrous ammonia .. | 5,413 | 66,784 | 65,022 | 40,203 | 40,848 | 1 |
| Poland— | | | | | | |
| Nitrogen fertilizers .. | 67,000 | 51,000 | — | — | — | — |
| Portugal— | | | | | | |
| Potassium nitrate .. | 394 | 427 | 436 | 594 | 604 | 550 |
| Sodium nitrate .. | 3,967 | 3,583 | 4,043 | 4,556 | 4,629 | 1,643 |
| Calcium nitrate .. | 475 | 260 | 169 | 50 | 51 | 8 |
| Ammonium sulphate .. | 68 | 83 | 117 | 73 | 74 | 116 |
| Ammonium chloride .. | 176 | 298 | 326 | 270 | 274 | 393 |
| Ammonium nitrate .. | 39 | 252 | 668 | 1,750 | 1,778 | 1,775 |
| Nitrophoska .. | n.a. | n.a. | 1,609 | 2,005 | 2,037 | 1,242 |
| Anhydrous ammonia .. | 6 | 8,403 | 3,947 | 2 | 2 | 4 |
| Roumania— | | | | | | |
| Nitrogen fertilizers (a) .. | 295 | 1,772 | 3,838 | 689 | 700 | — |
| Spain— | | | | | | |
| Sodium nitrate .. | 70,677 | 60,098 | 74,668 | 74,551 | 75,747 | 79,310 |
| Ammonium sulphate .. | 100,402 | 106,439 | 27,626 | 7,978 | 8,106 | 69 |
| Calcium nitrate .. | 55,891 | 101,987 | 81,383 | 78,883 | 80,149 | 94,605 |
| Other nitrogen fertilizers .. | 7,595 | 41,987 | 112,910 | 162,226 | 164,829 | 7,119 |
| Anhydrous ammonia .. | 3,739 | 1,993 | 36,352 | 115,461 | 117,314 | 121,112 |
| Sweden— | | | | | | |
| Potassium nitrate .. | 1,213 | 1,441 | 1,580 | 1,689 | 1,716 | 1,411 |
| Sodium nitrate .. | 23,054 | 27,343 | 28,181 | 29,777 | 30,255 | 25,965 |
| Calcium nitrate .. | 384,212 | 480,933 | 491,966 | 432,630 | 439,573 | 448,931 |
| Ammonium nitrate .. | — | 1,247 | 1,918 | 4,582 | 4,656 | 23,735 |
| Ammonium sulphate .. | 487 | 656 | 508 | 494 | 502 | 1,976 |
| Ammonium chloride .. | 1,491 | 1,391 | 1,390 | 1,698 | 1,725 | 1,548 |
| Switzerland— | | | | | | |
| Potassium and sodium nitrates .. | 1,122 | 2,771 | 1,235 | 1,455 | 1,478 | 1,132 |
| Ammonium sulphate, etc. .. | 903 | 1,237 | 887 | 4,272 | 4,341 | 11,058 |
| Ammonium chloride .. | 970 | 1,140 | 1,193 | 1,488 | 1,512 | 1,412 |
| Ammonium and calcium nitrates .. | 3,022 | 1,200 | 1,774 | 2,098 | 2,132 | 3,193 |
| Cyanamide .. | 431 | 2 | 2 | 1,127 | 1,145 | 5,705 |
| Anhydrous ammonia .. | 9,129 | n.a. | 15,311 | 10,377 | 10,544 | 10,293 |

(a) N content.

(b) Excludes imports from Belgium and Luxemburg, if any.

IMPORTS OF NITROGEN COMPOUNDS (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|---------|---------|--------|--------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Yugoslavia— | | | | | | |
| Sodium nitrate .. | 725 | 1,160 | 1,603 | 2,078 | 2,111 | 1,689 |
| Ammonium sulphate .. | 110,590 | 150,214 | 118,805 | 67,946 | 69,036 | 100,259 |
| Ammonium nitrate .. | 3,465 | 922 | 11,315 | 1,508 | 1,532 | 6,955 |
| Lime ammonium nitrate | 271,365 | 185,256 | 157,676 | — | — | — |
| Anhydrous ammonia .. | 295 | 4,021 | 45,504 | 67,274 | 68,354 | 35,905 |
| Other nitrogen fertilizers | 3,789 | 9,412 | 315 | — | — | — |
| Angola— | | | | | | |
| Sodium nitrate .. | 375 | 30 | 48 | 1,450 | 1,474 | 49 |
| Ammonium nitrate .. | 929 | 482 | 302 | 718 | 730 | 1,674 |
| Ammonium sulphate .. | 9,514 | 8,516 | 12,909 | 11,195 | 11,375 | 18,699 |
| Canary Islands— | | | | | | |
| Ammonium sulphate .. | 45,579 | 66,362 | 52,782 | 66,233 | 67,296 | 69,246 |
| Calcium nitrate .. | 767 | 1,140 | 264 | 567 | 577 | 398 |
| Other nitrogen fertilizers | 4,852 | 5,954 | 7,189 | 15,617 | 15,868 | 14,196 |
| Central African Republic | 2,122 | 1,049 | 944 | 1,222 | 1,242 | n.a. |
| Congo (Brazza) .. | 46 | 1,594 | 4,073 | 25 | 25 | n.a. |
| Egypt— | | | | | | |
| Ammonium sulphate .. | 106,135 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Ammonium nitrate .. | 27,050 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Other nitrogen fertilizers | 28,785 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Ethiopia— | | | | | | |
| Nitrogen fertilizers .. | 3,335 | 1,963 | 549 | 584 | 593 | 2,332 |
| Malagasy Republic— | | | | | | |
| Nitrogen fertilizers .. | 3,675 | 4,859 | 5,815 | 4,809 | 4,887 | n.a. |
| Morocco— | | | | | | |
| Potassium nitrate .. | 328 | 506 | 445 | 386 | 393 | 1,195 |
| Sodium nitrate .. | 215 | 265 | 328 | 491 | 499 | 298 |
| Calcium nitrate .. | 49 | 146 | 147 | 113 | 115 | n.a. |
| Ammonium nitrate .. | 13,581 | 23,741 | 23,574 | 13,596 | 13,815 | 16,069 |
| Ammonium sulphate .. | 50,088 | 76,704 | 57,271 | 38,844 | 39,468 | 75,700 |
| Other nitrogen fertilizers | 11,364 | 8,712 | 13,478 | 13,861 | 14,084 | 19,519 |
| Reunion— | | | | | | |
| Nitrogen fertilizers .. | 5,702 | 5,293 | 4,299 | n.a. | n.a. | n.a. |
| Senegal— | | | | | | |
| Anhydrous ammonia .. | 87 | 1,324 | 3,987 | 7,323 | 7,441 | 6,770 |
| Nitrogen fertilizers .. | 24,694 | 16,455 | 2,501 | 1,610 | 1,636 | 1,518 |
| South Africa— | | | | | | |
| Sodium nitrate .. | 945 | 1,430 | 1,559 | 670 | 681 | 599 |
| Ammonium sulphate .. | 10,339 | 5,480 | 3,159 | 1,193 | 1,212 | 12,355 |
| Ammonium chloride .. | 2,829 | 2,356 | 3,832 | 6,927 | 7,038 | 6,760 |
| Ammonium nitrate .. | 17,140 | n.a. | 3 | 281 | 286 | 20,605 |
| Sudan— | | | | | | |
| Ammonium sulphate .. | 12,068 | 1,629 | 7,717 | 6,831 | 6,941 | 5,000 |
| Other nitrogen fertilizers | 99 | 7,301 | 551 | 5,501 | 5,590 | 350 |
| Tunisia— | | | | | | |
| Nitrogen fertilizers .. | 21,165 | 27,905 | 41,873 | 11,446 | 11,630 | 74,539 |
| Costa Rica— | | | | | | |
| Nitrogen fertilizers .. | 28,059 | 55,556 | 66,787 | 52,148 | 52,985 | 83,406 |
| French West Indies— | | | | | | |
| Guadeloupe— | | | | | | |
| Nitrogen fertilizers .. | 1,484 | 2,425 | 1,564 | n.a. | n.a. | n.a. |
| Martinique— | | | | | | |
| Nitrogen fertilizers .. | 6,736 | 5,876 | 4,461 | n.a. | n.a. | n.a. |
| Guatemala— | | | | | | |
| Sodium nitrate .. | 148 | 181 | 100 | 100 | 102 | 31 |
| Other nitrogen fertilizers | 24,469 | 29,298 | 33,642 | 51,520 | 52,347 | 53,235 |
| Honduras— | | | | | | |
| Nitrogen fertilizers .. | 19,326 | 25,028 | 24,496 | 24,414 | 24,806 | 40,351 |

IMPORTS OF NITROGEN COMPOUNDS (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--|-----------------|-----------------|-----------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Mexico— | | | | | | |
| Sodium nitrate .. | 15,004 | 17,283 | 17,031 | 15,553 | 15,803 | 16,530 |
| Ammonium chloride .. | 249 | 1 | — | 69 | 70 | — |
| Ammonium sulphate .. | 69,386 | 84,693 | 38,920 | <i>n.a.</i> | <i>n.a.</i> | 113,249 |
| Ammonium nitrate .. | 4,194 | 15,204 | 13,256 | 8,373 | 8,507 | 20,249 |
| Anhydrous ammonia .. | 189,718 | 173,484 | 82,067 | 57,313 | 58,233 | 75,791 |
| Nicaragua— | | | | | | |
| Nitrogen fertilizers .. | 25,681 | 44,116 | 12,002 | 40,482 | 41,132 | 34,104 |
| Panama Republic— | | | | | | |
| Nitrogen fertilizers .. | 15,606 | 17,784 | 24,105 | 23,551 | 23,929 | 21,611 |
| Salvador— | | | | | | |
| Sodium nitrate .. | — | 198 | — | — | — | <i>n.a.</i> |
| Other nitrogen fertilizers | 69,731 | 92,278 | 98,660 | 161,291 | 163,880 | 177,454 |
| United States— | | | | | | |
| Potassium and sodium nitrates, crude .. | 40,022 | 25,403 | 32,665 | 50,142 | 50,947 | 55,491 |
| Potassium nitrate .. | 13,799 | 14,287 | 10,102 | 12,974 | 13,182 | <i>n.a.</i> |
| Sodium nitrate .. | 194,693 | 183,285 | 164,729 | 115,587 | 117,442 | 184,329 |
| Calcium nitrate .. | 28,795 | 37,360 | 44,378 | 46,803 | 47,555 | 35,871 |
| Ammonium sulphate .. | 149,963 | 116,800 | 124,600 | 194,374 | 197,493 | <i>n.a.</i> |
| Ammonium chloride .. | 3,833 | 3,973 | 3,406 | 3,514 | 3,570 | <i>n.a.</i> |
| Ammonium nitrate .. | 158,266 | 202,600 | 208,464 | 291,175 | 295,848 | <i>n.a.</i> |
| Ammonium phosphates | 189,081 | 220,554 | 244,078 | 407,758 | 414,301 | 414,918 |
| Cyanamide .. | 15,874 | 15,444 | 12,889 | 6,920 | 7,031 | 4,947 |
| Argentina— | | | | | | |
| Potassium nitrate .. | 57 | 6 | 10 | 140 | 142 | 46 |
| Sodium nitrate .. | 10,118 | 8,891 | 10,472 | 13,257 | 13,470 | 9,060 |
| Ammonium sulphate .. | <i>r</i> 31,522 | <i>r</i> 14,634 | <i>r</i> 21,072 | 1,785 | 1,814 | 1,284 |
| Ammonium chloride .. | 1,954 | 2,567 | 2,453 | 3,016 | 3,065 | 3,142 |
| Ammonium nitrate .. | 2,243 | 864 | 1,362 | 2,027 | 2,060 | 2,959 |
| Brazil— | | | | | | |
| Potassium nitrate .. | 442 | 353 | 1 | 199 | 202 | <i>n.a.</i> |
| Sodium nitrate .. | 26,737 | 24,965 | 34,299 | 23,474 | 23,851 | <i>n.a.</i> |
| Potassium and sodium nitrates .. | 9,562 | 6,240 | 16,895 | 9,288 | 9,432 | <i>n.a.</i> |
| Ammonium chloride .. | 2,586 | 3,315 | 3,271 | 4,505 | 4,577 | <i>n.a.</i> |
| Ammonium nitrate .. | 148 | — | 986 | 1 | 1 | <i>n.a.</i> |
| Ammonium sulphate .. | 298,590 | 412,243 | 443,918 | 686,212 | 697,224 | <i>n.a.</i> |
| Cyanamide .. | 59 | 197 | 1,671 | 221 | 225 | <i>n.a.</i> |
| Other nitrogen fertilizers | 10,870 | 13,519 | 10,141 | 10,756 | 10,929 | <i>n.a.</i> |
| Chile— | | | | | | |
| Ammonium chloride .. | 636 | 357 | 655 | 445 | 452 | <i>n.a.</i> |
| Ammonium sulphate .. | 408 | 1,377 | 481 | 524 | 532 | <i>n.a.</i> |
| Ammonium nitrate .. | 15,176 | 30,851 | 32,716 | 45,860 | 46,596 | <i>n.a.</i> |
| Anhydrous ammonia .. | 116 | 70 | 338 | 536 | 545 | <i>n.a.</i> |
| Colombia— | | | | | | |
| Potassium nitrate .. | <i>r</i> 213 | <i>r</i> 197 | 184 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sodium nitrate .. | <i>r</i> 135 | <i>r</i> 177 | 298 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ammonium chloride .. | <i>r</i> 38 | <i>r</i> 319 | 983 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ammonium sulphate .. | <i>r</i> 1,871 | <i>r</i> 4,844 | 8,030 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Other nitrogen fertilizers | <i>r</i> 722 | <i>r</i> 2,279 | 189 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Anhydrous ammonia .. | <i>r</i> 26 | <i>r</i> 13 | 5 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ecuador— | | | | | | |
| Nitrogen fertilizers .. | 5,353 | 14,424 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Peru— | | | | | | |
| Potassium nitrate .. | 200 | 163 | 110 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sodium nitrate .. | 2,544 | 1,765 | 551 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Anhydrous ammonia .. | 4 | 93 | 34 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Other nitrogen fertilizers | 92,069 | 24,095 | 26,607 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |

IMPORTS OF NITROGEN COMPOUNDS (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|---------|---------|---------|---------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Uruguay— | | | | | | |
| Potassium nitrate .. | 31 | 15 | 5 | 19 | 19 | 120 |
| Sodium nitrate .. | 216 | 98 | 260 | 410 | 417 | 26 |
| Ammonium sulphate .. | 1,563 | 3,887 | 1,397 | 3,117 | 3,167 | 9,184 |
| Venezuela— | | | | | | |
| Potassium nitrate .. | 3,562 | 1,961 | 1,800 | n.a. | n.a. | n.a. |
| Sodium nitrate .. | 327 | 167 | 312 | n.a. | n.a. | n.a. |
| Calcium nitrate .. | — | — | 2,070 | n.a. | n.a. | n.a. |
| Ammonium sulphate .. | 27,512 | 11,953 | 15,439 | n.a. | n.a. | n.a. |
| Anhydrous ammonia .. | 2 | 6,866 | 12,600 | n.a. | n.a. | n.a. |
| Burma— | | | | | | |
| Nitrogen fertilizers .. | 15,943 | 61,734 | 10,528 | 2,235 | 2,271 | 7 |
| Formosa— | | | | | | |
| Sodium nitrate .. | 1,231 | 1,516 | 1,813 | 2,485 | 2,525 | 3,032 |
| Ammonium chloride .. | 853 | 1,312 | 1,151 | 1,291 | 1,312 | 1,123 |
| Ammonium sulphate .. | 169,219 | 62,990 | 195,976 | 12,080 | 12,274 | 2 |
| Other nitrogen fertilizers | n.a. | 1 | 7 | 8 | 8 | 15 |
| Iran (a)— | | | | | | |
| Ammonium chloride .. | 293 | 490 | 370 | 509 | 518 | 395 |
| Nitrogen fertilizers .. | 6,870 | 20,157 | 15,100 | 17,386 | 17,666 | 51,590 |
| Iraq— | | | | | | |
| Nitrogen fertilizers .. | 25,074 | 40,000 | 50,146 | 44,785 | 45,504 | n.a. |
| Israel— | | | | | | |
| Nitrogen fertilizers .. | 1,749 | n.a. | 3,847 | 11,286 | 11,468 | 43,400 |
| Japan— | | | | | | |
| Sodium nitrate .. | 26,896 | 24,283 | 25,379 | 22,776 | 23,142 | 19,454 |
| Potassium and barium nitrate .. | 663 | 961 | 84 | 1,914 | 1,945 | 646 |
| Other nitrogen fertilizers | 3 | 885 | 2,642 | 2,657 | 2,700 | 3,448 |
| Jordan— | | | | | | |
| Nitrogen fertilizers .. | 8,965 | 4,162 | 3,813 | 1,858 | 1,888 | 3,409 |
| Korea (South)— | | | | | | |
| Ammonium sulphate .. | 100,593 | 263,927 | 78,480 | 30 | 31 | 30 |
| Ammonium nitrate .. | 6,163 | 6,148 | 6,806 | n.a. | n.a. | 6,976 |
| Other nitrogen fertilizers | 35,695 | 17,705 | 23,499 | n.a. | n.a. | 3,635 |
| Lebanon— | | | | | | |
| Nitrogen fertilizers .. | 21,312 | 33,840 | 23,095 | 30,611 | 31,103 | 54,030 |
| Philippine Republic— | | | | | | |
| Ammonium phosphate .. | 4,432 | 10,288 | n.a. | n.a. | n.a. | 9,000 |
| Ammonium sulphate .. | 94,570 | 57,330 | 48,565 | 30,198 | 30,683 | 69,789 |
| Other nitrogen fertilizers | 66,517 | 51,286 | 59,826 | 90,520 | 91,973 | 168,986 |
| Syria— | | | | | | |
| Nitrogen fertilizers .. | 34,009 | 83,362 | 61,355 | 93,954 | 95,462 | 98,038 |
| Thailand— | | | | | | |
| Potassium nitrate .. | 976 | 1,334 | 1,315 | 1,598 | 1,624 | 1,311 |
| Ammonium chloride .. | 2,319 | 2,153 | 2,365 | 2,972 | 3,020 | 4,095 |
| Ammonium sulphate .. | 40,923 | 26,749 | 2,767 | 1,000 | 1,016 | 28,600 |
| Other nitrogen fertilizers | 11,206 | 16,275 | 21,027 | 10,625 | 10,796 | 17,514 |
| Turkey— | | | | | | |
| Potassium nitrate .. | 322 | 316 | 167 | 194 | 197 | n.a. |
| Sodium nitrate .. | 7,503 | 12,697 | 2,226 | 3,956 | 4,019 | n.a. |
| Ammonium chloride .. | 844 | 776 | 1,096 | 927 | 942 | n.a. |
| Ammonium sulphate .. | 294,335 | 296,133 | 372,145 | 223,713 | 227,303 | n.a. |
| Ammonium nitrate .. | 32,018 | 130,934 | 146,661 | 34,555 | 35,110 | n.a. |
| Calcium nitrate .. | 11,744 | 42,449 | 11,600 | 33,981 | 34,526 | n.a. |

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

PETROLEUM AND ALLIED PRODUCTS
PRODUCTION OF CRUDE PETROLEUM*

| Producing Country | Long tons | | | | Tonnes | |
|---------------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— Crude petroleum | 87,400 | 79,900 | 76,000 | 82,000 | 83,000 | 83,000 |
| Nigeria (b) | 15,962,000 | 6,900,000 | 25,600,000 | 51,970,000 | 52,800,000 | 74,100,000 |
| Canada (b) | 46,838,978 | 50,586,170 | r 54,798,657 | 61,490,674 | 62,477,599 | 66,729,895 |
| Trinidad (b) | 9,284,320 | 8,557,000 | 8,204,000 | 7,292,000 | 7,409,000 | 6,833,000 |
| Brunei | 5,095,000 | 5,884,000 | 6,005,000 | 6,700,000 | 6,807,000 | 6,433,000 |
| India | 5,577,000 | 5,761,000 | 6,616,000 | 6,701,000 | 6,808,000 | 7,190,000 |
| Pakistan (b) | 425,000 | 480,000 | 470,000 | 475,000 | 482,000 | (a) 520,000 |
| Sarawak | 45,104 | 200,187 | 439,888 | 845,420 | 858,986 | 3,275,307 |
| Australia | 978,077 | 1,790,500 | 2,034,112 | 8,406,323 | 8,541,244 | 14,803,390 |
| New Zealand | 360 | 322 | 430 | 66,668 | 67,738 | 116,639 |
| TOTAL† | 109,422,000 | 109,396,000 | 134,036,000 | 176,702,000 | 179,538,000 | 180,100,000 |
| OTHER COUNTRIES | | | | | | |
| Albania | 1,070,000 | 1,134,900 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Austria | 2,642,506 | 2,770,000 | 2,714,700 | 2,754,043 | 2,798,237 | 2,515,879 |
| Bulgaria | 491,000 | 467,000 | 320,000 | 328,000 | 334,000 | 305,000 |
| Czechoslovakia | 200,000 | 206,000 | 207,000 | 200,000 | 203,000 | 194,000 |
| France | 2,781,172 | 2,645,220 | 2,456,579 | 2,273,000 | 2,309,000 | 1,861,000 |
| Germany (Federal)— Crude petroleum | 7,801,994 | 7,856,069 | 7,751,341 | 7,416,213 | 7,535,221 | 7,420,354 |
| Hungary | 1,659,000 | 1,778,000 | 1,726,000 | 1,906,000 | 1,937,000 | 1,955,000 |
| Italy | r 1,580,395 | r 1,481,154 | r 1,453,573 | 1,385,820 | 1,408,058 | 1,294,701 |
| Netherlands | 2,229,227 | 2,100,000 | 2,000,000 | 1,960,000 | 1,991,000 | 1,714,000 |
| Poland | 443,000 | 467,300 | 431,000 | 417,000 | 424,000 | 395,400 |
| Roumania | 12,997,000 | 13,075,000 | 13,037,000 | 13,166,000 | 13,377,000 | 13,793,000 |
| U.S.S.R. | 283,451,000 | 305,000,000 | 350,000,000 | 349,000,000 | 355,000,000 | 372,000,000 |
| Yugoslavia | 2,336,506 | 2,455,000 | 2,656,000 | 2,809,000 | 2,854,000 | 2,961,000 |
| Algeria | 37,770,000 | 41,479,000 | 43,149,000 | 46,119,900 | 46,860,000 | 36,346,000 |
| Angola | 528,668 | 737,676 | 2,418,700 | 4,985,109 | 5,065,105 | 5,721,331 |
| Congo (Brazza) | 49,210 | 41,947 | 23,833 | 18,644 | 18,943 | 14,433 |
| Egypt | 5,626,000 | 7,900,000 | 12,150,000 | 16,141,000 | 16,400,000 | 16,500,000 |
| Gabon | 3,424,054 | 4,569,000 | 4,948,039 | 5,337,706 | 5,423,360 | 5,784,766 |
| Libya | 82,100,000 | 123,000,000 | 148,000,000 | 157,365,000 | 159,890,000 | 133,012,000 |
| Morocco | 95,626 | 87,238 | 57,635 | 43,359 | 44,055 | 22,618 |
| Tunisia | 2,191,000 | 3,136,000 | 3,568,000 | 4,379,000 | 4,449,000 | 4,092,000 |
| Cuba (a) (b) | 101,000 | r 156,000 | 120,000 | 118,000 | 120,000 | 120,000 |
| Mexico (b) | 18,721,000 | 20,019,000 | 21,080,000 | 22,343,000 | 22,701,000 | 22,608,000 |
| United States (b) | 428,860,000 | 443,872,000 | r 449,567,000 | 468,993,000 | 476,516,000 | 465,612,000 |
| Argentina (b) | 16,138,800 | 17,661,000 | 18,312,000 | 19,643,329 | 19,958,546 | 21,544,000 |
| Bolivia (b) | 1,780,000 | 1,864,000 | 1,805,000 | 1,110,000 | 1,128,000 | 1,663,000 |
| Brazil (b) | 6,856,000 | 7,700,000 | 9,131,000 | 8,696,000 | 8,835,000 | 8,697,000 |
| Chile | 1,583,000 | 1,760,000 | 1,907,000 | 1,774,513 | 1,802,989 | 1,868,344 |
| Colombia (b) | 9,941,128 | 8,934,444 | 10,845,070 | 11,275,000 | 11,456,000 | 11,233,000 |
| Ecuador (b) | 293,108 | 229,000 | 214,349 | 198,000 | 201,177 | 178,600 |
| Peru | r 3,694,000 | r 3,865,000 | 3,750,000 | 3,753,000 | 3,813,000 | 3,005,000 |
| Venezuela | 182,559,869 | 186,242,000 | 187,283,000 | 191,236,000 | 194,305,000 | 187,876,000 |
| Abu Dhabi | 12,165,510 | 14,917,600 | 16,814,871 | 20,079,903 | 20,402,185 | 27,595,909 |
| Bahrain | 3,396,000 | 3,696,000 | 3,719,000 | 3,779,000 | 3,840,000 | 3,736,000 |
| Burma | 608,000 | 779,000 | 800,000 | 805,000 | 818,000 | 843,000 |

*Excluding Natural Gasoline. See page 243.

(a) Estimated.

(b) The following conversion rates have been used: 35 gallons=1 barrel, and the undermentioned barrels=1 ton (barrels per tonne in brackets)—Nigeria 7.3 (7.2), Canada 7.5 (7.4), Trinidad 7.0 (6.9), Burma 7.4 (7.3), Pakistan 7.4 (7.3), Cuba 6.8 (6.7), Mexico 7.1 (7.0), United States 7.5 (7.4), Argentina 7.1 (7.0), Bolivia 8.2 (8.1), Brazil 7.8 (7.7), Colombia 7.1 (7.0), Ecuador 7.5 (7.4), Venezuela 7.1 (7.0), Indonesia 7.5 (7.4).

PRODUCTION OF CRUDE PETROLEUM (cont.)

| Producing Country | Long tons | | | | Tonnes | |
|-------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| China (a) (d) | 7,500,000 | 9,700,000 | 14,000,000 | 19,000,000 | 19,000,000 | 23,000,000 |
| Formosa | 32,357 | 55,580 | 76,700 | 84,200 | 85,500 | 108,000 |
| Indonesia | 25,498,000 | 30,118,000 | 36,200,000 | 41,730,000 | 42,400,000 | 44,320,000 |
| Iran (b) | 120,919,000 | 132,901,000 | 152,200,000 | 172,400,000 | 175,160,000 | 207,700,000 |
| Iraq | 58,938,981 | 72,620,000 | 73,309,000 | 75,241,100 | 76,448,700 | 83,770,828 |
| Israel | 138,000 | 117,000 | 102,000 | 79,000 | 80,000 | 70,000 |
| Japan | 771,000 | 780,364 | 785,400 | 807,000 | 820,286 | 801,800 |
| Kuwait | 113,355,644 | 120,162,473 | 127,502,203 | 135,227,000 | 137,397,000 | 146,785,398 |
| Qatar | 9,069,839 | 9,018,000 | 9,366,184 | 8,881,948 | 9,024,503 | 10,570,000 |
| Mongolia (d) | 10,000 | 8,000 | 12,000 | 12,000 | 12,000 | <i>n.a.</i> |
| Saudi Arabia | 127,262,215 | 138,776,535 | 146,494,684 | 174,056,992 | 176,848,866 | 223,714,000 |
| Syria | <i>n.a.</i> | 1,276,000 | 2,374,000 | 4,287,000 | 4,356,000 | 6,500,000 |
| Turkey | 2,685,033 | 3,055,400 | 3,568,813 | 3,401,000 | 3,456,000 | 3,452,000 |
| Neutral Zone (c) .. | 22,263,000 | 22,546,000 | 23,751,000 | 26,500,000 | 26,900,000 | 29,167,000 |
| TOTAL† | 1,508,000,000 | 1,742,000,000 | 1,871,000,000 | 1,990,000,000 | 2,022,000,000 | 2,146,000,000 |
| WORLD'S TOTAL .. | 1,617,000,000 | 1,851,000,000 | 2,005,000,000 | 2,167,000,000 | 2,202,000,000 | 2,326,000,000 |

†Abu Dhabi Bahrain Islands and Gatar included in Commonwealth Countries Total 1967-1970, in other Countries Total 1971.

(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

| Producing Country | Long tons | | | | Tonnes | |
|-------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Trinidad (a) | 21,818 | 19,000 | 16,700 | 15,700 | 16,000 | <i>n.a.</i> |
| Brunei | 57,000 | 55,000 | 50,500 | 49,000 | 50,000 | 60,400 |
| OTHER COUNTRIES | | | | | | |
| Austria | 1,000 | 2,000 | 2,000 | — | — | <i>n.a.</i> |
| France | 308,843 | 313,292 | 392,609 | 431,714 | 438,642 | <i>n.a.</i> |
| Germany (Federal) .. | 8,000 | 8,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Italy | 105,115 | <i>r</i> 119,000 | <i>r</i> 117,000 | 95,000 | 97,000 | 62,000 |
| Poland | 24,000 | 24,000 | 25,000 | 26,200 | 26,600 | <i>n.a.</i> |
| Roumania | 404,000 | 389,000 | 384,000 | 376,000 | 382,000 | <i>n.a.</i> |
| Yugoslavia | 18,000 | 22,200 | 22,500 | 24,200 | 24,600 | 28,000 |
| Algeria | 676,000 | 732,000 | 915,000 | 990,000 | 1,003,000 | <i>n.a.</i> |
| Egypt | 4,000 | 5,000 | 2,000 | 3,000 | 3,000 | <i>n.a.</i> |
| Mexico | 1,955,000 | 2,088,000 | 2,173,000 | 2,437,000 | 2,476,000 | <i>n.a.</i> |
| United States | 15,638,000 | 16,664,000 | 17,726,000 | 18,507,000 | 18,804,000 | 18,800,000 |
| Argentina | <i>r</i> 64,688 | <i>r</i> 57,752 | <i>r</i> 60,413 | 78,986 | 80,253 | <i>n.a.</i> |
| Chile | 56,000 | 58,000 | 51,000 | 46,000 | 47,000 | <i>n.a.</i> |
| Colombia | 60,000 | <i>r</i> 90,000 | <i>r</i> 110,000 | 130,000 | 130,000 | <i>n.a.</i> |
| Ecuador | 14,311 | 13,000 | 15,662 | 15,000 | 15,000 | <i>n.a.</i> |
| Peru | 79,462 | 78,060 | 81,082 | 70,999 | 72,138 | <i>n.a.</i> |
| Venezuela | 423,000 | 400,000 | 429,000 | 533,000 | 542,000 | <i>n.a.</i> |
| Japan | 3,000 | 4,000 | 4,000 | 3,800 | 3,860 | <i>n.a.</i> |
| WORLD'S TOTAL (b) | 20,000,000 | 21,000,000 | 22,000,000 | 23,000,000 | 24,000,000 | 24,000,000 |

(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 ft | Million m³

| Producing Country | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|-------------------------------|------------|------------|--------------|--------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom .. | 16,664 | 71,351 | 178,673 | 391,958 | 11,099 | 18,460 |
| Nigeria | 5,424 | 5,190 | 2,260 | 2,839 | 80 | <i>n.a.</i> |
| Canada | 1,471,598 | 1,692,301 | r 1,977,838 | 2,277,109 | 64,481 | 70,813 |
| Barbados | 108 | 97 | 108 | 117 | 3 | <i>n.a.</i> |
| Trinidad | 53,747 | 56,402 | 56,686 | 56,489 | 1,600 | 1,582 |
| Brunei | 8,899 | 8,474 | 123,267 | 135,927 | 3,849 | 3,501 |
| India | 16,457 | 21,330 | 25,744 | 23,873 | 676 | 753 |
| Pakistan | 83,288 | 91,525 | 116,921 | 133,856 | 3,790 | 3,049 |
| Australia | 152 | 216 | 9,375 | 53,061 | 1,502 | 2,274 |
| New Zealand .. | 4 | 3 | 2 | 3,769 | 107 | 301 |
| OTHER COUNTRIES | | | | | | |
| Austria | 63,469 | 57,600 | 52,379 | 67,006 | 1,897 | 1,891 |
| Bulgaria | 11,605 | 17,876 | 18,540 | 16,720 | 474 (a) | 433 |
| Czechoslovakia .. | 31,900 | 39,100 | 41,672 | (a) 33,000 | (a) 934 | <i>n.a.</i> |
| France | r 196,456 | r 200,658 | r 229,793 | 242,965 | 6,800 | 7,149 |
| Germany (Federal) | 148,476 | 223,841 | 310,531 | 440,463 | 12,463 | 15,071 |
| Hungary | 72,219 | 95,032 | 114,243 | 122,506 | 3,469 | 3,713 |
| Italy | r 328,678 | 367,590 | 422,828 | 465,129 | 13,171 | 13,380 |
| Netherlands .. | 246,900 | 496,400 | 771,700 | 1,118,350 | 31,668 | 43,797 |
| Poland | 55,440 | 90,300 | 138,575 | 183,000 | 5,182 | 5,383 |
| Roumania | 731,000 | 774,600 | 842,900 | 875,500 | 24,800 | 25,031 |
| U.S.S.R. | 5,593,800 | 6,000,000 | (a)6,000,000 | (a)7,000,000 | (a) 200,000 | (a) 212,000 |
| Yugoslavia | 16,280 | 20,624 | 25,784 | 34,500 | 977 | 1,151 |
| Algeria (Sahara) | 76,209 | 87,510 | 105,414 | 105,873 | 2,998 | <i>n.a.</i> |
| Gabon | 611 | 883 | 742 | 1,123 | 32 | 32 |
| Morocco | 379 | 382 | 1,484 | 1,539 | 44 | 48 |
| Tunisia | 326 | 334 | 328 | 316 | 9 | 1 |
| Mexico | 571,674 | 576,759 | 608,119 | 665,327 | 18,840 | 18,220 |
| United States .. | 18,171,000 | 19,322,400 | 20,698,000 | 21,920,642 | 620,723 | 636,940 |
| Argentina | 169,087 | 188,580 | 188,157 | 212,311 | 6,012 | 6,444 |
| Brazil | 30,888 | 34,700 | 44,069 | 44,623 | 1,264 | 1,177 |
| Chile | 60,000 | 68,298 | 79,952 | 94,325 | 2,700 | 7,986 |
| Colombia | 40,640 | 41,500 | 47,250 | 51,997 | 1,472 | 1,400 |
| Peru | 15,000 | 16,800 | 17,400 | 16,800 | 476 | <i>n.a.</i> |
| Venezuela | 265,233 | 272,800 | 281,810 | 317,407 | 8,988 | 9,360 |
| Formosa | 18,616 | 24,878 | 31,554 | 32,400 | 917 | 1,090 |
| Indonesia | 98,000 | r 116,025 | (a) 110,000 | 108,435 | 3,071 | <i>n.a.</i> |
| Iran | 51,000 | 54,600 | 98,300 | 194,200 | 5,500 | 15,612 |
| Israel | 3,860 | 5,001 | 4,980 | 4,732 | 134 | 124 |
| Japan | 66,735 | 72,620 | 77,880 | 83,299 | 2,359 | 2,433 |
| Kuwait | 69,920 | (a) 87,000 | 192,000 | 204,000 | 5,800 | 4,400 |

*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: 1967—4,712; 1968—4,855; 1969—4,752; 1970—4,677. (Million m³): 1970—132; 1971—129.

Shipments from Bureau of Mines plants: 1967—607; 1968—478; 1969—360; 1970—230. (Million m³): 1970—7; 1971—5.

(a) Estimated.

PRODUCTION OF ASPHALT ROCK

| Producing Country | Long tons | | | | Tonnes | |
|---------------------------|-----------|-----------|-----------|---------|---------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| France | 125,495 | 111,145 | 112,082 | 110,940 | 112,720 | 113,290 |
| Germany (Federal) | 80,318 | 74,152 | 68,380 | 69,055 | 70,163 | 72,376 |
| Italy | r 301,630 | r 260,957 | r 209,283 | 201,422 | 204,654 | 167,774 |
| Angola | 26,600 | 30,100 | 38,664 | 36,372 | 36,956 | 56,103 |

PRODUCTION OF NATURAL ASPHALT, ETC.

| Producing Country | Long tons | | | | Tonnes | |
|-------------------------|-----------|---------|---------|---------|---------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Trinidad | 142,444 | 136,041 | 122,495 | 128,319 | 130,378 | 123,860 |
| OTHER COUNTRIES | | | | | | |
| Spain | 18,960 | 17,712 | 18,759 | 19,615 | 19,930 | <i>n.a.</i> |
| Argentina— | | | | | | |
| Grahamite ("Rafaelite") | 681 | 555 | 427 | 555 | 564 | <i>n.a.</i> |
| Impsonite | r 3,115 | r 1,390 | 3,003 | 4,932 | 5,011 | <i>n.a.</i> |
| Turkey | 11,186 | 25,441 | 21,042 | 34,957 | 35,518 | <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.

PRODUCTION OF OIL-SHALE

| Producing Country | Long tons | | | | Tonnes | |
|---------------------------|-----------|---------|---------|---------|---------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| Austria | 589 | 394 | 502 | 512 | 520 | 490 |
| France | 3,016 | 3,497 | 3,921 | 5,000 | 5,000 | 1,000 |
| Germany (Federal) | 108,303 | 108,434 | 115,154 | 121,818 | 123,773 | 110,845 |
| Sweden (a) | 715,398 | 714,866 | 435,966 | 265,673 | 269,936 | 281,604 |

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

(a) Alum shale.

PRODUCTION OF PETROLEUM REFINERY PRODUCTS IN CERTAIN COUNTRIES*

| Producing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|------------|------------|------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom (a)— | | | | | | |
| Aviation and motor spirit | 9,272,000 | 9,809,000 | 10,377,000 | 11,454,000 | 11,638,000 | 12,705,000 |
| Other spirit | 154,000 | 247,000 | 195,000 | 186,000 | 189,000 | 131,000 |
| Kerosine | 3,980,000 | 4,652,000 | 5,366,000 | 5,760,000 | 5,852,000 | 6,247,000 |
| Gas oil and diesel oil .. | 14,005,000 | 16,874,000 | 19,170,000 | 22,159,000 | 22,515,000 | 24,454,000 |
| Fuel oil | 30,282,000 | 33,718,000 | 37,661,000 | 42,181,000 | 42,858,000 | 43,173,000 |
| Fuel used in refineries .. | 4,673,000 | 5,073,000 | 5,547,000 | 5,933,000 | 6,028,000 | 6,184,000 |
| Lubricating oil | 994,000 | 1,019,000 | 1,183,000 | 1,303,000 | 1,324,000 | 1,430,000 |
| Bitumen | 1,722,000 | 1,726,000 | 1,695,000 | 1,886,000 | 1,916,000 | 2,094,000 |
| Paraffin wax | 56,000 | 56,000 | 58,000 | 65,000 | 66,000 | 65,000 |
| Ghana— | | | | | | |
| Motor spirit | 136,484 | 137,489 | 175,830 | 152,196 | 154,639 | 195,295 |
| Kerosine | 39,989 | 58,315 | 64,828 | 72,210 | 73,369 | 78,363 |
| Gas oil | 201,952 | 196,485 | 239,344 | 241,772 | 245,652 | 240,832 |
| Fuel oil | 264,608 | 266,877 | 416,819 | 316,427 | 321,506 | 301,476 |
| Kenya— | | | | | | |
| Motor spirit | 265,000 | 253,000 | 288,000 | 308,300 | 313,300 | <i>n.a.</i> |
| Kerosine | 214,000 | 202,000 | 267,000 | 364,000 | 370,000 | <i>n.a.</i> |
| Gas and diesel oil | 381,000 | 400,000 | 426,000 | 436,000 | 443,000 | <i>n.a.</i> |
| Asphalt | 49,000 | 40,000 | 54,000 | 92,000 | 94,000 | <i>n.a.</i> |
| Barbados— | | | | | | |
| Motor spirit | 19,816 | 25,933 | 28,154 | 30,746 | 31,240 | <i>n.a.</i> |
| Kerosine | 13,137 | 12,829 | 13,353 | 11,302 | 11,484 | <i>n.a.</i> |
| Gas oil | 3,979 | 2,776 | 2,834 | 3,725 | 3,785 | <i>n.a.</i> |
| Diesel oil | 29,591 | 29,201 | 42,546 | 37,915 | 38,524 | <i>n.a.</i> |
| Fuel oil | 20,565 | 21,698 | 24,673 | 28,881 | 29,345 | <i>n.a.</i> |
| Asphalt | 6,080 | 5,724 | 5,488 | 4,238 | 4,306 | <i>n.a.</i> |
| Canada (b)— | | | | | | |
| Aviation spirit | 153,454 | 164,740 | 157,286 | 130,846 | 132,946 | 132,426 |
| Motor spirit | 16,120,783 | 16,981,395 | 17,813,664 | 18,770,040 | 19,071,299 | 19,470,201 |
| Naphtha | 290,769 | 286,002 | 277,060 | 284,546 | 289,112 | 418,627 |
| Kerosine | 2,360,522 | 2,340,912 | 2,583,483 | 2,740,689 | 2,784,677 | 2,968,335 |
| Aviation turbine fuel .. | 1,001,648 | 1,245,000 | 1,438,256 | 1,810,010 | 1,839,061 | 2,096,468 |
| Gas oil, etc. | 8,276,930 | 8,893,411 | 9,204,720 | 9,872,862 | 10,031,322 | 10,786,697 |
| Diesel oil | 6,103,025 | 6,609,122 | 6,811,624 | 7,516,543 | 7,637,184 | 8,418,929 |
| Fuel oil | 9,849,580 | 10,811,396 | 11,280,759 | 12,358,527 | 12,556,881 | 15,477,114 |
| Lubricating oil and grease | 273,783 | 246,462 | 274,869 | 367,121 | 373,013 | 387,810 |
| Coke | 211,401 | 204,516 | 198,582 | 180,787 | 183,689 | 165,091 |
| Asphalt | 1,996,847 | 2,025,421 | 2,062,698 | 2,298,387 | 2,335,256 | 2,430,784 |
| Jamaica— | | | | | | |
| Motor spirit | 175,871 | 182,000 | 241,000 | 260,000 | 264,000 | <i>n.a.</i> |
| Kerosine and jet fuel .. | 96,802 | 125,000 | 170,000 | 155,000 | 158,000 | <i>n.a.</i> |
| Diesel oil | 197,819 | 206,700 | 300,000 | 307,000 | 312,000 | <i>n.a.</i> |
| Fuel oil | 487,557 | 580,000 | 672,000 | 804,000 | 817,000 | <i>n.a.</i> |
| Asphalt | 18,118 | 20,000 | 23,600 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Trinidad— | | | | | | |
| Aviation spirit | 178,831 | 54,451 | 61,262 | 25,140 | 25,544 | 23,698 |
| Motor spirit | 2,310,045 | 2,392,654 | 2,490,658 | 2,392,880 | 2,431,286 | 2,673,260 |
| White spirit | 23,770 | 892 | 1,264 | 1,386 | 1,408 | 1,344 |
| Kerosine | 464,512 | 468,232 | 320,011 | 829,983 | 843,405 | 749,846 |
| Aviation turbine fuel .. | 1,483,213 | 1,941,371 | 1,922,455 | 1,583,914 | 1,609,336 | 1,490,528 |
| Gas and diesel oil .. | 2,668,836 | 2,509,363 | 2,255,757 | 2,108,376 | 2,142,216 | 2,581,347 |
| Fuel oil | 11,542,084 | 12,387,013 | 12,874,834 | 13,316,901 | 13,530,637 | 11,745,847 |

*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.)

| Producing Country and Description | Long tons | | | | Tonnes | |
|---------------------------------------|---------------|-------------|-----------|-----------|-----------|-----------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Trinidad (cont.)— | | | | | | |
| Lubricating oil and greases | 205,229 | 152,880 | 205,280 | 187,726 | 190,739 | 180,642 |
| Bitumen | 47,586 | 32,482 | 31,345 | 31,832 | 32,343 | 28,383 |
| Other products .. | 217,088 | 218,775 | 259,549 | 193,467 | 196,571 | 172,429 |
| India— | | | | | | |
| Motor and other spirits | 1,305,000 | 1,356,000 | 1,362,000 | 1,378,000 | 1,400,000 | n.a. |
| Kerosine | 1,992,000 | 2,409,000 | 2,498,000 | 2,866,000 | 2,912,000 | n.a. |
| Gas and diesel oils .. | 3,916,000 | 4,222,000 | 4,644,000 | 4,711,000 | 4,787,000 | n.a. |
| Fuel oil, etc. | 3,606,000 | 3,997,000 | 4,194,000 | 4,172,000 | 4,239,000 | n.a. |
| Lubricating oils .. | 63,000 | 61,000 | 98,000 | 232,000 | 236,000 | n.a. |
| Bitumen | 525,000 | 567,000 | 679,000 | 753,000 | 765,000 | n.a. |
| Pakistan— | | | | | | |
| Motor spirit | r 248,000 | r 297,000 | 330,000 | 317,000 | 322,000 | n.a. |
| Kerosine | r 566,000 | r 680,000 | 948,000 | 908,000 | 922,000 | n.a. |
| Diesel oil | r 687,000 | r 801,000 | 988,000 | 946,000 | 961,000 | n.a. |
| Fuel oil | r 1,468,000 | r 1,456,000 | 1,628,000 | 1,558,000 | 1,583,000 | n.a. |
| Lubricating oil .. | r 54,000 | r 50,000 | 73,000 | 69,000 | 70,000 | n.a. |
| Bitumen | 20,000 | 21,000 | n.a. | n.a. | n.a. | n.a. |
| Sarawak— | | | | | | |
| Motor spirit | 494,000 | 596,400 | 718,000 | 786,000 | 799,000 | 733,000 |
| Gas and diesel oils .. | 379,900 | 164,400 | 195,000 | 235,000 | 239,000 | 22,000 |
| Fuel oil | 90,500 | 77,800 | 71,000 | 238,000 | 242,000 | 17,000 |
| Feedstocks (b) | 1,680,100 | 2,049,100 | 2,123,000 | 1,856,000 | 1,886,000 | 1,517,000 |
| Australia— | | | | | | |
| Aviation spirit | 37,465 | 34,550 | 24,333 | 27,000 | 27,000 | 45,900 |
| Motor spirit | 5,983,011 | 6,400,000 | 6,738,476 | 7,100,000 | 7,214,000 | 7,258,700 |
| Kerosine | 420,909 | 507,316 | 566,872 | 569,000 | 578,000 | 661,600 |
| Aviation turbine fuel .. | 671,319 | 782,109 | 860,873 | 1,074,000 | 1,091,000 | 1,326,000 |
| Gas and diesel oils .. | 3,155,132 | 3,469,805 | 3,976,876 | 4,055,000 | 4,120,000 | 4,293,000 |
| Fuel oil | 5,936,630 | 6,518,401 | 5,674,811 | 6,082,000 | 6,180,000 | 5,418,000 |
| do. (used in refineries) | 2,066,043 | 2,228,938 | 2,237,083 | 2,235,000 | 2,271,000 | 2,344,000 |
| Lubricating oil | 321,749 | 337,373 | 316,120 | 362,000 | 368,000 | 416,600 |
| Bitumen | 401,445 | 405,488 | 428,274 | 440,000 | 447,000 | 444,700 |
| New Zealand— | | | | | | |
| Motor spirit | (a) 1,040,000 | 1,159,000 | 1,093,000 | 1,199,000 | 1,218,000 | n.a. |
| Diesel oil | (a) 546,000 | 586,000 | 589,000 | 654,000 | 665,000 | n.a. |
| Fuel oil | (a) 788,000 | 822,000 | 849,000 | 1,012,000 | 1,028,000 | n.a. |
| Irish Republic— | | | | | | |
| Motor spirit | 439,000 | 460,000 | 503,000 | 493,000 | 501,000 | n.a. |
| Jet fuel | 25,000 | 87,000 | 76,000 | 60,000 | 61,000 | n.a. |
| Gas and diesel oils .. | 705,000 | 620,000 | 620,000 | 629,000 | 639,000 | n.a. |
| Fuel oil | 926,000 | 900,000 | 932,000 | 1,248,000 | 1,268,000 | n.a. |

(a) Year beginning 1 April of that stated.

(b) Mainly gasoline-type and fuel oil-type.

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

| Producing Country and Description | Long tons | | | | Tonnes | |
|---|-------------|------------|------------|------------|------------|------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES | | | | | | |
| Albania— | | | | | | |
| Motor spirit | 45,000 | 46,850 | 61,000 | } n.a. | } n.a. | } n.a. |
| Kerosine | n.a. | 11,300 | n.a. | | | |
| Diesel oil | 99,000 | 109,000 | 131,000 | | | |
| Austria— | | | | | | |
| Motor spirit | 836,273 | 851,025 | 908,000 | 1,014,580 | 1,030,861 | 1,376,084 |
| Kerosine | 76,620 | 88,438 | 93,355 | 103,312 | 104,970 | 103,226 |
| Gas oil | 881,284 | 1,003,533 | 1,079,000 | 1,508,941 | 1,533,155 | 1,680,167 |
| Fuel oil | 1,963,689 | 2,216,418 | 2,400,000 | 2,525,879 | 2,566,412 | 3,418,656 |
| Lubricating oil .. | 185,427 | 253,857 | 265,000 | 306,802 | 311,725 | 276,444 |
| Bitumen | 240,570 | 236,364 | 251,000 | 262,960 | 267,180 | 276,200 |
| Belgium— | | | | | | |
| Aviation spirit and avia- tion turbine gasoline .. | 201,227 | 252,924 | 414,495 | 346,000 | 352,000 | 359,334 |
| Motor spirit | 1,922,002 | 2,501,711 | 3,021,429 | 3,520,000 | 3 577,000 | 3,761,000 |
| White spirit, etc. .. | 99,314 | 162,892 | n.a. | 208,000 | 211,000 | 229,540 |
| Kerosine, including avia- tion kerosine | 589,544 | 604,235 | 736,659 | 832,000 | 845,000 | 830,358 |
| Gas oil | 2,564,574 | 4,410,470 | 6,188,594 | 5,856,933 | 5,950,920 | 6,510,047 |
| Diesel oil | 2,128,815 | 2,379,236 | 2,728,292 | 3,417,751 | 3,472,596 | 3,366,000 |
| Fuel oil | 5,385,400 | 7,095,671 | 8,587,165 | 11,083,000 | 11,261,000 | 8,699,334 |
| Lubricating oil .. | 41,000 | 53,000 | 53,000 | 53,000 | 54,000 | 94,000 |
| Bitumen | 505,000 | 611,883 | 656,000 | 841,000 | 855,000 | 1,054,000 |
| Bulgaria— | | | | | | |
| Motor spirit | 586,000 | 595,000 | 851,000 | 1,135,000 | 1,153,000 | n.a. |
| Kerosine | 92,000 | 98,000 | 123,000 | 124,000 | 126,000 | n.a. |
| Diesel oil | 925,000 | 994,000 | 1,389,000 | 1,705,000 | 1,732,000 | n.a. |
| Fuel oil | 1,425,000 | 1,700,000 | 2,209,000 | 2,733,000 | 2,777,000 | n.a. |
| Lubricating oil .. | 46,000 | 49,000 | 39,000 | 51,800 | 52,600 | n.a. |
| Czechoslovakia— | | | | | | |
| Motor spirit | 551,000 | 733,000 | 823,000 | 884,000 | 898,000 | n.a. |
| Kerosine | 213,000 | 207,000 | 220,000 | 235,000 | 239,000 | 276,000 |
| Diesel oil | 206,000 | 251,000 | 584,000 | 599,000 | 609,000 | n.a. |
| Denmark— | | | | | | |
| Motor spirit | 1,306,000 | 1,318,000 | 1,588,000 | 1,269,583 | 1,289,956 | 1,452,742 |
| Kerosine | 192,000 | 137,000 | 142,000 | 172,176 | 174,939 | 177,709 |
| Diesel oil | } 4,365,000 | 620,889 | 793,353 | 870,346 | 884,313 | 1,097,822 |
| Fuel oil | | 4,183,429 | 5,527,316 | 6,557,003 | 6,662,224 | 6,860,343 |
| Lubricating oil .. | 4,024 | 7,000 | 8,000 | 1,068 | 1,085 | 1,399 |
| Grease | 1,810 | n.a. | n.a. | 2,965 | 3,013 | 3,313 |
| Asphalt | 61,572 | 106,805 | 123,000 | 149,883 | 152,288 | 158,558 |
| France— | | | | | | |
| Motor spirit | 10,947,000 | 11,335,000 | 12,064,000 | 12,870,000 | 13,080,000 | 13,704,000 |
| Kerosine and jet fuel .. | 2,371,000 | 2,298,000 | 2,488,000 | 2,859,000 | 2,905,000 | 2,838,000 |
| Gas and diesel oil .. | 5,713,000 | 5,861,000 | 8,869,000 | 9,349,000 | 9,499,000 | 9,632,000 |
| Fuel oils | 39,335,000 | 42,998,000 | 47,937,000 | 55,226,000 | 56,112,000 | 63,063,000 |
| Lubricating oil .. | 904,000 | 899,000 | 1,026,000 | 1,037,000 | 1,054,000 | 1,120,000 |
| Other products (a) .. | 6,024,000 | 6,719,000 | 7,798,000 | 7,960,000 | 8,088,000 | 5,336,000 |
| Germany (Federal)— | | | | | | |
| Aviation spirit | n.a. | n.a. | 303,978 | 337,890 | 343,312 | 314,628 |
| Motor spirit | 11,460,374 | 12,432,909 | 12,704,203 | 13,641,055 | 13,859,959 | 14,264,889 |
| White spirit | 128,122 | 139,272 | 126,493 | 126,605 | 128,638 | 113,995 |
| Kerosine | 986,698 | 1,167,340 | 1,042,573 | 1,222,229 | 1,241,842 | 1,292,485 |
| Diesel oil | 8,191,482 | 9,082,837 | 8,869,346 | 9,614,853 | 9,769,143 | 9,450,949 |
| Fuel oil | 44,071,482 | 49,702,020 | 54,318,241 | 60,923,758 | 61,901,429 | 63,129,545 |
| Lubricating oil .. | 918,671 | 1,146,311 | 1,227,138 | 1,180,982 | 1,199,933 | 1,187,840 |
| Grease | 44,691 | 48,467 | 50,723 | 44,720 | 45,438 | 42,431 |
| Paraffin wax | 100,434 | 112,923 | 128,838 | 133,032 | 135,167 | 135,868 |
| Coke | 447,017 | 562,562 | 565,579 | 599,800 | 609,425 | 650,234 |
| Bitumen | 3,762,346 | 4,280,429 | 4,433,571 | 4,640,484 | 4,714,950 | 4,711,102 |

(a) Other than butane and propane.

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

| Producing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|------------|------------|------------|------------|------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Greece— | | | | | | |
| Motor spirit | 373,568 | 460,320 | 513,000 | 573,000 | 582,000 | 651,000 |
| Kerosine | 104,030 | 97,595 | 92,000 | 43,000 | 44,000 | 75,000 |
| Aviation spirit | 256,939 | 310,985 | 323,000 | 353,000 | 359,000 | 369,000 |
| Diesel oil | 1,064,372 | 1,324,559 | 1,430,000 | 1,642,000 | 1,668,000 | 1,709,000 |
| Fuel oil | 1,668,446 | 1,677,930 | 1,700,000 | 1,864,000 | 1,894,000 | 1,929,000 |
| Asphalt | 68,935 | 86,871 | 148,000 | 179,000 | 182,000 | 135,000 |
| Hungary— | | | | | | |
| Motor spirit | 472,000 | 568,000 | 606,000 | 681,000 | 692,000 | <i>n.a.</i> |
| Kerosine | 2,000 | 1,000 | 1,000 | 1,000 | 1,000 | <i>n.a.</i> |
| Diesel oil | 1,241,000 | 1,369,000 | 1,501,000 | 1,694,000 | 1,721,000 | 2,114,000 |
| Fuel oil | 1,773,000 | 1,938,000 | 2,043,000 | 2,463,000 | 2,503,000 | 2,344,000 |
| Lubricating oils | 144,000 | 144,000 | 159,000 | 164,000 | 167,000 | <i>n.a.</i> |
| Bitumen | 571,000 | 560,000 | 499,000 | 461,000 | 468,000 | <i>n.a.</i> |
| Italy— | | | | | | |
| Motor spirit | 11,508,450 | 12,394,239 | 12,153,370 | 12,745,065 | 12,949,591 | 12,799,246 |
| White spirit | 43,398 | 32,193 | 23,499 | 20,318 | 20,644 | 21,583 |
| Kerosine | 3,420,145 | 4,257,133 | 4,779,104 | 5,742,333 | 5,834,481 | 5,990,863 |
| Gas oil | 15,706,783 | 17,494,987 | 19,573,311 | 22,652,347 | 23,015,860 | 23,736,017 |
| Fuel oil and diesel oil | 42,570,224 | 44,117,416 | 48,528,696 | 53,347,647 | 54,203,741 | 54,544,909 |
| Lubricating oil | 437,508 | 484,705 | 516,482 | 526,128 | 534,571 | 544,978 |
| Bitumen | 1,459,616 | 1,677,352 | 2,003,328 | 2,138,380 | 2,172,695 | 2,061,665 |
| Other products | 1,986,815 | 1,921,264 | 2,406,711 | 2,654,000 | 2,697,000 | 2,045,595 |
| Netherlands— | | | | | | |
| Motor spirit | 2,154,000 | 3,331,000 | 4,033,000 | 4,542,000 | 4,615,000 | 4,833,000 |
| Kerosine | 913,000 | 1,153,000 | 1,073,000 | 1,181,000 | 1,200,000 | 1,239,000 |
| Aviation fuels | 1,012,000 | 1,239,000 | 1,921,000 | 2,240,000 | 2,276,000 | 2,419,000 |
| Gas and diesel oil | 7,947,000 | 9,414,000 | 13,373,000 | 16,864,000 | 17,135,000 | 16,923,000 |
| Residual fuel oil | 14,051,000 | 15,891,000 | 21,011,000 | 25,038,000 | 25,440,000 | 23,576,000 |
| Lubricating oil | 316,000 | 274,000 | 494,000 | 463,000 | 471,000 | 558,600 |
| Poland— | | | | | | |
| Aviation and motor spirit | 995,200 | 1,456,400 | 1,475,300 | 1,597,000 | 1,623,000 | 1,862,000 |
| Kerosine | 18,700 | 41,100 | 49,200 | 147,000 | 149,000 | 71,000 |
| Gas and diesel oil | 1,243,600 | 1,661,300 | 1,910,000 | 2,176,000 | 2,211,000 | 2,623,000 |
| Fuel oil | 1,097,100 | 1,727,400 | 2,015,000 | 1,953,900 | 1,985,200 | 2,260,900 |
| Lubricating oil | 187,800 | 173,600 | 173,000 | 265,000 | 269,200 | 340,000 |
| Grease | 29,700 | 31,100 | 31,800 | 32,400 | 32,900 | |
| Paraffin wax | 13,800 | 13,900 | 15,000 | 14,900 | 15,100 | 15,900 |
| Bitumen | 343,600 | 401,600 | 478,000 | 540,000 | 548,700 | <i>n.a.</i> |
| Portugal— | | | | | | |
| Motor spirit | 400,979 | 396,581 | 454,375 | 730,941 | 742,670 | 809,976 |
| Kerosine | 187,192 | 199,675 | 200,106 | 203,868 | 207,140 | 162,573 |
| Jet fuel | 94,500 | 62,933 | 60,843 | 182,815 | 185,749 | 216,497 |
| Gas and diesel oil | 362,123 | 362,811 | 452,662 | 744,168 | 756,110 | 858,958 |
| Fuel oil | 609,194 | 597,258 | 754,063 | 1,440,256 | 1,463,368 | 1,731,851 |
| Roumania— | | | | | | |
| Motor spirit | 2,260,000 | 2,594,000 | 2,577,000 | 2,742,000 | 2,786,000 | 3,017,000 |
| Kerosine and white spirit | 908,000 | 934,000 | 988,000 | 954,000 | 969,000 | 1,050,000 |
| Gas oil | 3,961,000 | 4,299,000 | 4,520,000 | 4,969,000 | 5,049,000 | 5,277,000 |
| Fuel oil | 3,884,000 | 3,567,000 | 3,853,000 | 4,182,000 | 4,249,000 | 4,371,000 |
| Bitumen | 385,000 | 431,000 | 498,000 | 529,000 | 537,000 | 565,000 |
| Spain (a)— | | | | | | |
| Motor spirit | 2,107,000 | 2,734,000 | 2,796,000 | 3,213,521 | 3,265,089 | 3,253,000 |
| Kerosine and jet fuel | 292,000 | 362,000 | 343,000 | 330,859 | 336,168 | 320,511 |
| Gas oil | 4,501,000 | 5,915,000 | 6,303,000 | 6,659,197 | 6,766,058 | 7,394,945 |
| Diesel oil | 228,000 | 251,000 | 231,000 | 277,057 | 281,503 | 294,130 |
| Fuel oil | 10,360,000 | 13,002,000 | 14,612,000 | 14,813,672 | 15,051,394 | 15,501,840 |
| Lubricating oil | 123,000 | 137,000 | 152,000 | 199,389 | 202,589 | 214,228 |

(a) Includes "Canary Islands" production.

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

| Producing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-------------|-----------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Sweden— | | | | | | |
| Motor spirit | 757,847 | 1,160,000 | 1,213,010 | 1,279,000 | 1,300,000 | 1,342,000 |
| White spirit etc. .. | 7,977 | 5,410 | 1,794 | 32,000 | 33,000 | 28,000 |
| Kerosine | 100,000 | 233,000 | 202,192 | 170,219 | 172,951 | 147,000 |
| Fuel oil, etc. | 4,230,000 | 6,913,227 | 7,928,472 | 8,505,000 | 8,641,000 | 8,627,000 |
| Lubricating oil .. | 73,500 | 80,668 | 68,318 | 64,000 | 65,000 | 81,000 |
| Asphalt | 583,298 | 583,947 | 659,925 | 711,409 | 722,825 | <i>n.a.</i> |
| Yugoslavia— | | | | | | |
| Motor spirit | 872,006 | 920,000 | 987,000 | 1,213,000 | 1,232,000 | 1,472,000 |
| White spirit | 16,604 | 17,600 | 18,500 | 20,215 | 20,540 | 21,043 |
| Kerosine | 92,579 | 117,000 | 139,000 | 160,632 | 163,210 | 214,210 |
| Gas oil | 1,367,063 | 1,358,000 | 1,696,000 | 2,058,000 | 2,091,000 | 2,665,000 |
| Fuel oil | 1,787,319 | 1,819,000 | 1,937,000 | 2,469,000 | 2,509,000 | 2,930,000 |
| Lubricating oil .. | 135,820 | 101,000 | 87,000 | 101,086 | 102,708 | 114,181 |
| Bitumen | 168,000 | 241,000 | 309,000 | 352,112 | 357,762 | 376,064 |
| Other products .. | 19,453 | 1,702 | 2,243 | 2,164 | 2,199 | 5,063 |
| Angola— | | | | | | |
| Motor spirit | 54,997 | 64,841 | 60,722 | 55,232 | 56,118 | 52,385 |
| Kerosine | 7,197 | 8,124 | 7,399 | 17,436 | 17,716 | 18,449 |
| Jet fuel | 41,729 | 46,120 | 46,117 | 72,274 | 73,434 | 69,781 |
| Gas and diesel oil .. | 105,439 | 133,313 | 96,835 | 96,823 | 98,377 | 100,807 |
| Fuel oil | 356,896 | 348,844 | 383,117 | 385,493 | 391,679 | 388,847 |
| Asphalt | 7,458 | 11,108 | 10,516 | 13,286 | 13,499 | 16,733 |
| Canary Islands— | | | | | | |
| Motor spirit | 610,785 | 707,951 | 639,270 | 544,979 | 553,724 | 554,304 |
| Kerosine | 129,848 | 184,747 | 104,869 | 8,984 | 9,128 | 16,307 |
| Jet fuel | <i>n.a.</i> | 24,505 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Gas oil | 1,079,443 | 1,137,219 | 1,165,928 | 943,405 | 958,544 | 1,136,698 |
| Diesel oil | 203,581 | 104,251 | 224,773 | 209,920 | 213,289 | 210,165 |
| Fuel oil | 3,864,101 | 3,883,070 | 4,382,867 | 3,923,967 | 3,986,935 | 4,173,723 |
| Lubricating oil .. | 57,454 | 62,280 | <i>n.a.</i> | 72,340 | 73,501 | 81,879 |
| Asphalt | 137,980 | 129,454 | <i>n.a.</i> | 101,034 | 102,655 | 101,646 |
| Egypt— | | | | | | |
| Motor spirit | 724,590 | 754,000 | 436,000 | 487,100 | 494,900 | 695,000 |
| Kerosine | 808,831 | 619,000 | 405,000 | 507,600 | 515,700 | 740,000 |
| Jet fuel | | | | | | |
| Gas and diesel oil .. | 1,139,713 | 956,000 | 476,700 | 543,800 | 552,500 | 749,000 |
| Fuel oil | 3,185,494 | 2,997,000 | 1,405,700 | 1,598,100 | 1,623,700 | 2,572,700 |
| Asphalt | 96,850 | 141,000 | 40,000 | 58,200 | 59,100 | 73,000 |
| Morocco— | | | | | | |
| Motor spirit | 248,000 | 280,000 | 306,639 | 296,000 | 300,900 | 337,500 |
| Kerosine | 65,000 | 73,000 | 114,545 | 75,000 | 76,000 | 43,000 |
| Gas and fuel oils .. | 840,000 | 848,000 | 918,000 | 905,000 | 920,000 | 880,000 |
| Mozambique— | | | | | | |
| Motor spirit | 130,391 | 140,183 | 140,579 | 131,615 | 133,727 | 130,975 |
| Gas oil | 220,994 | 246,916 | 215,574 | 188,823 | 191,853 | 194,470 |
| Fuel oil | 342,364 | 361,066 | 347,119 | 326,223 | 331,458 | 356,963 |
| South Africa— | | | | | | |
| Motor spirit | 1,897,000 | 1,817,000 | 1,999,000 | 2,311,000 | 2,348,000 | <i>n.a.</i> |
| Kerosine | 153,000 | 120,000 | 141,000 | 287,000 | 292,000 | |
| Jet fuel | 117,000 | 68,000 | 74,000 | 97,000 | 99,000 | |
| Gas and diesel oil .. | 1,849,000 | 1,737,000 | 1,794,000 | 1,920,000 | 1,951,000 | |
| Fuel oil | 2,714,000 | 2,749,000 | 2,773,000 | 2,065,000 | 2,098,000 | |
| Costa Rica— | | | | | | |
| Motor spirit | 20,554 | 55,351 | 58,506 | 56,034 | 56,930 | 80,857 |
| Diesel oil | 36,559 | 117,342 | 122,199 | 114,753 | 116,589 | 175,897 |
| Fuel oil | 23,066 | 67,104 | 83,093 | 78,000 | 79,000 | <i>n.a.</i> |
| Kerosine | 3,619 | 15,921 | 18,382 | 18,006 | 18,294 | 21,212 |

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

| Producing Country and Description | Long tons | | | | Tonnes | |
|-----------------------------------|---------------|---------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Guatemala— | | | | | | |
| Motor spirit | 135,125 | 150,602 | 146,945 | 198,092 | 201,271 | 176,332 |
| Kerosine | 39,568 | 43,971 | 46,050 | 48,324 | 49,099 | 51,356 |
| Aviation turbine fuel | 22,184 | 25,674 | 27,711 | 30,504 | 30,993 | 35,355 |
| Diesel oil | 167,965 | 204,765 | 216,900 | 213,552 | 216,979 | 217,642 |
| Fuel oil | 220,788 | 225,126 | 256,660 | 258,725 | 262,877 | 242,340 |
| Mexico— | | | | | | |
| Aviation spirit | 70,988 | 58,000 | 61,154 | 54,500 | 55,400 | } n.a. |
| Motor spirit | 3,113,000 | 3,300,685 | 3,468,303 | 3,200,000 | 3,300,000 | |
| Kerosine | 1,697,975 | 1,689,133 | 1,712,465 | 1,739,700 | 1,767,600 | |
| Gas and diesel oil | 5,115,221 | 5,838,066 | 6,076,640 | 4,153,000 | 4,220,000 | |
| Fuel oil | 6,328,194 | 6,300,000 | 6,500,000 | 6,941,700 | 7,053,100 | |
| Lubricating oil | 187,941 | 176,000 | 191,780 | 270,000 | 274,000 | |
| Grease | 8,605 | 8,859 | 8,128 | 7,000 | 7,000 | |
| Paraffin wax | 49,909 | 41,000 | 51,034 | 50,000 | 50,000 | |
| Asphalt | 999,824 | 1,088,128 | 1,268,015 | 1,343,800 | 1,365,400 | |
| Netherlands Antilles (a)— | | | | | | |
| Aviation spirit | 1,062,000 | 714,534 | 595,000 | 474,000 | 482,000 | } n.a. |
| Motor spirit | 3,248,000 | 3,089,424 | 3,378,000 | 3,500,000 | 3,556,000 | |
| White spirit | 61,000 | 34,447 | 13,000 | 4,000 | 4,000 | |
| Kerosine | 530,000 | 726,344 | 547,000 | 357,000 | 363,000 | |
| Aviation turbine fuel | 4,168,000 | 4,053,946 | 4,192,000 | 3,516,000 | 3,572,000 | |
| Gas oil | 2,790,000 | 1,715,472 | 2,026,000 | 2,323,000 | 2,360,000 | |
| Diesel oil | 1,466,000 | 1,853,261 | 1,210,000 | 1,382,000 | 1,404,000 | |
| Fuel oil | 20,579,000 | 21,469,470 | 23,840,000 | 27,312,000 | 27,750,000 | |
| Lubricating oil | 420,000 | 483,245 | 358,000 | 436,000 | 443,000 | |
| Asphalt | 999,000 | 1,080,659 | 1,022,000 | 1,011,000 | 1,027,000 | |
| Nicaragua— | | | | | | |
| Motor spirit | 92,000 | 100,000 | 75,000 | 107,800 | 109,500 | } n.a. |
| Kerosine | 28,000 | 28,000 | 28,000 | 30,000 | 30,000 | |
| Gas and diesel oil | 82,000 | 101,000 | 91,000 | 123,000 | 125,000 | |
| Fuel oil | 82,000 | 99,000 | 92,000 | 136,000 | 138,000 | |
| Panama— | | | | | | |
| Motor spirit | 322,000 | 351,000 | 359,000 | 384,000 | 390,000 | } n.a. |
| Kerosine | 110,000 | 51,000 | 76,000 | 53,000 | 54,000 | |
| Jet fuel | 165,000 | 102,000 | 240,000 | 162,000 | 165,000 | |
| Gas and diesel oil | 662,000 | 660,000 | 760,000 | 691,000 | 702,000 | |
| Fuel oil | 1,490,000 | 1,473,000 | 1,953,000 | 1,869,000 | 1,899,000 | |
| Salvador— | | | | | | |
| Motor spirit | 122,810 | 108,000 | 66,000 | 35,000 | 36,000 | } n.a. |
| Kerosine | 64,954 | 46,000 | 29,000 | 21,000 | 21,000 | |
| Diesel oil | 150,322 | 145,000 | 75,000 | 41,000 | 42,000 | |
| United States— | | | | | | |
| Aviation spirit | } 212,000,000 | } 223,872,000 | 2,940,000 | 2,190,000 | 2,225,000 | 2,120,000 |
| Motor spirit | | | 229,702,000 | 239,325,000 | 243,164,000 | 255,000,000 |
| Kerosine (b) | } 47,556,000 | } 53,009,000 | 54,037,000 | 50,607,000 | 51,419,000 | n.a. |
| Jet fuels (military) | | | | | | |
| Distillate fuel oil | 109,198,000 | 114,068,000 | 115,116,000 | 121,723,000 | 123,675,000 | 122,000,000 |
| Residual fuel oil | 40,244,000 | 40,223,000 | 38,778,000 | 37,554,000 | 38,156,000 | 40,200,000 |
| Lubricating oil | 9,082,000 | 9,196,000 | 9,111,000 | 9,266,000 | 9,415,000 | 9,300,000 |
| Paraffin wax | 715,000 | 736,000 | 756,000 | 787,000 | 800,000 | 900,000 |
| Coke | 16,238,000 | 16,998,000 | 18,369,000 | 19,263,000 | 19,572,000 | 19,800,000 |
| Asphalt | 20,741,000 | 21,990,000 | 22,028,000 | 23,808,000 | 24,190,000 | 26,600,000 |
| Road oil | 1,110,000 | 1,086,000 | 1,445,000 | 1,494,000 | 1,518,000 | 1,500,000 |
| Argentina— | | | | | | |
| Aviation spirit | 60,800 | 38,758 | 45,000 | 41,000 | 42,000 | 42,900 |
| Motor spirit | 3,409,500 | 3,476,403 | 3,677,000 | 3,915,000 | 3,978,000 | 4,282,000 |
| Kerosine | 853,900 | 798,790 | 825,000 | 874,000 | 888,000 | 755,000 |
| Gas oil | 2,518,200 | 2,675,600 | } 4,518,000 | 3,118,000 | 3,168,000 | 3,832,000 |
| Diesel oil | 1,169,700 | 1,223,400 | | 1,614,000 | 1,640,000 | 1,889,000 |
| Fuel oil | 7,727,700 | 7,896,500 | 6,948,000 | 8,319,000 | 8,453,000 | 9,200,000 |
| Lubricating oil | 115,000 | 105,900 | 224,000 | 153,000 | 155,000 | n.a. |

(a) Exports.

(b) Including commercial jet fuel.

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

| Producing Country and Description | Long tons | | | | Tonnes | | |
|--------------------------------------|------------|-------------|------------|------------|------------|------------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 | |
| OTHER COUNTRIES (cont.) | | | | | | | |
| Bolivia— | | | | | | | |
| Motor spirit | 173,000 | 189,000 | 211,681 | 214,422 | 217,863 | 252,800 | |
| Kerosine | 83,000 | 89,000 | 94,389 | 101,507 | 103,136 | 109,100 | |
| Diesel oil | 91,000 | 85,000 | 83,608 | 87,731 | 89,139 | 98,500 | |
| Fuel oil | 118,000 | 150,000 | 139,684 | 137,210 | 139,412 | 144,200 | |
| Brazil— | | | | | | | |
| Motor spirit | 4,798,000 | 5,371,000 | 6,144,915 | 6,887,885 | 6,998,367 | } n.a. | |
| Kerosine | 767,000 | 983,957 | 1,195,039 | 1,272,566 | 1,292,978 | | |
| Diesel oil | 4,058,000 | 4,794,936 | 5,194,919 | 5,695,595 | 5,786,952 | | |
| Fuel oil | 5,882,000 | 6,844,107 | 8,228,278 | 8,305,420 | 8,438,697 | | |
| Lubricating oil | — | 5,000 | 9,000 | n.a. | n.a. | | |
| Paraffin wax | 131 | 5,000 | 7,000 | n.a. | n.a. | | |
| Asphalt | 495,389 | 662,395 | 638,393 | 691,203 | 702,295 | | |
| Chile— | | | | | | | |
| Aviation spirit | } 975,000 | 1,007,900 | 1,138,000 | 1,117,000 | 1,135,000 | 10,905 | |
| Motor spirit | | | | | | 1,302,800 | |
| Kerosine | | 293,500 | 315,190 | 325,640 | 346,000 | 351,500 | 460,213 |
| Diesel oil | | } 1,530,000 | 1,759,900 | 1,795,000 | 1,541,000 | 1,565,700 | 782,756 |
| Fuel oil | | | | | | | |
| Colombia— | | | | | | | |
| Aviation spirit | 82,847 | 76,049 | 68,813 | 62,052 | 63,047 | 54,287 | |
| Motor spirit | 1,475,979 | 1,537,472 | 1,581,712 | 1,761,063 | 1,789,310 | 1,907,058 | |
| Kerosine | 323,274 | 376,479 | 400,478 | 451,945 | 459,194 | 434,420 | |
| Jet fuel | 66,892 | 106,264 | 138,036 | 164,433 | 167,071 | 191,644 | |
| Gas oil | 40,322 | 37,853 | 23,508 | n.a. | n.a. | 59,323 | |
| Diesel oil | 728,702 | 984,240 | 897,992 | 858,310 | 872,083 | 1,006,506 | |
| Fuel oil | 2,110,210 | 2,406,399 | 2,279,776 | 2,303,000 | 2,340,000 | 2,685,100 | |
| Lubricating oil and grease | 58,107 | 59,161 | 65,444 | 79,734 | 81,013 | 41,884 | |
| Coke | 125,463 | 160,069 | 147,329 | n.a. | n.a. | 139,200 | |
| Asphalt | 94,032 | 122,512 | 110,582 | 109,737 | 111,497 | 99,012 | |
| Ecuador— | | | | | | | |
| Motor spirit | 261,251 | 319,000 | 296,568 | 355,656 | 361,363 | } n.a. | |
| Kerosine | 63,412 | } 123,000 | 79,432 | 62,261 | 63,260 | | |
| Aviation turbine fuel | 38,942 | | 55,249 | 77,767 | 79,015 | | |
| Diesel oil | 164,055 | 204,000 | 208,717 | 249,941 | 253,952 | | |
| Residual fuel oil | 226,516 | 277,000 | 339,622 | 339,731 | 345,183 | | |
| Peru— | | | | | | | |
| Aviation spirit | r 3,770 | r 2,690 | 3,340 | 1,298 | 1,319 | } n.a. | |
| Motor spirit | r 841,840 | r 1,096,360 | 1,113,560 | 1,088,890 | 1,106,356 | | |
| Kerosine | r 464,330 | r 494,490 | 482,578 | 504,361 | 512,451 | | |
| Aviation turbine fuel | r 149,540 | r 168,280 | 188,390 | 195,453 | 198,588 | | |
| Diesel oil | r 780,180 | r 894,360 | 937,310 | 924,370 | 939,197 | | |
| Fuel oil | r 926,730 | r 1,187,730 | 1,132,490 | 1,132,338 | 1,150,501 | | |
| Lubricating oil and grease | r 10,656 | r 8,919 | 9,112 | 11,045 | 11,222 | | |
| Asphalt | 32,352 | 25,374 | 34,521 | n.a. | n.a. | | |
| Uruguay— | | | | | | | |
| Motor spirit | 261,064 | 229,996 | 260,358 | 258,200 | 262,300 | 251,058 | |
| Kerosine | 159,522 | 133,205 | 158,779 | 166,000 | 168,700 | 168,700 | |
| Aviation turbine fuel | 18,894 | 17,076 | 23,024 | 23,000 | 23,400 | 21,400 | |
| Gas oil | 234,927 | 210,029 | 270,904 | 294,000 | 298,700 | 314,600 | |
| Diesel oil | 59,437 | 48,146 | 52,003 | 58,000 | 58,900 | 59,849 | |
| Fuel oil | 701,059 | 567,666 | 675,293 | 680,000 | 690,900 | 780,566 | |
| Lubricating oil | 144 | 286 | 344 | 350 | 360 | 330 | |
| Asphalt | 13,000 | 23,315 | 30,170 | 38,000 | 38,600 | 34,060 | |
| Venezuela— | | | | | | | |
| Motor spirit | 5,923,000 | 6,664,000 | 6,912,000 | 7,500,000 | 7,620,000 | 3,218,000 | |
| Kerosine | 641,000 | 603,000 | 714,000 | 550,000 | 559,000 | 560,000 | |
| Gas and diesel oils | 8,253,000 | 9,357,000 | 7,489,000 | 7,481,000 | 7,601,000 | 7,964,000 | |
| Fuel oil | 37,300,000 | 37,700,000 | 37,553,000 | 43,390,000 | 44,086,000 | 42,068,000 | |
| Lubricating oil | 530,000 | 588,000 | 501,000 | 539,000 | 548,000 | 548,000 | |
| Asphalt | 870,000 | 870,000 | 767,000 | 810,000 | 823,000 | 956,000 | |

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

| Producing Country and Description | Long tons | | | | Tonnes | | | | | | | |
|-----------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|------------|------------|------------|------------|------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 | | | | | | |
| OTHER COUNTRIES (cont.) | | | | | | | | | | | | |
| Bahrain— | | | | | | | | | | | | |
| Motor spirit | 963,000 | 797,000 | 920,000 | 953,000 | 968,000 | } n.a. | | | | | | |
| Kerosine | 295,000 | 237,000 | 145,000 | 140,000 | 142,000 | | | | | | | |
| Jet fuel | 1,671,000 | 1,904,000 | 1,754,000 | 1,985,000 | 2,017,000 | | | | | | | |
| Gas and diesel oil | 1,761,000 | 1,802,000 | 2,191,000 | 2,788,000 | 2,833,000 | | | | | | | |
| Fuel oil | 5,567,000 | 5,159,000 | 5,339,000 | 5,642,000 | 5,733,000 | | | | | | | |
| Lubricating oil | 94,000 | 157,000 | 132,000 | n.a. | n.a. | | | | | | | |
| Bitumen | 3,000 | 6,000 | 10,000 | 30,000 | 30,000 | | | | | | | |
| Burma— | | | | | | | | | | | | |
| Motor spirit | 168,000 | 154,000 | 163,000 | 159,000 | 162,000 | 133,600 | | | | | | |
| Kerosine | 178,000 | 231,000 | 237,000 | 269,000 | 273,000 | 240,000 | | | | | | |
| Jet fuel (b) | 29,000 | 14,000 | 21,600 | } 291,000 | } 296,000 | } 290,000 | | | | | | |
| Diesel oil | 219,000 | 237,000 | 249,000 | | | | | | | | | |
| Paraffin wax | 16,000 | 18,000 | 18,000 | n.a. | n.a. | n.a. | | | | | | |
| Formosa— | | | | | | | | | | | | |
| Aviation spirit | } 332,000 | } 348,000 | } 437,000 | } 518,500 | } 527,000 | } 593,000 | | | | | | |
| Motor spirit | | | | | | | | | | | | |
| Kerosine | | | | | | | 20,600 | 21,800 | 15,900 | 20,100 | 20,400 | 37,600 |
| Diesel oil | | | | | | | 415,500 | 456,400 | 735,000 | 990,200 | 1,006,000 | 1,066,000 |
| Fuel oil | | | | | | | 1,127,600 | 1,636,500 | 2,169,000 | 2,451,700 | 2,491,000 | 2,630,000 |
| Lubricating oil | | | | | | | 17,300 | 22,500 | 27,400 | 32,400 | 32,900 | 37,000 |
| Asphalt | | | | | | | 96,892 | 116,777 | 118,700 | 150,300 | 152,700 | 152,000 |
| Indonesia— | | | | | | | | | | | | |
| Aviation spirit | 16,000 | 14,400 | 23,000 | 19,000 | 19,000 | } n.a. | | | | | | |
| Motor spirit | 1,304,000 | 1,260,000 | 1,241,000 | 1,419,000 | 1,442,000 | | | | | | | |
| Kerosine | 1,399,000 | 1,620,000 | 1,800,000 | 1,890,000 | 1,921,000 | | | | | | | |
| Fuel oil | 2,580,000 | 1,905,000 | 1,941,000 | 1,836,000 | 1,865,000 | | | | | | | |
| Jet fuel | 143,000 | 192,000 | 218,000 | 113,000 | 115,000 | | | | | | | |
| Gas and diesel oils | 1,539,000 | 1,800,000 | 1,098,000 | 1,852,000 | 1,577,000 | | | | | | | |
| Iran (a)— | | | | | | | | | | | | |
| Aviation spirit | 722,000 | 728,000 | 721,000 | 638,700 | 649,000 | 606,000 | | | | | | |
| Motor spirit | 2,025,000 | 2,192,000 | 2,278,000 | 2,207,000 | 2,242,000 | 2,198,000 | | | | | | |
| Kerosine | 1,865,000 | 1,981,000 | 2,039,000 | 1,917,000 | 1,948,000 | 2,184,000 | | | | | | |
| Aviation turbine fuel | 1,263,000 | 1,547,000 | 1,621,000 | 1,559,000 | 1,584,000 | 1,340,000 | | | | | | |
| Gas and diesel oils | 3,019,000 | 3,272,000 | 3,221,000 | 3,404,000 | 3,459,000 | 3,720,000 | | | | | | |
| Fuel oil | 8,925,000 | 8,497,000 | 8,878,000 | 9,276,000 | 9,425,000 | 9,402,000 | | | | | | |
| Lubricating oil | 46,000 | 51,000 | 50,000 | 56,000 | 57,000 | 67,000 | | | | | | |
| Bitumen | 310,000 | 269,000 | 289,000 | 262,000 | 266,000 | 323,000 | | | | | | |
| Iraq— | | | | | | | | | | | | |
| Motor spirit | 265,000 | 376,000 | 379,000 | 375,000 | 381,000 | } n.a. | | | | | | |
| Kerosine | 400,000 | 561,000 | 530,000 | 569,000 | 578,000 | | | | | | | |
| Aviation turbine fuel | n.a. | 59,000 | 80,000 | 75,000 | 76,000 | | | | | | | |
| Gas oil | } 541,000 | } 769,000 | } 752,000 | } 757,000 | } 769,000 | | | | | | | |
| Diesel oil | | | | | | | | | | | | |
| Fuel oil | | | | | | | | | | | | |
| Fuel oil | 1,225,000 | 1,218,000 | 1,430,000 | 1,447,000 | 1,470,000 | | | | | | | |
| Israel— | | | | | | | | | | | | |
| Motor spirit | 557,000 | 688,000 | 727,300 | 467,000 | 474,000 | } n.a. | | | | | | |
| Kerosine | (b) 282,000 | 636,000 | 696,000 | 542,000 | 551,000 | | | | | | | |
| Gas and diesel oils | 1,146,000 | 1,041,000 | 1,126,000 | 1,063,000 | 1,080,000 | | | | | | | |
| Fuel oil | 1,963,000 | 1,789,000 | 2,290,000 | 2,441,000 | 2,480,000 | | | | | | | |
| Japan— | | | | | | | | | | | | |
| Aviation spirit | } 10,413,000 | } 11,824,000 | } 13,328,880 | } 15,064,000 | } 15,305,800 | } 16,615,000 | | | | | | |
| Motor spirit | | | | | | | | | | | | |
| Kerosine | | | | | | | 6,918,000 | 8,383,000 | 10,328,242 | 13,995,600 | 14,220,200 | 14,276,600 |
| Jet fuel | | | | | | | 1,951,000 | 2,381,450 | 2,678,375 | 1,917,000 | 1,947,800 | 2,184,500 |
| Gas oil | | | | | | | 6,853,000 | 7,897,000 | 8,832,572 | 10,313,100 | 10,478,600 | 11,477,600 |
| Diesel oil | | | | | | | 4,167,000 | 5,390,000 | n.a. | n.a. | n.a. | n.a. |
| Fuel oil | | | | | | | 55,683,000 | 63,000,000 | 75,115,000 | 93,099,000 | 94,593,000 | 106,755,000 |
| Lubricating oil | | | | | | | 1,308,000 | 1,496,000 | 1,748,000 | 2,056,000 | 2,089,000 | 2,169,000 |
| Paraffin wax | | | | | | | 78,725 | 88,000 | 116,000 | 120,000 | 122,000 | n.a. |
| Asphalt | | | | | | | 1,800,391 | 2,035,000 | 2,870,000 | 3,551,959 | 3,608,932 | n.a. |

(a) Abadan Refinery only.

