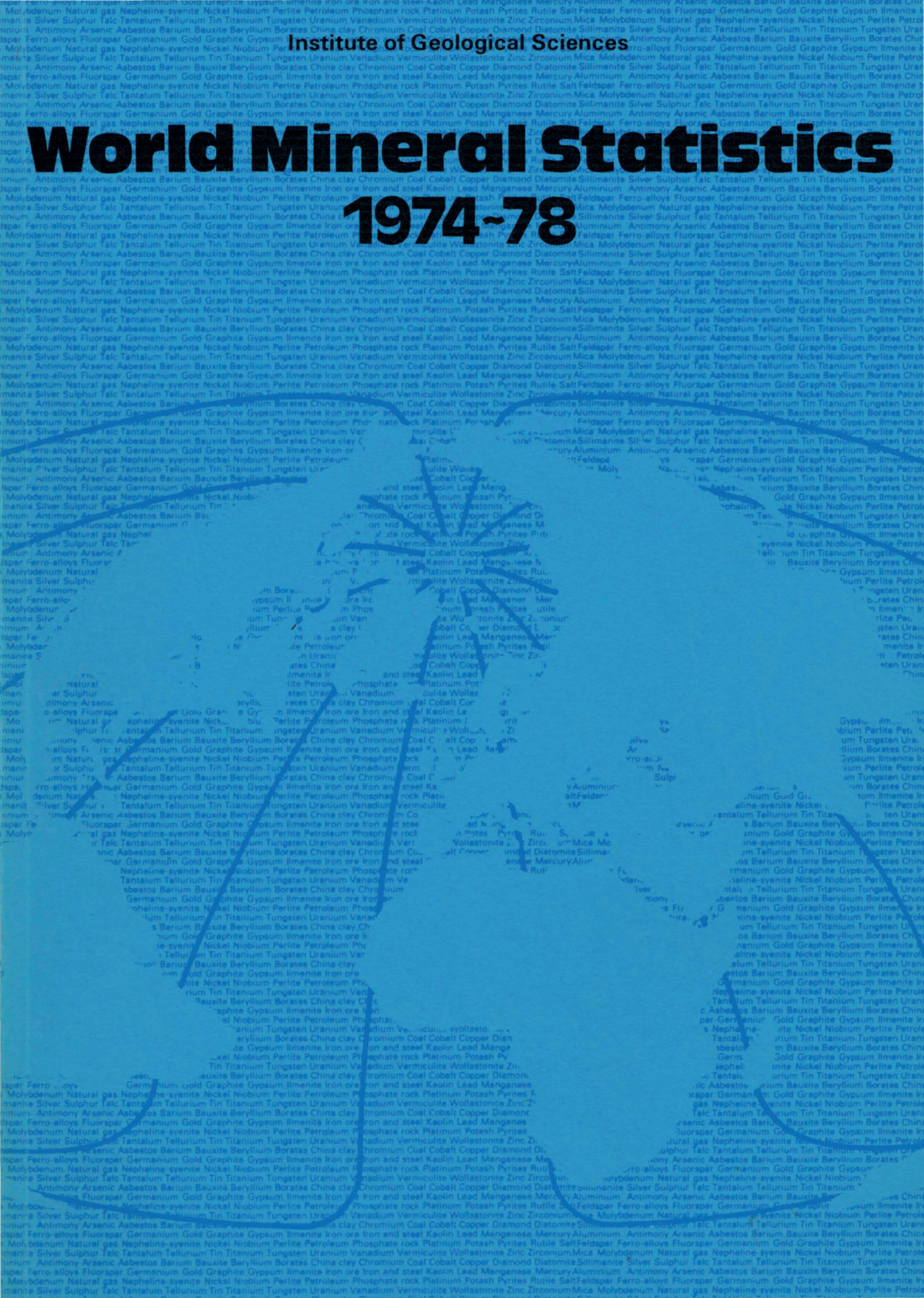


World Mineral Statistics

1974-78



INSTITUTE OF GEOLOGICAL SCIENCES

Natural Environment Research Council

WORLD MINERAL STATISTICS 1974–78

Production: Exports: Imports

Compiled by C. D. G. Black, G. J. Lofty,
N. E. Sharp, J. A. Hillier, D. C. T. Singh, M. K. Ubbi
and R. R. Songra under the direction of
R. A. Healing, Head, Mineral Statistics and
Economics Unit

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Compilers

Staff of the Mineral Statistics and Economics Unit
Institute of Geological Sciences, London

PREFACE

For more than half a century the Institute of Geological Sciences and its predecessors have published statistics on the production and trade of minerals throughout the world for the information of government, industry and the general public. The well-known series of annual publications, the Statistical Summary of the *Mineral Industry: World Production, Exports and Imports*, began with a volume containing information for the years 1913-18 and concluded with an edition published in 1973 covering the period 1966-71. This was then succeeded by a new annual series entitled *World Mineral Statistics*.

The first edition of *World Mineral Statistics* presented data for 1970-74 and the second for 1972-76, while the third - this present volume - contains statistics for the years 1974-78 inclusive. The overlapping of these editions with one another and of the new series with the old ensures both the continuity necessary for studying trends accurately and also the incorporation of any revised information subsequently received. The objective is to present as far as possible the latest official information obtainable from primary sources, that is from the individual producing and trading countries themselves, rather than uncritically to reproduce data from secondary compilations. The latter have, however, been fully consulted and the invaluable assistance and co-operation provided to the Institute by those numerous national and international organisations also concerned with compiling world mineral statistics is gratefully acknowledged.

In this current edition not only have all the statistics been updated by two years compared with the preceding one but several new tables have been introduced showing the production and trade of Bentonite and Fuller's Earth, Bismuth, Bromine and Lithium minerals as well as the production of Strontium minerals and Magnesium. A further feature is the inclusion of estimates of imports and exports for certain mineral commodities and countries, which have been derived by our compilation staff from extensive analyses of world trade, in order to fill some conspicuous gaps in the officially reported data.

It is hoped that the contents of this latest edition will again provide the reader with a comprehensive and reliable record of the activities of the world mineral industries, which are essentially an end-product of geology and a measure of the unceasing contribution of the geological sciences to man's material welfare and progress.

Dr G M Brown, FRS

Director

Institute of Geological Sciences
Exhibition Road
London SW7 2DE
June 1980

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EXPLANATORY NOTES

Coverage

A somewhat smaller range of minerals and less detail on commodity subdivision is shown than in volumes of the *Statistical Summary of the Mineral Industry*, the predecessor of this series. However, readers should note that the coverage of the tables is being extended year by year. Users of this compilation are advised that, at least for the years up to 1976, the full coverage of the *Statistical Summary* is held on file in the Mineral Statistics and Economics Unit and is available for consultation. Where figures are shown in the tables as 'estimated' the source of the estimate is not generally given.

Arrangement of countries

In each table, after the United Kingdom, countries are ordered alphabetically in geographical groupings as follows:

European Economic Community (EEC)
Europe other than EEC and including the Soviet Union
Africa
North and Central America, including the Caribbean
South America
Asia
Australasia, including the Pacific Islands

So far as possible the nomenclature follows the London Diplomatic List and United Nations usage.

Production of metals

Bauxite, chromium, iron and manganese are shown in the tables as gross ore mined. Mine production of other minerals is expressed as metal content (or equivalent). In addition, metal production (which may be derived from both domestic and imported ores), is given separately in the case of cobalt, copper, iron, lead and zinc. So far as possible, the data given refers to primary metal production.

Trade

Canada Production of Canadian minerals is shown throughout by the official figures for 'sales and shipments'.

South Africa Import data are taken from the trade statistics of the common customs area, which includes Botswana, Lesotho, South Africa, Namibia, and Swaziland, and relate to this area as a whole.

USA Imports shown are general imports as distinct from imports for consumption. US trade statistics show trade between the US customs territory and foreign countries; but exclude trade between the US and Puerto Rico, and between the US and the Virgin Islands, Guam, American Samoa and other US possessions. Also excluded is trade between any of these outlying areas, shipments from US possessions to foreign countries, and shipments for the use of the US Government in foreign countries.

General Although every effort has been made to provide comprehensive coverage of trade statistics the resulting trade compilations depend on the nature of the data available. In particular the absence of import or export figures for any country from the tables does not necessarily imply that there is no trade in that commodity, only that the item has not been separately identified in the available trade statistics.

Where an estimate for a trade statistic has been reconstructed from the imports/exports of other countries, the resulting figure may be conservative, as complete coverage of world trade is seldom available.

In general, export statistics include re-exports. The distinction is only made when re-exports are recorded separately in the relevant national trade account and are deemed to be significant.

Tables showing trade in metals covered by Standard International Trade Classification (Revised) 688.0 and 689.1 (Antimony, Bismuth, Cadmium, Cobalt, Molybdenum, Tantalum-Niobium, Titanium, Tungsten and Vanadium) include under the term 'metal', unwrought and wrought forms, powder, alloys, waste and scrap, unless these are separately shown. Trade tables of other metals include only unwrought forms under the term 'metal'.

Acknowledgements

Compilation of this volume of mineral statistics has been possible only by obtaining information from a very large number of organisations throughout the world, chiefly home and overseas government departments and specialist national or international authorities concerned with particular sectors of the minerals or metals industries. To all these bodies the Institute expresses its grateful acknowledgement for the information made available, whether in published form or provided by direct correspondence.

Among the numerous overseas government departments which have provided valuable information, particular acknowledgement is made to the United States Bureau of Mines; the Department of Energy, Mines and Resources of Canada; the Bureau of Mineral Resources, Geology and Geophysics of Australia; the Department of Mines of South Africa; the Indian Bureau of Mines; and the Mines Departments of other countries whose regular statements, yearbooks and other reports are worthy of direct consultation by readers in search of detail.

Specialist commodity organisations which have kindly allowed information to be reproduced, and whose own publications contain a wealth of authoritative data, include the World Bureau of Metal Statistics, the British Sulphur Corporation, Samuel Montagu & Company Ltd, the British Steel Corporation/Iron and Steel Statistics Bureau, the International Tin Council, ISMA Ltd, International Lead and Zinc Study Group, Metallgesellschaft AG, the UN Food and Agricultural Organisation, and the UNCTAD Committee on Tungsten.

Units

The statistics shown in this volume are expressed in metric units. The following factors are given for converting to non-metric units:

Tonnes \times 0.9842 = long tons

Tonnes \times 1.1023 = short tons

Kilograms \times 2.2046 = pounds

Kilograms \times 32.1507 = troy ounces

Cubic metres \times 35.31467 = cubic feet

1 tonne of crude petroleum equals on average 7 barrels crude petroleum

Conversion of national currencies to pounds sterling has been made using the annual period average factors shown for each country in *International Financial Statistics* published by the International Monetary Fund.

Symbols

...	Figures not available
0	Quantity less than half unit shown
—	Nil
*	Estimated

Production of Bauxite

thousand tonnes

Country	1974	1975	1976	1977	1978
France	2 898	2 563	2 330	2 059	1 978
Italy	32	32	24	35	24
Greece	2 783	3 006	2 503	2 882	2 630
Hungary	2 751	2 890	2 918	2 949	2 899
Romania	858	779	890	900	900
Soviet Union (a)	* 8 400	* 6 470	* 6 020	* 6 180	* 6 180
Spain	8	11	13	10	10
Turkey	665	558	463	567	449
Yugoslavia	2 389	2 257	2 033	2 044	2 566
Ghana	324	314	267	283	330
Guinea	7 600	8 406	11 316	11 300	* 11 000
Mozambique	6	5	5	2	* 2
Sierra Leone	672	716	651	790	* 716
Dominican Republic (b)	1 196	772	620	575	568
Haiti (b)	793	522	660	588	580
Jamaica (b)	15 224	11 304	10 309	11 433	11 736
USA (b)	1 980	1 800	1 989	2 013	1 669
Brazil	858	969	998	1 352	* 1 400
Guyana (b)	3 606	3 829	3 108	3 344	3 450
Surinam	6 885	4 751	4 585	4 856	5 025
China	* 700	* 900	* 1 000	* 1 000	* 1 100
India	1 114	1 274	1 449	1 519	1 653
Indonesia	1 290	993	940	1 301	1 008
Malaysia	948	704	660	616	615
Australia	19 994	21 003	24 084	26 086	24 299
World total (c)	84 000	76 800	79 800	84 700	82 800

(a) Includes nepheline concentrates and alunite

(b) Dried bauxite equivalent

(c) Excluding small amounts of bauxite produced by Pakistan

Production of Alumina

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom	94 700	82 500	96 000	98 500	94 000
France	1 280 460	1 250 200	1 184 080	* 1 248 800	* 1 214 900
Germany, Federal Republic of	1 302 000	1 246 138	1 333 425	1 453 948	1 409 780
Italy	688 800	750 000	797 800	792 308	808 522
Czechoslovakia	* 100 000	* 100 000	* 90 000	* 95 000	* 90 000
German Democratic Republic	48 200	48 300	44 500	38 953	37 585
Greece	498 000	475 300	461 600	474 200	482 000
Hungary	690 900	756 200	731 800	783 000	798 000
Romania	* 374 000	368 000	425 000	442 000	449 000
Soviet Union	* 2 300 000	* 2 400 000	* 2 500 000	* 2 600 000	* 2 600 000
Turkey	* 123 700	* 81 700	* 139 100	* 170 300	* 74 000
Yugoslavia	273 000	283 000	455 000	499 000	496 000
Guinea	636 000	639 100	552 000	562 000	622 000
Canada	1 264 700	1 133 700	490 000	1 060 800	1 053 600
Jamaica	2 781 359	2 276 600	1 621 027	2 036 000	2 141 900
USA	7 087 000	5 304 000	* 5 800 000	6 030 000	5 960 000
Brazil	240 000	267 500	303 000	372 000	410 000
Guyana	315 492	298 340	285 000	277 300	249 500
Surinam	1 196 000	1 129 000	1 162 000	1 215 000	1 316 000
China	* 400 000	* 520 000	* 520 000	* 650 000	* 700 000
India	299 200	337 000	442 000	386 600	480 000
Japan	1 800 900	1 565 000	1 411 400	1 784 700	1 767 000
Taiwan	45 000	46 400	47 700	51 000	51 000
Australia	4 899 489	5 128 877	6 205 828	6 659 234	6 775 675
World total	28 700 000	26 500 000	27 100 000	29 700 000	30 100 000

thousand tonnes

Production of Primary Aluminium

Country	1974	1975	1976	1977	1978
United Kingdom	293	308	335	350	346
France	393	383	385	399	391
Germany, Federal Republic of	689	678	697	742	740
Italy	212	190	213	260	267
Netherlands	252	261	256	241	261
Austria	92	89	89	92	91
Czechoslovakia	50	43	36	37	38
German Democratic Republic	* 60	* 60	* 60	* 65	* 65
Greece	147	135	134	145	144
Hungary	69	70	70	71	71
Iceland	68	59	65	71	74
Norway	648	595	618	623	640
Poland	102	103	103	104	100
Romania	187	204	207	209	213
Soviet Union	* 2 100	* 2 150	* 2 200	* 2 200	* 2 300
Spain	191	210	211	211	212
Sweden	82	77	83	83	82
Switzerland	87	79	78	80	79
Turkey	2	17	31	30	33
Yugoslavia	148	168	198	197	196
Cameroon	47	52	57	57	41
Egypt	—	2	59	90	100
Ghana	157	143	151	154	114
South Africa	75	76	78	78	81
Canada	1 021	887	633	983	1 048
Mexico	41	40	42	43	43
USA	4 448	3 519	3 857	4 117	4 358
Argentina	1	24	43	50	49
Brazil	126	121	139	167	186
Surinam	57	35	46	50	59
Venezuela	46	50	47	43	67
Bahrain	118	116	122	121	123
China	* 160	* 200	* 200	* 250	* 300
India	129	167	210	184	205
Iran	49	51	31	21	26
Japan	1 118	1 013	919	1 188	1 058
Korea, Republic of	18	18	18	17	18
Taiwan	31	28	26	30	50
Australia	219	214	232	248	263
New Zealand	110	109	140	145	151
World Total	13 800	12 700	13 100	14 200	14 700