(b) Estimated.

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

| Producing Country and Description | Long tons | | | | Tonnes | |
|-----------------------------------|-----------|------------|------------|------------|------------|------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Jordan— | | | | | | |
| Motor spirit | 70,707 | 70,569 | 88,278 | 95,491 | 97,023 | 103,540 |
| Kerosine | 68,882 | 64,784 | 73,183 | 70,333 | 71,462 | 90,158 |
| Gas oil | 117,505 | 119,850 | 128,430 | 100,483 | 102,095 | 123,892 |
| Fuel oil | 89,532 | 87,616 | 115,948 | 126,024 | 128,046 | 151,470 |
| Asphalt | 29,895 | 33,053 | 38,173 | 27,241 | 27,678 | 33,533 |
| Korea (South)— | | | | | | |
| Motor spirit | 316,000 | 444,000 | 552,000 | 644,800 | 655,100 | 757,700 |
| Kerosine | 172,897 | 251,364 | 281,000 | 395,200 | 401,500 | 463,200 |
| Jet fuel | 106,897 | r 263,000 | r 398,000 | 589,000 | 598,000 | n.a. |
| Diesel oil | 557,787 | 1,057,000 | 1,266,000 | 1,538,000 | 1,563,000 | 1,921,500 |
| Fuel oil | 1,061,478 | 2,361,000 | 3,618,000 | 5,508,000 | 5,596,000 | 6,124,000 |
| Kuwait— | | | | | | |
| Motor spirit | 260,000 | 276,000 | 350,000 | 405,000 | 411,000 | 506,000 |
| Kerosine | 92,000 | 97,000 | 474,000 | 604,000 | 614,000 | 703,000 |
| Gas and diesel oils | 2,401,000 | 6,393,000 | 6,300,000 | 7,135,000 | 7,250,000 | 6,660,000 |
| Fuel oil | 6,301,000 | 7,440,000 | 7,480,000 | 10,287,000 | 10,452,000 | 11,500,000 |
| Bitumen | 35,000 | 33,000 | 19,000 | 30,000 | 31,000 | n.a. |
| Lebanon— | | | | | | |
| Motor spirit | 298,000 | 342,000 | 341,000 | 368,500 | 374,400 | 396,500 |
| Kerosine | 177,000 | 187,000 | 203,500 | 208,300 | 211,600 | 217,800 |
| Gas oil | 265,000 | 276,000 | 312,700 | 332,600 | 337,900 | 342,600 |
| Fuel oil | 877,000 | 355,000 | 869,700 | 943,100 | 958,200 | 946,700 |
| Philippine Republic— | | | | | | |
| Motor spirit | 1,427,000 | 1,574,000 | 1,671,000 | 1,790,000 | 1,819,000 | 1,839,000 |
| Kerosine | | 392,000 | 440,000 | 429,000 | 436,000 | 437,000 |
| Jet fuel | 364,000 | 303,000 | 344,000 | 344,000 | 350,000 | 274,000 |
| Gas and diesel oil | 1,293,000 | 1,540,000 | 1,744,000 | 1,870,000 | 1,900,000 | 2,076,000 |
| Fuel oil | 2,420,000 | 3,002,000 | 3,112,000 | 3,430,000 | 3,485,000 | 3,634,000 |
| Saudi Arabia— | | | | | | |
| Aviation spirit | 13,000 | 16,098 | 17,637 | | | |
| Motor spirit | 2,340,000 | 2,805,294 | 2,915,673 | 3,938,817 | 4,001,996 | 3,800,000 |
| Kerosine | 364,000 | 392,097 | 405,941 | 873,251 | 887,258 | 685,000 |
| Jet fuel | 1,200,000 | 1,677,024 | 1,777,012 | 1,754,472 | 1,782,614 | 1,650,000 |
| Diesel oil | 2,216,000 | 2,561,858 | 3,497,233 | 2,859,399 | 2,905,264 | 2,980,000 |
| Fuel oil | 9,421,000 | 11,137,972 | 11,703,309 | 16,562,289 | 16,827,948 | 17,000,000 |
| Asphalt, etc. | n.a. | 130,699 | 141,684 | 154,811 | 157,294 | n.a. |
| Southern Yemen— | | | | | | |
| Motor spirit etc. .. | 327,000 | 340,000 | 279,000 | 220,000 | 220,000 | |
| Kerosine | 532,000 | 566,000 | 271,000 | 254,000 | 258,000 | |
| Gas and diesel oil | 996,000 | 590,000 | 660,000 | 1,105,000 | 1,123,000 | n.a. |
| Fuel oil | 2,915,000 | 2,600,000 | 4,345,000 | 3,484,000 | 3,540,000 | |
| Other products .. | 405,000 | 602,000 | n.a. | n.a. | n.a. | |
| Syria— | | | | | | |
| Motor spirit | 165,000 | 157,000 | 197,000 | 378,000 | 384,000 | |
| Kerosine | 169,000 | 161,000 | 202,000 | 231,000 | 235,000 | |
| Gas and diesel oil | 250,000 | 238,000 | 296,000 | 359,000 | 365,000 | n.a. |
| Fuel oil | 448,000 | 475,000 | 592,000 | 600,000 | 610,000 | |
| Turkey— | | | | | | |
| Motor spirit | 784,324 | 898,340 | 907,000 | 962,000 | 977,000 | 114,000 |
| Kerosine | 386,011 | 466,100 | 416,000 | 436,000 | 443,000 | 482,000 |
| Jet fuel | 172,605 | 157,634 | 159,000 | 158,000 | 161,000 | 110,000 |
| Diesel oil | 1,249,759 | 1,480,384 | 1,375,000 | 1,610,000 | 1,636,000 | 2,040,000 |
| Fuel oil | 2,266,277 | 2,694,395 | 2,900,000 | 3,251,000 | 3,303,000 | 3,900,000 |
| Asphalt | 182,929 | 183,440 | 219,000 | 193,000 | 196,000 | 185,000 |

EXPORTS OF PETROLEUM AND ALLIED PRODUCTS*

| Exporting Country and Description | Long tons | | | | Tonnes | |
|---|-----------|-----------|-----------|-----------|-----------|-----------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Crude petroleum .. | 189,316 | 328,251 | 435,849 | 1,333,852 | 1,355,260 | 1,773,794 |
| Aviation spirit .. | 146,856 | 144,153 | 68,445 | 57,164 | 58,081 | 63,278 |
| Aviation turbine fuel (d) | 288,820 | 256,561 | 90,260 | 150,824 | 153,245 | 80,349 |
| Motor spirit .. | 994,414 | 919,095 | 868,685 | 926,774 | 941,649 | 1,129,713 |
| Other spirit .. | 163,282 | 147,407 | 262,364 | 337,915 | 343,338 | 585,894 |
| Kerosine (a) .. | 739,497 | 924,172 | 997,058 | 1,123,089 | 1,141,115 | 1,206,892 |
| Gas oil .. | 3,445,056 | 4,653,007 | 4,999,113 | 5,546,308 | 5,635,326 | 6,140,463 |
| Diesel oil .. | 362,247 | | | | | |
| Fuel oil .. | 4,568,421 | 6,153,546 | 5,903,538 | 7,779,684 | 7,904,548 | 6,194,749 |
| Lubricating oil .. | 503,843 | 553,686 | 580,287 | 630,988 | 641,115 | 682,202 |
| Greases (c) .. | 30,878 | 32,926 | 34,924 | 24,486 | 24,879 | 31,065 |
| Other heavy oils .. | 1,914 | n.a. | n.a. | 33,122 | 33,654 | 44,340 |
| Petroleum jelly .. | 706 | 790 | 1,356 | 1,154 | 1,173 | 1,668 |
| Petroleum waxes .. | 3,883 | 3,041 | 3,314 | 3,978 | 4,042 | 6,618 |
| Malta (bunkers) (b)— | | | | | | |
| Aviation spirit .. | 5,157 | 4,638 | 6,705 | 5,728 | 5,820 | 3,271 |
| Aviation turbine fuel .. | 56,772 | 74,559 | 59,010 | 71,080 | 72,221 | 57,478 |
| Gas oil .. | 7,488 | 10,612 | 12,787 | 9,278 | 9,427 | 8,227 |
| Diesel oil .. | 10,583 | 14,743 | 9,877 | 12,900 | 13,107 | 9,893 |
| Fuel oil .. | 45,549 | 25,153 | 23,875 | 17,954 | 18,242 | 42,877 |
| Ghana— | | | | | | |
| Gas oil (bunkers) .. | 14,555 | 27,070 | 27,254 | 34,537 | 35,091 | 2,300 |
| Diesel oil (bunkers) (b) .. | 6,606 | 132 | 238 | 2,206 | 2,242 | 28,090 |
| Fuel oil .. | 233,331 | 200,994 | 265,386 | 88,199 | 89,615 | n.a. |
| Lubricating oil (bunkers) (b) .. | 403 | 695 | 840 | 917 | 932 | 971 |
| Kenya— | | | | | | |
| Aviation spirit (bunkers) (b) .. | 1,374 | 400 | 584 | 372 | 378 | 465 |
| Motor spirit .. | 28,526 | 219,374 | 17,933 | 19,705 | 20,021 | 18,449 |
| do. (bunkers) .. | 1 | 3 | 43 | 3 | 3 | 3 |
| Aviation turbine fuel (bunkers) .. | 83,995 | 56,845 | 153,639 | 162,752 | 165,364 | 169,921 |
| Kerosine .. | 7,888 | 5,808 | 5,643 | 7,411 | 7,530 | 6,476 |
| Gas, diesel and fuel oils do. bunkers .. | 271,857 | 171,655 | 204,038 | 321,868 | 327,033 | 427,414 |
| Lubricating oil (bunkers) (b) .. | 1,252 | 1,224 | 950 | 1,543 | 1,568 | 762 |
| Asphalt and bitumen .. | 17,074 | 13,057 | 9,765 | 9,675 | 9,830 | 3,748 |
| Mauritius (bunkers) (b)— | | | | | | |
| Aviation spirit .. | 1,074 | 132 | 43 | 40 | 41 | — |
| Aviation turbine fuel .. | 8,071 | 12,076 | 12,379 | 16,288 | 16,549 | 17,915 |
| Fuel oils .. | 74,216 | 114,729 | 88,129 | 92,298 | 93,779 | 107,574 |

*Excluding the United Kingdom, the following rates have been used for converting Imperial gallons to long tons and to tonnes (in brackets): Aviation spirit 315 (310), Motor spirit 305 (300), Aviation turbine fuel 275 (271), White spirit 280 (276), Kerosine 275 (271), Gas oil 260 (256), Diesel oil 256 (252), Fuel oil 240 (236), Lubricating oil 250 (246), Asphalt 220 (216), Road oil 220 (216), Crude petroleum 245 (241), (except for countries mentioned in footnote (b) on page 241).

- (a) 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.)

| Exporting Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|------------|------------|------------|------------|------------|------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Nigeria— | | | | | | |
| Crude petroleum .. | 14,773,521 | 6,889,548 | 26,550,577 | 50,883,400 | 51,700,079 | 71,702,810 |
| Motor spirit .. | 15,511 | 9,845 | 103 | — | — | 897 |
| Aviation spirit .. | 5,269 | 2,233 | 5 | — | — | 234 |
| do. (bunkers) .. | 237 | — | — | — | — | — |
| do. do. (a) .. | 421 | — | — | n.a. | n.a. | n.a. |
| Aviation turbine fuel .. | 2,943 | 3,550 | 22 | 16,519 | 16,784 | 805 |
| do. (bunkers) .. | 713 | — | — | — | — | — |
| do. do. (a) .. | 291 | 4,678 | 13,495 | n.a. | n.a. | n.a. |
| Kerosine .. | 7,707 | 1,261 | — | 57 | 58 | 117 |
| do. (bunkers) .. | 65 | — | — | — | — | — |
| Gas oil .. | 9,702 | 3,683 | 6 | 5 | 5 | 2,980 |
| do. (bunkers) .. | 3,009 | 463 | — | — | — | 48 |
| Diesel oil .. | 9,375 | 3,869 | — | — | — | 570 |
| do. (bunkers) .. | 201 | — | — | — | — | — |
| do. do. (a) .. | — | 4,360 | 9,725 | n.a. | n.a. | n.a. |
| Fuel oil .. | 59,239 | 3,569 | 1,190 | 589 | 598 | 1,832,355 |
| do. (bunkers) .. | 8,139 | 163 | 1,950 | 337 | 342 | 4,674 |
| do. do. (a) .. | 3,328 | 6,065 | 11,135 | n.a. | n.a. | n.a. |
| Asphalt and bitumen .. | 3,942 | 1,448 | 1,043 | 1,790 | 1,819 | 1,802 |
| Tanzania— | | | | | | |
| Motor spirit .. | 91,237 | 124,260 | 132,166 | 132,729 | 134,859 | 142,341 |
| Aviation turbine fuel .. | 12,907 | 14,790 | 18,322 | 28,762 | 29,224 | 23,275 |
| do. (bunkers) .. | 10,082 | 19,943 | 4,402 | 3,431 | 3,486 | 4,051 |
| Kerosine .. | 9,097 | 12,004 | 14,522 | 18,441 | 18,737 | 24,993 |
| Gas, diesel and fuel oils .. | 210,103 | 366,476 | 343,804 | 406,890 | 413,012 | 480,835 |
| do. (bunkers) .. | 6,559 | 9,149 | 5,141 | 27,672 | 28,116 | 23,237 |
| Uganda (bunkers)(a)— | | | | | | |
| Aviation spirit .. | 480 | 84 | 388 | 402 | 409 | 160 |
| Canada— | | | | | | |
| Crude petroleum .. | 20,045,942 | 22,331,729 | 26,312,099 | 32,117,650 | 32,633,057 | 36,682,183 |
| Motor spirit .. | 48,894 | 47,262 | 50,602 | 64,605 | 65,642 | 25,694 |
| Fuel oil .. | 495,403 | 686,755 | 878,608 | 1,459,611 | 1,483,034 | 2,136,137 |
| Lubricating oil (c) .. | 6,331 | 3,823 | 2,597 | 2,304 | 2,341 | 1,077 |
| Liquified petroleum gas .. | 988,373 | 1,074,810 | 1,265,756 | 1,655,264 | 1,681,826 | 1,901,516 |
| Petroleum coke (d) .. | 16,644 | 7,532 | 2,327 | 47,579 | 48,343 | 11,171 |
| Natural gas (million cu. ft.) .. | 505,165 | 607,355 | 669,816 | 768,113 | (b) 21,750 | (b) 25,571 |
| Barbados (bunkers)— | | | | | | |
| Aviation spirit (a) .. | 3,271 | 794 | 2,079 | 624 | 634 | n.a. |
| Aviation turbine fuel (a) .. | 14,281 | 7,461 | 7,838 | 20,849 | 21,184 | n.a. |
| Gas, diesel and fuel oils .. | 4,157 | 3,164 | 614 | 4,612 | 4,686 | n.a. |
| Do. do. (a) .. | 156,185 | 94,811 | 64,359 | 124,476 | 126,474 | n.a. |
| Bermuda (bunkers)(a)(e) | | | | | | |
| Aviation spirit .. | 6,400 | 14,516 | 4,031 | n.a. | n.a. | 4,648 |
| Motor spirit .. | 3,167 | 1,534 | 1,314 | n.a. | n.a. | 1,466 |
| Aviation turbine fuel .. | 85,561 | 92,495 | 103,878 | n.a. | n.a. | 197,513 |
| Kerosine .. | 171 | 164 | 146 | n.a. | n.a. | 17,807 |
| Fuel and Diesel oil .. | 21,419 | 21,829 | 33,413 | n.a. | n.a. | 14,428 |
| Lubricating oil .. | 9 | 34 | 9 | n.a. | n.a. | 9 |

(a) Foreign produce. See imports.

 (b) Million m³.

(c) Including grease.

(d) Including pitch coke.

(e) Including bunkers for military forces.

EXPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

| Exporting Country and Description | Long tons | | | | Tonnes | 1971 |
|---------------------------------------|-------------|-------------|------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | |
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Jamaica— | | | | | | |
| Aviation spirit (bunkers) | <i>n.a.</i> | (b) 4,385 | (a) 13,834 | (b) 1,668 | (b) 1,695 | <i>n.a.</i> |
| Motor spirit | 56,321 | 31,061 | 45,665 | 78,963 | 80,230 | 82,707 |
| Kerosine | 9,770 | 4,359 | 7,669 | 7,139 | 7,254 | 8,520 |
| do. (bunkers) .. | <i>n.a.</i> | <i>n.a.</i> | 5,526 | 44,590 | 45,306 | <i>n.a.</i> |
| Gas oil | (e) | 520 | 6,799 | 185 | 188 | — |
| do. (bunkers) .. | <i>n.a.</i> | (b) 14,933 | 5,526 | 13,036 | 13,245 | <i>n.a.</i> |
| Diesel oil | (e) | 40,927 | 52,205 | 77,590 | 78,835 | 89,795 |
| do. (bunkers) .. | <i>n.a.</i> | (b) 19,869 | 13,916 | 19,379 | 19,690 | <i>n.a.</i> |
| Fuel oil | 107,297 | 49,342 | 36,951 | — | — | — |
| do. (bunkers) .. | <i>n.a.</i> | (a) 129,294 | 106,822 | 54,460 | 55,334 | <i>n.a.</i> |
| Lubricating oil .. | 10,572 | 19,609 | 17,932 | 17,347 | 17,626 | 17,670 |
| Trinidad and Tobago— | | | | | | |
| Crude petroleum .. | 1,752,295 | 1,942,362 | 2,139,530 | 2,270,145 | 2,306,581 | 2,660,919 |
| Aviation spirit (c) .. | 2,038,187 | 2,533,868 | 2,328,425 | 2,448,449 | 2,487,747 | 2,119,690 |
| do. (bunkers) .. | 28,323 | 35,635 | 47,289 | 47,628 | 48,392 | 35,194 |
| Motor spirit | 1,156,517 | 1,096,978 | 904,789 | 965,331 | 980,825 | 1,136,052 |
| do. (bunkers) .. | 941 | 24 | 23 | 358 | 364 | — |
| Kerosine | 7,168 | 12,582 | 15,375 | 11,711 | 11,899 | 2,910 |
| do. (bunkers) .. | 81 | 46 | 51 | 39 | 40 | 57 |
| Gas oil | 434,902 | 120,762 | 176,148 | 113,942 | 115,771 | 104,933 |
| do. (bunkers) .. | 54,773 | 54,218 | 40,072 | 43,688 | 44,389 | 34,306 |
| Diesel oil | 1,833,187 | 2,120,591 | 1,832,054 | 1,667,938 | 1,694,708 | 1,893,771 |
| do. (bunkers) .. | 165,959 | 155,617 | 147,571 | 170,320 | 173,054 | 187,710 |
| Fuel oil | 9,757,602 | 11,073,309 | 11,876,753 | 11,831,729 | 12,021,628 | 9,001,631 |
| do. (bunkers) .. | 1,049,038 | 1,388,553 | 1,246,422 | 1,409,586 | 1,432,210 | 1,207,397 |
| Lubricating oil .. | 141,246 | 171,488 | 191,431 | 173,628 | 176,415 | 167,349 |
| Road oil | 7,697 | 6,908 | 5,970 | 6,844 | 6,954 | 6,266 |
| Asphalt— | | | | | | |
| Dried | 59,284 | 54,216 | 44,916 | 59,495 | 60,450 | 50,753 |
| Asphalt cement .. | 545 | 465 | 2,070 | 1,692 | 1,719 | 2,287 |
| Bituminous asphalt .. | 22,173 | 17,228 | 16,524 | 12,075 | 12,269 | 8,753 |
| Brunei— | | | | | | |
| Crude petroleum (d) .. | 4,973,838 | 5,842,863 | 5,965,564 | 6,533,648 | 6,638,513 | <i>n.a.</i> |
| Ceylon (bunkers) (a)— | | | | | | |
| Aviation spirit | 22,274 | 11,978 | 7 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Gas oil | 9,788 | 5,865 | 4,123 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Diesel oil | 31,580 | 61,159 | 59,233 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Fuel oil | 456,700 | 499,043 | 280,166 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Cyprus (bunkers) (a)— | | | | | | |
| Aviation spirit | 1,357 | 1,308 | 785 | 450 | 457 | 287 |
| India (f)— | | | | | | |
| Motor spirit | <i>n.a.</i> | <i>n.a.</i> | 155,352 | 82,698 | 84,025 | 93,989 |
| Other spirit | | | | | | |

(a) Foreign produce. See imports.

(b) Including foreign produce.

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

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

(e) Included with fuel oil.

(f) Years ended March 31 following that stated.

EXPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons Tonnes

| Exporting Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|---------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Malaysia (West)— | | | | | | |
| Crude petroleum .. | 313,807 | 493,897 | 434,340 | 337,226 | 342,638 | 379,857 |
| Aviation spirit .. | 2,725 | 89 | 1,248 | — | — | 1 |
| do. do. (bunkers) .. | 12,113 | 14,322 | n.a. | 26,081 | 26,500 | 34,677 |
| Motor spirit .. | 92,219 | 167,988 | 94,640 | 83,567 | 84,908 | 45,958 |
| Aviation turbine fuel .. | 40,622 | 5,209 | 47 | 76 | 77 | 6,504 |
| Kerosine .. | 20,090 | 104,540 | 95,509 | 91,685 | 93,157 | 52,399 |
| Gas oil .. | 72,299 | 70,176 | 110,008 | 92,562 | 94,048 | 61,460 |
| Diesel oil .. | 62,336 | 38,606 | 17,834 | 14,325 | 14,555 | 2,233 |
| Fuel oil .. | 246,188 | 188,296 | 154,627 | 232,259 | 235,987 | 29,119 |
| Fuel and diesel oil (bunkers) .. | 57,149 | 52,570 | n.a. | 33,696 | 34,237 | 58,562 |
| Asphalt and bitumen .. | 12,519 | 12,401 | 4,716 | 11,789 | 11,978 | 14,308 |
| Sabah— | | | | | | |
| (bunkers) (b)— | | | | | | |
| Aviation spirit .. | 6,548 | 9,248 | 8,682 | 9,136 | 9,283 | 10,889 |
| Fuel oil .. | 11,798 | 10,801 | 9,228 | n.a. | n.a. | 4,149 |
| Sarawak— | | | | | | |
| Crude petroleum (c) .. | 2,716,036 | 3,512,411 | 3,920,909 | n.a. | n.a. | n.a. |
| Motor spirit (d) .. | 93,927 | 90,678 | 74,858 | n.a. | n.a. | n.a. |
| Kerosine .. | 208,621 | 111,646 | n.a. | n.a. | n.a. | n.a. |
| Aviation turbine fuel .. | 477,603 | 578,887 | 699,862 | n.a. | n.a. | n.a. |
| Gas oil .. | 138,542 | 128,243 | 140,942 | n.a. | n.a. | n.a. |
| Diesel oil .. | 13,087 | 15,304 | 16,112 | n.a. | n.a. | n.a. |
| Fuel oil .. | 1,327,893 | 1,400,178 | 1,422,512 | n.a. | n.a. | n.a. |
| do. (bunkers) (e) .. | 20,882 | 15,438 | 20,312 | n.a. | n.a. | n.a. |
| Singapore— | | | | | | |
| Crude petroleum .. | 5 | 11,355 | 124 | 6,758 | 6,866 | 105,820 |
| Aviation spirit .. | 287,206 | 317,247 | 411,443 | 229,243 | 232,922 | 319,855 |
| do. (bunkers) .. | 65,273 | 73,082 | 87,863 | 97,013 | 98,570 | 109,676 |
| Motor spirit .. | 851,307 | 1,102,998 | 1,149,607 | 1,300,562 | 1,321,436 | 1,783,457 |
| White spirit .. | 103,762 | 25,575 | 49,778 | 37,526 | 38,128 | 37,600 |
| Aviation turbine fuel .. | 1,681,216 | 1,922,616 | 2,311,394 | 1,903,134 | 1,933,679 | 2,243,883 |
| Kerosine .. | 340,052 | 340,518 | 525,509 | 519,963 | 528,308 | 864,905 |
| Gas oil .. | 1,220,614 | 1,811,756 | 1,825,626 | 1,641,010 | 1,667,348 | 1,907,628 |
| Diesel oil .. | 492,696 | 482,098 | 459,670 | 663,852 | 674,507 | 984,149 |
| Fuel oil .. | 3,211,728 | 4,104,655 | 4,654,974 | 5,545,450 | 5,634,454 | 7,183,651 |
| Fuel and diesel oil (bunkers) .. | 3,519,190 | 4,065,527 | 3,984,078 | 3,831,875 | 3,893,377 | 2,877,040 |
| Lubricating oil .. | 98,170 | 113,372 | 138,687 | 142,151 | 144,432 | 91,545 |
| Asphalt and bitumen .. | 55,212 | 80,915 | 73,861 | 110,011 | 112,793 | 217,649 |
| Australia (a)— | | | | | | |
| Aviation spirit .. | 3,360 | 11,572 | 376 | 369 | 375 | 8,506 |
| do. do. (bunkers) .. | 605 | 906 | 15 | 32 | 33 | 157 |
| do. do. do. (b) .. | 822 | 260 | 706 | 812 | 825 | 1,016 |
| Motor spirit .. | 128,540 | 217,962 | 197,586 | 148,508 | 150,891 | 188,506 |
| Kerosine .. | 12,539 | 22,360 | 5,527 | 14,703 | 14,939 | 24,860 |
| Aviation turbine fuel .. | 45,516 | 101,579 | 65,595 | 117,556 | 119,443 | 198,692 |
| do. (bunkers) .. | 24,787 | 58,335 | 69,591 | 83,040 | 84,373 | 264,751 |
| do. do. (b) .. | 82,799 | 109,378 | 115,855 | 151,859 | 154,296 | 127,268 |
| Lubricating oil .. | 90,669 | 94,679 | 99,216 | 92,450 | 93,934 | 142,502 |
| Diesel and fuel oils .. | 878,803 | 688,037 | 479,144 | 692,705 | 703,821 | 702,294 |
| Fuel oil (bunkers)— | | | | | | |
| Domestic produce .. | 878,028 | 1,281,811 | 1,216,532 | 1,253,199 | 1,273,309 | 1,251,050 |
| Foreign produce .. | 3,230 | 9,256 | 20,077 | 5,053 | 5,134 | 21,969 |

(a) Years ended June 30 of 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) Including diesel oil bunkers.

EXPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

| Exporting Country and Description | Long tons | | | | Tonnes | |
|--|-----------|---------|---------|---------|---------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Fiji (bunkers)(d)— .. | | | | | | |
| Aviation spirit | 3,079 | 1,028 | 352 | 191 | 194 | 8,704 |
| Aviation turbine fuel .. | 60,076 | 81,627 | 69,380 | 80,514 | 81,806 | 110,546 |
| Diesel oil | 12,856 | 14,623 | 10,052 | 13,287 | 13,500 | 17,171 |
| Gas oil | 2,387 | 4,379 | 5,057 | 4,439 | 4,510 | 4,289 |
| Fuel oil | 761 | 2,208 | 15,488 | 86 | 88 | 19,072 |
| New Zealand (a)— | | | | | | |
| Diesel oil | 309 | 3,451 | 507 | — | — | 840 |
| do. (bunkers) | 99,576 | 106,918 | 118,735 | 130,408 | 132,501 | 145,207 |
| do. (bunkers) (d) .. | 6,942 | 2,891 | 921 | 2,563 | 2,604 | n.a. |
| Fuel oil | 137,245 | 53,569 | 155,577 | 64,001 | 65,028 | 40,128 |
| do. (bunkers) | 100,040 | 112,597 | 88,293 | 86,242 | 87,626 | 130,542 |
| do. (bunkers) (d) .. | 5,789 | 4,094 | 904 | 228 | 232 | n.a. |
| Lubricating oil (bunkers) (d) | 2,295 | 2,073 | 2,075 | 1,995 | 2,027 | n.a. |
| Irish Republic— | | | | | | |
| Aviation spirit (d) (b) .. | 1,964 | 1,040 | 787 | 814 | 827 | 864 |
| do. (d) (c) | 10,795 | 8,745 | 9,342 | 8,160 | 8,291 | n.a. |
| Motor spirit | 41,937 | 9,696 | 8,246 | 6,480 | 6,584 | 2,568 |
| Aviation turbine fuel (b) | 2,985 | 51,937 | 59,818 | 54,409 | 55,282 | 36,282 |
| do. (c) | 4 | 2,711 | 52,647 | 16,077 | 16,335 | n.a. |
| do. (d) (b) | 47,197 | — | — | 10,371 | 10,538 | 25,454 |
| do. (d) (c) | 119,699 | 164,026 | 176,503 | 180,277 | 183,171 | n.a. |
| Gas and diesel oils .. | 314,900 | 111,099 | 52,498 | 108,789 | 110,535 | 28,656 |
| do. (bunkers) (d)(b) | 11,492 | 12,668 | 17,948 | 18,590 | 18,889 | 25,369 |
| do. do. (b) | 8,252 | 6,826 | 8,029 | 14,786 | 15,023 | 7,739 |
| Fuel oil | 322,295 | 210,407 | 319,557 | 488,417 | 496,256 | 679,663 |
| do. (bunkers) (b) .. | 125,096 | 106,296 | 91,654 | 100,270 | 101,880 | 43,040 |
| OTHER COUNTRIES | | | | | | |
| Albania— | | | | | | |
| Crude petroleum | 163,000 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Natural asphalt | 27,000 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Other asphalt | 328,000 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Austria— | | | | | | |
| Motor spirit | 294 | 252 | 2,962 | 141 | 143 | 183 |
| Gas oil | 7,981 | 770 | 300 | 276 | 281 | 2,095 |
| Fuel oil | 23 | 27 | 43 | 41 | 42 | 29 |
| Lubricating oil, etc. .. | 77,717 | 98,795 | 131,108 | 127,066 | 129,105 | 127,670 |

(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 | Tonnes

| Exporting Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|-----------------------------------|-----------|-----------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Crude petroleum .. | 271,482 | 148,174 | 31,973 | 23,918 | 24,302 | 26,022 |
| Motor spirit | 1,010,007 | 1,675,912 | 2,341,253 | 2,286,197 | 2,322,884 | 2,238,983 |
| Kerosine | 500,891 | 553,466 | 736,029 | 697,473 | 708,665 | 561,313 |
| Gas oil | 3,644,964 | 1,700,990 | 3,071,362 | 2,367,071 | 2,405,056 | 2,378,230 |
| do. (bunkers) (a) .. | 230,490 | 207,751 | 233,609 | 1,026,534 | 1,043,007 | 284,852 |
| Fuel oil, etc. .. . | 859,378 | 1,444,441 | 2,139,279 | 1,926,767 | 1,957,687 | 1,670,301 |
| do. (bunkers) (a) .. | 1,556,793 | 1,792,148 | 2,401,090 | 2,072,931 | 2,106,196 | 2,127,707 |
| Lubricating oil .. | 162,374 | 192,467 | 191,047 | 248,764 | 252,756 | 265,434 |
| do. (bunkers) (a) .. | 6,642 | 10,442 | 9,379 | 9,569 | 9,723 | 11,549 |
| Other heavy oils .. | — | 1,134 | 1,475 | 1,491 | 1,515 | 3,198 |
| Petroleum jelly .. | 140 | 46 | 70 | 239 | 243 | 85 |
| Paraffin wax .. . | 232 | 517 | 223 | 272 | 276 | 1,217 |
| Ozokerite and ceresin (c) | 20 | 25 | 19 | 14 | 14 | 48 |
| Petroleum coke .. | 31,447 | 26,855 | 76,856 | 57,159 | 58,076 | 19,410 |
| Natural asphalt .. | 193 | 132 | 111 | 1,311 | 1,332 | 4,953 |
| Pitch | 226,184 | 259,584 | 284,252 | 314,091 | 319,131 | 388,187 |
| Bulgaria— | | | | | | |
| Crude petroleum .. | 1,464 | 4,330 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Denmark— | | | | | | |
| Aviation spirit .. . | 1,628 | 8,021 | — | — | — | — |
| Motor spirit | 287,386 | 310,598 | 322,780 | 508,624 | 516,786 | 594,043 |
| White spirit | 957 | 1,823 | 11,819 | 16,169 | 16,429 | 23,521 |
| Kerosine | 12,740 | 9,260 | 16,217 | 15,347 | 15,594 | 20,048 |
| Gas oil | 364,063 | 282,789 | 344,310 | 397,098 | 403,470 | 523,685 |
| Diesel oil | 1,693 | 6,710 | 17 | 2,014 | 2,046 | 513 |
| Fuel oil | 110,925 | 227,636 | 636,732 | 743,131 | 755,056 | 830,030 |
| Gas oil (bunkers) .. | 477,208 | 444,749 | 423,974 | 409,222 | 415,789 | 472,901 |
| Diesel oil (bunkers) .. | | | | | | |
| Fuel oil (bunkers) .. | | | | | | |
| Lubricating oil .. | r 15,711 | r 4,284 | r 14,722 | 12,785 | 12,985 | 14,666 |
| Grease | 799 | 1,219 | 1,873 | 1,761 | 1,790 | 967 |
| France— | | | | | | |
| Aviation spirit .. . | 399 | 359 | 808 | 23 | 23 | 238 |
| Motor spirit | 1,595,203 | 1,103,573 | 972,857 | 1,294,388 | 1,315,159 | 1,360,710 |
| White spirit | 27,207 | 30,703 | 32,591 | 50,065 | 50,869 | 40,386 |
| Kerosine | 26,801 | 12,057 | 2,284 | 2,796 | 2,841 | 67,193 |
| Gas oil | 2,820,975 | 2,575,585 | 2,856,598 | 2,997,328 | 3,045,426 | 3,683,520 |
| do. (bunkers) .. . | 343,179 | 326,122 | 324,948 | 347,114 | 352,684 | <i>n.a.</i> |
| do. (bunkers) (b) .. | 17,013 | 16,625 | 18,039 | 10,603 | 10,773 | <i>n.a.</i> |
| Fuel oil | 5,020,027 | 4,193,721 | 4,214,672 | 2,561,861 | 2,602,971 | 3,654,702 |
| do. (bunkers) .. . | 2,646,015 | 3,122,984 | 3,850,482 | 4,111,497 | 4,177,474 | <i>n.a.</i> |
| do. (bunkers) (b) .. | 130,196 | 73,601 | 36,533 | 48,241 | 49,015 | <i>n.a.</i> |
| Lubricating oil .. | 296,347 | 265,502 | 373,630 | 310,734 | 315,720 | 336,820 |
| do. (bunkers) .. . | 34,797 | 35,074 | 37,682 | 40,123 | 40,767 | <i>n.a.</i> |
| do. (bunkers) (b) .. | 914 | 695 | 869 | 763 | 775 | <i>n.a.</i> |
| Petroleum jelly .. | 1,412 | 1,794 | 2,330 | 1,791 | 1,820 | 185 |
| Paraffin wax .. . | 16,746 | 13,007 | 12,131 | 16,240 | 16,501 | 7,063 |
| Ozokerite, ceresin, etc. | 30 | 46 | 47 | 48 | 49 | 39 |
| Petroleum coke .. | 1 | 21 | 7 | 66 | 67 | 307 |
| Natural asphalt and | | | | | | |
| bitumen | 17,014 | 20,908 | 15,926 | 14,630 | 14,865 | 7,913 |
| Mastic asphalt .. | 2,585 | 4,860 | 4,557 | 4,632 | 4,706 | 5,864 |
| Bitumen | 401,194 | 372,596 | 326,233 | 398,850 | 405,250 | 411,077 |

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

(b) Foreign produce. See imports.

(c) Including montan wax.

EXPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

| Exporting Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|------------|------------|-------------|------------|------------|--------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Germany (Federal)— | | | | | | |
| Crude Petroleum .. | 80,397 | 31,966 | 119,039 | 131,968 | 134,086 | 605 |
| Aviation spirit (bunkers) (a) .. | 24,558 | 11,000 | 11,972 | 9,323 | 9,473 | 5,159 |
| Motor spirit (b) .. | 1,090,323 | 1,714,457 | r 1,107,955 | 806,708 | 819,653 | 735,130 |
| White spirit .. | 8,094 | 5,999 | 9,990 | 7,035 | 7,148 | 9,914 |
| Kerosine .. | 24,248 | 28,994 | 13,900 | 21,006 | 21,343 | 3,959 |
| Aviation turbine fuel .. | 16,359 | 33,382 | 30,004 | 104,470 | 106,147 | 127,102 |
| do. (bunkers) (a) .. | 563,584 | 624,232 | 686,794 | 741,326 | 753,222 | 892,737 |
| Gas and diesel oil .. | 377,864 | 491,394 | 598,047 | 308,797 | 313,752 | 441,774 |
| do. (bunkers) (a) .. | 248,255 | 287,848 | 290,814 | 308,403 | 313,352 | 247,379 |
| Fuel oil .. | 3,531,802 | 3,910,547 | 4,675,420 | 3,850,924 | 3,912,720 | 3,898,492 |
| do. (bunkers) (a) .. | 1,108,016 | 1,297,899 | 1,492,582 | 1,307,083 | 1,328,058 | 1,316,709 |
| Lubricating oil .. | 191,272 | 256,863 | 302,295 | 337,266 | 342,678 | 351,491 |
| do. (bunkers) (a) .. | 9,949 | 10,267 | 10,339 | 11,590 | 11,776 | 14,101 |
| Petroleum jelly .. | 14,141 | 15,474 | 15,886 | 15,348 | 15,594 | 17,389 |
| Paraffin wax .. | 48,952 | 57,364 | 70,908 | 82,318 | 83,639 | 94,457 |
| Natural asphalt and bitumen .. | 1,329 | 1,529 | 1,949 | 535 | 544 | 3,338 |
| Bitumen .. | 251,592 | 321,616 | 355,347 | 399,599 | 406,011 | 396,210 |
| Petroleum coke .. | 148,502 | 184,294 | 199,376 | 223,928 | 227,521 | 229,306 |
| Germany (East)— | | | | | | |
| Motor spirit .. | 492,215 | 539,510 | 412,276 | 456,957 | 464,290 | 444,274 |
| Diesel oil .. | 420,636 | 518,441 | 489,849 | 481,285 | 489,008 | 242,607 |
| Greece— | | | | | | |
| Diesel and fuel oils .. | 121,279 | 74,156 | 119,747 | 104,281 | 105,955 | 42,491 |
| Hungary— | | | | | | |
| Motor spirit .. | 209,636 | 240,032 | 293,341 | 146,941 | 149,299 | 231,010 |
| Gas oil .. | 213,573 | 236,253 | 245,093 | 182,620 | 185,551 | 74,886 |
| Fuel oil .. | 444,861 | 550,834 | 471,330 | 292,581 | 297,276 | 12,747 |
| Lubricating oil .. | 13,925 | 11,226 | 11,508 | 11,916 | 12,107 | 10,930 |
| Paraffin wax and ceresin .. | n.a. | n.a. | 5,178 | 5,237 | 5,321 | n.a. |
| Bitumen .. | 178,141 | 147,239 | 76,524 | 22,592 | 22,955 | 12,222 |
| Italy— | | | | | | |
| Crude petroleum .. | 36 | 17 | 21 | 6 | 6 | 37 |
| Aviation and motor spirits (c) .. | 4,209,041 | 2,286,435 | 5,731,299 | 5,804,485 | 5,897,630 | 6,630,220 |
| do. (bunkers) (a) .. | 37,187 | 72,763 | 37,505 | 38,288 | 38,903 | 64,779 |
| Kerosine .. | 1,603,324 | 2,007,975 | 2,336,396 | 2,691,175 | 2,734,360 | 2,802,131 |
| Lubricating oil .. | 220,334 | 257,643 | 242,948 | 242,908 | 246,806 | 288,834 |
| Fuel oil and gas oil .. | 15,516,411 | 19,563,940 | 21,652,642 | 18,705,122 | 19,005,292 | 18,086,720 |
| do. (bunkers) (a) .. | 3,812,235 | 3,332,246 | 3,444,867 | 3,675,267 | 3,734,244 | 4,219,295 |
| Paraffin wax .. | 1,728 | 1,383 | 1,655 | 1,907 | 1,938 | 2,202 |
| Natural asphalt and bitumen .. | 7,305 | 4,199 | 1,105 | 1,548 | 1,573 | 903 |
| Pitch .. | 186,686 | 211,434 | 204,876 | 177,388 | 180,235 | 197,488 |
| Netherlands— | | | | | | |
| Aviation spirit (bunkers) (a) .. | 21,101 | 5,858 | 13,000 | 4,401 | 4,472 | (d) 3,000 |
| Motor spirit .. | 3,436,552 | 3,559,065 | 4,900,000 | 5,953,400 | 6,048,900 | 5,772,000 |
| Kerosine .. | 615,041 | 712,643 | 903,000 | 1,312,783 | 1,333,849 | 1,553,000 |
| Gas oil .. | 3,804,952 | 4,104,821 | 6,490,724 | 10,867,861 | 11,042,263 | d 11,568,655 |
| do. (bunkers) (a) .. | 599,617 | 646,991 | 747,263 | 810,751 | 823,762 | d 886,350 |
| Fuel oil .. | 4,786,932 | 4,661,146 | 7,299,014 | 11,907,559 | 12,098,645 | d 9,201,757 |
| do. (bunkers) (a) .. | 3,806,257 | 4,630,595 | 5,868,818 | 6,431,201 | 6,534,403 | d 7,059,245 |
| Lubricating oil .. | 384,215 | 492,136 | 466,594 | 451,771 | 459,021 | 586,812 |

(a) Bunkers for foreign ships or aircraft only.

(b) Including aviation spirit.

(c) Includes white spirit.

(d) Excludes exports to Belgium and Luxemburg, if any.

EXPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

| Exporting Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|-----------|-----------|-----------|-----------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Netherlands (cont.) | | | | | | |
| Petroleum jelly .. | 7,350 | 10,160 | 10,580 | 11,930 | 12,122 | (d) 14,077 |
| Paraffin wax .. | 21,438 | 25,227 | 62,909 | 53,119 | 53,972 | 63,027 |
| Ozokerite and ceresin (b) | 124 | 127 | 111 | 108 | 110 | 78 |
| Pitch .. | 251,573 | 163,001 | 154,216 | 133,294 | 135,433 | (d) 211,380 |
| Natural asphalt .. | 77 | 36 | 7 | 32 | 33 | 20 |
| Petroleum coke .. | 7,659 | 496 | 395 | 265 | 269 | (d) 78 |
| Norway— | | | | | | |
| Motor spirit .. | 190,017 | 250,472 | 292,568 | 193,631 | 196,738 | 183,904 |
| Kerosine .. | — | 31 | 406 | 4 | 4 | 3 |
| Fuel oil .. | 960,263 | 860,089 | 929,813 | 1,214,427 | 1,233,915 | 1,412,575 |
| Lubricating oil .. | 20,364 | 22,086 | 12,776 | 14,838 | 15,076 | 15,955 |
| Poland— | | | | | | |
| Kerosine .. | 662,081 | 1,449,742 | 1,667,990 | 1,292,882 | 1,313,629 | 1,068,632 |
| Fuel oils .. | | | | | | |
| Lubricating oil .. | | | | | | |
| Paraffin wax .. | | | | | | |
| Asphalt .. | | | | | | |
| Portugal— | | | | | | |
| Motor spirit .. | 26,342 | 24,298 | 13,788 | 25,422 | 25,830 | 13,606 |
| Kerosine .. | 168 | 315 | 531 | 120,458 | 122,391 | 157,041 |
| Fuel oil .. | 36,263 | 138,371 | 31,694 | 220,671 | 224,212 | 171,488 |
| do. (bunkers) (a) | 22,323 | 12,921 | 16,100 | 59,833 | 60,793 | 67,453 |
| Lubricating oil, etc. | 6,740 | 8,603 | 11,874 | 21,770 | 22,119 | 63,867 |
| Bitumen .. | 145 | 787 | 1,233 | 38 | 39 | 88 |
| Natural asphalt .. | 301 | 74 | 10 | 182 | 185 | 66 |
| Roumania— | | | | | | |
| Motor spirit(c) .. | 942,181 | 973,085 | 839,134 | 689,600 | 700,700 | 624,000 |
| Kerosine .. | 211,998 | 177,354 | 198,318 | 89,200 | 90,600 | 32,700 |
| Gas oil .. | 2,058,172 | 2,252,356 | 2,125,393 | 2,507,900 | 2,548,200 | 2,620,400 |
| Fuel oil .. | 1,762,025 | 1,651,104 | 1,378,282 | 1,507,500 | 1,531,700 | 1,540,600 |
| Lubricating oil .. | 365,436 | 352,051 | 373,703 | 343,600 | 349,100 | 358,300 |
| Paraffin wax .. | 24,310 | 21,849 | 17,913 | 18,800 | 19,100 | 16,300 |
| Petroleum coke .. | 44,781 | 40,648 | 53,049 | 66,300 | 67,400 | 110,100 |
| Bitumen .. | 56,592 | 37,105 | 34,939 | 44,700 | 45,400 | 46,500 |
| Spain— | | | | | | |
| Motor spirit .. | 351,033 | 1,012,791 | 961,686 | 620,954 | 630,919 | 351,985 |
| Diesel oil .. | 433,087 | 1,626,587 | 1,047,711 | 1,642,854 | 1,669,217 | 1,530,516 |
| Fuel oil .. | 979,296 | 2,138,738 | 3,019,539 | 2,010,880 | 2,043,149 | 1,531,344 |
| Sweden— | | | | | | |
| Motor spirit, etc. | 287,728 | 506,570 | 595,318 | 540,767 | 549,445 | 474,401 |
| White spirit .. | 10 | 104 | 31 | 8 | 8 | 26 |
| Kerosine .. | 72,447 | 113,503 | 100,430 | 71,810 | 72,962 | 38,039 |
| Fuel oil and gas oil .. | 471,724 | 980,082 | 863,145 | 1,015,900 | 1,032,202 | 969,748 |
| Lubricating oil and grease .. | 48,567 | 62,456 | 59,429 | 67,592 | 68,677 | 72,623 |
| Paraffin wax .. | 93 | 42 | 187 | 184 | 187 | 55 |
| Asphalt .. | 9 | 9 | 17 | 55 | 56 | 54 |
| Pitch .. | 51,637 | 44,785 | 60,954 | 59,206 | 60,156 | 57,579 |
| Switzerland— | | | | | | |
| Motor spirit .. | 10,589 | 12,195 | 27,751 | 15,332 | 15,578 | 11,404 |
| Fuel oil .. | 161,089 | 182,850 | 213,583 | 225,170 | 228,783 | 114,666 |
| Lubricating oil and grease .. | 2,612 | 6,171 | 1,948 | 1,829 | 1,858 | 8,916 |
| Petroleum coke .. | 10,746 | 10,050 | 11,486 | 5,698 | 5,790 | 5 |
| Asphalt and bitumen .. | 2,395 | 998 | 1,120 | 56 | 57 | 73 |

(a) Bunkers for foreign ships or aircraft only.

(b) Including montan wax.

(c) Including white spirit and special kerosine.

(d) Excluding exports to Belgium and Luxemburg, if any.

EXPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

| Exporting Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| U.S.S.R.— | | | | | | |
| Crude petroleum .. | 45,555,652 | 58,280,500 | 62,878,500 | 65,744,961 | 66,800,000 | 74,800,000 |
| Motor spirit | 3,224,654 | 3,298,600 | 3,271,900 | 3,936,826 | 4,000,000 | 4,100,000 |
| Kerosine | 1,162,052 | 1,300,600 | 1,449,800 | 1,574,730 | 1,600,000 | 2,400,000 |
| Diesel oil | 8,479,528 | 9,929,000 | 9,792,000 | 11,219,948 | 11,400,000 | 11,400,000 |
| Fuel oil | 10,989,845 | 11,497,600 | 11,405,900 | 11,219,948 | 11,400,000 | 11,900,000 |
| Lubricating oil and grease | 262,585 | 301,100 | 318,900 | 306,679 | 311,600 | 264,400 |
| Paraffin wax | 24,113 | 23,400 | 27,500 | 37,400 | 38,000 | 39,700 |
| Bitumen | 32,184 | 37,300 | 36,800 | 35,727 | 36,300 | 36,000 |
| Yugoslavia— | | | | | | |
| Crude petroleum .. | 316,720 | 287,585 | 212,815 | 112,166 | 113,966 | 186,993 |
| Aviation spirit .. | 871 | 747 | 321 | 170 | 173 | 212 |
| Motor spirit | 88,814 | 125,483 | 92,201 | 130,738 | 132,836 | 134,785 |
| White spirit | 17 | 165 | 10 | 13 | 13 | 416 |
| Aviation turbine fuel .. | 13,515 | 17,445 | 23,561 | 29,623 | 30,098 | 15,843 |
| Gas oil | 265,030 | 32,496 | 54,860 | 88,181 | 89,596 | 89,559 |
| Fuel oil | 273,266 | 80,738 | 24,812 | 172,438 | 175,205 | 122,745 |
| Lubricating oil .. | 54,298 | 15,524 | 92 | 1,401 | 1,424 | 4,106 |
| Algeria— | | | | | | |
| Crude petroleum .. | 35,483,667 | 39,027,260 | 41,777,075 | 44,357,279 | 45,069,100 | <i>n.a.</i> |
| Angola— | | | | | | |
| Crude petroleum .. | 3 | 16,499 | 1,478,653 | 4,201,945 | 4,269,374 | 4,746,964 |
| Fuel oil | 46,932 | 253,046 | 246,837 | 287,017 | 291,623 | 268,462 |
| Canary Islands— | | | | | | |
| Motor spirit (a) .. | 124,140 | 173,220 | 248,477 | 152,458 | 154,904 | 255,260 |
| Kerosine (a) | 131,269 | 65,394 | 2,037 | 4,275 | 4,344 | 7,259 |
| Diesel oil (a) (b) .. | 134,375 | 94,232 | 26,209 | 4,834 | 4,912 | <i>n.a.</i> |
| do. (bunkers) (b) .. | 70,945 | 55,953 | 55,691 | 63,397 | 64,415 | 96,527 |
| Fuel oil (a) (b) .. | 92,563 | 85,389 | 88,412 | 9,868 | 10,027 | <i>n.a.</i> |
| do. (bunkers) (b) .. | 480,190 | 385,409 | 483,287 | 479,700 | 487,398 | 435,384 |
| Paraffin wax (a) .. | 454 | — | — | — | — | 630 |
| Asphalt (a) | 57,768 | 48,600 | 36,133 | 41,644 | 42,313 | 26,495 |
| Ceuta (c)— | | | | | | |
| Diesel oil (bunkers) .. | 36,686 | 28,601 | 20,817 | 26,335 | 26,753 | 22,617 |
| Fuel oil (bunkers) .. | 149,872 | 98,700 | 93,111 | 142,252 | 144,535 | 108,812 |
| Congo (Brazza)— | | | | | | |
| Crude petroleum .. | 37,793 | 54,459 | 31,343 | 16,906 | 17,178 | <i>n.a.</i> |
| Egypt— | | | | | | |
| Crude petroleum .. | 503,217 | 743,507 | 1,549,914 | 3,522,547 | 3,579,073 | 528,895 |
| Motor spirit | 383,974 | 366,577 | <i>n.a.</i> | 4,131 | 4,197 | 21,376 |
| Kerosine | 43,157 | 38,678 | 34,693 | 22,495 | 22,856 | <i>n.a.</i> |
| Gas and diesel oils .. | 583,621 | 177,878 | 51,094 | 24,564 | 24,958 | 19,364 |
| Fuel oil | | | | | | |
| do. (bunkers) (d) .. | | | | | | |
| Gabon— | | | | | | |
| Crude petroleum .. | 3,136,002 | 3,781,172 | 4,322,521 | 4,439,755 | 4,511,000 | <i>n.a.</i> |
| Libya— | | | | | | |
| Crude petroleum .. | 81,446,489 | 122,745,990 | 145,536,360 | 156,732,502 | 159,240,222 | <i>n.a.</i> |
| Morocco— | | | | | | |
| Gas oil | 7,610 | 26,905 | 9,859 | 5,001 | 5,082 | 4,248 |
| South Africa— | | | | | | |
| Motor spirit | 70,233 | 58,823 | 20,574 | 14,182 | 14,410 | 18,709 |
| do. (bunkers) (c) .. | | | | | | |
| Kerosine | 75,487 | 29,938 | 66,784 | 67,146 | 68,224 | 77,868 |
| Diesel oil | 350,488 | 238,723 | 226,021 | 230,169 | 233,863 | 205,879 |
| do. (bunkers) .. | | | | | | |
| do. (bunkers) (c) .. | | | | | | |
| Fuel oil | 2,319,479 | 2,217,771 | 2,717,288 | 3,011,194 | 3,059,515 | 3,239,952 |
| do. (bunkers) .. | | | | | | |
| do. (bunkers) (c) .. | | | | | | |
| Asphalt and bitumen .. | <i>n.a.</i> | <i>n.a.</i> | 7,046 | 4,557 | 4,630 | 13,322 |

(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 | Tonnes

| Exporting Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|--|------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Tunisia (bunkers)— | | | | | | |
| Fuel oil | 851 | 975 | 3,110 | 12,309 | 12,507 | 29,827 |
| Lubricating oil and grease | 176 | 725 | 545 | 634 | 645 | 1,634 |
| Mexico— | | | | | | |
| Crude petroleum | 1,413,367 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Motor spirit | 36,472 | 2,930 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Fuel oil | 1,121,445 | 2,050,999 | 2,307,603 | 2,466,363 | 2,505,941 | 1,094,364 |
| do. (bunkers) | 4,386 | 12,041 | 197,290 | 163,915 | 166,545 | 53,074 |
| Gas oil | 2,993 | 84 | 76 | 245 | 249 | 257 |
| Paraffin wax | 1,224 | 1,582 | 801 | 1,253 | 1,273 | 599 |
| Natural gas (<i>million cu. ft.</i>) (a) | 54,365 | 49,317 | 45,047 | 42,917 | (c) 1,215 | (c) 661 |
| Netherlands Antilles— | | | | | | |
| Crude petroleum | 348,000 | 162,000 | 350,000 | 650,000 | 660,000 | <i>n.a.</i> |
| Aviation spirit | 1,062,000 | 714,000 | 595,000 | 474,000 | 482,000 | <i>n.a.</i> |
| Motor spirit | 3,248,000 | 3,089,000 | 3,379,000 | 3,500,000 | 3,556,000 | <i>n.a.</i> |
| White spirit | 61,000 | 34,000 | 13,000 | 4,000 | 4,000 | <i>n.a.</i> |
| Kerosine | 530,000 | 726,000 | 547,000 | 357,000 | 363,000 | <i>n.a.</i> |
| Aviation turbine fuel | 4,168,000 | 4,053,000 | 4,192,000 | 3,516,000 | 3,572,000 | <i>n.a.</i> |
| Gas oil | 2,790,000 | 1,715,000 | 2,026,000 | 2,323,000 | 2,360,000 | <i>n.a.</i> |
| Diesel oil | 1,466,000 | 1,853,000 | 1,211,000 | 1,382,000 | 1,404,000 | <i>n.a.</i> |
| Fuel oil | 20,570,000 | 21,469,000 | 23,840,000 | 27,312,000 | 27,750,000 | <i>n.a.</i> |
| Lubricating oil | 420,000 | 483,000 | 358,000 | 436,000 | 443,000 | <i>n.a.</i> |
| Asphalt | 999,000 | 1,080,000 | 1,022,000 | 1,011,000 | 1,027,000 | <i>n.a.</i> |
| United States— | | | | | | |
| Crude petroleum | 3,829,808 | 754,636 | 282,782 | 739,710 | 751,580 | 219,770 |
| Natural gasoline | (b) | (b) | (b) | (b) | (b) | (b) |
| Aviation spirit | 210,779 | 67,763 | 49,353 | 17,429 | 17,708 | 45,189 |
| Motor spirit | 152,110 | 63,007 | 66,677 | 39,285 | 39,915 | 49,916 |
| Other finished light products | 42,199 | 60,490 | 97,392 | 63,073 | 64,085 | 111,318 |
| Kerosine | 20,034 | 77,774 | 19,275 | 14,960 | 15,200 | 22,272 |
| Aviation turbine fuel | 36,331 | 32,100 | 41,534 | 8,068 | 8,197 | 27,316 |
| Gas oil and distillate fuel oil | 587,017 | 300,862 | 271,224 | 210,659 | 214,039 | 275,363 |
| Residual fuel oil | 3,225,123 | 2,912,090 | 2,441,083 | 2,881,208 | 2,927,442 | 1,949,125 |
| Lubricating oil | 2,400,000 | 2,100,000 | 1,910,000 | 1,811,000 | 1,840,061 | 1,709,096 |
| Transformer oil | 42,293 | 49,364 | 42,367 | 45,958 | 46,695 | 51,368 |
| Greases | 46,779 | 38,734 | 34,921 | 38,752 | 39,373 | 30,867 |
| Paraffin wax | 175,007 | 159,906 | 164,619 | 184,937 | 187,904 | 177,828 |
| Petroleum jelly | 24,328 | 25,237 | 22,249 | 24,263 | 24,652 | 24,089 |
| Natural asphalt and bitumen | 34,125 | 34,771 | 25,277 | 31,420 | 31,924 | 28,804 |
| Other asphalt, etc. | 44,616 | 50,486 | 58,367 | 52,362 | 53,202 | 45,710 |
| Petroleum coke | 2,925,923 | 3,483,701 | 4,112,066 | 5,536,545 | 5,625,389 | 4,866,735 |
| Liquefied petroleum gases | 554,090 | 580,657 | 615,926 | 553,846 | 562,733 | 546,484 |
| Natural gas (<i>million cu. ft.</i>) | 91,145 | 100,716 | 68,272 | 91,715 | (c) 2,597 | (c) 2,384 |
| Argentina— | | | | | | |
| Crude petroleum | 9,093 | 185,001 | 59,684 | — | — | <i>n.a.</i> |
| Kerosine | 38 | 4 | 657 | — | — | 1,089 |
| Gas oil | 46 | 183 | 3,178 | 2,785 | 2,830 | 1,209 |
| Fuel oil | 669,911 | 907,417 | 93,757 | 90,326 | 91,776 | 38,197 |
| Paraffin wax | 1,593 | 3,550 | 3,297 | 4,046 | 4,111 | 4,637 |
| Asphalt | 6,495 | 4,050 | 2,039 | 997 | 1,013 | 4,373 |
| Grahamite ("Rafaelite") | 314 | 137 | 261 | 243 | 247 | 191 |

(a) Imports into the United States.

(b) Included with motor spirit.

 (c) Million m³.

EXPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

| Exporting Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|--------------|-------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Bolivia— | | | | | | |
| Crude petroleum .. | 1,502,000 | 1,529,000 | 1,435,400 | 665,900 | 676,600 | 1,225,081 |
| Brazil— | | | | | | |
| Fuel oil | 85,145 | 46,000 | 101,000 | 707,764 | 719,122 | n.a. |
| Colombia— | | | | | | |
| Crude petroleum .. | 4,243,239 | r 2,441,598 | r 3,938,612 | 4,359,500 | 4,429,500 | n.a. |
| Fuel oil | 1,166,024 | r 1,077,111 | r 1,628,962 | 1,332,100 | 1,353,500 | n.a. |
| Ecuador— | | | | | | |
| Crude petroleum .. | 37,400 | 40,100 | n.a. | n.a. | n.a. | n.a. |
| Peru— | | | | | | |
| Crude petroleum .. | 333,630 | 481,264 | 285,055 | 231,400 | 235,100 | n.a. |
| Natural gasoline .. | 378 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Kerosine | 88 | 9 | n.a. | n.a. | n.a. | n.a. |
| Gas oil (a) | 32,569 | 48,000 | n.a. | n.a. | n.a. | n.a. |
| Fuel oil and diesel oil .. | 66,322 | 49,489 | n.a. | n.a. | n.a. | n.a. |
| do. (bunkers) .. | 31,648 | 47,499 | 27,346 | 28,000 | 28,400 | n.a. |
| Lubricating oil and grease | 748 | 992 | n.a. | n.a. | n.a. | n.a. |
| Venezuela— | | | | | | |
| Crude petroleum .. | 124,245,602 | 127,075,154 | 127,390,372 | 126,900,000 | 127,900,000 | 123,191,130 |
| Motor spirit | 2,055,951 | 2,731,607 | 2,501,486 | 3,100,000 | 3,200,000 | 3,571,014 |
| Kerosine | 2,736,613 | 2,609,130 | 2,419,659 | } 3,026,600 | 3,072,500 | { 1,814,514 |
| Aviation turbine fuel .. | 352,639 | 131,752 | 82,632 | | | |
| Gas oil | } 42,284,214 | 40,526,700 | 42,049,308 | 44,200,000 | 44,800,000 | 43,640,315 |
| Diesel oil | | | | | | |
| Fuel oil | 287,061 | 381,018 | 417,562 | 400,000 | 400,000 | 407,259 |
| Lubricating oil .. | 26 | 20 | 20 | n.a. | n.a. | n.a. |
| Paraffin wax | 552,653 | 420,179 | 362,515 | 397,000 | 403,000 | 557,535 |
| Asphalt | | | | | | |
| Abu Dhabi— | | | | | | |
| Crude petroleum .. | 12,157,754 | 14,758,077 | 16,781,085 | 20,155,669 | 20,479,167 | 27,300,000 |
| Bahrain— | | | | | | |
| Aviation and motor spirit | 942,000 | 790,000 | 839,000 | 1,900,000 | 1,900,000 | n.a. |
| Aviation turbine fuel .. | 1,399,000 | 1,585,000 | 1,477,000 | 1,700,000 | 1,700,000 | n.a. |
| Kerosine | 406,000 | 447,000 | 154,000 | 130,000 | 130,000 | n.a. |
| Diesel oil | 1,628,000 | 1,710,000 | 1,944,000 | 2,700,000 | 2,800,000 | n.a. |
| Fuel oil | 4,255,000 | 4,150,000 | 4,835,000 | 4,200,000 | 4,300,000 | n.a. |
| do. bunkers | 1,300,000 | 1,053,000 | 962,000 | 890,000 | 890,000 | n.a. |
| Asphalt | 1,000 | 1,000 | 5,000 | n.a. | n.a. | n.a. |
| Burma— | | | | | | |
| Paraffin wax | 4,743 | 8,168 | 9,676 | 10,533 | 10,702 | 8,615 |
| Formosa— | | | | | | |
| Motor spirit, etc. .. | 9,936 | 1,712 | 30,318 | 1,415 | 1,438 | 23,886 |
| Fuel oil | n.a. | 15,668 | 129,819 | 131,536 | 133,647 | 60,602 |
| Lubricating oil .. | 48,876 | 44,707 | 41,168 | 48,496 | 49,275 | 44,889 |
| Asphalt | 27,047 | 28,373 | 29,208 | 47,049 | 47,804 | 44,091 |
| Indonesia— | | | | | | |
| Crude petroleum .. | 9,508,000 | 12,274,000 | 25,102,000 | 29,801,000 | 30,280,000 | n.a. |
| Motor spirit | 137,000 | 65,000 | 186,000 | 229,000 | 233,000 | n.a. |
| Gas and diesel oils .. | 544,000 | 132,000 | 153,000 | 192,000 | 195,000 | n.a. |
| do. do. (bunker oil) | n.a. | 15,000 | 107,000 | 32,000 | 32,000 | n.a. |
| Fuel oil | 756,000 | 798,000 | 904,000 | 441,000 | 449,000 | n.a. |
| do. (bunker oil) .. | n.a. | 33,000 | 24,000 | 131,000 | 133,000 | n.a. |
| Iran (b)— | | | | | | |
| Crude petroleum .. | 119,379,493 | 117,003,307 | 134,572,246 | 146,678,950 | 149,033,683 | 160,419,784 |
| Motor spirit | 2,982,303 | 4,040,605 | 4,025,667 | 4,029,757 | 4,094,423 | 3,876,321 |
| Kerosine | 466,756 | 783,473 | 724,089 | 832,781 | 846,145 | 545,860 |
| Gas oil | 799,408 | 1,246,425 | 1,218,839 | 1,605,873 | 1,631,643 | 1,757,273 |
| Diesel oil | 365,184 | 303,532 | 458,654 | 426,375 | 433,218 | 571,640 |
| Fuel oil | 9,308,964 | 10,858,112 | 9,690,345 | 10,961,739 | 11,137,647 | 9,064,835 |
| Pitch | 91,132 | 67,416 | 99,571 | 66,105 | 67,166 | 63,485 |

(a) Including bunkers.

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

EXPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons | Tonnes

| Exporting Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|--------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Iraq— | | | | | | |
| Crude petroleum .. | 56,120,790 | 69,445,521 | 69,966,164 | 72,055,675 | 73,212,168 | 79,900,419 |
| Japan— | | | | | | |
| Motor spirit | 323,065 | 125,443 | 77,294 | 57,826 | 58,753 | 54,426 |
| Kerosine | 302,666 | 193,161 | 554,652 | 151,025 | 153,448 | 389,713 |
| Gas oil | 174,259 | 114,429 | 79,807 | 27,478 | 27,918 | 121,779 |
| Lubricating oils .. | 82,700 | 151,710 | 223,220 | 298,967 | 303,765 | 324,029 |
| Paraffin wax .. . | 14,405 | 17,781 | 24,478 | 30,802 | 31,296 | 37,969 |
| Asphalt and pitch .. | 97,796 | 127,853 | 154,803 | 145,601 | 147,937 | 49,112 |
| Jordan— | | | | | | |
| Asphalt and bitumen .. | 7,985 | 7,880 | 4,845 | 952 | 967 | 462 |
| Kuwait— | | | | | | |
| Crude petroleum .. | 102,313,966 | 107,452,430 | 113,324,522 | 120,230,000 | 122,154,000 | 130,106,952 |
| Gas oil | } 2,231,200 | d 4,752,700 | 4,783,100 | 5,452,300 | 5,539,700 | } 10,071,374 |
| Diesel oil | | | | | | |
| do. (bunkers) .. . | 90,000 | d 1,553,700 | 1,319,100 | 1,244,400 | 1,264,400 | } n.a. |
| Fuel oil | 5,095,700 | d 3,430,300 | 4,301,900 | 6,477,600 | 6,581,500 | |
| do. (bunkers) .. . | 3,761,000 | d 2,807,000 | 2,976,000 | 3,172,400 | 3,223,300 | n.a. |
| Neutral Zone (a)— | | | | | | |
| Crude petroleum .. | 19,700,000 | 18,750,000 | 20,286,000 | 24,641,400 | 25,036,800 | 25,000,000 |
| Fuel oil | 480,000 | 799,200 | 1,029,000 | 1,328,000 | 1,349,000 | n.a. |
| Qatar— | | | | | | |
| Crude petroleum .. | 8,909,704 | 9,058,678 | 9,211,244 | 8,987,645 | 9,131,897 | 10,500,000 |
| Saudi Arabia— | | | | | | |
| Crude petroleum .. | 110,729,266 | 119,503,878 | 126,290,281 | 145,510,000 | 147,838,000 | 170,000,000 |
| Southern Yemen (b) (c) | | | | | | |
| Aviation and motor | | | | | | |
| spirits | 730,217 | 705,608 | (d) 188,000 | (d) 174,000 | (d) 177,000 | n.a. |
| Kerosine | 557,036 | 500,991 | (d) 197,000 | (d) 197,000 | (d) 200,000 | n.a. |
| Gas, diesel and fuel oils | 3,058,156 | 3,010,455 | d 4,424,000 | d 4,297,000 | d 4,366,000 | n.a. |
| Fuel oils (bunkers) .. | 1,374,883 | 424,370 | (d) 476,000 | (d) 243,000 | (d) 247,000 | n.a. |
| Syria— | | | | | | |
| Natural asphalt .. . | 285 | 98 | 10 | 393 | 400 | 507 |
| Turkey— | | | | | | |
| Motor spirit | 5,925 | 8,541 | n.a. | 3,350 | 3,404 | n.a. |
| Fuel oil | 33,009 | 146,307 | 296,422 | 36,721 | 37,310 | 33,000 |

(a) Neutral Zone of Kuwait and Saudi Arabia.

(b) Previously Aden.

(c) Domestic and foreign produce.

(d) Estimated.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS*

| Importing Country and Description | | | Long tons | | Tonnes | |
|--------------------------------------|------------|------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Crude petroleum .. | 72,667,395 | 81,177,261 | 92,751,047 | 101,348,942 | 102,975,597 | 109,366,365 |
| Aviation spirit .. | 153,849 | 152,583 | 122,696 | 64,641 | 65,678 | 57,978 |
| Aviation turbine fuel .. | 76,728 | 85,510 | 48,828 | 30,027 | 30,509 | 56,865 |
| Motor spirit .. | 4,427,020 | 4,394,127 | 3,933,788 | 3 850,632 | 3,912,437 | 4,144,552 |
| Other spirit (f) .. | 4,104,008 | 4,502,485 | 4,955,303 | 3,585,206 | 3,642,748 | 2,692,314 |
| Kerosine .. | 624,426 | 633,495 | 578,153 | 544,757 | 553,500 | 650,393 |
| Aviation jet fuel .. | 541,277 | 587,670 | 520,361 | 584,939 | 594,327 | 877,414 |
| Fuel oil .. | 9,216,054 | 7,040,996 | 6,053,417 | 8,773,141 | 8,913,950 | 8,173,058 |
| Diesel oil .. | 224,991 | 3,463,495 | 2,932,914 | 1,876,431 | 1,906,548 | 2,196,177 |
| Gas oil .. | 3,332,459 | | | | | |
| Lubricating oil .. | 639,136 | 626,790 | 525,638 | 516,332 | 524,619 | 502,258 |
| Greases .. | 347 | 487 | 1,135 | 1,086 | 1,103 | 1,310 |
| Other oils .. | 2,629 | 2,747 | 2,893 | 43,986 | 44,692 | 41,248 |
| Mineral jelly .. | 2,851 | 2,714 | 1,583 | 2,826 | 2,871 | 2,293 |
| Paraffin wax .. | 14,629 | 12,287 | 13,280 | 27,000 | 27,433 | 15,936 |
| Other petroleum wax .. | 180,433 | 171,021 | 168,408 | 118,560 | 120,462 | 128,689 |
| Petroleum coke .. | 83,229 | 72,151 | 90,153 | 140,942 | 143,204 | 112,589 |
| Asphalt and bitumen (d) | 66,827 | 64,516 | 48,850 | 51,042 | 51,861 | 42,069 |
| Natural gas (Million cu. ft.) .. | 27,100 | 36,200 | 36,900 | 28,900 | (h) 819 | (h) 800 |
| Channel Islands— | | | | | | |
| Aviation spirit .. | 1,314 | 905 | (b) 978 | 1,611 | 1,637 | 1,819 |
| Motor spirit .. | 35,043 | 36,755 | (b) 23,887 | 40,308 | 40,955 | 25,694 |
| Other spirit (b) .. | 145 | 147 | 124 | 101 | 103 | 100 |
| Kerosine (g) .. | 25,850 | 22,098 | (b) 21,148 | 27,068 | 27,502 | 24,809 |
| Gas and fuel oil .. | 239,961 | 253,770 | (b) 100,071 | 284,535 | 289,102 | 116,241 |
| Lubricating oil .. | 1,685 | 1,429 | (b) 624 | 1,571 | 1,596 | 1,510 |
| Greases (b) .. | 47 | 35 | 28 | 11 | 11 | 58 |
| Gibraltar— | | | | | | |
| Aviation spirit (e) (g) .. | 10,070 | 3,446 | 4,067 | 4,131 | 4,196 | 5,244 |
| Motor spirit .. | 2,913 | 3,085 | 3,089 | 3,858 | 3,920 | 3,976 |
| Diesel oil .. | 13,991 | 9,463 | 7,075 | 11,705 | 11,893 | 15,008 |
| Fuel oil .. | 4,922 | 1 | (c) 7,492 | (c) 13,186 | (c) 13,397 | 17,522 |
| Lubricating oil .. | 2,561 | 646 | 225 | 283 | 287 | 337 |
| Kerosine .. | 22 | 8 | — | — | — | — |
| Malta— | | | | | | |
| Aviation spirit (a) .. | 5,400 | 5,960 | 3,357 | 7,122 | 7,236 | 2,373 |
| Motor spirit .. | 29,701 | 27,235 | 32,917 | 36,001 | 36,579 | 38,972 |
| Aviation turbine fuel (a) | 24,038 | 11,019 | 15,851 | 21,419 | 21,763 | 16,225 |
| Kerosine .. | 22,455 | 27,471 | 25,450 | 23,460 | 23,837 | 28,554 |
| Fuel oil (a) .. | 130,715 | 139,850 | 145,630 | 109,278 | 111,032 | 155,821 |
| Gas oil (a) .. | 31,697 | 36,152 | 40,316 | 41,226 | 41,888 | 33,650 |
| Diesel oil (a) .. | 9,796 | 16,057 | 7,046 | 14,728 | 14,964 | 11,143 |
| Lubricating oil .. | 1,789 | 1,712 | 2,087 | 2,551 | 2,592 | 2,239 |
| Paraffin wax .. | 421 | 232 | 272 | 319 | 324 | 367 |
| Bitumen .. | 3,306 | 2,344 | 2,854 | 1,166 | 1,185 | 6 |
| Gambia— | | | | | | |
| Motor spirit .. | 4,869 | 5,549 | 6,988 | 7,327 | 7,444 | n.a. |
| Kerosine .. | 1,190 | 1,011 | 1,642 | 814 | 827 | n.a. |
| Aviation turbine fuel .. | 2 | (c) 6 | — | — | — | n.a. |
| Gas oil .. | 4,572 | 5,000 | 6,362 | 5,923 | 6,018 | n.a. |
| Diesel oil .. | | | | | | |
| Lubricating oil .. | 517 | 313 | 381 | 520 | 528 | n.a. |
| Asphalt and bitumen .. | 6 | 1 | 15 | — | — | n.a. |

*Excluding the United Kingdom, the following rates have been used for converting Imperial gallons to long tons and to tonnes (in brackets): Aviation spirit 315 (310), Motor spirit 305 (300), Aviation turbine fuel 275 (271), Kerosine 275 (271), Gas oil 260 (256), Diesel oil 256 (252), Fuel oil 240 (236), Lubricating oil 250 (246), Crude petroleum 245 (241), Asphalt 220 (216), Road oil 220 (216).

(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.

(h) Million m³.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons | Tonnes

| Importing Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|-------------------------------------|-----------|-----------|-----------|-----------|-----------|-------------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Ghana— | | | | | | |
| Crude petroleum .. | 814,973 | 895,049 | 780,327 | 887,589 | 901,835 | <i>n.a.</i> |
| Aviation spirit .. | 1,063 | 8,636 | 1,745 | 304 | 309 | <i>n.a.</i> |
| Motor spirit .. | 75 | 16 | 43 | 324 | 329 | <i>n.a.</i> |
| White spirit .. | 383 | 613 | 492 | 575 | 584 | <i>n.a.</i> |
| Aviation turbine fuel .. | 25,232 | 18,023 | 41,669 | 31,776 | 32,286 | <i>n.a.</i> |
| Diesel oil (b) .. | 4,110 | 636 | 11 | 2,589 | 2,631 | <i>n.a.</i> |
| Lubricating oil (b) .. | 15,176 | 13,869 | 14,367 | 18,502 | 18,799 | <i>n.a.</i> |
| Greases .. | 3,433 | 856 | 1,421 | 539 | 548 | <i>n.a.</i> |
| Petroleum jelly .. | 1,145 | 929 | 1,407 | 1,424 | 1,447 | <i>n.a.</i> |
| Asphalt and bitumen .. | 4,320 | 10,484 | 4,584 | 10,292 | 10,457 | <i>n.a.</i> |
| Kenya— | | | | | | |
| Crude petroleum .. | 1,892,312 | 1,931,922 | 2,034,243 | 2,170,760 | 2,205,594 | 2,540,564 |
| Aviation spirit (b) .. | 6,243 | 5,591 | 5,967 | 4,982 | 5,062 | 3,521 |
| Motor spirit .. | 4,550 | 39,996 | 10,795 | 42,610 | 43,294 | 35,027 |
| Kerosine (c) .. | 31,877 | 80,111 | 79,973 | 61,537 | 62,525 | 29,236 |
| Gas, diesel, fuel oils .. | 93,065 | 40,964 | 35,675 | 67,610 | 68,695 | 49,811 |
| Lubricating oil (b) .. | 12,307 | 18,188 | 7,143 | 24,032 | 24,418 | 45,677 |
| Greases .. | 616 | 1,484 | 505 | 15 | 15 | 90 |
| Petroleum jelly and paraffin wax .. | 701 | 1,070 | 1,164 | 1,205 | 1,224 | 1,998 |
| Asphalt .. | 2,598 | 2,203 | 1,513 | 3,374 | 3,428 | 1,217 |
| Malawi— | | | | | | |
| Aviation spirit .. | 1,500 | 1,441 | 1,355 | 1,026 | 1,042 | 1,347 |
| Motor-spirit .. | 20,089 | 27,637 | 27,915 | 24,584 | 24,978 | 28,689 |
| Kerosine .. | 8,904 | 10,258 | 10,813 | 10,535 | 10,704 | 12,386 |
| Aviation turbine fuel .. | 2,669 | 3,424 | 4,112 | 6,439 | 6,542 | 7,425 |
| White spirit .. | 104 | 154 | 139 | 166 | 169 | 166 |
| Gas oil .. | 31,370 | 46,500 | 47,112 | 42,605 | 43,288 | 13,066 |
| Diesel oil .. | | | | | | |
| Fuel oil .. | | | 3,468 | 4,236 | 4,304 | 5,051 |
| Lubricating oil .. | 3,484 | 2,751 | 2,133 | 2,721 | 2,765 | 3,130 |
| Grease .. | 93 | 112 | 97 | 124 | 126 | 156 |
| Asphalt and bitumen .. | 2,029 | 2,256 | 2,328 | 3,901 | 3,963 | 4,983 |
| Mauritius— | | | | | | |
| Aviation spirit (b) .. | 851 | 843 | — | — | — | 2 |
| Motor spirit .. | 27,009 | 20,007 | 21,519 | 16,919 | 17,191 | 12,356 |
| Aviation turbine fuel (b) .. | 8,904 | 13,678 | 14,445 | 14,958 | 15,198 | 17,436 |
| Kerosine .. | 17,112 | 12,353 | 15,326 | 10,507 | 10,676 | 7,246 |
| Lubricating oils .. | 2,260 | 3,257 | 2,044 | 2,842 | 2,888 | 1,808 |
| Gas, diesel, fuel oils (b) .. | 116,127 | 169,644 | 143,495 | 151,706 | 154,140 | 130,066 |
| Grease .. | 131 | 190 | 128 | 154 | 157 | 67 |
| Asphalt and pitch .. | 1,792 | 2,137 | 1,871 | 339 | 344 | 363 |
| Asphalt, natural .. | 1,340 | 734 | — | 2,313 | 2,350 | 4,985 |
| Nigeria— | | | | | | |
| Aviation spirit (b) .. | 14,751 | 8,461 | 6,454 | 12,506 | 12,707 | 1,911 |
| Motor spirit .. | 117,615 | 248,103 | 278,319 | 206,602 | 209,918 | 20,415 |
| White spirit .. | 1,870 | 718 | 2,047 | 2,714 | 2,758 | 8,302 |
| Aviation turbine fuel (b) .. | 19,141 | 67,376 | 95,741 | 67,202 | 68,281 | 4,199 |
| Kerosine .. | 57,810 | 122,810 | 129,387 | 69,830 | 70,563 | 1,581 |
| Gas oil .. | 129,420 | 324,078 | 305,261 | 153,719 | 156,186 | 1,870 |
| Diesel oil (b) .. | 8,803 | 1,089 | 132 | 19,819 | 20,139 | 382 |
| Fuel oil (b) .. | 137,829 | 261,488 | 267,215 | 116,634 | 118,506 | 1,884 |
| Lubricating oil .. | 33,088 | 20,024 | 28,265 | 29,097 | 29,564 | 25,413 |
| Petroleum jelly .. | 2,361 | 1,703 | 2,211 | 2,082 | 2,115 | 3,271 |
| Asphalt and bitumen .. | (a) 7,970 | 9,947 | 5,093 | 61,279 | 62,262 | 101,065 |

(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.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--|-----------|---------|---------|-----------|-----------|-----------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| St. Helena— | | | | | | |
| Motor spirit | 404 | 221 | 475 | 312 | 317 | 354 |
| Kerosine | 238 | 135 | 268 | 15 | 15 | 141 |
| Diesel oil | 364 | 512 | 387 | 46 | 47 | 216 |
| Lubricating oil .. | 6 | 13 | 6 | 5 | 5 | 8 |
| Seychelles— | | | | | | |
| Motor spirit | 1,044 | 1,161 | 1,413 | 1,420 | 1,443 | n.a. |
| Kerosine | 777 | 937 | 903 | 1,402 | 1,424 | n.a. |
| Fuel oil | 4,081 | 7,263 | 12,311 | 9,413 | 9,564 | n.a. |
| Sierra Leone— | | | | | | |
| Aviation spirit .. | 3,173 | 4,249 | 203 | 7,428 | 7,457 | 6,961 |
| Motor spirit | 18,818 | 34,535 | 20,172 | (c) 895 | (c) 909 | (c) 1,511 |
| Aviation turbine fuel .. | 2,135 | — | — | — | — | — |
| Kerosine | 14,723 | 27,126 | 7,098 | (c) 1,314 | (c) 1,335 | 195 |
| Gas oil | 132,569 | 114,335 | 10,429 | 71,587 | 72,736 | 58,846 |
| Diesel oil | | | | | | |
| Fuel oil | 13,663 | 24,674 | 497 | — | — | — |
| Lubricating oil .. | 2,479 | 3,085 | 4,022 | 5,520 | 5,609 | 3,310 |
| Asphalt and bitumen .. | 108 | 80 | 98 | 1,326 | 1,347 | 34 |
| Tanzania— | | | | | | |
| Crude petroleum .. | 658,102 | 737,397 | 614,575 | 720,141 | 731,697 | 944,326 |
| Aviation spirit .. | 5,133 | 1,663 | 4,226 | 2,835 | 2,881 | 1,787 |
| Motor spirit | 21,353 | 47,708 | 71,256 | 69,370 | 70,483 | 86,242 |
| Aviation turbine fuel .. | 5,997 | 12,616 | 6,524 | 13,748 | 13,969 | 486 |
| Kerosine | 2,751 | 1,648 | 13,278 | 13,140 | 13,351 | 15,947 |
| Gas, diesel, fuel oils .. | 60,031 | 125,304 | 197,926 | 166,790 | 169,466 | 335,095 |
| Lubricating oil .. | 10,417 | 11,833 | 11,699 | 19,025 | 19,330 | 6,266 |
| Greases | 460 | 763 | 646 | 1,212 | 1,231 | 565 |
| Petroleum jelly and paraffin wax | 151 | 341 | 355 | 340 | 345 | 703 |
| Asphalt | 819 | 424 | 9,366 | 19,048 | 19,354 | 10,095 |
| Uganda— | | | | | | |
| Aviation spirit (a) .. | 4,603 | 1,131 | 1,403 | 579 | 588 | 562 |
| Kerosine | (b) 4,976 | 521 | 808 | 909 | 924 | 861 |
| Gas, diesel, fuel oils .. | — | — | — | — | — | 814 |
| Lubricating oil .. | 5,005 | 5,528 | 6,107 | 7,218 | 7,334 | 3,069 |
| Greases | 378 | 377 | 436 | 391 | 397 | 306 |
| Petroleum jelly and paraffin wax | 244 | 185 | 274 | 266 | 270 | 444 |
| Asphalt | (c) 68 | 412 | 374 | 1,345 | 1,367 | 87 |
| Zambia— | | | | | | |
| Aviation spirit .. | 3,835 | 3,237 | 2,969 | 3,863 | 3,925 | n.a. |
| Motor spirit | 88,174 | 89,405 | 124,509 | 124,432 | 126,429 | n.a. |
| Aviation turbine fuel .. | 13,972 | 20,994 | 19,761 | 35,135 | 35,699 | n.a. |
| Kerosine | 14,025 | 16,954 | 7,468 | 10,528 | 10,697 | n.a. |
| White spirit | 58 | 548 | 1,268 | 3,108 | 3,158 | n.a. |
| Gas oil | 140,916 | 179,177 | 214,994 | 217,939 | 221,436 | n.a. |
| Diesel oil | | | | | | |
| Fuel oil | 44,099 | 31,127 | 15,644 | 2,688 | 2,731 | n.a. |
| Lubricating oil and grease | 12,820 | 17,579 | 24,091 | 22,128 | 22,483 | n.a. |
| Paraffin wax | 2,528 | 1,082 | 1,225 | 1,986 | 2,018 | n.a. |

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

(c) Excess of re-exports.