Exports of Bauxite, Alumina and Aluminium

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom					
Alumina	102 847	11 798	12 675	10 863	10 841
Alumina hydrate	11 324	12 872	30 314	32 277	25 220
Unwrought (a)(h)	87 430	88 815	160 188	165 749	160 515
Scrap (i)	11 737	15 477	6 869	9 757	12 706
Belgium-Luxembourg					
Bauxite	175	75	55	59	689
Alumina	306	436	694	194	185
Unwrought	7 313	5 766	9 510	5 403	1 048
Unwrought alloys	12 984	4 206	4 685	7 673	9 137
Scrap	20 177	18 096	32 127	38 978	28 726
Denmark					
Unwrought	297	47	-	1 145	3 364
Unwrought alloys	5 070	4 702	4 654	5 819	6 498
Scrap	3 626	2 635	4 793	6 598	7 345
France					
Bauxite	114 366	46 006	32 307	19 976	17 437
Alumina	303 628	297 303	235 222	251 089	226 873
Alumina hydrate	87 311	70 376	76 695	81 162	76 158
Unwrought	84 511	105 773	72 269	83 453	84 660
Unwrought alloys	95 306	58 014	76 924	82 339	81 758
Scrap	20 570	22 297	30 605	32 094	33 969
Germany, Federal Republic of					
Bauxite	12 548	10 178	4 615	9 327	12 260
Alumina	245 379	227 639	324 235	321 518	344 606
Alumina hydrate	123 398	111 172	132 026	118 543	120 544
Unwrought	70 901	79 060	133 366	69 404	107 670
Unwrought alloys	103 408	80 599	148 060	129 732	163 941
Scrap	31 756	31 500	49 388	50 819	52 982
Italy					
Bauxite	5 278	5 912	1 390	6 744	12 240
Alumina	252 740	364 059	472 980	322 147	311 007
Alumina hydrate	241	136	2 584	10 130	16 592
Unwrought	11 367	24 216	3 608	11 929	49 195
Unwrought alloys	12 107	9 117	5 846	12 265	20 069
Scrap	731	718	1 339	981	1693
Netherlands					
Bauxite (b)	4 521	2 652	5 605	3 467	3 295
Alumina (b)	26 559	24 796	27 029	30 282	39 098
Unwrought (a)	293 982	264 182	290 357	316 247	294 443
Scrap	37 925	32 980	48 510	53 358	61 994
Austria					
Unwrought	21 855	8 536	8 589	8 699	11 685
Scrap	19 644	20 073	30 419	48 737	42 570
Finland					
Unwrought (a)	904	548	1 195	3 248	2 652
Greece					
Bauxite	1 456 963	1 594 641	1 366 847	1 548 527	1 688 716
Alumina	190 208	200 008	194 732	203 127	174 355
Unwrought	101 769	89 072	88 912	77 513	85 275
Hungary					
Bauxite	559 000	603 000	633 018	584 319	601 203
Alumina	626 000	686 000	621 000	707 000	688 002
Unwrought	54 727	60 821	53 927	67 903	77 777
Scrap	19 784	17 627	16 168	17 688	12 128
Iceland					
Unwrought	63 071	43 600	78 625	74 200	77 349
Norway					
Unwrought	404 258	309 266	375 475	354 048	416 859
Unwrought alloys	150 255	142 234	186 316	210 214	213 382
Scrap	12 805	8 524	10 148	14 704	21 520
Romania					
Unwrought	47 342	84 700	75 000	60 200	70 300
Soviet Union					
Unwrought	528 713	502 365	520 000	540 000	560 000

Exports of Bauxite, Alumina and Aluminium

tonnes

Country	1974	1975	1976	1977	1978
Spain					
Unwrought	641	10	3 712	6 202	2 134
Unwrought alloys	1 844	2 378	7 092	2 658	3 704
Sweden					
Bauxite	641	750	1 150	4 133	5 717
Unwrought	6 713	2 860	6 414	19 373	28 656
Unwrought alloys	5 052	5 159	6 923	13 085	9 873
Switzerland					
Alumina	219	145	155	184	163
Unwrought & scrap	23 135	22 661	33 197	29 027	32 876
Turkey					
Bauxite	187 400	75 000	11 160	—	29
Alumina	101 175	36 657	76 080	60 310	20 870
Yugoslavia					
Bauxite	1 611 243	1 283 147	1 023 950	908 894	676 163
Alumina	84 428	77 383	91 665	125 866	74 848
Unwrought	66 696	71 869	81 316	63 224	55 641
Unwrought alloys	3 063	95	1 459	831	3 089
Scrap	4 936	6 741	7 132	6 148	3 127
Cameroon					
Unwrought	21 250	25 034	20 837	20 244	11 600
Ghana					
Bauxite	398 317	320 494	...	...	...
Unwrought (a)	137 600	135 800	145 100	148 100	111 300
Guinea					
Bauxite	3 287 000	6 615 000	(f)* 9 300 000	(f)* 6 800 000	(f)* 6 700 000
Alumina	332 000	277 000	(f)* 500 000	(f)* 350 000	(f)* 400 000
Mozambique					
Bauxite	1 695	3 846	920	—	...
Sierra Leone					
Bauxite	740 773	625 265	578 961	809 726	...
Canada					
Alumina	33 250	24 724	15 944	24 211	32 659
Unwrought	690 070	511 801	507 863	655 352	862 604
Scrap	53 617	43 042	51 419	50 833	57 702
Dominican Republic					
Bauxite	1 473 555	753 601	516 632	642 667	628 470
Haiti					
Bauxite	793 048	522 707	738 758	...	...
Jamaica					
Bauxite (d)	7 999 839	5 482 681	6 284 034	6 354 801	6 447 723
Alumina	2 816 124	2 374 776	1 622 565	2 035 901	2 142 090
USA					
Bauxite	20 475	28 757	24 624	33 183	34 040
of which: Re-exports	4 486	9 160	9 382	7 515	10 828
Alumina	644 139	673 511	738 186	492 777	501 552
Alumina hydrate	25 614	22 085	31 575	33 973	44 105
Unwrought (a)	188 669	168 756	138 590	88 855	115 066
Scrap	72 763	60 829	98 872	92 369	176 590
Brazil					
Bauxite	24 192	17 777	2 738	3 654	4 005
Guyana					
Bauxite, dried	1 382 057	1 377 390	934 284	895 653	1 014 484
Bauxite, calcined	779 718	784 023	742 432	704 593	587 619
Alumina	306 810	308 110	250 888	251 860	251 170
Surinam					
Bauxite	3 974 000	2 325 000	2 013 000	2 206 000	...
Alumina	1 077 000	1 088 000	1 078 000	1 059 000	...
Bahrain					
Unwrought (a)	98 198	90 093	120 903	112 970	140 100
China					
Bauxite (f)	* 111 200	* 120 000	* 135 000	* 90 000	* 95 000

Exports of Bauxite, Alumina and Aluminium

tonnes

Country	1974	1975	1976	1977	1978
Hong Kong					
Bauxite (Re-exports)	6 287	13 014	10 435	8 223	4 500
Alumina (Re-exports)	119	17	16	7	3 620
Alumina hydrate (Re-exports)	183	205	798	628	1 851
Unwrought (Re-exports)	4 418	2 925	4 281	4 777	5 605
Scrap	6 789	3 976	5 543	5 977	6 302
India					
Bauxite	18 264	14 320	21 190	...	...
Unwrought (c)	20	10 108	25 319	1 796	...
Indonesia					
Bauxite	1 260 971	973 370	872 039	1 138 361	911 105
Iran (e)					
Unwrought	18 193	13 332	1 506	—	200
Japan					
Bauxite	146	860	1 066	660	1 821
Alumina	40 367	33 709	85 243	151 869	124 105
Alumina hydrate	39 129	23 443	38 224	51 447	50 961
Unwrought	24 161	77 364	52 024	86 924	45 438
Unwrought alloys	10 699	6 142	17 682	12 725	9 156
Scrap	1 219	404	752	1 422	1 097
Korea, Republic of					
Unwrought	(a) 5 027	...	10	—	...
Malaysia (g)					
Bauxite	814 954	649 371	523 818	663 758	...
Singapore					
Alumina	962	4 319	21 856	2 795	1 425
Unwrought	1 830	90	559	893	3 665
Scrap	...	2 512	3 792	3 921	4 228
Taiwan					
Unwrought	4 512	1 464	295	78	444
Australia					
Bauxite	* 6 800 000	* 6 100 000	* 5 900 000	* 6 200 000	...
Alumina	4 704 855	4 513 937	5 855 447	6 119 454	6 250 236
Unwrought (a)	52 731	76 661	64 532	77 818	80 019
Scrap	1 171	2 710	5 996	6 925	8 002

Notes:

- 1 Except where alumina hydrate is separately specified, national trade figures for alumina can be considered as inclusive of hydrate
- 2 In this table the description 'unwrought' aluminium corresponds to item 684.1 of the Standard International Trade Classification (revised) and comprises ingots, blocks, unwrought bars, etc

(a) Including alloys

(b) Figures up to 1976 exclude exports to Belgium-Luxembourg, if any

(c) Years ended 31 March following that stated

(d) Estimated dry equivalent

(e) Years ended 20 March following that stated

(f) IGS estimates, based on known imports into certain countries

(g) From 1975 includes Sabah and Sarawak

(h) See footnote (i)

(i) From 1977 excludes waste and scrap in ingot form for smelting, which is then included with 'Unwrought'

Imports of Bauxite, Alumina and Aluminium

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom					
Bauxite, uncalcined	294 359	264 788	273 106	320 816	288 766
Bauxite, calcined	182 417	171 732	185 011	196 720	128 857
Alumina	599 949	670 834	(h)* 650 000	698 168	695 989
Alumina hydrate	2 081	1 947	3 139	4 661	3 466
Unwrought (i)	143 411	110 155	128 076	110 115	78 228
Unwrought alloys	137 304	49 489	90 170	92 450	112 627
Scrap (j)	22 216	13 650	16 729	6 167	4 976
Belgium-Luxembourg					
Bauxite	23 814	16 380	19 680	17 406	32 867
Alumina	5 012	4 257	8 242	6 984	6 201
Alumina hydrate	12 430	8 432	12 815	15 300	15 633
Unwrought	166 753	128 140	147 836	139 555	175 926
Unwrought alloys	86 252	60 036	110 412	98 855	90 908
Scrap	18 138	14 777	19 073	14 161	15 351
Denmark					
Bauxite	3 107	130 418	93 064	4 543	10 143
Unwrought	3 140	596	710	1 837	6 221
Unwrought alloys	3 680	4 439	10 206	11 137	10 901
Scrap	1 645	1 835	2 260	2 776	1 638
France					
Bauxite	1 012 251	1 456 369	2 269 601	1 919 636	1 954 504
Alumina	10 207	9 956	12 577	16 485	37 231
Alumina hydrate	3 955	2 118	6 903	14 634	18 550
Unwrought	183 100	137 185	140 011	151 534	160 732
Unwrought alloys	79 783	80 741	111 396	123 732	130 095
Scrap	27 201	25 192	31 735	37 081	42 286
Germany, Federal Republic of					
Bauxite	4 340 342	4 213 076	4 086 997	4 090 450	3 613 821
Alumina	499 149	471 753	473 147	494 918	486 069
Alumina hydrate	1 570	2 541	2 652	2 099	2 080
Unwrought	215 254	169 111	245 280	258 285	245 788
Unwrought alloys	123 698	115 342	159 869	162 226	165 070
Scrap	77 169	94 426	102 532	128 757	137 345
Irish Republic					
Unwrought (a)	6 325	5 336	7 705	5 625	6 333
Alumina	3 222	2 734	2 796	3 163	3 239
Italy					
Bauxite	1 972 367	1 829 887	1 836 634	1 912 894	1 644 740
Alumina	26 571	40 642	87 820	114 237	139 505
Alumina hydrate	23 327	25 825	23 304	31 209	27 336
Unwrought	160 778	81 623	128 166	120 815	119 944
Unwrought alloys	94 994	29 457	69 411	74 674	70 541
Scrap	65 818	53 289	73 568	89 431	82 812
Netherlands					
Bauxite (b)	141 285	152 732	130 828	141 242	151 521
Alumina (b)	494 510	549 603	512 341	505 774	542 576
Alumina hydrate (b)	31 391	21 696	28 444	24 760	21 861
Unwrought	129 563	96 114	130 339	130 953	106 553
Unwrought alloys	29 195	25 251	31 769	31 351	38 955
Scrap	16 744	24 728	28 341	29 850	30 515
Austria					
Bauxite	32 298	18 947	30 878	34 233	40 226
Alumina	188 519	186 948	188 489	192 835	198 667
Alumina hydrate	9 133	7 198	8 727	7 770	7 890
Unwrought	17 775	17 994	21 040	19 246	14 891
Scrap	17 795	14 120	24 145	55 838	47 061
Finland					
Alumina	118	116	174	147	287
Alumina hydrate	21 565	24 625	22 401	17 672	24 045
Unwrought	15 923	11 721	19 198	23 287	18 191
Unwrought alloys	9 695	7 447	5 268	5 248	3 520
German Democratic Republic					
Bauxite	247 500	265 300	260 900	197 900	251 500
Alumina	90 450	94 524	92 648	...	...

Imports of Bauxite, Alumina and Aluminium

tonnes

Country	1974	1975	1976	1977	1978
Greece					
Alumina	—	—	—	—	216
Alumina hydrate	...	201	—	—	353
Unwrought	1 767	891	3 646	4 527	400
Hungary					
Unwrought	139 399	146 900	155 514	162 406	165 859
Iceland					
Alumina	195 209	169 919	130 966	113 168	141 907
Norway					
Bauxite	6 576	6 143	3 473	10 542	3 706
Alumina	1 258 210	1 234 914	1 313 561	1 267 885	1 197 810
Alumina hydrate	29 295	35 545	29 250	33 579	31 682
Unwrought	21 725	13 472	13 469	4 246	3 615
Unwrought alloys	6 186	5 911	10 092	4 255	4 334
Poland					
Bauxite	118 588	119 235	127 417	115 298	100 558
Alumina	262 566	271 588	281 060	289 553	313 000
Portugal					
Alumina	4 977	3 488	3 163	5 160	6 799
Unwrought	6 620	4 776	9 431	12 050	19 137
Romania					
Bauxite	561 548	...	...	...	...
Alumina	67 192	...	...	...	...
Soviet Union					
Bauxite	1 623 000	3 477 000	3 524 000	3 500 000	3 500 000
Alumina	886 446	1 028 846	1 000 000	1 000 000	1 000 000
Spain					
Bauxite	132 374	118 906	95 027	110 294	117 544
Alumina	399 777	445 564	408 641	413 487	432 221
Unwrought	23 902	27 860	13 441	32 954	31 127
Unwrought alloys	3 526	730	986	3 890	6 845
Scrap	4 439	4 319	2 861	3 466	3 108
Sweden					
Bauxite	97 121	68 042	38 523	37 470	58 167
Alumina	188 165	220 221	189 849	233 039	185 236
Unwrought	34 179	22 307	25 579	23 921	24 065
Unwrought alloys	20 180	21 465	21 187	19 404	10 103
Scrap	1 947	1 140	1 179	430	2 936
Switzerland					
Bauxite	15 990	20 230	25 534	8 560	7 693
Alumina	198 438	158 074	158 222	158 096	152 844
Unwrought & scrap	41 600	16 100	31 143	39 219	35 314
Turkey					
Alumina	448	1 184	192	188	171
Unwrought	50 266	51 681	26 861	40 906	11 245
Yugoslavia					
Bauxite	219 648	108 621	41 304	51 403	43 643
Alumina	100 584	175 463	38 327	1 347	30 262
Unwrought	43 970	29 680	32 283	43 066	40 704
Unwrought alloys	4 922	2 651	1 401	633	885
Cameroon					
Alumina	91 150	75 695	127 080	78 425	81 600
Egypt					
Unwrought & scrap	5 763	7 705	1 533	772	839
Ghana					
Alumina	327 137	273 801	...	...	...
Unwrought (a)	233	73	...	...	...
Madagascar					
Unwrought & scrap	529	484	656	444	1 112
Morocco					
Bauxite	930	—	—	—	780
Alumina	1 533	1 115	1 415	2 431	1 725
Nigeria					
Unwrought (a)	1 258	3 298	5 334	...	...