(b) Including aviation turbine fuel.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--|------------|------------|------------|------------|------------|------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Canada— | | | | | | |
| Crude petroleum | 22,771,331 | 23,698,478 | 25,749,979 | 27,683,114 | 28,127,358 | 33,187,144 |
| Aviation spirit | 40,185 | 14,986 | 21,825 | 13,372 | 13,587 | 8,460 |
| Motor spirit | 475,491 | 478,359 | 690,583 | 582,407 | 591,753 | 550,370 |
| Aviation turbine fuel .. . | 417,594 | 618,407 | 601,975 | 464,558 | 472,013 | 216,411 |
| Kerosine, etc. | 234,895 | 272,257 | 200,736 | 40,035 | 40,678 | 17,464 |
| Lubricating oils | 228,788 | 232,443 | 235,734 | 159,536 | 162,096 | 176,972 |
| Diesel oil | 635,768 | 829,903 | 704,464 | 1,042,617 | 1,059,351 | 463,978 |
| Fuel oil | 7,048,184 | 7,026,868 | 6,674,573 | 6,731,151 | 6,839,166 | 5,900,164 |
| Liquefied petroleum gas | 22,361 | 32,740 | 61,512 | 26,050 | 26,468 | 4,783 |
| Grease | 5,746 | 5,962 | 5,927 | 5,802 | 5,895 | 7,164 |
| Petroleum jelly | 2,266 | 2,443 | 4,297 | 2,897 | 2,944 | 2,193 |
| Paraffin wax | 7,000 | 10,155 | 11,215 | 8,461 | 8,597 | 9,296 |
| Refined asphalts and road oils | 51,301 | 51,706 | 57,164 | 70,689 | 71,823 | 61,409 |
| Natural asphalt | 4,627 | 3,015 | 2,261 | 1,770 | 1,798 | 2,568 |
| Petroleum coke (c) .. . | 505,211 | 501,256 | 628,198 | 695,606 | 706,769 | 665,836 |
| Natural gas (million cubic feet) | 52,872 | 88,228 | 37,733 | 11,878 | (d) 336 | (d) 453 |
| Antigua— | | | | | | |
| Aviation spirit | 7,397 | 13,445 | n.a. | n.a. | n.a. | n.a. |
| Motor spirit | 63,125 | 4,816 | n.a. | n.a. | n.a. | n.a. |
| Kerosine | 20,579 | 10,463 | n.a. | n.a. | n.a. | n.a. |
| Fuel oils | 7,821 | 4,302 | n.a. | n.a. | n.a. | n.a. |
| Lubricating oil | 1,423 | 855 | n.a. | n.a. | n.a. | n.a. |
| Bahamas— | | | | | | |
| Motor spirit | 60,682 | 65,797 | 80,585 | 61,944 | 62,938 | 69,532 |
| Kerosine | 18,440 | 31,582 | 72,208 | 27,000 | 27,434 | 36,164 |
| Fuel oils | 139,025 | 150,971 | 156,646 | 341,748 | 347,233 | 1,314,086 |
| Lubricating oil | 6,856 | 2,100 | 14,253 | 6,683 | 6,790 | 2,477 |
| Barbados— | | | | | | |
| Crude petroleum | 91,892 | 93,227 | 74,260 | 79,643 | 80,921 | n.a. |
| Aviation spirit (b) | 13 | 521 | 2,647 | 2,169 | 2,204 | n.a. |
| Motor spirit | 2,790 | 36 | 3,530 | 14,840 | 15,078 | n.a. |
| Kerosine (a) (b) | 14,389 | 33,354 | 46,644 | 62,122 | 63,119 | n.a. |
| Gas oil and diesel oil (b) .. . | 241,302 | 90,430 | 73,700 | 42,810 | 43,497 | n.a. |
| Fuel oil (b) | | 192,667 | 116,905 | 84,674 | 86,033 | n.a. |
| Lubricating oil | 1,391 | 1,365 | 1,760 | 1,892 | 1,923 | n.a. |
| Bermuda (b)— | | | | | | |
| Aviation and motor spirits | 33,162 | 16,169 | 25,871 | 30,000 | 30,000 | 26,072 |
| Aviation turbine fuel .. . | 46,288 | 99,260 | 64,781 | n.a. | n.a. | n.a. |
| Kerosine | 28,856 | 13,720 | 31,216 | 80,000 | 81,000 | 92,979 |
| Diesel oil | 806,867 | 42,758 | 24,469 | n.a. | n.a. | 25,934 |
| Fuel oil | 33,373 | 25,507 | 48,548 | n.a. | n.a. | n.a. |
| Lubricating oil | 1,150 | 1,095 | 1,025 | 700 | 700 | 1,006 |
| Asphalt | 2,580 | 2,920 | 2,731 | n.a. | n.a. | 2,573 |
| British Honduras— | | | | | | |
| Aviation spirit | 1,208 | — | — | — | — | — |
| Motor spirit | 10,746 | 8,365 | 12,590 | 10,643 | 10,814 | 13,703 |
| Kerosine | 3,897 | 3,811 | 7,566 | 7,936 | 8,063 | 10,896 |
| Diesel and fuel oils .. . | 19,255 | 17,330 | 22,279 | 18,872 | 19,175 | 324,794 |
| Lubricating oil | 809 | 884 | 992 | 1,139 | 1,157 | 1,056 |
| Asphalt, etc. | 1,174 | 2,386 | 65 | 664 | 675 | 1,084 |
| Cayman Islands— | | | | | | |
| Aviation and motor spirits | 3,123 | 2,209 | 2,730 | 4,820 | 4,897 | 4,436 |
| Kerosine | 514 | 140 | 379 | 1,600 | 1,625 | — |
| Diesel oil | 1,820 | 2,294 | 3,372 | 3,356 | 3,410 | 5,855 |

(a) Including aviation turbine fuel.

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

(c) Including pitch coke.

 (d) Million m³.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons Tonnes

| Importing Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|---------------------------------------|------------|-------------|------------|------------|------------|------------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Dominica— | | | | | | |
| Aviation and motor spirits | 3,816 | 4,076 | 3,372 | 4,414 | 4,485 | n.a. |
| Kerosine | 1,471 | 1,475 | 1,449 | 1,474 | 1,498 | n.a. |
| Fuel oil and diesel oil | 1,855 | 1,724 | 2,099 | 2,627 | 2,669 | n.a. |
| Lubricating oil | 160 | 112 | 188 | 174 | 177 | n.a. |
| Road oil | 574 | 535 | 407 | 60 | 61 | n.a. |
| Grenada— | | | | | | |
| Aviation and motor spirits | 5,373 | 6,202 | n.a. | n.a. | n.a. | n.a. |
| Kerosine | 2,704 | 2,786 | n.a. | n.a. | n.a. | n.a. |
| Fuel oils | 3,759 | 3,765 | n.a. | n.a. | n.a. | n.a. |
| Lubricating oil | 177 | 499 | n.a. | n.a. | n.a. | n.a. |
| Road oil | 16,493 | 1,434 | n.a. | n.a. | n.a. | n.a. |
| Jamaica— | | | | | | |
| Crude Petroleum | 951,574 | 1,130,507 | 1,336,909 | 1,642,819 | 1,669,186 | 1,528,321 |
| Aviation spirit | 8,833 | (a) 2,620 | (a) 5,952 | (a) 14,605 | (a) 14,839 | 11,872 |
| Motor spirit | 12,408 | 12,582 | 737 | 7 | 7 | 6,746 |
| Kerosine | 34,907 | (a) 39,625 | 3,748 | 996 | 1,012 | 35,544 |
| Gas oil | 53,580 | (a) 37,871 | 30,989 | 41,935 | 42,608 | n.a. |
| Diesel oil | 76,735 | (a) 57,218 | 7,251 | 23,223 | 23,596 | n.a. |
| Fuel oil | 318,813 | (a) 262,694 | 199,400 | 205,116 | 208,408 | n.a. |
| Lubricating oil | 4,990 | 7,319 | 5,008 | 18,210 | 18,502 | 22,426 |
| Grease | 365 | 395 | 569 | 401 | 408 | 394 |
| Petroleum jelly | 333 | 290 | 252 | 362 | 367 | 377 |
| Paraffin wax | 176 | 316 | 231 | 367 | 373 | 212 |
| Natural asphalt | 1,439 | 6,496 | 1,292 | 1,189 | 1,208 | 1,680 |
| Montserrat— | | | | | | |
| Motor spirit | 1,001 | n.a. | n.a. | 1,204 | 1,223 | 726 |
| Kerosine | 279 | n.a. | n.a. | 3,425 | 3,480 | 224 |
| Fuel oils | 1,167 | n.a. | n.a. | 2,233 | 2,269 | 2,326 |
| Lubricating oil | 95 | n.a. | n.a. | 110 | 112 | 39 |
| St. Kitts— | | | | | | |
| Motor spirit | 2,320 | 2,263 | 2,438 | 2,417 | 2,456 | 3,348 |
| Kerosine | 1,987 | 3,370 | 1,831 | 1,672 | 1,699 | 2,031 |
| Fuel oils | 3,156 | 5,786 | 3,961 | 4,167 | 4,234 | 14,372 |
| Lubricating oil | 333 | 191 | 219 | 228 | 232 | 220 |
| St. Lucia— | | | | | | |
| Motor spirit | 4,408 | 4,741 | 4,458 | 6,842 | 6,952 | 6,788 |
| Kerosine | 1,557 | 1,533 | 1,325 | 2,103 | 2,138 | 1,806 |
| Fuel oil | 4,756 | 5,114 | 2,758 | 10,869 | 11,044 | 13,203 |
| Lubricating oil | 207 | 174 | 316 | 435 | 442 | 653 |
| Road oil | 2,493 | 1,339 | 142 | 3,553 | 3,610 | 3,011 |
| St. Vincent— | | | | | | |
| Aviation and motor spirits | 2,973 | 2,870 | 3,294 | 3,858 | 3,920 | n.a. |
| Kerosine | 1,721 | 1,667 | 1,805 | 1,998 | 2,030 | n.a. |
| Gas, diesel and fuel oils | 899 | 1,611 | 2,087 | 2,544 | 2,585 | n.a. |
| Lubricating oil | 64 | 79 | 104 | 129 | 131 | n.a. |
| Road oil | 623 | 728 | 759 | 746 | 758 | n.a. |
| Asphalt | 28 | 12 | 9 | 2,220 | 2,256 | n.a. |
| Trinidad and Tobago— | | | | | | |
| Crude petroleum | 11,180,069 | 12,642,930 | 14,079,975 | 15,372,572 | 15,619,302 | 15,499,707 |
| Aviation and motor spirits | 77,543 | 13,819 | 90,067 | 117,311 | 119,194 | 16,098 |
| Fuel oil | 61,021 | 9,091 | 8,006 | 38,674 | 39,295 | 25,340 |
| Lubricating oil | 3,821 | 4,263 | 4,192 | 6,142 | 6,241 | 51,016 |
| Greases | 265 | 242 | 427 | 249 | 253 | 409 |
| Petroleum jelly | 100 | 189 | 173 | 106 | 108 | 123 |
| Paraffin wax | 615 | 550 | 745 | 652 | 662 | 1,434 |

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

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|------------|------------|------------|------------|-----------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Virgin Islands— | | | | | | |
| Motor spirit | 183 | 2,993 | 2,782 | 3,007 | 3,055 | 3,262 |
| Kerosine | 472 | 559 | 559 | 330 | 335 | 540 |
| Diesel oil | 926 | 823 | 1,928 | 3,200 | 3,251 | 3,441 |
| Lubricating oil .. | 293 | 542 | 1,615 | 137 | 139 | 344 |
| Falkland Islands— | | | | | | |
| Motor spirit | 317 | 272 | 240 | 184 | 187 | 347 |
| Kerosine | 18 | 8 | 3 | 1 | 1 | 2 |
| Gas and diesel oils .. | 5,783 | 169 | 383 | 335 | 340 | 514 |
| Lubricating oil .. | 32 | 29 | 91 | 28 | 28 | 66 |
| Guyana— | | | | | | |
| Aviation spirit (a) .. | 4,075 | 4,329 | 2,609 | 3,899 | 3,962 | 4,222 |
| Motor spirit | 25,638 | 35,872 | 40,853 | 38,590 | 39,209 | 33,112 |
| Kerosine | 25,698 | 25,658 | 25,554 | 26,964 | 27,397 | 34,718 |
| Gas, diesel and fuel oils | 366,485 | 365,083 | r 661,455 | 432,900 | 439,848 | 424,107 |
| Lubricating oil .. | 3,896 | 4,316 | 2,504 | 4,938 | 5,017 | 7,051 |
| Grease | 491 | 436 | 261 | 519 | 527 | 444 |
| Paraffin wax | 27 | 24 | 23 | 9 | 9 | 4 |
| Petroleum jelly .. | 66 | 117 | 82 | 64 | 65 | 106 |
| Road oil | 355 | 348 | 190 | 46 | 47 | 22 |
| Asphalt and bitumen .. | 11,371 | 10,708 | 4,427 | 7,029 | 7,142 | 5,867 |
| Asphalt natural .. | 798 | 127 | 1 | — | — | — |
| Brunei— | | | | | | |
| Aviation and motor spirits | 2,729 | 2,905 | 5,662 | 7,549 | 7,670 | n.a. |
| Kerosine | 1,309 | 2,331 | 3,430 | 1,612 | 1,638 | n.a. |
| Diesel oil | 15 | 2 | 1,423 | 862 | 876 | n.a. |
| Fuel oil | — | 179 | 20 | — | — | n.a. |
| Lubricating oil .. | 1,623 | 1,863 | 2,390 | 2,720 | 2,764 | n.a. |
| Grease | 35 | 58 | 70 | 82 | 83 | n.a. |
| Ceylon— | | | | | | |
| Crude petroleum .. | — | 37,811 | — | 1,803,688 | 1,832,632 | 1,819,458 |
| Aviation spirit (a) .. | 12,791 | 13,410 | } 80,929 | n.a. | n.a. | n.a. |
| Motor spirit | 159,266 | 219,506 | | n.a. | n.a. | n.a. |
| Kerosine | 224,329 | 260,772 | 184,212 | n.a. | n.a. | n.a. |
| Gas oil (a) | 193,525 | 260,773 | 211,840 | n.a. | n.a. | n.a. |
| Diesel oil (a) | 168,234 | 171,120 | 183,691 | n.a. | n.a. | n.a. |
| Fuel oil (a) | 457,181 | 447,858 | 784,960 | n.a. | n.a. | n.a. |
| Lubricating oil .. | 12,498 | 12,056 | 10,069 | n.a. | n.a. | n.a. |
| Other oils and greases | 250 | 688 | 650 | n.a. | n.a. | n.a. |
| Paraffin wax | 803 | 612 | 687 | n.a. | n.a. | n.a. |
| Asphalt (incl. natural) .. | 18,602 | 4,380 | n.a. | n.a. | n.a. | n.a. |
| Cyprus— | | | | | | |
| Aviation spirit (a) .. | 1,544 | 2,064 | 2,364 | 2,292 | 2,329 | 17 |
| Motor spirit | 75,637 | 77,034 | 92,235 | 97,309 | 98,870 | 107,404 |
| Aviation turbine fuel .. | — | (c) | (c) | (c) | (c) | (c) |
| Kerosine, etc. | 34,597 | 63,382 | 37,194 | 52,491 | 53,334 | 61,099 |
| Gas oil | 99,896 | 134,118 | 132,182 | 130,479 | 132,573 | 133,201 |
| Other fuel oils | 192,040 | 228,249 | 228,812 | 242,497 | 246,389 | 280,783 |
| Lubricating oil .. | 4,898 | 5,299 | 5,969 | 6,728 | 6,836 | 6,006 |
| Paraffin wax | 152 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Asphalt and bitumen .. | 15,215 | (b) 13,698 | (b) 18,122 | (b) 13,859 | (b) 14,081 | (b) 9,010 |

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

(b) Including natural.

(c) Included with kerosine.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|------------|------------|------------|------------|------------|------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Hong Kong— | | | | | | |
| Aviation spirit .. | 11,502 | 3,729 | 4,872 | 2,624 | 2,666 | 3,021 |
| Motor spirit | 80,600 | 83,093 | 100,638 | 90,114 | 91,558 | 112,761 |
| White spirit | 31,406 | 28,117 | 35,074 | 27,890 | 28,338 | 33,068 |
| Aviation turbine fuel .. | 201,869 | 244,270 | 327,405 | 344,636 | 350,166 | 449,043 |
| Kerosine | 178,538 | 173,563 | 197,677 | 167,605 | 170,295 | 210,694 |
| Diesel oil and gas oil .. | 389,758 | 460,656 | 532,970 | 584,644 | 594,026 | 692,286 |
| Fuel oil | 1,754,796 | 1,872,851 | 2,209,029 | 2,491,134 | 2,531,109 | 2,482,438 |
| Lubricating oil | 15,624 | 24,306 | 23,467 | 26,086 | 26,505 | 23,601 |
| Greases | 848 | 974 | 1,231 | 1,186 | 1,205 | 1,276 |
| Petroleum jelly | 310 | 303 | 260 | 348 | 354 | 465 |
| Paraffin wax | 5,727 | 4,248 | 4,679 | 3,689 | 3,748 | 3,435 |
| Asphalt and bitumen .. | 12,621 | 12,650 | 11,964 | 11,286 | 11,467 | 13,985 |
| Asphalt (natural) .. | 215 | 185 | 177 | 69 | 70 | 9 |
| India (b)— | | | | | | |
| Crude petroleum .. | 9,788,560 | 5,969,060 | 10,875,214 | 11,473,047 | 11,657,160 | 12,978,999 |
| Aviation and motor spirits | } n.a. | } n.a. | 48,319 | 25,650 | 26,062 | n.a. |
| Other spirit | | | 681,379 | 285,255 | 289,833 | n.a. |
| Kerosine | n.a. | n.a. | 172,240 | 462,887 | 470,315 | n.a. |
| Fuel oil | n.a. | n.a. | } 324,673 | } 182,476 | } 185,404 | } n.a. |
| Lubricating oil and grease | n.a. | n.a. | | | | |
| Petroleum jelly | n.a. | n.a. | } 466 | } 907 | } 922 | } 537 |
| Paraffin wax | n.a. | n.a. | | | | |
| Asphalt and bitumen .. | 2,366 | 498 | 466 | 907 | 922 | 537 |
| Malaysia (West)— | | | | | | |
| Crude petroleum .. | 2,856,612 | 3,082,882 | 3,169,024 | 2,989,792 | 3,037,778 | 2,644,553 |
| Aviation spirit | 349 | 155 | 365 | 3,356 | 3,410 | 1,205 |
| Motor spirit | 92,436 | 91,940 | 88,795 | 96,361 | 97,908 | 108,826 |
| White spirit | 10,955 | 8,159 | 6,876 | 11,778 | 11,967 | 5,532 |
| Aviation turbine fuel .. | 9,409 | (c) 2,447 | 2,882 | 22,760 | 23,125 | 41,959 |
| Kerosine | 41,240 | 49,114 | 77,792 | 70,610 | 71,743 | 71,826 |
| Gas oil | 342,530 | 376,012 | 369,378 | 550,570 | 559,407 | 505,314 |
| Diesel oil | 41,509 | 38,642 | 64,763 | 61,243 | 62,226 | 40,530 |
| Fuel oil | 20,526 | 45,740 | 32,540 | 54,232 | 55,102 | 82,783 |
| Lubricating oil | 24,078 | 22,998 | 25,502 | 45,034 | 45,757 | 53,820 |
| Paraffin wax | 2,409 | 2,945 | 4,763 | 3,250 | 3,302 | 3,423 |
| Petroleum jelly | 452 | 389 | 346 | 429 | 436 | 466 |
| Grease | 1,389 | 1,094 | 1,064 | 1,720 | 1,748 | 1,868 |
| Asphalt and bitumen .. | 8,411 | 9,910 | 8,545 | 7,966 | 8,094 | 12,513 |
| Natural asphalt .. | 1,084 | 405 | 1,101 | 1,359 | 1,381 | 700 |
| Sabah— | | | | | | |
| Aviation and motor spirits (a) | 27,997 | 47,522 | 45,824 | 53,926 | 54,791 | 72,708 |
| Kerosine | (d) 23,056 | (d) 33,897 | (d) 33,934 | (d) 39,122 | (d) 39,750 | (d) 42,100 |
| Diesel oil | 66,454 | 98,556 | 89,736 | 103,630 | 105,293 | 109,715 |
| Fuel oil (a) | 13,654 | 14,028 | 13,375 | 9,537 | 9,690 | 13,836 |
| Lubricating oil | 4,970 | 5,981 | 5,896 | 2,149 | 2,183 | 5,892 |

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

(b) Years ended March 31 following that stated.

(c) Excess of re-exports.

(d) Including aviation turbine fuel.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons Tonnes

| Importing Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|---------------------------------------|------------|------------|------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Sarawak— | | | | | | |
| Crude petroleum (d) .. | 4,924,312 | 5,818,018 | 6,021,133 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Aviation spirit | 526 | 550 | 354 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Motor spirit | 22,725 | 28,652 | 22,759 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Kerosine | 9,847 | 17,248 | 10,154 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Aviation turbine fuel .. | 13,070 | 6,533 | 13,258 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Gas oil | 25,167 | 28,554 | 21,062 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Diesol oil | 15,343 | 18,417 | 5,834 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Fuel oil | 2,614 | 3,778 | 5,429 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Lubricating oil | 4,206 | 4,380 | 4,333 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Paraffin wax | 7 | 8 | 18 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Mineral jelly | 19 | 24 | 17 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Singapore— | | | | | | |
| Crude petroleum | 5,427,414 | 8,894,082 | 9,388,706 | 10,783,769 | 10,956,849 | 15,416,157 |
| Aviation spirit | 318,957 | 351,439 | 429,249 | 245,075 | 249,009 | 650,678 |
| Motor spirit | 521,547 | 513,677 | 588,941 | 615,377 | 625,253 | 508,807 |
| White spirit | 35,710 | 39,524 | 39,398 | 29,964 | 30,446 | 13,528 |
| Aviation turbine fuel .. | 1,364,987 | 897,038 | 1,333,532 | 1,313,987 | 1,335,076 | 1,130,300 |
| Kerosine | 294,688 | 271,128 | 294,120 | 293,566 | 298,278 | 289,603 |
| Gas oil | 900,700 | 1,172,689 | 1,292,219 | 1,363,558 | 1,385,439 | 1,154,096 |
| Diesol oil | 206,812 | 144,259 | 138,291 | 186,391 | 189,383 | 205,046 |
| Fuel oil | 3,581,234 | 3,735,555 | 4,339,527 | 5,198,547 | 5,281,968 | 3,091,202 |
| Lubricating oil | 117,406 | 148,969 | 183,682 | 200,980 | 204,206 | 180,108 |
| Petroleum jelly | 388 | 386 | 339 | 254 | 258 | 399 |
| Grease | 881 | 702 | 717 | 1,057 | 1,074 | 1,202 |
| Asphalt and bitumen .. | 3,163 | 6,259 | 6,625 | 10,119 | 10,282 | 5,911 |
| Petroleum coke | 76,522 | 3,004 | 3 | 2,026 | 2,058 | 50 |
| Australia (b)— | | | | | | |
| Crude petroleum | 20,228,316 | 20,397,361 | 21,108,923 | 20,783,101 | 21,116,670 | 12,488,305 |
| Aviation spirit (a) | 60,763 | 51,005 | 39,613 | 49,593 | 50,389 | 11,864 |
| Motor spirit | 370,863 | 317,848 | 245,269 | 424,572 | 431,385 | 472,156 |
| White spirit | 4,180 | 4,815 | 4,413 | 7,519 | 7,640 | 6,531 |
| Kerosine | 50,921 | 57,458 | 47,918 | 73,200 | 74,375 | 90,573 |
| Aviation turbine fuel (a) | 83,164 | 47,316 | 58,649 | 54,310 | 55,182 | 67,148 |
| Lubricating oil | 57,039 | 50,469 | 42,780 | 34,754 | 35,312 | 50,443 |
| Gas, diesel and fuel oils (a) | 212,896 | 191,570 | 780,668 | 1,398,034 | 1,420,468 | 1,998,735 |
| Petroleum jelly | 901 | 1,479 | 1,528 | 1,679 | 1,706 | 2,005 |
| Paraffin wax | 10,825 | 11,747 | 13,148 | 14,121 | 14,348 | 16,195 |
| Natural asphalt | 644 | 1,068 | 647 | 1,115 | 1,133 | 1,243 |
| Bitumen and pitch | 230 | 205 | 5,052 | 1,974 | 2,006 | 2,204 |
| Fiji— | | | | | | |
| Aviation spirit (a) | 2,287 | 2,519 | 1,995 | 543 | 551 | 544 |
| Motor spirit | 24,430 | 25,415 | 24,686 | 37,528 | 38,131 | 35,243 |
| Aviation turbine fuel (a) | 63,223 | 66,928 | 87,374 | 97,995 | 99,568 | 111,957 |
| Kerosine | 8,186 | 10,284 | 9,815 | 20,088 | 20,411 | 14,229 |
| Gas oil (a) | 23,208 | 23,097 | 29,734 | 27,996 | 28,445 | 21,140 |
| Diesol oil (a) | 40,067 | 50,652 | 49,374 | 66,466 | 67,533 | 83,323 |
| Fuel oil (a) | 19,989 | 25,651 | 34,832 | 1,881 | 1,912 | 49,946 |
| Lubricating oil | 2,082 | 2,131 | 2,387 | 3,003 | 3,052 | 3,501 |
| Greases | 190 | 169 | 178 | 144 | 146 | 222 |
| Bitumen | 1,956 | 1,124 | 963 | 915 | 930 | 13 |
| New Guinea (b)— | | | | | | |
| Aviation and motor spirits | 37,161 | 42,413 | 47,281 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Kerosine | (c) 5,273 | (c) 12,584 | (c) 13,717 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Fuel oils | 55,051 | 66,210 | 75,028 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Lubricating oil | 2,332 | 2,511 | 3,243 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |

(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.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--|-----------|-----------|------------|-----------|-----------|-----------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| New Hebrides— | | | | | | |
| Aviation spirit | 402 | 471 | 123 | 663 | 674 | 597 |
| Motor spirit | 1,921 | 2,785 | 2,638 | 3,332 | 3,386 | 7,397 |
| Kerosine | 520 | 1,136 | 847 | 1,667 | 1,694 | 1,967 |
| Lubricating oil | 496 | 335 | 375 | 564 | 573 | 615 |
| Other oils | 11,053 | 14,714 | 11,503 | 17,222 | 17,509 | 28,473 |
| New Zealand (c)— | | | | | | |
| Crude petroleum | 2,907,971 | 2,450,180 | 2,703,091 | 2,711,224 | 2,754,739 | 3,029,939 |
| Aviation spirit and motor spirit | 242,003 | 233,331 | 212,689 | 282,397 | 286,929 | 236,113 |
| White spirit | 23,189 | 16,616 | 32,692 | 41,007 | 41,665 | 39,656 |
| Aviation turbine fuel | 115,837 | 108,124 | 125,777 | 142,970 | 145,265 | 143,570 |
| Kerosine | 33,243 | 27,068 | 36,487 | 30,600 | 31,091 | 29,159 |
| Gas oil | 165,056 | 124,841 | 169,175 | 240,813 | 244,678 | 213,514 |
| Diesel oil (a) | | | | | | |
| Fuel oil (a) | 5,239 | — | 268 | — | — | n.a. |
| Lubricating oil (a) | 49,319 | 46,453 | 48,820 | 44,459 | 45,173 | 55,136 |
| Transformer oil | 247 | 296 | 46 | 223 | 229 | n.a. |
| Petroleum jelly | 388 | 255 | 340 | 536 | 545 | n.a. |
| Paraffin wax | 1,937 | 1,576 | 2,223 | 4,545 | 4,618 | 2,394 |
| Asphalt and bitumen | 671 | 301 | 201 | 273 | 277 | n.a. |
| do. natural | 352 | 202 | 242 | 273 | 277 | 261 |
| Papua (c)— | | | | | | |
| Aviation and motor spirits | 21,621 | 19,432 | 22,884 | n.a. | n.a. | n.a. |
| Kerosine | (d) 8,094 | (d) 8,046 | (d) 15,152 | n.a. | n.a. | n.a. |
| Fuel oil | 15,880 | 19,299 | 25,141 | n.a. | n.a. | n.a. |
| Lubricating oil | 973 | 75 | 945 | n.a. | n.a. | n.a. |
| Solomon Islands— | | | | | | |
| Aviation spirit | 349 | 315 | 1,063 | 334 | 339 | 1,266 |
| Aviation turbine fuel | 16 | 114 | | | | |
| Motor spirit | 1,545 | 1,937 | 1,938 | 2,220 | 2,256 | 2,655 |
| Kerosine | 837 | 951 | 914 | 1,059 | 1,076 | 1,068 |
| Fuel oils | 7,642 | 8,702 | 8,741 | 9,609 | 9,763 | 12,530 |
| Lubricating oil | 367 | 445 | 490 | 491 | 499 | 842 |
| Western Samoa— | | | | | | |
| Motor spirit | 4,583 | 4,306 | 4,680 | 4,949 | 5,028 | n.a. |
| Kerosine | 1,091 | 1,154 | 1,012 | 1,326 | 1,347 | n.a. |
| Fuel oil | 2,569 | 2,919 | 2,877 | 3,998 | 4,062 | n.a. |
| Lubricating oil | 207 | 185 | 687 | 277 | 281 | n.a. |
| Irish Republic— | | | | | | |
| Crude petroleum | 2,681,472 | 2,445,050 | 2,463,764 | 2,900,537 | 2,947,090 | 3,337,587 |
| Aviation spirit (a) | 11,567 | 11,527 | 4,521 | 6,143 | 6,242 | 2,774 |
| Motor spirit | 50,238 | 43,810 | 3,674 | 128,074 | 130,130 | 179,704 |
| White spirit | 3,720 | 3,583 | 64,185 | 4,482 | 4,554 | 5,210 |
| Kerosine | 70,096 | 86,401 | 70,743 | 97,709 | 99,277 | 84,335 |
| Aviation turbine fuel (a) | 162,949 | 156,971 | 119,355 | 220,146 | 223,679 | 275,151 |
| Gas and diesel oils (a) | 46,614 | 63,805 | 115,066 | 183,427 | 186,371 | 268,259 |
| Fuel oil | 763,130 | 763,242 | 1,208,872 | 1,250,223 | 1,270,289 | 1,665,180 |
| Lubricating oil | 29,286 | 32,100 | 35,237 | 34,252 | 34,801 | 34,840 |
| Greases | 317 | 549 | 1,110 | 1,012 | 1,028 | 1,347 |
| Other oils | 40,118 | 48,002 | 31,535 | 70,627 | 71,760 | 88,691 |
| Paraffin wax (b) | 2,386 | 2,374 | 3,276 | 2,877 | 2,923 | 2,920 |
| Asphalt and bitumen | 11,896 | 66,513 | 3,628 | 3,337 | 3,390 | 7,378 |
| do. natural | 580 | 3,101 | 36,980 | 9,939 | 10,098 | 9,945 |

(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 | Tonnes

| Importing Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|-----------------------------------|------------|------------|------------|------------|------------|-------------|
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Crude petroleum .. | 1,073,627 | 1,471,914 | 1,323,877 | 2,210,392 | 2,245,862 | 4,480,379 |
| Motor spirit .. | 578,517 | 703,012 | 784,762 | 931,468 | 946,415 | 669,730 |
| White spirit .. | 6,251 | 4,929 | 5,988 | 5,929 | 6,024 | 9,911 |
| Gas oil .. | 113,381 | 104,692 | 101,584 | 122,024 | 123,982 | 30,958 |
| Fuel oil .. | 1,208,651 | 1,657,194 | 1,796,660 | 1,911,002 | 1,941,668 | 1,716,647 |
| Lubricating oil, etc. .. | 54,562 | 56,531 | 61,587 | 75,639 | 76,853 | 82,538 |
| Petroleum jelly .. | 308 | 355 | 418 | 490 | 498 | 535 |
| Paraffin wax .. | 7,237 | 8,073 | 8,367 | 9,410 | 9,561 | 10,768 |
| Ozokerite and ceresin (a) .. | 175 | 93 | 115 | 109 | 111 | 147 |
| Natural asphalt .. | 1,074 | 865 | 499 | 699 | 710 | 683 |
| Petroleum coke .. | 15,871 | 10,272 | 20,584 | 31,273 | 31,775 | 56,047 |
| Bitumen, etc. .. | 188,801 | 193,815 | 255,231 | 281,541 | 286,059 | 291,458 |
| Belgium-Luxembourg | | | | | | |
| E.U.— | | | | | | |
| Crude petroleum .. | 17,309,891 | 23,024,873 | 28,003,420 | 29,874,107 | 30,353,510 | 30,580,920 |
| Motor spirit, etc. .. | 418,734 | 614,226 | 678,285 | 987,523 | 1,003,370 | 2,086,990 |
| Kerosine .. | 55,702 | 144,450 | 61,540 | 171,340 | 174,090 | 476,169 |
| Gas oil .. | 2,238,959 | 2,031,746 | 1,704,501 | 1,719,930 | 1,747,530 | 3,177,518 |
| Fuel oil .. | 2,513,771 | 2,835,255 | 2,860,801 | 2,613,714 | 2,655,656 | 3,598,720 |
| Lubricating oil .. | 274,770 | 291,897 | 292,577 | 351,550 | 357,191 | 811,137 |
| Other heavy oils .. | 16,310 | 15,367 | 13,610 | 22,248 | 22,605 | 24,943 |
| Petroleum jelly .. | 982 | 935 | 1,176 | 2,955 | 3,003 | 1,575 |
| Paraffin wax .. | 7,974 | 8,232 | 9,706 | 9,983 | 10,143 | 11,313 |
| Ozokerite and ceresin (a) .. | 198 | 150 | 328 | 288 | 293 | 340 |
| Petroleum coke .. | 89,062 | 107,053 | 149,011 | 169,476 | 172,196 | 108,248 |
| Natural asphalt .. | 7,583 | 4,188 | 8,414 | 5,922 | 6,017 | 20,769 |
| Pitch .. | 41,269 | 52,925 | 52,211 | 44,539 | 45,254 | 32,479 |
| Bulgaria— | | | | | | |
| Crude petroleum .. | 2,758,730 | 3,257,700 | 4,731,000 | 5,600,000 | 5,696,000 | <i>n.a</i> |
| Denmark— | | | | | | |
| Crude petroleum .. | 6,434,807 | 6,646,697 | 9,023,399 | 9,961,958 | 10,121,818 | 10,664,444 |
| Aviation spirit .. | 51,027 | 45,718 | 29,227 | 30,517 | 31,007 | 20,474 |
| Motor spirit .. | 781,043 | 891,031 | 766,243 | 851,153 | 864,812 | 909,386 |
| White spirit .. | 11,886 | 12,954 | 10,491 | 13,394 | 13,609 | 13,424 |
| Kerosine .. | 110,227 | 116,341 | 130,396 | 111,779 | 113,573 | 119,589 |
| Gas oil .. | 2,659,224 | 2,952,453 | 3,193,684 | 3,838,511 | 3,900,108 | 3,307,368 |
| Diesel oil .. | 46,543 | 62,075 | 31,385 | 27,105 | 27,540 | 36,258 |
| Fuel oil .. | 2,160,704 | 2,787,653 | 3,511,905 | 4,731,752 | 4,807,683 | 4,594,264 |
| Lubricating oil .. | 86,939 | 96,485 | 80,084 | 91,881 | 93,355 | 92,233 |
| Grease .. | 1,333 | 1,428 | 1,161 | 1,634 | 1,660 | 1,406 |
| Petroleum jelly .. | 582 | 507 | 485 | 598 | 608 | 489 |
| Ozokerite, etc. .. | 1,247 | 1,036 | 1,677 | 1,427 | 1,450 | 1,123 |
| Paraffin wax .. | 8,011 | 8,545 | 10,467 | 10,835 | 11,009 | 15,198 |
| Natural asphalt .. | 1,384 | 1,703 | 1,679 | 1,629 | 1,656 | 1,566 |
| Other asphalt .. | 207,964 | 202,191 | 233,056 | 254,605 | 258,691 | 280,518 |
| Faroe Islands— | | | | | | |
| Motor spirit .. | 3,644 | 4,009 | 4,516 | 3,960 | 4,024 | 6,754 |
| Kerosine .. | 3,357 | 2,554 | 3,617 | 1,918 | 1,949 | 2,791 |
| Fuel oils .. | 45,144 | 51,680 | 55,345 | 65,973 | 67,032 | 73,691 |
| Lubricating oil, etc. .. | 559 | 640 | 677 | 707 | 718 | 805 |
| Finland— | | | | | | |
| Crude petroleum .. | 4,891,801 | 5,722,367 | 6,953,831 | 9,599,178 | 9,753,216 | 8,945,371 |
| Motor spirit .. | 83,141 | 48,093 | 19,765 | 26,718 | 27,147 | 23,457 |
| White spirit .. | 4,587 | 6,057 | 7,002 | 4,197 | 4,264 | 6,342 |
| Kerosine .. | 11,739 | 12,179 | 9,427 | 11,721 | 11,909 | <i>n.a.</i> |
| Aviation turbine fuel .. | 8,792 | 11,022 | 5,194 | 7,403 | 7,522 | 12,924 |
| Fuel oil .. | 2,968,904 | 2,831,357 | 2,750,833 | 2,945,302 | 2,992,565 | 2,904,217 |
| Lubricating oil .. | 60,160 | 62,822 | 75,531 | 69,384 | 70,498 | 88,179 |
| Petroleum jelly .. | 318 | 329 | 428 | 440 | 447 | 322 |
| Paraffin wax .. | 7,106 | 7,404 | 6,210 | 8,615 | 8,753 | 10,027 |
| Asphalt, etc. .. | 24,827 | 28,339 | 35,561 | 41,101 | 41,761 | 43,717 |

(a) Including montan wax.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

| Importing Country and Description | | | Long tons | | Tonnes | |
|--------------------------------------|------------|------------|------------|------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| France— | | | | | | |
| Crude petroleum .. | 71,205,103 | 75,957,091 | 84,942,576 | 98,581,133 | 100,162,702 | 104,748,661 |
| Aviation spirit .. | 75,113 | 43,084 | 40,542 | 41,843 | 42,515 | 52,418 |
| Motor spirit .. | 432,820 | 608,817 | 399,532 | 385,499 | 391,685 | 686,888 |
| White spirit .. | 14,964 | 17,861 | 26,612 | 32,647 | 33,171 | 31,598 |
| Kerosine .. | 9,742 | 9,971 | 18,085 | 6,955 | 7,067 | 62,722 |
| Lubricating oil .. | 28,502 | 16,243 | 29,699 | 25,846 | 26,261 | 52,045 |
| Fuel oil .. | 1,210,171 | 1,020,055 | 909,833 | 1,063,933 | 1,081,006 | 1,378,017 |
| Gas oil .. | 2,523,082 | 2,771,952 | 2,762,698 | 3,097,101 | 3,146,800 | 3,968,633 |
| Petroleum coke .. | 120,460 | 116,269 | 130,694 | 209,232 | 212,590 | 220,719 |
| Paraffin wax .. | 2,789 | 4,504 | 5,051 | 3,870 | 3,932 | 5,273 |
| Ozokerite and ceresin .. | 72 | 89 | 104 | 49 | 50 | 29 |
| Petroleum jelly .. | 581 | 757 | 629 | 795 | 808 | 986 |
| Natural asphalt and bitumen .. | 2,281 | 2,750 | 1,574 | 2,584 | 2,626 | 2,241 |
| Bitumen .. | 7,212 | 7,446 | 8,953 | 11,266 | 11,447 | 9,876 |
| Natural gas (<i>mill. cu. ft.</i>) | 15,500 | 13,900 | 19,300 | 19,400 | (a) 549 | (a) 463 |
| Germany (Federal)— | | | | | | |
| Crude petroleum .. | 70,862,200 | 82,743,329 | 88,136,987 | 97,226,605 | 98,786,443 | 100,229,654 |
| Aviation spirit .. | 170,981 | 198,600 | 163,728 | 55,509 | 56,400 | 32,631 |
| Motor spirit .. | 3,051,432 | 3,284,551 | 3,605,057 | 4,788,495 | 4,865,336 | 3,290,967 |
| White spirit .. | 35,347 | 41,471 | 51,053 | 64,289 | 65,321 | 76,547 |
| Kerosine .. | 23,236 | 45,849 | 25,746 | 63,427 | 64,445 | 176,425 |
| Aviation turbine fuel .. | 350,118 | 371,959 | 401,618 | 541,457 | 550,146 | 636,479 |
| Gas and diesel oil .. | 1,153,249 | 1,432,161 | 1,350,691 | 2,052,133 | 2,085,064 | 1,410,338 |
| Fuel oil .. | 12,451,914 | 13,701,558 | 16,349,499 | 19,279,496 | 19,588,883 | 21,247,535 |
| Lubricating oil, etc. .. | 149,805 | 171,880 | 171,206 | 179,400 | 182,279 | 211,706 |
| Petroleum jelly .. | 1,359 | 1,893 | 1,827 | 2,145 | 2,180 | 1,757 |
| Paraffin wax .. | 32,891 | 31,583 | 36,952 | 33,700 | 34,241 | 32,993 |
| Natural asphalt and bitumen .. | 18,483 | 19,628 | 17,830 | 21,262 | 21,603 | 22,003 |
| Bitumen .. | 314,397 | 271,252 | 286,765 | 266,790 | 271,071 | 368,388 |
| Petroleum coke .. | 317,573 | 318,555 | 444,225 | 864,162 | 878,029 | 626,183 |
| Germany (East)— | | | | | | |
| Crude petroleum .. | 6,535,000 | 7,912,000 | 9,126,000 | 10,152,000 | 10,315,000 | 10,919,000 |
| Greece— | | | | | | |
| Crude petroleum .. | 3,929,393 | 3,791,407 | 4,527,699 | 4,703,031 | 4,778,501 | 4,856,682 |
| Aviation spirit .. | 10,700 | 13,452 | 12,919 | 77,631 | 78,877 | 91,141 |
| Motor spirit .. | r 84,371 | r 66,152 | r 56,800 | | | |
| White spirit .. | 3,746 | 3,400 | 2,157 | 1,687 | 1,714 | 545 |
| Kerosine .. | 7,513 | 833 | 698 | 67,223 | 68,302 | 17,926 |
| Fuel oil and diesel oil .. | 1,031,261 | 976,434 | 1,238,627 | 1,110,408 | 1,128,227 | 1,389,922 |
| Lubricating oil, etc. .. | 41,725 | 47,117 | 54,001 | 75,339 | 76,548 | 82,852 |
| Petroleum jelly .. | 104 | 118 | 193 | 138 | 140 | 173 |
| Paraffin wax .. | 265 | 272 | 342 | 262 | 266 | 310 |
| Asphalt and bitumen .. | 1,518 | 832 | 1,174 | 758 | 770 | 8,526 |
| Hungary— | | | | | | |
| Crude petroleum .. | 2,909,314 | 3,169,144 | 3,704,332 | 4,280,019 | 4,348,701 | 4,892,000 |
| Motor spirit .. | 69,879 | 71,483 | 98,556 | 98,551 | 100,133 | 148,686 |
| Gas oil .. | 127,947 | 144,735 | 164,719 | 292,817 | 297,516 | 245,521 |
| Fuel oil .. | 340,535 | 327,830 | 354,581 | 382,089 | 388,220 | 223,465 |
| Iceland— | | | | | | |
| Aviation spirit .. | 11,311 | 3,301 | 2,338 | 2,660 | 2,703 | 2,701 |
| Motor spirit .. | 52,273 | 52,000 | 49,191 | 49,874 | 50,674 | 62,020 |
| White spirit .. | 484 | 910 | 20 | 533 | 542 | 696 |
| Kerosine .. | 741 | 1,369 | 2,971 | 803 | 816 | 1,008 |
| Gas oil and fuel oil .. | 386,985 | 332,939 | 336,621 | 389,009 | 395,252 | 397,755 |
| Lubricating oil .. | 4,413 | 4,557 | 4,843 | 4,823 | 4,900 | 6,144 |
| Greases .. | | | | | | |
| Paraffin wax .. | 107 | 111 | 450 | 458 | 465 | 315 |
| Petroleum jelly .. | 7 | 14 | 8 | 8 | 8 | 3 |
| Asphalt .. | 1,356 | 2,705 | 2,026 | 4,512 | 4,585 | 5,420 |

 (a) Million m³.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--|------------|------------|------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Italy— | | | | | | |
| Crude petroleum .. | 85,074,155 | 86,183,840 | 99,576,512 | 110,312,074 | 112,082,257 | 115,705,328 |
| Aviation and motor spirits | 518,075 | 168,425 | 241,236 | 304,854 | 309,746 | 582,822 |
| Kerosine | 25,469 | 22,508 | 106,213 | 58,132 | 59,065 | 103,771 |
| Gas oil | 2,910,669 | 3,340,273 | 3,124,326 | 2,345,018 | 2,382,649 | 2,369,153 |
| Fuel oil | | | | | | |
| Lubricating oil .. | 117,168 | 159,453 | 117,474 | 136,555 | 138,746 | 125,223 |
| Petroleum jelly .. | 1,718 | 1,928 | 1,928 | 1,742 | 1,770 | 1,669 |
| Paraffin wax (a) .. | 37,530 | 39,681 | 43,740 | 47,086 | 47,842 | 41,087 |
| Pitch | 2,697 | 31,459 | 41,015 | 44,584 | 45,300 | 87,812 |
| Petroleum coke .. | 264,906 | 267,778 | 335,948 | 410,840 | 417,433 | 449,903 |
| Natural asphalt and bitumen | 3,300 | 2,127 | 2,621 | 2,686 | 2,729 | 2,499 |
| Netherlands— | | | | | | |
| Crude petroleum .. | 31,367,387 | 35,230,537 | 47,600,046 | 65,945,352 | 67,003,580 | 71,571,524 |
| Motor spirit, etc. .. | 502,368 | 344,861 | 588,000 | 571,319 | 580,487 | 819,000 |
| Kerosine | 423,885 | 566,341 | 509,000 | 433,124 | 440,075 | (c) 445,000 |
| Gas oil | 1,769,166 | 1,808,224 | 1,689,593 | 2,763,655 | 2,808,004 | c 2,911,613 |
| Fuel oil | 4,040,041 | 2,363,260 | 1,595,690 | 2,183,536 | 2,218,576 | c 1,311,667 |
| Lubricating oil .. | 311,731 | 363,035 | 401,473 | 434,799 | 441,777 | 538,877 |
| Petroleum jelly .. | 2,164 | 2,336 | 1,983 | 1,997 | 2,030 | 6,351 |
| Paraffin wax | 17,247 | 16,102 | 18,209 | 18,922 | 19,226 | 16,780 |
| Ozokerite and ceresin (b) | 158 | 244 | 293 | 395 | 401 | 349 |
| Pitch | 189,534 | 244,332 | 220,524 | 171,461 | 174,213 | (c) 9,220 |
| Petroleum coke .. | 116,697 | 124,687 | 138,931 | 206,821 | 210,140 | (c) 237,495 |
| Natural asphalt .. | 1,463 | 1,936 | 1,266 | 1,833 | 1,863 | 1,943 |
| Norway— | | | | | | |
| Crude petroleum .. | 3,141,973 | 4,847,957 | 5,026,470 | 6,424,828 | 6,527,928 | 5,634,378 |
| Aviation spirit | 43,657 | 28,734 | 21,030 | 11,396 | 11,579 | 14,563 |
| Motor spirit | 543,019 | 443,296 | 552,476 | 593,737 | 603,265 | 601,944 |
| White spirit | 19,765 | 22,988 | 19,183 | 23,044 | 23,414 | 25,390 |
| Kerosine | 193,112 | 188,406 | 173,976 | 225,222 | 228,837 | 261,816 |
| Aviation turbine fuel .. | 106,622 | 73,034 | 65,462 | 67,340 | 68,421 | 146,735 |
| Diesel oil | 314,328 | 137,067 | 142,816 | 193,995 | 197,109 | 240,153 |
| Gas oil | 1,060,722 | 954,485 | 1,015,754 | 1,201,371 | 1,220,650 | 1,244,518 |
| Fuel oil | 1,402,718 | 1,050,526 | 1,080,467 | 1,255,481 | 1,275,628 | 926,751 |
| Lubricating oil .. | 52,893 | 53,986 | 56,478 | 62,597 | 63,602 | 61,883 |
| Petroleum jelly .. | 344 | 714 | 792 | 822 | 836 | 863 |
| Paraffin wax | 4,124 | 3,749 | 4,386 | 4,738 | 4,815 | 4,681 |
| Greases | 1,722 | 1,757 | 1,759 | 1,815 | 1,845 | 2,026 |
| Pitch | 76,203 | 99,834 | 107,487 | 143,344 | 145,645 | 145,878 |
| Petroleum coke .. | 190,371 | 246,092 | 264,462 | 319,063 | 324,184 | 280,573 |
| Asphalt, etc. | 1,323 | 1,259 | 364 | 451 | 459 | 394 |
| Poland— | | | | | | |
| Crude petroleum .. | 3,551,100 | 5,493,357 | 6,407,183 | 6,900,000 | 7,011,000 | 7,894,000 |
| Motor spirit | 2,739,971 | 2,494,898 | 2,358,874 | 2,379,194 | 2,417,374 | 2,267,185 |
| Kerosine | | | | | | |
| Fuel oils | | | | | | |
| Lubricating oil .. | | | | | | |
| Paraffin wax | | | | | | |
| Asphalt | | | | | | |
| Petroleum coke .. | | | | | | |

(a) Includes ozokerite and ceresin.

(b) Including montan wax.

(c) Excludes imports from Belgium and Luxemburg, if any.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|------------|------------|------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Portugal— | | | | | | |
| Crude petroleum .. | 1,723,699 | 1,781,116 | 2,202,831 | 3,586,327 | 3,643,877 | 3,987,381 |
| Motor spirit .. | 129,848 | 195,981 | 271,855 | 43,868 | 44,572 | 41,463 |
| Kerosine .. | 17,640 | 12,474 | 12,395 | 14,300 | 14,530 | 29,062 |
| Aviation turbine fuel .. | 6,927 | 12,708 | 16,443 | 22,436 | 22,796 | <i>n.a.</i> |
| Gas oil and diesel oil .. | 331,165 | 398,994 | 351,367 | 255,820 | 259,925 | 224,558 |
| Fuel oil .. | 353,000 | 401,444 | 351,511 | 196,994 | 200,155 | 383,126 |
| Lubricating oil .. | 48,425 | 52,050 | 57,547 | 66,970 | 68,045 | 58,051 |
| Petroleum jelly .. | 142 | 243 | 152 | 242 | 246 | 176 |
| Paraffin wax .. | 5,097 | 3,985 | 3,411 | 6,126 | 6,224 | 3,594 |
| Ozokerite and ceresin .. | 87 | 162 | 315 | 506 | 514 | 366 |
| Bitumen .. | 35,767 | 31,885 | 41,864 | 48,327 | 49,103 | 34,560 |
| Natural asphalt .. | 1,581 | 1,943 | 1,149 | 996 | 1,012 | 325 |
| Spain— | | | | | | |
| Crude petroleum .. | 14,391,362 | 20,269,613 | 27,412,395 | 23,426,159 | 23,802,089 | 27,321,569 |
| Aviation spirit (a) .. | 38,929 | 49,622 | 44,151 | 41,235 | 41,897 | 42,408 |
| Kerosine (a) .. | 65,376 | 77,806 | 10,062 | 946 | 961 | 426 |
| Aviation turbine fuel .. | 56,802 | 85,414 | 33,090 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Diesel oil (a) .. | 6,990 | 36,422 | 21,544 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Lubricating oil (a) .. | 14,739 | 13,626 | 43,175 | 32,007 | 32,521 | 21,520 |
| Fuel oil (a) .. | 54,662 | 79,302 | 71,567 | 80,106 | 81,391 | 567,140 |
| Petroleum jelly (a) .. | 1,328 | 1,388 | 1,598 | 2,163 | 2,198 | 2,293 |
| Paraffin wax (a) .. | 9,052 | 2,889 | 5,337 | 10,725 | 10,897 | 9,326 |
| Asphalt (a) .. | 34,323 | 18,202 | 21,100 | 16,518 | 16,783 | 24,184 |
| Sweden— | | | | | | |
| Crude petroleum .. | 6,048,295 | 8,919,432 | 10,364,000 | 11,576,000 | 11,762,000 | 11,910,364 |
| Motor spirit, etc. .. | 2,525,072 | 2,489,852 | 2,548,234 | 2,528,704 | 2,569,282 | 2,791,929 |
| White spirit .. | 66,093 | 38,635 | 27,616 | 30,735 | 31,228 | 38,108 |
| Kerosine .. | 312,830 | 346,330 | 309,956 | 472,516 | 480,099 | 381,363 |
| Fuel oil and gas oil .. | 12,994,579 | 13,698,608 | 14,909,096 | 17,177,722 | 17,453,381 | 15,609,750 |
| Lubricating oil and grease .. | 172,458 | 183,682 | 183,143 | 173,864 | 176,654 | 182,456 |
| Petroleum jelly .. | 839 | 980 | 962 | 1,006 | 1,022 | 1,319 |
| Paraffin wax .. | 6,398 | 6,285 | 7,328 | 6,480 | 6,584 | 6,000 |
| Ozokerite, ceresin, etc. .. | 1,687 | 1,833 | 2,398 | 2,989 | 3,037 | 3,147 |
| Asphalt .. | 713 | 897 | 597 | 691 | 702 | 991 |
| Pitch .. | 38,755 | 50,816 | r 41,673 | 35,318 | 35,885 | 35,812 |
| Petroleum coke .. | 18,932 | 31,443 | 69,504 | 72,451 | 73,614 | 107,876 |
| Switzerland— | | | | | | |
| Crude petroleum .. | 3,873,852 | 4,506,002 | 4,880,647 | 5,297,828 | 5,382,843 | 5,186,463 |
| Motor spirit .. | 1,121,731 | 1,209,635 | 1,330,395 | 1,350,463 | 1,372,134 | 1,670,551 |
| White spirit .. | 9,392 | 11,060 | 13,241 | 15,375 | 15,622 | 16,324 |
| Kerosine .. | 10,762 | r 61,270 | r 53,258 | 76,377 | 77,603 | 71,883 |
| Gas and diesel oils .. | 303,341 | 335,077 | 461,239 | 549,675 | 558,496 | 591,028 |
| Fuel oil .. | 3,543,772 | 4,126,988 | 4,318,806 | 5,006,635 | 5,086,977 | 5,368,104 |
| Lubricating oil and grease .. | 80,787 | 81,716 | 84,239 | 93,811 | 95,316 | 103,846 |
| Petroleum jelly .. | 781 | 818 | 799 | 833 | 846 | 885 |
| Paraffin wax and ceresin .. | 7,271 | 7,843 | 9,096 | 10,335 | 10,501 | 9,141 |
| Asphalt and bitumen .. | 264,238 | 229,203 | 218,787 | 249,814 | 253,823 | 286,450 |
| Petroleum coke .. | 10,672 | 53,746 | 49,930 | 48,931 | 49,716 | 46,928 |
| U.S.S.R.— | | | | | | |
| Motor spirit .. | 741,304 | 682,700 | 633,300 | 592,700 | 602,200 | 365,200 |
| Kerosine .. | 12,007 | 6,900 | 104,500 | 78,800 | 80,100 | 328,900 |
| Diesel oil .. | 238,276 | 182,900 | 172,300 | 175,800 | 178,600 | 181,200 |
| Fuel oil .. | 158,260 | 31,200 | 20,900 | — | — | — |
| Lubricating oil and grease .. | 134,344 | 94,500 | 112,000 | 110,900 | 112,700 | 133,800 |
| Paraffin wax .. | 7,874 | 6,300 | 7,200 | 5,900 | 6,000 | 6,100 |
| Bitumen .. | 25,100 | 21,500 | 23,500 | 23,400 | 23,800 | 22,300 |

(a) Excluding imports from Canary Islands.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons | Tonnes

| Importing Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Yugoslavia— | | | | | | |
| Crude petroleum .. | 2,506,361 | 2,640,801 | 3,168,556 | 4,467,524 | 4,539,215 | 4,933,782 |
| Aviation spirit .. | 19,204 | 19,883 | 16,671 | 18,713 | 19,013 | 18,198 |
| Motor spirit .. | 7,209 | 13,638 | 6,730 | 10,306 | 10,471 | 6,097 |
| Kerosine .. | 12,992 | 23,893 | 3,369 | 22,101 | 22,456 | 8,356 |
| Aviation turbine fuel .. | 19 | 1,076 | — | — | — | — |
| Fuel oils .. | 567,208 | 818,300 | 390,658 | 794,509 | 807,259 | 829,404 |
| Lubricating oil .. | 31,368 | 21,946 | 46,918 | 58,210 | 59,144 | 24,113 |
| Greases .. | 368 | 303 | 461 | 635 | 645 | 688 |
| Paraffin wax .. | 3,400 | 2,859 | 4,485 | 5,317 | 5,402 | 5,487 |
| Petroleum jelly .. | 260 | 334 | 304 | 306 | 311 | 324 |
| Ozokerite and ceresin .. | 266 | 194 | 62 | 408 | 415 | 405 |
| Petroleum coke .. | 22,988 | 22,938 | 13,810 | 6,609 | 6,715 | 42,815 |
| Pitch .. | 39,022 | 56,769 | 44,697 | 58,276 | 59,211 | 51,762 |
| Algeria— | | | | | | |
| Motor spirit .. | 3,035 | 30,043 | 10,609 | 4,558 | 4,631 | <i>n.a.</i> |
| Kerosine .. | 159 | 9,692 | <i>n.a.</i> | 20 | 20 | <i>n.a.</i> |
| Gas oil .. | 2,450 | 2,397 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Fuel oil and diesel oil .. | 3,777 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Lubricating oil .. | 30,907 | 36,516 | 34,324 | 35,196 | 35,761 | <i>n.a.</i> |
| Angola— | | | | | | |
| Crude petroleum .. | 34,853 | 57,139 | 75,542 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Motor spirit .. | 7,227 | 7,165 | 8,838 | 8,766 | 8,907 | 12,996 |
| Kerosine .. | 7,231 | 7,935 | 10,897 | 5,597 | 5,687 | 4,773 |
| Gas oil and fuel oil .. | 70,096 | 144,559 | 162,505 | 226,723 | 230,362 | 192,440 |
| Lubricating oil .. | 12,812 | 15,137 | 15,077 | 21,188 | 21,529 | 15,182 |
| Paraffin wax .. | 170 | 326 | 170 | 217 | 221 | 487 |
| Petroleum jelly .. | 32 | 43 | 47 | 27 | 27 | 97 |
| Asphalt and bitumen .. | 1 | 1,000 | 233 | 31 | 31 | 21 |
| Cameroun— | | | | | | |
| Motor spirit, etc. .. | 70,930 | 78,392 | 86,500 | 89,500 | 90,900 | <i>n.a.</i> |
| Kerosine .. | 39,990 | 47,340 | 56,000 | 59,500 | 60,500 | <i>n.a.</i> |
| Gas and fuel oil .. | 63,130 | 67,999 | 77,500 | 94,000 | 96,000 | <i>n.a.</i> |
| Lubricating oil .. | 6,160 | 6,634 | 7,000 | 7,100 | 7,200 | <i>n.a.</i> |
| Canary Islands— | | | | | | |
| Crude petroleum .. | 6,490,223 | 7,580,247 | 7,638,649 | 6,937,057 | 7,048,377 | 7,810,120 |
| Motor spirit .. | 31,995 | 38,787 | 7,373 | 636 | 647 | 6,550 |
| Diesel oil (b) .. | — | 19,541 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Cape Verde Islands— | | | | | | |
| Motor spirit .. | (c) 1,500 | (c) 2,800 | (c) 2,000 | (c) 1,300 | (c) 1,300 | 1,328 |
| Kerosine .. | <i>n.a.</i> | (c) 2,900 | (c) 3,100 | (c) 2,300 | (c) 2,300 | 4,082 |
| Central African Republic— | | | | | | |
| Aviation spirit .. | 2,110 | 892 | 2,217 | } 1,902 | 1,933 | <i>n.a.</i> |
| Motor spirit .. | 11,888 | 11,692 | 1,917 | | | |
| Kerosine .. | 4,888 | 5,579 | 963 | 137 | 139 | <i>n.a.</i> |
| Gas oil .. | 12,250 | 13,174 | 2,479 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Diesel oil .. | 894 | 383 | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ceuta (a)— | | | | | | |
| Diesel oil (b) .. | 22,305 | 28,102 | 20,817 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Fuel oil (b) .. | 38,654 | 32,148 | 8,000 | 13,499 | 13,716 | 95,663 |
| Lubricating oil .. | 3,363 | 3,335 | 2,650 | 2,374 | 2,413 | 2,416 |
| Congo (Brazza)— | | | | | | |
| Aviation spirit .. | 1,809 | 2,148 | 1,853 | } 1,774 | 1,802 | <i>n.a.</i> |
| Motor spirit .. | 17,493 | 2,662 | 1,332 | | | |
| Kerosine .. | 13,736 | 1,373 | 1,304 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Gas oil .. | 50,866 | 24,877 | 35,218 | } 11,285 | 11,466 | <i>n.a.</i> |
| Fuel oil .. | 19,324 | 714 | — | | | |
| Lubricating oil .. | 5,823 | 4,148 | 7,144 | 4,008 | 4,072 | <i>n.a.</i> |

(a) Excluding imports from Spain and Canary Islands.

(c) Estimated.

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

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | | |
|--------------------------------------|-------------------|-------------|-------------|-------------|-------------|-------------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 | |
| OTHER COUNTRIES | | | | | | | |
| <i>(cont.)</i> | | | | | | | |
| Dahomey— | | | | | | | |
| Aviation spirit | 332 | <i>n.a.</i> | 18,400 | 22,900 | 23,300 | 343 | |
| Motor spirit | 15,242 | 12,200 | | | | | |
| Kerosine | 11,194 | 7,000 | 12,300 | 12,400 | 12,600 | 10,600 | |
| Gas oil | 16,299 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 25,373 | |
| Fuel oils | 943 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 3,433 | |
| Lubricating oil | 1,031 | 1,130 | 1,100 | 1,600 | 1,600 | 1,424 | |
| Egypt— | | | | | | | |
| Crude petroleum | 2,433,075 | 1,230,452 | 975,534 | 1,030,427 | 1,046,962 | 1,524,744 | |
| Motor spirit | 11,058 | 10,099 | 2,024 | 3,524 | 3,581 | 271 | |
| Kerosine | 74,210 | 264,895 | 275,460 | 413,343 | 419,976 | 325,203 | |
| Fuel oil | 467 | 545,500 | 729,000 | 925,000 | 940,000 | 250,000 | |
| Gas oil | 31,648 | | | | | | |
| Diesel oil | 3,161 | 67,628 | 390,000 | 665,000 | 676,000 | 481,000 | |
| Lubricating oil | 59,349 | | | | | | |
| Paraffin wax | 1,237 | 2,192 | 2,643 | 1,896 | 1,926 | 4,333 | |
| Ozokerite and ceresin | | 65 | 389 | 5,290 | 43,802 | 44,505 | 173,639 |
| Asphalt and bitumen | Ethiopia — | | | | | | |
| Aviation spirit | 8,235 | 3,156 | 2,384 | 2,854 | 2,900 | 3,916 | |
| Motor spirit | 43,871 | 15,457 | 26,521 | 40,002 | 40,644 | 19,840 | |
| Kerosine | 6,265 | 2,944 | 882 | 6,862 | 6,972 | 11,384 | |
| Gas and fuel oils | 148,718 | 22,292 | 23,285 | 53,279 | 54,134 | 17,592 | |
| Lubricating oil and grease | 6,652 | 7,390 | 4,512 | 3,851 | 3,913 | 5,741 | |
| French Somaliland— | | | | | | | |
| Motor spirit | 4,966 | 11,683 | 6,076 | 2,000 | 2,000 | <i>n.a.</i> | |
| Kerosine | 1,964 | 2,123 | 2,181 | 3,000 | 3,000 | <i>n.a.</i> | |
| Fuel oil, etc. | 10,027 | 14,975 | 15,206 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | |
| Lubricating oil | 548 | 1,206 | 8,868 | 2,300 | 2,300 | <i>n.a.</i> | |
| Gabon— | | | | | | | |
| Aviation spirit | 2,545 | 3,941 | 5,706 | 3,419 | 3,474 | <i>n.a.</i> | |
| Motor spirit | 14,299 | 203 | 46 | | | | |
| Kerosine | 1,595 | 687 | 615 | 300 | 300 | <i>n.a.</i> | |
| Gas oil | 50,768 | 3,149 | 1,058 | 821 | 834 | <i>n.a.</i> | |
| Fuel oil | 210 | 19 | — | | | | |
| Lubricating oil | 3,295 | 2,192 | 2,491 | 2,626 | 2,668 | <i>n.a.</i> | |
| Ivory Coast— | | | | | | | |
| Crude petroleum | r 651,293 | r 694,508 | 818,000 | 771,550 | 783,931 | 641,040 | |
| Aviation spirit | 1,422 | 1,440 | 1,460 | 922 | 937 | 623 | |
| Motor spirit | 58 | 80,111 | 3,714 | 16,447 | 16,713 | 23,507 | |
| Kerosine | 26 | 27,578 | 1,822 | 4,372 | 4,442 | 16,616 | |
| Gas oil | 21 | 79,755 | 13,824 | 27,749 | 28,194 | 23,370 | |
| Fuel oils | — | 28,150 | 386 | 415 | 422 | 6,854 | |
| Lubricating oil | 11,321 | 12,436 | 12,270 | 13,646 | 13,865 | 14,082 | |
| Libya— | | | | | | | |
| Motor spirit | 131,461 | 132,917 | 149,563 | 134,707 | 136,869 | <i>n.a.</i> | |
| Kerosine, etc. | 22,428 | 19,836 | 12,049 | 113 | 115 | <i>n.a.</i> | |
| Gas oil and diesel oil | 197,376 | 236,090 | 270,913 | 210,349 | 213,724 | <i>n.a.</i> | |
| Fuel oil | 41,285 | 49,044 | 43,684 | 8,808 | 8,949 | <i>n.a.</i> | |
| Lubricating oil, etc. | 12,029 | 17,159 | 26,242 | 16,173 | 16,433 | <i>n.a.</i> | |
| Malagasy Republic— | | | | | | | |
| Aviation spirit | 5,583 | 7,714 | 6,295 | 7,286 | 7,403 | <i>n.a.</i> | |
| Motor spirit | 10,042 | 5,677 | 7,711 | 2,601 | 2,643 | <i>n.a.</i> | |
| Kerosine | 5,027 | 2,424 | 737 | 62 | 63 | <i>n.a.</i> | |
| Gas oil | 9,927 | 7,579 | 15,234 | 1,904 | 1,935 | <i>n.a.</i> | |

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons Tonnes

| Importing Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 | |
|-----------------------------------|-----------|-----------|-------------|-------------|-------------|---------------|---------------|
| OTHER COUNTRIES | | | | | | | |
| <i>(cont.)</i> | | | | | | | |
| Malagasy Republic (cont.) | | | | | | | |
| Fuel oils | 9,348 | 864 | 163 | 1,253 | 1,274 | } <i>n.a.</i> | |
| Lubricating oil | 7,111 | 6,987 | 9,256 | 7,789 | 7,915 | | |
| Road oil, etc. | 7,574 | 9,555 | 10,021 | 5,982 | 6,078 | | |
| Paraffin wax | 2,397 | 3,120 | 2,620 | 4,308 | 4,378 | | |
| Petroleum jelly | 34 | 55 | 25 | 31 | 32 | | |
| Asphalt and bitumen | 113 | 2,959 | 982 | 5,982 | 6,078 | } <i>n.a.</i> | |
| Mali— | | | | | | | |
| Aviation spirit | 863 | 612 | } 25,532 | 27,158 | 27,594 | | } <i>n.a.</i> |
| Motor spirit | 40,012 | 33,229 | | | | | |
| Kerosine | 10,981 | 10,929 | 6,546 | 7,947 | 8,075 | | |
| Gas and fuel oil | 23,840 | 22,234 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | | |
| Lubricating oil | 2,142 | 2,434 | 2,242 | 2,514 | 2,554 | | |
| Morocco— | | | | | | | |
| Crude petroleum | 1,079,796 | 1,217,329 | 1,283,721 | 1,506,490 | 1,530,665 | 1,622,635 | |
| Aviation spirit | 9,149 | 6,020 | 7,622 | 6,853 | 6,963 | 3,710 | |
| Motor spirit | 1,368 | 2,494 | 2,042 | 2,549 | 2,590 | 2,502 | |
| White spirit | 5,848 | 2,412 | 3,094 | 3,742 | 3,803 | 3,112 | |
| Kerosine | 23,028 | 42,346 | 49,794 | 58,203 | 59,137 | 34,877 | |
| Gas oil | 19,476 | 18,344 | 16,339 | 41,087 | 41,747 | 79,787 | |
| Fuel oil | 19,647 | 7,997 | 14,759 | 84,672 | 86,031 | 163,523 | |
| Lubricating oil, etc. | 20,895 | 23,023 | 26,599 | 27,743 | 28,189 | 26,105 | |
| Paraffin wax | 2,938 | 3,200 | 2,160 | 1,464 | 1,488 | 1,043 | |
| Asphalt, bitumen, etc. | 22,818 | 30,723 | 5,060 | 403 | 410 | 922 | |
| Mozambique— | | | | | | | |
| Motor spirit | 29,100 | 30,958 | 27,605 | 34,303 | 34,854 | 21,539 | |
| Kerosine | 19,800 | 21,118 | 21,902 | 23,718 | 24,099 | 27,443 | |
| Fuel oil | 62,100 | 93,211 | 89,427 | 99,886 | 101,489 | 169,673 | |
| Lubricating oil | 9,700 | 10,225 | 12,628 | 15,641 | 15,893 | 16,759 | |
| Paraffin wax | 6 | 6 | 2 | 10 | 10 | <i>n.a.</i> | |
| Petroleum jelly | 4 | — | — | 4 | 4 | <i>n.a.</i> | |
| Asphalt and bitumen (a) | 1,477 | 1,865 | 59 | 156 | 158 | <i>n.a.</i> | |
| Niger— | | | | | | | |
| Aviation spirit | 1,447 | 1,481 | 400 | } 14,802 | 15,042 | } <i>n.a.</i> | |
| Motor spirit | 11,301 | 13,039 | 11,620 | | | | |
| Kerosine | 6,274 | 5,799 | 2,540 | 3,872 | 3,935 | | |
| Gas oil | 14,774 | 15,797 | 1,101 | <i>n.a.</i> | <i>n.a.</i> | | |
| Fuel oils | 5,783 | 8,037 | 7,179 | <i>n.a.</i> | <i>n.a.</i> | | |
| Lubricating oil | 1,166 | 1,877 | 1,816 | 1,235 | 1,255 | | |
| Reunion— | | | | | | | |
| Motor spirit, etc. | 32,187 | 35,362 | 38,589 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | |
| Kerosine | 8,878 | 10,484 | 11,890 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | |
| Fuel oil, etc. | 22,267 | 18,738 | 17,207 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | |
| Lubricating oil | 1,505 | 1,485 | 1,868 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | |
| Senegal— | | | | | | | |
| Aviation spirit | 1,954 | 2,862 | 1,934 | 1,555 | 1,580 | 1,446 | |
| Motor spirit | 64,354 | 2,784 | 20 | 1,514 | 1,538 | 1,252 | |
| Kerosine | 11,076 | 1,095 | 7 | 44 | 45 | 43 | |
| Gas oil | 18,463 | 1,435 | 545 | 355 | 361 | 391 | |
| Fuel oils | 120,053 | 2,168 | 70 | 15 | 15 | 33 | |
| Lubricating oil | 39,156 | 5,104 | 9,410 | 7,728 | 7,852 | 5,724 | |

(a) Including coal tar and pitch.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons | Tonnes

| Importing Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|-----------------------------------|-------------|----------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| South Africa— | | | | | | |
| Crude petroleum (a) .. | 10,468,210 | 7,807,228 | 8,052,242 | 9,093,543 | 9,239,467 | 13,204,263 |
| Motor spirit (b) .. | 365,420 | 642,236 | 500,907 | 376,813 | 382,857 | 446,339 |
| White spirit .. | 26,657 | 24,114 | 25,817 | 31,681 | 32,189 | 30,904 |
| Kerosine .. | 428,721 | 394,793 | 386,775 | 305,136 | 310,030 | 287,235 |
| Gas oil (b) .. | 436,648 | 411,672 | 533,855 | 586,271 | 595,679 | 853,063 |
| Diesel oil (b) .. | | | | | | |
| Fuel oil (b) .. | 618,296 | 165,162 | 218,772 | 371,081 | 377,033 | 1,652,461 |
| Lubricating oil .. | 203,000 | 148,120 | 130,455 | 146,569 | 148,921 | 185,516 |
| Transformer oil .. | <i>n.a.</i> | <i>n.a.</i> | 14,835 | 12,072 | 12,266 | 16,405 |
| Other oils .. | <i>n.a.</i> | <i>n.a.</i> | 923,774 | 785,190 | 797,784 | 517,827 |
| Paraffin wax .. | 17,025 | 14,347 | 19,144 | 25,265 | 25,670 | 26,799 |
| Asphalt and bitumen .. | 8,254 | 8,685 | 10,088 | 17,749 | 18,034 | 7,785 |
| Petroleum jelly .. | 4,077 | 4,169 | 4,047 | 4,260 | 4,328 | 5,025 |
| Sudan— | | | | | | |
| Aviation spirit (b) .. | 14,059 | 67,000 | 21,636 | 14,997 | 15,238 | 22,716 |
| Motor spirit .. | 15,048 | | 104,208 | 88,906 | 90,333 | 85,638 |
| Kerosine .. | 23,275 | 40,278 | 82,455 | 99,691 | 101,291 | 89,693 |
| Gas oil .. | 62,909 | 50,817 | 147,150 | 146,297 | 148,645 | 213,493 |
| Diesel oil .. | 13,345 | 79,232 | 126,808 | 175,724 | 178,544 | 108,641 |
| Fuel oil .. | 66,744 | 123,194 | 258,759 | 230,753 | 234,456 | 211,843 |
| Lubricating oil, etc. .. | 12,701 | 19,929 | 54,241 | 20,432 | 20,760 | 36,205 |
| Petroleum jelly .. | 77 | 84 | 82 | 21 | 21 | 62 |
| Paraffin wax .. | 74 | 64 | 119 | 178 | 181 | 251 |
| Asphalt and bitumen .. | 1,339 | 5 | 558 | 6,913 | 7,024 | 1,810 |
| Togo— | | | | | | |
| Motor spirit .. | 10,587 | 10,600 | 12,947 | 16,223 | 16,483 | 19,085 |
| Kerosine .. | 13,221 | 11,290 | 12,773 | 12,687 | 12,891 | 12,467 |
| Fuel oil .. | 39,923 | 40,228 | 53,037 | 50,594 | 51,406 | 66,683 |
| Lubricating oil .. | 930 | 1,288 | 1,386 | 1,655 | 1,682 | 1,854 |
| Tunisia— | | | | | | |
| Aviation spirit .. | 674 | 1,857 | 787 | 1,034 | 1,051 | 660 |
| Motor spirit .. | | | | | | |
| White spirit .. | 784 | <i>r</i> 653 | 705 | 721 | 733 | 812 |
| Kerosine .. | 481 | <i>r</i> 2,586 | 1,900 | 1,061 | 1,079 | 1,380 |
| Fuel oil .. | 15,882 | 9,573 | 22,901 | 2,000 | 2,000 | 123,707 |
| Gas oil .. | — | <i>n.a.</i> | <i>n.a.</i> | 65 | 66 | 338 |
| Lubricating oil .. | 10,541 | 12,804 | 10,817 | 12,700 | 12,904 | 12,901 |
| Petroleum jelly .. | 28 | 36 | 81 | 82 | 83 | 38 |
| Paraffin wax .. | 273 | 270 | 280 | 317 | 323 | 650 |
| Upper Volta— | | | | | | |
| Aviation spirit .. | 35,000 | 173 | 14,890 | 16,951 | 17,223 | <i>n.a.</i> |
| Motor spirit .. | | | | | | |
| Kerosine .. | 6,163 | 6,685 | 7,904 | 8,031 | <i>n.a.</i> | <i>n.a.</i> |
| Gas oil .. | 5,507 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Fuel oils .. | 8,373 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Lubricating oil .. | 1,404 | 1,084 | 225 | 229 | <i>n.a.</i> | <i>n.a.</i> |
| Costa Rica— | | | | | | |
| Motor spirit .. | 42,928 | 19,386 | 17,335 | 30,073 | 30,556 | 24,788 |
| Kerosine .. | 14,654 | 8,197 | 9,192 | 27,908 | 28,356 | 9,076 |
| Diesel oil, etc. .. | 100,594 | 27,408 | 24,132 | 75,359 | 76,569 | 72,242 |
| Fuel oil .. | 105,372 | 254,196 | 304,925 | 293,963 | 298,681 | 386,949 |
| Lubricating oil .. | 9,308 | 11,845 | 11,832 | 12,243 | 12,440 | 12,648 |
| Grease .. | 360 | 356 | 537 | 937 | 953 | 763 |
| Petroleum jelly .. | 258 | 102 | 192 | 215 | 219 | 251 |
| Paraffin wax .. | 1,740 | 1,762 | 1,983 | 1,934 | 1,966 | 1,962 |
| Asphalt .. | 10,366 | 8,826 | 7,438 | 10,143 | 10,306 | 17,433 |

(a) Including partly-refined.