Imports of Bauxite, Alumina and Aluminium

tonnes

Country	1974	1975	1976	1977	1978
South Africa					
Bauxite	7 188	32 130	13 248	24 034	18 120
Alumina	169 488	140 499	165 347	159 739	184 956
Unwrought	842	1 264	633	449	613
Scrap	202	356	875	662	518
Tanzania					
Unwrought (a)	3 348	1 630	3 427	...	...
Canada					
Bauxite	2 715 604	2 420 669	1 230 053	2 755 254	2 432 552
Alumina	883 566	760 616	907 955	821 597	1 056 208
Unwrought	47 950	18 303	22 545	20 789	11 480
Scrap	5 836	7 011	8 936	16 126	27 162
Mexico					
Bauxite, calcined	30 140	50 691	34 751	27 837	...
Alumina	92 150	85 246	93 065	96 107	...
Alumina hydrate	10 103	9 135	11 945	12 908	...
Unwrought	25 332	7 591	9 865	5 491	...
USA					
Bauxite, crude dried	14 049 811	11 815 032	12 796 409	13 374 074	14 036 476
Bauxite, calcined	309 125	353 797	314 136	241 720	251 786
Alumina	3 290 381	3 181 874	3 287 971	3 760 359	3 961 982
Unwrought	197 014	202 240	250 235	136 758	340 231
Unwrought alloys	264 617	213 152	266 591	337 706	345 995
Scrap	67 773	49 720	77 758	81 551	83 588
Argentina					
Bauxite	38 673	29 071	20 691	...	...
Alumina	4 368	99 479	43 053	...	...
Alumina hydrate	8 936	6 021	7 518	...	...
Unwrought	86 059	48 931	21 570	...	...
Brazil					
Bauxite	15 120	12 988	14 018	12 364	10 091
Alumina	795	10 674	3 335	705	23 981
Alumina hydrate	1 135	1 053	1 321	1 234	354
Unwrought	81 388	64 848	59 037	62 048	53 070
Unwrought alloys	23 400	14 017	19 071	18 771	7 257
Scrap	5 593	2 382	4 043	8 432	22 234
Chile					
Unwrought	3 219	...	...	...	...
Colombia					
Unwrought (a)	...	...	13 870	...	...
Uruguay					
Unwrought	1 934	20 164	2 033	849	...
Venezuela					
Alumina	82 435	61 053	...	...	...
Unwrought (a)	176	109	...	...	...
China					
Unwrought (a)(k)	* 32 500	* 286 500	* 163 700	* 108 100	* 154 800
Hong Kong					
Bauxite	4 540	9 349	4 789	6 345	7 070
Alumina	264	229	228	281	1 081
Alumina hydrate	170	254	863	800	1 937
Unwrought	24 008	25 446	22 878	25 876	28 481
Scrap	424	241	458	303	473
India (c)					
Alumina	466	385	421	955	...
Unwrought	166	4 981	330	5 508	...
Unwrought alloys	43	82	6	29	...
Indonesia					
Alumina	6 362	4 804	7 633	17 664	21 866
Unwrought	4 698	6 995	8 401	11 623	12 288
Iran (e)					
Alumina	51 843	36 961	19 494	...	...
Unwrought	711	5 222	9 543	...	...
Israel					
Unwrought	(g) 3 840	(g) 582	(g) 409	(k) 18 500	(k) 24 800

Imports of Bauxite, Alumina and Aluminium

tonnes

Country	1974	1975	1976	1977	1978
Japan					
Bauxite	5 310 875	4 600 226	4 276 583	5 318 199	4 742 993
Alumina	646 748	561 260	627 417	940 480	758 918
Unwrought	384 816	328 256	340 425	411 624	598 120
Unwrought alloys	94 088	50 077	89 700	122 183	142 084
Scrap	24 823	29 165	69 304	70 470	139 612
Korea, Republic of					
Alumina	43 924	41 772	49 243	49 415	...
Unwrought (a)	17 546	16 532	32 445	63 380	85 700
Scrap	4 000	1 407	29 629	3 321	...
Malaysia (f)					
Alumina	4 049	4 332	4 201	5 480	...
Unwrought (a)	9 409	5 967	8 370	11 740	...
Philippines					
Bauxite	5 681	7 589	4 362	7 750	4 112
Unwrought	12 611	6 176	11 417	10 443	8 668
Unwrought alloys	5 782	2 282	5 962	6 549	8 122
Singapore					
Bauxite	3 528	12 612	5 397	3 681	7 242
Alumina	4 207	2 255	4 138	3 919	4 460
Unwrought	3 557	694	3 541	3 842	7 862
Scrap	...	352	377	542	399
Syria					
Unwrought & scrap	1 024	1 250	1 933	2 081	...
Taiwan					
Bauxite	105 609	114 433	166 029	162 569	171 182
Alumina	25 690	6 250	21 542	8 966	42 579
Unwrought	18 338	11 573	36 358	52 479	48 672
Thailand					
Bauxite	500	6 804	3 086	12 316	...
Alumina	4 795	1 105	725	1 340	...
Alumina hydrate	6 777	2 660	1 022	4 297	...
Unwrought (a)	22 793	18 424	28 327	29 295	...
Scrap	457	97	1 006	1 386	...
Australia					
Alumina	2 748	2 555	3 199	2 197	3 569
Unwrought (a)	9 473	369	256	183	344
Scrap	2 589	1 154	1 420	1 374	1 337
New Zealand (d)					
Alumina	296 875	151 618	297 647	255 829	...
Unwrought	1 235	2 220	75	274	...

Notes:

- 1 Except where alumina hydrate is separately specified, national trade figures for alumina can be considered as inclusive of hydrate
- 2 In this table the description 'unwrought' aluminium corresponds to item 684.1 of the Standard International Trade Classification (revised) and comprises ingots, blocks, unwrought bars, etc

(a) Including alloys

(b) Figures up to 1976 exclude imports from Belgium-Luxembourg, if any

(c) Years ended 31 March following that stated

(d) Years ended 30 June of that stated

(e) Years ended 20 March following that stated

(f) From 1975 includes Sabah and Sarawak

(g) Figures may be incomplete as value only given in Israeli trade return for imports from some countries

(h) IGS estimate based on interpretation of official data

(i) See footnote (j)

(j) From 1977 excludes waste and scrap in ingot form for smelting, which is then included with 'Unwrought'

(k) IGS estimates, based on known exports from certain countries

Mine Production of Antimony

tonnes (metal content)

Country	1974	1975	1976	1977	1978
Italy	1 177	1 028	1 009	808	931
Austria	540	555	568	561	550
Czechoslovakia	* 706	724	285	300	300
Soviet Union	* 7 500	* 7 500	* 7 700	* 7 700	* 7 000
Spain	134	80	157	331	471
Turkey	2 925	1 550	1 784	2 032	2 438
Yugoslavia	2 208	2 183	2 021	2 248	2 760
Algeria	* 60	* 60	* 60	* 60	* 60
Morocco	1 780	1 260	1 426	1 285	2 110
South Africa	15 380	15 958	10 714	11 831	9 017
Zimbabwe	* 300	* 300	* 360	* 300	* 300
Canada (a)	2 500	2 600	3 400	3 200	3 000
Guatemala	435	856	1 120	916	230
Honduras	80	103	117	103	100
Mexico (c)	2 407	3 137	2 546	2 698	2 457
USA	600	804	257	553	724
Bolivia	11 961	13 967	17 409	15 156	12 672
Peru (e)	317	122	603	823	895
Burma	166	278	468	500	620
China	* 12 000	* 12 000	* 12 000	* 12 000	* 12 000
India	393	238	404	186	—
Korea, Republic of	8	40	10	—	—
Pakistan	* 33	131	120	121	* 100
Sarawak	274	352	361	264	291
Thailand	5 232	3 870	4 534	3 031	2 873
Australia (b)	1 406	2 205	1 892	2 089	1 514
World total (d)	70 500	71 900	71 300	69 100	63 400