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

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|-----------|----------|---------|---------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Cuba— | | | | | | |
| Motor spirit | 37,000 | 56,000 | 39,000 | n.a. | n.a. | n.a. |
| Lubricating oil | 68,100 | 64,600 | 44,600 | n.a. | n.a. | n.a. |
| Lubricating greases | | | | | | |
| Dominican Republic— | | | | | | |
| Motor spirit | 175,900 | 172,465 | 194,400 | 185,589 | 188,566 | n.a. |
| Kerosine | 32,050 | r 45,900 | r 25,600 | 74,830 | 76,030 | n.a. |
| Lubricating oil, etc. | 7,529 | 9,997 | r 11,100 | 10,820 | 10,994 | n.a. |
| French West Indies— | | | | | | |
| Guadeloupe— | | | | | | |
| Motor spirit, etc. | 43,544 | 38,974 | 41,741 | n.a. | n.a. | n.a. |
| Kerosine | 13,915 | 13,062 | 11,765 | n.a. | n.a. | n.a. |
| Gas and fuel oil | 32,790 | 33,184 | 41,480 | n.a. | n.a. | n.a. |
| Lubricating oil | 2,111 | 2,211 | 3,558 | n.a. | n.a. | n.a. |
| Martinique— | | | | | | |
| Motor spirit, etc. | 36,781 | 38,312 | 44,566 | n.a. | n.a. | n.a. |
| Kerosine | 13,474 | 12,824 | 12,797 | n.a. | n.a. | n.a. |
| Gas and fuel oil | 39,269 | 42,289 | 48,107 | n.a. | n.a. | n.a. |
| Lubricating oil | 3,842 | 3,630 | 4,341 | n.a. | n.a. | n.a. |
| Greenland— | | | | | | |
| Motor spirit | 5,418 | 8,077 | 8,619 | 12,493 | 12,693 | 16,244 |
| Kerosine | 5,061 | 11,595 | 6,043 | 702 | 713 | 947 |
| Fuel oil | 84,700 | 120,761 | 90,888 | 83,438 | 84,777 | 112,652 |
| Lubricating oil | 1,114 | 1,164 | 915 | 1,011 | 1,027 | 955 |
| Guatemala— | | | | | | |
| Crude petroleum, etc. | 202,848 | 728,000 | 778,000 | 666,385 | 677,079 | 74,702 |
| Aviation spirit | 13,594 | 16,604 | 16,197 | 9,855 | 10,014 | 21,510 |
| Motor spirit | | | | | | |
| Kerosine | 1,488 | 4,061 | 3,072 | 3,046 | 3,095 | 8,280 |
| Diesel oil | 112,000 | 89,000 | 60,745 | 32,202 | 32,719 | 11,064 |
| Fuel oil | | | | | | |
| Lubricating oil | 7,484 | 9,392 | 8,942 | 9,991 | 10,152 | 9,054 |
| Grease | 745 | 992 | 884 | 943 | 959 | 1,298 |
| Asphalt | 5 | 3 | 6 | — | — | 2 |
| Paraffin wax, etc. | 7,640 | 7,364 | 5,869 | 7,783 | 7,908 | 5,509 |
| Honduras— | | | | | | |
| Crude petroleum | 90,536 | 336,049 | 546,923 | 690,466 | 701,546 | 688,793 |
| Motor spirit | 56,319 | 57,070 | 31,259 | 9,098 | 9,244 | 9,992 |
| Kerosine | 18,819 | 18,707 | 7,702 | 93 | 94 | 27 |
| Gas, diesel and fuel oils | r 117,815 | r 104,486 | r 57,929 | 42,579 | 43,262 | 44,215 |
| Lubricating oil | 3,605 | 6,141 | 6,379 | 66 | 67 | 187 |
| Greases | 363 | 690 | 781 | 780 | 794 | 807 |
| Pitch, asphalt, etc. | 2,189 | 4,211 | 4,703 | 15,221 | 15,465 | 34,337 |
| Mexico— | | | | | | |
| Crude petroleum | — | r 18 | 139 | n.a. | n.a. | 59,386 |
| Aviation spirit | 14,154 | r 8,183 | 3,923 | 1,191 | 1,210 | 1,310 |
| Motor spirit | r 56 | n.a. | 54,146 | 25,132 | 25,535 | 282,590 |
| Kerosine | 126 | r 111 | 1,401 | 1,712 | 1,739 | 56,745 |
| Gas oil | 177 | r 210 | 169,366 | 271,763 | 276,124 | 422,875 |
| Fuel oil | 71,882 | r 94,757 | 68,818 | 45,568 | 46,299 | 40,860 |
| Lubricating oil | 56,153 | 69,498 | 62,381 | 30,343 | 30,830 | 4,964 |
| Grease | 2,912 | 1,751 | 832 | 763 | 775 | 392 |
| Paraffin wax | 27,148 | 19,753 | 11,773 | 13,805 | 14,027 | 3,904 |
| Petroleum jelly | 919 | 201 | 2 | — | — | — |
| Asphalt | 607 | 435 | 429 | 456 | 463 | 722 |
| Asphalt rock | 1,102 | 32 | 96 | 804 | 817 | 15 |
| Natural gas (million cu. ft.) | 9,669 | 11,016 | 12,004 | 13,142 | (a) 372 | (a) 404 |

 (a) Million m³.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--|--------------|-------------|------------|------------|------------|---------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Netherlands Antilles— | | | | | | |
| Crude petroleum | 40,781,000 | 38,671,000 | 41,798,000 | 46,664,000 | 47,413,000 | } <i>n.a.</i> |
| Aviation spirit | 201,000 | 15,000 | 17,000 | 7,000 | 7,000 | |
| Motor spirit | 349,000 | r 285,000 | 235,000 | 41,000 | 42,000 | |
| Kerosine | 156,000 | 175,000 | 41,000 | 10,000 | 10,000 | |
| Fuel oil | 1,333,000 | 2,010,000 | 1,827,000 | 975,000 | 991,000 | |
| Diesel oil | 213,000 | 68,800 | 618,000 | 373,000 | 379,000 | |
| Gas oil | 262,000 | <i>n.a.</i> | 186,000 | 362,000 | 368,000 | |
| Lubricating oil, etc. | — | 10,800 | 11,000 | 92,000 | 93,000 | |
| Asphalt | 2,000 | <i>n.a.</i> | 3,000 | 1,400 | 1,400 | |
| Nicaragua— | | | | | | |
| Crude petroleum | 335,210 | 337,331 | 306,166 | 408,134 | 414,684 | 540,157 |
| Motor spirit | 11,952 | 22,811 | 24,444 | 9,607 | 9,762 | 10,760 |
| Kerosine | 12,049 | 9,413 | 8,690 | 3,499 | 3,556 | 1,672 |
| Fuel oil | 13,360 | 19,814 | 27,478 | 28,854 | 29,318 | 28,849 |
| Lubricating oil and greases | 7,172 | 7,312 | 5,590 | 7,351 | 7,469 | 8,716 |
| Paraffin wax | } 1,133 | 1,295 | 1,560 | 1,834 | 1,864 | 991 |
| Petroleum jelly | | — | 27 | — | 15 | 15 |
| Natural asphalt | — | 27 | — | 15 | 15 | <i>n.a.</i> |
| Panama Republic— | | | | | | |
| Motor spirit | 346 | 500 | 483 | 468 | 476 | 575 |
| Kerosine | 289 | 600 | 153 | 461 | 468 | 629 |
| Diesel oil | 12,555 | 23,968 | r 7,367 | 18,337 | 18,631 | 19,095 |
| Fuel oil | 22,408 | 24,292 | r 12,809 | 22,941 | 23,309 | 13,088 |
| Lubricating oil | 5,505 | 5,496 | 7,447 | 7,696 | 7,819 | 8,504 |
| Grease | 378 | 443 | 395 | 417 | 424 | 436 |
| Paraffin wax, etc. | 1,046 | 1,023 | 873 | 1,270 | 1,290 | 1,037 |
| St. Pierre and Miquelon— | | | | | | |
| Motor spirit | 832 | 909 | 1,011 | 1,199 | 1,218 | 1,004 |
| Gas oil and fuel oil | 36,338 | 47,083 | 57,599 | 70,582 | 71,715 | 53,260 |
| Lubricating oil | 457 | 650 | 587 | 530 | 538 | 472 |
| Salvador— | | | | | | |
| Motor spirit | 4,699 | 1,488 | 2,277 | 5,794 | 5,887 | 6,484 |
| Kerosine | 2,477 | 2,030 | 1,823 | 1,532 | 1,557 | 2,086 |
| Gas oil and diesel oil | 1,861 | 225 | 210 | 40 | 41 | 4 |
| Fuel oil | 472,373 | 490,302 | 343,534 | 132,667 | 134,796 | 461,207 |
| Lubricating oil | 4,784 | 4,562 | 3,751 | 4,533 | 4,606 | 3,935 |
| Grease | 503 | 737 | 541 | 576 | 586 | 472 |
| Paraffin wax, etc. | 1,485 | 1,679 | 1,575 | 2,156 | 2,191 | 1,760 |
| Petroleum jelly | 195 | 238 | 351 | 69 | 70 | 92 |
| Asphalt | 7,359 | 6,405 | 5,459 | 5,421 | 5,509 | 8,404 |
| United States— | | | | | | |
| Crude petroleum | 67,181,510 | 74,732,448 | 81,040,653 | 85,913,876 | 87,292,539 | 107,454,008 |
| Aviation spirit | } 248,808 | 333,259 | 259,356 | 324,007 | 329,206 | 172,522 |
| Motor spirit, etc. | | 3,463,460 | 4,752,434 | 5,366,694 | 7,142,746 | 7,257,366 |
| Naphtha, etc. | 277,433 | 241,258 | 496,169 | 336,324 | 341,721 | 27,316 |
| Kerosine | 4,102,932 | 5,223,774 | 5,955,707 | 6,875,625 | 6,985,958 | 7,033,147 |
| Jet fuel | } 57,920,400 | 62,957,039 | 69,757,009 | 80,340,576 | 81,629,804 | 79,219,664 |
| Fuel oil | | 5,600 | 4,653 | 22,541 | 32,405 | 32,925 |
| Gas oil and diesel oil | 6,799 | 22,301 | 20,302 | 15,012 | 15,253 | 14,329 |
| Lubricating oil, etc. | } 1,301,014 | 1,068,279 | 948,698 | 1,055,832 | 1,072,775 | 1,225,114 |
| Paraffin wax, etc. | | 1,301,014 | 1,068,279 | 948,698 | 1,055,832 | 1,072,775 |
| Asphalt (petroleum) | } 1,301,014 | 1,068,279 | 948,698 | 1,055,832 | 1,072,775 | 1,225,114 |
| Natural asphalt and bitumen | | 548,600 | 627,900 | 796,230 | 1,004,983 | (a) 28,458 |
| Natural gas (<i>million cu. ft.</i>) | 548,600 | 627,900 | 796,230 | 1,004,983 | (a) 28,458 | (a) 25,000 |

 (a) Million m³.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons | Tonnes

| Importing Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|-----------------------------------|------------|------------|-------------|------------|------------|-----------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Argentina— | | | | | | |
| Crude petroleum .. | 2,251,675 | 1,753,685 | r 2,286,483 | 1,380,558 | 1,402,712 | 2,248,345 |
| Motor spirit .. | 10,409 | 79,629 | 359 | 968 | 984 | 1 |
| Kerosine .. | 7,820 | — | — | — | — | 48 |
| Gas oil .. | 150,464 | 360,003 | 672,818 | 518,812 | 527,138 | 219,604 |
| Fuel oil .. | — | — | 569,783 | 160,867 | 163,449 | 138,357 |
| Diesel oil .. | 3,856 | 12,388 | 104,693 | n.a. | n.a. | 12,242 |
| Lubricating oil .. | 72,369 | 64,008 | 148,298 | 135,214 | 137,384 | 170,339 |
| Grease .. | 99 | 29 | 85 | 43 | 44 | 130 |
| Paraffin wax .. | 1 | — | 1 | 3 | 3 | 16 |
| Petroleum jelly .. | — | 48 | r 78 | 91 | 92 | 98 |
| Bolivia— | | | | | | |
| Aviation spirit .. | 13,248 | 14,600 | 11,600 | 11,012 | 11,189 | 11,353 |
| Fuel oil .. | 334 | — | — | 160 | 163 | 1,973 |
| Lubricating oil and grease .. | 934 | 1,313 | 700 | 4,045 | 4,110 | 2,134 |
| Paraffin wax, etc. .. | 2,953 | 2,108 | n.a. | — | — | n.a. |
| Tar, pitch, etc. .. | 26 | 6 | n.a. | 6,533 | 6,638 | 6,518 |
| Brazil— | | | | | | |
| Crude petroleum .. | 10,392,489 | 12,326,904 | 13,159,460 | 15,547,162 | 15,796,648 | } n.a. |
| Aviation spirit .. | 143,741 | 107,506 | 82,985 | 73,253 | 74,428 | |
| Motor spirit .. | 233,765 | 524,071 | 202,586 | n.a. | n.a. | |
| White spirit .. | 24 | — | — | n.a. | n.a. | |
| Kerosine .. | 219,891 | 198,000 | 11,741 | 7,547 | 7,668 | |
| Diesel oil .. | 19,375 | — | n.a. | n.a. | n.a. | |
| Fuel oil .. | 52,783 | 490,072 | n.a. | n.a. | n.a. | |
| Lubricating oil .. | 275,720 | 328,812 | 255,931 | 389,739 | 395,993 | |
| Transformer oil .. | 10,276 | 10,242 | 13,341 | 22,654 | 23,018 | |
| Petroleum jelly .. | 1,360 | 1,769 | 1,341 | 1,358 | 1,380 | |
| Greases .. | r 121 | r 114 | r 92 | 155 | 157 | |
| Paraffin wax .. | 21,779 | 26,810 | 16,804 | 5,350 | 5,436 | |
| Ozokerite and ceresin .. | 93 | 116 | 106 | 228 | 232 | |
| Asphalt and bitumen .. | 335 | 542 | 540 | 850 | 864 | |
| Chile— | | | | | | |
| Crude petroleum .. | 2,106,732 | 1,894,829 | 2,263,288 | 1,944,990 | 1,976,201 | } n.a. |
| Aviation spirit .. | n.a. | n.a. | n.a. | n.a. | n.a. | |
| Motor spirit .. | 21,230 | 9,569 | 5,908 | 34,074 | 34,621 | |
| Kerosine .. | 52,265 | 94,509 | r 23 | 2 | 2 | |
| Diesel oil .. | 122,815 | 52,852 | r 117,571 | 82,530 | 83,854 | |
| Residual fuel oil .. | 315,571 | 1,346,054 | 224,451 | 909,584 | 924,180 | |
| Lubricating oil .. | 6,639 | 7,024 | 5,224 | 10,229 | 10,393 | |
| Petroleum jelly .. | 134 | 234 | 160 | 80 | 81 | |
| Greases .. | 1,090 | 768 | 910 | 804 | 817 | |
| Paraffin wax .. | 10,781 | r 6,517 | 11 | 114 | 116 | |
| Natural asphalt .. | 291 | 198 | 223 | 542 | 551 | |
| Colombia— | | | | | | |
| Aviation spirit .. | r 3 | 1 | r 22,276 | 2,400 | 2,400 | } n.a. |
| Motor spirit .. | 54,474 | r 10 | r 38,030 | n.a. | n.a. | |
| Kerosine .. | r 8,031 | r 448 | r 82 | 4,200 | 4,300 | |
| Gas oil and diesel oil .. | 6,964 | — | r 142 | 2,500 | 2,500 | |
| Lubricating oil .. | r 6,224 | r 2,878 | r 17,697 | 14,400 | 14,600 | |
| Petroleum jelly .. | r 464 | r 562 | 857 | n.a. | n.a. | |
| Paraffin wax .. | r 22,678 | r 25,086 | 21,688 | n.a. | n.a. | |
| Natural asphalt .. | r 59 | r 187 | 152 | n.a. | n.a. | |
| Ecuador— | | | | | | |
| Lubricating oil and greases .. | 13,239 | 7,200 | 10,500 | 12,900 | 13,100 | } n.a. |
| Petroleum jelly .. | 126 | n.a. | n.a. | n.a. | n.a. | |
| Paraffin wax .. | 4,301 | n.a. | n.a. | n.a. | n.a. | |
| Natural asphalt .. | 4,516 | 2,869 | n.a. | n.a. | n.a. | |

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--|-----------|-----------|-----------|-----------|-----------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| French Guiana— | | | | | | |
| Motor spirit, etc. | 6,980 | 8,201 | 10,424 | n.a. | n.a. | } n.a. |
| Kerosine | 994 | 1,813 | 887 | n.a. | n.a. | |
| Fuel oil, etc. | 13,901 | 18,036 | 16,163 | n.a. | n.a. | |
| Lubricating oil | 685 | 978 | 516 | n.a. | n.a. | |
| Paraguay— | | | | | | |
| Motor spirit | 10,000 | 6,800 | 1,500 | 10,700 | 10,900 | } n.a. |
| Kerosine | 800 | 600 | n.a. | 1,300 | 1,300 | |
| Fuel oil, etc. | 24,000 | 23,000 | 15,500 | 23,700 | 24,100 | |
| Lubricating oil | 2,800 | 4,000 | 5,000 | 4,000 | 4,100 | |
| Peru— | | | | | | |
| Aviation spirit | 15,038 | 39,870 | 27,317 | 18,400 | 18,700 | } n.a. |
| Motor spirit | 111,974 | 30,200 | n.a. | n.a. | n.a. | |
| Diesel oil and fuel oil | 29,424 | 402,069 | 300,125 | 485,100 | 492,900 | |
| Lubricating oil | 6,886 | 26,774 | 34,825 | 36,000 | 37,000 | |
| Petroleum jelly | 302 | 263 | 238 | n.a. | n.a. | |
| Paraffin wax | 11,353 | 12,663 | 11,352 | n.a. | n.a. | |
| Asphalt and bitumen | 194 | 169 | 218 | n.a. | n.a. | |
| Greases | 4,849 | 1,847 | 2,421 | n.a. | n.a. | |
| Ozokerite | 36 | 9 | 22 | n.a. | n.a. | |
| Surinam— | | | | | | |
| Motor spirit | 20,931 | 22,000 | 22,000 | n.a. | n.a. | n.a. |
| Kerosine | 6,658 | 6,000 | 8,100 | 7,480 | 7,600 | 6,168 |
| Gas oil | } 95,921 | 78,500 | 77,826 | 83,617 | 84,959 | 81,454 |
| Diesel oil | | | | | | |
| Fuel oil | 363,068 | 331,200 | 347,700 | 360,155 | 365,934 | 392,858 |
| Lubricating oil | 4,536 | 4,400 | 201 | 197 | 200 | 189 |
| Asphalt | r 4,391 | 7,253 | 6,315 | 2,422 | 2,461 | 5,495 |
| Uruguay— | | | | | | |
| Crude petroleum | 1,523,146 | 1,340,000 | 1,550,000 | 1,670,000 | 1,700,000 | n.a. |
| Motor spirit, etc. | 10,003 | 2,287 | 3,847 | 3,932 | 3,995 | 944 |
| Kerosine | 4,683 | 18,363 | 9,575 | 7,400 | 7,500 | 19,959 |
| Gas oil | } 9,310 | 16,303 | 16,289 | 11,000 | 11,000 | 22,880 |
| Diesel oil | | | | | | |
| Fuel oil | 16,831 | 17,450 | 30,469 | 19,387 | 19,698 | 10,405 |
| Lubricating oil and greases | 10,886 | 17,055 | 10,318 | 13,596 | 13,814 | 15,745 |
| Paraffin wax | 300 | 296 | 340 | 603 | 613 | 595 |
| Venezuela— | | | | | | |
| Motor spirit | 22,877 | 5,870 | 4,697 | n.a. | n.a. | 5,390 |
| White spirit | 716 | 1,306 | 686 | n.a. | n.a. | 18,814 |
| Gas and fuel oils | 13 | 16 | 14 | n.a. | n.a. | — |
| Lubricating oil and grease | 5,089 | 5,961 | 5,474 | n.a. | n.a. | 5,650 |
| Paraffin wax | 248 | 201 | 262 | n.a. | n.a. | 2,286 |
| Petroleum jelly | 716 | 928 | 1,010 | n.a. | n.a. | 1,095 |
| Asphalt | 241 | 614 | 87 | n.a. | n.a. | 50 |
| Bitumen, pitch, etc. | 1,479 | 1,000 | 10,733 | n.a. | n.a. | 7,723 |
| Bahrain— | | | | | | |
| Crude petroleum | 8,459,000 | 7,552,000 | 8,079,000 | 8,520,000 | 8,660,000 | n.a. |
| Burma— | | | | | | |
| Crude petroleum | 401,545 | 145,800 | r 63,753 | 210,196 | 213,569 | 291,369 |
| Lubricating oil | 13,950 | 23,100 | 16,106 | 17,089 | 17,363 | 16,431 |
| Grease | 713 | 532 | 402 | 637 | 646 | 687 |
| Paraffin wax | 2 | 45 | 15 | 30 | 30 | 56 |
| Petroleum jelly | 111 | 81 | 126 | 30 | 30 | 121 |
| Asphalt | 5,428 | 14,190 | 5,943 | 7,646 | 7,769 | 17,916 |

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons Tonnes

| Importing Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 | |
|-----------------------------------|----------------|-------------|-------------|-------------|-------------|-------------|--|
| OTHER COUNTRIES (cont.) | | | | | | | |
| Formosa— | | | | | | | |
| Crude petroleum | 1,300,029 | 3,000,000 | 2,958,496 | 3,454,176 | 3,509,605 | 3,490,101 | |
| Motor spirit | 1 | — | — | 3 | 3 | 1 | |
| Lubricating oil | 26,393 | 26,686 | 34,272 | 37,280 | 37,878 | 42,168 | |
| Grease | 2,082 | 1,673 | 1,620 | 2,254 | 2,290 | 2,272 | |
| Paraffin wax | 3,176 | 3,660 | 4,287 | 5,210 | 5,294 | 7,049 | |
| Asphalt | 2,383 | 2,238 | 2,809 | 12,075 | 12,269 | 3,281 | |
| Iran (a)— | | | | | | | |
| Lubricating oil | 2,638 | 6,629 | 7,604 | 4,360 | 4,430 | 6,423 | |
| Paraffin wax | 900 | 1,136 | 719 | 592 | 602 | 966 | |
| Petroleum jelly | 417 | 747 | 395 | 514 | 522 | 698 | |
| Iraq— | | | | | | | |
| Lubricating oil | 5,773 | 2,942 | 2,530 | 383 | 389 | n.a. | |
| Israel (b)— | | | | | | | |
| Lubricating oils | 2,140 | 6,571 | 10,383 | 9,938 | 10,098 | 7,458 | |
| Paraffin wax | 556 | 826 | 702 | 836 | 850 | 613 | |
| Petroleum jelly | 131 | 216 | 176 | 180 | 183 | 205 | |
| Asphalt | 259 | 204 | 147 | 130 | 132 | 274 | |
| Japan— | | | | | | | |
| Crude petroleum | 108,301,570 | 125,545,036 | 150,327,613 | 176,975,102 | 179,806,703 | 202,961,864 | |
| Aviation spirit | 1,061 | 40 | 36 | 28,551 | 29,009 | 143,457 | |
| Motor spirit | 1,311,725 | 2,480,834 | 3,247,410 | 5,128,567 | 5,210,865 | 4,213,228 | |
| Kerosine | 41,148 | 142,064 | 196,028 | 261,425 | 265,620 | 265,161 | |
| Aviation turbine fuel | 124,869 | 171,489 | 173,953 | 264,334 | 268,575 | 330,272 | |
| Gas oil | 12,924,290 | 15,801,211 | 15,639,495 | 22,820,627 | 23,186,898 | 21,102,920 | |
| Fuel oil | 519,387 | 399,684 | 396,656 | 323,765 | 328,960 | 288,404 | |
| Lubricating oil | 4,803 | 4,449 | 2,513 | 1,641 | 1,668 | 1,361 | |
| Grease | 3,401 | 4,259 | 3,494 | 3,715 | 3,775 | 2,928 | |
| Petroleum jelly | 10,178 | 9,465 | 8,227 | 6,192 | 6,292 | 6,239 | |
| Paraffin wax | 3,074 | 2,845 | 2,533 | 2,505 | 2,546 | 2,284 | |
| Gilsonite | 112 | 83 | 8 | 21 | 21 | 5,839 | |
| Asphalt and bitumen | 1,278,957 | 1,727,493 | 1,914,215 | 2,532,160 | 2,572,794 | 1,639,276 | |
| Petroleum coke | Jordan— | | | | | | |
| Crude petroleum | 408,587 | 410,127 | 497,879 | 472,140 | 479,716 | 591,757 | |
| Motor spirit | 4,295 | 1,354 | 3,731 | 7,525 | 7,646 | n.a. | |
| Kerosine | 16,951 | 29,578 | 25,478 | 32,858 | 33,385 | 17,509 | |
| Fuel oil, etc. | 2,000 | n.a. | n.a. | n.a. | n.a. | n.a. | |
| Lubricating oil | 5,367 | 6,407 | 7,754 | 5,889 | 5,983 | 5,308 | |
| Korea (South)— | | | | | | | |
| Crude petroleum | 2,624,000 | 5,000,000 | 7,500,000 | 10,300,000 | 10,500,000 | 11,548,907 | |
| Aviation spirit | 2,700 | 3,000 | 2,000 | 100 | 100 | 712 | |
| Motor spirit | 13,000 | 20,000 | n.a. | n.a. | n.a. | n.a. | |
| Kerosine, etc. | 50,000 | 23,000 | 874 | 5,600 | 5,700 | 25,705 | |
| Gas, diesel and fuel oils | 907,000 | 477,000 | 112,700 | n.a. | n.a. | 1,345 | |
| Lubricating oils | 900 | 5,500 | 10,000 | 16,200 | 16,500 | 25,000 | |
| Greases | | | | | | | |
| Laos— | | | | | | | |
| Aviation spirit | 27,500 | 5,400 | 7,400 | 60,971 | 61,949 | 30,387 | |
| Motor spirit | 34,200 | 22,600 | 26,500 | 41,356 | 42,020 | 38,650 | |
| Kerosine | 8,500 | 7,300 | 10,598 | 10,471 | 10,639 | 8,707 | |
| Gas oil | 29,100 | 14,200 | 37,000 | 38,464 | 39,081 | 45,413 | |
| Fuel oil | n.a. | 2,700 | 11,000 | 4,023 | 4,088 | 542 | |
| Lubricating oil | 3,700 | 1,200 | 2,900 | 4,300 | 4,300 | 2,024 | |
| Lebanon— | | | | | | | |
| Motor spirit | 296,291 | 332,814 | 341,753 | 365,791 | 371,661 | 405,285 | |
| Kerosine | 47,568 | 46,102 | 44,110 | 50,995 | 51,814 | 45,041 | |
| Fuel oil | 548,529 | 605,413 | 619,630 | 685,921 | 696,929 | 831,067 | |
| Lubricating oil | 1,308 | 15,536 | 17,203 | 17,621 | 17,904 | 23,077 | |
| Paraffin wax | 494 | 620 | 576 | 660 | 671 | 743 | |
| Natural asphalt | 24 | 14 | 80 | 15 | 15 | 5 | |

(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.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|-----------|-------------|-----------|-----------|-----------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Philippine Republic— | | | | | | |
| Crude petroleum | 6,218,000 | 7,565,000 | r 7,953,000 | 8,953,000 | 9,097,000 | 9,027,886 |
| Aviation spirit | 34,839 | 14,534 | r 11,835 | 13,082 | 13,292 | 12,054 |
| Motor spirit | 30,412 | 4,625 | r 18,270 | 9,405 | 9,556 | 5 |
| Kerosine | 9,882 | 1,260 | r 2,435 | 5,702 | 5,793 | 7,785 |
| Diesel oil | 21,810 | 8,170 | n.a. | 3,878 | 3,940 | 20,293 |
| Fuel oils | 326 | 4 | 12 | n.a. | n.a. | 6 |
| Lubricating oils | 100,693 | 104,890 | 98,672 | 135,178 | 137,347 | 115,517 |
| Grease | 1,996 | 2,178 | 1,521 | 3,327 | 3,380 | 1,829 |
| Petroleum jelly | 1,713 | 1,091 | 1,132 | 1,228 | 1,248 | 778 |
| Paraffin wax | 8,126 | 11,981 | 9,712 | 8,845 | 8,987 | 11,700 |
| Asphalt | r 1,614 | r 1,686 | 1,485 | 3,368 | 3,422 | 1,249 |
| Southern Yemen (b) | | | | | | |
| Crude petroleum | 5,761,180 | 4,811,743 | 6,600,000 | 6,700,000 | 6,700,000 | } n.a. |
| Motor spirit | 28,288 | 131,685 | n.a. | n.a. | n.a. | |
| Kerosine | — | 3,945 | n.a. | n.a. | n.a. | |
| Gas and fuel oils (a) | 328,464 | 151,673 | n.a. | n.a. | n.a. | |
| Lubricating oil and greases | 6,464 | 3,118 | 4,100 | 1,030 | 1,050 | |
| Syria— | | | | | | |
| Crude petroleum | 896,962 | 1,047,320 | 1,304,869 | 1,231,064 | 1,250,819 | 714,554 |
| Motor spirit | 4,097 | 3,987 | 15,345 | 4,450 | 4,522 | 3,585 |
| Kerosine | 7,822 | 23,709 | 21,070 | 18,538 | 18,836 | 33,388 |
| Fuel oil and diesel oil | 408,794 | 574,358 | 518,464 | 179,047 | 181,921 | 229,930 |
| Lubricating oil | 11,371 | 30,455 | 30,148 | 20,487 | 20,816 | 27 |
| Natural asphalt | 1,359 | 2,818 | 33 | 45 | 46 | 55 |
| Thailand— | | | | | | |
| Aviation spirit | 78,889 | 14,566 | 9,265 | 23,197 | 23,569 | 14,016 |
| Motor spirit | 161,969 | 107,229 | 121,950 | 83,259 | 84,595 | 50,208 |
| Kerosine | 770,134 | 114,176 | 67,969 | 34,819 | 35,378 | 12,902 |
| Gas, diesel and fuel oils | 810,485 | 1,202,042 | 1,248,656 | 966,377 | 981,878 | 689,975 |
| Lubricating oil | 95,737 | 86,818 | 93,029 | 98,294 | 99,871 | 67,582 |
| Grease | 5,617 | 4,146 | 5,866 | 6,798 | 6,907 | 5,647 |
| Paraffin wax | 3,681 | 3,453 | 4,591 | 5,070 | 5,151 | 6,088 |
| Petroleum jelly | 1,077 | 977 | 884 | 961 | 976 | 961 |
| Asphalt | 4,245 | 45,829 | 8,490 | 862 | 875 | 1,221 |
| Turkey— | | | | | | |
| Crude petroleum | 2,441,205 | 2,921,669 | 2,517,530 | 3,423,642 | 3,478,581 | } n.a. |
| Motor spirit | 19,319 | 35,171 | 40,176 | 37,375 | 37,975 | |
| Kerosine | 43,643 | 47,143 | 50,189 | 23,304 | 23,678 | |
| Gas and diesel oils | 154,309 | 166,750 | 304,835 | 115,566 | 117,421 | |
| Fuel oil | 14,499 | 72,379 | 83,331 | 16,436 | 16,700 | |
| Lubricating oils and grease | 88,654 | 122,681 | r 97,617 | 86,765 | 88,157 | |
| Paraffin wax | 2,667 | 2,960 | 3,166 | 3,549 | 3,606 | |
| Petroleum jelly | 240 | 184 | 142 | 187 | 190 | |
| Asphalt | — | 11 | 47 | n.a. | n.a. | |
| French Polynesia— | | | | | | |
| Motor spirit, etc. | 28,421 | 29,431 | 27,059 | n.a. | n.a. | n.a. |
| Kerosine | 9,562 | 11,125 | 5,153 | n.a. | n.a. | n.a. |
| Other oils | 86,360 | 96,620 | 69,440 | n.a. | n.a. | n.a. |
| New Caledonia— | | | | | | |
| Motor spirit, etc. | 21,740 | 7,000 | 27,100 | 38,300 | 38,900 | } n.a. |
| Kerosine | 4,008 | 2,200 | 5,900 | 9,200 | 9,300 | |
| Gas and fuel oils | 193,303 | 196,000 | 240,500 | 237,600 | 241,400 | |
| Lubricating oil, etc. | 2,542 | 2,800 | 3,400 | 3,800 | 3,900 | |

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

(b) Previously Aden.

PHOSPHATES
PRODUCTION OF PHOSPHATE ROCK
(Including Apatite)

| Producing Country | Long tons Tonnes | | | | | Long tons Tonnes | | | | | | |
|-------------------------------|---|------------|-------------|------------|------------|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| | <i>Estimated Tribasic Phosphate of Lime Content or equivalent</i> | | | | | | | | | | | |
| COMMONWEALTH COUNTRIES | | | | | | | | | | | | |
| Kenya (a) | 341 | 40 | 354 | 628 | 638 | 350 | 75 | 9 | 78 | 138 | 140 | 77 |
| Rhodesia (d) | n.a. | n.a. | (c) 100,000 | (c) 84,000 | (c) 85,000 | (c) 90,000 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Seychelles (a) (b) | 3,480 | 5,929 | 7,410 | 6,431 | 6,534 | n.a. | 2,000 | 4,000 | 4,600 | 4,100 | 4,100 | n.a. |
| Uganda (d) | 10,668 | 9,322 | (c) 12,000 | 15,318 | 15,564 | 16,000 | 9,600 | 8,400 | 11,000 | 13,800 | 14,000 | 14,000 |
| Christmas Island (b)(e) | 1,073,898 | 1,193,904 | 1,161,844 | 1,046,766 | 1,063,564 | 990,721 | 913,000 | 1,015,000 | 988,000 | 890,000 | 904,000 | 842,000 |
| India— | | | | | | | | | | | | |
| Apatite | 11,447 | 6,300 | 9,196 | 15,519 | 15,768 | 11,307 | 4,000 | 2,000 | 3,200 | 5,400 | 5,500 | 4,000 |
| Phosphate rock | — | — | 68,082 | 147,182 | 149,544 | 232,089 | — | — | 44,600 | 96,500 | 98,000 | 152,000 |
| Australia— | | | | | | | | | | | | |
| Phosphate rock | 11,770 | 5,744 | 18,258 | 14,260 | 14,489 | 10,000 | 5,300 | 2,600 | 8,000 | 6,400 | 6,500 | 4,500 |
| Nauru (b) | 1,766,567 | 2,218,549 | 2,163,100 | 2,091,350 | 2,124,910 | 1,870,650 | 1,466,000 | 1,841,000 | 1,795,000 | 1,736,000 | 1,764,000 | 1,553,000 |
| Ocean Island (b) | 445,150 | 519,407 | 555,100 | 500,800 | 508,836 | 619,638 | 383,000 | 447,000 | 477,000 | 431,000 | 437,000 | 533,000 |
| TOTAL | 3,236,000 | 3,891,000 | 3,878,000 | 3,922,000 | 3,985,000 | 3,847,000 | | | | | | |
| OTHER COUNTRIES | | | | | | | | | | | | |
| Belgium | 26,600 | (c) 29,500 | n.a. | n.a. | n.a. | n.a. | 5,000 | 6,000 | n.a. | n.a. | n.a. | n.a. |
| France | 63,000 | 31,600 | 32,800 | 31,500 | 32,000 | 30,000 | 15,000 | 7,500 | 7,800 | 7,500 | 7,600 | 7,100 |
| Poland | 74,300 | 71,000 | 57,800 | 44,000 | 45,000 | — | 22,300 | 21,300 | 17,300 | 13,000 | 13,000 | — |
| U.S.S.R. (f) | | | | | | | | | | | | |
| Apatite | 8,661,000 | 9,546,000 | 10,334,000 | 11,151,000 | 11,330,000 | n.a. | 7,380,000 | 8,134,000 | 8,806,000 | 9,599,000 | 9,753,000 | n.a. |
| Phosphate rock | 7,384,000 | 7,875,000 | 8,612,000 | 9,350,000 | 9,500,000 | n.a. | 4,030,000 | 4,300,000 | 4,649,000 | 5,107,000 | 5,189,000 | n.a. |
| Algeria | 191,323 | 360,000 | 413,000 | 484,479 | 492,253 | 490,553 | 130,000 | 241,000 | 276,000 | 325,000 | 330,000 | 329,000 |
| Egypt | 672,414 | 670,000 | 650,000 | 704,974 | 716,287 | 713,318 | 430,000 | 420,000 | 400,000 | 440,000 | 450,000 | 450,000 |
| Morocco | 9,787,962 | 10,345,770 | 10,493,992 | 11,219,422 | 11,399,494 | 12,008,060 | 7,243,000 | 7,637,000 | 7,761,000 | 8,210,000 | 8,342,000 | 8,879,000 |

(a) Phosphatic guano.
(b) Exports.
(c) Estimated.
(d) Apatite.
(e) Including phosphate dust
(f) United States Bureau of Mines' estimate.

PRODUCTION OF PHOSPHATE ROCK (cont.)

| Producing Country | Long tons | | | | | Tonnes | | | | |
|-----------------------------|--|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| | 1967 | 1968 | 1969 | 1970 | 1971 | 1967 | 1968 | 1969 | 1970 | 1971 |
| | Estimated Tribasic Phosphate of Lime Content or equivalent | | | | | | | | | |
| OTHER COUNTRIES | | | | | | | | | | |
| <i>(cont.)</i> | | | | | | | | | | |
| Senegal— | | | | | | | | | | |
| Phosphate rock .. | 1,100,000 | 1,090,000 | 1,019,000 | 982,000 | 1,454,167 | 913,000 | 905,000 | 846,000 | 818,000 | 1,207,000 |
| Aluminum phosphates .. | 158,735 | 157,865 | 162,000 | 128,000 | 146,632 | 94,000 | 101,000 | 102,000 | 80,000 | 91,000 |
| South Africa— | | | | | | | | | | |
| Phosphate rock (h) .. | 1,330,606 | 1,540,692 | 1,651,994 | 1,658,270 | 1,729,469 | 67,923 | 767,881 | 806,173 | 809,235 | 830,145 |
| Guano .. | 3,396 | 3,186 | 3,780 | (i) | (i) | 800 | 800 | 900 | n.a. | n.a. |
| Togo .. | 1,122,000 | 1,353,000 | 1,450,000 | 1,484,000 | 1,715,314 | 909,000 | 1,096,000 | 1,175,000 | 1,206,000 | 1,390,000 |
| Tunisia .. | 2,841,000 | 3,389,248 | 2,642,298 | 2,968,658 | 3,161,684 | 1,847,000 | 2,203,000 | 1,717,000 | 1,929,000 | 2,055,000 |
| Mexico .. | 48,000 | 42,000 | 32,000 | 46,000 | 50,000 | 31,200 | 27,300 | 21,000 | 30,000 | 33,000 |
| Netherlands Antilles (b) .. | 101,679 | 91,667 | 111,384 | 90,076 | 91,521 | 74,000 | 67,000 | 81,000 | 66,000 | n.a. |
| United States (e) .. | 35,509,000 | 36,831,250 | 33,683,000 | 33,571,000 | 34,500,000 | 24,316,000 | 25,054,000 | 22,793,000 | 22,693,000 | 23,500,000 |
| Argentina (f) .. | 232 | 289 | 483 | 312 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Brazil— | | | | | | | | | | |
| Apatite .. | 219,000 | 284,100 | n.a. | n.a. | n.a. | 171,000 | 213,000 | n.a. | n.a. | n.a. |
| Phosphate rock .. | 52,000 | 44,200 | n.a. | n.a. | n.a. | 34,000 | 29,000 | n.a. | n.a. | n.a. |
| Chile— | | | | | | | | | | |
| Guano (c) .. | 16,049 | 22,255 | 15,028 | 14,700 | 13,075 | (c) 6,000 | (c) 9,000 | 6,000 | 6,000 | 5,200 |
| Peru (f) .. | 63,175 | 76,000 | 20,000 | 49,000 | n.a. | 16,000 | 20,000 | 5,000 | 13,000 | n.a. |
| China (a) (d) .. | 1,000,000 | 980,000 | 1,000,000 | 1,200,000 | n.a. | 750,000 | 740,000 | 750,000 | 900,000 | n.a. |
| Indonesia (g) .. | (c) 30,000 | n.a. | n.a. | n.a. | n.a. | 13,000 | n.a. | n.a. | n.a. | n.a. |
| Israel .. | 590,000 | 765,000 | 971,000 | 866,000 | 764,400 | 390,000 | 500,000 | 630,000 | 560,000 | 500,000 |
| Jordan .. | 1,065,244 | 1,138,035 | 1,299,753 | 1,081,819 | 786,360 | 778,000 | 830,000 | 949,000 | 789,728 | 574,043 |
| Philippine Republic— | | | | | | | | | | |
| Phosphate rock .. | 1 | 513 | n.a. | 1,400 | 4,729 | — | 200 | n.a. | 560 | 1,900 |
| Guano .. | 1,295 | 646 | 15,000 | 1,457 | 1,135 | 320 | 160 | 4,000 | 400 | 300 |
| Vietnam (North) (d) (a) .. | 980,000 | 980,000 | 1,200,000 | 980,000 | n.a. | 850,000 | 850,000 | 1,040,000 | 850,000 | n.a. |
| TOTAL .. | 74,000,000 | 79,000,000 | 76,000,000 | 77,000,000 | 81,000,000 | 81,000,000 | 82,000,000 | 85,000,000 | 81,000,000 | 85,000,000 |
| WORLD'S TOTAL .. | 77,000,000 | 83,000,000 | 80,000,000 | 81,000,000 | 85,000,000 | 85,000,000 | 86,000,000 | 88,000,000 | 89,000,000 | 90,000,000 |

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, the Somali Republic and South West Africa.

(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.
 (i) Production of Guano for the years ending 31 March 1970 and 31 March 1971 is stated to be:—2,314 long tons (2,351 tonnes) and 1,980 tonnes respectively.

PRODUCTION OF SUPERPHOSPHATES

| Producing Country | Long tons Tonnes | | | | | Long tons Tonnes | | | | |
|-------------------------------|---|------------|------------|------------|------------|--------------------|-----------|-----------|-----------|-----------|
| | 1967 | 1968 | 1969 | 1970 | 1971 | 1967 | 1968 | 1969 | 1970 | 1971 |
| | <i>Estimated P₂O₅ Content</i> | | | | | | | | | |
| COMMONWEALTH COUNTRIES | | | | | | | | | | |
| United Kingdom— | | | | | | | | | | |
| Single | 344,194 | 334,835 | 292,686 | 243,717 | 247,629 | 69,000 | 67,000 | 59,000 | 49,000 | 51,000 |
| Concentrated* .. | 70,862 | 97,213 | 104,500 | 96,800 | 98,400 | 31,200 | 43,247 | 46,000 | 42,700 | 41,900 |
| Uganda— | | | | | | | | | | |
| Single | 16,752 | 14,769 | 21,838 | 26,577 | 27,003 | 3,700 | 3,200 | 4,800 | 5,800 | n.a. |
| Canada*— | | | | | | | | | | |
| Single | 276,000 | 246,000 | n.a. | n.a. | n.a. | 55,000 | 49,000 | n.a. | n.a. | n.a. |
| Concentrated .. | 89,000 | 118,000 | n.a. | n.a. | n.a. | 40,000 | 54,000 | n.a. | n.a. | n.a. |
| India*— | | | | | | | | | | |
| Single | 820,000 | 723,000 | 634,100 | 594,300 | 603,800 | 139,000 | 116,000 | 101,800 | 95,100 | 117,200 |
| Pakistan— | | | | | | | | | | |
| Single | 5,182 | 18,537 | 21,648 | 22,578 | 22,940 | 900 | 3,300 | 3,700 | 3,900 | 4,700 |
| Australia— | | | | | | | | | | |
| Single (a) | 4,427,000 | 4,174,000 | 3,776,000 | 3,392,000 | 3,446,000 | 974,000 | 918,300 | 830,700 | 746,000 | 666,000 |
| New Zealand— | | | | | | | | | | |
| Single (b) .. | 1,337,000 | 1,509,000 | 1,682,000 | 1,599,000 | 1,625,000 | 267,000 | 302,000 | 336,400 | 320,000 | 301,000 |
| TOTAL | | | | | | 1,610,000 | 1,556,000 | 1,483,000 | 1,367,000 | 1,291,000 |
| OTHER COUNTRIES | | | | | | | | | | |
| Irish Republic*— | | | | | | | | | | |
| Single | 281,500 | 256,900 | 171,700 | n.a. | n.a. | 51,700 | 46,900 | 31,400 | n.a. | n.a. |
| Concentrated .. | 76,800 | 117,300 | 82,900 | n.a. | n.a. | 33,500 | 47,800 | 33,800 | n.a. | n.a. |
| Austria*— | | | | | | | | | | |
| Single | 242,100 | 215,300 | 174,300 | 189,000 | 192,000 | 43,600 | 38,700 | 31,400 | 34,000 | 25,680 |
| Belgium*— | | | | | | | | | | |
| Single | 162,400 | 185,900 | 151,100 | 129,600 | 131,600 | 29,200 | 32,800 | 28,300 | 25,100 | 32,300 |
| Concentrated .. | 120,000 | 110,000 | 72,900 | 74,000 | 75,200 | 54,000 | 50,000 | 34,800 | 34,800 | 53,000 |
| Bulgaria— | | | | | | | | | | |
| Single | 274,000 | 402,000 | 387,678 | 402,296 | 408,752 | 88,000 | 133,000 | 138,000 | 145,000 | 146,000 |
| Czechoslovakia— | | | | | | | | | | |
| Single | 1,336,000 | c1,229,000 | c1,287,000 | c1,348,000 | c1,370,000 | 240,480 | 221,200 | 231,700 | 242,700 | 249,500 |

*Source: International Superphosphate Manufacturers' Association.

(a) Including double and triple superphosphate and ammonium phosphate expressed as single superphosphate.

(b) Superphosphate content of all fertilizers made.

(c) Estimated.

| Producing Country | Long tons | | | | | Tonnes | | | | | | | |
|----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|---------|---------|---------|---------|---------|---------|---------|
| | 1967 | | | | | 1970 | | | | | | | |
| | 1967 | 1968 | 1969 | 1970 | 1971 | 1967 | 1968 | 1969 | 1970 | 1971 | | | |
| OTHER COUNTRIES (cont.) | | | | | | | | | | | | | |
| Denmark*— | | | | | | | | | | | | | |
| Single (a) | 352,300 | 312,300 | 371,300 | 327,900 | 333,100 | n.a. | 56,200 | 66,800 | 59,000 | 60,000 | n.a. | n.a. | n.a. |
| Enriched | 24,600 | 23,800 | 22,800 | 19,800 | 20,200 | n.a. | 7,600 | 7,300 | 6,300 | 6,400 | n.a. | n.a. | n.a. |
| Finland*— | | | | | | | | | | | | | |
| Single | 303,100 | 249,800 | n.a. | n.a. | n.a. | n.a. | 49,900 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Kotka-phosphate | 85,600 | 61,200 | n.a. | n.a. | n.a. | n.a. | 14,100 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| France*— | | | | | | | | | | | | | |
| Single (f) | 1,402,500 | 1,495,200 | 1,373,600 | 1,200,600 | 1,219,900 | n.a. | 277,100 | 290,000 | 240,800 | 244,700 | n.a. | n.a. | n.a. |
| Concentrated | 332,700 | 282,700 | 356,000 | 364,900 | 370,700 | n.a. | 149,800 | 160,200 | 164,200 | 166,800 | n.a. | n.a. | n.a. |
| Germany (Federal)*— | | | | | | | | | | | | | |
| Single | 320,900 | 214,500 | n.a. | 109,300 | 111,100 | n.a. | 57,800 | 40,800 | 21,200 | 21,500 | n.a. | n.a. | n.a. |
| Germany (East)— | | | | | | | | | | | | | |
| Single | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 165,000 | 183,000 | 203,000 | 206,000 | 206,700 | 206,700 | 206,700 |
| Greece*— | | | | | | | | | | | | | |
| Single | 173,200 | 206,500 | 88,000 | 145,200 | 147,600 | n.a. | 31,500 | 43,400 | 30,000 | 30,500 | n.a. | n.a. | n.a. |
| Hungary— | | | | | | | | | | | | | |
| Single | 811,000 | 833,000 | 903,000 | 886,000 | 900,000 | 922,000 | 150,000 | 154,000 | 164,000 | 166,000 | 166,000 | 166,000 | 166,000 |
| Italy— | | | | | | | | | | | | | |
| Single | 1,532,897 | 1,584,419 | 1,391,722 | 1,372,371 | 1,394,394 | 1,263,024 | 290,000 | 300,000 | 261,000 | 265,000 | 265,000 | 265,000 | 265,000 |
| Netherlands*— | | | | | | | | | | | | | |
| Single | 303,100 | 282,400 | 301,800 | 236,400 | 240,200 | n.a. | 55,400 | 53,700 | 44,700 | 45,400 | n.a. | n.a. | n.a. |
| Concentrated | 183,100 | 203,400 | 158,600 | 159,900 | 162,500 | n.a. | 80,800 | 91,500 | 73,300 | 74,500 | n.a. | n.a. | n.a. |
| Norway— | | | | | | | | | | | | | |
| Single (c) | 18,700* | 6,800* | 19,000* | 21,000* | 21,400* | n.a. | 3,400 | 3,400 | 3,800 | 3,800 | n.a. | n.a. | n.a. |
| Enriched*(d) | 16,700 | 10,400 | 5,600 | — | — | — | 5,400 | 3,800 | — | — | — | — | — |
| Poland (b)— | | | | | | | | | | | | | |
| Single | 1,544,000 | 1,903,000 | 2,124,700 | 2,270,200 | 2,306,600 | 2,189,000 | 255,000 | 314,000 | 408,000 | 415,000 | 394,000 | 394,000 | 394,000 |
| Portugal— | | | | | | | | | | | | | |
| Single | 483,000 | 481,000 | 346,500 | 445,434 | 452,582 | n.a. | 81,000 | 79,000 | 80,000 | 81,000 | 81,000 | 81,000 | 81,000 |
| 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): 1967—489,865; 1968—426,565; 1969—443,275; 1970—460,157. (Tonnes): 1970—467,541; 1971—548,066

(b) The following amounts of "Supertomasyna" were produced (long tons): 1967—289,000; 1968—308,000; 1969—315,000; 1970—317,000. (Tonnes): 1970—322,000; 1971—266,000.

(c) The majority of this material was used to make potash superphosphate, production of which was as follows (long tons): 1967—26,575; 1968—30,835; 1969—21,026; 1970—15,370. (Tonnes): 1970—15,617; 1971—n.a.

(d) Including concentrated superphosphate. (e) Calculated as single superphosphate.

(f) Including enriched superphosphate.

PRODUCTION OF SUPERPHOSPHATES (cont.)

| Producing Country | Long tons Tonnes | | | | | Estimated P ₂ O ₅ Content | | | | | Long tons Tonnes | | | |
|-----------------------------------|--------------------|------------|------------|------------|------------|---|-----------|-----------|-----------|-----------|--------------------|-----------|------|------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1970 | 1969 | 1970 | 1970 | 1968 | 1969 | 1970 | 1970 | 1971 |
| | | | | | | | | | | | | | | |
| OTHER COUNTRIES (cont.) | | | | | | | | | | | | | | |
| Roumania— | .. | 1,010,000 | c1,360,000 | c1,500,000 | c1,531,000 | .. | 162,000 | 179,000 | 218,000 | 240,000 | 244,000 | 245,000 | .. | .. |
| Single .. | .. | 1,520,600 | 1,427,000 | 1,608,000 | 1,634,000 | .. | 306,000 | 311,300 | 309,200 | 283,000 | 287,600 | 372,000 | .. | .. |
| Spain (a)— | .. | 303,100 | 228,200 | 170,900 | 173,700 | .. | 59,100 | 57,100 | 44,500 | 38,300 | 38,900 | n.a. | .. | .. |
| Single .. | .. | 23,600 | 86,100 | 103,400 | 105,100 | .. | 6,800 | 17,600 | 21,500 | 25,900 | 26,300 | n.a. | .. | .. |
| Sweden*— | .. | 25,000 | n.a. | 12,300 | 12,500 | .. | 4,400 | 4,300 | n.a. | 2,200 | 2,200 | n.a. | .. | .. |
| Single .. | .. | n.a. | n.a. | 8,368,000 | 8,502,000 | .. | n.a. | n.a. | n.a. | 1,565,000 | 1,590,000 | n.a. | .. | .. |
| U.S.S.R. | .. | .. | .. | 2,782,000 | 2,827,000 | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Concentrated .. | .. | .. | .. | 823,900 | 415,000 | .. | 169,000 | 145,000 | 136,000 | 66,000 | 67,000 | 79,000 | .. | .. |
| Yugoslavia— | .. | 1,058,000 | 909,000 | 415,000 | 422,000 | .. | 11,600 | 13,000 | 15,800 | 17,800 | 18,100 | 22,300 | .. | .. |
| Single .. | .. | 72,800 | 79,000 | 108,300 | 110,000 | .. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | .. | .. |
| Algeria— | .. | 261,622 | 301,215 | 404,900 | 411,400 | .. | 183,300 | 175,900 | 174,000 | 168,000 | 171,000 | 175,000 | .. | .. |
| Single .. | .. | 116,100 | 63,900 | 55,000 | 55,900 | .. | 19,800 | 11,200 | 9,800 | 10,600 | 10,800 | 12,500 | .. | .. |
| Morocco*— | .. | 965,200 | 925,700 | n.a. | n.a. | .. | 4,900 | 5,400 | 5,200 | 5,300 | 5,400 | 5,400 | .. | .. |
| Single .. | .. | 31,000 | 33,900 | 33,200 | 33,700 | .. | 147,000 | 171,000 | 174,000 | 168,000 | 171,000 | 171,000 | .. | .. |
| South Africa*— | .. | 318,600* | 371,100 | 376,000 | 382,000 | .. | 10,600 | n.a. | n.a. | n.a. | n.a. | n.a. | .. | .. |
| Single .. | .. | 59,100 | n.a. | — | — | .. | 3,000 | 1,300 | 4,000 | n.a. | n.a. | n.a. | .. | .. |
| Tunisia— | .. | 179,176 | 257,954 | 380,770 | 368,400 | .. | 1,054,800 | 815,700 | 757,000 | 683,000 | 694,000 | 568,000 | .. | .. |
| Single .. | .. | 43,868 | 257,954 | 380,770 | 368,400 | .. | 1,322,500 | 1,240,000 | 1,293,000 | 1,189,000 | 1,208,000 | 1,326,000 | .. | .. |
| Concentrated .. | .. | 15,473 | 6,653 | 20,064 | n.a. | .. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | .. | .. |
| Salvador— | .. | 5,284,700* | 4,078,500* | n.a. | n.a. | .. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | .. | .. |
| Single .. | .. | 2,938,800* | 2,695,600* | n.a. | n.a. | .. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | .. | .. |
| Concentrated .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |

*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): 1967—395,885; 1968—406,119; 1969—375,146; 1970—308,148 (Tonnes); 1970—313,093; 1971—n.a.

(c) Estimated.

(d) Years ending June 30 of that stated.

PRODUCTION OF SUPERPHOSPHATES (cont.)

Long tons | Tonnes

Long tons | Tonnes

| Producing Country | 1967 | | | | | 1968 | | | | | 1969 | | | | | 1970 | | | | | 1971 | | | | | | | | | |
|--------------------------------|---|------------|------------|------------|------------|------------|------------|------------|------------|------------|---|-----------|------------|------------|------------|------------|------------|------------|------------|------------|---|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| | Estimated P ₂ O ₅ Content | | | | | | | | | | Estimated P ₂ O ₅ Content | | | | | | | | | | Estimated P ₂ O ₅ Content | | | | | | | | | |
| OTHER COUNTRIES (cont.) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brazil— | 445,971 | 498,773 | 528,390 | 628,574 | 638,661 | 108,855* | 89,200 | 90,000 | 95,800 | 115,400 | 117,300 | 36,900* | 5,200 | 5,800 | 780 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | |
| Single | 26,100* | 29,000* | 5,500* | n.a. | n.a. | 526* | 5,200 | 5,800 | 780 | n.a. | n.a. | 74 | 4,000 | 4,000 | 2,000 | 2,100 | 2,100 | 2,100 | 2,100 | 2,100 | 2,100 | 2,100 | 2,100 | 2,100 | 2,100 | 2,100 | 2,100 | 2,100 | 2,100 | |
| Colombia— | 20,000 | 20,000 | 9,400 | 10,600 | 10,800 | n.a. | 4,000 | 4,000 | 2,000 | 2,000 | n.a. | n.a. | 9,300 | 10,000 | 3,400 | 6,800 | 6,800 | 6,800 | 6,800 | 6,800 | 6,800 | 6,800 | 6,800 | 6,800 | 6,800 | 6,800 | 6,800 | 6,800 | 6,800 | |
| Single | 46,800 | 50,000 | 20,000 | n.a. | n.a. | n.a. | 9,300 | 10,000 | 3,400 | 6,800 | 6,800 | n.a. | 1,000 | 1,300 | 1,400 | 2,200 | 2,200 | 2,200 | 2,200 | 2,200 | 2,200 | 2,200 | 2,200 | 2,200 | 2,200 | 2,200 | 2,200 | 2,200 | 2,200 | |
| Uruguay* | 6,000 | 7,000 | 8,400 | 10,800 | 11,000 | n.a. | 1,000 | 1,300 | 1,400 | 2,200 | 2,200 | n.a. | 36,000 | 36,000 | 35,000 | 33,000 | 33,000 | 33,000 | 33,000 | 33,000 | 33,000 | 33,000 | 33,000 | 33,000 | 33,000 | 33,000 | 33,000 | 33,000 | 33,000 | |
| Single | 200,286 | 200,700 | 193,400 | 187,000 | 190,000 | 195,000 | 36,000 | 36,000 | 35,000 | 33,000 | 33,000 | n.a. | 10,500 | 10,600 | 12,100 | 12,800 | 12,800 | 12,800 | 12,800 | 12,800 | 12,800 | 12,800 | 12,800 | 12,800 | 12,800 | 12,800 | 12,800 | 12,800 | 12,800 | |
| Israel* | 59,100 | 55,700 | 59,600 | 65,900 | 67,000 | 73,000 | 1,500 | 1,000 | 1,100 | 800 | 800 | 14,500 | 1,500 | 1,000 | 1,100 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| Single | 3,900 | 3,200 | 3,300 | 2,400 | 2,400 | n.a. | 1,500 | 1,000 | 1,100 | 800 | 800 | 14,500 | 213,000 | 201,000 | 171,000 | 147,900 | 147,900 | 147,900 | 147,900 | 147,900 | 147,900 | 147,900 | 147,900 | 147,900 | 147,900 | 147,900 | 147,900 | 147,900 | 147,900 | |
| Concentrated (b) | 1,170,200 | 1,112,500 | 960,200 | 827,900 | 841,200 | 711,699 | 28,300 | 35,100 | 39,800 | 28,000 | 28,500 | 127,200 | 213,000 | 201,000 | 171,000 | 147,900 | 147,900 | 147,900 | 147,900 | 147,900 | 147,900 | 147,900 | 147,900 | 147,900 | 147,900 | 147,900 | 147,900 | 147,900 | 147,900 | |
| Single | 78,800 | 94,000 | 105,700 | 74,500 | 75,700 | n.a. | 28,300 | 35,100 | 39,800 | 28,000 | 28,500 | n.a. | 28,300 | 35,100 | 39,800 | 28,000 | 28,500 | 28,500 | 28,500 | 28,500 | 28,500 | 28,500 | 28,500 | 28,500 | 28,500 | 28,500 | 28,500 | 28,500 | 28,500 | 28,500 |
| Concentrated (b) | 757 | — | — | — | — | 1,066 | 130 | — | — | — | — | 180 | 130 | — | — | — | — | — | — | — | — | — | 180 | 130 | — | — | — | — | — | |
| Single | 78,800 | 94,000 | 105,700 | 74,500 | 75,700 | n.a. | 28,300 | 35,100 | 39,800 | 28,000 | 28,500 | n.a. | 28,300 | 35,100 | 39,800 | 28,000 | 28,500 | 28,500 | 28,500 | 28,500 | 28,500 | 28,500 | 28,500 | 28,500 | 28,500 | 28,500 | 28,500 | 28,500 | 28,500 | 28,500 |
| Lebanon* | 78,700 | 78,700 | n.a. | n.a. | n.a. | n.a. | 14,200 | 14,200 | n.a. | n.a. | n.a. | n.a. | 14,200 | 14,200 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Single | 8,000 | 12,000 | n.a. | 2,100 | 2,100 | 650 | 1,600 | 2,400 | n.a. | 2,100 | 2,100 | 130 | 1,600 | 2,400 | n.a. | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Philippine Republic* | 202,000 | 141,000 | 99,400 | 191,400 | 194,500 | 120,300* | 33,000 | 22,700 | 15,900 | 30,500 | 31,000 | 19,000 | 33,000 | 22,700 | 15,900 | 30,500 | 31,000 | 31,000 | 31,000 | 31,000 | 31,000 | 31,000 | 31,000 | 31,000 | 31,000 | 31,000 | 31,000 | 31,000 | 31,000 | 31,000 |
| Single | 202,000 | 141,000 | 99,400 | 191,400 | 194,500 | 120,300* | 33,000 | 22,700 | 15,900 | 30,500 | 31,000 | 19,000 | 33,000 | 22,700 | 15,900 | 30,500 | 31,000 | 31,000 | 31,000 | 31,000 | 31,000 | 31,000 | 31,000 | 31,000 | 31,000 | 31,000 | 31,000 | 31,000 | 31,000 | 31,000 |
| TOTAL | 8,900,000 | 8,700,000 | 8,700,000 | 8,700,000 | 8,700,000 | 8,800,000 | 8,900,000 | 8,700,000 | 8,700,000 | 8,700,000 | 8,800,000 | 8,300,000 | 8,900,000 | 8,700,000 | 8,700,000 | 8,700,000 | 8,700,000 | 8,700,000 | 8,700,000 | 8,700,000 | 8,700,000 | 8,700,000 | 8,700,000 | 8,700,000 | 8,700,000 | 8,700,000 | 8,700,000 | 8,700,000 | 8,700,000 | |
| World's TOTAL | 10,500,000 | 10,200,000 | 10,100,000 | 10,100,000 | 10,100,000 | 10,300,000 | 10,500,000 | 10,200,000 | 10,100,000 | 10,100,000 | 10,300,000 | 9,600,000 | 10,500,000 | 10,200,000 | 10,100,000 | 10,100,000 | 10,100,000 | 10,100,000 | 10,100,000 | 10,100,000 | 10,100,000 | 10,100,000 | 10,100,000 | 10,100,000 | 10,100,000 | 10,100,000 | 10,100,000 | 10,100,000 | 10,100,000 | 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

| Producing Country | Long tons | | | | Tonnes | |
|------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom (b) .. | 655,670 | 597,980 | 590,350 | 640,449 | 650,728 | 563,345 |
| OTHER COUNTRIES | | | | | | |
| Belgium | 1,312,000 | 1,399,000 | 1,510,000 | 1,279,000 | 1,300,000 | 1,288,000 |
| France | 2,477,369 | 2,634,429 | 2,774,909 | 2,789,958 | 2,809,455 | 2,834,729 |
| Germany (Federal) .. | 2,654,000 | 2,677,000 | 2,703,000 | 2,335,000 | 2,373,000 | 2,108,000 |
| Germany (East) (a) .. | 123,000 | 124,000 | 123,000 | 136,000 | 138,000 | 132,000 |
| Luxemburg | 774,623 | 804,170 | 809,244 | 792,269 | 804,983 | 840,808 |
| Sweden | 65,734 | 368,992 | 323,548 | 346,325 | 351,883 | n.a. |
| Egypt | n.a. | 55,354 | 38,622 | 21,200 | 21,540 | n.a. |
| Argentina (c) | 6,500 | 3,800 | 3,500 | 2,500 | 2,600 | 6,800 |
| Colombia (c) | 23,100 | n.a. | 24,500 | 33,000 | 33,500 | n.a. |

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

(a) Estimated.

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

(c) Years ended June 30 of that stated.

EXPORTS OF PHOSPHATES, ETC.

Long tons | Tonnes

| Exporting Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|---|--------------|--------------|---------------|---------------|---------------|---------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— Phosphatic fertilizers .. | 55,670 | 62,176 | 48,477 | 45,220 | 45,946 | 33,361 |
| Seychelles— Phosphatic guano .. | 3,480 | 5,929 | 7,410 | 6,431 | 6,534 | <i>n.a.</i> |
| Canada— Nitrogen-phosphate fertilizers .. | (£8,978,193) | (£9,930,240) | (£11,338,000) | (£15,278,000) | (£15,278,000) | (£17,246,000) |
| Christmas Island— Phosphate rock .. | 984,125 | 1,123,269 | 1,043,750 | 957,042 | 972,400 | 862,169 |
| Phosphate dust .. | 89,773 | 70,635 | 118,094 | 89,724 | 91,164 | 128,552 |
| Malaysia (West)— Natural phosphates .. | 32 | 27 | 137 | 9 | 9 | — |
| New Zealand (a)— Superphosphates .. | 405 | 488 | 336 | 198 | 201 | 85 |
| Nauru— Phosphate rock .. | 1,766,567 | 2,218,549 | 2,163,100 | 2,091,350 | 2,124,910 | 1,870,650 |
| Ocean Island— Phosphate rock .. | 445,150 | 519,407 | 555,100 | 500,800 | 508,863 | 619,638 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg E.U.— Phosphate rock .. | 20,762 | 10,715 | 11,810 | 7,759 | 7,883 | 11,525 |
| Superphosphates (b) .. | 46,067 | 45,510 | 31,793 | 24,306 | 24,696 | 53,624 |
| Basic slag (b) .. | 276,623 | 277,316 | 278,875 | 267,343 | 271,633 | 275,717 |
| France— Phosphate rock .. | 2,910 | 788 | 433 | 2,568 | 2,628 | 2,552 |
| Superphosphates .. | 43,030 | 30,471 | 29,104 | 14,485 | 14,718 | 14,542 |
| Basic slag .. | 344,742 | 306,780 | 275,156 | 323,951 | 329,150 | 269,121 |
| Di-calcium phosphates .. | 14,551 | 17,641 | 15,602 | 9,486 | 9,638 | 10,180 |
| Germany (Federal)— Phosphate rock .. | 49,278 | 23,349 | 2,419 | 4,584 | 4,658 | 6,724 |
| Superphosphates .. | 8,203 | 34,402 | 14,944 | 5,468 | 5,556 | 2,283 |
| Basic slag .. | 199,990 | 211,914 | 226,027 | 270,902 | 275,249 | 196,050 |
| Other phosphatic fertilizers .. | 2,409 | 6,856 | 3,264 | 5,562 | 5,651 | 1,260 |
| Greece— Phosphatic fertilizers .. | 25,122 | 83,025 | — | 42,912 | 43,601 | 15,150 |
| Hungary— Superphosphates .. | <i>n.a.</i> | <i>n.a.</i> | 7,414 | 12,416 | 12,615 | <i>n.a.</i> |
| Italy— Superphosphates .. | 1,085 | 18,922 | 6,619 | 7,640 | 7,763 | 3,298 |
| Netherlands— Phosphate rock .. | 497 | 223 | 7,077 | 6,278 | 6,379 | 370 |
| Superphosphates (b) .. | 138,518 | 115,379 | 96,856 | 88,655 | 90,078 | (c) 65,232 |
| Basic slag (b) .. | 220 | 26 | 2 | — | — | (c) 13 |
| Norway— Superphosphates .. | 4,213 | 8,278 | 3 | 12 | 12 | 10 |
| Portugal— Superphosphates .. | 105,649 | 96,924 | 44,159 | 52,824 | 53,672 | 105,375 |
| Spain— Superphosphates, etc. .. | 70,714 | 31,023 | 66,047 | 84,705 | 86,064 | 71,582 |
| Di-calcium phosphates .. | 492 | 1,784 | 2,661 | 4,921 | 5,000 | <i>n.a.</i> |
| Sweden— Phosphate rock .. | 21 | 1,787 | — | — | — | 3,914 |
| Superphosphates .. | 16,533 | 13,457 | 23,556 | 31,840 | 32,351 | 1,418 |
| Di-calcium phosphates .. | 25,644 | 26,873 | 41,664 | 34,622 | 35,178 | 38,062 |
| Basic slag .. | 24,328 | 32,164 | 26,147 | 26,111 | 26,530 | 14,741 |

(a) Years ended June 30 of that stated.

 (b) P₂O₅ content.

(c) Excludes exports to Belgium and Luxemburg, if any.

EXPORTS OF PHOSPHATES, ETC. (cont.)

| Exporting Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|------------|------------|------------|------------|------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| U.S.S.R.— | | | | | | |
| Apatite ore | 88,977 | 59,500 | 46,600 | 48,620 | 49,400 | 50,200 |
| do. concentrates .. | 4,438,377 | 5,026,300 | 5,519,000 | 5,511,556 | 5,600,000 | 6,000,000 |
| Superphosphates .. | 372,226 | 438,500 | 436,100 | 640,325 | 650,600 | 565,800 |
| Yugoslavia— | | | | | | |
| Superphosphates .. | 282,157 | 340,468 | 109,161 | 32,605 | 33,128 | 97,491 |
| Algeria— | | | | | | |
| Phosphate rock .. | 86,681 | 240,700 | 414,249 | 411,423 | 418,025 | 467,425 |
| Egypt— | | | | | | |
| Phosphate rock .. | 496,000 | 444,000 | 403,055 | 314,256 | 319,299 | 281,970 |
| Phosphatic fertilizers .. | 33,955 | 28,837 | 38,484 | 91,547 | 93,016 | 78,755 |
| Morocco— | | | | | | |
| Phosphate rock .. | 9,195,992 | 9,922,012 | 10,132,804 | 11,353,431 | 11,535,625 | 11,867,653 |
| Hyperphosphates .. | 7,559 | 13,656 | 1,851 | 1,202 | 1,222 | 290 |
| Superphosphates .. | 184,133 | 235,634 | 179,901 | 103,619 | 105,282 | 197,096 |
| Senegal— | | | | | | |
| Phosphate rock .. | 697,518 | 743,371 | 687,622 | 845,501 | 859,069 | 1,120,514 |
| Aluminium phosphates .. | 74,436 | 53,796 | 93,485 | 95,320 | 96,850 | 86,366 |
| Phosphate fertilizers .. | 17,287 | 25,900 | 45,722 | 48,108 | 48,880 | 79,632 |
| South Africa— | | | | | | |
| Phosphate rock .. | 958 | 1,587 | 206 | 225 | 229 | 2,208 |
| Phosphatic fertilizers .. | 5,285 | 11,657 | 7,404 | 9,350 | 9,500 | 78,665 |
| Togo— | | | | | | |
| Phosphate rock .. | 1,003,876 | 1,238,685 | 1,299,490 | 1,480,538 | 1,504,296 | 1,813,863 |
| Tunisia— | | | | | | |
| Phosphate rock .. | 2,263,560 | 2,384,526 | 1,791,803 | 2,299,127 | 2,336,022 | 2,647,970 |
| Hyperphosphates .. | 13,739 | 21,946 | 55,882 | 28,030 | 28,480 | 7,460 |
| Superphosphates .. | 376,264 | 341,828 | 297,000 | 367,838 | 373,741 | 415,336 |
| Mexico— | | | | | | |
| Phosphate rock .. | 33,874 | 28,339 | 22,131 | 12,974 | 13,182 | 10,087 |
| Netherlands Antilles— | | | | | | |
| Phosphate rock .. | 116,469 | 91,667 | 111,384 | 90,076 | 91,521 | n.a. |
| United States— | | | | | | |
| Phosphate rock .. | 9,194,137 | 10,788,393 | 10,150,891 | 10,480,798 | 10,648,988 | 11,508,929 |
| Superphosphates— | | | | | | |
| Single | 67,463 | 84,848 | 24,896 | 34,126 | 34,674 | 7,775 |
| Concentrated .. | 564,276 | 1,034,277 | 700,392 | 630,879 | 641,003 | 632,405 |
| Sodium phosphates .. | 24,177 | 17,074 | 16,655 | 20,627 | 20,958 | 23,124 |
| Ammonium phosphates | 1,134,311 | 1,134,045 | 841,040 | 912,373 | 927,014 | 1,231,362 |
| Other phosphatic fertilizers .. | 31,875 | 32,346 | 31,692 | 24,216 | 24,605 | 35,555 |
| Israel— | | | | | | |
| Phosphate rock .. | 413,365 | 637,116 | 778,781 | 521,218 | 529,583 | 357,710 |
| Japan— | | | | | | |
| Phosphate rock .. | 591 | 1,349 | n.a. | n.a. | n.a. | n.a. |
| Superphosphates .. | 13,147 | 22,851 | 15,271 | 14,815 | 15,053 | 9,884 |
| Thermal phosphates .. | 10,336 | 9,772 | 12,032 | 18,688 | 18,988 | 19,080 |
| Ammonium phosphate | 8,395 | 892 | 327 | 3,386 | 3,441 | 845 |
| Ammonium sulphate phosphate .. | 45,614 | 59,634 | 48,363 | 48,901 | 49,686 | 44,732 |
| Other phosphatic fertilizers .. | 3,403 | 1,555 | 9,409 | 5,600 | 5,690 | 2,552 |
| Jordan— | | | | | | |
| Phosphate rock .. | 867,733 | 1,076,945 | 913,629 | 645,863 | 656,227 | 647,278 |
| Lebanon— | | | | | | |
| Superphosphates .. | 16,808 | 34,701 | 55,836 | 50,741 | 51,555 | 69,225 |
| Philippine Republic— | | | | | | |
| Ammonium phosphates | n.a. | 9,842 | 29,034 | 6,889 | 7,000 | n.a. |

IMPORTS OF PHOSPHATES, ETC.

| Importing Country and Description | Long tons | | | | Tonnes | |
|---|-----------|-----------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Phosphate rock | 1,586,966 | 1,843,057 | 1,665,393 | 1,571,740 | 1,596,966 | 1,726,623 |
| Superphosphates | 46,681 | 31,512 | 5,559 | 15,203 | 15,447 | 36,597 |
| Basic slag | 41,977 | 40,141 | 42,434 | 54,158 | 55,027 | 76,696 |
| Ammonium phosphate | 10,451 | 30,118 | 5,174 | 7,286 | 7,403 | 34,185 |
| Ghana— | | | | | | |
| Superphosphates | — | 160 | 734 | — | — | <i>n.a.</i> |
| Other phosphatic fertilizers | 6 | 227 | 210 | 1,046 | 1,063 | <i>n.a.</i> |
| Kenya— | | | | | | |
| Superphosphates | 14,509 | 15,710 | 16,075 | 14,105 | 14,331 | 15,261 |
| Other phosphatic fertilizers | 640 | 3,335 | 1,414 | 4,433 | 4,504 | 7,320 |
| Mauritius— | | | | | | |
| Phosphatic guano | 9,545 | 10,501 | 10,071 | 8,565 | 8,703 | 6,061 |
| Phosphatic fertilizers | 2,941 | 3,851 | 2,435 | 3,534 | 3,591 | 4,667 |
| Nigeria— | | | | | | |
| Phosphatic fertilizers | 28,389 | 23,963 | 23,093 | 14,103 | 14,329 | 14,760 |
| Sierra Leone— | | | | | | |
| Superphosphates | 418 | 420 | 225 | 432 | 439 | 112 |
| Other phosphatic fertilizers | 10 | 562 | 1 | 305 | 310 | 1,017 |
| Tanzania— | | | | | | |
| Superphosphates | 1,168 | 2,552 | 1,974 | 2,506 | 2,546 | 5,514 |
| Other phosphatic fertilizers | 1 | 82 | 1,007 | 615 | 625 | 1,036 |
| Uganda— | | | | | | |
| Superphosphates | 530 | 757 | 263 | 728 | 740 | 894 |
| Other phosphatic fertilizers | 401 | 44 | 178 | 757 | 769 | 63 |
| Zambia— | | | | | | |
| Phosphatic fertilizers | 3,265 | 919 | 492 | 4,122 | 4,188 | <i>n.a.</i> |
| Canada— | | | | | | |
| Phosphate rock | 2,035,506 | 2,098,196 | 1,965,474 | 2,205,402 | 2,240,792 | 2,580,445 |
| Superphosphates, single do. concentrated | 31,688 | 12,854 | 4,803 | 4,449 | 4,520 | 323 |
| Calcium phosphate | 41,804 | 26,969 | 20,020 | 55,381 | 56,270 | 47,669 |
| Sodium phosphates | 18,726 | 18,129 | 19,464 | 20,967 | 21,304 | 20,544 |
| Sodium phosphates | 8,801 | 6,361 | 5,757 | 5,877 | 5,971 | 5,460 |
| Antigua— | | | | | | |
| Phosphatic fertilizers | — | 11 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Barbados— | | | | | | |
| Phosphatic fertilizers | 144 | 30 | 10 | 32 | 32 | <i>n.a.</i> |
| British Honduras— | | | | | | |
| Phosphatic fertilizers | 27 | 628 | 1,285 | 1,170 | 1,189 | 1,884 |
| Grenada— | | | | | | |
| Superphosphates | 944 | 692 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Other phosphatic fertilizers | 766 | 550 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Jamaica— | | | | | | |
| Phosphatic fertilizers | 13,724 | 2,756 | 9,346 | 3,021 | 3,069 | 6,150 |
| St. Kitts— | | | | | | |
| Phosphatic fertilizers | 1,751 | 977 | 89 | 725 | 737 | 3 |
| St. Lucia— | | | | | | |
| Phosphatic fertilizers | — | 12 | 37 | <i>n.a.</i> | <i>n.a.</i> | — |
| St. Vincent— | | | | | | |
| Superphosphates | — | 386 | — | 1 | 1 | <i>n.a.</i> |
| Trinidad and Tobago— | | | | | | |
| Superphosphates | 490 | 1,778 | 160 | 762 | 774 | 1,180 |

IMPORTS OF PHOSPHATES, ETC. (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|---------------------------------------|-----------|-----------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Guyana— | | | | | | |
| Superphosphates .. | 385 | 444 | 141 | 415 | 422 | 690 |
| Other phosphatic fertilizers .. | 2,321 | 3,114 | 2,386 | 3,154 | 3,205 | 5,075 |
| Ceylon— | | | | | | |
| Phosphate rock .. | 24,755 | — | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Superphosphates .. | 2,291 | 7,009 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Other phosphatic fertilizers .. | 23,630 | 25,340 | 38,875 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Cyprus— | | | | | | |
| Superphosphates .. | 19,913 | 27,152 | 18,091 | 12,369 | 12,567 | 14,623 |
| Hong Kong— | | | | | | |
| Phosphatic fertilizers .. | 88 | 10 | — | — | — | 70 |
| India (b)— | | | | | | |
| Phosphate rock .. | 594,496 | 831,855 | 636,130 | 740,339 | 752,219 | 797,795 |
| Other natural phosphates .. | 4,843 | — | — | — | — | — |
| Superphosphates .. | 1,517 | 161 | 114 | — | — | — |
| Ammonium phosphate .. | 459,136 | 353,524 | 126,906 | 43,930 | 44,635 | 287,440 |
| Malaysia (West)— | | | | | | |
| Natural phosphates .. | 100,193 | 84,282 | 79,358 | 86,362 | 87,748 | 103,935 |
| Phosphatic fertilizers .. | 6,014 | 3,863 | 6,192 | 5,545 | 5,634 | 6,419 |
| Sabah— | | | | | | |
| Natural phosphates .. | 555 | 491 | 59 | 58 | 59 | 33 |
| Other phosphatic fertilizers .. | 296 | 137 | 802 | 1,911 | 1,942 | 1,803 |
| Sarawak— | | | | | | |
| Natural phosphates .. | 5,644 | 3,556 | 2,404 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Phosphatic fertilizers .. | 107 | 147 | 320 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Australia (a)— | | | | | | |
| Phosphate rock .. | 3,271,814 | 3,295,780 | 3,176,565 | 2,649,319 | 2,691,833 | 2,107,385 |
| Calcium phosphates .. | 2,076 | 1,595 | 2,505 | 907 | 922 | 1,311 |
| Other phosphatic fertilizers .. | 35 | 30 | (c) 14,021 | (c) 1,623 | (c) 1,649 | (c) 3,141 |
| Fiji— | | | | | | |
| Phosphatic fertilizers .. | 2,716 | 4,651 | 4,608 | 3,192 | 3,243 | 1,552 |
| New Zealand (a)— | | | | | | |
| Phosphate rock .. | 1,051,120 | 871,849 | 1,019,997 | 1,053,969 | 1,070,885 | 988,839 |
| Superphosphates .. | 11,340 | 50 | 161 | 313 | 318 | <i>n.a.</i> |
| Basic slag .. | 9,929 | 7,972 | 5,589 | 5,135 | 5,217 | 6,602 |
| Other phosphatic fertilizers .. | 2,791 | 13,742 | 4,718 | 10,175 | 10,338 | <i>n.a.</i> |
| Irish Republic— | | | | | | |
| Phosphate rock .. | 351,901 | 418,772 | 333,207 | 379,294 | 385,382 | 400,856 |
| Superphosphates .. | 10,590 | 5,311 | 15,052 | 15,657 | 15,908 | 11,366 |
| Basic slag .. | 116,205 | 144,640 | 149,705 | 150,061 | 152,469 | 179,556 |
| Di-calcium phosphate .. | 1,615 | 395 | 505 | 1,939 | 1,970 | 638 |
| Other phosphatic fertilizers .. | 12 | 25 | 394 | 1,752 | 1,780 | 900 |

(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.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|------------------------------------|-----------|-----------|-----------|-----------|-----------|------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Phosphate rock | 270,378 | 316,766 | 301,035 | 260,419 | 264,598 | 330,799 |
| Basic slag | 300,834 | 321,468 | 245,012 | 289,587 | 294,234 | 199,372 |
| Other phosphatic fertilizers | 1,274 | 1,150 | 465 | 1,147 | 1,166 | 1,080 |
| Belgium-Luxemburg E.U.— | | | | | | |
| Phosphate rock | 1,446,254 | 1,776,641 | 1,811,264 | 1,870,446 | 1,900,461 | 2,001,261 |
| Superphosphates (a) .. | 200 | 1,333 | 8,720 | 4,076 | 4,142 | 13,389 |
| Basic slag (a) | 134 | 76 | — | 1 | 1 | 7 |
| Bulgaria— | | | | | | |
| Phosphate rock | 991,000 | 1,381,000 | 991,000 | n.a. | n.a. | n.a. |
| Czechoslovakia— | | | | | | |
| Phosphatic fertilizers (a) | 292,000 | 286,000 | 322,000 | 355,000 | 361,000 | 377,000 |
| Denmark— | | | | | | |
| Phosphate rock | 276,423 | 270,039 | 324,582 | 313,632 | 318,665 | 313,026 |
| Superphosphates | 20,932 | 45,733 | 36,202 | 24,371 | 24,762 | 21,720 |
| Di-calcium phosphates .. | 34,562 | 33,013 | 35,268 | 42,238 | 42,916 | 43,659 |
| Basic slag | 2,857 | 2,681 | 822 | 571 | 580 | 532 |
| Finland— | | | | | | |
| Phosphate rock | 346,277 | 448,469 | 499,662 | 388,190 | 394,419 | 571,041 |
| Superphosphates | 295 | 339 | 884 | 695 | 706 | 612 |
| Basic slag | 13,173 | 10,993 | 10,364 | 8,743 | 8,883 | 5,938 |
| France— | | | | | | |
| Phosphate rock | 2,965,701 | 3,206,220 | 3,357,311 | 3,493,235 | 3,549,291 | 3,816,617 |
| Aluminium phosphates .. | 84,415 | 99,710 | 91,861 | 85,498 | 86,870 | 107,081 |
| Other phosphates | 10,553 | 37,418 | 17,952 | 435 | 442 | 2 |
| Superphosphates | 272,533 | 298,395 | 327,583 | 337,574 | 342,991 | 411,286 |
| Calcined phosphates | 35,737 | 34,451 | 39,718 | 35,298 | 35,865 | 46,075 |
| Basic slag | 732,778 | 827,485 | 927,578 | 862,874 | 876,721 | 892,538 |
| Di-calcium phosphates .. | 1,415 | 6,858 | 7,713 | 483 | 491 | 467 |
| Germany (Federal)— | | | | | | |
| Phosphate rock, etc. .. | 2,629,268 | 2,552,303 | 2,683,030 | 2,757,764 | 2,802,018 | 2,757,336 |
| Superphosphates | 26,868 | 26,915 | 28,030 | 20,992 | 21,329 | 16,090 |
| Basic slag | 527,400 | 508,257 | 417,647 | 414,714 | 421,369 | 432,612 |
| Other phosphatic fertilizers | 1,319 | 1,159 | 1,703 | 6,176 | 6,275 | 6,661 |
| Germany (East) (a)— | | | | | | |
| Phosphate rock | 347,400 | 449,000 | 438,267 | 480,700 | 488,400 | 452,800 |
| Other phosphatic fertilizers | 56,308 | 40,323 | 46,301 | 23,951 | 24,335 | 10,000 |
| Greece— | | | | | | |
| Phosphate rock | 326,531 | 387,842 | 314,072 | 175,916 | 178,739 | 295,779 |
| Basic slag | 49 | n.a. | n.a. | — | — | — |
| Other phosphatic fertilizers | 18,137 | n.a. | n.a. | — | — | — |
| Hungary— | | | | | | |
| Phosphate rock | 486,198 | 490,810 | 587,268 | 594,008 | 603,540 | 637,769 |
| Iceland— | | | | | | |
| Superphosphates | 8,519 | 8,254 | 9,342 | 7,543 | 7,664 | 10,062 |
| Italy— | | | | | | |
| Phosphate rock | 1,870,354 | 2,129,605 | 1,866,083 | 2,070,662 | 2,103,890 | 1,885,649 |
| Superphosphates | 17,335 | 25,700 | 23,006 | 76,124 | 77,346 | 128,701 |
| Basic slag | 111,686 | 99,492 | 108,174 | 111,326 | 113,112 | 113,729 |
| Netherlands— | | | | | | |
| Phosphate rock | 835,448 | 1,223,197 | 1,217,135 | 1,557,698 | 1,582,695 | 1,623,724 |
| Superphosphates (a) .. | 47,978 | 29,124 | 28,675 | 19,326 | 19,636 | (b) 4,990 |
| Basic slag | 24,464 | 22,153 | 20,618 | 19,212 | 19,520 | (b) 24,289 |
| Di-calcium phosphates .. | 99 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Norway— | | | | | | |
| Phosphate-rock | 234,801 | 308,599 | 277,236 | 363,353 | 369,184 | 347,813 |
| Basic slag | 6,064 | 8,286 | 5,861 | 8,324 | 8,458 | 5,688 |

 (a) P_2O_5 content.

(b) Excludes imports from Belgium and Luxemburg, if any.

IMPORTS OF PHOSPHATES, ETC. (cont.)

Long tons Tonnes

| Importing Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|-----------------------------------|-----------|--------------|--------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Poland— | | | | | | |
| Apatite concentrates .. | 428,000 | 524,000 | 586,000 | 651,000 | 662,000 | 953,000 |
| Phosphate rock .. | 602,000 | 940,000 | 1,251,000 | 1,334,000 | 1,356,000 | 1,513,000 |
| Portugal— | | | | | | |
| Phosphate rock .. | 292,074 | 294,992 | 298,482 | 244,934 | 248,864 | 285,959 |
| Basic slag .. | 9,199 | 8,813 | 10,901 | 9,923 | 10,082 | 8,930 |
| Roumania— | | | | | | |
| Phosphate rock (a) .. | 216,132 | 202,353 | 303,824 | 311,900 | 317,000 | 340,600 |
| Spain— | | | | | | |
| Phosphate rock .. | 1,135,684 | 1,220,922 | 1,321,923 | 1,364,350 | 1,386,244 | 1,539,574 |
| Superphosphates, etc. .. | 1,083 | 2,953 | 35,738 | 11,208 | 11,388 | 14,915 |
| Basic slag .. | 25,050 | 26,033 | 29,486 | 20,277 | 20,602 | 19,827 |
| Di-calcium phosphates | 6,499 | 2,039 | 11,117 | 8,550 | 8,687 | 2,935 |
| Sweden— | | | | | | |
| Phosphate rock .. | 503,748 | 519,637 | 513,100 | 500,542 | 508,574 | 476,114 |
| Superphosphates .. | 226 | 18,349 | 41,628 | 31,714 | 32,223 | 13,761 |
| Di-calcium phosphates | 3,002 | 2,522 | 5,278 | 5,204 | 5,288 | 4,493 |
| Switzerland— | | | | | | |
| Phosphate rock .. | 27,063 | 21,610 | 21,337 | 11,014 | 11,191 | 17,055 |
| Basic slag .. | 197,363 | 195,645 | 190,595 | 181,914 | 184,833 | 181,406 |
| Other phosphatic fertilizers .. | 16,172 | 17,602 | 16,861 | 17,881 | 18,168 | 16,767 |
| Di-calcium phosphates | 12,099 | 9,851 | 9,902 | 10,318 | 10,484 | 10,798 |
| Yugoslavia— | | | | | | |
| Phosphate rock .. | 683,283 | 784,387 | 715,866 | 777,201 | 789,673 | 769,537 |
| Superphosphates .. | 5,999 | 4,921 | 28,594 | — | — | 12,967 |
| Basic slag .. | 61,931 | 18,798 | 26,081 | 7,726 | 7,850 | 4,148 |
| Algeria— | | | | | | |
| Phosphate fertilizers .. | 7,312 | 64,215 | 77,556 | 99,107 | 100,697 | <i>n.a.</i> |
| Angola— | | | | | | |
| Superphosphates .. | 3,937 | 3,732 | 4,420 | 5,123 | 5,206 | 4,402 |
| Canary Islands— | | | | | | |
| Phosphate rock .. | 18,665 | 18,759 | 22,155 | 15,790 | 16,044 | 16,294 |
| Central African Republic— | | | | | | |
| Phosphate fertilizers .. | 723 | 2,640 | 224 | 446 | 453 | <i>n.a.</i> |
| Congo (Brazza)— | | | | | | |
| Phosphate fertilizers .. | 42 | 29 | 35 | 20 | 20 | <i>n.a.</i> |
| Ethiopia— | | | | | | |
| Phosphate fertilizers .. | 9 | 273 | 1,111 | 3,525 | 3,582 | 5,534 |
| Gabon— | | | | | | |
| Phosphate fertilizers .. | 5 | 49 | 44 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Malagasy Republic— | | | | | | |
| Phosphate rock .. | 387 | 632 | 1,574 | 489 | 496 | <i>n.a.</i> |
| Phosphatic fertilizers .. | 656 | 3,079 | 942 | 5,163 | 5,246 | <i>n.a.</i> |
| Morocco— | | | | | | |
| Di-calcium phosphates | 18 | 15 | 34 | 32 | 33 | 46 |
| Reunion— | | | | | | |
| Phosphate fertilizers .. | 279 | 1,296 | 638 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| South Africa— | | | | | | |
| Phosphate rock .. | 86,188 | 75,957 | 2 | 31 | 32 | 4 |
| Basic slag .. | 17,553 | 15,755 | 18,820 | 11,212 | 11,392 | 14,303 |
| Other phosphatic fertilizers .. | 77,851 | 1,083 | 9,539 | 13,329 | 13,543 | 9,060 |
| Sudan— | | | | | | |
| Superphosphates .. | 325 | 44 | 30 | 541 | 550 | 350 |
| Tunisia— | | | | | | |
| Phosphatic fertilizers .. | 4,479 | <i>r</i> 702 | <i>r</i> 581 | 1,286 | 1,306 | 1,058 |
| Costa Rica— | | | | | | |
| Phosphatic fertilizers .. | 14,905 | 19,974 | 12,908 | 23,532 | 23,910 | 19,742 |

 (a) P_2O_5 content.