(a) Includes Sb content of antimonial lead alloys

(b) Includes Sb content of lead and zinc concentrates

(c) Includes Sb content of antimonial lead

(d) Excludes any antimony ore produced in Afghanistan, Hungary and Iran

(e) Includes Sb content of antimonial lead plus Sb content of ores for export

Antimony

Exports of Antimony

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom					
Metal	2 747	803	902	704	497
France					
Metal (a)	219	386	157	219	392
Oxide	3 802	2 031	3 346	3 189	4 654
Germany, Federal Republic of					
Ore	55	7	—	132	—
Metal (a)	196	111	75	216	19
Oxide	301	327	268	366	319
Italy					
Metal (a)	737	1 109	494	1 145	61
Oxide	56	152	115	206	487
Netherlands					
Metal (a)	38	60	66	91	39
Oxide	23	12	133	188	407
Austria					
Ore	297	329	488	336	414
Sulphide (b)	—	—	3	22	0
Soviet Union					
Metal	1 304	...	...	...	...
Spain					
Metal	231	139	323	262	464
Sweden					
Metal	22	108	56	3	12
Turkey					
Ore	13 174	1 766	2 795	1 819	...
Metal	545	205	347	20	...
Yugoslavia					
Metal	1 775	1 305	775	580	1 485
Morocco					
Ore	4 084	3 102	3 795	3 495	2 267
South Africa					
Ore	22 530	12 247	18 115	8 452	3 173
Guatemala					
Ore & concentrate	1 460	2 361	1 525	1 579	...
Mexico					
Ore & concentrate	6 587	9 465	6 115	3 450	...
Metal	98	275	190	143	...
USA					
Metal (a)	834	419	471	763	639
Oxide	664	291	294	236	216
Bolivia					
Ore (c)(d)	13 071	11 784	17 398	13 822	10 527
Peru					
Ore	530	817	571	865	...
Metal	...	21	231	429	...
Burma					
Ore & concentrate	476	295	...	...	...
China (e)					
Ore & concentrate	* 2 000	* 2 500	* 1 400	* 2 100	* 500
Metal	* 1 900	* 2 800	* 2 000	* 3 000	* 5 000
Oxide	* 200	* 500	* 1 200	* 400	* 1 200
Japan					
Metal	...	...	194	77	102
Thailand					
Ore	6 792	4 788	6 017	3 989	...
Metal	201	229	253	45	...
Australia					
Ore & concentrate	...	1 259	1 324	1 216	3 040

(a) Including scrap

(b) Believed to be crude liquated sulphide

(c) Sb content

(d) May include metal

(e) IGS estimates, based on known imports into certain countries

Imports of Antimony

Country	1974	1975	1976	1977	1978
United Kingdom					
Metal	260	398	116	828	319
Oxide	196	98	142	349	253
Sulphide	32	10	50	(c) 56	(c) 66
Belgium-Luxembourg					
Ore	8 969	8 707	11 170	6 823	5 179
Metal (a)	72	222	210	550	230
Oxide	196	93	147	104	110
Denmark					
Metal (a)	46	12	13	21	9
Oxide	22	13	23	10	27
France					
Ore	8 184	5 045	10 829	7 679	9 984
Metal (a)	2 010	527	563	451	818
Oxide	451	407	193	318	454
Germany, Federal Republic of					
Ore	3 369	2 129	3 514	2 578	3 040
Metal (a)	924	841	1 064	761	747
Oxide	2 819	2 393	3 010	3 243	3 406
Italy					
Ore	2 326	728	1 090	720	—
Metal (a)	132	185	230	121	152
Oxide	504	229	363	392	406
Netherlands					
Metal (a)	64	43	47	128	90
Oxide	678	466	863	897	1 059
Austria					
Metal	48	97	171	92	52
Finland					
Metal	77	8	6	5	39
Greece					
Metal	17	8	31	17	—
Norway					
Metal	35	52	40	17	22
Spain					
Ore	1 709	335	992	1 054	564
Metal	317	137	99	321	126
Oxide	103	123	237	202	307
Sweden					
Metal	22	47	25	25	21
Switzerland					
Metal	62	122	160	137	126
Yugoslavia					
Ore & concentrate	2 863	3 276	1 935	2 209	2 576
Metal	40	127	118	170	145
Algeria					
Metal	77	53	(a) 30	(a) 115	...
Morocco					
Metal (a)	7	4	12	9	2
Canada					
Oxide	796	395	734	626	906
Mexico					
Oxide	42	21	41	...	...
USA					
Ore (b)	13 295	7 548	9 093	3 119	4 077
Liquated	78	67	37	* 240	* 55
Metal (a)	2 544	2 468	2 584	2 251	4 015
Oxide	5 727	8 937	10 533	8 746	9 702

Antimony

Imports of Antimony

tonnes

Country	1974	1975	1976	1977	1978
Argentina					
Ore	322	580	533	...	...
Brazil					
Ore	1 738	1 597	1 721	494	655
Metal	209	47	129	81	284
Oxide	274	225	340	386	392
Sulphide	42	8	3	3	5
Venezuela					
Metal	16	60	101	...	...
India					
Ore	879	724	1 523	...	...
Metal	1	11	46	...	...
Oxide (d)	24	42	68	107	...
Japan					
Ore & concentrate	10 857	9 012	12 703	7 501	6 553
Metal	589	454	1 055	1 239	1 611
Sulphide	3	-	...	41	43
Malaysia (e)					
Metal	31	30	60	52	...
Australia					
Metal	73	497	32	58	87

(a) Including waste and/or scrap

(b) Sb content

(c) Includes sulphides of calcium and iron

(d) Years ended 31 March following that stated

(e) From 1975 includes Sabah and Sarawak

Production of White Arsenic

tonnes

Country	1974	1975	1976	1977	1978
France (a)(b)	6 848	5 495	7 276	* 7 000	* 7 000
Germany, Federal Republic of	364	320	360	360	* 360
Portugal	263	256	278	222	...
Soviet Union	* 7 250	* 7 350	* 7 400	* 7 500	* 7 600
Spain	166	12	* 10	...	...
Sweden (b)	14 687	11 688	7 252	6 724	6 800
Namibia (c)	6 640	6 663	6 985	* 6 350	* 7 250
Mexico (d)	9 503	6 156	5 498	5 742	* 5 800
Brazil	18	13	—	—	...
Peru	1 973	1 260	789	* 800	...
Japan	193	60	* 60	...	...

Notes:

- 1 The production data in this table does not include calculated trioxide equivalents for output reported as arsenic metal
 - 2 Arsenic is known to have been produced also in the following countries: Argentina, Austria, Belgium, China, Czechoslovakia, German Democratic Republic, Finland, Hungary, United Kingdom and Zimbabwe
- (a) Byproduct of complex gold ores
 (b) Excluding metallic arsenic
 (c) Output of Tsumeb Corp. only trioxide equivalent of reported black arsenic
 (d) Including trioxide equivalent of black arsenic

Arsenic

Exports of Arsenic

tonnes

Country	1974	1975	1976	1977	1978
France					
White arsenic	9 311	8 940	5 759	7 210	12 937
Germany, Federal Republic of					
White arsenic	246	287	140	44	56
Italy					
White arsenic	69	1	1	233	25
Netherlands					
White arsenic (b)	31	163	128	29	2
Portugal					
White arsenic	(c) 284	(c) 176	(c) 87	10	...
South Africa (a)					
White arsenic	* 3 000	* 4 000	* 2 000	...	...
Mexico					
White arsenic, pure	5 328	3 262	4 667	3 234	...
White arsenic, crude	72	—	50	10	...
Hong Kong					
White arsenic (Re-exports)	17	16	17	38	8
Japan					
White arsenic	20	6	5	12	6

Note: This table does not purport to be comprehensive: data relating to arsenic are not fully recorded by many countries

(a) IGS estimates, based on known imports into certain countries

(b) Figures up to 1976 exclude exports to Belgium-Luxembourg, if any

(c) Includes arsenic acid

Imports of Arsenic

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom					
White arsenic	5 917	4 611	4 879	* 5 600	...
Belgium-Luxembourg					
White arsenic	300	112	39	29	40
Denmark					
White arsenic	34	2	31	0	3
France					
Metallic arsenic	122	97	102	89	60
Germany, Federal Republic of					
White arsenic	702	564	534	576	508
Metallic arsenic (a)	81	32	61	40	56
Italy					
White arsenic	1 347	1 444	1 186	865	785
Metallic arsenic (a)	68	208	105	124	78
Netherlands					
White arsenic (g)	606	521	508	194	291
Austria					
White arsenic (e)	47	43	41	26	24
Finland					
White arsenic (e)	723	719	836	773	916
Norway					
White arsenic (e)	80	68	89	59	..
Spain					
White arsenic	421	455	596	483	308
Switzerland					
White arsenic (e)	58	43	30	65	26
Turkey					
White arsenic	45	50	77	55	81
Yugoslavia					
Metallic arsenic	17	25	18	21	36
White arsenic	55	49	111	50	...
Morocco					
White arsenic	23	2	0	10	—
South Africa					
White arsenic	117	105	90	165	—
Metallic arsenic	1	2	17	13	17
USA					
Metallic arsenic	641	438	261	323	360
White arsenic	12 467	10 898	3 884	5 773	9 862
Argentina					
White arsenic	438	367	396	...	...
Brazil					
Metallic arsenic	44	17	38	34	39
White arsenic	850	651	1 255	600	562
Chile					
White arsenic	111	...	...	...	...
Hong Kong					
White arsenic	55	40	46	55	10
India (b)					
Metallic arsenic	95	12	34	18	...
White arsenic	704	340	986	500	...
Iran (d)					
White arsenic	90	40	66	...	...
Japan					
White arsenic	1 082	906	1 359	1 076	751
Korea, Republic of					
White arsenic	41	3	2	11	...
Malaysia (f)					
White arsenic	5 305	4 386	834	43	...

Arsenic

Imports of Arsenic

tonnes

Country	1974	1975	1976	1977	1978
Philippines					
White arsenic	98	108	106	135	152
Taiwan					
White arsenic	303	93	79	244	213
Thailand					
White arsenic	124	12	72	75	...
Australia					
White arsenic	1 154	366	584	685	...
New Zealand (c)					
White arsenic (e)	1 647	532	1 701	2 009	...

Note: This table does not purport to be comprehensive: data relating to arsenic are not fully recorded by many countries

(a) May include some tellurium

(b) Years ended 30 March following that stated

(c) Years ended 30 June of that stated

(d) Years ended 20 March following that stated

(e) Includes pentoxide and/or arsenic acid

(f) From 1975 includes Sabah and Sarawak

(g) Figures up to 1976 exclude imports from Belgium-Luxembourg, if any

Production of Asbestos

Country	1974	1975	1976	1977	1978
Italy	148 099	146 995	164 789	149 327	135 402
Bulgaria	* 25 000	* 22 000	* 20 000	* 20 000	* 20 000
Finland	5 593	2 791	—	—	—
Soviet Union	* 1 360 000	* 1 900 000	* 2 290 000	* 2 460 000	* 2 500 000
Turkey	15 587	15 496	9 577	3 975	...
Yugoslavia	12 867	12 336	12 830	9 036	10 304
Egypt	283	479	1 096	* 1 100	...
South Africa					
Amosite	94 543	88 411	78 898	66 983	40 526
Anthophyllite	822	1 912	1 506	550	—
Crocidolite	155 477	164 727	178 411	200 966	137 171
Chrysotile	82 430	99 660	111 025	111 575	79 511
Swaziland	37 917	37 601	39 327	38 046	36 951
Zimbabwe	* 165 000	* 165 000	* 165 000	* 200 000	...
Canada					
Chrysotile	1 643 763	1 055 667	1 536 091	1 537 360	1 380 000
Mexico	5	26	1	—	...
USA (a)	98 966	89 497	104 183	92 264	93 097
Argentina	896	1 130	889	882	...
Brazil	61 871	73 978	92 703	* 95 000	...
China	* 150 000	* 150 000	* 175 000	* 200 000	* 200 000
Cyprus	28 086	31 602	34 518	36 684	34 359
India	23 272	20 312	24 119	22 177	19 100
Japan					
Amphibole & chrysotile	5 130	4 612	7 703	* 8 000	...
Korea, Republic of	5 710	4 345	4 762	6 180	13 616
Taiwan	2 957	1 737	853	673	2 031
Australia					
Chrysotile	30 863	47 922	60 642	50 601	62 383
World total	4 200 000	4 100 000	5 100 000	5 300 000	5 100 000

(a) Sold or used by producers

Exports of Unmanufactured Asbestos

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom	4 698	1 698	1 996	705	522
Belgium-Luxembourg	645	1 721	269	225	221
Denmark	514	112	182	97	268
France	317	2 050	2 314	1 647	532
Germany, Federal Republic of	57 148	73 770	67 953	45 551	44 215
Italy	67 067	81 073	83 752	71 013	68 922
Netherlands	220	189	199	255	393
Austria	131	183	449	102	81
Finland	4 867	3 512	—	3	—
Soviet Union	528 000	613 303	630 000	600 000	600 000
Sweden	60	173	119	225	1
Switzerland	136	82	17	74	37
Yugoslavia	1 735	3 170	2 163	2 159	1 902
Mozambique	424	1 148	...	—	..
South Africa (a)					
Amosite	91 000)			
Crocidolite	160 000	) * 368 000	* 335 000	* 360 000	* 338 500
Chrysotile	70 000)			
Swaziland	32 421	41 219	41 847	34 853	38 083
Canada					
Crude	582	183	83	1	1
Fibre	817 446	568 683	708 494	705 693	689 549
Shorts	834 926	511 447	769 480	709 570	708 389
USA	55 994	33 064	42 568	34 144	41 782
Cyprus	37 166	28 378	33 552	35 341	...
Hong Kong (Re-exports)	21	705	433	215	225
Japan	180	2 158	3 529	1 226	756
Singapore	3 150	1 670	1 098	5 203	5 901
Australia	21 046	24 524	40 145	20 510	37 094

(a) From 1975, IGS estimates, based on known imports into certain countries

Imports of Unmanufactured Asbestos

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom	153 004	139 185	144 938	127 217	117 781
Belgium-Luxembourg	82 662	60 549	70 373	54 219	53 737
Denmark	28 182	24 388	30 625	26 926	21 470
France	177 707	138 637	143 625	114 790	110 612
Germany, Federal Republic of	339 561	386 188	382 570	399 278	345 817
Irish Republic	7 609	6 848	5 275	6 654	8 014
Italy	66 373	66 273	77 179	64 950	47 189
Netherlands	48 217	35 852	49 466	39 909	41 357
Austria	33 067	34 343	38 552	39 074	30 807
Bulgaria	32 564	28 812	...	...	...
Czechoslovakia	38 826	43 494	44 750	1 685	44 028
Finland	6 172	10 132	5 790	5 624	5 415
German Democratic Republic	56 318	65 725	58 002	71 400	62 600
Greece	19 371	13 315	20 420	19 650	14 757
Hungary	31 731	32 604	36 035	41 632	39 100
Iceland	8	7	9	12	11
Norway	5 892	5 629	5 134	2 269	517
Poland	102 609	94 412	108 261	87 723	102 376
Portugal	9 653	5 778	13 028	18 774	17 111
Romania	28 521	...	...	...	...
Spain	125 782	94 114	113 053	105 763	79 338
Sweden	17 339	15 529	10 366	2 555	1 334
Switzerland	17 731	17 262	18 929	22 682	22 794
Turkey	14 584	16 357	19 681	16 519	17 105
Yugoslavia	54 296	52 138	42 675	57 032	47 796
Algeria	3 872	4 582	11 852	15 872	...
Canary Islands	189	288	352	1 145	236
Egypt	8 429	5 477	13 322	15 380	11 334
Ghana	21 613	13 188	...	...	...
Kenya	305	743	921	1 572	797
Libya	1 598	1 335	1 846	2 641	...
Morocco	6 718	7 160	6 621	7 812	5 649
Mozambique	288	740	2 570	...	...
Nigeria	46 178	29 024	55 258	...	...
Senegal	794	1 132	...	...	...
South Africa	30 385	28 560	30 428	24 523	15 153
Tunisia	1 019	1 619	1 474	2 567	1 749
Uganda	197	28	147	...	...
Zaire	1 162	672	1 673	1 013	...
Zambia	3 017	2 765	...	...	...
Canada	3 932	5 166	6 002	4 112	756
Costa Rica	1 897	2 974	1 417	1 389	...
El Salvador	1 988	3 866	2 637	4 242	...
Guatemala	2 609	1 808	2 553	3 297	...
Jamaica	1 680	1 307	41	...	...
Mexico	56 132	60 395	50 668	41 588	...
Nicaragua	1 170	1 207	...	...	...
Panama	340	83	603	532	..
USA					
Amosite	7 274	3 533	1 428	529	1 170
Crocidolite	10 253	10 603	9 322	10 922	16 865
Chrysotile	649 805	462 336	550 817	515 142	531 416
Other unmanufactured	27 721	12 095	35 225	18 287	20 975
Argentina	17 831	15 548	20 868	...	...
Brazil	38 621	29 800	33 882	39 197	37 650
Chile	12 656	...	...	...	...
Colombia	...	...	19 954	...	...
Uruguay	2 086	1 927	1 193	2 652	...
Venezuela	9 671	15 548	...	...	...