IMPORTS OF PHOSPHATES, ETC. (cont.)

Long tons Tonnes

| Importing Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|---|-----------------|-----------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| French West Indies— | | | | | | |
| Guadeloupe— | | | | | | |
| Phosphatic fertilizers .. | 670 | 459 | 615 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Martinique— | | | | | | |
| Phosphatic fertilizers .. | 1,441 | 1,007 | 558 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Guatemala— | | | | | | |
| Phosphatic fertilizers .. | 799 | 6,209 | 8,600 | 11,523 | 11,708 | 14,394 |
| Honduras— | | | | | | |
| Phosphatic fertilizers .. | 892 | 469 | 436 | 452 | 459 | 213 |
| Mexico— | | | | | | |
| Phosphate rock | 323,155 | 321,580 | 619,763 | 811,971 | 825,001 | 1,075,213 |
| Superphosphates | 13,960 | 19,329 | <i>n.a.</i> | — | — | <i>n.a.</i> |
| Ammonium phosphates | 5 | — | 14,348 | 12,817 | 13,023 | 209 |
| Nicaragua— | | | | | | |
| Phosphatic fertilizers .. | 23,652 | 14,438 | 8,531 | 11,677 | 11,865 | 15,527 |
| Panama Republic— | | | | | | |
| Phosphatic fertilizers .. | 1,336 | 777 | 320 | 269 | 273 | 1,636 |
| Salvador— | | | | | | |
| Phosphatic fertilizers .. | 16,615 | 16,110 | 31,481 | 11,444 | 11,628 | 22,731 |
| United States— | | | | | | |
| Phosphate rock | 123,796 | 103,142 | 124,847 | 121,369 | 123,317 | 81,468 |
| Basic slag | 356 | <i>n.a.</i> | 21 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Di-calcium phosphates | 5,197 | 19,018 | 13,005 | 29,611 | 30,086 | <i>n.a.</i> |
| Ammonium phosphates | 189,081 | 220,554 | 244,078 | 407,757 | 414,301 | 414,918 |
| Other phosphatic fertilizers | 70,790 | 27,910 | 76,502 | 97,807 | 99,377 | 83,772 |
| Argentina— | | | | | | |
| Phosphatic fertilizers .. | 7,551 | 7,588 | 9,602 | 16,000 | 16,257 | 19,287 |
| Brazil— | | | | | | |
| Phosphate rock | 221,882 | 324,599 | 305,222 | 421,396 | 428,158 | <i>n.a.</i> |
| Superphosphates— | | | | | | |
| Single | 18,221 | 14,497 | 11,757 | 24,907 | 25,307 | |
| Concentrated | 81,792 | 99,888 | 100,243 | 194,921 | 198,049 | |
| Calcined phosphates .. | 1,158 | 98 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | |
| Di-calcium phosphate .. | 789 | 5,926 | 4,574 | 5,176 | 5,259 | |
| Ammonium phosphates | 64,004 | 107,532 | 139,832 | 244,581 | 248,506 | |
| Basic slag | 6,881 | 11,996 | 8,323 | 7,872 | 7,998 | |
| Other phosphatic fertilizers | 17,785 | 21,193 | 18,134 | 28,399 | 28,855 | |
| Chile— | | | | | | |
| Superphosphates | 84,142 | 58,618 | 54,007 | 116,368 | 118,235 | <i>n.a.</i> |
| Basic slag | 7,935 | 1,984 | <i>n.a.</i> | 7,412 | 7,531 | |
| Calcium phosphates | 19,465 | 1,965 | 103 | 8,274 | 8,407 | |
| Other phosphatic fertilizers | 27,737 | 86,909 | 104,076 | 56,611 | 57,520 | |
| Colombia— | | | | | | |
| Phosphate rock | <i>r</i> 19,474 | 20,473 | 20,904 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Superphosphates | <i>r</i> 16,317 | <i>r</i> 36,977 | 41,958 | | | |
| Di-calcium phosphates | 20 | 10 | <i>n.a.</i> | | | |
| Peru— | | | | | | |
| Phosphate rock | 5,996 | 6,841 | 11,010 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Phosphatic fertilizers .. | 9,359 | 7,676 | 7,293 | | | |
| Uruguay— | | | | | | |
| Phosphate rock | 73,098 | 37,211 | 52,113 | 36,649 | 37,237 | 95,211 |
| Venezuela— | | | | | | |
| Calcium phosphates and superphosphates .. | 12,676 | 2,168 | 1,459 | <i>n.a.</i> | <i>n.a.</i> | 2,429 |
| Burma— | | | | | | |
| Phosphatic fertilizers .. | 650 | 9,522 | 17,699 | 2,031 | 2,064 | 51 |

IMPORTS OF PHOSPHATES, ETC. (cont.)

Long tons Tonnes

| Importing Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|-----------------------------------|-----------|-----------|-------------|-------------|-------------|---------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Formosa— | | | | | | |
| Calcium phosphate .. | 1,441 | 1,427 | 1,309 | 1,300 | 1,321 | 1,905 |
| Iran (a)— | | | | | | |
| Phosphatic fertilizers .. | 50,480 | 28,262 | 60,500 | 41,533 | 42,200 | 146,735 |
| Iraq— | | | | | | |
| Phosphatic fertilizers .. | 4,096 | 1,483 | 1,664 | 6,894 | 7,005 | <i>n.a.</i> |
| Japan— | | | | | | |
| Phosphate rock .. | 2,589,960 | 3,363,099 | 2,916,823 | 3,075,650 | 3,125,006 | 2,985,267 |
| Calcium phosphates .. | 2,765 | 4,785 | 5,068 | 2,508 | 2,549 | 2,337 |
| Ammonium phosphate .. | 99 | 571 | 578 | 2,139 | 2,174 | <i>n.a.</i> |
| Superphosphates .. | 9,562 | 18,967 | 16,854 | 13,132 | 13,343 | 8,937 |
| Jordan— | | | | | | |
| Phosphatic fertilizers .. | 4,192 | 6,035 | 7,342 | 6,351 | 6,453 | 4,276 |
| Korea (South)— | | | | | | |
| Calcium phosphates .. | 90,211 | 5 | — | — | — | 2,534 |
| Other phosphatic fertilizers .. | 217,330 | 138,149 | — | — | — | <i>n.a.</i> |
| Lebanon— | | | | | | |
| Phosphatic fertilizers .. | 2,420 | 3,144 | 98 | 150 | 152 | 331 |
| Philippine Republic— | | | | | | |
| Phosphate rock .. | 104,443 | 148,565 | 111,584 | 152,757 | 155,208 | 123,321 |
| Superphosphates .. | 979 | 1,225 | 1,569 | 753 | 765 | 1,000 |
| Ammonium phosphate .. | 4,432 | 10,288 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 9,000 |
| Other phosphatic fertilizers .. | 249 | 1,605 | 12,671 | 1,570 | 1,595 | 2,253 |
| Syria— | | | | | | |
| Phosphatic fertilizers .. | 13,211 | 25,830 | 29,079 | 33,651 | 34,191 | 41,639 |
| Thailand— | | | | | | |
| Superphosphates .. | 2,638 | 1,612 | 1,368 | 2,116 | 2,150 | 2,360 |
| Phosphatic fertilizers .. | 84,565 | 128,938 | 120,282 | 73,071 | 74,243 | 48,829 |
| Turkey— | | | | | | |
| Phosphate rock .. | 93,602 | 105,180 | 123,536 | 82,473 | 83,796 | } <i>n.a.</i> |
| Superphosphates .. | 155,477 | r 269,275 | 171,049 | 57,203 | 58,121 | |
| Ammonium phosphate .. | 33 | 32 | 44 | 35 | 36 | |
| Other phosphatic fertilizers .. | 51,872 | 29,277 | r 11,570 | <i>n.a.</i> | <i>n.a.</i> | |

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

PLATINUM
PRODUCTION OF PLATINUM METALS

| Producing Country | Troy ounces | | | | Kilogrammes | |
|---|------------------|------------------|------------------|------------------|----------------|----------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Canada— | | | | | | |
| Recovered from Ontario nickel-copper ores (c)— | | | | | | |
| Platinum | 401,263 | 485,891 | 310,404 | 482,428 | 15,005 | 14,500 |
| Other platinum metals | | | | | | |
| OTHER COUNTRIES | | | | | | |
| U.S.S.R.— | | | | | | |
| Crude platinum (d) .. | 1,900,000 | 2,000,000 | 2,100,000 | 2,200,000 | 68,400 | 71,500 |
| Ethiopia— | | | | | | |
| Crude platinum .. | 282 | 322 | 343 | 273 | 8 | 6 |
| South Africa— | | | | | | |
| Crude and matte (Pt metals content) (d) | 825,000 | 850,000 | 950,000 | 1,500,000 | 46,700 | 38,900 |
| Osmiridium (crude) (b) (d) | 8,000 | 14,000 | 14,000 | 2,800 | 87 | 87 |
| United States (a)— | | | | | | |
| New platinum metals recovered by refineries from crude platinum and gold and copper ores of domestic origin | | | | | | |
| Platinum | 6,736 | 4,816 | 8,702 | 8,036 | 250 | 317 |
| Palladium | 8,142 | 5,275 | 8,224 | 11,875 | 369 | 652 |
| Iridium | 754 | 454 | 570 | 1,261 | 39 | 15 |
| Osmium | 151 | 95 | 135 | 149 | 5 | 6 |
| Rhodium | 57 | 36 | 70 | 64 | 2 | 3 |
| Ruthenium | 11 | 6 | 11 | 10 | — | 5 |
| Colombia— | | | | | | |
| Crude platinum .. | 12,411 | 25,280 | 27,805 | 26,358 | 820 | 797 |
| Japan— | | | | | | |
| Platinum | 3,072 | 2,785 | 3,140 | 3,296 | 103 | 107 |
| Palladium | 3,327 | 3,651 | 3,877 | 4,610 | 143 | 167 |
| WORLD'S TOTAL (e) | 3,000,000 | 3,400,000 | 3,400,000 | 4,200,000 | 130,600 | 127,100 |

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

| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|-------------------|---------|---------|---------|---------|------------|------------|
| | | | | | Kilograms. | Kilograms. |
| Platinum | 126,377 | 115,587 | 126,822 | 118,298 | 3,679 | 3,217 |
| Palladium | 215,162 | 195,620 | 227,763 | 208,555 | 6,487 | 5,011 |
| Iridium | 7,748 | 2,127 | 2,250 | 1,927 | 60 | 68 |
| Osmium | 2,377 | 672 | 208 | 121 | 4 | 11 |
| Rhodium | 11,505 | 12,176 | 11,743 | 13,394 | 417 | 275 |
| Ruthenium | 2,630 | 3,273 | 2,873 | 7,881 | 245 | 71 |

(b) Sales.

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

(d) United States Bureau of Mines' estimate.

(e) Estimated.

EXPORTS OF PLATINUM*

| Exporting Country and Description | Troy ounces | | | | Kilogrammes | |
|--|-------------|-----------|-----------|-----------|-------------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Platinum— | | | | | | |
| Ingots, grain and powder | 564,448 | 579,994 | 701,390 | 561,715 | 17,471 | 13,291 |
| Other kinds (a) | 115,304 | 199,269 | 152,610 | 216,540 | 6,735 | 6,538 |
| Other platinum metals and alloys | 422,785 | 454,235 | 459,037 | 447,268 | 13,912 | 14,405 |
| Canada— | | | | | | |
| Concentrates, etc. (b) .. | 457,098 | 569,416 | 433,747 | 638,504 | 19,860 | 6,640 |
| Platinum metals (b) .. | 18,757 | 15,526 | 29,753 | 11,562 | 360 | 352 |
| Scrap | 26,397 | 32,041 | 35,810 | 30,262 | 941 | 850 |
| Australia (c)— | | | | | | |
| Platinum and platinum group metals | (a) 56,181 | (a) 3,655 | (a) 7,508 | (a) 6,140 | (a) 191 | (a) 260 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Unwrought platinum and platinum metals | 4,051 | 1,479 | 160 | 4,951 | 154 | 27 |
| Denmark— | | | | | | |
| Rods, sheets, wire, scrap, etc. | 836 | 418 | 417 | 32 | 1 | 1 |
| France— | | | | | | |
| Unwrought platinum and scrap (a) | 36,041 | 47,324 | 43,071 | 694,681 | 21,607 | 1,331 |
| Palladium (inc. scrap)(a) | 7,073 | 38,534 | 18,950 | 14,661 | 456 | 542 |
| Drawn or rolled platinum | 18,680 | 20,803 | 21,035 | 21,326 | 633 | 545 |
| Germany (Federal)— | | | | | | |
| Platinum metals (a) | 270,291 | 357,868 | 371,919 | 318,839 | 9,917 | 13,330 |
| Italy— | | | | | | |
| Unwrought platinum | 32,054 | 38,581 | 29,064 | 60,250 | 1,874 | 622 |
| Netherlands— | | | | | | |
| Unwrought platinum and platinum metals | 17,811 | 11,124 | 10,803 | 3,987 | 124 | 126 |
| Drawn or rolled | 6,623 | 8,841 | 5,241 | 8,809 | 274 | 8,154 |
| Norway— | | | | | | |
| Platinum | 19,901 | 21,670 | 20,544 | 19,580 | 609 | 865 |
| Switzerland— | | | | | | |
| Unwrought platinum | 42,182 | 73,239 | 100,696 | 63,112 | 1,963 | 2,125 |

*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 308), the following quantities were re-exported from Canada without change or alteration (troy ounces):

1967—164,033; 1968—83,228; 1969—52,694; 1970—20,399. (Kilogrammes): 1970—634; 1971—1,105.

(c) Years ended June 30 of that stated.

EXPORTS OF PLATINUM (cont.)

| Exporting Country and Description | Troy ounces | | | | Kilogrammes | |
|--|-------------|----------|---------|---------|-------------|-------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| U.S.S.R. | (a) | (a) | (a) | (a) | (a) | (a) |
| Yugoslavia— | | | | | | |
| Palladium | 7,620 | 23,309 | 15,947 | 23,148 | 720 | 16 |
| United States— | | | | | | |
| Ores, etc. (Pt content) | 76,489 | 55,373 | 73,220 | 83,880 | 2,609 | 4,670 |
| Ingots, sheets, wire, etc. | 134,987 | 171,169 | 150,347 | 180,120 | 5,602 | 4,814 |
| Palladium, rhodium, etc. and alloys | 118,017 | 172,159 | 277,495 | 149,766 | 4,658 | 3,100 |
| Colombia— | | | | | | |
| Platinum | r 16,750 | r 30,350 | n.a. | n.a. | n.a. | n.a. |
| Japan— | | | | | | |
| Platinum | 10,392 | 12,430 | 17,406 | 26,775 | 833 | 529 |
| Platinum group metals | 12,380 | 92,561 | 37,315 | 10,283 | 319 | 21 |

(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 | | | | Kilogrammes | |
|-----------------------------|-------------|---------|---------|---------|-------------|--------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| United Kingdom | 52,437 | 27,528 | 44,625 | 31,781 | 1,019 | 1,053 |
| France | 15,462 | 63,763 | 93,800 | 36,539 | 1,136 | 1,565 |
| Germany (Federal) | 196,859 | 205,057 | 203,353 | 493,674 | 15,355 | 7,018 |
| Netherlands | 6,237 | 15,882 | 2,315 | 3,826 | 119 | 478 |
| United States | 129,915 | 429,730 | 285,954 | 494,424 | 15,378 | 12,659 |
| Japan | 417,311 | 638,953 | 577,359 | 711,260 | 22,123 | 28,336 |

IMPORTS OF PLATINUM*

| Importing Country and Description | Troy ounces | | | | Kilogrammes | |
|--|---------------|---------------|---------------|---------------|---------------|---------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— Ores and concentrates | (£38,283,000) | (£44,563,018) | (£52,791,239) | (£47,693,000) | (£47,693,000) | (£42,156,000) |
| Platinum and platinum group metals | 127,795 | 152,762 | 167,832 | 182,999 | 5,692 | 4,441 |
| Canada— Platinum and platinum group metals (c) .. . | 212,889 | 207,961 | 118,946 | 60,745 | 1,889 | 1,678 |
| Nigeria— Platinum and platinum group metals .. . | 22,348 | 2,117 | 2,985 | 46,647 | 1,451 | 2,211 |
| Hong Kong— Platinum and platinum group metals .. . | 48,318 | 80,469 | 64,216 | 73,745 | 2,294 | 3,718 |
| India (a)— Platinum | 1,589 | 332 | 1,323 | 5,504 | 171 | 338 |
| Malaysia (West)— Unwrought platinum .. | 233 | 15 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sarawak— Platinum | 1 | 29 | 876 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Singapore— Unwrought platinum .. | 4,625 | 158 | 156 | 3,677 | 114 | 13 |
| Australia (b)— Platinum bars, rods, sheets, etc. | } (d) 7,040 | } (d) 3,357 | } (d) 9,273 | } (d) 11,585 | } (d) 360 | } 7,755 |
| Bars, rods, sheets, etc. of other platinum metals | | | | | | |
| Platinum metal powder | (d) 1,021 | (d) 8,332 | (d) 14,237 | (d) 156 | (d) 5 | 2,436 |
| Wire | (d) 1,307 | (d) 1,586 | (d) 2,489 | (d) 2,638 | (d) 82 | 138 |
| New Zealand (b)— Platinum and platinum group metals | 1,353 | 1,243 | 2,307 | 1,829 | 57 | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Austria— Unwrought platinum and platinum metals | 4,083 | 3,987 | 5,626 | 15,207 | 473 | 309 |
| Denmark— Rods, sheets, wire and scrap | 7,871 | 9,067 | 11,124 | 14,886 | 463 | 425 |
| Finland— Unwrought platinum etc. | — | 1,993 | 10,578 | 1,804 | 56 | 150 |
| France— Unwrought platinum, alloys and scrap .. . | 81,856 | 75,505 | 121,764 | 101,500 | 3,157 | 2,656 |
| Unwrought palladium, alloys and scrap .. . | 55,589 | 91,221 | 107,257 | 66,102 | 2,056 | 2,412 |
| Drawn or rolled platinum | 16,879 | 26,505 | 41,847 | 30,447 | 947 | 860 |
| Germany (Federal)— Platinum metals and alloys | 491,135 | 584,050 | 724,870 | 645,232 | 20,069 | 19,589 |
| Italy— Unwrought platinum .. | 46,040 | 51,440 | 63,208 | 63,851 | 1,986 | 1,605 |
| Drawn or rolled .. . | 9,806 | 3,215 | 10,931 | 12,314 | 383 | 209 |
| Other platinum metals | 25,624 | 25,721 | 36,973 | 51,409 | 1,599 | 1,681 |

*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 306).

(d) Including alloys.

IMPORTS OF PLATINUM (cont.)

| Importing Country and Description | Troy ounces | | | | Kilogrammes | |
|--|-------------|-----------|---------|---------|-------------|--------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Netherlands— | | | | | | |
| Unwrought platinum and platinum metals .. | 32,794 | 32,697 | 16,236 | 22,152 | 689 | 1,799 |
| Drawn or rolled .. | 27,489 | 37,327 | 35,108 | 48,097 | 1,496 | 1,307 |
| Norway— | | | | | | |
| Unwrought platinum .. | 1,125 | 354 | 386 | 675 | 21 | 108 |
| Drawn or rolled .. | 1,543 | 1,222 | 997 | 2,090 | 65 | 35 |
| Portugal— | | | | | | |
| Sheets, wire, etc. .. | 16,306 | 3,589 | 1,096 | 700 | 22 | 618 |
| Switzerland— | | | | | | |
| Unwrought platinum .. | 65,293 | 87,256 | 73,111 | 71,567 | 2,226 | 1,752 |
| Yugoslavia— | | | | | | |
| Unwrought platinum .. | 19,355 | 52,780 | 17,073 | 27,360 | 851 | 58 |
| South Africa— | | | | | | |
| Platinum | 3,651 | 6,653 | 3,808 | 1,343 | 42 | 260 |
| Costa Rica— | | | | | | |
| Unwrought platinum and platinum metals .. | 5,691 | 932 | 3,922 | 8,038 | 250 | 190 |
| Mexico— | | | | | | |
| Platinum | 249 | 14 | 13 | n.a. | n.a. | 2 |
| Palladium | 5,621 | 3,980 | 4,069 | 4,192 | 130 | 147 |
| United States— | | | | | | |
| Ores, and | | | | | | |
| concentrates, (a) .. | 54 | 112 | 3,221 | 644 | 20 | 4 |
| Grains and nuggets (a) .. | 41,798 | 64,777 | 67,560 | 29,065 | 904 | 1,087 |
| Sponge and scrap (a) (b) | 359,770 | 359,455 | 399,847 | 410,165 | 12,758 | 12,746 |
| Plates, bars, sheets (a) (b) | 64,344 | 68,718 | 58,404 | 124,911 | 3,885 | 3,309 |
| Iridium | 11,401 | 17,461 | 10,207 | 8,834 | 275 | 867 |
| Osmium and osmiridium | | | | | | |
| Palladium | 613,669 | 1,067,595 | 249,389 | 270,034 | 8,398 | 6,703 |
| Rhodium and ruthenium | 100,433 | 61,987 | 52,976 | 59,442 | 1,849 | 1,969 |
| Argentina— | | | | | | |
| Platinum | 289 | 514 | 8,134 | 868 | 27 | 61 |
| Palladium | 4,437 | 1,125 | 997 | 1,543 | 48 | 120 |
| Brazil— | | | | | | |
| Unwrought platinum .. | 580 | 579 | 764 | 900 | 28 | n.a. |
| Venezuela— | | | | | | |
| Unwrought platinum .. | 86,839 | 52,020 | 4,726 | n.a. | n.a. | 94 |
| Japan— | | | | | | |
| Platinum | 234,324 | 210,492 | 272,216 | 465,353 | 14,474 | 20,098 |
| Palladium | 354,701 | 600,098 | 491,678 | 632,713 | 19,679 | 21,741 |
| Rhodium | 9,177 | 9,103 | 8,514 | 14,665 | 456 | 273 |
| Iridium, etc. | 2,226 | 2,043 | 7,473 | 4,945 | 154 | 243 |
| Lebanon— | | | | | | |
| Unwrought platinum .. | 4,060 | 4,248 | 3,747 | 3,627 | 113 | 120 |
| Turkey— | | | | | | |
| Sheets | 8,713 | 64 | 289 | 29,932 | 931 | n.a. |

(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:

| | Troy ounces Kilogrms. | | | | | |
|-------------------|-------------------------|---------|---------|---------|--------|--------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| Sponge .. | 257,703 | 303,561 | 272,794 | 346,069 | 10,763 | 10,430 |
| Platinum metal .. | 322,764 | 372,238 | 331,103 | 461,142 | 14,343 | 13,739 |

POTASH MINERALS
PRODUCTION OF POTASH

| Producing Country and Description | Long tons Tonnes | | | | | K ₂ O Content or Equivalent | | | | | Long tons Tonnes | |
|---|--------------------|------------|------------|------------|------------|--|-----------|-----------|-----------|-----------|--------------------|-----------|
| | 1967 | 1968 | 1969 | 1970 | 1971 | 1967 | 1968 | 1969 | 1970 | 1971 | 1970 | 1971 |
| | | | | | | | | | | | | |
| COMMONWEALTH COUNTRIES | | | | | | | | | | | | |
| Canada— | | | | | | | | | | | | |
| Potash salts .. | n.a. | 4,339,000 | 5,466,000 | 5,108,000 | 5,843,000 | 2,127,904 | 2,605,010 | 3,346,000 | 3,123,000 | 3,173,000 | 3,573,000 | |
| OTHER COUNTRIES | | | | | | | | | | | | |
| France (b)— | | | | | | | | | | | | |
| Sylvinite .. | | | | | | 7,294 | 8,578 | 29,546 | 28,258 | 28,711 | 28,711 | |
| Chloride .. | | | | | | 1,663,288 | 1,567,500 | 1,671,799 | 1,657,079 | 1,683,670 | 1,683,670 | |
| Other fertilizer salts | | | | | | 118,257 | 115,446 | 64,053 | 54,878 | 55,759 | 55,759 | 1,870,000 |
| Germany— | | | | | | | | | | | | |
| Federal Republic— | | | | | | | | | | | | |
| Kainite, sylvinite, etc. | 19,536,819 | 19,868,384 | 19,989,000 | 20,697,560 | 22,305,681 | 2,421,328 | 2,520,189 | 2,585,000 | 2,603,007 | 2,644,849 | 2,814,829 | |
| Eastern— | | | | | | | | | | | | |
| Potash salts .. | n.a. | n.a. | n.a. | n.a. | n.a. | 2,171,000 | 2,200,000 | 2,264,000 | 2,381,000 | 2,419,000 | 2,426,000 | |
| Italy— | | | | | | | | | | | | |
| Crude potash salts .. | 1,784,643 | 1,800,000 | 2,100,000 | 1,864,000 | 1,785,000 | 246,000 | 246,000 | 276,000 | 224,000 | 228,000 | 214,000 | |

(a) United States Bureau of Mines' estimate.

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

PRODUCTION OF POTASH (cont.)

| Producing Country and Description | Long tons Tonnes | | | | | Long tons Tonnes | | | | | | |
|---|--------------------|-----------|-----------|-----------|-----------|--|------------|------------|------------|------------|------------|------------|
| | 1967 | 1968 | 1969 | 1970 | 1971 | 1967 | 1968 | 1969 | 1970 | 1971 | | |
| | | | | | | K ₂ O Content or Equivalent | | | | | | |
| OTHER COUNTRIES (cont.) | | | | | | | | | | | | |
| Spain— Sylvinite .. | 3,485,927 | 3,701,162 | 3,999,353 | 3,882,800 | 3,945,108 | 4,257,350 | 570,848 | 606,647 | 625,609 | 588,869 | 598,319 | 645,600 |
| U.S.S.R. (a)— Potash salts .. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 2,822,000 | 3,100,000 | 3,130,000 | 4,379,000 | 4,450,000 | n.a. |
| United States— Potash salts (b) .. | 5,044,000 | 4,258,000 | 4,391,000 | 4,333,000 | 4,402,000 | 4,763,000 | 2,946,000 | 2,430,000 | 2,504,000 | 2,019,000 | 2,261,000 | 2,455,000 |
| Chile— Nitrate .. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | (a)14,300 | (d)17,000 | (d)15,200 | (d)15,000 | (d)15,000 | n.a. |
| Israel— Chloride .. | 484,000 | 590,000 | 539,000 | 855,000 | 869,000 | 929,000 | 295,000 | 350,000 | 318,000 | 505,000 | 513,000 | 550,000 |
| WORLD'S TOTAL (c) .. | | | | | | | 15,400,000 | 15,700,000 | 16,900,000 | 17,600,000 | 17,900,000 | 19,100,000 |

(a) United States Bureau of Mines' estimate.

(b) Marketable production.

(c) Estimated.

(d) Years ended June 30 of that stated.

EXPORTS OF POTASH SALTS

| Exporting Country and Description | Long tons | | | | Tonnes | |
|---|-----------|-----------|-----------|-----------|-----------|-----------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— Fertilizer Salts | 449 | 535 | 373 | 10,800 | 10,973 | 1,488 |
| Canada (c)— Fertilizer salts (b) | 1,789,736 | 2,431,671 | 2,339,885 | 3,257,486 | 3,309,769 | 2,895,432 |
| India (a)— Nitrate | — | 9 | 19 | 11 | 11 | 33 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Fertilizer salts (b) | 12 | 8 | 94 | 347 | 353 | 462 |
| Carbonate | 1,872 | 1,792 | 483 | 2,102 | 2,136 | 3,460 |
| Chloride (b) | 391,076 | 356,741 | 191,556 | 196,294 | 199,444 | 5,746 |
| Nitrate | — | — | 40 | 3 | 3 | 86 |
| Sulphate (b) | 155,992 | 151,276 | 156,940 | 164,895 | 167,541 | 190,893 |
| France— | | | | | | |
| Sylvinite, etc. | 68,652 | 55,848 | 58,563 | 60,356 | 61,325 | 47,704 |
| Carbonate | 28,620 | 30,290 | 31,400 | n.a. | n.a. | n.a. |
| Caustic potash | 10,244 | 9,412 | 8,618 | 9,942 | 10,102 | 11,699 |
| Chlorate | 1,385 | 1,500 | 1,648 | 1,938 | 1,969 | n.a. |
| Chloride | 1,147,427 | 1,051,055 | 944,247 | 770,096 | 782,454 | 1,182,715 |
| Sulphate | 1,138 | 733 | 754 | 612 | 622 | 1,865 |
| Nitrate | 2,773 | 2,423 | 4,317 | 3,838 | 3,900 | 3,818 |
| Germany (Federal)— | | | | | | |
| Fertilizer salts | 1,326,785 | 993,066 | 1,562,088 | 1,802,539 | 1,831,465 | 1,901,629 |
| Carbonate | 12,570 | 14,611 | 15,269 | 16,576 | 16,842 | 16,866 |
| Caustic potash | 10,585 | 10,322 | 10,217 | 10,620 | 10,791 | 12,347 |
| Chlorate | 364 | 45 | 223 | 94 | 96 | n.a. |
| Nitrate | 16,688 | 14,949 | n.a. | n.a. | n.a. | n.a. |
| Germany (East)— | | | | | | |
| Fertilizer salts (b) | 1,516,000 | 1,476,000 | 1,629,000 | 1,712,000 | 1,739,000 | 1,757,000 |
| Carbonate | 8,511 | 9,236 | 8,253 | 8,232 | 8,364 | 7,604 |
| Caustic potash | 7,505 | 7,316 | 8,982 | 12,205 | 12,401 | 9,606 |
| Italy— | | | | | | |
| Nitrate | 1,504 | 1,690 | n.a. | n.a. | n.a. | n.a. |
| Caustic potash | 41 | — | 20 | 2,145 | 2,179 | 537 |
| Sulphate | 123,678 | 25,440 | 101,784 | 45,051 | 45,774 | 6,161 |
| Netherlands— | | | | | | |
| Carbonate | 1,642 | 1,720 | 2,609 | 2,830 | 2,876 | 1,672 |
| Caustic potash | 32 | 33 | 47 | 86 | 87 | (d) 18 |
| Chloride (b) | 833 | 451 | 471 | 145 | 147 | (d) 52 |
| Nitrate | 302 | 83 | 47 | 271 | 275 | 157 |
| Sulphate (b) | 231 | 211 | 294 | 150 | 152 | (d) 89 |
| Poland— | | | | | | |
| Caustic potash | 705 | 495 | n.a. | n.a. | n.a. | n.a. |
| Chlorate | 680 | 473 | n.a. | n.a. | n.a. | n.a. |
| Portugal— | | | | | | |
| Caustic potash | 91 | 335 | 450 | 13 | 13 | 9 |
| Chloride | 422 | 306 | 579 | 964 | 979 | 1,044 |
| Sulphate | 641 | 127 | 364 | 822 | 835 | 810 |
| Spain— | | | | | | |
| Chloride | 502,491 | 634,711 | 506,222 | 436,434 | 443,438 | 416,057 |
| Nitrate | 883 | 1,268 | 1,644 | 1,798 | 1,827 | 936 |
| Sulphate | 15,856 | 23,380 | 21,229 | 29,052 | 29,518 | 53,685 |

(a) Years ended March 31 following that stated.

 (b) K₂O content.

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

 (d) Excludes exports to Belgium
and Luxemburg, if any.

EXPORTS OF POTASH SALTS (cont.)

| Exporting Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Sweden— | | | | | | |
| Carbonate | — | 24 | 88 | — | — | 38 |
| Caustic potash | 3,068 | 2,528 | 2,771 | 2,575 | 2,616 | 2,142 |
| U.S.S.R.— | | | | | | |
| Fertilizer salts | 1,343,737 | 1,694,300 | 1,651,900 | 3,051,040 | 3,100,000 | 3,900,000 |
| United States— | | | | | | |
| Chloride | 899,044 | 956,412 | 923,340 | 708,713 | 720,086 | 684,526 |
| Other | | | | | | |
| potassic fertilizers | 100,199 | 206,637 | 176,138 | 148,394 | 150,775 | 250,415 |
| Caustic potash | 5,289 | 4,132 | 2,567 | 6,119 | 6,217 | 25,297 |
| Israel— | | | | | | |
| Carbonate | 1,545 | 1,404 | 1,632 | 1,801 | 1,830 | 2,060 |
| Japan— | | | | | | |
| Chlorate | 739 | 704 | 1,054 | 935 | 950 | 1,368 |
| Chloride | 3,945 | 8,048 | 8,071 | 5,453 | 5,540 | 7,158 |
| Sulphate | 7,196 | 6,231 | 3,601 | 18,825 | 19,127 | 999 |
| Caustic potash | 1,141 | 5,853 | 903 | 2,088 | 2,121 | 4,079 |
| Other fertilizer salts | 868 | 677 | 225 | 863 | 877 | 357 |

IMPORTS OF POTASH SALTS

| Importing Country and Description | Long tons | | | | Tonnes | |
|-----------------------------------|-----------|-------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Fertilizer salts | 42,438 | 36,020 | 35,944 | 23,937 | 24,321 | 35,388 |
| Carbonate | 10,392 | 10,483 | 11,743 | 11,008 | 11,185 | 10,884 |
| Caustic potash and lyes | 2,122 | 2,300 | 2,068 | 2,616 | 2,658 | 2,602 |
| Chloride | 716,653 | 751,267 | 690,067 | 747,512 | 759,510 | 811,025 |
| Nitrate | 3,965 | <i>n.a.</i> | <i>n.a.</i> | 9,763 | 9,919 | 9,163 |
| Sulphate | 35,658 | 40,047 | 40,791 | 33,984 | 34,529 | 38,115 |
| Other compounds | 2,523 | 3,742 | 2,770 | 20,053 | 20,375 | 20,977 |
| Ghana— | | | | | | |
| Fertilizer salts | 4 | 208 | 225 | 337 | 342 | <i>n.a.</i> |
| Kenya— | | | | | | |
| Fertilizer salts | 759 | 2,131 | 2,401 | 4,048 | 4,113 | 2,780 |
| Mauritius— | | | | | | |
| Fertilizer salts | 9,468 | 4,499 | 5,954 | 5,275 | 5,360 | 10,580 |
| Nigeria— | | | | | | |
| Fertilizer salts | 2,185 | 195 | 457 | 1,314 | 1,335 | 483 |
| Sierra Leone— | | | | | | |
| Fertilizer compounds .. | 50 | 58 | 50 | 110 | 112 | 51 |
| Tanzania— | | | | | | |
| Fertilizer salts | 1,441 | 1,426 | 1,658 | 2,128 | 2,162 | 3,166 |
| Uganda— | | | | | | |
| Fertilizer salts | 1,455 | 3,600 | 2,565 | 5,293 | 5,378 | 1,596 |
| Canada— | | | | | | |
| Caustic potash | 1,504 | 1,713 | 1,351 | 1,621 | 1,647 | 905 |
| Carbonate | 619 | 674 | 894 | 976 | 992 | 1,134 |
| Crude chloride | 24,482 | 21,382 | 14,627 | 20,913 | 21,249 | 57,065 |
| Nitrate | 1,517 | 2,384 | 3,425 | 2,638 | 2,680 | 2,896 |
| Crude sulphate | 27,030 | 22,271 | 27,745 | 18,257 | 18,550 | 13,211 |
| Other potassic fertilizers | 19,145 | 17,977 | 22,834 | 24,288 | 24,678 | 13,815 |
| Barbados— | | | | | | |
| Fertilizer salts | 4,164 | 4,011 | 3,010 | 799 | 812 | <i>n.a.</i> |
| Grenada— | | | | | | |
| Fertilizer salts | 43 | 25 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Jamaica— | | | | | | |
| Fertilizer salts | 10,243 | 11,580 | 13,763 | 12,349 | 12,547 | 9,351 |
| St. Kitts— | | | | | | |
| Potassic fertilizers .. | 547 | 852 | 867 | 1,200 | 1,219 | 79 |
| St. Lucia— | | | | | | |
| Potassic fertilizers .. | 2,995 | 805 | 1,610 | 16 | 16 | — |
| St. Vincent— | | | | | | |
| Chloride | 1,295 | 2,352 | — | 1 | 1 | <i>n.a.</i> |
| Trinidad and Tobago— | | | | | | |
| Chloride and sulphate .. | 1,560 | 2,670 | 4,212 | 4,260 | 4,328 | 3,641 |
| Guyana— | | | | | | |
| Fertilizer salts | 2,771 | 2,977 | 3,208 | 2,519 | 2,559 | 3,254 |
| Ceylon— | | | | | | |
| Kainite and sylvinite .. | — | — | 25 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Chloride (b) | 27,564 | 31,057 | 39,368 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Cyprus— | | | | | | |
| Fertilizer salts | 292 | 583 | 896 | 840 | 853 | 1,598 |
| Hong Kong— | | | | | | |
| Nitrate | 634 | 742 | 609 | 595 | 605 | 662 |
| Chlorate | (a) 80 | 65 | 55 | 5 | 5 | 8 |
| Other fertilizer salts .. | 27 | 13 | 34 | 9 | 9 | 14 |

(a) Excess of re-exports

(b) K₂O Content.

IMPORTS OF POTASH SALTS (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|---------------------------------------|-----------|---------|---------|---------|---------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| India (a)— | | | | | | |
| Carbonate | 1,912 | 893 | 378 | 241 | 245 | 236 |
| Caustic potash | 2,869 | 951 | 171 | 13 | 13 | 11 |
| Nitrate | — | — | — | — | — | 6 |
| Sulphate | 13,277 | 49,824 | 5,067 | 20,257 | 20,582 | n.a. |
| Chlorate | — | — | 84 | 103 | 105 | — |
| Chloride | 314,851 | 235,234 | 135,421 | 55,151 | 56,036 | 184,807 |
| Malaysia (West)— | | | | | | |
| Fertilizer salts | 55,434 | 53,215 | 73,021 | 97,340 | 98,902 | 96,681 |
| Sabah— | | | | | | |
| Fertilizer salts | 1,172 | 2,252 | 2,562 | 4,814 | 4,891 | 6,588 |
| Sarawak— | | | | | | |
| Fertilizer salts | 1,450 | 770 | 648 | n.a. | n.a. | n.a. |
| Australia (c)— | | | | | | |
| Carbonate | 1,217 | 1,011 | 1,610 | 1,673 | 1,700 | 2,038 |
| Caustic potash | 1,340 | 1,503 | 1,061 | 1,957 | 1,989 | 1,856 |
| Chloride | 110,970 | 114,438 | 118,554 | 110,178 | 111,946 | 136,132 |
| Nitrate | 1,602 | 603 | 368 | 5,187 | 5,270 | 3,537 |
| Sulphate | 8,168 | 15,467 | 12,981 | 17,983 | 17,357 | 17,130 |
| Other fertilizer salts | 760 | 220 | 3,397 | 5,876 | 5,970 | 2,467 |
| Other compounds | 389 | 392 | 657 | 450 | 457 | 698 |
| New Zealand (c)— | | | | | | |
| Chloride | 152,637 | 115,340 | 142,936 | 153,917 | 156,388 | 192,804 |
| Nitrate | 517 | 230 | 192 | 301 | 306 | n.a. |
| Sulphate | 2,996 | 2,997 | 4,156 | 3,334 | 3,387 | 5,126 |
| Other fertilizer salts | 336 | 247 | 118 | 4,773 | 4,850 | n.a. |
| Compounds other than fertilizer | 147 | 118 | 242 | 203 | 206 | n.a. |
| Irish Republic— | | | | | | |
| Fertilizer salts | 7,303 | 10,897 | 6,923 | 8,289 | 8,422 | 13,165 |
| Chloride | 190,283 | 218,887 | 182,983 | 240,906 | 244,773 | 239,567 |
| Other compounds | 250 | 329 | 454 | 328 | 333 | 520 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Fertilizer salts | 121,427 | 83,176 | 77,619 | 76,510 | 77,738 | 60,174 |
| Caustic potash | 444 | 443 | 510 | 648 | 659 | 531 |
| Carbonate | 895 | 809 | 1,278 | 1,107 | 1,125 | 1,236 |
| Chloride | 165,844 | 201,802 | 193,302 | 216,964 | 220,446 | 237,705 |
| Nitrate | 487 | 499 | 640 | 840 | 854 | 669 |
| Sulphate | 25,863 | 24,379 | 21,138 | 17,985 | 18,274 | 35,037 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Fertilizer salts (b) | 13,302 | 13,359 | 14,713 | 14,119 | 14,346 | 11,625 |
| Carbonate | 1,179 | 4,179 | 4,124 | 5,464 | 5,552 | 6,188 |
| Chlorates | 401 | 584 | 471 | 616 | 626 | 691 |
| Chloride (b) | 686,065 | 709,388 | 622,216 | 656,683 | 667,221 | 471,720 |
| Nitrate | 2,614 | 2,433 | 1,873 | 1,970 | 2,002 | 2,001 |
| Sulphate (b) | 8,368 | 13,463 | 8,177 | 15,902 | 16,157 | 10,066 |
| Czechoslovakia— | | | | | | |
| Fertilizer salts (b) | 381,000 | 474,000 | 451,000 | 518,000 | 526,000 | 569,000 |

(a) Years ended March 31 following that stated.

(c) Years ended June 30 of that stated.

 (b) K₂O content.

IMPORTS OF POTASH SALTS (cont.)

Long tons | Tonnes

| Importing Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|-----------------------------------|---------|---------|----------|---------|---------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Denmark— | | | | | | |
| Carbonate | 423 | 356 | 249 | 340 | 346 | 534 |
| Caustic potash | 1,094 | 1,381 | 1,188 | 1,402 | 1,425 | 1,312 |
| Chlorate | 106 | 145 | 122 | 104 | 106 | 91 |
| Chloride | 236,188 | 191,242 | 217,024 | 214,414 | 217,855 | 252,345 |
| Nitrate | 1,477 | 1,410 | 1,399 | 1,374 | 1,397 | 1,368 |
| Sulphate | 5,226 | r 8,759 | r 12,824 | 9,142 | 9,289 | 850 |
| Finland— | | | | | | |
| Fertilizer salts | 161,835 | 189,827 | 173,592 | 197,962 | 201,139 | 230,711 |
| Carbonate | 447 | 1,056 | 765 | 963 | 979 | 1,023 |
| Caustic potash | 298 | 264 | 250 | 312 | 317 | 269 |
| Nitrate | 278 | 926 | 551 | 932 | 947 | 824 |
| Sulphate | 16,328 | 9,303 | 11,273 | 18,031 | 18,320 | 16,614 |
| France— | | | | | | |
| Chloride | 35,214 | 201,762 | 120,848 | 109,053 | 110,803 | 138,731 |
| Sulphate | 51,167 | 53,022 | 57,438 | 74,339 | 75,532 | 65,373 |
| Caustic potash | 107 | 176 | 63 | 212 | 216 | 128 |
| Patent potash | 7,814 | 9,241 | 10,566 | 11,026 | 11,203 | 8,955 |
| Germany (Federal)— | | | | | | |
| Fertilizer salts | 87,580 | 47,636 | 85,472 | 22,172 | 22,528 | 34,149 |
| Carbonate | 3,249 | 3,417 | 3,391 | 3,415 | 3,470 | 4,847 |
| Caustic potash | 5,708 | 6,497 | 7,338 | 5,683 | 5,774 | 10,974 |
| Chlorate | 491 | 626 | 975 | 710 | 721 | n.a. |
| Nitrate | 4,235 | 4,387 | 3,860 | 3,508 | 3,564 | 4,464 |
| Greece— | | | | | | n.a. |
| Carbonate | 1,800 | 2,070 | 856 | 1,726 | 1,754 | 1,554 |
| Caustic potash | 185 | 68 | 65 | 105 | 107 | 243 |
| Nitrate | 91 | 124 | 101 | 540 | 549 | 424 |
| Sulphate | 12,991 | 19,137 | 30,852 | 20,183 | 20,507 | 22,317 |
| Hungary— | | | | | | |
| Fertilizer salts | 330,693 | 380,888 | 450,180 | 595,210 | 604,761 | 739,000 |
| Iceland— | | | | | | |
| Fertilizer salts | 7,240 | 7,709 | 5,590 | 5,270 | 5,355 | 4,806 |
| Carbonate | 59 | 72 | 372 | 205 | 208 | 96 |
| Caustic potash | 30 | 6 | 99 | 28 | 28 | 42 |
| Italy— | | | | | | |
| Fertilizer salts | 44,052 | 50,497 | 47,019 | 44,253 | 44,963 | 37,976 |
| Carbonate | 5,380 | 6,529 | 6,278 | 7,371 | 7,489 | 9,019 |
| Caustic potash | 329 | 264 | 377 | 442 | 449 | 485 |
| Chloride | 197,718 | 204,006 | 174,962 | 213,887 | 217,319 | 242,031 |
| Nitrate | 1,744 | 1,846 | 2,322 | 4,821 | 4,898 | 3,957 |
| Sulphate | 4,602 | 3,862 | 5,095 | 21,315 | 21,657 | 48,058 |
| Netherlands— | | | | | | |
| Fertilizer salts (a) | 10,707 | 9,860 | 7,442 | 6,771 | 6,880 | 4,028 |
| Carbonate | 8,927 | 9,324 | 9,704 | 9,868 | 10,026 | 7,743 |
| Chloride (a) | 147,271 | 165,538 | 161,250 | 161,161 | 163,747 | (b) 171,112 |
| Nitrate | 3,680 | 3,339 | 4,415 | 4,867 | 4,945 | 5,138 |
| Sulphate (a) | 52,534 | 46,871 | 49,453 | 43,945 | 44,650 | (b) 27,418 |
| Norway— | | | | | | |
| Fertilizer salts | 258 | 1,975 | 285 | 127 | 129 | 127 |
| Carbonate | 308 | 325 | 286 | 283 | 288 | 401 |
| Caustic potash | 1,196 | 966 | 899 | 555 | 564 | 583 |
| Chlorate | 168 | 104 | 151 | 107 | 109 | 218 |
| Chloride | 174,593 | 131,049 | 138,482 | 156,503 | 159,015 | 158,148 |
| Nitrate | 343 | 136 | 213 | 205 | 208 | 238 |
| Sulphate | 448 | 57,723 | 60,589 | 63,463 | 64,482 | 78,950 |

 (a) K₂O content.

(b) Excludes imports from Belgium and Luxemburg, if any.

IMPORTS OF POTASH SALTS (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Poland— | | | | | | |
| Fertilizer salts | 1,673,000 | 1,768,000 | 1,867,000 | 2,180,000 | 2,215,000 | 2,191,000 |
| Carbonate | 2,945 | 3,246 | 5,830 | 5,441 | 5,528 | 4,510 |
| Portugal— | | | | | | |
| Carbonate | 264 | 486 | 388 | 325 | 330 | 307 |
| Caustic potash | 166 | 204 | 182 | 231 | 235 | 261 |
| Chlorate | 221 | 268 | 308 | 310 | 315 | 290 |
| Chloride | 27,460 | 23,825 | 29,149 | 30,424 | 30,912 | 35,073 |
| Nitrate | 394 | 427 | 436 | 594 | 604 | 550 |
| Sulphate | 2,335 | 2,787 | 2,936 | 4,130 | 4,196 | 4,460 |
| Roumania— | | | | | | |
| Fertilizer salts (a) .. | 14,566 | 10,925 | 33,168 | 29,400 | 29,900 | 34,200 |
| Sweden— | | | | | | |
| Fertilizer salts | 467 | 786 | 456 | 442 | 449 | 456 |
| Carbonate | 1,026 | 1,036 | 1,238 | 1,103 | 1,121 | 1,194 |
| Caustic potash | 238 | 85 | 100 | 340 | 346 | 81 |
| Chloride | 178,541 | 179,820 | 196,879 | 195,297 | 198,431 | 176,316 |
| Nitrate | 1,213 | 1,441 | 1,580 | 1,689 | 1,716 | 719 |
| Sulphate | 33,029 | 37,288 | 37,725 | 39,256 | 39,886 | 31,219 |
| Switzerland— | | | | | | |
| Fertilizer salts | 96,671 | 103,598 | 106,759 | 106,267 | 107,972 | 97,215 |
| Carbonate | 2,319 | 1,771 | 1,693 | 1,957 | 1,989 | 1,695 |
| Caustic potash | 1,382 | 1,145 | 1,698 | 1,374 | 1,396 | 1,310 |
| Nitrate | 747 | 574 | 701 | 842 | 856 | 706 |
| Sulphate | 695 | 694 | 947 | 965 | 981 | 381 |
| U.S.S.R.— | | | | | | |
| Caustic potash | 7,000 | 6,100 | 7,086 | 8,759 | 8,900 | 9,100 |
| Yugoslavia— | | | | | | |
| Fertilizer salts | 165,745 | 72,917 | 23,394 | 14,595 | 14,829 | 772 |
| Caustic potash | 604 | 995 | 2,074 | 2,374 | 2,412 | 1,668 |
| Chlorate | 399 | 337 | 295 | 359 | 365 | n.a. |
| Chloride | n.a. | 108,598 | 169,070 | 276,415 | 280,851 | 332,667 |
| Sulphate | 6,940 | 6,731 | 3,730 | 7,289 | 7,406 | 10,216 |
| Algeria— | | | | | | |
| Chloride | 8,904 | 16,512 | 37,744 | 11,786 | 11,975 | n.a. |
| Sulphate | 5,176 | 13,662 | 19,832 | 29,345 | 29,816 | n.a. |
| Angola— | | | | | | |
| Chloride | 394 | 235 | 491 | 428 | 435 | 565 |
| Sulphate | 1,168 | 631 | 1,047 | 616 | 626 | 998 |
| Canary Islands— | | | | | | |
| Fertilizer salts | 1,259 | 1,117 | 467 | 1,538 | 1,563 | 638 |
| Central African Republic— | | | | | | |
| Potassic fertilizers .. | 640 | 204 | 555 | 1,321 | 1,342 | n.a. |
| Congo (Brazza)— | | | | | | |
| Fertilizer salts | 146 | 2,576 | 3,914 | 1,221 | 1,241 | n.a. |
| Malagasy Republic— | | | | | | |
| Fertilizer salts | 3,040 | 4,759 | 5,108 | 4,274 | 4,343 | n.a. |
| Morocco— | | | | | | |
| Chloride | 13,448 | 18,750 | 8,569 | 13,466 | 13,682 | 16,770 |
| Sulphate | 14,408 | 17,078 | 17,394 | 17,598 | 17,880 | 21,136 |
| Nitrate | 328 | 506 | 445 | 386 | 393 | 1,195 |
| Reunion— | | | | | | |
| Fertilizer salts | 692 | 522 | 175 | n.a. | n.a. | n.a. |
| Senegal— | | | | | | |
| Fertilizer salts | 8,466 | 7,161 | 1,492 | 7,900 | 8,027 | 4,440 |
| South Africa— | | | | | | |
| Fertilizer salts | 159,504 | 135,292 | 124,219 | 92,176 | 93,655 | 209,413 |
| Caustic potash | 506 | 624 | 538 | 623 | 633 | 773 |
| Other compounds | 52,363 | 33,804 | 27,352 | 66,282 | 67,346 | 45,197 |
| Sudan— | | | | | | |
| Caustic potash | 1 | 177 | 621 | 151 | 153 | 1,205 |

 (a) K_2O content.

IMPORTS OF POTASH SALTS (cont.)

Long tons Tonnes

| Importing Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 | |
|---|-----------|-----------|-----------|-----------|-----------|-----------|--------|
| OTHER COUNTRIES (cont.) | | | | | | | |
| Tunisia— | | | | | | | |
| Fertilizer salts | 3,424 | 3,307 | 6,728 | 4,349 | 4,419 | 6,386 | |
| Caustic potash | 20 | 8 | — | n.a. | n.a. | n.a. | |
| Costa Rica— | | | | | | | |
| Fertilizer salts | 18,731 | 22,589 | 24,737 | 21,063 | 21,401 | 37,127 | |
| French West Indies— | | | | | | | |
| Guadeloupe— | | | | | | | |
| Fertilizer salts | 84 | 113 | 145 | n.a. | n.a. | n.a. | |
| Martinique— | | | | | | | |
| Fertilizer salts | 3,773 | 3,110 | 1,765 | n.a. | n.a. | n.a. | |
| Guatemala— | | | | | | | |
| Fertilizer salts | 901 | 238 | 101 | 202 | 205 | 385 | |
| Honduras— | | | | | | | |
| Fertilizer salts | 9,710 | 6,055 | 4,824 | 5,823 | 5,916 | 5,189 | |
| Mexico— | | | | | | | |
| Carbonate | 753 | 1,226 | 1,705 | 886 | 900 | 2,010 | |
| Chloride | 37,408 | 49,051 | 51,181 | 48,953 | 49,739 | 55,332 | |
| Caustic potash | 1,047 | 2,127 | 765 | 810 | 823 | 922 | |
| Sulphate | 99 | 10,498 | 15,349 | 23,107 | 23,478 | 17,108 | |
| Nicaragua— | | | | | | | |
| Fertilizer salts | 1,456 | 2,381 | 16,625 | 864 | 878 | 3,584 | |
| Panama Republic— | | | | | | | |
| Fertilizer salts | 597 | 371 | 801 | 131 | 133 | 365 | |
| Salvador— | | | | | | | |
| Fertilizer salts | 3,131 | 1,795 | 3,241 | 3,508 | 3,564 | 8,822 | |
| United States— | | | | | | | |
| Carbonate | 4,073 | 393 | — | 69 | 70 | n.a. | |
| Caustic potash | 1,006 | 1,133 | 1,628 | 2,511 | 2,551 | 3,102 | |
| Chlorates | 347 | 416 | 277 | 586 | 596 | n.a. | |
| Chloride | 2,420,179 | 3,175,555 | 3,418,952 | 3,800,364 | 3,861,349 | 4,126,873 | |
| Cyanide | 915 | 803 | 924 | 827 | 840 | n.a. | |
| Nitrate | 13,799 | 14,287 | 10,102 | 12,974 | 13,182 | 19,941 | |
| Potassium-sodium nitrate mixtures | 40,022 | 25,403 | 32,665 | 50,142 | 50,947 | 55,491 | |
| Sulphate | 54,424 | 38,900 | 44,042 | 67,660 | 68,746 | 35,548 | |
| Argentina— | | | | | | | |
| Carbonate | 589 | 643 | 440 | 768 | 780 | 1,056 | |
| Caustic potash | 1,268 | 743 | 764 | 1,162 | 1,181 | 1,022 | |
| Chlorate | 573 | 493 | 738 | 685 | 696 | 828 | |
| Nitrate | 57 | 6 | 10 | 140 | 142 | 46 | |
| Sulphate | 1,407 | 2,751 | 2,448 | 3,169 | 3,220 | 2,624 | |
| Chloride | 4,398 | 4,541 | 4,384 | 8,422 | 8,557 | 10,795 | |
| Brazil— | | | | | | | |
| Caustic potash | 976 | 846 | 1,036 | 2,215 | 2,251 | } n.a. | |
| Nitrate | 442 | 353 | 1 | 199 | 202 | | |
| Nitrate of potash and soda | 9,562 | 6,240 | 16,895 | 9,283 | 9,432 | | |
| Chloride | 218,005 | 291,753 | 312,853 | 483,933 | 491,699 | | |
| Sulphate | 5,006 | 10,012 | 12,501 | 16,023 | 16,280 | | |
| Carbonate | 1,417 | 1,857 | 2,296 | 2,484 | 2,524 | } n.a. | |
| Chlorate | 9 | — | 31 | 4 | 4 | | |
| Chile— | | | | | | | |
| Caustic potash | 128 | 93 | 79 | 156 | 158 | | } n.a. |
| Chlorate | 85 | 60 | n.a. | 63 | 64 | | |
| Chloride | 21,369 | 21,973 | 33,411 | 22,689 | 23,053 | | |
| Sulphate | 5,660 | 2,253 | 8,565 | 10,243 | 10,407 | | |
| Colombia— | | | | | | | |
| Chlorate | r 412 | r 316 | 225 | } n.a. | } n.a. | } n.a. | |
| Chloride | r 42,781 | r 52,066 | 57,426 | | | | |
| Nitrate | r 203 | r 197 | 184 | | | | |
| Sulphate | r 4,348 | r 6,439 | 7,042 | | | | |
| Other fertilizer salts | r 98 | r 157 | 174 | | | | |

IMPORTS OF POTASH SALTS (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Peru— | | | | | | |
| Fertilizer salts | 7,554 | 3,662 | 4,493 | } n.a. | } n.a. | } n.a. |
| Nitrate | 200 | 163 | 110 | | | |
| Carbonate | 55 | 51 | 73 | | | |
| Chloride | 70 | 3,182 | 3,775 | | | |
| Caustic potash | 20 | 41 | 25 | | | |
| Uruguay— | | | | | | |
| Nitrate | 31 | 15 | 5 | 19 | 19 | 120 |
| Caustic potash | 114 | 153 | 50 | 116 | 118 | 72 |
| Venezuela— | | | | | | |
| Carbonate | 50 | 61 | 34 | n.a. | n.a. | 60 |
| Chlorate | 258 | 157 | 218 | n.a. | n.a. | 269 |
| Chloride | 12,303 | 17,920 | 11,899 | n.a. | n.a. | 18,780 |
| Nitrate | 3,562 | 1,961 | 1,800 | n.a. | n.a. | 157 |
| Sulphate | 9,159 | 3,941 | 5,417 | n.a. | n.a. | 13,618 |
| Burma— | | | | | | |
| Fertilizer salts | 246 | 79 | n.a. | 309 | 314 | 1 |
| Formosa— | | | | | | |
| Fertilizer salts | 93,561 | 109,414 | 132,539 | 116,126 | 117,989 | 99,133 |
| Carbonate | 232 | 289 | 334 | 174 | 177 | 502 |
| Nitrate | 39 | 93 | 194 | 220 | 224 | 315 |
| Caustic potash | 57 | 75 | 133 | 243 | 247 | 259 |
| Iran (a)— | | | | | | |
| Fertilizer salts | — | 295 | 2,950 | n.a. | n.a. | n.a. |
| Japan— | | | | | | |
| Fertilizer salts | 23,559 | 22,307 | 23,377 | 24,761 | 25,158 | 22,830 |
| Chloride | 1,116,138 | 1,213,355 | 1,234,121 | 1,210,795 | 1,230,225 | 1,083,832 |
| Sulphate | 57,328 | 65,586 | 86,769 | 76,242 | 77,465 | 164,699 |
| Jordan— | | | | | | |
| Fertilizer salts | 1,814 | 862 | 844 | 4,288 | 4,357 | 5,011 |
| Korea (South)— | | | | | | |
| Fertilizer salts | 28,448 | 67,381 | 220,373 | 82,152 | 83,470 | 95,147 |
| Lebanon— | | | | | | |
| Fertilizer salts | 7,461 | 7,892 | 5,422 | 8,107 | 8,237 | 6,473 |
| Philippine Republic— | | | | | | |
| Sulphate | 8,641 | 4,680 | 3,937 | 2,453 | 2,492 | 1,600 |
| Other fertilizer salts .. | 58,488 | 50,606 | 64,093 | 62,439 | 63,441 | 50,918 |
| Thailand— | | | | | | |
| Chlorate | 63 | 245 | 314 | 399 | 405 | 258 |
| Chloride | 498 | 485 | n.a. | n.a. | n.a. | 200 |
| Nitrate | 976 | 1,334 | 1,315 | 1,598 | 1,624 | 1,311 |
| Sulphate | 984 | 837 | 2,362 | 886 | 900 | 1,850 |
| Turkey— | | | | | | |
| Carbonate | 1,903 | 2,148 | 922 | 1,231 | 1,251 | } n.a. |
| Caustic potash | 1,742 | 708 | 272 | 368 | 374 | |
| Chlorates | 150 | 346 | 511 | 411 | 418 | |
| Nitrate | 322 | 316 | 167 | 194 | 197 | |
| Sulphate | 2,155 | 540 | 1,277 | n.a. | n.a. | |

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

PYRITES
PRODUCTION OF PYRITES
 (see also Sulphur)

(including Cupreous Pyrites)

| Producing Country | Long tons Tonnes | | | | | Long tons Tonnes | | | | |
|-------------------------------|--------------------|-----------|-----------|-----------|-----------|---------------------------|---------|----------|---------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1971 | Estimated Sulphur Content | | | | |
| | | | | | | 1967 | 1968 | 1969 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | | | | | |
| Canada (c) | 337,447 | 280,533 | 288,779 | 323,812 | 288,438 | 162,837 | 139,104 | 142,732 | 156,717 | 139,700 |
| Cyprus (a) | 1,039,277 | 1,012,744 | 907,246 | 866,796 | 782,316 | 493,000 | 486,000 | 435,000 | 414,000 | 378,100 |
| India | .. | 15,187 | 40,980 | 25,983 | 40,886 | .. | n.a. | n.a. | n.a. | n.a. |
| Australia (b) | 252,748 | 165,265 | r 117,708 | 210,325 | 259,080 | 111,202 | 71,800 | r 51,400 | 101,400 | 123,500 |
| TOTAL | 1,700,000 | 1,500,000 | 1,400,000 | 1,400,000 | 1,400,000 | .. | .. | .. | .. | .. |
| OTHER COUNTRIES | | | | | | | | | | |
| Bulgaria (b) | 161,500 | 161,500 | 170,000 | 170,000 | n.a. | 68,000 | 68,000 | 71,000 | 71,000 | 72,000 |
| Czechoslovakia (b) | 370,000 | 374,000 | 394,000 | 335,000 | 352,000 | 143,000 | 146,000 | 154,000 | 131,000 | 137,000 |
| Finland (b) | 700,000 | 760,000 | 800,000 | 948,000 | 850,000 | 340,000 | 370,000 | 370,000 | 489,000 | 440,000 |
| France (d) | 84,032 | 80,505 | 83,854 | 83,798 | 81,710 | 34,661 | 33,100 | 34,400 | 35,200 | 34,000 |
| Germany (Federal) | 548,309 | 607,580 | 631,522 | 563,542 | 495,050 | 217,066 | 283,010 | 246,000 | 230,000 | 219,400 |
| Germany (East) | n.a. | n.a. | n.a. | n.a. | n.a. | 53,000 | 57,000 | 57,000 | 57,000 | n.a. |
| Greece | r 216,508 | 207,898 | 241,651 | 266,071 | 133,660 | r 100,000 | 97,000 | 111,000 | 115,000 | 58,000 |
| Italy | 1,388,759 | 1,384,239 | 1,451,396 | 1,494,450 | 1,503,650 | 613,000 | 609,000 | 639,000 | 657,000 | 662,000 |
| Norway | 626,805 | 681,647 | 754,500 | 735,200 | 777,931 | 282,179 | 309,373 | 346,000 | 339,000 | 362,000 |
| Poland | n.a. | n.a. | n.a. | n.a. | n.a. | 80,000 | 80,000 | 30,000 | n.a. | n.a. |
| Portugal | 519,683 | 552,421 | 522,737 | 468,309 | 558,504 | 239,054 | 249,694 | 231,572 | 209,300 | 249,000 |
| Roumania | n.a. | n.a. | 354,000 | 794,000 | 807,000 | n.a. | n.a. | n.a. | 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): 1967—8,635; 1968—7,015; 1969—11,309; 1970—9,683. (Tonnes): 1970—9,838; 1971—n.a.

PRODUCTION OF PYRITES (cont.)

| Producing Country | Long tons Tonnes | | | | | Long tons Tonnes | | | | | | |
|-----------------------------------|--------------------|------------|------------|------------|------------|---------------------------|-----------|-----------|-----------|------------|------------|------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | Estimated Sulphur Content | | | | | | |
| | | | | | | 1967 | 1968 | 1969 | 1970 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | | | | | | | |
| Spain .. | 2,290,760 | 2,406,605 | 2,477,456 | 2,686,247 | 2,729,353 | 2,429,220 | 1,086,000 | 1,144,000 | 1,176,000 | 1,256,000 | 1,276,000 | 1,135,000 |
| Sweden .. | 474,900 | 467,000 | 487,380 | 566,115 | 575,200 | 591,700 | 242,210 | 236,000 | 246,420 | 284,140 | 288,700 | 297,000 |
| U.S.S.R. (c) .. | 3,450,000 | 3,450,000 | 3,450,000 | 3,937,000 | 4,000,000 | n.a. | 1,820,000 | 1,821,000 | 1,821,000 | 2,067,000 | 2,100,000 | n.a. |
| Yugoslavia (a) .. | 418,000 | 270,000 | 268,000 | 349,000 | 355,000 | 276,000 | 175,000 | 113,000 | 113,000 | 146,000 | 149,000 | 116,000 |
| Algeria .. | 33,836 | 45,446 | 41,099 | 31,992 | 32,505 | 27,422 | 15,000 | 21,000 | 19,000 | 15,000 | 15,000 | 13,000 |
| Morocco (e) .. | 347,575 | 411,252 | 385,344 | 286,444 | 291,041 | 440,549 | 104,000 | 123,000 | 115,600 | 85,933 | 87,000 | 132,200 |
| South Africa .. | 854,943 | 763,108 | 824,107 | 854,171 | 867,878 | 749,633 | 400,000 | 267,000 | 330,000 | 340,000 | 350,000 | 300,000 |
| United States (b) .. | 860,909 | 872,000 | 860,000 | 831,000 | 844,000 | n.a. | 355,033 | 362,000 | 355,000 | 344,000 | 350,000 | n.a. |
| China (c) .. | 1,480,000 | 1,480,000 | 1,800,000 | 1,900,000 | 2,000,000 | 2,000,000 | 665,000 | 669,000 | 803,000 | 900,000 | 914,000 | 900,000 |
| Formosa .. | 38,085 | 38,365 | 37,684 | 39,000 | 40,000 | 45,000 | 14,500 | 14,400 | 14,100 | 15,000 | 15,000 | 17,000 |
| Japan (d) .. | 2,968,129 | 2,950,000 | 2,919,000 | 2,720,000 | 2,764,000 | n.a. | 1,363,527 | 1,357,000 | 1,350,000 | 1,269,000 | 1,289,000 | n.a. |
| Korea (South) .. | 3,571 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Korea (North) (c) .. | 492,000 | 492,000 | 492,000 | 492,000 | 500,000 | 500,000 | 190,000 | 197,000 | 197,000 | 197,000 | 200,000 | 200,000 |
| Philippine Republic .. | 143,910 | 179,281 | 198,000 | 270,000 | 274,000 | 238,334 | 65,000 | 85,000 | 94,000 | 125,000 | 127,000 | 112,000 |
| Turkey .. | 123,036 | 134,656 | 127,793 | 90,000 | 91,000 | 58,500 | 60,000 | 62,000 | 59,000 | 41,000 | 42,000 | 27,000 |
| TOTAL* .. | 18,600,000 | 18,900,000 | 19,600,000 | 21,100,000 | 21,400,000 | 20,700,000 | 9,500,000 | 9,600,000 | 9,600,000 | 10,100,000 | 10,300,000 | 10,300,000 |
| WORLD'S TOTAL* .. | 20,300,000 | 20,400,000 | 20,900,000 | 22,500,000 | 22,800,000 | 22,100,000 | 9,500,000 | 9,600,000 | 9,600,000 | 10,100,000 | 10,300,000 | 10,300,000 |

*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) Pyrrhotite

(b) Including by-product pyrites.

EXPORTS OF PYRITES

Long tons | Tonnes

| Exporting Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|-----------------------------------|------------|-------------|-------------|------------|------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Canada (a) | (£360,181) | (£407,000) | (£426,000) | (£489,000) | (£489,000) | (£436,000) |
| Cyprus— | | | | | | |
| Iron pyrites | 710,260 | 798,900 | 831,755 | 805,183 | 818,107 | 611,842 |
| Cupreous pyrites | 183,673 | 148,021 | 102,971 | 94,532 | 96,049 | 74,513 |
| OTHER COUNTRIES | | | | | | |
| Austria | — | — | 2,251 | — | — | — |
| Belgium-Luxemburg | | | | | | |
| E.U. | — | — | 19 | 1,433 | 1,456 | 169 |
| Finland— | | | | | | |
| Concentrate | 30,816 | 44,916 | 89,774 | 17,240 | 17,517 | <i>n.a.</i> |
| Germany (Federal) | 173 | 144 | 224 | 267 | 271 | 412 |
| Greece | 4,260 | 3,973 | 4,064 | 4,232 | 4,300 | — |
| Italy— | | | | | | |
| Iron pyrites | } 51,262 | 47,710 | 39,635 | 19,080 | 19,386 | 26,877 |
| Cupreous pyrites | | | | | | |
| Norway | 476,711 | 513,954 | 495,846 | 512,574 | 520,799 | 545,236 |
| Poland | 53,703 | 36,470 | 17,970 | 38,818 | 39,441 | <i>n.a.</i> |
| Portugal— | | | | | | |
| Iron pyrites | 240,320 | 265,358 | 246,731 | 224,890 | 228,499 | 186,738 |
| Spain— | | | | | | |
| Iron pyrites | 575,282 | 607,321 | 729,079 | 592,375 | 601,881 | 756,343 |
| Cupreous pyrites | 114,741 | 212,549 | 279,173 | 278,694 | 283,166 | 180,408 |
| Sweden | 38,882 | 40,965 | 40,954 | 50,933 | 51,750 | 40,798 |
| U.S.S.R. | 1,586,000 | 1,507,804 | 1,509,000 | 1,771,000 | 1,800,000 | 1,800,000 |
| Yugoslavia | 94,883 | 105,040 | 107,600 | 50,719 | 51,533 | 76,280 |
| Algeria | 12,598 | <i>n.a.</i> | <i>n.a.</i> | 2,000 | 2,000 | <i>n.a.</i> |
| United States— | | | | | | |
| Iron pyrites | 16,033 | 1,501 | 1,334 | 1,731 | 1,759 | 3,064 |
| Turkey | 17,962 | 9,596 | 87,187 | 39,334 | 39,965 | <i>n.a.</i> |

(a) Sulphur in ores (pyrite).

IMPORTS OF PYRITES

| Importing Country | Long tons | | | | Tonnes | |
|-------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom .. | 241,750 | 216,333 | 217,220 | 167,221 | 169,905 | 213,799 |
| Irish Republic | 1,900 | 1,085 | 1,236 | 560 | 569 | — |
| OTHER COUNTRIES | | | | | | |
| Austria | 24,518 | 25,542 | 25,812 | 18,817 | 19,119 | 15,128 |
| Belgium-Luxemburg .. | | | | | | |
| E.U. | 271,778 | 347,142 | 386,935 | 401,284 | 407,724 | 297,811 |
| Czechoslovakia (a) .. | 36,000 | 31,000 | 32,000 | 75,000 | 76,000 | 58,000 |
| Denmark | 111,573 | 116,536 | 144,455 | 162,783 | 165,395 | 144,530 |
| France | 310,827 | 310,671 | 321,100 | 314,163 | 319,204 | 249,314 |
| Germany (Federal) .. | 1,414,242 | 1,861,694 | 1,774,733 | 1,604,225 | 1,629,968 | 1,381,434 |
| Germany (East) (a) .. | 107,170 | 107,704 | 106,765 | 104,899 | 106,582 | 74,433 |
| Hungary | 173,220 | 146,047 | 164,252 | 173,482 | 176,266 | 135,165 |
| Italy | 1,186,342 | 1,087,194 | 843,185 | 833,099 | 846,468 | 552,890 |
| Netherlands | 88,820 | 120,663 | 95,182 | 108,779 | 110,525 | 86,113 |
| Sweden | 122,489 | 62,905 | 111,094 | 115,873 | 117,733 | 115,511 |
| Switzerland | 45,260 | 41,550 | 31,848 | 17,243 | 17,520 | 25,342 |
| Yugoslavia | 20 | 22 | 50,106 | 93,209 | 94,705 | 76,280 |
| Egypt | 73,897 | 45,921 | 58,937 | 46,764 | 47,514 | 37,677 |
| South Africa | 7,674 | 8,441 | 9,244 | n.a. | n.a. | n.a. |
| Tunisia | 7,643 | 7,836 | 10,485 | 7,352 | 7,470 | 10,020 |
| Japan | 77,305 | n.a. | 54,116 | 180,978 | 183,882 | 110 |

(a) S content.

RARE EARTH AND THORIUM MINERALS
PRODUCTION OF RARE EARTH AND THORIUM MINERALS

| Producing Country and Description | Long tons | | | | Tonnes | |
|-----------------------------------|-----------|-----------|--------|---------|---------|-----------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Nigeria— | | | | | | |
| Monazite | 109 | 7 | 12 | 13 | 13 | 91 |
| Canada— | | | | | | |
| Thorium oxide .. | 52 | 62 | 13 | — | — | — |
| Ceylon— | | | | | | |
| Monazite | 20 | 41 | 55 | 16 | 16 | 6 |
| India— | | | | | | |
| Monazite (d) | (e) 2,500 | (e) 2,500 | 3,437 | 3,575 | 3,632 | 3,992 |
| Malaysia (West) (a)— | | | | | | |
| Monazite | 1,203 | 2,172 | 1,580 | 1,631 | 1,657 | 1,471 |
| Australia (b)— | | | | | | |
| High-grade concentrates | 2,163 | 1,849 | 3,420 | 3,929 | 3,992 | 3,963 |
| OTHER COUNTRIES | | | | | | |
| Finland— | | | | | | |
| Lanthanide concentrate (c) .. | 492 | 396 | 349 | 160 | 163 | 35 |
| Burundi— | | | | | | |
| Bastnaesite | 296 | 517 | 590 | (e) 300 | (e) 300 | (e) 240 |
| Malagasy Republic— | | | | | | |
| Monazite | 366 | — | 2 | n.a. | n.a. | n.a. |
| Zaire Republic— | | | | | | |
| Monazite | n.a. | n.a. | 175 | 140 | 143 | 180 |
| United States— | | | | | | |
| Bastnaesite (f) | 11,400 | 10,200 | 12,200 | 8,952 | 9,096 | 9,823 |
| Brazil— | | | | | | |
| Monazite | 1,062 | 1,664 | 1,966 | 2,271 | 2,308 | (e) 2,400 |
| Indonesia— | | | | | | |
| Monazite | 5 | (e) 25 | n.a. | n.a. | n.a. | n.a. |
| Korea (South)— | | | | | | |
| Monazite | 12 | — | — | n.a. | n.a. | n.a. |
| Thailand— | | | | | | |
| Monazite | n.a. | 39 | 64 | 106 | 108 | 112 |

(a) Exports.

(b) Monazite content.

(c) Oxide content. Source United States Bureau of Mines.

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

(e) Estimated.

(f) Rare earth oxide content of bastnaesite concentrates. Monazite is also produced but statistics are not available.

EXPORTS OF RARE EARTH MINERALS, ETC.

| Exporting Country and Description | Long tons | | | | Tonnes | |
|---|-------------|-------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— Concentrates (a) .. | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 61 | 62 | 23 |
| Ceylon— Monazite | 74 | <i>n.a.</i> | <i>n.a.</i> | 68 | 69 | 76 |
| Malaysia (West)— Monazite | 1,203 | 2,172 | 1,580 | 1,631 | 1,657 | 1,471 |
| Australia— Monazite | 1,858 | 2,575 | r 2,681 | 4,941 | 5,020 | 4,661 |
| OTHER COUNTRIES | | | | | | |
| France— Salts of rare earth minerals | 426 | 554 | 725 | 838 | 852 | 78 |
| Germany (Federal)— Compounds of rare earth minerals | 395 | 387 | 358 | 140 | 142 | 212 |
| Malagasy Republic— Uranothorianite .. | 302 | 55 | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| United States— Thorium ore and concentrates | — | 1 | 1 | — | — | <i>n.a.</i> |
| Brazil— Cerium chloride .. | 1,376 | 1,779 | 1,311 | 295 | 300 | <i>n.a.</i> |

(a) Containing 40-95 per cent. rare earth oxides or equivalent.

IMPORTS OF RARE EARTH MINERALS, ETC.

Long tons | Tonnes

| Importing Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|--|-------------|-------------|-------------|-------|-------|-------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— Concentrates (b) .. | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 1,392 | 1,414 | 774 |
| OTHER COUNTRIES | | | | | | |
| France— | | | | | | |
| Rare earth minerals .. | 1,115 | 69 | 525 | 2,402 | 2,441 | 2,557 |
| Salts of rare earth minerals | 359 | 304 | 171 | 744 | 756 | 209 |
| Germany (Federal)— | | | | | | |
| Salts of rare earth minerals (a) | 476 | 402 | 385 | 472 | 480 | 424 |
| United States— | | | | | | |
| Monazite sand and other thorium ore | 1,867 | 3,899 | 3,755 | 3,079 | 3,128 | 3,060 |

Rare earth minerals are also imported into Canada but statistics of imports are not recorded in the trade returns.

(a) Including uranium salts.

(b) Containing 40-95 per cent. rare earth oxides or equivalent.

SALT
PRODUCTION OF SALT

| Producing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Rock-salt | 692,000 | 1,088,000 | 1,515,000 | 1,573,000 | 1,598,000 | 1,807,000 |
| Brine-salt | 1,391,000 | 1,495,000 | 1,580,000 | 1,706,000 | 1,733,000 | <i>n.a.</i> |
| Salt in brine (a) .. | 4,918,000 | 5,050,000 | 5,494,000 | 5,608,000 | 5,698,000 | <i>n.a.</i> |
| Malta— | | | | | | |
| Sea-salt | 2,617 | 2,418 | 1,704 | 3,117 | 3,167 | 3,000 |
| Ghana | 30,000 | 29,000 | 35,356 | 15,868 | 16,123 | 47,200 |
| Kenya | 48,032 | 60,036 | 41,617 | 38,651 | 39,271 | 43,406 |
| Mauritius— | | | | | | |
| Sea-salt | 4,100 | 4,100 | <i>r</i> 4,100 | 4,400 | 4,500 | 5,400 |
| Nigeria | 802 | 818 | 2,161 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Tanzania | 35,534 | 29,805 | 33,552 | 41,282 | 41,944 | 37,278 |
| Uganda | 4,575 | <i>r</i> 4,258 | <i>r</i> 4,726 | 2,241 | 2,277 | 2,722 |
| Canada— | | | | | | |
| Rock-salt | 2,698,317 | 2,884,201 | 2,685,050 | 3,220,835 | 3,272,530 | 3,688,600 |
| Other salt (b) | 2,035,573 | 1,458,946 | 1,473,660 | 1,563,893 | 1,588,993 | 1,371,600 |
| West Indies— | | | | | | |
| Sea-salt— | | | | | | |
| Bahamas (c) | 711,250 | 629,536 | 450,538 | 755,850 | 767,981 | 1,058,986 |
| St. Kitts (c) | 2,711 | — | — | — | — | <i>n.a.</i> |
| Turks and Caicos Islands | 4,193 | 2,200 | 2,411 | 2,400 | 2,439 | 2,337 |
| Ceylon | 74,610 | 96,842 | 111,907 | 63,353 | 64,370 | 86,144 |
| Cyprus | 6,581 | 4,740 | 5,778 | 6,889 | 6,999 | 6,592 |
| India— | | | | | | |
| Rock-salt | 3,200 | 2,900 | 3,400 | 3,954 | 4,017 | 3,845 |
| Other salt | 4,395,800 | 4,957,100 | 5,500,000 | 5,500,000 | 5,588,000 | 5,780,000 |
| Goa | 18,010 | 13,385 | 11,023 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Pakistan— | | | | | | |
| Rock-salt | 248,348 | 329,023 | 337,481 | 314,549 | 319,597 | 349,082 |
| Sea-salt | 436,570 | 551,639 | 552,635 | 440,315 | 447,381 | 269,818 |
| Australia | 703,157 | 899,704 | 1,653,478 | 3,022,449 | 3,070,959 | 3,787,781 |
| New Zealand | 55,200 | 55,000 | 48,518 | 51,959 | 52,793 | 43,263 |
| TOTAL | 18,600,000 | 19,700,000 | 21,600,000 | 23,800,000 | 24,200,000 | 25,900,000 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Rock-salt | 884 | 948 | 911 | 925 | 940 | 1,036 |
| Evaporated salt | 187,957 | 197,637 | 221,381 | 261,069 | 265,258 | <i>n.a.</i> |
| Bulgaria | 123,000 | <i>r</i> 116,000 | <i>r</i> 124,000 | 133,000 | 135,000 | 136,000 |
| Czechoslovakia | 199,000 | 200,000 | 204,000 | 299,597 | 304,405 | 309,551 |
| France— | | | | | | |
| Rock-salt (incl. refined) | 895,312 | 971,500 | 1,139,700 | 1,203,000 | 1,222,000 | 1,137,000 |
| Salt in brine | 2,518,392 | 2,416,800 | 2,624,900 | 2,937,000 | 2,984,000 | 3,108,000 |
| Sea-salt | 1,516,110 | 983,600 | 949,800 | 1,275,000 | 1,296,000 | 1,250,000 |
| Germany (Federal)— | | | | | | |
| Rock-salt | 5,084,048 | 6,028,681 | 6,674,018 | 8,193,361 | 8,324,840 | 6,719,354 |
| Brine-salt | 580,818 | 643,909 | 683,767 | 690,092 | 701,166 | 761,135 |
| Salt in brine | 1,133,795 | 1,254,267 | 1,361,297 | 1,398,520 | 1,420,962 | 1,440,278 |

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

(b) Including salt in brine.

(c) Exports.

PRODUCTION OF SALT (cont.)

| Producing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-------------|-------------|--------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Germany (East) | 1,804,000 | 1,939,000 | (a)2,000,000 | 2,097,000 | 2,130,000 | 2,171,200 |
| Greece— | | | | | | |
| Sea-salt | 95,236 | 94,679 | 74,100 | 67,000 | 68,000 | 63,817 |
| Italy— | | | | | | |
| Rock-salt and brine-salt | 2,536,348 | 2,585,000 | 2,750,000 | 2,826,000 | 2,871,000 | 3,393,000 |
| Netherlands (brine-salt) | 1,894,600 | 2,376,000 | 2,627,000 | 2,826,000 | 2,871,000 | 3,167,000 |
| Poland— | | | | | | |
| Rock-salt | 817,000 | 954,000 | 1,148,000 | 1,205,000 | 1,224,000 | 1,222,000 |
| Brine-salt | 289,000 | 286,000 | 267,000 | } 1,652,000 | 1,679,000 | 1,740,000 |
| Other salt | 1,342,000 | 1,352,000 | 1,358,000 | | | |
| Portugal— | | | | | | |
| Rock-salt | 110,929 | 148,919 | 163,411 | 191,418 | 194,490 | 235,368 |
| Sea-salt | 315,566 | 259,157 | 139,942 | 203,909 | 207,181 | 161,479 |
| Roumania | 2,026,000 | 2,331,000 | 2,682,000 | 2,817,000 | 2,862,000 | 2,948,000 |
| Spain— | | | | | | |
| Rock-salt | 833,441 | 896,955 | 1,059,322 | 1,107,997 | 1,125,777 | a 1,100,000 |
| Sea-salt | 887,278 | 894,353 | 758,962 | 913,691 | 928,353 | a 920,000 |
| Other salt | 22,462 | 23,825 | 14,302 | 25,713 | 26,126 | n.a. |
| Switzerland | 212,954 | 251,033 | 262,382 | 328,570 | 333,845 | 290,829 |
| U.S.S.R. | 10,432,000 | 10,826,000 | 11,811,000 | a12,768,000 | a12,973,000 | a12,973,000 |
| Yugoslavia— | | | | | | |
| Sea-salt | 40,000 | 40,407 | } 208,652 | 206,250 | 209,560 | 202,485 |
| Evaporated salt.. .. | 126,000 | 124,994 | | | | |
| Algeria— | | | | | | |
| Brine-salt and sea-salt.. | (a) 115,000 | (a) 118,000 | 147,000 | (a) 98,000 | (a) 99,000 | 116,500 |
| Angola | 76,460 | 71,351 | 78,915 | 86,357 | 87,743 | 90,284 |
| Cape Verde Islands | 20,000 | 31,000 | 27,000 | 16,550 | 16,816 | 32,937 |
| Egypt | 574,363 | 611,930 | 378,700 | 436,600 | 443,600 | 424,508 |
| Ethiopia (c) | 202,000 | 229,000 | 234,000 | 256,000 | 260,000 | 254,000 |
| Libya | 2,500 | 1,200 | 9,092 | (a) 16,000 | (a) 16,000 | (a) 16,000 |
| Morocco | 20,029 | 39,900 | 65,666 | 56,174 | 57,075 | 53,102 |
| Mozambique | 37,340 | 18,241 | 9,394 | 28,288 | 28,742 | 27,743 |
| Senegal | 69,888 | 82,238 | 78,600 | 115,889 | 117,749 | 116,000 |
| South Africa | 311,671 | 336,262 | 371,967 | 413,426 | 420,060 | 352,466 |
| South West Africa | n.a. | (a) 108,000 | (a) 108,000 | (a) 108,000 | (a) 110,000 | (a) 110,000 |
| Sudan | (a) 39,000 | 50,000 | 50,000 | 52,000 | 53,000 | 58,000 |
| Tunisia (sea-salt) | 315,000 | 349,000 | 279,000 | 296,000 | 301,000 | 351,000 |
| Costa Rica (b) | 12,000 | 11,000 | 9,000 | 10,000 | 10,000 | 9,000 |
| Dominican Republic— | | | | | | |
| Rock-salt | 905 | 1,673 | n.a. | — | — | 1,848 |
| Sea-salt | 15,517 | 27,678 | 25,145 | 37,357 | 37,956 | 36,707 |
| Guatemala (sea-salt) | 14,366 | 13,000 | 12,036 | 12,036 | 12,229 | 15,997 |
| Haiti (b) | 10,000 | 10,000 | n.a. | n.a. | n.a. | n.a. |
| Honduras | 23,113 | 22,149 | 27,362 | (a) 27,000 | (a) 27,000 | (a) 30,000 |
| Mexico | 3,278,000 | 3,541,000 | 3,828,000 | 4,087,000 | 4,153,000 | 4,360,000 |
| Nicaragua (sea-salt) | 40,169 | 65,990 | 70,666 | 109,936 | 111,700 | 45,000 |
| Panama (sea-salt) | 10,500 | 8,000 | 11,000 | 7,000 | 7,000 | n.a. |
| Salvador (sea-salt) | 24,113 | 23,847 | 26,793 | 31,000 | 31,000 | 31,000 |

(a) United States Bureau of Mines' estimate.

(b) Estimated.

(c) Years ended September 10 of year stated.

PRODUCTION OF SALT (cont.)

| Producing Country and Description | Long tons | | | | Tonnes | |
|------------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| United States (e)— | | | | | | |
| Rock-salt | 10,412,000 | 11,126,000 | 11,962,000 | 12,652,000 | 12,855,000 | 12,428,000 |
| Salt in brine | 19,639,000 | 20,796,000 | 22,487,000 | 23,418,000 | 23,794,000 | 22,180,000 |
| Evaporated salt | 4,722,000 | 4,930,000 | 5,056,000 | 4,909,000 | 4,988,000 | 5,378,000 |
| Argentina— | | | | | | |
| Rock-salt | 2,739 | 1,758 | 1,455 | 1,142 | 1,160 | } b1,040,000 |
| Other salt | 841,327 | 726,752 | 462,932 | 450,339 | 457,566 | |
| Brazil (sea-salt) | 1,023,280 | 1,425,817 | 1,603,771 | 1,797,330 | 1,826,172 | 1,477,000 |
| Chile | 411,191 | 817,407 | 1,323,096 | 508,000 | 516,000 | 425,000 |
| Colombia— | | | | | | |
| Rock-salt | 303,553 | 317,348 | 340,285 | 532,335 | 540,873 | 342,943 |
| Sea-salt | 156,612 | 187,632 | 296,869 | 230,280 | 233,974 | 305,000 |
| Ecuador (sea-salt) | 20,000 | 40,000 | 40,000 | n.a. | n.a. | n.a. |
| Peru— | | | | | | |
| Rock-salt | 10,327 | 10,178 | 7,065 | 3,716 | 3,776 | } b 180,000 |
| Sea-salt | 122,132 | 87,264 | 72,558 | 168,917 | 171,628 | |
| Brine-salt | 14,821 | 17,045 | 11,711 | 15,000 | 15,000 | |
| Venezuela (sea-salt) | 168,266 | 124,000 | 168,000 | 262,000 | 266,000 | 263,000 |
| Afghanistan (d) | 30,000 | 36,900 | 36,600 | (a) 40,000 | (a) 40,000 | (a) 40,000 |
| Burma— | | | | | | |
| Sea-salt | } 166,000 | } 130,000 | } 180,000 | } 160,000 | } 160,000 | } 186,000 |
| Brine-salt | | | | | | |
| China (a) | 13,000,000 | 15,000,000 | 15,000,000 | 16,000,000 | 16,000,000 | 15,000,000 |
| Formosa (sea-salt) | 509,330 | 306,530 | 376,864 | 527,000 | 535,000 | 670,000 |
| Indonesia | (b) 296,000 | (b) 79,000 | (b) 18,000 | (b) 18,000 | (b) 18,000 | (b) 18,000 |
| Iran (d) | 254,000 | 271,000 | 305,000 | 344,000 | 350,000 | 390,000 |
| Iraq (c) | (b) 59,000 | 42,000 | 49,000 | 45,000 | 46,000 | 54,000 |
| Israel | 56,179 | 64,450 | 65,999 | 65,253 | 66,300 | 79,464 |
| Japan— | | | | | | |
| Government-licensed plants | 958,000 | 952,000 | 966,000 | 946,000 | 961,000 | 946,000 |
| Jordan (brine-salt) | 13,982 | 17,217 | 19,109 | 15,184 | 15,428 | 17,334 |
| Korea (North) | (b) 500,000 | (b) 500,000 | (b) 540,000 | (b) 540,000 | (b) 550,000 | (b) 550,000 |
| Korea (South) | 602,364 | 552,000 | 284,000 | 399,000 | 405,000 | 372,000 |
| Lebanon (sea-salt) (a) | 25,000 | 25,000 | 25,000 | 25,000 | 25,000 | 30,000 |
| Philippine Republic— | | | | | | |
| Sea-salt | 116,000 | 189,000 | 227,000 | 207,000 | 210,000 | 235,000 |
| Southern Yemen | 59,000 | 77,000 | 62,000 | (a) 60,000 | (a) 60,000 | 60,000 |
| Syria | (b) 20,000 | (b) 20,000 | (b) 21,000 | (b) 21,000 | (b) 21,000 | (b) 21,000 |
| Thailand | (b) 110,000 | (b) 150,000 | (b) 200,000 | (b) 200,000 | (b) 200,000 | (b) 160,000 |
| Turkey— | | | | | | |
| Rock-salt | 35,809 | } 560,000 | } 556,000 | } 571,000 | } 580,000 | } 660,000 |
| Lake and spring salt | 172,983 | | | | | |
| Sea-salt | 418,451 | | | | | |
| Vietnam (North) | (b) 150,000 | (b) 150,000 | (b) 150,000 | (b) 150,000 | (b) 150,000 | (b) 150,000 |
| Vietnam (South) | 154,824 | 155,780 | 116,450 | (b) 118,000 | (b) 120,000 | (b) 129,000 |
| Yemen | (b) 98,000 | (b) 80,000 | (b) 107,000 | (b) 98,000 | (b) 99,000 | (b) 100,000 |
| TOTAL* | 97,000,000 | 104,000,000 | 110,000,000 | 117,000,000 | 119,000,000 | 116,000,000 |
| WORLD'S TOTAL* | 115,000,000 | 124,000,000 | 131,000,000 | 141,000,000 | 143,000,000 | 142,000,000 |

*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' estimate.

(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 Tonnes

| Exporting Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|-----------------------------------|-------------|------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | 414,708 | 475,356 | 510,476 | 573,415 | 582,618 | 472,233 |
| Kenya | 762 | 1,555 | 202 | 668 | 679 | 681 |
| Tanzania | 10,914 | 10,609 | 12,684 | 8,410 | 8,545 | 16,280 |
| Uganda | 1,615 | 1,939 | 1,473 | 2,095 | 2,129 | 1,783 |
| Bahamas | 711,250 | 629,536 | 450,538 | 755,850 | 767,981 | 1,058,986 |
| St. Kitts | 2,711 | — | — | — | — | <i>n.a.</i> |
| Turks and Caicos Islands | 3,770 | 2,504 | 3,350 | 2,650 | 2,693 | 2,855 |
| India (b) | 281,568 | 291,609 | 264,631 | 102,696 | 104,344 | 186,818 |
| Malaysia (West) | 1,222 | 223 | 445 | 444 | 451 | 199 |
| Pakistan | (a) 124,194 | (a) 83,378 | (a) 125,890 | (a) 101,262 | (a) 102,887 | (a) 81,301 |
| Singapore | 5,675 | 6,543 | 9,367 | 6,491 | 6,595 | 10,119 |
| Australia (a)— | | | | | | |
| Refined salt | 2,129 | 1,806 | 608 | 922 | 937 | 478 |
| Other salt | 90,761 | 164,352 | 294,236 | 1,365,848 | 1,387,770 | 3,047,858 |
| OTHER COUNTRIES | | | | | | |
| Austria | 4 | 35 | 14 | 10 | 10 | 5 |
| Belgium-Luxemburg | | | | | | |
| E.U. | 3,807 | 6,453 | 6,686 | 6,971 | 7,083 | 9,406 |
| Denmark | 12,803 | 10,942 | 3,123 | 5,707 | 5,799 | 8,428 |
| France | 92,336 | 82,182 | 132,979 | 279,345 | 283,828 | 113,822 |
| Germany (Federal) | 997,547 | 1,150,775 | 1,217,214 | 1,570,198 | 1,595,395 | 1,441,886 |
| Italy | 21,075 | 20,102 | 28,915 | 218,591 | 222,099 | 160,100 |
| Netherlands | 1,133,681 | 1,399,944 | 1,603,306 | 2,032,565 | 2,065,182 | 1,937,628 |
| Norway— | | | | | | |
| Common salt | 2,946 | 3,630 | 3,069 | 1,690 | 1,717 | 1,976 |
| Poland | 141,180 | 176,911 | 196,986 | 205,955 | 209,260 | 209,364 |
| Portugal | 300 | 60 | 239 | 4,902 | 4,981 | 254 |
| Roumania | 390,238 | 477,044 | 516,000 | 594,200 | 603,700 | 633,600 |
| Spain | 294,414 | 360,844 | 268,968 | 173,927 | 176,718 | 167,487 |
| Sweden | 26 | 218 | 184 | 336 | 341 | 546 |
| Switzerland | 7 | 7 | 1,167 | 1,433 | 1,456 | 7 |
| U.S.S.R. | 265,834 | 271,000 | 218,000 | 289,000 | 293,600 | 264,500 |
| Algeria | 44,461 | 39,146 | 35,182 | 23,129 | 23,500 | 34,000 |
| Angola | 30,082 | 19,242 | 20,299 | 32,783 | 33,309 | 25,259 |
| Canary Islands (c) | 2,157 | 5,221 | 4,805 | 2,236 | 2,272 | 323 |
| Egypt | 114,199 | 47,960 | 40,431 | 47,507 | 48,269 | 38,604 |
| Ethiopia | 154,009 | 157,005 | 175,485 | 139,025 | 141,256 | 148,361 |
| Malagasy Republic | 1,293 | 2,600 | 1,839 | 5,509 | 5,597 | <i>n.a.</i> |
| Mozambique | 3,436 | 3,182 | 5,608 | 4,873 | 4,951 | 7,771 |
| Morocco | 1 | — | 105 | 2,074 | 2,107 | 160 |
| Senegal | 18,122 | 18,026 | 44,646 | 105,062 | 106,723 | 75,926 |
| South Africa | 27,576 | 35,140 | 28,268 | 28,926 | 29,390 | 35,706 |
| Sudan | 213 | 411 | 431 | 633 | 643 | 619 |
| Tunisia | 274,348 | 317,800 | 260,955 | 230,560 | 234,260 | 223,130 |
| Honduras | 6,397 | 6,508 | 4,579 | 3,920 | 3,983 | 9 |
| Mexico | 2,716,607 | 2,945,517 | 3,525,749 | 3,353,030 | 3,406,836 | 3,365,430 |
| Nicaragua | 3,492 | 3,154 | 3,290 | 4,648 | 4,723 | 9,587 |

(a) Years ended June 30 of that stated.

(b) Years ending March 31 following that stated.

(c) Excluding exports to Spain and other Spanish dependencies.

EXPORTS OF SALT (cont.)

| Exporting Country | Long tons | | | | Tonnes | |
|------------------------|-----------|-------------|---------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Salvador | 8,428 | 8,980 | 9,704 | 1,137 | 1,155 | 9,677 |
| United States | 605,115 | 649,753 | 639,502 | 377,577 | 383,636 | 608,346 |
| Argentina | 48,244 | 47,158 | 61,649 | 82,814 | 84,143 | 67,500 |
| Chile | 254,806 | 670,544 | 560,505 | 288,913 | 293,549 | <i>n.a.</i> |
| Peru | 236 | 218 | 497 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Formosa | 16,554 | 11,000 | 7,690 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Iran (a) | 3,148 | 4,644 | 2,677 | 4,098 | 4,164 | 3,076 |
| Japan | 7,669 | 392 | 1,284 | 339 | 344 | 1,018 |
| Southern Yemen .. | 71,464 | 88,284 | 59,407 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Thailand | 74,771 | 95,097 | 109,088 | 91,392 | 92,859 | 37,685 |
| Turkey | 6,693 | <i>n.a.</i> | 32,912 | <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 | Tonnes

| Importing Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|-----------------------------------|----------|----------|-----------|-----------|-----------|-----------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Salt for use of fisheries .. | 29,031 | 32,895 | 44,906 | 91,320 | 92,786 | 53,270 |
| Other salt | 7,183 | | | | | |
| Channel Islands | 778 | 1,015 | 362 | 385 | 391 | 272 |
| Malta— | | | | | | |
| Refined salt | (£5,491) | (£9,472) | (£10,774) | (£14,791) | (£14,791) | (£13,508) |
| Other salt | 56 | — | 353 | 241 | 245 | 25 |
| Gambia | 35 | 64 | 41 | 37 | 38 | n.a. |
| Ghana | 137 | 425 | 1,602 | 2,530 | 2,571 | n.a. |
| Kenya | 4,966 | 6,630 | 4,269 | 2,366 | 2,404 | 6,785 |
| Malawi | 9,125 | 10,863 | 10,279 | 10,008 | 10,168 | 10,968 |
| Mauritius | 99 | 154 | 150 | 197 | 200 | 151 |
| Nigeria | 124,029 | 127,782 | 137,939 | 141,369 | 143,638 | 273,871 |
| Seychelles | 233 | 403 | n.a. | 778 | 790 | n.a. |
| Sierra Leone | 9,291 | 8,847 | 9,623 | 10,280 | 10,445 | 7,634 |
| Tanzania | 3,138 | 5,695 | 19,799 | 10,256 | 10,421 | 4,410 |
| Uganda | 21,234 | 35,878 | 19,135 | 21,385 | 21,728 | 11,674 |
| Zambia | 11,586 | 13,368 | 44,630 | 13,134 | 13,345 | n.a. |
| Canada— | | | | | | |
| Salt for use of fisheries .. | 506,261 | 575,137 | 621,105 | 551,804 | 560,659 | 836,436 |
| Refined salt | | | | | | |
| Other salt | | | | | | |
| Antigua | 764 | n.a. | 201 | n.a. | n.a. | n.a. |
| Barbados | 1,946 | 1,906 | 1,930 | 2,282 | 2,319 | n.a. |
| Bermuda | 180 | 164 | 156 | n.a. | n.a. | 76 |
| British Honduras | 715 | 673 | 589 | 649 | 659 | 831 |
| Dominica | 422 | 361 | 346 | 418 | 425 | 344 |
| Grenada | 618 | 636 | n.a. | n.a. | n.a. | n.a. |
| Jamaica— | | | | | | |
| Rock-salt | 124 | 182 | 3,714 | 9,078 | 9,224 | 156 |
| Other salt | 11,839 | 14,019 | 11,418 | 5,957 | 6,052 | 20,351 |
| Montserrat | n.a. | 68 | n.a. | 34 | 35 | 67 |
| St. Kitts | 100 | 99 | 877 | 134 | 136 | 223 |
| St. Lucia— | | | | | | |
| Common salt | 649 | 503 | 1,065 | 823 | 836 | 400 |
| Refined salt | 4 | 3 | 63 | 72 | 73 | 42 |
| St. Vincent— | | | | | | |
| Unrefined salt | 1 | 20 | — | 282 | 287 | — |
| Refined salt | 415 | 911 | 1,192 | 2,386 | 2,424 | 9,192 |
| Trinidad and Tobago— | | | | | | |
| Rock and coarse salt | 2,749 | 2,228 | 2,231 | 2,896 | 2,942 | 3,013 |
| Refined salt | 7,670 | 8,222 | 8,658 | 7,775 | 7,900 | 8,563 |
| Virgin Islands | 15 | 21 | 21 | 28 | 28 | 33 |
| Guyana— | | | | | | |
| Rock and coarse salt | 1 | 18 | 6 | 3 | 3 | 1 |
| Refined salt, etc. | 2,832 | 3,202 | 3,025 | 3,214 | 3,266 | 3,427 |
| Brunei | 1,095 | 998 | 588 | 994 | 1,010 | n.a. |
| Ceylon— | | | | | | |
| Refined salt | 64 | 167 | 211 | n.a. | n.a. | n.a. |
| Other salt | 10,950 | 3,096 | 11 | n.a. | n.a. | n.a. |
| Cyprus | 212 | 369 | 477 | 372 | 378 | 439 |
| Hong Kong | 32,434 | 36,482 | 34,108 | 35,973 | 36,550 | 38,326 |
| India (a) | 4 | 7 | 45 | 227 | 231 | 614 |
| Malaysia (West) | 83,114 | 84,525 | 104,501 | 82,046 | 83,363 | 125,904 |
| Sabah | 3,710 | 3,636 | 6,752 | 4,442 | 4,513 | 4,157 |

(a) Years ended March 31 following that stated.

IMPORTS OF SALT (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------------|-----------------|-----------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Sarawak | 6,379 | 6,550 | 6,398 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Singapore | 27,022 | 34,356 | 92,026 | 41,537 | 42,203 | 46,844 |
| Australia (a)— | | | | | | |
| Refined salt | 9 | 211 | 6 | 16 | 16 | 13 |
| Other salt | 12,716 | 8,581 | 6,235 | 8,105 | 8,235 | 7,034 |
| Fiji | 1,961 | 2,317 | 2,560 | 2,009 | 2,041 | 2,199 |
| New Guinea (a) | 1,297 | 1,808 | 1,806 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| New Hebrides | — | 7 | 163 | 269 | 273 | 291 |
| New Zealand (a) | 43,749 | 45,046 | 35,456 | 36,832 | 37,423 | 31,018 |
| Papua (a) | 312 | 399 | 398 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Solomon Islands | 67 | 113 | 98 | 150 | 153 | 192 |
| Western Samoa | 435 | 318 | 572 | 433 | 440 | <i>n.a.</i> |
| Irish Republic— | | | | | | |
| Refined salt | 4,717 | 5,180 | 5,411 | 5,439 | 5,526 | 5,262 |
| Other salt | 41,379 | 43,745 | 45,173 | 49,957 | 50,759 | 51,549 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Common salt | 21 | 6,437 | 13,137 | 1,928 | 1,959 | 458 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Common salt | 818,204 | 999,856 | 1,018,654 | 1,254,998 | 1,275,137 | 998,027 |
| Refined salt | 110,507 | 121,855 | 128,162 | 136,889 | 139,086 | 596,280 |
| Denmark— | | | | | | |
| Rock-salt | 107,057 | 159,473 | 245,648 | 446,874 | 454,045 | 133,748 |
| Refined salt | 39,356 | 27,546 | | | | |
| Faroe Islands | 35,807 | 29,781 | 31,838 | 15,978 | 16,234 | 17,829 |
| Finland | 346,779 | 239,246 | 420,549 | 482,670 | 490,416 | 470,766 |
| France | 50,649 | 69,768 | 65,414 | 49,734 | 50,532 | 78,350 |
| Germany (Federal) | 123,598 | 143,817 | 174,396 | 332,345 | 337,678 | 428,550 |
| Greece | 8,774 | 44,492 | 46,733 | <i>n.a.</i> | <i>n.a.</i> | 80,368 |
| Iceland— | | | | | | |
| Common salt | 42,189 | 55,960 | 46,687 | 41,915 | 42,588 | 51,716 |
| Refined salt | 317 | 367 | 329 | 335 | 340 | 301 |
| Italy | 3,589 | 245 | 313 | 7,407 | 7,526 | 6,038 |
| Netherlands— | | | | | | |
| Rock-salt | 38,939 | 34,213 | 62,446 | 410,039 | 416,619 | 86,496 |
| Sea-salt, etc. | | | | | | |
| Refined salt | | | | | | |
| Norway— | | | | | | |
| Common salt | 112,559 | 147,101 | 135,565 | 190,796 | 193,858 | 188,253 |
| Refined salt | 151,838 | 170,399 | 168,652 | 143,432 | 145,734 | 182,322 |
| Portugal | 10,866 | 3,853 | 1,043 | 3,038 | 3,087 | 27,014 |
| Spain | 511 | 923 | 1,788 | 1,163 | 1,182 | 1,295 |
| Sweden | 811,043 | 240,841 | 977,585 | 1,085,000 | 1,102,412 | 949,583 |
| Switzerland | 928 | 1,575 | 1,102 | 2,986 | 3,034 | 1,898 |
| Yugoslavia | 121,756 | 135,490 | 168,330 | 143,148 | 145,445 | 119,179 |
| Cameroun | 25,194 | 18,876 | 19,739 | 21,095 | 21,434 | <i>n.a.</i> |
| Central African | | | | | | |
| Republic | 3,918 | 5,289 | 4,657 | 4,184 | 4,251 | <i>n.a.</i> |
| Congo (Brazza) | 1,667 | 3,687 | 2,082 | 2,473 | 2,513 | <i>n.a.</i> |
| Dahomey | 9,157 | 9,560 | 8,586 | 8,762 | 8,903 | 8,394 |
| Gabon | 2,430 | 2,709 | 2,548 | 3,232 | 3,284 | <i>n.a.</i> |
| Ivory Coast | <i>r</i> 23,793 | <i>r</i> 22,217 | 18,300 | 24,381 | 24,772 | 24,264 |

(a) Years ended June 30 of that stated.

IMPORTS OF SALT (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Malagasy Republic | 803 | 661 | 894 | 954 | 969 | n.a. |
| Mali | 15,993 | 12,337 | 10,249 | 15,700 | 16,000 | n.a. |
| Morocco | 69 | 41 | — | — | — | 49 |
| Mozambique | 5,842 | 1,679 | 829 | 672 | 683 | n.a. |
| Niger | 13,385 | 8,244 | 6,176 | 13,071 | 13,281 | n.a. |
| Reunion | 1,465 | 2,466 | 1,761 | n.a. | n.a. | n.a. |
| Senegal | 113 | 75 | 113 | 78 | 79 | 86 |
| South Africa | 2,104 | 1,948 | 2,609 | 2,634 | 2,677 | 2,628 |
| Sudan | 46 | 93 | 7 | 48 | 49 | 50 |
| Togo | 3,001 | 7,047 | 6,749 | 9,823 | 9,981 | 8,506 |
| Upper Volta | 12,100 | 13,092 | 9,425 | 13,153 | 13,364 | n.a. |
| Costa Rica | 4,098 | 4,040 | 3,863 | 9,485 | 9,637 | 9,960 |
| French West Indies— | | | | | | |
| Guadeloupe | 1,005 | 594 | 2,185 | n.a. | n.a. | n.a. |
| Martinique | 2,933 | 2,831 | 1,699 | n.a. | n.a. | n.a. |
| Greenland | 9,302 | 16,311 | 9,102 | 2,709 | 2,752 | 4,531 |
| Guatemala | 4,679 | 8,368 | 8,287 | 6,591 | 6,697 | 8,659 |
| Honduras | 3,860 | 1,291 | 544 | n.a. | n.a. | n.a. |
| Mexico | 5,112 | 90 | 458 | 304 | 309 | 225 |
| Netherlands Antilles | 1,090 | 989 | 848 | 1,016 | 1,032 | n.a. |
| Nicaragua | 6,791 | 16,566 | 25,029 | 14,767 | 15,004 | 22,202 |
| St. Pierre and Miquelon | 3,790 | 2,163 | 2,109 | 2,617 | 2,659 | 3,542 |
| Salvador | 1,731 | 26 | 119 | 75 | 76 | 39 |
| United States | 2,142,920 | 2,817,445 | 2,948,013 | 3,157,143 | 3,207,806 | 3,497,000 |
| Bolivia | 37 | 111 | n.a. | n.a. | n.a. | n.a. |
| Brazil | 48,712 | 641 | 6 | n.a. | n.a. | n.a. |
| Colombia | r 8 | r 9 | 11 | n.a. | n.a. | n.a. |
| French Guiana | 317 | 282 | 270 | n.a. | n.a. | n.a. |
| Peru | 2,671 | 2,882 | 3,081 | n.a. | n.a. | n.a. |
| Surinam | 1,374 | 1,396 | 1,274 | 1,474 | 1,498 | 1,565 |
| Uruguay | 50,064 | 40,146 | 39,387 | 60,531 | 61,503 | 45,488 |
| Burma | 5 | 9 | 11 | 3 | 3 | 2 |
| Iran (a) | 112 | 46 | 75 | 110 | 112 | 111 |
| Iraq | 90 | 14 | 432 | 401 | 407 | n.a. |
| Japan | 4,361,824 | 4,943,937 | 5,567,440 | 6,387,171 | 6,489,666 | 7,254,103 |
| Laos | 476 | 1,027 | 1,028 | 1,549 | 1,574 | 1,199 |
| Lebanon | 584 | 225 | 404 | 232 | 236 | 67 |
| Syria | 13,271 | 19,862 | 4,481 | 9,587 | 9,741 | 34 |
| Philippine Republic— | | | | | | |
| Crude | 10,335 | 26,513 | 8,714 | 1,884 | 1,914 | 27,152 |
| Refined | 114 | 337 | 395 | 109 | 111 | — |
| French Polynesia | 453 | 579 | 371 | n.a. | n.a. | n.a. |
| New Caledonia | 395 | n.a. | n.a. | n.a. | n.a. | n.a. |

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

SELENIUM
PRODUCTION OF SELENIUM

| Producing Country | Lb. avdp. | | | | Kilogrammes | |
|-------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Canada | 724,573 | 635,510 | r 599,415 | 663,336 | 300,884 | 325,679 |
| OTHER COUNTRIES | | | | | | |
| Belgium (b) | 72,300 | 54,500 | 45,600 | 67,700 | 30,700 | 54,700 |
| Finland | 15,000 | 15,000 | 15,000 | 15,300 | 6,940 | 6,273 |
| Sweden | 128,529 | 168,956 | 169,756 | 143,300 | 65,000 | 50,000 |
| Yugoslavia | 10,238 | 21,246 | 20,000 | 35,300 | 16,000 | 24,320 |
| Mexico | 5,000 | 2,000 | 65,000 | 278,000 | 126,000 | 52,000 |
| United States (a) | 598,400 | 633,000 | r 1,247,000 | 1,004,600 | 455,678 | 298,000 |
| Peru | 10,604 | 12,712 | 15,082 | 14,892 | 6,755 | 7,300 |
| Japan | 422,172 | 394,000 | 435,000 | 467,457 | 212,035 | 237,700 |
| WORLD'S TOTAL | 2,100,000 | 2,100,000 | 2,700,000 | 2,700,000 | 1,200,000 | 1,050,000 |

Selenium is also produced in Australia.

(a) Including selenium content of compounds.

(b) Exports.

EXPORTS OF SELENIUM

| Exporting Country | Lb. avdp. | | | | Kilogrammes | |
|-------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 73,166 | 33,187 | 28,741 |
| Canada | 539,400 | 787,100 | 872,300 | 686,100 | 311,210 | 259,228 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U. | 72,300 | 54,500 | 45,600 | 67,700 | 30,700 | 54,700 |
| Yugoslavia | 10,439 | 39,117 | 29,078 | 32,064 | 14,544 | 30,212 |
| Peru | 10,741 | 12,218 | 11,958 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Japan | 105,275 | 111,384 | 62,349 | 58,321 | 26,454 | 64,528 |

IMPORTS OF SELENIUM

Lb. avdp. | Kilogrammes

| Importing Country | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|-------------------------------|---------|-----------|---------|---------|---------|---------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom .. | 298,248 | 341,470 | 487,201 | 406,035 | 184,174 | 140,403 |
| India (c) | 19,324 | 13,159 | 12,571 | 18,979 | 8,609 | 15,705 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U. | 5,300 | 2,094 | 13,669 | 116,183 | 52,700 | 14,100 |
| France | 62,000 | 60,000 | 141,000 | 81,000 | 37,000 | 114,000 |
| Germany (Federal) .. | 293,876 | 454,593 | 506,843 | 472,891 | 214,500 | 112,600 |
| Italy | 75,178 | 50,044 | 75,838 | 39,789 | 18,048 | 21,200 |
| Spain | 13,190 | 16,175 | 19,842 | 13,228 | 6,000 | 7,000 |
| Sweden | 22,000 | 13,000 | 35,000 | 33,000 | 15,000 | 6,000 |
| Yugoslavia | 1,852 | 4,200 | 4,101 | 6,865 | 3,114 | 1,163 |
| Morocco (b) | 220 | 227 | 403 | 220 | 100 | 203 |
| United States (a) .. | 280,657 | 562,783 | 533,612 | 433,503 | 196,633 | 169,378 |
| Argentina | 15,809 | 19,899 | 23,223 | 15,148 | 6,871 | 8,680 |
| Brazil | 8,190 | 17,637 | 13,228 | 16,455 | 7,464 | n.a. |
| Peru | 847 | (b) 5,518 | 492 | n.a. | n.a. | n.a. |
| Japan | 10,578 | 15,084 | 7,445 | 12,893 | 5,848 | 1,915 |

(a) Including salts.

(c) Years ending March 31 following that stated.

(b) Including tellurium.

SILLIMANITE, Etc.
PRODUCTION OF SILLIMANITE, ETC.

| Producing Country and Description | Long tons | | | | Tonnes | |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| India— | | | | | | |
| Kyanite | 49,164 | 63,345 | 82,842 | 117,245 | 119,126 | 62,958 |
| Sillimanite | 5,705 | 4,562 | 3,883 | 4,418 | 4,489 | 4,327 |
| Australia— | | | | | | |
| Sillimanite (a) | 1,183 | 2,115 | 1,674 | 1,164 | 1,183 | 857 |
| OTHER COUNTRIES | | | | | | |
| Spain— | | | | | | |
| Andalusite | <i>n.a.</i> | <i>n.a.</i> | 2,106 | 3,002 | 3,050 | <i>n.a.</i> |
| South Africa— | | | | | | |
| Andalusite | 24,195 | 22,089 | 41,779 | 41,850 | 42,522 | 44,471 |
| Sillimanite | 34,826 | 32,671 | 27,850 | 31,412 | 31,916 | 17,460 |
| South West Africa— | | | | | | |
| Kyanite | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| United States— | | | | | | |
| Kyanite (b) | 62,000 | 60,000 | 62,000 | 67,000 | 68,000 | 69,000 |
| Korea (South)— | | | | | | |
| Andalusite | 59 | 111 | 53 | 37 | 38 | <i>n.a.</i> |

(a) In addition the following amounts of kaolinised sillimanite were produced (long tons): 1967—7,679; 1968—6,997; 1969—10,260; 1970—11,096. (Tonnes): 1970—11,274; 1971—10,187.

(b) Estimated. In addition the following amounts of synthetic mullite were produced (long tons): 1967—35,971; 1968—32,155; 1969—43,382; 1970—49,568. (Tonnes): 1970—50,363; 1971—49,965.

EXPORTS OF SILLIMANITE, ETC.

| Exporting Country and Description | Long tons | | | | Tonnes | |
|-----------------------------------|-------------|-------------|-------------|--------|--------|--------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Kyanite, sillimanite etc. | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 510 | 518 | 366 |
| India— | | | | | | |
| Kyanite | 40,011 | 49,668 | 44,920 | 68,235 | 69,330 | 42,821 |
| Sillimanite | 2,014 | 2,474 | 2,068 | 1,716 | 1,739 | 1,628 |
| OTHER COUNTRIES | | | | | | |
| France— | | | | | | |
| Kyanite, sillimanite, etc. | | | | | | |
| Crude | 750 | 363 | 547 | 699 | 710 | 596 |
| Calcined | 852 | 1,337 | 672 | 943 | 958 | 240 |

EXPORTS OF SILLIMANITE, ETC. (cont.)

| Exporting Country and Description | Long tons | | | | Tonnes | |
|--|-----------|--------|--------|--------|--------|--------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Germany (Federal)— Kyanite, sillimanite, etc. | | | | | | |
| Crude | 215 | 569 | 154 | 59 | 60 | 122 |
| Calcined | 1,616 | 1,247 | 1,074 | 1,054 | 1,071 | 163 |
| Italy— Kyanite, sillimanite, etc. | | | | | | |
| Crude | 643 | 148 | 38 | 524 | 533 | 948 |
| Calcined | | | | | | |
| South Africa— Andalusite | 7,354 | 6,487 | 14,616 | 21,152 | 21,491 | 18,413 |
| Sillimanite | 33,757 | 34,743 | 27,960 | 27,774 | 28,220 | 18,660 |
| United States— Kyanite, etc. | 19,132 | 18,283 | 17,586 | 21,450 | 21,794 | 28,625 |
| Japan— Sillimanite, etc. . . . | 152 | 883 | 2,485 | 4,057 | 4,122 | 3,995 |

IMPORTS OF SILLIMANITE, ETC.*

| Importing Country and Description | Long tons | | | | Tonnes | |
|--|-----------|--------|--------|--------|--------|--------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— Kyanite, sillimanite, etc. | 17,109 | 18,765 | 26,814 | 26,758 | 27,187 | 34,126 |
| Australia— Kyanite | 1,714 | 1,776 | 3,240 | 3,513 | 3,569 | 970 |
| Sillimanite | 572 | 758 | 302 | 8 | 8 | 5 |
| OTHER COUNTRIES | | | | | | |
| France— Kyanite, sillimanite, etc. | | | | | | |
| Crude | 2,999 | 2,672 | 1,787 | 1,948 | 1,979 | 3,193 |
| Calcined | 1,392 | 1,627 | 1,893 | 3,764 | 3,824 | 3,243 |
| Germany (Federal)— Kyanite, sillimanite, etc. | | | | | | |
| Crude | 14,686 | 18,162 | 18,258 | 20,734 | 21,067 | 22,362 |
| Calcined | 1,214 | 2,289 | 4,189 | 5,701 | 5,793 | 6,844 |
| Greece— Kyanite, sillimanite, etc. | 1,814 | 3,369 | 3,589 | 4,539 | 4,612 | 3,495 |
| Italy— Kyanite, sillimanite, etc. | 11,512 | 6,770 | 11,303 | 16,370 | 16,633 | 20,472 |
| United States— Kyanite, sillimanite, etc. | 1,626 | 1,295 | 1,864 | 1,053 | 1,070 | 1,218 |
| Argentina— Kyanite, sillimanite etc. | 544 | 191 | 293 | 1,049 | 1,066 | 443 |
| Japan— Kyanite, sillimanite, etc. | 30,307 | 30,175 | 34,273 | 38,525 | 39,143 | 26,108 |
| Thailand— Kyanite, sillimanite, etc. | 1,850 | 302 | 682 | n.a. | n.a. | n.a. |

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

SILVER
PRODUCTION OF SILVER
(Metal content)

| Producing Country | Troy ounces fine | | | | Kilogrammes | |
|--|-----------------------|-----------------------|-----------------------|-----------------------|---------------------|---------------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Kenya | 3,038 | 2,769 | 1,668 | — | — | — |
| Rhodesia | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | (<i>f</i>) 71,000 | (<i>f</i>) 2,200 | (<i>f</i>) 2,200 |
| Tanzania | 2,294 | 2,387 | 2,023 | 1,102 | 34 | 1 |
| Zambia (<i>b</i>) | 825,000 | (<i>f</i>) 830,000 | (<i>f</i>) 830,000 | (<i>f</i>) 768,000 | (<i>f</i>) 2,400 | (<i>f</i>) 2,400 |
| Canada | 36,315,189 | 45,012,797 | 43,530,941 | 44,250,804 | 1,376,356 | 1,397,730 |
| India | 111,563 | 94,073 | 105,390 | 49,512 | 1,540 | 3,774 |
| Australia | 19,842,000 | 21,394,000 | 24,457,000 | 25,992,000 | 808,443 | 685,874 |
| Fiji | 61,820 | 54,654 | 38,294 | 26,640 | 828 | 619 |
| New Guinea | 17,176 | 18,139 | 17,206 | 17,180 | 534 | 543 |
| New Zealand | — | 3,854 | 21,950 | 14,950 | 465 | 1,877 |
| TOTAL | 55,000,000 | 68,000,000 | 69,200,000 | 71,300,000 | 2,217,000 | 2,095,000 |
| OTHER COUNTRIES | | | | | | |
| Czechoslovakia (<i>d</i>) | 1,100,000 | 1,100,000 | 1,100,000 | 1,125,000 | 35,000 | 35,000 |
| Finland | 623,000 | 677,000 | 624,946 | 739,756 | 23,009 | 19,367 |
| France | 2,162,514 | 2,166,350 | 2,396,388 | 2,282,767 | 71,002 | 70,994 |
| Germany (Federal) | 2,022,300 | 1,769,300 | 1,684,442 | 1,800,000 | 56,000 | 56,500 |
| Germany (East) (<i>d</i>) | 4,800,000 | 4,800,000 | 4,800,000 | 3,215,000 | 100,000 | 50,000 |
| Greece | 239,000 | 269,000 | 257,913 | 419,921 | 13,061 | 14,194 |
| Italy | (<i>g</i>)1,382,400 | (<i>g</i>)1,155,700 | (<i>g</i>)1,832,592 | (<i>g</i>)1,063,321 | (<i>g</i>) 33,073 | (<i>g</i>) 38,439 |
| Portugal | 380,000 | 327,000 | 330,000 | 279,800 | 8,703 | 8,165 |
| Roumania (<i>d</i>) | 800,000 | 1,100,000 | 1,100,000 | 1,125,000 | 35,000 | 35,000 |
| Spain | 2,218,000 | 1,736,000 | 2,100,000 | 1,700,000 | 53,700 | 52,900 |
| Sweden | 3,455,000 | 3,523,800 | 3,683,100 | 3,949,300 | 122,836 | 121,137 |
| Yugoslavia (<i>g</i>) | 3,457,716 | 3,023,102 | 3,817,772 | 3,416,691 | 106,271 | 104,307 |
| Algeria (<i>f</i>) | 160,000 | 290,000 | 260,000 | 210,000 | 6,532 | (<i>e</i>) 3,000 |
| Morocco | 772,807 | 920,000 | 850,000 | 680,800 | 21,176 | 29,610 |
| South Africa | 3,063,505 | 3,337,048 | 3,334,614 | 3,526,969 | 109,701 | 105,071 |
| South West Africa (<i>c</i>) | 1,449,763 | 1,349,741 | <i>h</i> 1,273,000 | <i>h</i> 1,229,000 | (<i>h</i>) 38,000 | (<i>h</i>) 44,400 |
| Tunisia | 44,700 | 35,600 | 43,000 | 58,000 | 1,800 | 3,287 |
| Zaire Republic | 1,839,800 | 2,139,100 | 1,983,765 | 1,708,651 | 53,145 | 55,000 |
| Haiti (<i>f</i>) | 34,000 | <i>r</i> 17,000 | 17,000 | 17,000 | 500 | 500 |
| Honduras | 4,009,418 | 4,397,000 | 3,905,000 | 3,815,000 | 118,700 | 113,300 |
| Mexico | 38,273,350 | 40,031,000 | 42,904,359 | 42,836,424 | 1,332,362 | 1,140,166 |
| Nicaragua | 336,118 | 316,340 | 119,000 | 126,417 | 3,932 | 5,015 |
| United States | 32,344,862 | 32,728,979 | 41,906,311 | 45,005,615 | 1,399,831 | 1,292,790 |
| Argentina | 2,640,000 | 2,469,980 | 2,800,000 | 2,051,000 | 64,000 | (<i>e</i>) 64,000 |
| Bolivia (<i>a</i>) | 4,249,653 | 4,770,000 | 6,076,000 | 5,966,000 | 185,600 | 167,000 |
| Brazil | 478,700 | 451,700 | 391,300 | 357,000 | 11,104 | 19,400 |
| Chile | 3,065,504 | 3,739,324 | 3,132,768 | 2,392,668 | 74,420 | 84,897 |
| Colombia | 110,060 | 99,172 | 76,085 | 75,581 | 2,351 | 2,084 |
| Ecuador | 79,657 | 136,204 | 124,252 | 69,761 | 2,170 | (<i>e</i>) 2,000 |
| Peru (<i>e</i>) | 35,903,000 | 36,020,000 | 34,147,000 | 39,835,500 | 1,239,000 | 1,194,000 |

(a) Exports.

(b) Recovered from copper-refinery slimes.

(c) Accounted for by smelters.

(d) "Metallgesellschaft" estimate.

(e) Recoverable.

(f) Estimated.

(g) Refined.

(h) Years ended June 30 of that stated.

PRODUCTION OF SILVER (cont.)

Troy ounces fine Kilogrammes

| Producing Country | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|-----------------------------------|--------------------|--------------------|--------------------|--------------------|------------------|------------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Burma | 917,000 | 780,000 | 868,000 | 960,000 | 30,000 | 29,600 |
| China (a) | 800,000 | 800,000 | 800,000 | 800,000 | 25,000 | 30,000 |
| Formosa | 115,800 | 89,800 | 80,900 | 95,000 | 2,900 | 2,260 |
| Indonesia | 308,969 | 309,065 | 315,881 | 283,000 | 8,800 | 8,900 |
| Japan | 10,799,659 | 10,713,000 | 10,804,000 | 11,030,179 | 343,077 | 358,000 |
| Korea (South) | 587,910 | 610,607 | 629,640 | 1,694,344 | 52,700 | 46,841 |
| Korea (North) (a) | 600,000 | 700,000 | 800,000 | 800,000 | 25,000 | 30,000 |
| Philippine Republic | 1,368,976 | 1,510,500 | 1,566,312 | 1,701,889 | 52,935 | 60,336 |
| TOTAL* | 169,000,000 | 172,000,000 | 183,000,000 | 190,000,000 | 5,901,000 | 5,500,000 |
| WORLD'S TOTAL* | 224,000,000 | 240,000,000 | 252,000,000 | 261,000,000 | 8,118,000 | 7,595,000 |

*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.

TOTAL EXPORTS OF SILVER*

(Metal content)

| Exporting Country and Description | Troy ounces fine | | | | Kilogrammes | |
|-----------------------------------|------------------|-------------|------------|------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Bullion | 31,714,026 | 29,418,055 | 18,591,796 | 22,552,325 | 701,455 | 1,201,804 |
| Tanzania— | | | | | | |
| Refined bullion | 2,293 | 2,386 | 2,023 | 900 | 28 | 1 |
| Zambia— | | | | | | |
| Bullion | 166,000 | 76,097 | 49,163 | 97,491 | 3,032 | <i>n.a.</i> |
| Canada— | | | | | | |
| Ore, concentrates, etc. | 10,407,418 | 21,502,022 | 21,883,028 | 21,027,980 | 654,044 | 783,278 |
| Bullion | 13,735,675 | 28,104,562 | 34,658,937 | 24,199,524 | 752,690 | 566,126 |
| Hong Kong | | | | | | |
| Bullion | 897,118 | 1,849,448 | 763,924 | 366,115 | 11,387 | 5,893 |
| Singapore— | | | | | | |
| Bullion (b) | 1,086,000 | 2,082,000 | 982,000 | 323,700 | 10,100 | 16,800 |
| Australia (a)— | | | | | | |
| Ores and concentrates | 3,432,019 | 3,309,135 | 3,210,893 | 3,724,942 | 115,859 | 79,034 |
| Silver-lead bullion | 4,714,641 | 7,543,409 | 8,736,989 | 12,182,397 | 378,915 | 299,620 |
| Bullion, refined | 2,724,878 | 11,356,431 | 11,666,551 | 8,113,889 | 252,371 | 247,541 |
| Fiji— | | | | | | |
| Bullion | 61,690 | 54,419 | 33,698 | 26,982 | 839 | 613 |
| Irish Republic— | | | | | | |
| Bullion (b) | 16,000 | 30,000 | 110,700 | 67,400 | 2,100 | 2,200 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Bullion | 8,115,000 | 17,188,000 | 45,091,400 | 37,709,000 | 1,172,900 | <i>n.a.</i> |
| Denmark— | | | | | | |
| Bullion | 11,000 | 82,000 | 636,000 | 150,790 | 4,690 | 14,200 |
| Beaten, rolled or drawn | 6,000 | 20,000 | 19,300 | 12,860 | 400 | 1,300 |
| France— | | | | | | |
| Bullion and scrap | 773,000 | 8,645,000 | 3,518,000 | 3,078,000 | 95,735 | 122,887 |
| Beaten, rolled or drawn | 1,409,000 | 1,624,000 | 2,780,000 | 2,315,000 | 71,995 | 62,011 |
| Germany (Federal)— | | | | | | |
| Bullion | 13,542,000 | 23,940,000 | 27,683,000 | 14,231,000 | 442,650 | 442,401 |
| Netherlands— | | | | | | |
| Bullion and scrap | 722,000 | 1,659,900 | 3,122,600 | 5,311,000 | 165,189 | 124,517 |
| Beaten, rolled or drawn | 217,500 | 480,500 | 1,247,800 | 571,400 | 17,772 | 14,824 |
| Sweden— | | | | | | |
| Bullion | 1,800,000 | 4,018,800 | 5,626,400 | 5,433,500 | 169,000 | 176,000 |
| Switzerland— | | | | | | |
| Bullion | 1,676,000 | 407,000 | 3,743,000 | 2,450,400 | 76,216 | 121,863 |
| Yugoslavia— | | | | | | |
| Bullion | 2,616,000 | 2,320,000 | 3,255,000 | 2,748,000 | 85,483 | 90,327 |
| Morocco— | | | | | | |
| Bullion | 758,000 | 915,000 | 848,890 | 567,200 | 17,641 | 15,333 |
| South Africa— | | | | | | |
| Bullion | 11,175,744 | 4,108,791 | 3,713,085 | 2,499,896 | 77,755 | 111,010 |
| Guatemala (c)— | | | | | | |
| Ore and base bullion | 9,000 | <i>n.a.</i> | 20,000 | 3,000 | 93 | 4,664 |
| Honduras— | | | | | | |
| Ore and base bullion | 3,845,394 | 1,982,351 | 2,003,634 | 3,996,948 | 124,319 | 85,745 |

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

(a) Years ended June 30 of that stated.

(b) Estimated.

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

EXPORTS OF SILVER (cont.)

| Exporting Country and Description | Troy ounces fine | | | | Kilogrammes | |
|--|------------------|------------------|-------------|--------------------|-------------------|------------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Mexico— | | | | | | |
| Bullion, etc. | 28,936,000 | 37,320,000 | 27,653,000 | 17,262,000 | 536,900 | 669,793 |
| Nicaragua— | | | | | | |
| Bullion | 181,870 | 159,693 | 168,051 | 126,417 | 3,932 | 5,015 |
| United States— | | | | | | |
| Ore and base bullion | 2,365,000 | 23,129,000 | 31,047,000 | <i>c</i> 1,013,000 | <i>(c)</i> 31,500 | <i>(c)</i> 5,398 |
| Refined bullion | 68,404,000 | 102,632,000 | 57,956,000 | 17,239,000 | 536,200 | 264,268 |
| Argentina— | | | | | | |
| Bullion, etc. | <i>r</i> 746,941 | <i>r</i> 540,442 | 17,683 | 131,847 | 4,101 | 23,300 |
| Bolivia— | | | | | | |
| Ores, etc. | 4,249,653 | 4,770,000 | 6,076,000 | 5,966,000 | 185,600 | 167,000 |
| Chile— | | | | | | |
| Ores, etc. | 2,377,194 | 2,456,317 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ecuador <i>(a)</i> — | | | | | | |
| Ore and base bullion | 29,000 | 13,000 | 23,000 | <i>n.a.</i> | <i>n.a.</i> | — |
| Peru— | | | | | | |
| Ores and concentrates | | | | | | |
| Bullion | 30,768,258 | 33,100,000 | 36,000,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Burma— | | | | | | |
| Bullion | 400,957 | 299,934 | 2,599,184 | 1,057,000 | 32,877 | 14,039 |
| Japan— | | | | | | |
| Bullion and scrap <i>(b)</i> | 167,259 | 701,819 | 1,489,427 | 256,879 | 7,990 | 21,290 |
| Philippine Republic <i>(a)</i> — | | | | | | |
| Ore and base bullion | 317,000 | 358,000 | 300,000 | 264,353 | 8,222 | 6,720 |

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

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

(c) Ores and concentrates.

TOTAL IMPORTS OF SILVER*
(Metal content)

| Importing Country and Description | Troy ounces fine | | | | Kilogrammes | |
|-----------------------------------|----------------------|----------------|--------------------|---------------------|--------------------|--------------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Unrefined bullion .. | 13,226,990 | 53,171,493 | 19,673,284 | 11,933,624 | 371,177 | 482,436 |
| Refined bullion .. | 50,575,441 | 72,706,499 | 104,234,170 | 38,021,346 | 1,182,596 | 510,396 |
| Malta— | | | | | | |
| Bullion (c) | 15,749 | 6,289 | 5,081 | 18,839 | 586 | 912 |
| Nigeria— | | | | | | |
| Bullion (c) | 7,263 | 1,368 | 13,186 | 1,390,112 | 43,237 | 59,873 |
| Zambia— | | | | | | |
| Bullion | 812 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Canada— | | | | | | |
| Bullion | 5,383,872 | 14,060,635 | 19,168,785 | 4,319,357 | 134,347 | 22,482 |
| Jamaica— | | | | | | |
| Bullion | 17,500 | <i>n.a.</i> | — | 57,442 | 26,055 | <i>n.a.</i> |
| Trinidad and Tobago— | | | | | | |
| Bullion | 27,868 | 48,734 | 24,469 | 18,849 | 586 | 1,021 |
| Guyana— | | | | | | |
| Bullion (c) | 7,134 | <i>r</i> 5,889 | (<i>b</i>) 6,032 | (<i>b</i>) 11,267 | (<i>b</i>) 350 | 337 |
| Ceylon— | | | | | | |
| Bullion | 6,523 | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Cyprus— | | | | | | |
| Bullion | (<i>c</i>) 112,000 | 54,898 | 27,501 | (<i>c</i>) 72,933 | (<i>c</i>) 2,268 | (<i>c</i>) 4,544 |
| Hong Kong— | | | | | | |
| Bullion | 252,261 | 484,222 | 346,536 | 170,675 | 5,309 | 3,805 |
| India — | | | | | | |
| Bullion | 9,709 | 1,897 | 15,850 | 34,112 | 1,061 | 1,230 |
| Malaysia (West)— | | | | | | |
| Bullion (<i>b</i>) | 732 | 1,868 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sarawak— | | | | | | |
| Bullion | 58 | 7 | 58 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Singapore— | | | | | | |
| Bullion (<i>b</i>) | 7,000 | 158,000 | 126,400 | 627,600 | 19,520 | 890 |
| Australia (<i>a</i>)— | | | | | | |
| Bullion | 107,001 | 77,878 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| New Zealand (<i>a</i>)— | | | | | | |
| Beaten, rolled or drawn | 18,475 | — | 5,935 | 15,708 | 489 | <i>n.a.</i> |
| Irish Republic— | | | | | | |
| Bullion (<i>b</i>) | 41,724 | 13,200 | <i>r</i> 600 | — | — | 8 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Bullion | 3,273,000 | 2,363,080 | 3,494,785 | 2,739,200 | 85,200 | 127,900 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Bullion | 10,198,200 | 35,066,800 | 19,425,479 | 12,722,000 | 395,700 | <i>n.a.</i> |
| Denmark— | | | | | | |
| Bullion | 546,241 | 311,862 | 221,840 | 180,044 | 5,600 | 20,300 |
| Beaten, rolled or drawn | 3,628,211 | 2,621,893 | 2,790,684 | 3,006,094 | 93,500 | 71,300 |
| Finland— | | | | | | |
| Bullion, etc. | 1,876,000 | 648,156 | 737,634 | 716,575 | 22,288 | 22,918 |
| France— | | | | | | |
| Bullion and scrap .. | 18,578,242 | 29,152,580 | 18,602,774 | 14,163,044 | 440,520 | 525,932 |
| Beaten, rolled or drawn | 1,530,665 | 1,760,643 | 2,556,373 | 1,933,931 | 60,152 | 70,063 |
| Germany (Federal)— | | | | | | |
| Bullion | 47,720,000 | 59,990,100 | 78,125,900 | 61,139,400 | 1,901,650 | 1,744,000 |

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

(a) Years ended June 30 of that stated.

(c) Including partly worked.

(b) Estimated.

IMPORTS OF SILVER (cont.)

| Importing Country and Description | Troy ounces fine | | | | Kilogrammes | |
|--------------------------------------|------------------|------------|------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Netherlands— | | | | | | |
| Bullion and scrap .. | 1,513,400 | 3,545,000 | 5,020,800 | 3,015,500 | 93,793 | 139,174 |
| Beaten, rolled or drawn | 2,056,700 | 2,622,400 | 2,723,600 | 3,057,600 | 95,103 | 84,682 |
| Norway— | | | | | | |
| Bullion | 1,051,000 | 827,000 | 2,026,000 | 1,927,400 | 59,950 | 38,773 |
| Beaten, rolled or drawn | 1,978,000 | 1,780,000 | 1,740,000 | 2,173,300 | 67,597 | 56,712 |
| Portugal— | | | | | | |
| Bullion and scrap .. | 908,000 | 541,700 | 520,868 | 793,384 | 24,677 | 34,447 |
| Beaten, rolled and drawn | 74,000 | 60,600 | 115,456 | 93,076 | 2,895 | 4,493 |
| Spain | | | | | | |
| Bullion | 3,951,905 | 2,089,669 | 2,218,000 | 1,382,000 | 43,000 | 109,000 |
| Sweden— | | | | | | |
| Bullion | 386,000 | 386,000 | 418,000 | 450,000 | 14,000 | 15,000 |
| Switzerland— | | | | | | |
| Bullion | 18,636,000 | 16,347,390 | 3,743,000 | 7,099,700 | 220,825 | 598,079 |
| South Africa— | | | | | | |
| Bullion | 161,719 | 237,104 | 191,526 | 250,511 | 7,791 | 4,157 |
| Guatemala— | | | | | | |
| Bullion | 800 | 2,668 | 1,929 | 1,930 | 60 | 119 |
| United States— | | | | | | |
| Ore and base bullion .. | 25,642,000 | 28,786,000 | 31,888,000 | a29,246,000 | (a) 909,700 | (a) 970,624 |
| Refined bullion | 29,878,000 | 41,923,000 | 39,543,000 | 32,571,028 | 1,013,000 | 736,790 |
| Brazil— | | | | | | |
| Bullion | 901,000 | 983,330 | 1,069,109 | 1,482,115 | 46,100 | n.a. |
| Colombia— | | | | | | |
| Bullion and scrap .. | r 16,557 | r 23,148 | 5,433 | n.a. | n.a. | n.a. |
| Japan— | | | | | | |
| Bullion | 10,157,000 | 12,291,443 | 10,449,817 | 13,270,437 | 412,700 | 309,132 |
| Lebanon— | | | | | | |
| Bullion and scrap .. | 46,900 | 19,300 | 18,300 | 32,800 | 1,021 | 16,513 |
| Turkey— | | | | | | |
| Bullion, etc. | 48,000 | 1,000 | r 25,800 | 37,300 | 1,161 | n.a. |

(a) Ores and concentrates.

STRONTIUM MINERALS
PRODUCTION OF STRONTIUM MINERALS

| Producing Country and Description | Long tons | | | | Tonnes | |
|-----------------------------------|-------------|-------------|--------|--------|--------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Celestite | 6,680 | 7,763 | 11,536 | 9,351 | 9,501 | 9,749 |
| Canada (a)— | | | | | | |
| Celestite | — | — | 6,000 | 10,000 | 10,000 | 15,000 |
| Pakistan— | | | | | | |
| Celestite | 373 | 640 | 760 | 295 | 299 | 230 |
| OTHER COUNTRIES | | | | | | |
| Italy— | | | | | | |
| Celestite | 650 | 766 | 911 | 831 | 844 | <i>n.a.</i> |
| Spain— | | | | | | |
| Celestite | <i>n.a.</i> | <i>n.a.</i> | 3,543 | 6,889 | 7,000 | <i>n.a.</i> |
| Mexico— | | | | | | |
| Celestite | 2,503 | 3,398 | 17,791 | 25,200 | 25,600 | 33,231 |
| Argentina— | | | | | | |
| Celestite | 30 | 69 | 13 | 419 | 426 | <i>n.a.</i> |

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

(a) Estimated strontium sulphate content of crude material stockpiled or produced.

EXPORTS OF STRONTIUM MINERALS, ETC.

| Exporting Country and Description | Long tons | | | | Tonnes | |
|-----------------------------------|-----------|-------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Celestite | 3,863 | 5,824 | 7,546 | 5,758 | 5,850 | 5,635 |
| OTHER COUNTRIES | | | | | | |
| France— | | | | | | |
| Oxide | 5 | 79 | 32 | 35 | 36 | 45 |
| Italy— | | | | | | |
| Strontium minerals .. | 118 | 80 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Spain (a)— | | | | | | |
| Strontium minerals .. | — | 3,967 | 2,011 | 3,000 | 3,048 | <i>n.a.</i> |
| Mexico— | | | | | | |
| Celestite | 2,788 | 2,500 | 17,781 | 27,102 | 27,537 | 32,138 |

(a) Imports into United States.

IMPORTS OF STRONTIUM MINERALS, ETC.

| Importing Country and Description | Long tons | | | | Tonnes | |
|-----------------------------------|-----------|-------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES | | | | | | |
| France— | | | | | | |
| Strontium minerals .. | 31 | <i>r</i> 54 | 849 | 866 | 880 | 1,256 |
| United States— | | | | | | |
| Strontium minerals .. | 5,011 | 11,514 | 24,824 | 33,262 | 33,796 | <i>n.a.</i> |
| Strontium compounds .. | 7 | 16 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |

SULPHUR
(see also Pyrites)
PRODUCTION OF SULPHUR

| Producing Country and Description | Long tons | | | | | Tonnes | | | | | | |
|---|---------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 | |
| | Estimated Sulphur Content | | | | | | | | | | | |
| COMMONWEALTH COUNTRIES | | | | | | | | | | | | |
| United Kingdom— | | | | | | | | | | | | |
| Spent oxide .. | n.a. | n.a. | n.a. | n.a. | n.a. | 81,101 | 66,536 | 53,217 | 34,110 | 34,657 | 18,420 | |
| Anhydrite (a) .. | n.a. | n.a. | n.a. | n.a. | n.a. | 237,641 | 263,529 | 252,067 | 248,113 | 252,094 | 222,204 | |
| Other (b) .. | n.a. | n.a. | n.a. | n.a. | n.a. | 45,967 | 46,131 | 42,265 | 36,128 | 36,708 | 25,798 | |
| Canada— | | | | | | | | | | | | |
| Smelter gas .. | n.a. | n.a. | n.a. | n.a. | n.a. | 528,603 | 594,973 | 603,740 | 630,246 | 640,360 | 613,000 | |
| Hydrogen sulphide (g)(f) .. | n.a. | n.a. | n.a. | n.a. | n.a. | 2,073,413 | 2,304,237 | 2,654,916 | 3,168,134 | 3,218,973 | 2,781,000 | |
| Australia— | | | | | | | | | | | | |
| Sulphur content of: zinc concentrates .. | n.a. | n.a. | n.a. | n.a. | n.a. | 219,826 | 224,105 | 270,997 | 265,642 | 269,906 | 249,826 | |
| lead concentrates .. | n.a. | n.a. | n.a. | n.a. | n.a. | 56,490 | 50,244 | 56,367 | 59,420 | 60,374 | 55,801 | |
| OTHER COUNTRIES | | | | | | | | | | | | |
| Austria— | | | | | | | | | | | | |
| Recovered sulphur .. | 31,052 | 31,372 | 40,334 | n.a. | n.a. | 31,052 | 31,372 | 40,334 | n.a. | n.a. | n.a. | |
| Belgium— | | | | | | | | | | | | |
| By-product sulphur .. | 8,190 | 8,521 | 10,000 | 10,000 | 10,000 | 8,190 | 8,521 | 10,000 | 10,000 | 10,000 | n.a. | |
| Bulgaria (c) .. | 8,200 | 8,500 | 8,563 | 7,000 | 7,000 | 8,200 | 8,500 | 8,563 | 7,000 | 7,000 | n.a. | |
| France— | | | | | | | | | | | | |
| Sulphur (d) .. | 1,638,824 | 1,609,000 | 1,705,000 | 1,714,000 | 1,735,000 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | |
| Finland (e) .. | e 103,000 | e 123,000 | e 110,000 | e 113,000 | e 114,000 | 103,000 | 123,000 | 110,000 | 113,000 | 114,000 | 101,000 | |
| Germany (Federal)— | | | | | | | | | | | | |
| Refined sulphur .. | 104,071 | 124,877 | 127,033 | 173,092 | 175,870 | 104,071 | 124,877 | 127,033 | 173,092 | 175,870 | 183,944 | |
| Germany (East)— | | | | | | | | | | | | |
| Sulphur .. | 121,339 | 117,597 | 107,823 | 107,300 | 109,022 | 121,339 | 117,597 | 107,823 | 107,300 | 109,022 | 99,915 | |

(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 natural gas and nickel sulphide.

(g) Sales.

(h) United States Bureau of Mines' estimate.

PRODUCTION OF SULPHUR (cont.)

| Producing Country and Description | Long tons | | | | | Tonnes | | | | | | |
|-----------------------------------|---------------------------|-----------|------------|------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 | |
| | Estimated Sulphur Content | | | | | | | | | | | |
| OTHER COUNTRIES (cont.) | | | | | | | | | | | | |
| Italy— | | | | | | | | | | | | |
| Sulphur rock .. | 493,078 | 532,552 | 406,938 | 348,624 | 354,218 | 573,823 | 65,000 | 69,000 | 52,000 | 45,000 | 46,000 | 75,000 |
| Fused (c) .. | 9,681 | 6,916 | 1,300 | 1,659 | 1,686 | 14,325 | 9,681 | 6,916 | 1,300 | 1,659 | 1,686 | 14,325 |
| Ground sulphur rock (c) .. | 14,355 | 22,182 | n.a. | 28,133 | 28,584 | 21,345 | 4,300 | 6,600 | n.a. | 8,400 | 8,600 | 6,400 |
| Netherlands (f) .. | 42,000 | 42,000 | 42,000 | n.a. | n.a. | n.a. | 42,000 | 42,000 | 42,000 | 31,000 | 32,000 | n.a. |
| Poland— | | | | | | | | | | | | |
| Native sulphur .. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 710,000 | 1,295,000 | 1,911,000 | 2,642,000 | 2,684,000 | 2,713,000 |
| Spain— | | | | | | | | | | | | |
| Refined sulphur (h) .. | 42,120 | 27,823 | 28,082 | 30,854 | 31,349 | 34,934 | 42,120 | 27,823 | 28,082 | 30,854 | 31,349 | 34,934 |
| Sweden— | | | | | | | | | | | | |
| Sulphur .. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 2,068 | 6,254 | 6,401 | 3,800 | 3,861 | n.a. |
| U.S.S.R. (d) .. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 1,034,000 | 1,033,000 | 1,102,000 | 1,102,000 | 1,120,000 | n.a. |
| Native sulphur .. | 443,000 | 443,000 | 472,000 | 472,000 | 479,000 | n.a. | 443,000 | 443,000 | 472,000 | 472,000 | 479,000 | n.a. |
| By-product sulphur .. | | | | | | | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Algeria— | | | | | | | | | | | | |
| Sulphur .. | 20,784 | 21,370 | 22,000 | 16,000 | 16,000 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Egypt— | | | | | | | | | | | | |
| By-product sulphur (a) .. | 8,839 | 3,149 | 500 | (d) 1,000 | (d) 1,000 | n.a. | 8,839 | 3,149 | 500 | 1,000 | 1,000 | n.a. |
| South Africa— | | | | | | | | | | | | |
| By-product sulphur (a) .. | (d) 6,000 | (d) 6,000 | (d) 12,000 | (d) 12,000 | (d) 12,000 | n.a. | 6,000 | 6,000 | 12,000 | 12,000 | 12,000 | n.a. |
| Mexico— | | | | | | | | | | | | |
| Crude sulphur (f) .. | 1,793,085 | 1,582,206 | 1,605,601 | 1,258,156 | 1,278,346 | 1,075,472 | 1,793,085 | 1,582,206 | 1,605,601 | 1,258,156 | 1,278,346 | 1,075,472 |
| Sulphur ore (g) .. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 23,942 | 23,922 | 26,421 | 23,666 | 24,046 | 23,004 |
| Refined sulphur (e) .. | 47,577 | 52,204 | 57,043 | 58,790 | 59,733 | 62,612 | 47,577 | 52,204 | 57,043 | 58,790 | 59,733 | 62,612 |
| United States— | | | | | | | | | | | | |
| Crude sulphur (f) .. | 7,014,448 | 7,458,392 | 7,145,658 | 7,081,884 | 7,195,477 | 7,137,259 | 7,014,448 | 7,458,392 | 7,145,658 | 7,081,884 | 7,195,477 | 7,137,259 |
| Sulphur ore (g) .. | 568 | 3,125 | — | — | — | n.a. | 284 | 1,563 | — | — | — | n.a. |
| Smelter gas (b) .. | 1,114,881 | 1,315,251 | 1,583,000 | 1,637,000 | 1,663,000 | 1,560,000 | 364,477 | 429,982 | 517,515 | 535,000 | 544,000 | 515,000 |

(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 | Tonnes

| Producing Country and Description | Long tons | | | | | Tonnes | | | | |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 1967 | 1968 | 1969 | 1970 | 1971 | 1967 | 1968 | 1969 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | | | | | |
| United States (cont.)— | | | | | | | | | | |
| By-product sulphur (h) | 1,270,289 | 1,358,926 | 1,422,000 | 1,457,000 | 1,480,000 | 1,267,955 | 1,353,692 | 1,414,000 | 1,449,000 | 1,472,000 |
| Hydrogen sulphide and liquid sulphur dioxide(h) | 157,262 | 247,297 | n.a. | n.a. | n.a. | 134,198 | 210,780 | n.a. | n.a. | n.a. |
| Argentina— | | | | | | | | | | |
| Refined sulphur | 32,278 | 33,107 | 34,033 | 38,939 | 39,564 | 32,278 | 33,107 | 34,033 | 38,939 | 39,564 |
| Bolivia (f)— | | | | | | | | | | |
| Refined sulphur | 49,513 | 34,869 | 35,647 | 16,054 | 16,312 | 49,513 | 34,869 | 35,647 | 16,054 | 16,312 |
| Chile— | | | | | | | | | | |
| Smelter gases, etc. (g) | n.a. | n.a. | n.a. | n.a. | n.a. | 11,995 | 11,931 | 13,321 | 9,134 | 9,281 |
| Refined sulphur | 44,988 | 40,705 | 45,979 | 46,443 | 47,188 | 44,800 | 40,705 | 45,979 | 46,443 | 47,188 |
| Colombia— | | | | | | | | | | |
| Refined sulphur | 24,000 | 28,000 | 30,000 | 31,000 | 32,000 | 24,000 | 28,000 | 30,000 | 31,000 | 32,000 |
| Ecuador— | | | | | | | | | | |
| Native sulphur | n.a. | n.a. | n.a. | n.a. | n.a. | 243 | n.a. | 500 | 500 | 500 |
| China (c)— | | | | | | | | | | |
| Native sulphur | n.a. | n.a. | n.a. | n.a. | n.a. | 118,000 | 118,000 | 118,000 | 118,000 | 120,000 |
| Recovered sulphur (d) | 128,000 | 128,000 | 128,000 | 128,000 | 130,000 | 128,000 | 128,000 | 128,000 | 128,000 | 130,000 |
| Formosa— | | | | | | | | | | |
| Refined sulphur | 6,387 | 4,362 | 4,754 | 5,964 | 6,060 | 6,387 | 4,362 | 4,754 | 5,964 | 6,060 |
| Indonesia— | | | | | | | | | | |
| Native sulphur | n.a. | n.a. | n.a. | n.a. | n.a. | (c) 1,800 | (c) 1,200 | (c) 1,200 | (c) 1,000 | (c) 1,000 |
| Iran— | | | | | | | | | | |
| By-product sulphur (a)(c) | 25,000 | 37,000 | 39,000 | 39,000 | 40,000 | 25,000 | 37,000 | 39,000 | 39,000 | 40,000 |
| Japan— | | | | | | | | | | |
| Refined sulphur (e) | 250,000 | 256,000 | 200,719 | 235,595 | 239,376 | 250,000 | 256,000 | 200,719 | 235,595 | 239,376 |
| By-product sulphur (a) | 61,201 | 73,000 | 140,000 | 100,971 | 102,591 | 61,201 | 73,000 | 140,000 | 100,971 | 102,591 |
| Philippine Republic (b) | n.a. | n.a. | n.a. | n.a. | n.a. | 24 | 41 | 31 | 40 | 41 |
| Turkey— | | | | | | | | | | |
| Refined sulphur | 25,000 | 24,000 | 25,000 | 26,400 | 26,800 | 25,000 | 24,000 | 25,000 | 26,400 | 26,800 |

Sulphur is also produced in Iraq.

(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) From sulphur rock and sulphide ores.

(f) Exports.

(g) Sulphur contained in sulphuric acid.

(h) Produced in treatment of industrial gases.

EXPORTS OF SULPHUR

| Exporting Country and Description | Long tons | | | | Tonnes | |
|---|-----------|-------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | 1,851 | <i>n.a.</i> | <i>n.a.</i> | 2,452 | 2,491 | 2,379 |
| Canada | 1,583,635 | 1,884,942 | 2,021,679 | 2,668,243 | 2,711,068 | 2,402,129 |
| Singapore— | | | | | | |
| Crude | 2,081 | 4,355 | 4,245 | 5,676 | 5,767 | 9,858 |
| Refined | 805 | 372 | 3,060 | 103 | 105 | 2,077 |
| Australia— | | | | | | |
| Zinc concentrates (<i>S content</i>) (a) | 76,000 | 80,000 | 91,000 | 121,800 | 123,700 | 96,108 |
| New Zealand (b) | 2 | 1 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Crude | 2,057 | 3 | 544 | 291 | 296 | 500 |
| Refined | 8,030 | 3,977 | 5,123 | 6,175 | 6,274 | 6,483 |
| France— | | | | | | |
| Crude | 1,012,571 | 1,039,387 | 845,137 | 1,119,166 | 1,137,125 | 948,267 |
| Unrefined ground | 4,309 | 2,822 | 2,669 | 3,449 | 3,504 | 3,616 |
| Refined lump | 2,035 | 1,380 | 2,999 | 1,011 | 1,027 | 1,040 |
| Flowers of sulphur | 3,076 | 2,708 | 3,086 | 2,179 | 2,214 | 9,149 |
| Precipitated sulphur | 2 | 8 | 50 | 34 | 35 | 85 |
| Germany (Federal) | 72,961 | 45,173 | 37,522 | 36,442 | 37,027 | 46,715 |
| Germany (East) | 11,399 | <i>n.a.</i> | 13,847 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Greece | 7,674 | 22,771 | 24,678 | 9,390 | 9,541 | 3,174 |
| Italy— | | | | | | |
| Crude | 49 | 24 | 538 | 542 | 551 | 24 |
| Refined | 2,102 | 2,900 | 5,892 | 4,975 | 5,055 | 4,012 |
| Flowers of sulphur | 326 | } 297 | } 278 | } 358 | } 364 | } 313 |
| Precipitated sulphur | 7 | | | | | |
| Netherlands— | | | | | | |
| Crude | 2,480 | 617 | 1,356 | 830 | 843 | 286 |
| Refined | 25 | 205 | 38 | 83 | 84 | 9 |
| Norway | — | — | 18 | 5 | 5 | — |
| Poland | 397,619 | 949,759 | 1,428,083 | <i>n.a.</i> | <i>n.a.</i> | 2,064,000 |
| Portugal | 2,060 | 456 | 774 | 414 | 421 | 843 |
| Spain— | | | | | | |
| Refined | 245 | 244 | 246 | 63 | 64 | 7 |
| Sweden | 24 | 18 | 4 | 30 | 30 | — |
| Switzerland | 224 | 203 | 232 | 225 | 229 | 235 |
| U.S.S.R. | 277,153 | 286,600 | 356,800 | 456,475 | 463,800 | 463,700 |
| South Africa | 4,992 | 10,945 | 2,877 | 511 | 519 | 115 |
| Mexico | 1,611,394 | 1,400,000 | 1,140,021 | 651,523 | 661,978 | 682,825 |
| United States— | | | | | | |
| Crude | 2,042,079 | 1,549,047 | 1,549,000 | 1,429,055 | 1,451,987 | 1,556,407 |
| Refined and flowers of sulphur | 149,825 | 52,786 | 2,000 | 3,835 | 3,897 | 3,806 |
| Bolivia | 49,514 | 34,869 | 35,647 | 16,054 | 16,312 | 10,500 |
| Japan | 1,947 | 25,635 | 29,671 | 1,958 | 1,989 | 13,179 |

(a) Estimated amount recoverable.

(b) Years ended June 30 of that stated.

IMPORTS OF SULPHUR

Long tons | Tonnes

| Importing Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|-----------------------------------|---------|-------------|-----------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Sulphur | 701,040 | } r 769,502 | r 730,711 | 804,950 | 817,869 | 963,916 |
| Wastes and residues | 15,360 | | | | | |
| Malta— | | | | | | |
| Crude | 20 | 7 | 45 | — | — | — |
| Flowers of sulphur | 233 | 299 | 215 | 223 | 227 | 250 |
| Kenya | 270 | 511 | 535 | 955 | 970 | 1,154 |
| Mauritius | 83 | 69 | 106 | 39 | 40 | 60 |
| Nigeria | 1,290 | 253 | 116 | 336 | 342 | 465 |
| Tanzania | 270 | 407 | 286 | 449 | 456 | 1,231 |
| Uganda | 2,746 | 1,589 | 4,461 | 4,547 | 4,620 | 5,850 |
| Zambia— | | | | | | |
| Crude | 2,836 | 3,950 | — | 22 | 22 | <i>n.a.</i> |
| Flowers of sulphur | 23 | 2,261 | 62 | 17 | 17 | <i>n.a.</i> |
| Canada | 111,412 | 67,692 | 40,632 | 47,728 | 48,494 | 27,925 |
| Jamaica | 3,477 | 1,303 | — | 2,773 | 2,818 | <i>n.a.</i> |
| Trinidad and Tobago | 14,471 | 44,080 | 18,813 | 15,495 | 15,744 | 15,325 |
| Guyana | 3 | 4 | 1 | 2 | 2 | 1 |
| Ceylon | 1,631 | 452 | 961 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Cyprus | 1,467 | 2,397 | 598 | 1,771 | 1,799 | 1,735 |
| Hong Kong | 1,605 | 1,540 | 1,808 | 2,091 | 2,125 | 1,066 |
| India | 583,281 | 384,154 | 289,515 | 513,109 | 521,343 | 420,607 |
| Malaysia (West) | 4,061 | 5,754 | 5,516 | 10,643 | 10,814 | 10,207 |
| Singapore— | | | | | | |
| Crude | — | — | 17 | 7,536 | 7,657 | 10,223 |
| Refined | 782 | 7,769 | 10,365 | 9,496 | 9,649 | 10,258 |
| Australia | 513,962 | 548,563 | 383,886 | 320,151 | 325,289 | 268,528 |
| New Zealand (a) | 187,626 | 166,425 | 157,741 | 242,997 | 246,897 | 189,997 |
| Irish Republic | 97,851 | 102,495 | 106,811 | 118,780 | 120,686 | 121,356 |
| OTHER COUNTRIES | | | | | | |
| Austria | 87,776 | 82,564 | 110,642 | 115,004 | 116,850 | 122,199 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Crude | 220,373 | 283,592 | 298,713 | 326,098 | 331,331 | 425,617 |
| Refined | 371 | 525 | 286 | 2,438 | 2,477 | 4,159 |
| Czechoslovakia | 233,000 | 282,000 | 262,000 | 298,000 | 303,000 | 279,000 |
| Denmark | 6,595 | 5,900 | 11,449 | 10,927 | 11,102 | 15,301 |
| Finland | 50,426 | 33,703 | 38,496 | 36,648 | 37,236 | 56,594 |
| France— | | | | | | |
| Crude | 231,002 | 329,303 | 345,477 | 318,819 | 323,935 | 427,961 |
| Unrefined ground | 120 | 710 | 134 | 357 | 363 | 381 |
| Refined lump | 265 | 314 | 365 | 356 | 362 | 594 |
| Precipitated | 95 | 129 | 242 | 309 | 314 | 468 |
| Germany (Federal) | 319,482 | 247,575 | 315,181 | 287,878 | 292,498 | 332,421 |
| Greece | 76,252 | 98,876 | 142,503 | 43,290 | 43,985 | 104,467 |
| Hungary | 165,347 | 242,601 | 93,592 | 125,622 | 127,638 | 110,327 |
| Italy | 75,996 | 39,900 | 200,598 | 294,019 | 298,737 | 284,574 |
| Netherlands— | | | | | | |
| Crude | 275,705 | 327,508 | 381,064 | 407,419 | 413,957 | 442,264 |
| Refined | 1,687 | 2,325 | 2,264 | 2,236 | 2,272 | 2,402 |
| Norway | 37,298 | 25,859 | 33,920 | 33,469 | 34,006 | 21,225 |
| Portugal | 18,517 | 20,481 | 26,851 | 23,686 | 24,066 | 26,133 |
| Spain | 63,204 | 53,147 | 73,333 | 60,917 | 61,894 | 71,976 |

(a) Years ended June 30 of that stated.

IMPORTS OF SULPHUR (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--|-----------|-----------|-----------|-----------|-----------|-----------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Sweden | 121,921 | 146,576 | 116,541 | 132,513 | 134,640 | 126,585 |
| Switzerland— | | | | | | |
| Crude | 41,446 | 34,684 | 54,252 | 63,716 | 64,739 | 50,895 |
| Flowers of sulphur | 184 | 331 | 207 | 283 | 288 | 287 |
| U.S.S.R. | 45,766 | 9,252 | 24,400 | 213,300 | 216,700 | 218,500 |
| Yugoslavia | 21,364 | 20,325 | 22,273 | 21,408 | 21,752 | 20,880 |
| Algeria | 23,160 | 36,368 | 33,953 | 19,484 | 19,794 | n.a. |
| Angola | 460 | 519 | 623 | 821 | 834 | 722 |
| Canary Islands— | | | | | | |
| Crude | 6,291 | 7,706 | 7,692 | 6,250 | 6,350 | 9,699 |
| Refined, etc. | | | | | | |
| Egypt | 38,800 | 56,714 | 32,824 | 46,651 | 47,400 | 54,523 |
| Ethiopia | 70 | 212 | 558 | 1,141 | 1,159 | 408 |
| Malagasy Republic | 22 | 15 | 22 | 21 | 21 | n.a. |
| Morocco— | | | | | | |
| Crude | 5,945 | 12,376 | 29,504 | 19,529 | 19,842 | 21,332 |
| Unrefined, ground | 563 | 380 | 277 | 395 | 401 | 193 |
| Refined | 140 | 120 | 89 | 98 | 100 | 164 |
| Flowers of sulphur | 1,604 | 1,709 | 213 | 414 | 421 | 56 |
| Mozambique | 377 | 4,917 | 1,948 | 4,564 | 4,637 | n.a. |
| Senegal— | | | | | | |
| Crude | n.a. | 14 | 15 | 7 | 7 | 10 |
| Flowers of sulphur | 18 | 2,959 | 6,205 | 12,721 | 12,925 | 24,242 |
| South Africa | 197,260 | 217,845 | 156,467 | 165,270 | 167,922 | 211,288 |
| Tunisia— | | | | | | |
| Crude and unrefined | 122,195 | 142,600 | 131,249 | 166,296 | 168,965 | 172,341 |
| Refined and flowers of sulphur | 788 | — | 90 | 8 | 8 | 6 |
| Costa Rica | 15 | 36 | 47 | 96 | 98 | 106 |
| Guatemala | 14 | 13 | 29 | 30 | 30 | 9 |
| Mexico | 240 | 106 | 141 | 138 | 140 | 330 |
| Nicaragua | 55 | 142 | 108 | 259 | 263 | 185 |
| Salvador | 6,181 | 3 | 3,204 | 2,544 | 2,585 | 4,302 |
| United States | 1,474,182 | 1,571,542 | 1,675,000 | 1,537,481 | 1,562,153 | 1,340,096 |
| Argentina— | | | | | | |
| Crude | 20,606 | 22,025 | 43,912 | 55,908 | 56,805 | 29,993 |
| Refined and flowers of sulphur | 91 | 87 | 95 | 113 | 115 | 102 |
| Bolivia | 46 | n.a. | 3 | n.a. | n.a. | n.a. |
| Brazil— | | | | | | |
| Crude | 199,631 | 234,177 | 213,440 | 256,823 | 260,944 | n.a. |
| Refined | 2,135 | 3,496 | 1,200 | 507 | 515 | n.a. |
| Precipitated | 5 | 7 | 2 | 8 | 8 | n.a. |
| Chile | 31,977 | 37,976 | 50,028 | 61,148 | 62,129 | n.a. |
| Colombia | 1,060 | 40 | 2,541 | n.a. | n.a. | n.a. |
| Ecuador | 139 | 81 | n.a. | n.a. | n.a. | n.a. |
| Peru | 13,941 | 5,405 | 912 | n.a. | n.a. | n.a. |
| Uruguay | 10,059 | 7,638 | 5,999 | 5,862 | 5,956 | 9,268 |
| Venezuela | 26,447 | 42,282 | 11,433 | n.a. | n.a. | 22,853 |
| Burma | — | — | 240 | 1,310 | 1,331 | 246 |
| Formosa | 163,275 | 64,864 | 183,245 | 241,367 | 245,240 | 147,709 |
| Iran (a) | 379 | 689 | 536 | 422 | 429 | 355 |
| Iraq | 5,134 | 2,887 | 316 | 651 | 661 | n.a. |
| Israel | 72,268 | 68,945 | 57,187 | 40,304 | 40,951 | 70,660 |
| Japan | 31 | 8 | 23 | 10,403 | 10,570 | 276 |
| Jordan | 1,765 | 775 | 1,818 | 869 | 883 | 1,712 |
| Korea (South) | 28,141 | 54,243 | 135,445 | 147,374 | 149,739 | 156,847 |
| Lebanon | 12,871 | 30,934 | 56,292 | 60,159 | 61,124 | 58,782 |
| Philippine Republic | 5,976 | 5,099 | 12,149 | 13,512 | 13,729 | 19,600 |
| Syria | 59 | 212 | 342 | — | — | 47 |
| Thailand | 8,272 | 15,009 | 11,895 | 23,100 | 23,470 | 21,789 |
| Turkey | 591 | 9,973 | 14,371 | 127 | 129 | n.a. |

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

TALC
PRODUCTION OF TALC
(Including Steatite and Pyrophyllite)

| Producing Country | Long tons | | | | Tonnes | |
|-------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom .. | 8,968 | 11,345 | 10,099 | 10,780 | 10,953 | 10,953 |
| Swaziland— | | | | | | |
| Pyrophyllite | 589 | 573 | 591 | 250 | 254 | 204 |
| Canada (c) | 54,165 | 71,954 | 67,723 | 64,335 | 65,367 | 59,477 |
| India— | | | | | | |
| Steatite | 133,173 | 163,689 | 173,791 | 156,798 | 159,314 | 176,000 |
| Pyrophyllite | 4,856 | 10,507 | 10,714 | 13,702 | 13,922 | 11,395 |
| Pakistan | 2,607 | 2,576 | 2,219 | 1,710 | 1,737 | (a) 3,527 |
| Australia— | | | | | | |
| Talc | (f) 20,108 | (f) 37,262 | r 51,434 | (e) 118,534 | (e) 120,436 | } 56,414 |
| Pyrophyllite (g) .. | 555 | 969 | (d) 3,115 | 7,585 | 7,707 | |
| OTHER COUNTRIES | | | | | | |
| Austria | 76,505 | 83,219 | 92,651 | 98,577 | 100,159 | 91,621 |
| Finland | 2,500 | 4,732 | 28,286 | 61,700 | 62,700 | 100,700 |
| France | 213,920 | 242,198 | 243,184 | 229,300 | 233,000 | 246,000 |
| Germany (Federal) .. | 32,772 | 27,576 | 44,715 | 33,272 | 33,806 | 29,658 |
| Greece | 4,168 | 2,500 | 5,978 | 5,905 | 6,000 | 1,855 |
| Italy | 116,596 | 114,029 | 134,345 | 152,372 | 154,818 | 137,868 |
| Norway | 78,043 | 73,771 | 66,598 | 74,687 | 75,886 | 64,463 |
| Portugal | 138 | 1,437 | 1,181 | 1,778 | 1,807 | 1,275 |
| Spain | 31,416 | 28,569 | 33,195 | 38,986 | 39,612 | (a) 39,900 |
| Sweden | 23,900 | 23,326 | 27,951 | 31,800 | 32,300 | 24,045 |
| U.S.S.R. (a) | 364,000 | 364,000 | 374,000 | 374,000 | 380,000 | 400,000 |
| Egypt | (a) 30,000 | 4,400 | 4,200 | 6,385 | 6,487 | 6,321 |
| South Africa (b) .. | 8,992 | 8,909 | 8,673 | 7,448 | 7,568 | 8,438 |
| Mexico | 2,872 | 631 | 1,312 | 1,888 | 1,918 | 1,491 |
| United States— | | | | | | |
| Talc | 700,942 | 738,962 | 825,795 | 810,582 | 823,584 | 849,363 |
| Pyrophyllite | 104,872 | 116,629 | 93,167 | 107,212 | 108,932 | 91,652 |
| Argentina— | | | | | | |
| Talc | 16,641 | 20,930 | 21,370 | 18,373 | 18,668 | } (a) 31,000 |
| Pyrophyllite | 7,743 | 6,199 | 6,330 | 6,752 | 6,860 | |
| Brazil | 28,895 | 78,235 | 123,085 | n.a. | n.a. | n.a. |
| Chile | 2,836 | 2,769 | 796 | 629 | 639 | 1,758 |
| Colombia | 1,176 | 1,349 | 1,525 | 1,723 | 1,751 | 1,975 |
| Paraguay | 71 | 74 | 88 | 118 | 120 | 160 |
| Peru— | | | | | | |
| Pyrophyllite | 5,454 | 5,950 | 7,409 | 7,156 | 7,271 | (a) 8,000 |
| Uruguay | 2,596 | 2,173 | 2,270 | 1,608 | 1,634 | 852 |
| China (a) | 150,000 | 150,000 | 150,000 | 150,000 | 150,000 | 150,000 |
| Formosa | 40,662 | 28,595 | 23,988 | 38,106 | 38,717 | 39,042 |
| Japan— | | | | | | |
| Talc | 127,772 | 141,726 | 149,000 | 135,406 | 137,579 | } 1,895,000 |
| Pyrophyllite | 1,220,811 | 1,520,599 | 1,529,000 | 1,514,466 | 1,538,769 | |
| Korea (South)— | | | | | | |
| Talc | 55,391 | 63,738 | 128,847 | 133,201 | 135,338 | 104,374 |
| Pyrophyllite | 65,540 | 89,707 | 68,819 | 92,510 | 93,995 | 91,014 |
| Korea (North) (a) .. | 49,000 | 59,000 | 69,000 | 79,000 | 80,000 | 90,000 |
| Philippine Republic .. | 437 | 858 | 925 | 1,565 | 1,590 | 1,317 |
| TOTAL* | 3,770,000 | 4,230,000 | 4,420,000 | 4,860,000 | 4,940,000 | 4,950,000 |

*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): 1967—4,546; 1968—5,013; 1969—4,631; 1970—4,745. (Tonnes): 1970—4,821; 1971—3,333.

(c) Shipments. (d) Includes pyrophyllite previously classified as talc.

(e) Includes overburden.

(f) Includes some pyrophyllite.

(g) Includes chlorite.

EXPORTS OF TALC

| Exporting Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-------------|-------------|-----------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom .. | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 2,768 | 2,812 | 2,472 |
| India | 10,107 | 13,378 | 25,006 | 18,123 | 18,414 | 9,958 |
| Malaysia (West) .. | 46 | 10 | 131 | 71 | 72 | 349 |
| Singapore | 692 | 901 | 1,186 | 1,008 | 1,024 | 1,472 |
| Australia | 8,648 | 24,982 | <i>r</i> 33,595 | 30,847 | 31,342 | 32,662 |
| OTHER COUNTRIES | | | | | | |
| Austria | 60,772 | 71,710 | 78,464 | 82,603 | 83,929 | 74,225 |
| Belgium-Luxemburg E.U. | 8,351 | 11,564 | 14,119 | 15,662 | 15,913 | 15,320 |
| France | 44,280 | 43,677 | 48,101 | 59,918 | 60,880 | 53,954 |
| Germany (Federal) .. | 1,515 | 3,989 | 5,462 | 6,169 | 6,268 | 4,349 |
| Greece | 84 | 247 | 315 | 645 | 655 | 590 |
| Italy | 31,851 | 39,963 | 49,423 | 54,639 | 55,516 | 48,362 |
| Netherlands | 140 | 172 | 420 | 392 | 398 | 498 |
| Norway | 74,907 | 71,798 | 62,389 | 65,327 | 66,375 | 71,849 |
| Portugal | 83 | 42 | 33 | 71 | 72 | 97 |
| Sweden | 3,762 | 4,641 | 3,810 | 6,282 | 6,383 | 2,055 |
| Switzerland | 1,707 | 2,027 | 1,712 | 2,393 | 2,432 | 1,633 |
| Egypt | 1,213 | 1,676 | <i>r</i> 2,490 | 405 | 412 | 50 |
| South Africa— | | | | | | |
| Talc | 274 | 184 | 253 | 498 | 506 | 147 |
| Wonderstone (pyrophyllite) .. | 984 | 3,554 | 4,153 | 4,468 | 4,540 | 164 |
| Mexico | 40 | 24 | 89 | 16 | 16 | 1 |
| United States | 59,103 | 58,614 | 61,627 | 93,701 | 95,205 | 123,269 |
| Argentina | 123 | 59 | 325 | 79 | 80 | 510 |
| Brazil | 221 | 363 | 557 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| China (Mainland) (a) .. | 79,101 | 83,418 | 81,894 | 89,591 | 91,029 | <i>n.a.</i> |
| Japan | 752 | 881 | 436 | 812 | 825 | 1,854 |
| Korea (North) (b) .. | 37,901 | 45,724 | 69,838 | 84,398 | 85,752 | <i>n.a.</i> |
| Korea (South)— | | | | | | |
| Talc | 56,948 | 47,910 | 59,676 | 40,772 | 41,426 | 34,783 |
| Turkey | 16 | 50 | 67 | 107 | 109 | <i>n.a.</i> |

(a) Imports into various countries from China.

(b) Imports into various countries from Korea, North.

IMPORTS OF TALC

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|--------------|--------------|-----------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | 50,149 | 49,664 | 50,968 | 57,456 | 58,378 | 57,297 |
| Canada | 23,645 | 25,218 | 31,170 | 29,525 | 29,999 | 30,619 |
| Ceylon | 1,633 | 1,143 | 1,325 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Hong Kong | 1,371 | 1,412 | 1,478 | 2,483 | 2,523 | 4,008 |
| Malaysia (West) | 2,326 | 2,856 | 3,025 | 3,049 | 3,098 | 2,949 |
| Singapore | 2,982 | 4,409 | 4,963 | 6,286 | 6,387 | 6,766 |
| Australia (a) | 2,228 | 2,048 | 3,003 | 2,921 | 2,968 | 8,407 |
| New Zealand (a) | 1,392 | 1,406 | 1,651 | 1,749 | 1,777 | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Austria | 1,204 | 1,691 | 1,392 | 1,032 | 1,049 | 1,288 |
| Belgium-Luxemburg | | | | | | |
| E.U. | 26,401 | 29,191 | 32,393 | 39,102 | 39,730 | 26,009 |
| Denmark | 13,839 | 14,150 | 13,181 | 17,417 | 17,697 | 13,587 |
| Finland | 4,841 | 4,312 | 5,953 | 6,062 | 6,159 | 6,236 |
| France | 8,522 | 9,502 | 9,545 | 10,030 | 10,191 | 7,623 |
| Germany (Federal) | 60,330 | 76,565 | 90,543 | 96,332 | 97,878 | 93,486 |
| Greece | 1,306 | 1,970 | 1,927 | 3,853 | 3,915 | 2,967 |
| Italy | 14,196 | 15,628 | 17,487 | 17,698 | 17,982 | 18,484 |
| Netherlands | 14,457 | 15,023 | 14,724 | 18,541 | 18,839 | 13,375 |
| Norway | 4,339 | 5,922 | 5,108 | 2,722 | 2,766 | 2,922 |
| Poland | 10,109 | 17,270 | 22,853 | 20,782 | 21,116 | 19,868 |
| Portugal | 2,279 | 2,600 | 2,625 | 3,325 | 3,378 | 2,905 |
| Spain | 2,408 | 2,484 | 3,667 | 4,864 | 4,942 | 4,744 |
| Sweden | 18,328 | 18,622 | <i>r</i> 18,426 | 21,771 | 22,121 | 20,462 |
| Switzerland | 12,537 | 12,166 | 11,204 | 13,715 | 13,935 | 12,893 |
| U.S.S.R. | 56,297 | 49,998 | 81,400 | 90,744 | 92,200 | 53,800 |
| Yugoslavia | 658 | 690 | 1,515 | 1,374 | 1,396 | 1,517 |
| Algeria | 1,790 | 2,071 | 2,130 | 4,365 | 4,435 | <i>n.a.</i> |
| Ivory Coast | 403 | 585 | 482 | 676 | 687 | 650 |
| Malagasy Republic | 31 | 58 | 83 | 30 | 30 | <i>n.a.</i> |
| Morocco | 774 | 1,184 | 792 | 1,079 | 1,096 | 1,324 |
| Senegal | 156 | 205 | 202 | 153 | 155 | 216 |
| South Africa | 1,663 | 2,960 | 2,395 | 2,018 | 2,050 | 2,785 |
| Tunisia | 434 | 1,169 | 892 | 1,299 | 1,320 | 1,825 |
| Costa Rica | 201 | 262 | 253 | 328 | 333 | 351 |
| Guatemala | 232 | 160 | 267 | 290 | 295 | 255 |
| Honduras | 45 | 71 | 58 | 46 | 47 | 50 |
| Mexico— | | | | | | |
| Talc | 32,423 | 52,010 | 58,194 | 66,224 | 67,287 | 76,361 |
| Pyrophyllite | 120 | 57 | 173 | 218 | 222 | 283 |
| Nicaragua | 237 | 189 | 159 | 326 | 331 | 228 |
| Salvador | 133 | 144 | 98 | 127 | 129 | 172 |
| United States | 30,377 | 21,709 | 18,175 | 26,775 | 27,205 | 15,769 |
| Argentina | 499 | 141 | 232 | 575 | 584 | 458 |
| Brazil | 30 | 102 | 1 | 90 | 91 | <i>n.a.</i> |
| Chile | <i>r</i> 210 | <i>r</i> 266 | 594 | 264 | 268 | <i>n.a.</i> |
| Colombia | <i>r</i> 963 | <i>r</i> 538 | 1,395 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ecuador | 233 | 201 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Peru | 917 | 672 | 789 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Venezuela | 3,383 | 5,712 | 4,350 | 9,926 | 10,085 | 7,904 |
| Iran (b) | 248 | 425 | 219 | 191 | 194 | 58 |
| Iraq | 334 | 924 | 599 | 583 | 592 | <i>n.a.</i> |
| Japan | 93,313 | 125,480 | 152,272 | 155,762 | 158,262 | 173,439 |
| Lebanon | 287 | 422 | 583 | 381 | 387 | 816 |
| Philippine Republic | 2,794 | 4,222 | 3,568 | 3,970 | 4,034 | 3,669 |
| Syria | 167 | 285 | 907 | 529 | 537 | 1,467 |
| Thailand | 2,009 | 2,128 | 2,653 | 3,146 | 3,196 | 3,179 |
| Turkey | 137 | 117 | 138 | 79 | 80 | <i>n.a.</i> |

(a) Years ended June 30 of that stated.

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

TANTALUM AND NIOBIUM MINERALS
PRODUCTION OF TANTALUM AND NIOBIUM MINERALS

| Producing Country | Long tons | | | | Tonnes | |
|---|--------------|--------------|---------------|---------------|---------------|---------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Nigeria— | | | | | | |
| Tantalite | 18 | 27 | 6 | 4 | 4 | 4 |
| Columbite | 1,919 | 1,132 | 1,491 | 1,590 | 1,616 | 1,379 |
| Uganda— | | | | | | |
| Tantalite and columbite | 28 | 8 | 2 | 3 | 3 | 4 |
| Canada— | | | | | | |
| Niobium concentrates (<i>Nb₂O₅ content</i>) .. r | 964 | 974 | 1,524 | 2,096 | 2,129 | 1,058 |
| Tantalum concentrates (<i>Ta₂O₅ content</i>) .. | — | — | 58 | 142 | 144 | 204 |
| Malaysia (West)— | | | | | | |
| Columbite | 87 | 51 | 63 | 60 | 61 | 24 |
| Australia— | | | | | | |
| Tantalite and columbite | 36 | 106 | 152 | 69 | 70 | 75 |
| OTHER COUNTRIES | | | | | | |
| Portugal— | | | | | | |
| Tantalite and columbite | 14 | 12 | 6 | 4 | 4 | 11 |
| Zaire Republic— | | | | | | |
| Tantalite and columbite concentrates (b) .. | 144 | 112 | 76 | 144 | 146 | 106 |
| Ivory Coast— | | | | | | |
| Tantalite and columbite | — | 1 | — | — | — | n.a. |
| Malagasy Republic— | | | | | | |
| Columbite | — | 1 | — | — | — | n.a. |
| Mozambique— | | | | | | |
| Tantalite-columbite .. | 88 | 61 | 63 | 95 | 97 | 60 |
| Microlite | 69 | 91 | 81 | 63 | 64 | 54 |
| South Africa— | | | | | | |
| Tantalite-columbite .. | 4 | 18 | 4 | 3 | 3 | 1 |
| Argentina— | | | | | | |
| Tantalite (a) | 1 | 3 | 1 | 3 | 3 | n.a. |
| Brazil— | | | | | | |
| Tantalite-columbite | 55 | 128 | 199 | n.a. | n.a. | n.a. |
| Pyrochlore concentrates | 4,543 | 4,920 | 8,526 | 13,075 | 13,285 | 6,180 |
| French Guiana— | | | | | | |
| Tantalite and columbite | — | — | — | 1 | 1 | — |
| Thailand— | | | | | | |
| Tantalite and columbite | 39 | 44 | 26 | 56 | 57 | 42 |
| TOTAL (c) .. | 8,900 | 8,700 | 13,100 | 19,600 | 19,900 | 10,700 |

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

(a) Imports into the United States.

(b) Including tantalite-columbite content of tin-tantalite-columbite.

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

EXPORTS OF TANTALUM AND NIOBIUM MINERALS, ETC.

| Exporting Country and Description | Long tons | | | | Tonnes | |
|---|--------------|---------------|---------------|--------------|--------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Tantalum and niobium ores and concentrates .. | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 201 | 204 | 293 |
| Tantalum metal .. | (13,437lb.) | (21,669lb.) | (35,091lb.) | (52,757lb.) | (23,930kgs) | (9,954kgs) |
| Ferro-niobium and ferro-niobium-tantalum .. | 175 | 152 | 281 | 203 | 206 | 321 |
| Nigeria— | | | | | | |
| Tantalite | 15 | 16 | 17 | 4 | 4 | 2 |
| Columbite | 2,085 | 1,349 | 1,310 | 1,764 | 1,792 | 1,218 |
| Uganda— | | | | | | |
| Tantalite and columbite | 14 | 7 | 5 | 8 | 8 | 5 |
| Malaysia (West)— | | | | | | |
| Columbite | 57 | 53 | 46 | 24 | 24 | 30 |
| Australia (a)— | | | | | | |
| Tantalite and columbite | 27 | 54 | 70 | 106 | 108 | 123 |
| OTHER COUNTRIES | | | | | | |
| Germany (Federal)— | | | | | | |
| Tantalum metal, etc. .. | (29,900lb.) | (13,600lb.) | (51,092lb.) | (136,982lb.) | (62,134kgs) | (34,364kgs) |
| Niobium metal, etc. .. | (3,700lb.) | (4,700lb.) | (4,000lb.) | (3,353lb.) | (1,521kgs) | (1,574kgs) |
| Portugal— | | | | | | |
| Tantalite and columbite | 25 | 9 | <i>n.a.</i> | 12 | 12 | 12 |
| Mozambique— | | | | | | |
| Columbite | 160 | 170 | 80 | 190 | 193 | 153 |
| South Africa— | | | | | | |
| Tantalite | 4 | 14 | 2 | 31 | 32 | — |
| Zaire Republic (b)— | | | | | | |
| Tantalite and columbite (c) .. | 60 | r 140 | 130 | 130 | 132 | <i>n.a.</i> |
| United States— | | | | | | |
| Tantalum concentrates | 34 | 29 | 38 | 54 | 55 | 22 |
| Tantalum metal, etc. .. | (r58,594lb.) | (r111,003lb.) | (r124,261lb.) | (640,284lb.) | (290,428kgs) | (88,082kgs) |
| Niobium metal, etc. .. | (4,005lb.) | (8,069lb.) | (r40,903lb.) | (46,246lb.) | (20,977kgs.) | (9,519kgs) |
| Tantalum powder .. | (157,325lb.) | (83,713lb.) | (99,861lb.) | (138,992lb.) | (63,046kgs) | (38,733kgs) |
| Brazil— | | | | | | |
| Tantalite | 202 | 267 | 200 | 205 | 208 | <i>n.a.</i> |
| Columbite | 100 | 62 | 68 | 40 | 41 | <i>n.a.</i> |
| Pyrochlore concentrates | 2,682 | 2,900 | 5,650 | 8,366 | 8,500 | <i>n.a.</i> |
| Thailand— | | | | | | |
| Tantalite and columbite | 3 | 27 | 12 | 18 | 18 | 2 |

(a) Years ended June 30 of that stated.

(b) Including Rwanda and Burundi.

(c) Estimated.

IMPORTS OF TANTALUM AND NIOBIUM MINERALS, ETC.

| Importing Country and Description | Long tons | | | | Tonnes | |
|--|--------------|-------------|--------------|--------------|--------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Tantalum and niobium ores and concentrates | 1,053 | 1,054 | 2,738 | 2,903 | 2,950 | 962 |
| Tantalum metal .. | (46,411lb.) | (70,135lb.) | (87,341lb.) | (106,828lb.) | (48,456kgs) | (21,955kgs) |
| OTHER COUNTRIES | | | | | | |
| France— | | | | | | |
| Tantalum and niobium minerals | 376 | 551 | 1,145 | 711 | 723 | 515 |
| Germany (Federal)— | | | | | | |
| Tantalum and niobium minerals | 1,003 | 1,649 | 2,041 | 2,884 | 2,930 | 1,181 |
| Tantalum metal, etc. .. | (19,740lb.) | (58,530lb.) | (128,156lb.) | (151,336lb.) | (68,645kgs) | (68,983kgs) |
| United States— | | | | | | |
| Tantalum concentrates | 871 | 549 | 435 | 467 | 474 | n.a. |
| Niobium concentrates .. | 3,318 | 1,632 | 1,858 | 2,553 | 2,594 | 1,385 |
| Tantalum metal | (54,887lb.) | (17,863lb.) | (10,949lb.) | (51,428lb.) | (23,327kgs.) | (18,238kgs) |
| Niobium metal (a) .. | (55,552lb.) | (5,391lb.) | (5,185lb.) | (1,777lb.) | (806kgs.) | n.a. |
| Japan— | | | | | | |
| Niobium minerals .. | 465 | 773 | 1,294 | 1,101 | 1,119 | 1,230 |
| Tantalum ores and concentrates | 1,089 | 122 | 106 | 113 | 115 | 105 |
| Tantalum metal | (241,677lb.) | (30,896lb.) | (49,438lb.) | (93,852lb.) | (42,571kgs) | (22,617kgs) |

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

II
PRODUCTION OF TIN ORE
(Metal content)

| Producing Country | Long tons | | | | Tonnes | |
|-------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | r 1,475 | r 1,798 | r 1,622 | 1,695 | 1,722 | 1,816 |
| Nigeria | 9,340 | 9,649 | 8,603 | 7,833 | 7,959 | 7,326 |
| Rhodesia | (a) 600 | (a) 600 | (a) 600 | (a) 600 | (a) 600 | (a) 600 |
| Tanzania | 353 | 323 | 177 | 49 | 50 | 54 |
| Uganda | 104 | 169 | 163 | 120 | 122 | 117 |
| Canada (b) | 195 | 160 | 129 | 118 | 120 | 133 |
| Malaysia (West) | 72,121 | 75,069 | 72,167 | 72,630 | 73,794 | 75,445 |
| Australia | 5,586 | 6,537 | r 8,177 | 8,689 | 8,828 | 9,794 |
| TOTAL | 89,400 | 94,300 | 91,200 | 91,800 | 93,300 | 95,300 |
| OTHER COUNTRIES | | | | | | |
| France | 447 | 370 | 249 | 332 | 337 | 350 |
| Germany (Eastern) (g) .. | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 |
| Portugal | 645 | 668 | 489 | 428 | 435 | 555 |
| Spain | 160 | 140 | r 262 | 436 | 443 | 450 |
| Cameroun | 33 | 33 | 27 | 35 | 36 | 36 |
| Congo (Brazza) | 53 | 26 | 47 | 47 | 48 | 48 |
| Morocco | (a) 12 | 18 | 12 | 12 | 12 | 7 |
| Niger | 56 | 71 | 85 | 73 | 74 | 87 |
| Rwanda and Burundi (a) | 1,422 | 1,420 | 1,420 | 1,400 | 1,420 | 1,420 |
| South Africa | 1,763 | 1,837 | 1,794 | 1,949 | 1,980 | 2,051 |
| South West Africa | (f) 720 | (f) 700 | 1,008 | 1,028 | 1,044 | 964 |
| Zaire Republic | 4,664 | 8,806 | 5,560 | 6,356 | 6,458 | 6,054 |
| Mexico | 588 | 518 | 492 | 525 | 533 | 479 |
| United States | 50 | (g) 100 | (a) 72 | (a) 71 | (a) 72 | (a) 72 |
| Argentina | 802 | 701 | 855 | 1,153 | 1,172 | (a) 2,013 |
| Bolivia (c) | 27,283 | 29,101 | 29,625 | 29,625 | 30,100 | 30,290 |
| Brazil | 1,599 | 1,700 | 2,458 | 4,228 | 4,296 | (a) 2,098 |
| Peru (e) | 65 | 94 | 80 | 101 | 103 | 100 |
| Burma | 259 | 270 | 298 | 250 | 254 | 454 |
| China (d) (f) | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 |
| Indonesia | 13,601 | 16,632 | 16,281 | 18,791 | 19,092 | 19,767 |
| Japan | 1,166 | 943 | 729 | 781 | 793 | 788 |
| Korea (South) | 76 | 76 | 76 | 75 | 76 | 76 |
| Laos | 548 | 482 | 790 | 1,358 | 1,380 | 1,573 |
| Thailand | 22,490 | 23,601 | 20,857 | 21,434 | 21,778 | 21,690 |
| TOTAL* | 99,000 | 107,000 | 104,000 | 109,000 | 111,000 | 113,000 |
| WORLD'S TOTAL* .. | 188,000 | 201,000 | 196,000 | 201,000 | 204,000 | 208,000 |

*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

| Producing Country | Long tons | | | | Tonnes | |
|-------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | 23,317 | 24,933 | 25,982 | 21,687 | 22,035 | 23,153 |
| Nigeria | 9,131 | 9,843 | 8,839 | 7,941 | 8,069 | 7,348 |
| Rhodesia | (b) 600 | (b) 600 | (b) 600 | (b) 600 | (b) 600 | (b) 600 |
| Malaysia (West) | 76,328 | 88,185 | 86,878 | 90,652 | 92,107 | 87,095 |
| Australia | 3,594 | 3,692 | 4,156 | 5,129 | 5,211 | 6,333 |
| TOTAL | 113,000 | 127,000 | 126,000 | 126,000 | 128,000 | 125,000 |
| OTHER COUNTRIES | | | | | | |
| Belgium | r 4,193 | r 4,799 | r 4,444 | 4,190 | 4,257 | 3,940 |
| Germany— | | | | | | |
| Federal Republic | 1,622 | 1,504 | 1,446 | 1,176 | 1,195 | 1,169 |
| Eastern (d) | 1,100 | 1,200 | 1,200 | 1,100 | 1,100 | 1,100 |
| Netherlands | 13,739 | 7,983 | 5,298 | 5,843 | 5,937 | 837 |
| Portugal | 592 | 638 | 501 | 386 | 392 | 483 |
| Spain | 1,823 | 2,324 | 2,264 | 3,846 | 3,908 | 4,490 |
| Morocco (b) | 12 | 12 | 12 | 12 | 12 | 12 |
| South Africa | 658 | 682 | 738 | 603 | 613 | 714 |
| Zaire Republic | 1,404 | 1,909 | 1,900 | 1,374 | 1,396 | 1,350 |
| Mexico | 607 | 317 | r 206 | 525 | 533 | 479 |
| United States | 3,048 | 3,453 | 345 | 4,468 | 4,540 | 4,450 |
| Argentina (b) | 120 | 120 | 120 | 118 | 120 | 120 |
| Bolivia (a) | 1,059 | 59 | 85 | 295 | 299 | 6,816 |
| Brazil | 1,415 | 1,251 | 2,000 | 3,050 | 3,100 | 3,424 |
| China (c) | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 |
| Indonesia (b) | 1,481 | 4,560 | 7,639 | 5,108 | 5,190 | 9,218 |
| Japan | 1,666 | 1,859 | 1,387 | 1,353 | 1,375 | 1,297 |
| Thailand | 26,551 | 24,434 | 22,048 | 21,692 | 22,040 | 21,670 |
| TOTAL* | 83,000 | 79,000 | 74,000 | 75,000 | 76,000 | 82,000 |
| WORLD'S TOTAL* | 196,000 | 207,000 | 200,000 | 201,000 | 204,000 | 207,000 |

*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:

| Year | Long tons | Year | Long tons | Tonnes |
|--------------|-----------|--------------|-----------|--------|
| 1967 | 22,667 | 1970 | 20,001 | 20,322 |
| 1968 | 22,495 | 1971 | | 20,419 |
| 1969 | 22,775 | | | |

(a) Exports.

(b) International Tin Council estimate.

(c) United States Bureau of Mines' estimate.

(d) "Metallgesellschaft" estimate.

EXPORTS OF TIN, ETC.*

| Exporting Country and Description | Long tons | | | | Tonnes | |
|-----------------------------------|-------------|-------------|-------------|---------|---------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ore and concentrates .. | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 26 | 26 | 675 |
| Unwrought | 9,377 | 10,517 | 13,551 | 12,746 | 12,951 | 9,553 |
| do. alloys | 3,127 | 2,356 | 2,847 | 2,760 | 2,804 | 2,334 |
| Semi-manufactures (a) .. | 730 | 610 | 594 | 1,001 | 1,017 | 842 |
| Nigeria— | | | | | | |
| Ore and concentrates .. | 9 | 1,151 | 4 | 3 | 3 | — |
| Unwrought (a) | 10,813 | 11,280 | 10,110 | 10,731 | 10,903 | 8,433 |
| Tanzania— | | | | | | |
| Ore and concentrates .. | 378 | 385 | 176 | 237 | 241 | 141 |
| Uganda— | | | | | | |
| Ore and concentrates .. | 183 | 291 | 232 | 182 | 185 | 175 |
| Canada— | | | | | | |
| Concentrates (Sn content) .. | 326 | 118 | 304 | 264 | 268 | 217 |
| Hong Kong— | | | | | | |
| Scrap | 6 | 2 | 32 | 90 | 91 | 10 |
| Semi-manufactures | 34 | 39 | 52 | 52 | 53 | 49 |
| India (b)— | | | | | | |
| Scrap | 32 | — | — | 22 | 22 | — |
| Malaysia (West)— | | | | | | |
| Ore | 1,176 | 957 | 741 | 685 | 696 | 494 |
| Unwrought | 73,528 | 86,017 | 87,530 | 90,485 | 91,937 | 86,696 |
| Semi-manufactures (a) .. | 41 | 27 | — | 27 | 27 | 92 |
| Australia— | | | | | | |
| Ore and concentrates .. | | | | | | |
| (Sn content) | 1,662 | 3,135 | 3,524 | 3,661 | 3,720 | 3,325 |
| Unwrought | } 28 | } 234 | } 642 | } 1,089 | } 1,107 | } 1,943 |
| do. alloys | | | | | | |
| New Zealand (c)— | | | | | | |
| Scrap | 2 | 6 | 17 | — | — | 8 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Unwrought (a) | 17 | 23 | 10 | 63 | 64 | 4 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Unwrought | 3,739 | 4,246 | 3,843 | 2,995 | 3,043 | 2,696 |
| do. alloys | 81 | — | 40 | 57 | 58 | 28 |
| Scrap | 124 | 144 | 123 | 109 | 111 | 160 |
| Semi-manufactures (a) .. | 37 | 56 | 41 | 52 | 53 | 82 |
| Denmark— | | | | | | |
| Unwrought | 37 | 148 | 81 | 110 | 112 | 154 |
| do. alloys | 1,032 | 876 | 1,383 | 1,171 | 1,190 | 1,459 |
| Scrap | 32 | 108 | 47 | 3 | 3 | — |
| Semi-manufactures (a) .. | 48 | 55 | 51 | 53 | 54 | 79 |
| France— | | | | | | |
| Ore | 524 | 560 | 359 | 399 | 406 | 486 |
| Unwrought | 53 | 122 | 279 | 120 | 122 | 94 |
| do. alloys | 104 | 165 | 281 | 171 | 174 | 291 |
| Semi-manufactures (a) .. | 54 | 76 | 129 | 103 | 105 | 83 |
| Germany (Federal)— | | | | | | |
| Ore | 46 | 43 | 56 | 26 | 26 | 6 |
| Unwrought (a) | 1,994 | 1,512 | 1,489 | 863 | 877 | 1,180 |
| Scrap | 81 | 47 | 80 | 199 | 202 | 35 |
| Semi-manufactures (a) .. | 182 | 230 | 259 | 391 | 397 | 467 |

*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) Years ended June 30 of that stated.

EXPORTS OF TIN, ETC. (cont.)

| Exporting Country and Description | Long tons | | | | Tonnes | |
|--|-----------|---------|---------|--------|--------|--------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Italy— | | | | | | |
| Unwrought (a) | 115 | 301 | 230 | 229 | 233 | 258 |
| Semi-manufactures (a) .. | 11 | 12 | 11 | 30 | 30 | 33 |
| Netherlands— | | | | | | |
| Unwrought | 11,500 | 8,974 | 7,076 | 5,351 | 5,437 | 2,899 |
| do. alloys | 407 | 341 | 196 | 291 | 296 | 197 |
| Scrap (a) | 322 | 579 | 451 | 1,176 | 1,195 | 726 |
| Semi-manufactures (a) .. | 257 | 341 | 359 | 421 | 428 | 399 |
| Norway— | | | | | | |
| Unwrought (a) | 238 | 256 | 216 | 225 | 229 | 204 |
| Semi-manufactures (a) .. | 2 | 3 | 4 | 2 | 2 | 6 |
| Portugal— | | | | | | |
| Unwrought | 350 | 270 | 90 | 76 | 77 | 14 |
| Spain— | | | | | | |
| Unwrought | 95 | 228 | 403 | 1,323 | 1,344 | 1,384 |
| Sweden— | | | | | | |
| Unwrought | 21 | 66 | 43 | 377 | 383 | 48 |
| do. alloys | 49 | 131 | 20 | 56 | 57 | 46 |
| Switzerland— | | | | | | |
| Unwrought | 24 | 24 | 22 | 135 | 137 | 42 |
| Scrap | 60 | 84 | 152 | 106 | 108 | 146 |
| Semi-manufactures (a) .. | 39 | 57 | 63 | 108 | 110 | 84 |
| U.S.S.R.— | | | | | | |
| Unwrought | 6 | — | — | — | — | — |
| Cameroun— | | | | | | |
| Ore | 49 | 49 | 39 | n.a. | n.a. | n.a. |
| Congo (Brazza)— | | | | | | |
| Ore | 83 | 32 | — | n.a. | n.a. | n.a. |
| Niger— | | | | | | |
| Ore | 53 | 80 | 44 | 20 | 20 | 14 |
| South Africa— | | | | | | |
| Concentrates | 1,079 | 1,172 | 1,136 | 1,420 | 1,443 | 1,470 |
| Zaire Republic— | | | | | | |
| Ore (b) | 6,130 | r 5,000 | r 7,200 | 4,265 | 4,333 | n.a. |
| Unwrought (b) | 1,280 | r 1,020 | r 1,840 | 1,471 | 1,495 | n.a. |
| United States— | | | | | | |
| Unwrought (a) | 2,050 | 3,813 | 1,603 | 4,009 | 4,073 | 1,850 |
| Scrap (a) | 2,775 | 4,629 | 4,305 | 2,397 | 2,435 | 2,434 |
| Semi-manufactures (a) .. | 182 | 499 | 1,064 | 360 | 366 | 214 |
| Argentina— | | | | | | |
| Ore | — | 81 | 23 | 59 | 60 | n.a. |
| Tin-silver ore | 4,117 | 4,568 | 5,597 | 4,392 | 4,462 | 3,909 |
| Bolivia— | | | | | | |
| Ores, concentrates, etc. (Sn content) | 25,600 | 28,883 | 29,961 | 27,200 | 27,600 | 23,400 |
| Unwrought | 820 | 59 | 85 | 295 | 299 | 6,816 |
| Peru— | | | | | | |
| Concentrates (Sn content) | n.a. | 185 | n.a. | n.a. | n.a. | n.a. |
| Unwrought (Sn content) | n.a. | 40 | n.a. | n.a. | n.a. | n.a. |
| Burma— | | | | | | |
| Ore and concentrates (Sn content) | 60 | 107 | 32 | 83 | 84 | 441 |

(a) Including alloys.

(b) Estimated.

EXPORTS OF TIN, ETC. (cont.)

| Exporting Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|--------|--------|---------|---------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| China— | | | | | | |
| Unwrought (b) | 3,000 | 4,000 | 3,000 | 4,000 | 4,000 | 5,000 |
| Japan— | | | | | | |
| Unwrought | 46 | 105 | 136 | (a) 387 | (a) 393 | (a) 509 |
| Semi-manufactures (a) | 73 | 333 | 564 | 746 | 758 | 461 |
| Laos— | | | | | | |
| Ore (Sn content) .. | 415 | 533 | 803 | 772 | 784 | 1,005 |
| Thailand— | | | | | | |
| Ore (Sn content) .. | — | — | — | 25 | 25 | — |
| Unwrought | 26,572 | 23,507 | 23,062 | 21,502 | 21,847 | 21,705 |

(a) Including alloys.

(b) Estimated.

IMPORTS OF TIN, ETC.*

| Importing Country and Description | Long tons | | | | Tonnes | |
|--|-----------|--------|--------|--------|--------|--------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ore and concentrates .. | 62,803 | 67,551 | 74,306 | 68,921 | 70,027 | 59,685 |
| Unwrought (a) .. | 8,199 | 9,445 | 6,833 | 6,396 | 6,498 | 7,949 |
| Ghana— | | | | | | |
| Unwrought (a) .. | 6 | 8 | 2 | — | — | n.a. |
| Semi-manufactures (a) .. | 138 | 99 | 248 | 225 | 229 | n.a. |
| Kenya— | | | | | | |
| Unwrought (a) .. | 30 | 70 | 53 | 92 | 94 | 181 |
| Malawi— | | | | | | |
| Unwrought .. | — | — | } 2 | 4 | 4 | 3 |
| Semi-manufactures .. | 1 | n.a. | | | | |
| Mauritius— | | | | | | |
| Unwrought (a) .. | 5 | 4 | 3 | 1 | 1 | 4 |
| Semi-manufactures (a) .. | 13 | 4 | 67 | 1 | 1 | 5 |
| Nigeria— | | | | | | |
| Unwrought and semi-manufactures (a) .. | 187 | 90 | 451 | 188 | 191 | 1,148 |
| Tanzania— | | | | | | |
| Unwrought (a) .. | 18 | 40 | 31 | 42 | 43 | 62 |
| Uganda— | | | | | | |
| Unwrought (a) .. | 16 | 8 | 17 | 17 | 17 | 36 |
| Zambia— | | | | | | |
| Unwrought and semi-manufactures (a) .. | 64 | 43 | 85 | 65 | 66 | n.a. |
| Canada— | | | | | | |
| Unwrought .. | 4,548 | 4,301 | 4,946 | 5,030 | 5,111 | 5,104 |
| Semi-manufactures .. | 15 | 16 | 63 | 36 | 37 | 25 |
| Barbados— | | | | | | |
| Unwrought (a) .. | 102 | 3 | 2 | 2 | 2 | n.a. |
| Semi-manufactures (a) .. | 334 | 341 | 551 | 618 | 628 | n.a. |
| Jamaica— | | | | | | |
| Unwrought (a) .. | 36 | 53 | 139 | 26 | 26 | 78 |
| Semi-manufactures (a) .. | 5 | 171 | 13 | 663 | 674 | 2,395 |
| Trinidad and Tobago— | | | | | | |
| Unwrought (a) .. | 5 | 6 | 162 | 6 | 6 | 7 |
| Semi-manufactures (a) .. | 6,566 | 4,340 | 1,072 | 60 | 61 | 21 |
| Guyana— | | | | | | |
| Unwrought (a) .. | 17 | 18 | 19 | 17 | 17 | 17 |
| Semi-manufactures (a) .. | 2 | 3 | 1 | — | — | 1 |
| Ceylon— | | | | | | |
| Unwrought .. | 36 | 47 | 43 | n.a. | n.a. | n.a. |
| do. alloys .. | 4 | 2 | — | n.a. | n.a. | n.a. |
| Semi-manufactures (a) .. | 3,592 | 3,381 | 220 | n.a. | n.a. | n.a. |
| Hong Kong— | | | | | | |
| Unwrought .. | 89 | 81 | 174 | 212 | 216 | 328 |
| Scrap .. | 2 | — | 4 | 1 | 1 | — |
| Semi-manufactures .. (b) | 3 | 5 | 10 | 9 | 9 | 16 |
| India— | | | | | | |
| Unwrought .. | 6,961 | 6,171 | 4,830 | 6,209 | 6,309 | 2,813 |
| Semi-manufactures (a)(c) .. | 26 | 22 | 4 | 8 | 8 | 10 |
| Malaysia (West)— | | | | | | |
| Ore .. | 6,769 | 25,459 | 18,387 | 20,833 | 21,167 | 15,106 |
| Unwrought (a) .. | 55 | 70 | 157 | 101 | 103 | 154 |
| Semi-manufactures (a) .. | 195 | 87 | 158 | 351 | 357 | 171 |

*See footnote on page 360 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 | Tonnes

| Importing Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|--|--------|--------|--------|--------|--------|--------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Sabah— | | | | | | |
| Unwrought | 11 | 12 | (a) 12 | (a) 4 | (a) 4 | (a) 5 |
| Semi-manufactures .. | 9 | 6 | 5 | 27 | 27 | 43 |
| Australia— | | | | | | |
| Unwrought | 693 | 159 | 104 | 108 | 110 | 131 |
| Semi-manufactures (b) .. | 27 | 26 | 27 | 25 | 25 | 15 |
| Fiji— | | | | | | |
| Semi-manufactures (a) | 179 | 284 | n.a. | — | — | — |
| Sarawak— | | | | | | |
| Unwrought and semi-manufactures (a) .. | 109 | 135 | 37 | n.a. | n.a. | n.a. |
| New Zealand (b)— | | | | | | |
| Unwrought (a) .. | 389 | 293 | 315 | 334 | 339 | n.a. |
| Semi-manufactures (a) | 20 | 14 | 23 | 35 | 36 | n.a. |
| Irish Republic— | | | | | | |
| Unwrought (a) .. | 92 | 32 | 96 | 340 | 346 | 58 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Unwrought (a) .. | 523 | 556 | 604 | 603 | 613 | 634 |
| Semi-manufactures (a) | 82 | 42 | 56 | 62 | 63 | 61 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Ore | 5,943 | 6,407 | 5,556 | 5,905 | 6,000 | 6,591 |
| Unwrought | 2,624 | 2,409 | 3,179 | 2,543 | 2,584 | 1,465 |
| do. alloys | 163 | 170 | 153 | 196 | 199 | 163 |
| Scrap | 17 | 8 | 19 | 23 | 23 | 12 |
| Semi-manufactures (a) | 104 | 138 | 138 | 231 | 235 | 203 |
| Czechoslovakia— | | | | | | |
| Unwrought | 2,106 | 4,501 | 3,017 | n.a. | n.a. | n.a. |
| Denmark— | | | | | | |
| Unwrought | 680 | 763 | 761 | 751 | 763 | 911 |
| do. alloys | 399 | 343 | 385 | 464 | 472 | 114 |
| Scrap | 311 | 254 | 280 | 750 | 762 | 318 |
| Semi-manufactures (a) | 93 | 77 | 87 | 88 | 89 | 88 |
| Finland— | | | | | | |
| Unwrought (a) .. | 237 | 244 | 333 | 339 | 345 | 438 |
| France— | | | | | | |
| Unwrought | 10,148 | 9,384 | 10,925 | 9,676 | 9,831 | 10,449 |
| do. alloys | 68 | 255 | 216 | 195 | 198 | 147 |
| Scrap | 31 | 111 | 79 | 174 | 177 | 227 |
| Semi-manufactures (a) | 38 | 57 | 35 | 51 | 52 | 179 |
| Germany (Federal)— | | | | | | |
| Ore | 8,250 | 7,988 | 7,655 | 5,890 | 5,985 | 6,283 |
| Unwrought (a) .. | 12,162 | 16,883 | 15,286 | 14,847 | 15,085 | 15,483 |
| Scrap (a) | 175 | 186 | 201 | 298 | 303 | 401 |
| Semi-manufactures (a) | 7 | 33 | 22 | 70 | 71 | 149 |
| Greece— | | | | | | |
| Unwrought | 215 | 311 | 195 | 237 | 241 | 254 |
| Hungary— | | | | | | |
| Unwrought | 1,186 | 1,263 | 1,389 | 1,827 | 1,856 | 1,578 |
| Iceland— | | | | | | |
| Semi-manufactures (a) | 12 | 13 | 10 | 9 | 9 | 11 |
| Italy— | | | | | | |
| Unwrought | 5,810 | 6,898 | 7,120 | 7,160 | 7,275 | 6,733 |
| do. alloys | 196 | 170 | 337 | 235 | 239 | 531 |
| Scrap | 19 | 43 | 18 | 47 | 48 | 40 |
| Semi-manufactures (a) | 71 | 44 | 94 | 102 | 104 | 95 |

(a) Including alloys.

(b) Years ended June 30 of that stated.

IMPORTS OF TIN, ETC. (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|--------|--------|--------|--------|--------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Netherlands— | | | | | | |
| Ore | 19,768 | 11,461 | 10,378 | 9,996 | 10,157 | 1,208 |
| Unwrought | 5,053 | 4,221 | 6,295 | 5,117 | 5,199 | 5,247 |
| do. alloys | 890 | 428 | 179 | 156 | 159 | 504 |
| Scrap (a) | 314 | 238 | 311 | 291 | 296 | 62 |
| Semi-manufactures (a) | 44 | 63 | 81 | 137 | 139 | 146 |
| Norway— | | | | | | |
| Unwrought | 343 | 412 | 410 | 433 | 440 | 505 |
| do. alloys | 218 | 234 | 196 | 192 | 195 | 171 |
| Semi-manufactures (a) | 414 | 459 | 468 | 585 | 594 | 537 |
| Poland— | | | | | | |
| Unwrought | 3,171 | 3,246 | 3,925 | 3,481 | 3,537 | 4,956 |
| Portugal— | | | | | | |
| Unwrought (a) | 15 | 30 | 107 | 163 | 166 | 78 |
| Semi-manufactures (a) | 13 | 13 | 11 | 15 | 15 | 17 |
| Spain— | | | | | | |
| Ore | 2,066 | 2,502 | 4,949 | 5,364 | 5,450 | 5,515 |
| Unwrought | 13 | 3 | 3 | — | — | 10 |
| Sweden— | | | | | | |
| Unwrought | 574 | 646 | 482 | 793 | 806 | 467 |
| do. alloys | 115 | 116 | 94 | 142 | 144 | 97 |
| Semi-manufactures (a) | 136 | 147 | 147 | 156 | 159 | 175 |
| Switzerland— | | | | | | |
| Unwrought | 854 | 869 | 913 | 930 | 945 | 962 |
| Semi-manufactures (a) | 115 | 110 | 154 | 170 | 173 | 232 |
| U.S.S.R.— | | | | | | |
| Unwrought | 5,600 | 6,980 | 6,690 | 8,170 | 8,300 | 4,400 |
| Yugoslavia— | | | | | | |
| Unwrought | 1,792 | 1,385 | 927 | 1,550 | 1,575 | 762 |
| Semi-manufactures (a) | 29 | 60 | 38 | 83 | 84 | 36 |
| Egypt— | | | | | | |
| Unwrought and scrap .. | 438 | 467 | 281 | 620 | 630 | 586 |
| Malagasy Republic— | | | | | | |
| Semi-manufactures (a) | 6 | 7 | 3 | 9 | 9 | n.a. |
| Morocco— | | | | | | |
| Unwrought | 232 | 247 | 255 | 196 | 199 | 246 |
| Mozambique— | | | | | | |
| Semi-manufactures .. | 20 | 44 | 11 | 17 | 17 | n.a. |
| South Africa— | | | | | | |
| Ores and concentrates .. | 1 | 35 | 98 | 139 | 141 | 221 |
| Unwrought | 318 | 384 | 402 | 439 | 446 | 485 |
| Semi-manufactures .. | 219 | 11 | 64 | 15 | 15 | 30 |
| Sudan— | | | | | | |
| Unwrought and scrap .. | 59 | 1 | — | 75 | 76 | 2 |
| Semi-manufactures .. | 22 | 22 | 540 | 30 | 30 | 241 |
| Tunisia— | | | | | | |
| Unwrought (a) | 28 | 29 | 12 | 20 | 20 | 40 |
| Semi-manufactures (a) | 13 | 8 | 34 | 107 | 109 | 7 |
| Mexico— | | | | | | |
| Unwrought | 80 | 811 | 630 | 411 | 418 | n.a. |
| United States— | | | | | | |
| Ore (Sn content) | 3,255 | 2,808 | n.a. | 4,667 | 4,742 | 3,109 |
| Unwrought | 49,923 | 57,358 | 54,949 | 50,554 | 51,365 | 47,693 |
| do. alloys (b) | 692 | 623 | 1,832 | 853 | 867 | 1,058 |
| Scrap | 281 | 344 | 643 | 720 | 732 | 3,979 |
| Argentina— | | | | | | |
| Unwrought | 845 | 1,078 | 1,293 | 1,109 | 1,127 | 1,308 |
| Brazil— | | | | | | |
| Ore | 1 | 30 | 384 | — | — | n.a. |
| Unwrought (a) | 3 | 8 | 2 | — | — | n.a. |

(a) Including alloys.

(b) Including alloyed scrap, dross and residues.

IMPORTS OF TIN, ETC. (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|---|-----------|--------|--------|--------|--------|--------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Chile— | | | | | | |
| Unwrought | 862 | 657 | 688 | 913 | 928 | n.a. |
| do. alloys | 42 | 4 | 28 | 30 | 30 | n.a. |
| Colombia— | | | | | | |
| Unwrought (a) .. | 127 | 239 | 321 | 172 | 175 | n.a. |
| Semi-manufactures (a) r | 7 | 8 | 7 | n.a. | n.a. | n.a. |
| Peru— | | | | | | |
| Unwrought (a) .. | 193 | 167 | 186 | n.a. | n.a. | n.a. |
| Uruguay— | | | | | | |
| Unwrought | 27 | 47 | 42 | 34 | 35 | 34 |
| Venezuela— | | | | | | |
| Unwrought | 133 | 103 | 94 | 80 | 81 | 85 |
| Burma— | | | | | | |
| Unwrought | 4 | 2 | — | (a) 4 | (a) 4 | 24 |
| Semi-manufactures .. | — | 1 | 1 | 2 | 2 | 13 |
| Formosa— | | | | | | |
| Unwrought (a) | 324 | 301 | 452 | 462 | 469 | 704 |
| Iran (b)— | | | | | | |
| Unwrought | 277 | 225 | 331 | 299 | 304 | 274 |
| Iraq— | | | | | | |
| Unwrought | 51 | 43 | 36 | 81 | 82 | n.a. |
| Semi-manufactures .. | 94 | 35 | 142 | 114 | 116 | n.a. |
| Israel— | | | | | | |
| Unwrought | 126 | 146 | 135 | 178 | 181 | 114 |
| Japan— | | | | | | |
| Ore and concentrates .. | 594 | 1,102 | 22 | 245 | 249 | 18 |
| Unwrought | 19,300 | 20,273 | 25,542 | 26,455 | 26,880 | 27,682 |
| Jordan— | | | | | | |
| Semi-manufactures .. | n.a. | 18 | — | n.a. | n.a. | n.a. |
| Korea (South)— | | | | | | |
| Unwrought and semi- manufactures | 201 | 281 | 368 | 388 | 394 | 638 |
| Lebanon— | | | | | | |
| Unwrought and scrap .. | 18 | 17 | 12 | 41 | 42 | 14 |
| Philippine Republic— | | | | | | |
| Unwrought (a) | 700 | 600 | 424 | 795 | 808 | 733 |
| Southern Yemen— | | | | | | |
| Semi-manufactures (a) | 141 | 415 | n.a. | n.a. | n.a. | n.a. |
| Syria— | | | | | | |
| Unwrought and scrap .. | 54 | 130 | 69 | 118 | 120 | 137 |
| Turkey— | | | | | | |
| Unwrought (a) | 867 | 1,089 | 808 | 1,189 | 1,208 | n.a. |
| Semi-manufactures .. | — | 3 | 4 | 5 | 5 | n.a. |

(a) Including alloys.

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

TITANIUM MINERALS
PRODUCTION OF TITANIUM MINERALS

| Producing Country and Description | Long tons | | | | Tonnes | |
|-----------------------------------|------------|-------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Sierra Leone— | | | | | | |
| Rutile concentrates .. | 18,918 | 5,629 | 28,017 | 43,360 | 44,056 | 11,932 |
| Canada (shipments) (b)— | | | | | | |
| Ilmenite | 1,287,712 | 1,424,552 | 1,646,656 | 2,222,000 | 2,257,663 | <i>n.a.</i> |
| Ceylon— | | | | | | |
| Ilmenite | (a) 52,298 | (a) 73,430 | 81,546 | 83,226 | 84,562 | 92,892 |
| Rutile | — | 1,134 | 2,711 | 2,357 | 2,395 | 2,586 |
| India— | | | | | | |
| Ilmenite | 40,952 | 57,797 | 46,939 | 77,700 | 78,900 | 90,700 |
| Rutile | 2,496 | 2,644 | 2,461 | 2,461 | 2,500 | 2,900 |
| Malaysia (West) (a)— | | | | | | |
| Ilmenite | 89,372 | 123,838 | 130,533 | 219,095 | 222,611 | 155,682 |
| Australia— | | | | | | |
| Ilmenite concentrates .. r | 544,216 | 551,499 | r 701,172 | 872,449 | 886,452 | 814,842 |
| Rutile concentrates .. | 265,514 | r 290,154 | 365,339 | 365,009 | 370,867 | 366,726 |
| Leucoxene r | 696 | 1,607 | r 7,970 | 10,426 | 10,593 | 14,333 |
| OTHER COUNTRIES | | | | | | |
| Finland— | | | | | | |
| Ilmenite concentrates .. | 124,896 | 138,000 | 136,000 | 148,600 | 151,000 | 139,500 |
| Norway— | | | | | | |
| Ilmenite | 418,836 | 395,863 | 482,987 | 569,815 | 578,961 | 641,604 |
| Portugal— | | | | | | |
| Ilmenite | 527 | 545 | 203 | 234 | 238 | 890 |
| Spain— | | | | | | |
| Ilmenite | 36,486 | 38,432 | 28,770 | 26,698 | 27,126 | 23,623 |
| Egypt— | | | | | | |
| Ilmenite | 1,045 | — | 200 | — | — | — |
| Rutile | 6 | — | — | — | — | — |
| Malagasy Republic— | | | | | | |
| Ilmenite | 1,828 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| South Africa— | | | | | | |
| Ilmenite | — | — | 16,245 | — | — | — |
| Rutile | — | — | 485 | — | — | — |
| United States— | | | | | | |
| Ilmenite (d) | 834,903 | 873,669 | 831,470 | 774,960 | 787,390 | 619,617 |
| Brazil— | | | | | | |
| Ilmenite (c) | 14,730 | 17,598 | 19,962 | 20,318 | 20,644 | 20,000 |
| Rutile | 280 | 113 | 9 | 230 | 234 | 200 |
| Japan (e)— | | | | | | |
| Ilmenite | 6,664 | 5,778 | 4,002 | 3,095 | 3,145 | 3,000 |
| WORLD'S TOTAL*— | | | | | | |
| Ilmenite | 3,500,000 | 3,700,000 | 3,900,000 | 5,000,000 | 5,100,000 | 4,900,000 |
| Rutile | 294,000 | 305,000 | 365,000 | 410,000 | 417,000 | 384,000 |

*Excluding the U.S.S.R.

(a) Exports.

(b) Production of titanium dioxide slag (70–72% TiO₂) at Sorel was as follows (long tons): 1967—537,906; 1968—600,773; 1969—669,000; 1970—754,200. (Tonnes): 1970—766,300; 1971—775,280.

(c) Commissao Nacional de Energie Nuclear only.

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

(e) Production of metal (commercial titanium sponge) was as follows (long tons): 1967—7,716; 1968—5,341; 1969—6,342; 1970—9,084. (Tonnes): 1970—9,230; 1971—6,777.

EXPORTS OF TITANIUM MINERALS, ETC.*

| Exporting Country and Description | Long tons | | | | Tonnes | |
|---|-------------|-------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ferro-titanium | 977 | 1,456 | 1,282 | 1,543 | 1,568 | 1,204 |
| Titanium oxide | 528 | 455 | 852 | 5,158 | 5,241 | 15,760 |
| do. extended— | | | | | | |
| Mixtures containing not less than 94 per cent. TiO ₂ | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 37,783 | 38,389 | 10,199 |
| Pigments with a basis of TiO ₂ | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 19,358 | 19,669 | 57,988 |
| Sierra Leone— | | | | | | |
| Rutile concentrates | 18,918 | 5,629 | 15,480 | 28,768 | 29,230 | 16,379 |
| Canada— | | | | | | |
| Titanium dioxide slag (70% TiO ₂) | (a) | (a) | (a) | (a) | (a) | (a) |
| Ceylon— | | | | | | |
| Ilmenite | 52,298 | 73,430 | 83,362 | 76,849 | 78,082 | 86,669 |
| India— | | | | | | |
| Ilmenite | 20,607 | 47,759 | 72,836 | 53,199 | 54,053 | 50,358 |
| Malaysia (West)— | | | | | | |
| Ilmenite | 89,372 | 123,838 | 130,533 | 219,095 | 222,611 | 155,682 |
| Singapore— | | | | | | |
| Titanium oxide | 180 | 207 | 318 | 305 | 310 | 506 |
| Australia— | | | | | | |
| Rutile | 258,791 | 284,995 | 299,113 | 368,289 | 374,200 | 335,955 |
| Ilmenite (b) | 384,300 | 395,911 | 566,520 | 647,060 | 657,445 | 676,329 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Titanium oxide | 5,884 | 6,878 | 5,283 | 23,130 | 23,501 | 26,628 |
| do, extended | 9,653 | 10,402 | 10,813 | 7,774 | 7,899 | 7,221 |
| Finland— | | | | | | |
| Ilmenite | 39,792 | 45,164 | 12,816 | 24,277 | 24,667 | 10,500 |
| Titanium oxide | 5,042 | 4,216 | 3,483 | 3,526 | 3,583 | 3,627 |
| France— | | | | | | |
| Titanium minerals | 25 | 144 | 127 | 137 | 139 | 124 |
| Ferro-titanium | 2,265 | 2,788 | 3,462 | 3,235 | 3,287 | 1,951 |
| Titanium oxide | 13,589 | 10,012 | 9,689 | 14,341 | 14,571 | 13,648 |
| do, extended | 27,625 | 47,646 | 54,453 | 58,491 | 59,430 | 55,675 |
| Germany (Federal)— | | | | | | |
| Titanium minerals | 162 | 681 | 520 | 145 | 147 | 313 |
| Titanium oxide | 26,683 | 29,667 | 42,634 | 41,254 | 41,916 | 35,432 |
| do, extended | 57,458 | 68,019 | 63,813 | 76,232 | 77,455 | 81,905 |
| Italy— | | | | | | |
| Titanium oxide | 17,381 | 21,590 | 16,612 | 18,885 | 19,188 | 19,340 |
| Netherlands— | | | | | | |
| Titanium oxide | 8,900 | 14,390 | 21,190 | 19,964 | 20,284 | 22,368 |
| do, extended | 436 | 43 | 355 | 718 | 730 | 245 |
| Norway— | | | | | | |
| Ilmenite | 344,238 | 389,733 | 448,048 | 523,722 | 532,126 | 513,835 |
| Rutile | | | | | | |
| Titanium oxide, extended | | | | | | |
| Titanium oxide, extended | 6,584 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Spain— | | | | | | |
| Ilmenite | 6,200 | 6,348 | 3,445 | — | — | — |
| Titanium oxide | 4,788 | 3,142 | 655 | 2,832 | 2,878 | 2,558 |

*In these tables the term "titanium oxide" refers to material classified in the Standard International Trade Classification coding 513.5 "Metallic oxides of kinds principally used in paints", and "titanium oxide extended" to material classified in S.I.T.C. coding 533 "Pigments, paints etc."

(a) Information not available. Most of the titanium dioxide slag produced in Canada (figures on page 367) is believed to be exported.

(b) Includes leucoxene.

EXPORTS OF TITANIUM MINERALS, ETC. (cont.)

| Exporting Country and Description | | | Long tons | | Tonnes | |
|--------------------------------------|-------------|-------------|-----------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Sweden— | | | | | | |
| Titanium minerals .. | — | 24 | 1,519 | 303 | 308 | 205 |
| Titanium oxide .. | 45 | 32 | 10 | 10 | 10 | 7 |
| do, extended .. | — | — | 443 | 407 | 414 | 942 |
| South Africa— | | | | | | |
| Ilmenite | <i>n.a.</i> | <i>n.a.</i> | 309 | 504 | 512 | 409 |
| Titanium oxide .. | 58 | 61 | 659 | 218 | 221 | 848 |
| do, extended .. | 2,005 | 2,044 | 4,409 | 4,798 | 4,875 | 3,537 |
| United States— | | | | | | |
| Ores and concentrates .. | 2,703 | 3,784 | 1,271 | 945 | 960 | 1,597 |
| Titanium metal (a) .. | 1,276 | 2,458 | 2,502 | 2,591 | 2,633 | 1,552 |
| Titanium oxide and pigments | 23,272 | 27,050 | 21,880 | 23,388 | 23,763 | 24,275 |
| Brazil— | | | | | | |
| Titanium minerals .. | — | — | 1,174 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Japan— | | | | | | |
| Titanium sponge metal | 5,310 | 3,416 | 4,620 | 4,289 | 4,358 | 2,803 |
| Titanium oxide | 27,306 | 34,851 | 41,022 | 36,607 | 37,194 | 14,079 |

(a) Including alloys and scrap.

IMPORTS OF TITANIUM MINERALS, ETC.*

| Importing Country and Description | Long tons | | | | Tonnes | |
|--|-------------|-------------|-------------|---------|---------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ilmenite.. .. | 250,016 | 249,686 | 255,903 | 340,067 | 345,525 | 361,312 |
| Rutile | 16,926 | 21,149 | 43,993 | 49,079 | 49,867 | 36,221 |
| Titanium metal .. | 861 | 2,419 | 2,693 | 2,607 | 2,649 | 1,353 |
| Titanium oxide.. | 5,566 | 4,430 | 2,454 | 4,756 | 4,832 | 2,758 |
| do. extended— | | | | | | |
| Mixtures containing not less than 94 per cent. TiO ₂ .. | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 15,399 | 15,646 | 13,811 |
| Pigments with a basis of TiO ₂ .. | 17,353 | 21,891 | 20,395 | 11,058 | 11,236 | 8,484 |
| Canada— | | | | | | |
| Titanium metal .. | 1,935 | 208 | 339 | 258 | 262 | 160 |
| Titanium oxide .. | 1,443 | 2,132 | 2,236 | 2,483 | 2,523 | 5,390 |
| do, extended .. | 8,717 | 8,658 | 7,725 | 7,298 | 7,415 | 5,194 |
| Hong Kong— | | | | | | |
| Titanium oxide.. | 2,707 | 3,218 | 3,428 | 3,380 | 3,434 | 3,142 |
| India— | | | | | | |
| Rutile | 640 | 30 | — | — | — | — |
| Titanium oxide (b) .. | 4,752 | 4,650 | 5,892 | 6,321 | 6,423 | 4,409 |
| Malaysia (West)— | | | | | | |
| Titanium oxide .. | 1,332 | 1,502 | 1,564 | 1,821 | 1,850 | 1,978 |
| Singapore— | | | | | | |
| Titanium oxide.. | 899 | 1,276 | 1,644 | 2,366 | 2,404 | 2,014 |
| Australia (a)— | | | | | | |
| Titanium oxide.. | 1,103 | 1,173 | 1,192 | 1,010 | 1,026 | 762 |
| New Zealand (a)— | | | | | | |
| Titanium oxide.. | 654 | 566 | 1,100 | 974 | 990 | <i>n.a.</i> |
| Irish Republic— | | | | | | |
| Titanium oxide.. | 2,412 | 2,598 | 3,213 | 3,151 | 3,202 | 3,227 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Ferro-titanium .. | 163 | 182 | 215 | 243 | 247 | 211 |
| Titanium oxide .. | 5,674 | 6,257 | 6,443 | 7,149 | 7,264 | 7,081 |
| Belgium-Luxemburg | | | | | | |
| E. U.— | | | | | | |
| Titanium minerals .. | 14,642 | 32,626 | 46,562 | 60,975 | 61,954 | 68,348 |
| Ferro-titanium .. | 94 | 209 | 223 | 303 | 308 | 349 |
| Titanium oxide .. | 11,473 | 9,537 | 10,575 | 9,996 | 10,157 | 11,600 |
| do, extended .. | 3,379 | 4,060 | 3,811 | 5,415 | 5,502 | 6,674 |
| Denmark— | | | | | | |
| Titanium oxide .. | 5,860 | 6,048 | 6,816 | 7,727 | 7,851 | 6,116 |
| do, extended .. | 88 | 84 | 49 | 31 | 31 | 466 |
| Finland— | | | | | | |
| Titanium oxide .. | 10 | 22 | 47 | 115 | 117 | 181 |
| France— | | | | | | |
| Titanium minerals .. | 97,689 | 132,933 | 136,539 | 124,831 | 126,834 | 112,961 |
| Titanium metal .. | 487 | 482 | 556 | 1,078 | 1,095 | 1,556 |
| Titanium oxide.. | 14,102 | 17,603 | 19,619 | 18,594 | 18,892 | 22,362 |
| do, extended .. | 5,702 | 3,164 | 4,668 | 8,451 | 8,587 | 11,203 |

*In these tables the term "titanium oxide" refers to material classified in the Standard International Trade Classification coding 513.5 "Metallic oxides of kinds principally used in paints" and "titanium oxide extended" to material classified in S.I.T.C. coding 533 "Pigments, paints etc."

(a) Years ended June 30 of that stated.

(b) Years ended March 31 following that stated.

IMPORTS OF TITANIUM MINERALS, ETC. (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|-------------|---------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Germany (Federal)— | | | | | | |
| Ilmenite | 212,694 | 223,997 | 319,523 | 357,382 | 363,117 | 278,202 |
| Other titanium minerals | 155,787 | 183,444 | 234,588 | 210,408 | 213,785 | 209,008 |
| Titanium metal | 1,193 | 1,302 | 2,158 | 3,029 | 3,078 | 2,018 |
| Titanium oxide | 2,435 | 3,029 | 7,771 | 15,270 | 15,515 | 15,257 |
| do, extended | 8,667 | 12,550 | 15,670 | 12,966 | 13,174 | 17,646 |
| Greece— | | | | | | |
| Titanium oxide | 2,379 | 2,716 | 3,132 | 3,509 | 3,565 | 4,196 |
| Iceland— | | | | | | |
| Titanium oxide, extended | 39 | <i>n.a.</i> | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Italy— | | | | | | |
| Titanium minerals | 104,718 | 135,235 | 94,777 | 105,821 | 107,519 | 96,981 |
| Ferro-titanium | 502 | 626 | 987 | 1,481 | 1,505 | 757 |
| Titanium oxide | 21,012 | 23,842 | 29,237 | 32,580 | 33,103 | 35,328 |
| do, extended | 76 | 163 | 153 | 149 | 151 | 92 |
| Netherlands— | | | | | | |
| Ferro-titanium | 38 | 62 | 89 | 56 | 57 | (a) 114 |
| Titanium oxide | 2,491 | 4,186 | 5,527 | 5,864 | 5,958 | 5,458 |
| do, extended | 16,545 | 14,779 | 16,717 | 15,372 | 15,619 | 15,886 |
| Norway— | | | | | | |
| Titanium oxide | 1,105 | 949 | 1,830 | 1,273 | 1,294 | 333 |
| do, extended | 3,932 | 5,253 | 5,316 | 5,089 | 5,171 | 4,852 |
| Poland— | | | | | | |
| Titanium oxide | 8,542 | 10,471 | 10,083 | 12,201 | 12,397 | <i>n.a.</i> |
| Portugal— | | | | | | |
| Rutile | 343 | 262 | 113 | 425 | 432 | 257 |
| Titanium oxide | 2,595 | 3,064 | 3,498 | 4,077 | 4,142 | 4,107 |
| Spain— | | | | | | |
| Ilmenite | 2,718 | 23,476 | 17,453 | 12,448 | 12,648 | 30,268 |
| Titanium oxide | 5,491 | 5,231 | 8,067 | 6,339 | 6,441 | 6,822 |
| Sweden— | | | | | | |
| Titanium minerals | 2,747 | 2,619 | 3,408 | 3,450 | 3,505 | 2,728 |
| Ferro-titanium | 1,055 | 1,261 | 1,131 | 1,731 | 1,759 | 877 |
| Titanium oxide | 7,829 | 5,551 | 6,857 | 6,175 | 6,274 | 6,770 |
| do, extended | 8,741 | 12,732 | 12,572 | 13,611 | 13,829 | 12,706 |
| Switzerland— | | | | | | |
| Titanium oxide | 7,211 | 8,828 | 8,777 | 8,594 | 8,732 | 9,660 |
| Yugoslavia— | | | | | | |
| Rutile | 1,672 | 989 | 1,743 | 1,404 | 1,427 | 1,874 |
| Titanium oxide | 3,863 | 4,521 | 5,040 | 5,547 | 5,636 | 5,267 |
| Algeria— | | | | | | |
| Titanium oxide | 234 | 217 | 785 | 499 | 507 | <i>n.a.</i> |
| do, extended | 2,152 | <i>n.a.</i> | 3,580 | 4,964 | 5,044 | <i>n.a.</i> |
| Morocco— | | | | | | |
| Titanium oxide | 367 | 658 | 669 | 649 | 659 | 736 |
| do, extended | 191 | 233 | 245 | 322 | 327 | 294 |
| Senegal— | | | | | | |
| Titanium oxide | 139 | 156 | 172 | 157 | 160 | 104 |
| South Africa— | | | | | | |
| Titanium oxide | 159 | 403 | 677 | 960 | 975 | 991 |
| do, extended | 483 | 334 | 265 | 369 | 375 | 505 |
| Tunisia— | | | | | | |
| Titanium oxide | 345 | 355 | 308 | 163 | 166 | 182 |
| Mexico— | | | | | | |
| Titanium oxide | 17 | 46 | 59 | 12 | 12 | 1 |

(a) Excludes imports from Belgium and Luxemburg, if any.

IMPORTS OF TITANIUM MINERALS, ETC. (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|---------|---------|---------|---------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| United States— | | | | | | |
| Ilmenite (a) | 185,630 | 219,740 | 282,650 | 113,113 | 114,928 | 205,070 |
| Titanium ores and concentrates | 149,196 | 155,684 | 182,949 | 217,203 | 220,688 | 196,512 |
| Titanium metal | 6,379 | 3,398 | 5,898 | 6,335 | 6,437 | 4,009 |
| Ferro-titanium | 137 | r 178 | 492 | 65 | 66 | 79 |
| Titanium dioxide | 41,763 | 47,611 | 47,583 | 53,755 | 54,618 | 38,857 |
| Argentina— | | | | | | |
| Ores and concentrates | 794 | 781 | 1,225 | 1,327 | 1,348 | 1,736 |
| Titanium oxide | 2,057 | 1,083 | 949 | 1,469 | 1,493 | 1,334 |
| Brazil— | | | | | | |
| Rutile | 1,193 | 792 | 1,088 | 1,044 | 1,061 | n.a. |
| Titanium oxide | 9,319 | 15,065 | 15,956 | 18,018 | 18,307 | n.a. |
| Chile— | | | | | | |
| Titanium oxide | 2,090 | 2,502 | 2,724 | 2,577 | 2,618 | n.a. |
| Colombia— | | | | | | |
| Titanium oxide | r 910 | r 1,886 | 827 | n.a. | n.a. | n.a. |
| Peru— | | | | | | |
| Titanium oxide | — | 1,372 | 1,277 | n.a. | n.a. | n.a. |
| Venezuela— | | | | | | |
| Titanium oxide | 533 | 621 | 694 | n.a. | n.a. | 703 |
| do, extended | 4,099 | 4,556 | 4,336 | n.a. | n.a. | 5,600 |
| Formosa— | | | | | | |
| Titanium oxide | 2,695 | 4,071 | 4,568 | 5,643 | 5,734 | 7,110 |
| Iran (b)— | | | | | | |
| Titanium oxide | 919 | 1,234 | 1,221 | 1,963 | 1,994 | 2,469 |
| Israel— | | | | | | |
| Titanium oxide | 1,293 | 2,142 | 2,369 | 2,430 | 2,469 | 2,667 |
| Japan— | | | | | | |
| Ores and concentrates | 269,288 | 358,176 | 403,115 | 578,979 | 588,270 | 553,723 |
| Titanium oxide | 3,279 | 5,594 | 4,125 | 6,059 | 6,156 | 6,167 |
| Korea (South)— | | | | | | |
| Titanium oxide | 2,110 | 3,107 | 4,149 | 4,150 | 4,217 | 5,655 |
| Philippine Republic— | | | | | | |
| Titanium oxide | 3,313 | 3,749 | 3,735 | 4,245 | 4,313 | 4,430 |
| do, extended | 2,169 | 2,190 | 1,301 | 1,530 | 1,555 | 45 |
| Syria— | | | | | | |
| Titanium oxide | 285 | 221 | 669 | 311 | 316 | 566 |
| Turkey— | | | | | | |
| Titanium oxide | 2,771 | 3,827 | 4,028 | 4,086 | 4,152 | n.a. |
| Titanium minerals | 383 | 165 | 220 | 234 | 238 | n.a. |

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

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

PRODUCTION OF TUNGSTEN ORES AND CONCENTRATES

| Producing Country and Description | Long tons Tonnes | | | | | Long tons Tonnes | | | | |
|-----------------------------------|--------------------|---------|---------|-------|-------|-----------------------------------|---------|---------|-------|-------|
| | 1967 | 1968 | 1969 | 1970 | 1971 | 1967 | 1968 | 1969 | 1970 | 1971 |
| | | | | | | Estimated WO ₃ Content | | | | |
| COMMONWEALTH COUNTRIES | | | | | | | | | | |
| United Kingdom—Concentrates .. | 16 | 12 | 16 | 21 | 10 | 10 | 8 | 10 | 14 | 6 |
| Nigeria—Wolfram .. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 1 | 1 | n.a. |
| Tanzania—Wolfram | 47 | 31 | 13 | 14 | 11 | 28 | 19 | 8 | 8 | 5 |
| Uganda—Wolfram | 131 | n.a. | n.a. | n.a. | n.a. | 88 | 94 | 66 | 86 | 84 |
| Canada (a)—Concentrates .. | n.a. | n.a. | n.a. | n.a. | n.a. | 164 | 1,607 | 1,813 | 1,720 | 2,272 |
| Hong Kong—Wolfram .. | 4 | 1 | — | — | — | 3 | 1 | — | — | — |
| India—Concentrates .. | 28 | 38 | 40 | 34 | 30 | 18 | 24 | 25 | 22 | 19 |
| Malaysia (West) Wolfram .. | 13 | 98 | 46 | 132 | 237 | 9 | 69 | 32 | 92 | 164 |
| Scheelite .. | 9 | (b) 7 | 1 | 1 | 2 | 6 | 5 | 1 | 1 | 1 |
| Australia—Wolfram .. | r 505 | r 601 | r 964 | 1,232 | 907 | r 328 | 391 | r 626 | 800 | 655 |
| Scheelite .. | r 1,329 | r 1,622 | r 1,681 | 1,184 | 1,783 | r 864 | r 1,054 | r 1,093 | 770 | 1,294 |
| New Zealand—Scheelite .. | 16 | 19 | 8 | 5 | 7 | 10 | 12 | 5 | 4 | 5 |
| TOTAL .. | | | | | | 1,530 | 3,290 | 3,680 | 3,520 | 4,510 |
| OTHER COUNTRIES | | | | | | | | | | |
| Austria—Concentrates | 143 | 247 | 200 | 157 | 160 | 97 | 174 | 140 | 105 | 59 |

(a) Shipments (chiefly scheelite).

(b) Exports.

PRODUCTION OF TUNGSTEN ORES AND CONCENTRATES (cont.)

| Producing Country and Description | Long tons Tonnes | | | | | Long tons Tonnes | | | | | | |
|--|-----------------------------------|---------|---------|-------|-------|--------------------|---------|---------|---------|-------|-------|-------|
| | 1967 | 1968 | 1969 | 1970 | 1971 | 1967 | 1968 | 1969 | 1970 | 1971 | | |
| | Estimated WO ₃ Content | | | | | | | | | | | |
| OTHER COUNTRIES (cont.) | | | | | | | | | | | | |
| France— Concentrates .. | 30 | 25 | 131 | 104 | 106 | 1,083 | 20 | 16 | 88 | 72 | 73 | 448 |
| Italy— Concentrates .. | 1 | 1 | — | — | — | — | 1 | 1 | — | — | — | — |
| Portugal— Scheelite .. | 1,842 | 2,361 | 2,253 | 2,491 | 2,531 | 2,309 | 1,360 | 1,716 | 1,652 | 1,831 | 1,860 | 1,695 |
| Wolfram .. | — | — | — | — | — | — | — | — | — | — | — | — |
| Spain— Concentrates .. | 152 | 254 | 356 | 697 | 708 | 950 | 99 | 154 | 251 | 506 | 514 | 669 |
| U.S.S.R. (b) .. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 7,600 | 7,600 | 8,000 | 8,300 | 8,400 | 8,800 |
| Rwanda and Burundi— Concentrates .. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 371 | 400 | 210 | 226 | 230 | 250 |
| South Africa— Concentrates .. | 23 | 47 | 60 | 6 | 6 | 12 | 16 | 32 | 41 | 4 | 4 | 8 |
| Zaire Republic— Concentrates .. | n.a. | 70 | 131 | 333 | 339 | 508 | 65 | 46 | 85 | 216 | 220 | 330 |
| Tin-tungsten ore .. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 185 | 262 | 358 | 357 | 363 | 300 |
| Mexico .. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | r 4,414 | r 5,090 | r 4,453 | 5,242 | 5,326 | 3,905 |
| United States— Concentrates (a) .. | r 7,357 | r 8,483 | r 7,421 | 8,737 | 8,877 | 6,507 | r 4,414 | r 5,090 | r 4,453 | 5,242 | 5,326 | 3,905 |

(a) Shipments from mine.

(b) United States Bureau of Mines' estimate.

PRODUCTION OF TUNGSTEN ORES AND CONCENTRATES (cont.)

| Producing Country and Description | Long tons | | | | | Tonnes | | | | | | |
|--|-----------------------------------|--------|--------|--------|--------|--------|---------|---------|---------|-----------|--------|--|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 | |
| | Estimated WO ₃ Content | | | | | | | | | | | |
| OTHER COUNTRIES (cont.) | | | | | | | | | | | | |
| Argentina— Concentrates | 201 | 354 | 277 | 276 | 280 | 268 | 234 | 180 | 178 | 181 | 173 | |
| Bolivia (a)— Concentrates | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 2,217 | 2,264 | 2,333 | 2,370 | 2,640 | |
| Brazil— Wolfram and scheelite .. | 589 | n.a. | n.a. | n.a. | n.a. | n.a. | 475 | 998 | 1,435 | 1,458 | 1,763 | |
| Peru— Concentrates | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | (c) 687 | (c) 855 | (c) 998 | (c) 1,014 | 971 | |
| Burma— Tungsten concentrates .. | 93 | 139 | 110 | 90 | 91 | 290 | 82 | 66 | 54 | 55 | 174 | |
| Tin-wolfram concentrates | 185 | 515 | 452 | 714 | 726 | 878 | 200 | 180 | 280 | 290 | 350 | |
| China— Concentrates (b) | 15,000 | 15,000 | 16,000 | 16,000 | 16,000 | 16,000 | 9,000 | 9,900 | 9,900 | 10,100 | 10,100 | |
| Japan— Concentrates | 679 | 923 | 1,074 | 1,192 | 1,211 | 1,306 | 485 | 770 | 841 | 854 | 920 | |
| Korea— South— Concentrates | 3,586 | 3,837 | 3,435 | 3,968 | 4,032 | 4,018 | 2,700 | 2,400 | 2,500 | 2,600 | 2,600 | |
| North— Concentrates (b) | 4,500 | 4,500 | 6,700 | 6,700 | 6,800 | 6,800 | 2,000 | 3,000 | 3,000 | 3,000 | 3,000 | |
| Thailand— Concentrates | 825 | 950 | 1,220 | 1,356 | 1,378 | 4,865 | 618 | 793 | 882 | 896 | 3,162 | |
| TOTAL | | | | | | | 32,000 | 34,000 | 37,000 | 38,000 | 42,000 | |
| WORLD'S TOTAL | | | | | | | 34,000 | 38,000 | 40,000 | 41,000 | 47,000 | |

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

EXPORTS OF TUNGSTEN, ETC.

| Exporting Country and Description | Long tons | | | | Tonnes | |
|---------------------------------------|-----------|-------|-------|-------|--------|-------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Tungsten ore | 5 | — | — | 560 | 569 | 1,057 |
| Ferro-tungsten | 1,176 | 1,366 | 1,638 | 2,258 | 2,294 | 3,825 |
| Tungsten metal, etc. | 87 | 42 | 102 | 151 | 154 | 115 |
| Tanzania— | | | | | | |
| Wolfram ore | 46 | 31 | 20 | 19 | 19 | 5 |
| Uganda— | | | | | | |
| Wolfram ore | 145 | 100 | 173 | 220 | 224 | 206 |
| Hong Kong— | | | | | | |
| Tungsten ore | 5 | 2 | — | — | — | — |
| Malaysia (West)— | | | | | | |
| Wolfram | 36 | 36 | 221 | 169 | 172 | 272 |
| Scheelite | 2 | 7 | 4 | — | — | — |
| Australia (a)— | | | | | | |
| Wolfram ores and concentrates | 472 | 362 | 679 | 979 | 994 | 1,002 |
| (WO ₃ content) | 343 | 252 | 498 | 655 | 665 | 712 |
| Scheelite ores and concentrates | 1,206 | 1,248 | 1,771 | 1,408 | 1,431 | 1,214 |
| (WO ₃ content) | 788 | 850 | 1,200 | 994 | 1,010 | 825 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Ore | 161 | 274 | 235 | 169 | 172 | 100 |
| Tungsten metal | 945 | 902 | 916 | 912 | 927 | 1,259 |
| Belgium-Luxemburg | | | | | | |
| E. U.— | | | | | | |
| Ferro-tungsten | 35 | 40 | 12 | 43 | 44 | — |
| France— | | | | | | |
| Tungsten ore | 32 | 1 | — | 123 | 125 | 1,046 |
| Ferro-tungsten | 313 | 254 | 484 | 259 | 263 | 473 |
| Tungsten metal, etc. | 230 | 331 | 296 | 241 | 245 | 189 |
| Germany (Federal)— | | | | | | |
| Tungsten metal, etc. | 334 | 296 | 312 | 494 | 502 | 320 |
| Netherlands— | | | | | | |
| Ore | 245 | 266 | 119 | 118 | 120 | 345 |
| Portugal— | | | | | | |
| Tungsten ores | 1,304 | 1,579 | 1,560 | 1,701 | 1,728 | 1,447 |
| do. residues | 127 | 56 | 131 | 127 | 129 | 26 |
| Ferro-tungsten | 371 | 297 | 370 | 269 | 273 | 274 |
| Spain— | | | | | | |
| Tungsten ore | 184 | 146 | 401 | 658 | 669 | 324 |
| Sweden— | | | | | | |
| Ore | 43 | 440 | 99 | 274 | 279 | 21 |
| Tungsten metal, etc. | 190 | 110 | 129 | 74 | 75 | 163 |
| Ferro-tungsten | 104 | 112 | 1 | 1 | 1 | 12 |
| South Africa— | | | | | | |
| Tungsten ore | 39 | 29 | 64 | 10 | 10 | 18 |
| Zaire Republic (c)— | | | | | | |
| Tungsten ores (b) | 98 | r 88 | 160 | 370 | 376 | n.a. |
| Mexico— | | | | | | |
| Tungsten ore and concentrates | 256 | 412 | 496 | 452 | 459 | 522 |
| (WO ₃ content) | 185 | 260 | 278 | 263 | 267 | 380 |

(a) Years ended June 30 of that stated.

(b) Estimated.

(c) Including Rwanda and Burundi.

EXPORTS OF TUNGSTEN, ETC. (cont.)

| Exporting Country and Description | Long tons | | | | Tonnes | |
|---|-----------|-------|-------|--------|--------|--------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| United States— | | | | | | |
| Ore and concentrates .. | 843 | 539 | 6,187 | 16,846 | 17,116 | 1,763 |
| Tungsten metal, alloys and scrap | 300 | 265 | 597 | 750 | 762 | 687 |
| Tungsten powder .. | 23 | 21 | 29 | 181 | 184 | 148 |
| Argentina— | | | | | | |
| Tungsten ore | 98 | 207 | 99 | 47 | 48 | 96 |
| Tungsten concentrates .. | 7 | 95 | 92 | 148 | 150 | 89 |
| Bolivia— | | | | | | |
| Tungsten ore (WO ₃ content) .. | 1,919 | 2,217 | 2,264 | 2,333 | 2,370 | 2,640 |
| Brazil— | | | | | | |
| Tungsten ores | 413 | 660 | 1,386 | 1,614 | 1,640 | n.a. |
| Peru— | | | | | | |
| Tungsten ore and con- centrates (WO ₃ content) | 730 | 854 | 774 | n.a. | n.a. | n.a. |
| Burma— | | | | | | |
| Ore and concentrates .. | 70 | 109 | 275 | 271 | 275 | 260 |
| Tin-tungsten ores .. | 145 | 30 | 95 | 50 | 51 | 340 |
| Japan— | | | | | | |
| Tungsten metal .. | 28 | 23 | 34 | (a) 50 | (a) 51 | (a) 92 |
| Korea (South)— | | | | | | |
| Tungsten ore | 3,927 | 3,562 | 3,653 | 8,159 | 8,290 | 3,004 |
| Thailand— | | | | | | |
| Tungsten ore | 844 | 806 | 559 | 1,133 | 1,151 | 4,842 |

(a) Including alloys.

IMPORTS OF TUNGSTEN, ETC.

Long tons Tonnes

| Importing Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|--|-------|-------|-------|--------|--------|-------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Tungsten ores | 5,515 | 4,603 | 7,381 | 10,383 | 10,550 | 7,129 |
| Tungsten metal, etc. .. | 46 | 64 | 22 | 75 | 77 | 103 |
| Ferro-tungsten | 217 | 196 | 94 | 218 | 221 | 103 |
| Canada— | | | | | | |
| Ores and concentrates— | | | | | | |
| (W content) | 104 | 59 | 190 | 82 | 83 | 70 |
| Ferro-tungsten | 86 | 53 | 94 | 89 | 91 | 101 |
| India— | | | | | | |
| Tungsten ore | 184 | 203 | 169 | 259 | 263 | 333 |
| Australia (b)— | | | | | | |
| Tungsten metal | 13 | 13 | 15 | 18 | 18 | 17 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Tungsten ore | 2,616 | 2,354 | 3,149 | 3,644 | 3,703 | 3,076 |
| Tungsten metal, etc. .. | 83 | 89 | 66 | 225 | 229 | 113 |
| Ferro-tungsten | — | 10 | 79 | 20 | 20 | — |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Tungsten ore | 58 | 106 | 36 | 123 | 125 | 142 |
| Ferro-tungsten | 33 | 10 | 25 | 40 | 41 | 20 |
| France— | | | | | | |
| Tungsten ore | 1,942 | 1,578 | 2,703 | 2,633 | 2,675 | 2,311 |
| Tungsten metal, etc. .. | 77 | 54 | 65 | 143 | 145 | 102 |
| Germany (Federal)— | | | | | | |
| Tungsten ore | 4,411 | 5,486 | 8,802 | 6,836 | 6,946 | 5,432 |
| Tungsten metal, etc. .. | 614 | 681 | 630 | 773 | 785 | 376 |
| Italy— | | | | | | |
| Tungsten ore | 45 | 54 | 59 | 136 | 138 | 115 |
| Tungsten metal, etc. .. | 79 | 82 | 57 | 66 | 67 | 79 |
| Ferro-tungsten | 165 | 595 | 367 | 215 | 219 | 106 |
| Netherlands— | | | | | | |
| Tungsten ore | 216 | 215 | 367 | 372 | 378 | 467 |
| Ferro-tungsten | 3 | 2 | 5 | 17 | 17 | (c) 6 |
| Poland— | | | | | | |
| Tungsten concentrates .. | 2,406 | 3,199 | 2,873 | 3,298 | 3,351 | 3,308 |
| Sweden— | | | | | | |
| Tungsten ore | 900 | 1,900 | 2,401 | 3,479 | 3,535 | 2,792 |
| Tungsten metal, etc. .. | 55 | 37 | 68 | 113 | 115 | 35 |
| Ferro-tungsten | 380 | 272 | 655 | 652 | 663 | 626 |
| U.S.S.R. (a)— | | | | | | |
| Tungsten concentrates | 600 | — | n.a. | 786 | 799 | 4,792 |
| Yugoslavia— | | | | | | |
| Tungsten metal, etc. .. | 11 | 6 | 16 | 20 | 20 | 20 |
| Ferro-tungsten | 87 | 139 | 185 | 194 | 197 | 87 |
| South Africa— | | | | | | |
| Ores and concentrates .. | 782 | 287 | 280 | 585 | 594 | 481 |
| Tungsten metal | 41 | 86 | 40 | 123 | 125 | 70 |
| United States— | | | | | | |
| Tungsten ore | 1,280 | 1,276 | 1,210 | 949 | 964 | 323 |
| (WO ₃ content) | r 956 | r 981 | r 846 | 722 | 734 | 240 |
| Tungsten metal and carbide— | | | | | | |
| (W content) | 5 | 7 | 9 | 66 | 67 | 105 |
| Ferro-tungsten | 151 | — | — | 2 | 2 | 13 |
| Tungsten ingots, bars, scrap, etc. | 62 | 18 | 19 | 51 | 52 | 55 |
| Japan— | | | | | | |
| Tungsten ore | 4,436 | 2,835 | 4,788 | 6,063 | 6,160 | 2,756 |
| Tungsten metal | 37 | 43 | 66 | 123 | 125 | 59 |
| Ferro-tungsten | 183 | 25 | 46 | 373 | 379 | 63 |

(a) Imports from China. (b) Years ended June 30 of that stated.

(c) Excludes imports from Belgium and Luxemburg, if any.

URANIUM MINERALS

PRODUCTION OF URANIUM MINERALS

(Metal content)

| Producing Country | Long tons | | | | Tonnes | |
|-------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Canada (a) | 2,830 | 2,802 | 2,919 | 3,111 | 3,160 | 3,157 |
| | £ 17,898,304 | 20,151,307 | 19,141,874 | 20,550,000 | 20,550,000 | 20,550,000 |
| OTHER COUNTRIES | | | | | | |
| France | 1,208 | 1,152 | 1,246 | 1,275 | 1,295 | 1,280 |
| Portugal (b) | 79 | 79 | 79 | 79 | 80 | n.a. |
| Spain | 83 | 60 | 86 | 70 | 71 | n.a. |
| Gabon | 500 | 472 | 491 | 371 | 377 | 446 |
| Malagasy Republic (c) .. | 64 | 21 | — | — | — | n.a. |
| South Africa | 2,544 | 2,932 | 3,002 | 3,118 | 3,168 | 3,200 |
| | £ 627,000,000 | 630,000,000 | 631,000,000 | 631,000,000 | 631,000,000 | 631,000,000 |
| United States | 6,909 | 9,342 | 9,537 | 9,670 | 9,825 | 9,850 |
| | £ 653,000,000 | 670,000,000 | 661,000,000 | 659,000,000 | 659,000,000 | 660,000,000 |
| Argentina | 23 | 25 | 41 | 41 | 42 | n.a. |
| WORLD'S TOTAL (b) .. | 21,000 | 24,000 | 25,000 | 25,000 | 25,500 | 25,500 |

(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 | Long tons | | | | Tonnes | |
|--|-----------|------------|-----------|------------|------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Canada— Ores and concentrates £ | 8,059,006 | 10,046,635 | 9,445,000 | 10,389,000 | 10,389,000 | 7,177,000 |
| OTHER COUNTRIES | | | | | | |
| Gabon— Concentrates .. | 1,376 | 1,119 | 1,095 | 1,060 | 1,077 | <i>n.a.</i> |
| Malagasy Republic— Uranothorianite .. | 302 | 55 | — | — | — | <i>n.a.</i> |
| United States— Ores and concentrates .. | — | — | — | 19 | 19 | 40 |
| Compounds (a) .. | 25 | 51 | 47 | 1,806 | 1,835 | 2,731 |
| Metal and alloys (a) .. | — | 3 | — | 2 | 2 | 30 |

(a) Uranium and Thorium.

IMPORTS OF URANIUM MINERALS, ETC.

| Importing Country and Description | Long tons | | | | Tonnes | |
|---|-----------|--------|-------|--------|--------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Canada— Radium and compounds .. £ | 32,406 | 38,542 | 5,000 | 14,000 | 14,000 | 9,000 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg E.U.— Ore | — | 6 | 10 | 10 | 10 | 14 |
| France— Ore | 1,914 | 2,096 | 1,174 | 1,444 | 1,467 | 1,952 |
| Germany (Federal)— Ore | — | — | 10 | 3 | 3 | — |
| United States— Concentrates (U ₃ O ₈ content) | 1,288 | 400 | 1,300 | 590 | 600 | <i>n.a.</i> |

VANADIUM
PRODUCTION OF VANADIUM ORES*
(Metal content)

| Producing Country | Long tons | | | | Tonnes | |
|--------------------------|--------------|---------------|---------------|---------------|---------------|---------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| Finland | 1,154 | 1,179 | 1,325 | 1,294 | 1,315 | 1,109 |
| France (a) .. . | 95 | 69 | 96 | 77 | 78 | (d) 90 |
| Norway (d) .. . | r 730 | r 840 | r 990 | 1,060 | 1,080 | 1,050 |
| South Africa(b) .. | 1,888 | 2,017 | 5,443 | 7,117 | 7,231 | (d) 6,200 |
| South West Africa (d) .. | 960 | 500 | r 500 | 400 | 400 | 800 |
| United States (c) .. | 4,431 | 5,788 | 4,979 | 4,749 | 4,825 | 4,764 |
| WORLD'S TOTAL .. | 9,200 | 10,500 | 13,000 | 14,700 | 14,900 | 14,000 |

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

(a) By-product vanadium from aluminium plants.

(b) Vanadium in pentoxide and ammonium vanadate produced; together with an estimate of the vanadium content of slag exported, as follows (long tons): 1969—2,883; 1970—4,738. (Tonnes): 1970—4,814; 1971—5,000

(c) Recoverable.

(d) Estimated.

EXPORTS OF VANADIUM, ETC.

| Exporting Country and Description | Long tons | | | | Tonnes | |
|--|-----------|-------|--------|--------|--------|-----------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— Ferro-vanadium .. | 41 | 42 | 55 | 55 | 56 | 111 |
| OTHER COUNTRIES | | | | | | |
| Finland— Oxide | 2,452 | 2,532 | 2,735 | 2,754 | 2,798 | 1,874 |
| France— Ferro-vanadium | 244 | 66 | 304 | 145 | 147 | 81 |
| Germany (Federal) Ferro-vanadium | 542 | 793 | 654 | 631 | 641 | 724 |
| Italy— Ferro-vanadium .. | — | 1 | 41 | 20 | 20 | 72 |
| Norway— Ferro-vanadium .. | 175 | 630 | 647 | 510 | 518 | 446 |
| Sweden— Ferro-vanadium .. | 172 | 371 | 288 | 363 | 369 | 49 |
| South Africa— Oxide | 2,713 | 3,267 | 4,060 | 4,171 | 4,238 | (c) 3,619 |
| Ammonium vanadate .. | 43 | 614 | 38 | 55 | 56 | n.a. |
| Vanadiferous slag (b) .. | — | — | 20,595 | 33,840 | 34,381 | n.a. |
| South West Africa— Concentrates | n.a. | n.a. | 1,121 | 2,414 | 2,453 | 6,300 |
| (V content) (a) .. | n.a. | n.a. | 100 | 200 | 200 | 600 |
| United States— Ore, concentrates, oxide, etc. (V content) .. | 703 | 413 | 230 | 940 | 955 | 236 |
| Ferro-vanadium .. | 314 | 247 | 575 | 1,923 | 1,954 | 613 |

(a) Estimated. (b) Believed to contain about 14 per cent vanadium.

(c) Customs and Excise figure; those for previous years are from the Department of Mines.

IMPORTS OF VANADIUM, ETC.

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-------------|-------------|-------|-------|--------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— Ferro-vanadium .. | 141 | 482 | 788 | 1,315 | 1,336 | 200 |
| Canada— Ferro-vanadium .. | 346 | 237 | 349 | 168 | 171 | 90 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Ferro-vanadium .. | 10 | 23 | 32 | 49 | 50 | 133 |
| Oxide | 594 | 1,015 | 937 | 1,275 | 1,296 | 1,661 |
| France— | | | | | | |
| Oxide | 1,206 | 746 | 1,130 | 1,327 | 1,348 | 776 |
| Germany (Federal)— | | | | | | |
| Ferro-vanadium .. | 387 | 970 | 687 | 906 | 921 | 1,205 |
| Oxide | 696 | 851 | 1,145 | 1,255 | 1,275 | 458 |
| Hungary— | | | | | | |
| Ferro-vanadium .. | <i>n.a.</i> | <i>n.a.</i> | 149 | 209 | 212 | <i>n.a.</i> |
| Italy— | | | | | | |
| Ferro-vanadium .. | 616 | 254 | 352 | 442 | 449 | 304 |
| Oxide | 231 | 109 | 186 | 169 | 172 | 316 |
| Netherlands— | | | | | | |
| Ferro-vanadium .. | 8 | 3 | 5 | 3 | 3 | 7 |
| Sweden— | | | | | | |
| Ferro-vanadium .. | 173 | 372 | 447 | 521 | 529 | 418 |
| Oxide etc. .. | 657 | 907 | 959 | 930 | 945 | 641 |
| Mexico— | | | | | | |
| Ferro-vanadium .. | 156 | 328 | 192 | 199 | 202 | 190 |
| United States— | | | | | | |
| Ore | 213 | 1,926 | — | — | — | <i>n.a.</i> |
| (V content) .. | 37 | 28 | — | — | — | <i>n.a.</i> |
| Ferro-vanadium .. | 7 | 535 | 341 | 21 | 21 | 63 |
| Japan— | | | | | | |
| Oxide | 1,208 | 1,193 | 2,145 | 2,763 | 2,807 | 2,317 |

**VERMICULITE
PRODUCTION OF VERMICULITE**

| Producing Country | Long tons | | | | Tonnes | |
|-------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Kenya | 247 | 275 | 764 | 1,642 | 1,668 | 1,359 |
| Tanzania | 90 | 125 | 125 | 148 | 150 | 29 |
| India | 312 | 2,311 | 3,918 | 1,506 | 1,530 | 495 |
| OTHER COUNTRIES | | | | | | |
| South Africa | 99,898 | 108,440 | 126,753 | 119,971 | 121,896 | 132,070 |
| United States (a) | 227,679 | 258,926 | 276,310 | 254,758 | 258,847 | 273,499 |
| Argentina | 2,858 | 4,255 | 4,480 | 3,187 | 3,238 | 3,500 |
| WORLD'S TOTAL* | 333,000 | 373,000 | 404,000 | 382,000 | 388,000 | 411,000 |

*Excluding vermiculite produced in the U.S.S.R. and Brazil.

(a) Sold or used by producers.

EXPORTS OF VERMICULITE

| Exporting Country | Long tons | | | | Tonnes | |
|----------------------|-----------|---------|---------|---------|---------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| South Africa | 94,059 | 103,165 | 109,477 | 103,593 | 105,255 | 122,002 |

IMPORTS OF VERMICULITE

| Importing Country | Long tons | | | | Tonnes | |
|-------------------------------|-----------|------------|------------|------------|------------|--------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom .. (a) | 26,977 | (a) 24,772 | (a) 24,406 | (a) 28,544 | (a) 29,002 | 28,542 |
| Canada | 26,197 | 24,642 | 28,088 | 25,085 | 25,488 | 32,354 |
| Australia (c) | 2,215 | 3,284 | 3,541 | 3,702 | 3,762 | 3,961 |
| OTHER COUNTRIES | | | | | | |
| France (b) | 36,363 | 31,526 | 42,303 | 54,034 | 54,901 | 58,243 |
| Greece | 63 | 3 | 22 | 77 | 78 | 70 |
| Morocco (b) | 45 | 43 | 126 | 209 | 212 | 340 |
| Mexico | 367 | 474 | 503 | 621 | 631 | 328 |
| United States (a) | 14,252 | 9,443 | 5,801 | 10,788 | 10,961 | 16,447 |
| Venezuela | 218 | 515 | 380 | n.a. | n.a. | 488 |

(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)

| Producing Country | Long tons | | | | Tonnes | |
|-------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Zambia (c) | 43,781 | 51,547 | 49,373 | 52,612 | 53,456 | 57,066 |
| Canada | 1,111,178 | 1,147,448 | 1,151,907 | 1,233,304 | 1,253,094 | 1,270,211 |
| India | 5,187 | 6,858 | 7,290 | 8,287 | 8,420 | 9,000 |
| Australia | 400,527 | 415,722 | 501,848 | 479,511 | 487,207 | 450,297 |
| TOTAL | 1,561,000 | 1,622,000 | 1,710,000 | 1,774,000 | 1,802,000 | 1,778,000 |
| Irish Republic | 35,490 | 49,730 | 95,940 | 94,970 | 96,494 | 87,500 |
| OTHER COUNTRIES | | | | | | |
| Austria | 10,984 | 12,401 | 14,009 | 15,459 | 15,707 | 18,600 |
| Bulgaria | 66,800 | r 73,300 | r 75,800 | 75,200 | 76,400 | 80,000 |
| Finland (b) | 59,839 | 64,366 | 69,682 | 61,620 | 62,609 | 50,020 |
| France | 24,279 | 21,462 | 19,658 | 18,282 | 18,575 | 15,142 |
| Germany (Federal) (d) .. | 104,882 | 108,649 | 108,990 | 111,985 | 113,782 | 122,292 |
| Germany (East) (g) .. | 12,000 | 12,000 | 12,000 | 10,000 | 10,000 | (e) 5,000 |
| Greece | 11,552 | 10,441 | 9,239 | 8,100 | 8,200 | 13,900 |
| Hungary | 6,000 | (g) 3,500 | (g) 4,700 | (g) 4,700 | (g) 4,800 | n.a. |
| Italy | 122,237 | 136,267 | 130,210 | 109,000 | 110,700 | 105,900 |
| Norway | 11,980 | 11,654 | 11,011 | 10,158 | 10,321 | 10,927 |
| Poland | r 215,000 | r 216,000 | r 225,000 | 238,000 | 242,000 | 236,000 |
| Portugal | 422 | 355 | 1,074 | 1,581 | 1,606 | 2,046 |
| Spain | 56,962 | 73,420 | 83,016 | 96,516 | 98,065 | 85,874 |
| Sweden | 80,529 | 80,037 | 88,674 | 91,901 | 93,376 | 99,000 |
| U.S.S.R. (e) | 477,300 | 517,000 | 522,000 | 540,000 | 550,000 | 610,000 |
| Yugoslavia | 88,595 | 93,963 | 95,173 | 99,547 | 101,145 | 98,694 |
| Algeria | 8,000 | 18,000 | 20,700 | 16,700 | 16,970 | 15,797 |
| Congo (Brazza) | 2,337 | 1,600 | 4,600 | n.a. | n.a. | n.a. |
| Morocco | 38,873 | 32,767 | 34,644 | 17,566 | 17,848 | 12,328 |
| South West Africa | 22,200 | 22,800 | 37,500 | 45,400 | 46,100 | 48,900 |
| Tunisia | 4,087 | 5,020 | 9,646 | 12,057 | 12,251 | 11,802 |
| Guatemala (b) | 243 | — | 900 | 1,000 | 1,000 | (e) 1,000 |
| Honduras | 12,842 | 14,550 | 15,573 | 16,820 | 17,090 | 22,885 |
| Zaire Republic | 119,604 | 116,000 | 95,000 | 102,600 | 104,300 | 108,600 |
| Mexico | 210,351 | 236,000 | 249,000 | 258,400 | 262,600 | 261,200 |
| United States (b) | 490,547 | 472,720 | 493,875 | 476,904 | 484,557 | 445,805 |
| Argentina | 26,820 | 26,000 | r 31,184 | 38,369 | 38,985 | 33,000 |
| Bolivia (a) | 16,433 | 11,599 | 25,885 | 45,802 | 46,537 | 50,000 |
| Brazil | 1,800 | 4,700 | 8,800 | n.a. | n.a. | n.a. |
| Chile | 1,105 | 1,235 | 1,455 | 1,300 | 1,321 | 1,982 |
| Colombia (g) | 545 | 650 | 423 | 383 | 389 | 279 |
| Ecuador | 158 | 112 | 205 | 123 | 125 | n.a. |
| Peru (b) | 299,985 | 286,802 | 295,560 | 294,412 | 299,136 | 387,500 |
| Burma | 5,000 | 4,700 | 4,900 | 3,600 | 3,700 | 5,000 |
| China (g) | 90,000 | 100,000 | 100,000 | 100,000 | 100,000 | 110,000 |
| Iran (f) | (g) 24,000 | (g) 25,000 | (e) 26,000 | n.a. | n.a. | n.a. |
| Japan | 258,530 | 260,169 | 265,160 | 275,262 | 279,679 | 294,419 |
| Korea (South) | 13,400 | 19,000 | r 20,257 | 23,601 | 23,980 | 28,161 |
| Korea (North) (g) | 120,000 | 120,000 | 123,000 | 130,000 | 130,000 | n.a. |

- (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.

PRODUCTION OF ZINC ORE (cont.)

| Producing Country | Long tons | | | | Tonnes | |
|-----------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Philippine Republic | 1,462 | 2,207 | 3,234 | 3,141 | 3,191 | 3,875 |
| Thailand (a) | 1,400 | 1,100 | 700 | n.a. | n.a. | n.a. |
| Turkey | 5,734 | 10,811 | 16,114 | 24,100 | 24,500 | 17,500 |
| TOTAL | 3,100,000 | 3,200,000 | 3,400,000 | 3,600,000 | 3,600,000 | 3,700,000 |
| WORLD'S TOTAL | 4,600,000 | 4,700,000 | 5,100,000 | 5,200,000 | 5,300,000 | 5,500,000 |

Zinc ore is also produced in the United Kingdom, Czechoslovakia, Roumania and North Vietnam.

(a) Estimated.

METAL PRODUCTION OF ZINC

| Producing Country | Long tons | | | | Tonnes | |
|-------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | 102,675 | 140,625 | 148,608 | 144,282 | 146,597 | 116,464 |
| Zambia | 43,781 | 51,547 | 49,373 | 52,612 | 53,456 | 57,066 |
| Canada | 361,729 | 381,007 | 416,384 | 411,306 | 417,907 | 371,973 |
| India | 2,944 | 20,372 | 22,687 | 23,045 | 23,415 | 21,248 |
| Australia | 194,472 | 204,992 | 242,433 | 256,478 | 260,594 | 258,698 |
| TOTAL | 704,264 | 781,828 | 856,798 | 887,710 | 901,960 | 825,450 |
| OTHER COUNTRIES | | | | | | |
| Austria | 13,933 | 15,052 | 15,500 | 15,765 | 16,018 | 15,969 |
| Belgium | 223,738 | 247,148 | 256,477 | 237,427 | 241,237 | 212,712 |
| Bulgaria | 72,700 | 73,900 | 74,600 | 74,900 | 76,100 | 79,000 |
| Finland | — | — | 1,100 | 56,000 | 57,000 | 63,700 |
| France | 185,000 | 204,200 | 249,500 | 220,141 | 223,674 | 218,014 |
| Germany (Federal) | 138,596 | 142,068 | 144,817 | 147,851 | 150,224 | n.a. |
| Germany (East) (a) | 11,000 | 15,000 | 15,000 | 15,000 | 15,000 | 15,000 |
| Italy | 86,603 | 110,501 | 128,262 | 139,838 | 142,082 | 139,823 |
| Netherlands | 38,000 | 48,000 | 45,600 | 46,000 | 46,700 | 41,400 |
| Norway | 53,935 | 59,161 | 57,847 | 60,400 | 61,400 | 62,560 |
| Poland | 193,000 | 200,000 | 204,200 | 205,700 | 209,000 | 220,000 |
| Spain | 69,295 | 74,197 | 79,032 | 87,693 | 89,100 | 89,309 |
| U.S.S.R. (a) | 510,000 | 530,000 | 550,000 | 561,000 | 570,000 | 635,000 |
| Yugoslavia | 52,344 | 78,000 | 80,000 | 63,995 | 65,022 | 53,109 |
| South Africa | — | — | 11,600 | 26,700 | 27,100 | 42,400 |
| Zaire Republic | 60,521 | 61,584 | 62,300 | 62,500 | 63,500 | 62,673 |
| Mexico | 69,741 | 78,773 | 86,300 | 83,300 | 84,600 | 83,400 |
| United States (b) (c) | 838,241 | 911,510 | r 929,104 | 783,760 | 796,332 | 762,192 |
| Argentina | 22,626 | 20,607 | 24,210 | 31,000 | 32,000 | 33,500 |
| Peru | 62,351 | 66,958 | 63,728 | 69,300 | 70,400 | 57,200 |
| China (d) | 80,000 | 90,000 | 90,000 | 98,000 | 100,000 | 110,000 |
| Japan | 508,066 | 595,992 | 700,939 | 665,570 | 676,250 | 717,728 |
| Korea (South) | 2,419 | 2,500 | 2,274 | 2,300 | 2,300 | 9,200 |
| Korea (North) (d) | 80,000 | 80,000 | 60,000 | 80,000 | 80,000 | 80,000 |
| TOTAL | 3,400,000 | 3,700,000 | 4,000,000 | 3,900,000 | 3,900,000 | 4,000,000 |
| WORLD'S TOTAL | 4,100,000 | 4,500,000 | 4,800,000 | 4,800,000 | 4,900,000 | 4,800,000 |

Zinc is also produced in Czechoslovakia, Roumania and North Vietnam.

(a) Estimated.

(b) In addition secondary zinc recovered was as follows :

| Year | Long tons | Year | Long tons | Tonnes |
|--------------|-----------|--------------|-----------|---------|
| 1967 | 285,579 | 1970 | 300,948 | 305,775 |
| 1968 | 316,696 | 1971 | .. | 342,201 |
| 1969 | 333,416 | | | |

(c) The production by grades (including redistilled secondary) was as follows :

| | Long tons Tonnes | | | | | |
|-------------------------------|--------------------|---------|---------|---------|---------|-----------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| A—High grade—Special | 390,044 | 401,481 | 418,564 | 358,279 | 364,026 | 332,493 |
| Ordinary | 82,996 | 104,664 | 121,780 | 97,344 | 98,905 | 36,163 |
| B—Intermediate grade | 23,680 | 50,612 | 51,054 | 46,857 | 47,609 | 32,619 |
| C and D—Brass special | 81,321 | 67,714 | 79,737 | 64,117 | 65,145 | } 360,911 |
| E—Prime Western | 325,829 | 358,346 | 320,943 | 286,050 | 290,638 | |

(d) United States Bureau of Mines' estimate.

PRODUCTION OF ELECTROLYTIC ZINC IN CERTAIN COUNTRIES*

| Producing Country | Long tons | | | | Tonnes | |
|-------------------------------|-----------|---------|---------|---------|---------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Canada | 361,729 | 381,007 | 416,384 | 411,306 | 417,907 | 371,973 |
| Australia (Tasmania) .. | 194,472 | 204,992 | 242,433 | 256,478 | 260,594 | 258,698 |
| OTHER COUNTRIES | | | | | | |
| Austria | 13,933 | 15,052 | 15,500 | 15,765 | 16,018 | 15,969 |
| Norway | 53,935 | 59,161 | 57,847 | 60,400 | 61,400 | 62,560 |
| Poland | 92,000 | 95,100 | 96,000 | 100,000 | 102,000 | n.a. |
| Zaire Republic | 60,521 | 61,584 | 62,300 | 62,742 | 63,750 | 62,700 |
| United States | 331,488 | 355,594 | 406,000 | 353,130 | 358,794 | 274,474 |
| Japan | 306,000 | 363,000 | 390,600 | 364,000 | 370,500 | 411,900 |

*This production is already included in the Metal table.

PRODUCTION OF ZINC DUST IN CERTAIN COUNTRIES

| Producing Country | Long tons | | | | Tonnes | |
|-------------------------------|-----------|--------|----------|--------|--------|--------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom .. | 12,272 | 14,024 | 13,628 | 15,389 | 15,636 | 15,580 |
| Australia | 3,148 | 3,057 | 3,631 | 4,462 | 4,534 | 5,468 |
| OTHER COUNTRIES | | | | | | |
| France | 5,120 | 5,220 | r 7,426 | 6,673 | 6,780 | 7,968 |
| Germany (Federal) .. | 3,939 | 290 | — | — | — | — |
| United States | 44,887 | 54,970 | r 49,156 | 45,657 | 46,389 | 45,594 |
| Japan | r 26,070 | 30,612 | 35,197 | 34,172 | 34,720 | 34,454 |

**PRODUCTION OF ROLLED ZINC SHEETS, PLATES AND STRIPS
IN CERTAIN COUNTRIES**

| Producing Country | Long tons | | | | Tonnes | |
|-------------------------------|-----------|--------|--------|--------|--------|--------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom (a) .. | 22,859 | 25,346 | 26,885 | 25,214 | 25,619 | 26,174 |
| OTHER COUNTRIES | | | | | | |
| France | 76,080 | 69,480 | 71,200 | 64,250 | 65,280 | 68,761 |
| United States (b) .. | 39,500 | 42,432 | 41,554 | 35,030 | 35,592 | n.a. |
| Japan | 9,690 | 30,690 | 33,668 | 37,178 | 37,775 | 35,567 |

(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:

| Year | Long tons | Year | Long tons | Tonnes |
|--------------|-----------|--------------|-----------|--------|
| 1967 | 16,671 | 1970 | 16,139 | 16,398 |
| 1968 | 19,586 | 1971 | — | n.a. |
| 1969 | 21,775 | | | |

EXPORTS OF ZINC*

Long tons | Tonnes

| Exporting Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ore and concentrates .. | 43 | <i>n.a.</i> | <i>n.a.</i> | 454 | 461 | — |
| Unwrought (a) | 11,124 | 22,394 | 16,153 | 15,650 | 15,901 | 11,099 |
| Scrap | 649 | 1,185 | 611 | 759 | 771 | 1,311 |
| Semi-manufactures (a) | 4,159 | 4,527 | 6,764 | 6,432 | 6,535 | 6,355 |
| Oxide | 3,419 | 4,566 | 5,545 | 5,420 | 5,507 | 5,628 |
| Lithopone, etc... .. | 2,524 | 2,064 | 212 | 30 | 30 | 96 |
| Nigeria— | | | | | | |
| Ore and concentrates .. | 10 | <i>n.a.</i> | 42 | 60 | 61 | <i>n.a.</i> |
| Zambia— | | | | | | |
| Ores and concentrates .. | 621 | — | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Unwrought | 39,183 | 44,315 | 52,740 | 49,549 | 50,344 | 50,433 |
| Canada— | | | | | | |
| Ore (<i>Zn content</i>) | 656,879 | 764,123 | 718,450 | 755,349 | 767,470 | 785,870 |
| Unwrought | 265,761 | 284,560 | 274,459 | 313,798 | 318,834 | 283,248 |
| Scrap (a) | 7,339 | 5,587 | 7,875 | 6,610 | 6,714 | 5,381 |
| Hong Kong— | | | | | | |
| Scrap | — | 143 | 99 | — | — | 20 |
| India (c)— | | | | | | |
| Dross, scrap and ashes.. | 2,171 | 628 | 857 | 433 | 440 | 140 |
| Semi-manufactures (a) | 38 | 14 | 557 | 2,381 | 2,419 | 977 |
| Zinc white | 464 | 943 | 931 | 1,643 | 1,669 | 1,687 |
| Singapore— | | | | | | |
| Unwrought | 213 | 2,201 | 2,082 | 1,221 | 1,240 | 1,977 |
| Semi-manufactures (a) | 1,273 | 173 | 129 | 58 | 59 | 134 |
| Oxide | 293 | 253 | 205 | 94 | 95 | 106 |
| Australia (b)— | | | | | | |
| Ores and concentrates | | | | | | |
| (<i>Zn content</i>) | 140,198 | 171,707 | 181,991 | 231,201 | 234,912 | 210,869 |
| Unwrought | (a) 114,038 | (a) 89,136 | (a) 115,562 | (a) 152,272 | (a) 154,716 | (a) 136,825 |
| Semi-manufactures .. | (a) 433 | (a) 815 | (a) 1,300 | (a) 1,067 | (a) 1,084 | 2,170 |
| Oxide | 188 | 398 | 567 | 1,162 | 1,181 | 2,326 |
| Irish Republic— | | | | | | |
| Ores and concentrates | 33,905 | 84,098 | 190,491 | 191,260 | 194,330 | 129,297 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Ore | — | 3 | 704 | 1,177 | 1,196 | 280 |
| Unwrought (a) | 6,614 | 4,508 | 1,928 | 251 | 255 | 563 |
| Scrap | 25 | 62 | 228 | 611 | 621 | 149 |
| Lithopone | 1,912 | 1,397 | 1,456 | 1,251 | 1,271 | 438 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Ore | 26,429 | 49,183 | 54,891 | 191,477 | 194,549 | 22,645 |
| Unwrought | 134,020 | 148,970 | 153,055 | 135,123 | 137,291 | 126,752 |
| Scrap | 7,042 | 7,959 | 8,207 | 8,647 | 8,786 | 9,748 |
| Semi-manufactures (a) | 35,779 | 40,811 | 42,528 | 44,445 | 45,158 | 42,667 |
| Lithopone, etc... .. | 126 | 3 | 17 | 60 | 61 | 7 |

*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.)

| Exporting Country and Description | Long tons | | | | Tonnes | |
|-----------------------------------|-----------|---------|---------|---------|---------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Denmark— | | | | | | |
| Unwrought | 98 | 161 | 47 | 104 | 106 | 191 |
| do. alloys | 230 | 876 | 178 | 262 | 266 | 255 |
| Scrap | 3,208 | 3,270 | 3,247 | 2,859 | 2,905 | 2,793 |
| Semi-manufactures | 20 | 27 | 19 | 8 | 8 | 28 |
| Finland— | | | | | | |
| Concentrates | 113,506 | 123,958 | 131,480 | 2,078 | 2,111 | 300 |
| Unwrought | — | — | — | 43,536 | 44,235 | 56,147 |
| France— | | | | | | |
| Ore | 216 | 26,801 | 7,013 | 4,744 | 4,820 | 3 |
| Unwrought | 9,891 | 19,914 | 19,972 | 16,167 | 16,427 | 29,287 |
| do. alloys | 2,046 | 369 | 87 | 1,272 | 1,293 | 1,342 |
| Semi-manufactures (a) | 3,476 | 4,437 | 4,669 | 7,701 | 7,825 | 8,361 |
| Oxide | 7,378 | 9,751 | 8,681 | 24 | 24 | 44 |
| Lithopone, etc. | 1,533 | 2,407 | 3,843 | 5,537 | 5,626 | 2,202 |
| Germany (Federal)— | | | | | | |
| Ore | 88,967 | 114,996 | 59,374 | 49,065 | 49,852 | 55,187 |
| Unwrought (a) | 28,162 | 37,195 | 34,945 | 53,270 | 54,125 | 49,574 |
| Scrap (a) | 4,644 | 5,592 | 5,615 | 5,811 | 5,904 | 5,846 |
| Semi-manufactures (a) | 9,379 | 11,803 | 11,308 | 11,672 | 11,859 | 15,662 |
| Zinc-white | 9,223 | 8,957 | 9,206 | 9,847 | 10,005 | 9,190 |
| Lithopone | 35,989 | 38,192 | 37,344 | 35,465 | 36,034 | 29,533 |
| Greece— | | | | | | |
| Ore and concentrates | 23,947 | 14,835 | 16,825 | 21,271 | 21,612 | 25,820 |
| Italy— | | | | | | |
| Ore | 21,906 | 48,581 | 39,060 | 11,674 | 11,861 | 7,132 |
| Unwrought | 39 | 880 | 736 | 1,865 | 1,895 | 175 |
| Semi-manufactures (a) | 403 | 2,243 | 1,286 | 1,948 | 1,979 | 718 |
| Oxide | 819 | 907 | 1,149 | 565 | 574 | 921 |
| Lithopone, etc. | 3,078 | 2,809 | 2,897 | 382 | 388 | 13 |
| Netherlands— | | | | | | |
| Ore | 7,603 | 20,069 | 22,397 | 15,914 | 16,169 | 13,374 |
| Unwrought | 34,900 | 32,786 | 29,538 | 25,665 | 26,077 | 30,838 |
| do. alloys | 36 | 157 | 166 | 192 | 195 | 169 |
| Scrap (a) | 7,923 | 8,392 | 7,313 | 6,144 | 6,243 | 9,495 |
| Semi-manufactures (a) | 1,117 | 1,558 | 989 | 1,237 | 1,257 | 1,073 |
| Oxide | 8,774 | 10,876 | 11,067 | 10,212 | 10,376 | 10,858 |
| Lithopone, etc. | 13,270 | 10,512 | 10,890 | 10,949 | 11,125 | 13,752 |
| Norway— | | | | | | |
| Ore | 14,995 | 12,883 | 13,452 | 11,249 | 11,430 | 11,249 |
| Unwrought | 35,552 | 49,504 | 41,036 | 39,562 | 40,197 | 42,379 |
| do. alloys | 1,234 | 3,360 | 4,512 | 5,961 | 6,057 | 6,168 |
| Scrap | 401 | 386 | 304 | 172 | 175 | 92 |
| Semi-manufactures (a) | 1,655 | 2,015 | 2,572 | 2,884 | 2,930 | 3,072 |
| Zinc-white | 180 | 264 | 437 | 454 | 461 | 489 |
| Poland— | | | | | | |
| Unwrought and sheets | 70,912 | 76,034 | 83,697 | 81,683 | 82,994 | 79,847 |
| Unwrought alloys | 5,644 | 6,206 | 5,887 | 5,498 | 5,586 | 1,105 |
| Zinc-white | 2,984 | 2,421 | 1,731 | 1,895 | 1,926 | n.a. |
| Portugal— | | | | | | |
| Ore | 970 | — | 2,418 | 3,565 | 3,622 | 3,876 |
| Zinc-white | 102 | 116 | 121 | 112 | 114 | 129 |
| Spain— | | | | | | |
| Ore | 12,418 | 6,817 | 12,780 | 11,411 | 11,594 | 5,022 |
| Unwrought (a) | 13,654 | 21,985 | 6,499 | 3,587 | 3,645 | 21,842 |
| Oxide | 444 | 1,030 | 1,323 | 1,212 | 1,231 | 782 |
| Sweden— | | | | | | |
| Ore | 115,931 | 139,465 | 157,388 | 176,664 | 179,499 | 211,257 |
| Unwrought (a) | 306 | 449 | 438 | 405 | 412 | 144 |
| Scrap | 1,007 | 1,342 | 1,403 | 1,813 | 1,842 | 2,330 |
| Zinc-white | 645 | 347 | 344 | 288 | 293 | 638 |
| Lithopone | 10 | 1 | 3 | 37 | 38 | — |

(a) Including alloys.

EXPORTS OF ZINC (cont.)

| Exporting Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|----------|----------|---------|---------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Switzerland— | | | | | | |
| Unwrought and scrap .. | 1,622 | 1,664 | 1,699 | 1,297 | 1,318 | 1,650 |
| Semi-manufactures (a) .. | 57 | 39 | 47 | 127 | 129 | 42 |
| Zinc-white | 2 | 9 | 4 | 2 | 2 | 14 |
| U.S.S.R.— | | | | | | |
| Unwrought | 72,900 | 77,500 | 95,900 | 93,600 | 95,100 | 136,600 |
| Yugoslavia— | | | | | | |
| Ore | — | 13,518 | 30,434 | 24,433 | 24,825 | 51,936 |
| Concentrates | 2,791 | 9,059 | 83 | 2,163 | 2,198 | 5,846 |
| Unwrought | 5,135 | 30,138 | 30,016 | 21,586 | 21,933 | 19,694 |
| Semi-manufactures .. | 10,483 | 13,387 | 19,039 | 13,147 | 13,358 | 9,444 |
| Oxide | 1,204 | 988 | 1,519 | 1,032 | 1,049 | 625 |
| Lithopone | 2,451 | 708 | 79 | 8 | 8 | n.a. |
| Algeria— | | | | | | |
| Ore | 13,007 | 21,815 | 36,993 | 27,729 | 28,174 | 35,074 |
| Congo (Brazza)— | | | | | | |
| Ore | n.a. | 2,613 | 5 | n.a. | n.a. | n.a. |
| Morocco— | | | | | | |
| Ore | 85,338 | 78,496 | 74,577 | 36,909 | 37,501 | 19,456 |
| South Africa— | | | | | | |
| Ores and concentrates .. | 38,830 | 35,810 | 64,514 | 26,470 | 26,895 | 22,721 |
| Unwrought | 18 | 12 | 4 | 5 | 5 | n.a. |
| Oxide | 156 | 214 | 231 | 768 | 780 | 365 |
| Fume, dust, shavings, etc. | 71 | 82 | n.a. | 496 | 504 | 609 |
| Tunisia— | | | | | | |
| Ore | 13,127 | 7,283 | 5,186 | 12,158 | 12,353 | 16,143 |
| Zaire Republic (c)— | | | | | | |
| Ores and concentrates .. r | 77,300 | r 68,400 | r 60,500 | 34,000 | 35,000 | n.a. |
| Unwrought | 56,200 | r 33,700 | r 57,000 | 72,000 | 73,000 | n.a. |
| Guatemala— | | | | | | |
| Ore | 12 | 44 | — | 2,157 | 2,192 | n.a. |
| Honduras— | | | | | | |
| Ore and concentrates .. | 9,725 | 17,498 | 25,670 | 38,119 | 38,731 | n.a. |
| Mexico— | | | | | | |
| Ores and concentrates | 275,591 | 195,000 | 308,891 | 321,391 | 326,548 | 270,981 |
| Unwrought | 32,563 | 41,498 | 40,613 | 37,540 | 38,142 | 42,293 |
| Oxide | 7,658 | 4,359 | 5,733 | 5,836 | 5,930 | 7,499 |
| United States— | | | | | | |
| Unwrought | 15,682 | 31,616 | 8,302 | 258 | 262 | 12,108 |
| Scrap (b) | 1,487 | 2,047 | 1,776 | 1,980 | 2,012 | 1,113 |
| Semi-manufactures (a) .. | 4,439 | 13,973 | 26,478 | 21,889 | 22,240 | 5,641 |
| Oxide | 3,071 | 3,250 | 3,374 | 5,648 | 5,739 | 6,064 |
| Lithopone | 723 | 1,161 | 969 | 1,376 | 1,398 | 494 |
| Argentina— | | | | | | |
| Unwrought | 918 | 1,823 | 2,509 | 2,787 | 2,832 | 469 |
| Bolivia— | | | | | | |
| Ores (b) | 16,433 | 11,599 | 26,000 | 45,800 | 46,500 | 50,000 |
| Chile— | | | | | | |
| Concentrates | 2,046 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Peru— | | | | | | |
| Ores, etc. (Zn content) .. | 221,000 | 229,000 | 250,000 | 215,000 | 218,000 | 316,000 |
| Unwrought (Zn content) | 63,892 | 54,264 | 57,000 | 64,000 | 65,000 | 51,000 |
| Burma— | | | | | | |
| Concentrates | 8,912 | 6,385 | 7,754 | 5,443 | 5,530 | 4,757 |
| Formosa— | | | | | | |
| Zinc-white | 22 | 73 | 231 | 200 | 203 | 494 |
| Iran (d)— | | | | | | |
| Ore | 39,488 | 50,304 | 52,392 | 95,103 | 96,629 | 66,223 |

(a) Including alloys.

(b) Zn content.

(c) Estimated.

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

EXPORTS OF ZINC (cont.)

| Exporting Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|--------|--------|------------|------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Japan— | | | | | | |
| Unwrought | 64,713 | 85,477 | 93,046 | 51,754 | 52,585 | 62,986 |
| Semi-manufactures | 3,407 | 2,918 | 3,796 | (a) 24,420 | (a) 24,812 | (a) 5,061 |
| Oxide | 807 | 1,834 | 2,547 | 715 | 726 | 1,384 |
| Lithopone | 398 | 683 | 292 | 40 | 41 | 75 |
| Korea (South)— | | | | | | |
| Ore | 21,967 | 33,537 | 39,243 | 38,843 | 39,466 | 37,499 |
| Philippine Republic— | | | | | | |
| Concentrates | 2,933 | 4,252 | 5,713 | 7,572 | 7,694 | 9,630 |
| Scrap | 359 | 766 | 978 | 604 | 614 | 1,018 |
| Turkey— | | | | | | |
| Ore | 8,532 | 18,814 | 25,161 | 25,475 | 25,884 | <i>n.a.</i> |

(a) Including alloys.

IMPORTS OF ZINC*

Long tons | Tonnes

| Importing Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|--|----------|----------|----------|-----------|-----------|----------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ore and concentrates .. | 254,945 | 330,530 | 327,880 | 295,297 | 300,036 | 291,411 |
| Unwrought (a) .. | 159,515 | 168,071 | 159,602 | 160,918 | 163,501 | 173,595 |
| Waste and scrap .. | 3,905 | 3,452 | 1,198 | 427 | 434 | 786 |
| Semi-manufactures (a) .. | 587 | 1,622 | 1,215 | 730 | 742 | 607 |
| Oxide .. | 332 | n.a. | n.a. | 349 | 354 | 975 |
| Lithopone, etc. . . | 1,389 | 1,022 | 3,928 | 4,768 | 4,845 | 4,394 |
| Malta— | | | | | | |
| Semi-manufactures .. | (£9,373) | (£2,515) | (£7,627) | (£15,675) | (£15,675) | (£6,510) |
| Ghana— | | | | | | |
| Unwrought (a) .. | 838 | 18 | 1,752 | 944 | 959 | n.a. |
| Semi-manufactures (a) .. | 40 | 17 | 208 | 312 | 317 | n.a. |
| Kenya— | | | | | | |
| Unwrought (a) .. | 1,006 | 1,150 | 1,413 | 1,899 | 1,930 | 2,107 |
| Semi-manufactures (a) .. | 23 | 12 | 481 | 991 | 1,007 | 528 |
| Nigeria— | | | | | | |
| Unwrought and semi-manufactures (a) .. | 2,500 | 1,701 | 6,172 | 4,777 | 4,854 | 4,494 |
| Tanzania— | | | | | | |
| Unwrought (a) .. | 1,154 | 1,596 | 1,749 | 1,743 | 1,771 | 2,204 |
| Semi-manufactures (a) .. | 42 | 192 | 204 | 366 | 372 | 151 |
| Uganda— | | | | | | |
| Unwrought .. | 1,229 | 876 | 1,605 | 1,264 | 1,284 | 1,750 |
| Semi-manufactures (a) .. | — | 21 | 38 | 42 | 43 | 49 |
| Canada— | | | | | | |
| Ore and concentrates (Zn content) .. | (c) 67 | (c) 114 | (c) 54 | (c) 360 | (c) 366 | (c) 74 |
| Unwrought .. | 951 | 1,355 | 689 | 329 | 334 | 3,632 |
| Semi-manufactures .. | 1,671 | 1,600 | 1,680 | 1,291 | 1,312 | 1,047 |
| Zinc-white .. | 1,521 | 1,471 | 2,286 | 1,950 | 1,981 | 2,150 |
| Lithopone .. | 282 | 360 | — | — | — | — |
| Barbados— | | | | | | |
| Semi-manufactures (a) .. | 26 | 26 | 37 | 78 | 79 | n.a. |
| Jamaica— | | | | | | |
| Semi-manufactures (a) .. | 7 | 29 | 22 | 9 | 9 | 544 |
| Trinidad and Tobago— | | | | | | |
| Semi-manufactures (a) .. | 23 | 25 | 17 | 41 | 42 | 42 |
| Ceylon— | | | | | | |
| Unwrought (a) .. | 546 | 1,812 | 1,244 | n.a. | n.a. | n.a. |
| Semi-manufactures (a) .. | 87 | 57 | 80 | n.a. | n.a. | n.a. |
| Cyprus— | | | | | | |
| Semi-manufactures (a) .. | 208 | 237 | 30 | 6 | 6 | 119 |
| Hong Kong— | | | | | | |
| Unwrought .. | 4,398 | 7,344 | 8,024 | 8,820 | 8,962 | 8,585 |
| Scrap .. | 100 | 270 | 83 | 88 | 89 | 231 |
| Semi-manufactures .. | 350 | 664 | 525 | 523 | 532 | 506 |
| Oxide .. | 668 | 1,066 | 1,006 | 886 | 900 | 999 |
| Lithopone .. | 593 | 1,073 | 1,139 | 590 | 600 | 600 |
| India (b)— | | | | | | |
| Ore and concentrates .. | 512 | 27,387 | 39,707 | 60,149 | 61,114 | 43,000 |
| Unwrought .. | 54,297 | 64,963 | 21,975 | 62,345 | 63,345 | 53,847 |
| do. alloys .. | 8,899 | 21,949 | 12,644 | 27,205 | 27,642 | 14,841 |
| Semi-manufactures (a) .. | 1,671 | 1,525 | 2,469 | 1,660 | 1,687 | 1,548 |
| Zinc-white .. | 46 | 9 | 1 | — | — | 76 |
| Lithopone .. | 617 | 734 | 1,029 | 1,224 | 1,244 | 257 |
| Malaysia (West)— | | | | | | |
| Ore .. | 2,251 | 2,641 | 2,072 | 2,631 | 2,673 | 3,558 |
| Unwrought (a) .. | 1,200 | 2,000 | 1,758 | 1,636 | 1,662 | 2,347 |
| Semi-manufactures (a) .. | 1,204 | 1,327 | 1,989 | 1,883 | 1,913 | 1,477 |

*See footnote on p. 388 concerning the descriptions "unwrought" zinc and "semi-manufactures" used in these tables.

(a) Including alloys.

(b) Years ended March 31 following that stated.

(c) Including scrap.

IMPORTS OF ZINC (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--|-----------|---------|---------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Singapore— | | | | | | |
| Unwrought | 4,428 | 7,115 | 5,128 | 8,416 | 8,552 | 8,585 |
| Semi-manufactures (a) .. | 330 | 1,356 | 858 | 839 | 852 | 1,041 |
| Oxide | 555 | 682 | 638 | 927 | 942 | 566 |
| Sarawak— | | | | | | |
| Semi-manufactures (a) .. | 69 | 67 | 48 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Australia (b)— | | | | | | |
| Ore and concentrates .. | 6,210 | — | 3,251 | — | — | — |
| Unwrought and semi-manufactures (a) .. | 198 | 132 | 110 | 204 | 207 | 245 |
| Lithopone | 976 | 1,081 | 1,044 | 830 | 843 | 845 |
| New Zealand (b)— | | | | | | |
| Unwrought (a) | 3,983 | 3,578 | 9,503 | 14,948 | 15,188 | <i>n.a.</i> |
| Semi-manufactures (a) .. | 787 | 551 | 558 | 1,034 | 1,051 | <i>n.a.</i> |
| Oxide | 2 | 16 | 21 | 24 | 24 | <i>n.a.</i> |
| Lithopone | 117 | 72 | 117 | 119 | 121 | <i>n.a.</i> |
| Irish Republic— | | | | | | |
| Unwrought (a) | 3,603 | 4,433 | 4,507 | 2,724 | 2,767 | 3,104 |
| Semi-manufactures (a) .. | 252 | 657 | 852 | 876 | 890 | 1,033 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Ore | 13,039 | 10,052 | 11,251 | 5,659 | 5,750 | 292 |
| Unwrought (a) | 5,488 | 6,499 | 6,748 | 6,537 | 6,642 | 4,413 |
| Semi-manufactures (a) .. | 626 | 727 | 692 | 1,061 | 1,078 | 1,533 |
| Zinc-white and zinc-grey | 518 | 688 | 700 | 677 | 689 | 1,141 |
| Lithopone | 498 | 312 | 174 | 123 | 125 | 129 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Ore | 517,386 | 612,283 | 549,884 | 608,105 | 617,863 | 529,123 |
| Unwrought | 14,020 | 19,655 | 41,001 | 28,764 | 29,226 | 35,046 |
| Scrap | 879 | 1,082 | 1,348 | 2,131 | 2,165 | 7,167 |
| Semi-manufactures (a) .. | 921 | 1,369 | 1,480 | 1,620 | 1,646 | 4,856 |
| Oxide | 2,070 | 2,631 | 3,833 | 5,783 | 5,876 | 7,681 |
| Lithopone, etc. | 4,105 | 3,555 | 3,749 | 3,220 | 3,272 | 3,059 |
| Denmark— | | | | | | |
| Unwrought | 8,513 | 9,897 | 11,922 | 13,309 | 13,523 | 8,784 |
| do. alloys | 333 | 752 | 1,164 | 1,682 | 1,709 | 2,215 |
| Scrap | 108 | 88 | 183 | 114 | 116 | 3 |
| Semi-manufactures (a) .. | 7,542 | 6,645 | 7,226 | 7,007 | 7,119 | 7,607 |
| Zinc-white | 1,684 | 1,597 | 2,002 | 2,524 | 2,564 | 1,997 |
| Lithopone | 1,584 | 1,442 | 1,398 | 1,167 | 1,186 | 1,284 |
| Finland— | | | | | | |
| Unwrought (a) | 6,629 | 5,395 | 9,467 | 3,112 | 3,162 | 1,980 |
| Scrap | 6 | — | 1 | — | — | 46 |
| Semi-manufactures (a) .. | 600 | 711 | 654 | 656 | 667 | 697 |
| Zinc-white | 326 | 356 | 364 | 258 | 262 | 315 |
| Lithopone | 1,119 | 829 | 1,024 | 937 | 952 | 837 |
| France— | | | | | | |
| Ore | 326,894 | 355,676 | 405,962 | 404,655 | 411,149 | 384,844 |
| Unwrought | 30,064 | 25,869 | 25,027 | 24,377 | 24,768 | 29,014 |
| Scrap | 14,868 | 18,890 | 18,148 | 17,155 | 17,430 | 20,331 |
| Semi-manufactures (a) .. | 8,958 | 7,675 | 9,249 | 10,235 | 10,399 | 8,855 |
| Oxide | 1,415 | 2,270 | 2,967 | 3,371 | 3,425 | 3,807 |
| Lithopone, etc. | 12,092 | 14,797 | 12,148 | 10,743 | 10,916 | 9,720 |

(a) Including alloys.

(b) Years ended June 30 of that stated.

IMPORTS OF ZINC (cont.)

Long tons Tonnes

| Importing Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|-----------------------------------|---------|---------|---------|---------|---------|---------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Germany (Federal)— | | | | | | |
| Ores | 147,583 | 232,295 | 345,051 | 358,013 | 363,758 | 355,231 |
| Unwrought (a) .. | 139,642 | 184,064 | 179,594 | 152,511 | 154,958 | 170,918 |
| Scrap (a) | 642 | 803 | 950 | 2,448 | 2,487 | 3,233 |
| Semi-manufactures (a) | 22,028 | 23,812 | 26,784 | 28,773 | 29,235 | 26,707 |
| Zinc-white | 2,357 | 2,774 | 3,514 | 3,931 | 3,994 | 4,891 |
| Lithopone | 2,144 | 2,160 | 1,693 | 2,427 | 2,466 | 2,653 |
| Greece— | | | | | | |
| Unwrought | 7,375 | 7,275 | 10,592 | 8,184 | 8,315 | 7,435 |
| Semi-manufactures (a) | 260 | 330 | 240 | 119 | 121 | 125 |
| Zinc-white | 433 | 289 | 396 | 437 | 444 | 504 |
| Lithopone | 4,080 | 4,075 | 4,183 | 4,152 | 4,219 | 4,320 |
| Hungary— | | | | | | |
| Crude and refined .. | 13,086 | 17,940 | 19,927 | 17,541 | 17,823 | 22,957 |
| Iceland— | | | | | | |
| Unwrought (a) | 17 | 13 | 16 | 19 | 19 | 23 |
| Semi-manufactures (a) | 64 | 65 | 67 | 22 | 22 | 84 |
| Italy— | | | | | | |
| Ore | 21,079 | 25,647 | 59,289 | 101,927 | 103,563 | 107,324 |
| Unwrought | 56,959 | 37,243 | 38,364 | 43,184 | 43,877 | 32,622 |
| do. alloys | 8,005 | 4,470 | 6,636 | 15,773 | 16,026 | 7,304 |
| Scrap | 7,913 | 6,761 | 5,898 | 3,699 | 3,758 | 3,589 |
| Semi-manufactures (a) | 3,443 | 3,686 | 3,497 | 3,769 | 3,829 | 4,104 |
| Oxide | 2,903 | 3,235 | 4,877 | 6,665 | 6,772 | 6,371 |
| Lithopone, etc... .. | 385 | 991 | 1,184 | 2,255 | 2,291 | 4,028 |
| Netherlands— | | | | | | |
| Ore | 81,229 | 94,740 | 100,539 | 88,939 | 90,366 | 95,640 |
| Unwrought | 16,110 | 16,881 | 16,625 | 14,004 | 14,229 | 21,697 |
| do. alloys | 1,597 | 1,860 | 1,466 | 1,707 | 1,734 | 1,380 |
| Scrap | 210 | 548 | 1,584 | 1,785 | 1,814 | 1,167 |
| Semi-manufactures (a) | 6,604 | 7,916 | 7,663 | 7,848 | 7,974 | 7,686 |
| Oxide | 1,661 | 1,797 | 2,647 | 3,337 | 3,391 | 3,495 |
| Lithopone, etc... .. | 1,354 | 1,198 | 1,200 | 985 | 1,001 | 1,026 |
| Norway— | | | | | | |
| Ore | 80,260 | 111,230 | 101,730 | 145,634 | 147,971 | 82,471 |
| Unwrought | 1,571 | 2,493 | 4,359 | 1,703 | 1,730 | 1,130 |
| Scrap | 1,676 | 2,736 | 3,647 | 2,867 | 2,913 | 3,115 |
| Semi-manufactures (a) | 1,942 | 1,658 | 1,083 | 1,348 | 1,370 | 1,654 |
| Zinc-white | 1,042 | 643 | 1,176 | 1,601 | 1,627 | 1,917 |
| Lithopone, etc... .. | 159 | 145 | 118 | 141 | 143 | 135 |
| Poland— | | | | | | |
| Concentrates | 105,580 | 84,505 | 82,280 | 122,075 | 124,034 | 109,820 |
| Portugal— | | | | | | |
| Unwrought and scrap .. | 6,374 | 6,100 | 8,038 | 10,239 | 10,355 | 9,428 |
| Semi-manufactures .. | 313 | 683 | 643 | 784 | 797 | 904 |
| Oxide | 195 | 229 | 229 | 260 | 264 | 195 |
| Lithopone | 2,296 | 2,316 | 2,765 | 2,214 | 2,250 | 2,327 |
| Spain— | | | | | | |
| Unwrought and scrap .. | 113 | (a) 100 | (a) 972 | — | — | (a) 280 |
| Semi-manufactures (a) | 71 | 108 | 121 | 448 | 455 | 306 |
| Oxide | 195 | 231 | 230 | 275 | 279 | 292 |
| Lithopone | 1,250 | 113 | 297 | 98 | 100 | 121 |
| Sweden— | | | | | | |
| Unwrought | 31,207 | 34,487 | 38,505 | 33,583 | 34,122 | 34,188 |
| do. alloys | 2,775 | 3,334 | 3,919 | 5,538 | 5,627 | 3,617 |
| Scrap | 89 | 132 | — | 14 | 14 | — |
| Semi-manufactures (a) | 1,532 | 1,585 | 1,540 | 1,510 | 1,534 | 1,883 |
| Zinc-white | 1,873 | 2,086 | 2,398 | 2,125 | 2,159 | 2,246 |
| Lithopone, etc... .. | 2,665 | 2,100 | 1,564 | 1,410 | 1,433 | 1,071 |

(a) Including alloys.

IMPORTS OF ZINC (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|---------|--------|--------|--------|--------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Switzerland— | | | | | | |
| Unwrought | 24,114 | 25,401 | 30,566 | 26,935 | 27,367 | 25,864 |
| Semi-manufactures (a) .. | 4,303 | 4,509 | 5,188 | 5,645 | 5,736 | 4,951 |
| Zinc-white | 1,287 | 1,126 | 1,392 | 1,664 | 1,691 | 2,092 |
| U.S.S.R.— | | | | | | |
| Unwrought | 29,230 | 35,820 | 49,300 | 52,400 | 53,300 | 49,400 |
| do. alloys | 4,000 | 3,840 | 4,000 | 4,000 | 4,000 | 4,000 |
| Semi-manufactures .. r | 2,700 | r 3,000 | 5,000 | 5,500 | 5,600 | 6,600 |
| Yugoslavia— | | | | | | |
| Concentrates | 21,410 | 41,442 | 49,880 | 13,450 | 13,666 | n.a. |
| Unwrought | 2,197 | 7,347 | 11,484 | 12,968 | 13,176 | 19,345 |
| Semi-manufactures | 329 | 186 | 207 | 748 | 760 | 1,077 |
| Oxide | 241 | 46 | 58 | 75 | 76 | 199 |
| Lithopone | 1,269 | 669 | 1,159 | 1,964 | 1,996 | 1,475 |
| Algeria— | | | | | | |
| Unwrought | 148 | 118 | 689 | 1,193 | 1,212 | n.a. |
| Semi-manufactures | 285 | 247 | 622 | 551 | 560 | n.a. |
| Oxide | 309 | 570 | 794 | 350 | 356 | n.a. |
| Lithopone | 2,201 | 2,724 | 3,701 | 4,530 | 4,603 | n.a. |
| Angola— | | | | | | |
| Semi-manufactures (a) .. | 289 | 276 | 295 | 74 | 75 | 123 |
| Oxide | 52 | 106 | 100 | 128 | 130 | 171 |
| Egypt— | | | | | | |
| Unwrought and scrap .. | 1,290 | 4,193 | 2,229 | 3,435 | 3,490 | 2,210 |
| Ethiopia— | | | | | | |
| Unwrought | 317 | 55 | 150 | 234 | 238 | 448 |
| Semi-manufactures | | 567 | 224 | 299 | 304 | 869 |
| Malagasy Republic— | | | | | | |
| Semi-manufactures (a) .. | 108 | 104 | 91 | 138 | 140 | n.a. |
| Oxide | 2 | 19 | 39 | 43 | 44 | n.a. |
| Morocco— | | | | | | |
| Unwrought | 731 | 912 | 1,089 | 768 | 780 | 1,083 |
| Semi-manufactures (a) .. | 251 | 239 | 216 | 393 | 399 | 197 |
| Oxide | 432 | — | 2 | 598 | 608 | 483 |
| Lithopone | 1,386 | 1,569 | 2,040 | 1,885 | 1,915 | 2,226 |
| Mozambique— | | | | | | |
| Semi-manufactures | 20 | 22 | 23 | 28 | 28 | n.a. |
| Oxide | 72 | 99 | 104 | 84 | 85 | n.a. |
| South Africa— | | | | | | |
| Ores and concentrates .. | 5 | 23,639 | 2 | 11,356 | 11,538 | 34,851 |
| Unwrought | 48,322 | 38,289 | 8,381 | 24,501 | 24,894 | 17,598 |
| Semi-manufactures | 980 | 1,581 | 698 | 7,184 | 7,300 | 759 |
| Scrap | 847 | 987 | 1,191 | 773 | 785 | 440 |
| Lithopone | 1,512 | 1,378 | 1,362 | 1,253 | 1,273 | 1,149 |
| Oxide | 185 | 267 | 213 | 185 | 188 | 144 |
| Sudan— | | | | | | |
| Unwrought | — | 74 | 44 | 53 | 54 | 120 |
| Semi-manufactures | 9 | 187 | 446 | 140 | 142 | 188 |
| Tunisia— | | | | | | |
| Unwrought and scrap (a) .. | 96 | 59 | 157 | 315 | 320 | 276 |
| Semi-manufactures (a) .. | 128 | 51 | 128 | 151 | 153 | 52 |
| Oxide | 394 | 143 | 214 | 333 | 338 | 215 |
| Costa Rica— | | | | | | |
| Unwrought (a) | 985 | 976 | 1,335 | 1,897 | 1,927 | 1,187 |
| Semi-manufactures (a) .. | 217 | 35 | 95 | 686 | 697 | 221 |
| Honduras— | | | | | | |
| Unwrought | (z) 39 | (a) — | (a) 2 | (a) 19 | (a) 19 | 114 |
| Semi-manufactures | (z) 9 | (a) 48 | (a) 49 | (a) 27 | (a) 27 | 21 |
| Mexico— | | | | | | |
| Semi-manufactures | 80 | 70 | 48 | 115 | 117 | 66 |
| Oxide | 100 | 55 | 56 | 59 | 60 | 127 |

(a) Including alloys.

IMPORTS OF ZINC (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|-----------------------------------|-----------|---------|---------|---------|---------|---------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Nicaragua— | | | | | | |
| Unwrought | 651 | 809 | 1,071 | 365 | 371 | 426 |
| Semi-manufactures (a) .. | 147 | 74 | 46 | 19 | 19 | 13 |
| United States— | | | | | | |
| Ore (Zn content) | 386,880 | 439,905 | 519,367 | 420,008 | 426,748 | 436,360 |
| Unwrought | 197,607 | 272,042 | 289,850 | 232,260 | 235,987 | 294,609 |
| Dross and scrap | 1,308 | 1,203 | 2,219 | 1,337 | 1,358 | 1,011 |
| Semi-manufactures | 4,054 | 8,285 | 8,383 | 9,100 | 9,246 | 8,187 |
| Oxide | 12,207 | 13,885 | 13,004 | 10,780 | 10,953 | 11,896 |
| Lithopone | 104 | 220 | 233 | 78 | 79 | 73 |
| Argentina— | | | | | | |
| Unwrought | 2,133 | 4,060 | 4,079 | 4,876 | 4,954 | 2,031 |
| Sheets and plates | 326 | 361 | 918 | 1,000 | 1,016 | 956 |
| Zinc-white r | 49 | 71 | 65 | 84 | 85 | 102 |
| Lithopone | 103 | 49 | 172 | 59 | 60 | 45 |
| Brazil— | | | | | | |
| Unwrought (a) | 35,876 | 42,404 | 54,798 | 43,282 | 43,977 | n.a. |
| Zinc-white | 38 | 87 | 98 | 126 | 128 | n.a. |
| Lithopone | 3,441 | 3,548 | 2,290 | 2,667 | 2,710 | n.a. |
| Chile— | | | | | | |
| Unwrought r | 6,469 | r 2,878 | 5,215 | 3,728 | 3,788 | n.a. |
| Semi-manufactures (a) .. | 69 | 113 | 147 | 177 | 180 | n.a. |
| Lithopone | 5 | — | n.a. | 1 | 1 | n.a. |
| Colombia— | | | | | | |
| Unwrought (a) r | 2,319 | r 4,173 | 6,001 | } n.a. | } n.a. | } n.a. |
| Semi-manufactures (a) .. | 84 | r 139 | 109 | | | |
| Zinc-white | 16 | 5 | 5 | | | |
| Lithopone r | 200 | r 237 | 251 | | | |
| Peru— | | | | | | |
| Semi-manufactures (a) .. | 103 | 127 | 129 | } n.a. | } n.a. | } n.a. |
| Zinc-white | 25 | 11 | 15 | | | |
| Lithopone | 198 | 160 | 140 | | | |
| Uruguay— | | | | | | |
| Unwrought and sheets .. | 868 | 982 | 1,253 | 1,358 | 1,380 | 1,024 |
| Lithopone | 270 | 158 | 218 | 245 | 249 | 108 |
| Venezuela— | | | | | | |
| Unwrought | 4,619 | 6,756 | 6,116 | n.a. | n.a. | 8,578 |
| Oxide | 702 | 504 | 333 | n.a. | n.a. | 457 |
| Lithopone | 490 | 518 | 470 | n.a. | n.a. | 498 |
| Burma— | | | | | | |
| Unwrought | 601 | 31 | (a) 9 | (a) 350 | (a) 356 | 126 |
| Semi-manufactures | 138 | 177 | n.a. | 242 | 246 | 1 |
| Formosa— | | | | | | |
| Unwrought (a) | 10,455 | 10,268 | 9,830 | 14,496 | 14,729 | 176 |
| Zinc-white | 183 | 305 | 278 | 345 | 351 | 273 |
| Semi-manufactures (a) .. | 348 | 477 | 715 | 466 | 473 | 380 |
| Lithopone | 1,133 | 882 | 800 | 703 | 714 | 718 |
| Iran (b)— | | | | | | |
| Unwrought | 1,757 | 3,245 | 2,397 | 3,264 | 3,316 | 5,191 |
| Semi-manufactures (a) .. | 1,725 | 226 | 126 | 500 | 508 | 363 |
| Lithopone | 1,410 | 1,806 | 706 | 1,657 | 1,684 | 1,283 |
| Iraq— | | | | | | |
| Semi-manufactures | 32 | 28 | 34 | 27 | 27 | n.a. |
| Israel— | | | | | | |
| Unwrought (a) | 3,673 | 3,769 | 5,343 | 3,542 | 3,599 | 3,436 |
| Semi-manufactures | 433 | 566 | 1,030 | 911 | 926 | 577 |
| Oxide | 424 | 524 | 677 | n.a. | n.a. | 651 |

(a) Including alloys.

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

IMPORTS OF ZINC (cont.)

| Importing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|---------|---------|---------|---------|-----------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| OTHER COUNTRIES (cont.) | | | | | | |
| Japan— | | | | | | |
| Ore | 604,380 | 843,138 | 833,386 | 957,547 | 972,913 | 1,075,659 |
| Unwrought | 17,815 | 8,417 | 8,099 | 21,594 | 21,941 | 13,929 |
| Scrap | 95 | 4 | 65 | 46 | 47 | 36 |
| Semi-manufactures (a) | 10 | 290 | 19 | 3 | 3 | 14 |
| Oxide | 77 | 96 | 151 | 377 | 383 | 264 |
| Korea (South)— | | | | | | |
| Unwrought | 4,527 | 6,564 | 8,195 | 9,413 | 9,564 | 4,779 |
| Semi-manufactures | | | | | | |
| Lithopone | | | | | | |
| Lebanon— | 2,259 | 1,933 | 2,269 | n.a. | n.a. | 2,549 |
| Unwrought | 447 | 791 | 817 | 888 | 902 | 986 |
| Semi-manufactures | 49 | 60 | 50 | 54 | 55 | 20 |
| Oxide | 100 | 69 | 104 | 41 | 42 | 54 |
| Philippine Republic— | | | | | | |
| Unwrought (a) | 16,000 | 20,750 | 21,998 | 17,246 | 17,523 | 15,122 |
| Semi-manufactures (a) | | | | | | |
| Oxide | | | | | | |
| Syria— | 909 | 1,133 | 1,304 | 1,091 | 1,108 | 1,297 |
| Oxide and lithopone | 46 | (b) 113 | (b) 190 | (b) 45 | (b) 46 | 1,203 |
| Thailand— | | | | | | |
| Unwrought | 16,387 | 14,414 | 17,781 | 16,383 | 16,645 | 18,925 |
| Semi-manufactures (a) | 2,128 | 2,104 | 1,871 | 1,818 | 1,852 | 1,253 |
| Oxide | 690 | 1,053 | 887 | 1,300 | 1,321 | 1,435 |
| Lithopone | 1,226 | 846 | 1,393 | 1,190 | 1,209 | 1,703 |
| Turkey— | | | | | | |
| Unwrought | 4,010 | 7,988 | 7,782 | 8,425 | 8,560 | n.a. |
| Semi-manufactures (a) | 2,028 | 1,361 | 1,841 | 2,223 | 2,259 | n.a. |
| Oxide | 2,537 | 2,487 | 2,499 | 2,185 | 2,220 | n.a. |

(a) Including alloys.

(b) Oxide only.

ZIRCONIUM MINERALS

PRODUCTION OF ZIRCONIUM MINERALS

| Producing Country and Description | Long tons | | | | Tonnes | |
|--------------------------------------|-----------|-------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Ceylon | (b) 119 | 25 | 67 | 110 | 112 | 139 |
| Malaysia (West) (a) .. | 465 | 1,109 | 1,395 | 826 | 839 | 2,746 |
| Australia— Zircon concentrates .. | 283,682 | 294,195 | 369,296 | 389,105 | 395,352 | 405,856 |
| OTHER COUNTRIES | | | | | | |
| Egypt | 49 | — | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Malagasy Republic .. | 205 | <i>n.a.</i> | <i>n.a.</i> | 3 | 3 | 3 |
| Brazil (b) | 413 | 323 | 3,459 | 4,003 | 4,067 | 4,496 |
| Thailand | 1,506 | 3,169 | 251 | 851 | 865 | 1,526 |

Zirconium minerals are also known to have been produced in India, the U.S.S.R., South Africa, the United States and Cambodia.

(a) Exports.

(b) Zircon and baddeleyite.

EXPORTS OF ZIRCONIUM MINERALS, ETC.

| Exporting Country and Description | Long tons | | | | Tonnes | |
|---|-------------|-------------|-------------|-------------|-------------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— Ores and concentrates .. | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 1,115 | 1,133 | 216 |
| Nigeria— Ores and concentrates | 536 | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Malaysia (West)— Zircon | 465 | 1,109 | 1,395 | 826 | 839 | 2,746 |
| Australia— Zircon concentrates .. | 247,179 | 266,121 | 310,922 | 380,488 | 386,595 | 367,214 |
| OTHER COUNTRIES | | | | | | |
| Germany (Federal)— Ore | 710 | 1,244 | 1,556 | 1,298 | 1,319 | 1,223 |
| South Africa— Zircon concentrates .. | — | — | 89 | — | — | 25 |
| United States— Ores and concentrates | 2,437 | 1,809 | 2,409 | 3,911 | 3,974 | 8,554 |
| Zirconium metal, etc. .. | 35 | 103 | 198 | 268 | 272 | 510 |
| Thailand— Zircon | 640 | 800 | 1,320 | 2,470 | 2,510 | <i>n.a.</i> |

IMPORTS OF ZIRCONIUM MINERALS, ETC.

| Importing Country and Description | Long tons | | | | Tonnes | |
|--|-----------|--------|--------|--------|--------|-------------|
| | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— Zirconium ores .. | 24,721 | 49,265 | 47,324 | 26,994 | 27,427 | 39,889 |
| Canada— Zirconium alloys .. | 56 | 98 | 93 | 92 | 94 | 96 |
| OTHER COUNTRIES | | | | | | |
| France— Zirconium ore .. | 17,618 | 23,542 | 29,231 | 27,374 | 27,813 | 32,732 |
| Germany (Federal)— Zirconium ore .. | 22,229 | 29,327 | 31,512 | 40,726 | 41,380 | 38,098 |
| Italy— Zirconium ore .. | 17,523 | 16,808 | 18,073 | 34,733 | 35,290 | 17,380 |
| United States— Zirconium ore .. | 52,950 | 53,482 | 85,190 | 84,606 | 85,964 | 87,441 |
| Zirconium metal .. | 73 | 134 | 222 | 118 | 120 | 137 |
| Ferro-zirconium .. | 648 | 260 | 393 | 589 | 598 | 1,021 |
| Argentina— Zirconium ore and concentrates .. | 627 | 564 | 751 | 922 | 937 | 962 |
| Brazil— Zirconium ore .. | 2,084 | 1,432 | 4,566 | 2,467 | 2,507 | <i>n.a.</i> |
| Chile— Zirconium ore .. | 220 | 159 | 703 | 421 | 428 | <i>n.a.</i> |
| Japan— Zirconium ore .. | 51,691 | 57,447 | 61,125 | 92,786 | 94,275 | 76,588 |
| Turkey— Zirconium ore .. | 116 | 224 | 20 | 18 | 18 | <i>n.a.</i> |

OTHER MINERALS AND METALS

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

| Country and Description | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|---|-----------|-------------|-------------|-------------|-------------|-------------|
| | | | | | Kilogms. | Kilogms. |
| Germanium (in terms of metal) | | | | | | |
| PRODUCTION— | | | | | | |
| Austria Lb. | 19,511 | 16,314 | 15,000 | 15,000 | 6,800 | <i>n.a.</i> |
| Zaire Republic .. Lb. | 763 | — | <i>n.a.</i> | 46,749 | 21,205 | 53,133 |
| United States (b) Lb. | 30,000 | 30,000 | 30,000 | 28,000 | 12,500 | <i>n.a.</i> |
| Japan Lb. | 9,507 | 9,979 | 12,247 | 12,993 | 5,894 | <i>n.a.</i> |
| EXPORTS— | | | | | | |
| Italy Lb. | 6,834 | 9,039 | 6,173 | 9,480 | 4,300 | 2,500 |
| IMPORTS— | | | | | | |
| Italy Lb. | 1,323 | 1,102 | 6,394 | 12,787 | 5,800 | 2,700 |
| Japan Lb. | 161 | 104 | 3,499 | 1,556 | 706 | 1,301 |
| | | | | | Tonnes | Tonnes |
| Nepheline Syenite | | | | | | |
| PRODUCTION— | | | | | | |
| Canada Ton | 358,572 | 380,888 | 446,938 | 434,524 | 441,497 | 453,590 |
| Norway Ton | 64,180 | 81,712 | 128,000 | 143,000 | 145,000 | 160,100 |
| EXPORTS— | | | | | | |
| Canada Ton | 274,654 | 288,555 | 353,226 | 346,382 | 351,940 | 366,720 |
| IMPORTS— | | | | | | |
| Mexico Ton | 161 | 151 | 284 | 101 | 103 | 373 |
| United States .. Ton | 256,837 | 271,981 | 346,679 | 353,475 | 359,145 | 376,027 |
| Perlite | | | | | | |
| PRODUCTION— | | | | | | |
| United Kingdom Ton | 116 | 70 | — | — | — | <i>n.a.</i> |
| Australia Ton | 1,389 | 1,049 | 1,114 | 825 | 838 | 2,122 |
| New Zealand .. Ton | 1,055 | 1,840 | <i>n.a.</i> | 2,000 | 2,000 | 2,000 |
| Greece Ton | 111,576 | 161,430 | 146,169 | 165,925 | 168,588 | 160,614 |
| Mexico Ton | 10,405 | 9,772 | 9,970 | 12,170 | 12,365 | 9,056 |
| United States .. Ton | 570,000 | 498,000 | 547,000 | 542,000 | 551,000 | 449,000 |
| Turkey Ton | 20 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 9,180 |
| Sodium Carbonate (Natural) | | | | | | |
| PRODUCTION— | | | | | | |
| Kenya Ton | 103,100 | 105,908 | 104,235 | 164,832 | 167,477 | 161,260 |
| United States (a) Ton | 1,541,000 | 1,824,000 | 2,228,000 | 2,391,000 | 2,429,000 | 2,611,000 |
| EXPORTS— | | | | | | |
| Kenya Ton | 96,777 | 110,718 | 84,585 | 154,673 | 157,155 | 149,907 |
| Sudan Ton | 61 | 67,281 | 75,173 | 150,828 | 153,248 | 145,582 |

(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 | 1967 | 1968 | 1969 | 1970 | 1970 | 1971 |
|----------------------------------|---------|-------------|-------------|-------------|-------------|-------------|
| Sodium Sulphate (Natural) | | | | | Tonnes | Tonnes |
| PRODUCTION— | | | | | | |
| Canada Ton | 382,425 | 410,419 | 462,767 | 437,988 | 445,017 | 437,190 |
| United States (b) Ton | 569,000 | 625,000 | 600,000 | 534,000 | 543,000 | 614,000 |
| Chile Ton | 17,928 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Argentina .. Ton | 27,181 | 19,604 | 26,554 | 34,440 | 34,993 | <i>n.a.</i> |
| Turkey Ton | 8,968 | 10,865 | 13,567 | 16,354 | 16,616 | <i>n.a.</i> |
| EXPORTS— | | | | | | |
| Canada Ton | 110,565 | 97,308 | 107,512 | 107,043 | 108,761 | 111,151 |
| Tellurium | | | | | Kilograms. | Kilograms. |
| PRODUCTION— | | | | | | |
| Canada Lb. | 73,219 | 70,991 | 62,048 | 58,333 | 26,459 | 11,108 |
| United States (a) Lb. | 135,000 | 121,000 | 234,000 | 158,000 | 72,000 | 74,400 |
| Peru Lb. | 32,690 | 35,000 | 38,111 | 62,248 | 28,235 | 24,040 |
| Japan Lb. | 29,760 | 31,000 | 51,000 | 78,063 | 35,409 | 35,800 |
| EXPORTS— | | | | | | |
| Peru Lb. | 25,199 | 37,000 | 34,998 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| IMPORTS— | | | | | | |
| Spain Lb. | 4,377 | 2,275 | 6,614 | 8,818 | 4,000 | 5,000 |
| Japan Lb. | 223 | 218 | 269 | 9,041 | 4,101 | 1,280 |
| Wollastonite | | | | | Tonnes | Tonnes |
| PRODUCTION— | | | | | | |
| Kenya Ton | 12 | 1,360 | 680 | 98 | 100 | — |
| India Ton | — | — | 441 | 567 | 576 | 2,044 |
| Finland Ton | 3,445 | 4,228 | 5,120 | 5,955 | 6,051 | 5,549 |
| Mexico Ton | 1,018 | 68 | 4,495 | 6,458 | 6,562 | 2,716 |
| United States— | | | | | | |
| Industrial | (c) | (c) | (c) | (c) | (c) | (c) |

(a) Including tellurium content of compounds.

(b) Sold or used by producers.

(c) In the range 30,000 to 40,000 tons per annum.

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 1967-1971 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.

Australia

Antimony
Asbestos
Barytes
Bauxite
Bentonite
Beryl
Bismuth
Cadmium
China Clay
Coal
Cobalt
Copper
Damourite
Diatomaceous earth
Feldspar, China stone
Fuller's earth
Garnet
Gold
Gypsum
Iron
Lead
Lithium
Magnesite, Dolomite
Manganese
Molybdenum
Monazite
Natural gas
Nickel
Perlite
Petroleum
Phosphate
Pyrites
Salt
Selenium
Sillimanite
Silver
Sulphur
Talc, Pyrophyllite
Tantalite, Columbite
Tin
Titanium
Tungsten
Zinc
Zircon

Bahamas

Salt

Barbados

Natural gas

Botswana

Manganese

Brunei

Natural gas
Natural gasoline
Petroleum

Canada

Arsenic
Asbestos
Barytes
Bentonite
Bismuth
Cadmium
Coal
Cobalt
Copper
Diatomaceous earth
Feldspar
Fluorspar
Gold
Gypsum, Anhydrite
Iron
Lead
Lithium
Magnesite, Dolomite
Mercury
Mica
Molybdenum
Natural gas
Nepheline syenite
Nickel
Niobium
Petroleum
Platinum
Potash salts
Pyrites
Salt
Selenium
Silver
Sodium sulphate
Strontium
Sulphur
Talc
Tantalite, Columbite
Tellurium
Thorium
Tin
Titanium
Tungsten
Uranium
Zinc

Ceylon

China clay
Feldspar
Graphite

Ceylon—(cont.)

Magnesite, Dolomite
Monazite
Salt
Titanium
Zircon

Christmas Island

Phosphate

Cyprus

Asbestos
Bentonite
Chrome
Cobalt
Copper
Gypsum
Pyrites
Salt

Dominica

Pumice

Fiji

Gold
Manganese
Silver

Ghana

Bauxite
Diamonds
Gold
Manganese
Salt

Guyana

Bauxite
Diamonds
Gold
Manganese

Hong Kong

China clay
Feldspar
Graphite
Iron
Tungsten

India

Asbestos
Barytes
Bauxite
Bentonite
Beryl
Bromine
Cadmium
China Clay

Minerals produced in countries of the Commonwealth and Sterling Area (cont.)

| | | |
|----------------------|------------------------|-------------------------|
| India (cont.) | Malaysia (West) | Pakistan (cont.) |
| Chrome | Bauxite | Dolomite |
| Coal | China clay | Gypsum |
| Copper | Columbite | Magnesite |
| Columbite | Gold | Natural gas |
| Corundum | Iron | Petroleum |
| Diamonds | Manganese | Salt |
| Feldspar | Monazite | Strontium |
| Fluorspar | Tin | Talc |
| Fuller's earth | Titanium | |
| Garnet | Tungsten | Papua |
| Gold | Zircon | Gold |
| Graphite | | |
| Gypsum | Malta | Rhodesia |
| Iron | Salt | Asbestos |
| Lead | | Chrome |
| Magnesite, Dolomite | Mauritius | Coal |
| Manganese | Salt | Copper |
| Mica | | Corundum |
| Monazite | Nauru Island | Gold |
| Natural Gas | Phosphate | Lithium |
| Petroleum | | Magnesite |
| Phosphate | New Guinea | Nickel |
| Pyrites | Gold | Phosphate |
| Salt | Silver | Silver |
| Sillimanite, Kyanite | | Tin |
| Silver | New Hebrides | |
| Talc, Pyrophyllite | Manganese | St. Kitts |
| Titanium | | Salt |
| Tungsten | New Zealand | |
| Uranium | Bentonite | |
| Vermiculite | Coal | Sarawak |
| Wollastonite | Copper | Antimony |
| Zinc | Diatomaceous earth | Gold |
| Zircon | Gold | Petroleum |
| | Iron | Phosphate |
| | Magnesite, Dolomite | |
| | Natural gas | Seychelles |
| | Perlite | Phosphate |
| | Petroleum | |
| | Pumice | Sierra Leone |
| | Salt | Bauxite |
| | Silver | Diamonds |
| | Tungsten | Iron |
| | Wollastonite | Titanium |
| | | |
| | Nigeria | Swaziland |
| | China clay | Asbestos |
| | Coal | Barytes |
| | Gold | China clay |
| | Lead | Coal |
| | Monazite | Iron |
| | Natural gas | Pyrophyllite |
| | Petroleum | |
| | Salt | |
| | Tantalite, Columbite | Tanzania |
| | Tin | Bentonite |
| | Tungsten | China clay |
| | | Coal |
| | Ocean Island | Corundum |
| | Phosphate | Diamonds |
| | | Gold |
| | | Gypsum |
| | Pakistan | Magnesite |
| | Barytes | Mica |
| | China clay | Salt |
| | Chrome | Silver |
| | Coal | Tin |
| | | |
| | | |
| | | |
| Lesotho | | |
| Diamonds | | |

Minerals produced in countries of the Commonwealth and Sterling Area (cont.)

Tanzania (cont.)

Tungsten
Vermiculite

Trinidad

Gypsum
Natural asphalt
Natural gas
Natural gasoline
Petroleum

Turks and Caicos Islands

Salt

Uganda

Beryl
Cobalt
Copper
Lithium
Phosphate
Salt
Tantalite, Columbite
Tin
Tungsten

United Kingdom

Barytes, Witherite
Bromine
Cadmium
China clay
China stone
Coal
Diatomaceous earth
Fluorspar
Fuller's earth
Gypsum, Anhydrite
Iron
Lead
Magnesite, Dolomite
Natural gas
Perlite
Petroleum
Salt
Strontium
Sulphur
Talc
Tin
Tungsten
Zinc

Zambia

Cadmium
Coal
Cobalt
Copper
Gold
Gypsum
Lead
Manganese
Silver
Tantalite, Columbite
Zinc

Burma

Barytes
Coal
Copper
Gold
Gypsum
Iron
Lead
Nickel
Petroleum
Salt
Silver
Tin
Tungsten
Zinc

Iceland

Pumice

Irish Republic

Barytes
Coal
Copper
Gypsum
Lead
Pyrites
Zinc

Jordan

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
Gold
Graphite
Gypsum
Iron
Lead
Lithium
Magnesite
Manganese
Mica
Nickel
Phosphate

South Africa—(cont.)

Platinum, Osmiridium
Pyrites
Salt
Sillimanite, Andalusite
Silver
Sulphur
Talc
Tantalite
Tin
Titanium
Tungsten
Uranium
Vanadium
Vermiculite

South West Africa

Cadmium
Copper
Diamonds
Gold
Iron
Lead
Manganese
Salt
Silver
Tin
Vanadium
Zinc

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