Imports of Unmanufactured Asbestos

tonnes

Country	1974	1975	1976	1977	1978
Hong Kong	68	907	851	318	2 406
India	60 176	41 514	47 167	...	...
Indonesia	6 488	4 845	9 340	11 363	14 781
Iran (a)	26 058	24 814	40 109	...	...
Iraq	2 872	1 482	...	...	...
Israel (d)	8 099	856	3 542	5 426	4 881
Japan	352 110	253 097	325 346	300 636	234 901
Korea, Dem. P.R. of	* 4 600	* 3 300	...	...	...
Korea, Republic of	64 847	56 960	74 206	70 255	...
Kuwait	5 405	5 666	16 859	...	...
Malaysia (c)	19 207	19 932	19 281	21 141	...
Pakistan (b)	...	...	5 647	14 428	8 738
Philippines	4 090	1 899	2 471	4 286	4 822
Saudi Arabia	...	10 405	11 339	15 572	...
Singapore	10 701	10 341	9 154	13 376	9 168
Sri Lanka	2 547	789	2 896	2 288	...
Syria	1 508	3 391	1 349	5 589	...
Taiwan	16 348	13 363	19 157	25 343	24 892
Thailand	39 874	42 521	56 688	52 455	...
Australia	55 154	49 794	60 490	74 267	42 061
New Zealand (b)	7 117	12 484	9 168	5 095	...

(a) Years ended 20 March following that stated

(b) Years ended 30 June of that stated

(c) From 1975 includes Sabah and Sarawak

(d) Figures may be incomplete as value only given in Israeli trade return for imports from some countries

Production of Barium Minerals

Country	1974	1975	1976	1977	1978
United Kingdom	50 000	52 000	50 000	57 000	54 409
France	109 281	121 669	150 000	220 000	225 000
Germany, Federal Republic of	306 395	254 902	262 387	265 593	168 586
Irish Republic	345 000	295 000	323 000	373 000	343 753
Italy	183 420	212 416	179 412	152 646	236 613
Austria	361	279	81	192	242
Greece	165 000	174 596	90 620	38 579	44 691
Poland	* 51 500	53 548	80 342	88 700	90 300
Portugal	1 489	2 429	90	590	503
Soviet Union	* 326 000	* 350 000	* 400 000	* 450 000	* 475 000
Spain	103 962	77 095	88 965	83 284	...
Turkey	48 713	66 254	188 266	40 856	...
Yugoslavia	51 000	60 645	56 122	52 245	* 30 000
Algeria	53 000	69 200	74 500	50 000	...
Egypt	274	749	288	746	5 153
Kenya	442	376	359	429	303
Morocco	93 381	135 790	137 463	149 920	* 155 000
South Africa	1 547	795	1 915	2 500	2 355
Swaziland	296	219	368	—	—
Tunisia	17 366	10 411	22 313	16 049	21 500
Canada	78 019	81 356	100 266	116 950	105 741
Cuba	9 246	* 10 000	...	...	...
Mexico	271 710	299 985	270 063	270 674	* 290 300
USA (b)	1 003 000	1 196 000	1 119 594	1 355 216	1 916 000
Argentina	36 241	37 431	40 546	41 637	...
Brazil	60 715	53 675	51 238	* 50 000	...
Chile	4 194	5 982	17 123	* 20 000	...
Colombia	2 500	3 000	3 100	3 450	3 500
Peru	357 797	331 700	330 689	* 280 000	* 290 000
Afghanistan (c)	...	6 400	5 100	14 100	...
Burma (a)	26 825	25 720	15 681	17 273	...
China	* 200 000	* 250 000	* 270 000	* 300 000	* 300 000
India	143 541	175 868	235 068	330 989	351 340
Iran (c)	* 95 000	149 359	* 170 000	* 170 000	...
Japan	38 402	34 180	66 409	72 916	77 036
Korea, Dem. P.R. of	* 120 000	* 120 000	* 120 000	* 120 000	* 120 000
Korea, Republic of	745	2 062	4 174	2 645	1 005
Malaysia	...	814	6 096	12 074	5 079
Pakistan	4 785	4 597	9 380	* 12 300	...
Philippines	...	3 803	3 199	5 393	...
Thailand	200 917	258 387	151 343	118 466	274 564
Australia	7 466	23 460	14 133	11 675	10 844
World total (d)	4 600 000	5 000 000	5 100 000	5 400 000	6 100 000

(a) Years ended 31 March following that stated

(b) Sold or used by producers

(c) Years ended 20 March following that stated

(d) Excluding Barium minerals known to have been produced in German Democratic Republic and Romania

Barium

Exports of Barium Minerals

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom					
Barytes & witherite	4 854	3 993	6 630	3 904	3 424
Belgium-Luxembourg					
Barytes & witherite	416	434	199	315	408
France					
Barytes & witherite	25 217	22 552	58 560	99 353	116 535
Germany, Federal Republic of					
Barytes & witherite	54 317	46 992	65 582	32 761	38 178
Irish Republic					
Barytes, unground	* 320 000	* 279 000	...	...	322 853
Italy					
Barytes & witherite	17 429	16 079	24 314	20 264	73 863
Netherlands (b)					
Barytes & witherite	73 644	81 545	102 895	103 708	94 774
Bulgaria					
Barytes	97 675	93 913	...	...	...
Greece					
Barytes	101 811	83 402	33 695	36 003	48 256
Norway					
Barytes & witherite	75	2 979	13 913	13 228	4 627
Portugal					
Barytes & witherite	26	234	2 466	1 000	3
Romania					
Barytes	(d) 6 391	...	...	...	...
Spain					
Barytes	67 484	50 666	52 801	58 070	90 793
Turkey					
Barytes	69 573	35 406	(e) 175 191	(e) 154 911	(e) 124 123
Yugoslavia					
Barytes	40 830	47 732	41 665	25 309	16 495
Morocco					
Barytes & witherite	83 307	125 005	120 556	181 244	224 842
Swaziland					
Barytes	296	94	369	—	...
Tunisia					
Barytes & witherite	6 050	5 000	4 000	157	1 109
Canada					
Barytes	31 263	45 606	60 297	69 421	56 783
Mexico					
Barytes	148 351	114 492	106 728	121 683	...
USA					
Barytes & witherite	55 570	52 060	37 402	44 952	33 179
China					
Barytes & witherite (g)	* 100 800	* 78 200	* 63 400	* 77 300	* 121 300
India					
Barytes, unground	144 578	173 610	151 426	...	...
Indonesia					
Barytes & witherite	...	35 011	5 186	3 402	12 546
Israel					
Barytes (c)	445	411	163	761	708
Japan					
Barytes & witherite	...	95	...	1 250	2 894
Korea, Dem. P.R. of					
Barytes	* 87 200	* 94 900	...	...	...
Malaysia (f)					
Barytes	3 537	5 342	1 747	895	...

Barium

tonnes

Exports of Barium Minerals

Country	1974	1975	1976	1977	1978
Pakistan (a)					
Barytes	—	...	...	500	—
Thailand					
Barytes	67 337	188 584	107 186	202 725	...
Australia					
Barytes, ground	1 843	13 957	4 017	1 304	969

(a) Years ended 30 June of that stated

(b) Figures up to 1976 exclude exports to Belgium-Luxembourg, if any

(c) Figures may be incomplete as value only given in Israeli trade return for exports to some countries

(d) Imports into Soviet Union only

(e) Including witherite

(f) From 1975 includes Sabah and Sarawak

(g) IGS estimates, based on known imports into certain countries

Barium

Imports of Barium Minerals

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom					
Barytes & witherite	54 029	28 200	36 448	50 616	80 530
Belgium-Luxembourg					
Barytes (a)	7 210	7 829	8 477	8 318	8 293
Denmark					
Barytes (a)	5 250	5 325	11 264	4 471	5 863
France					
Barytes (a)	77 584	44 429	11 411	11 814	8 983
Germany, Federal Republic of					
Barytes & witherite	165 336	91 156	124 162	175 356	196 465
Italy					
Barytes (a)	24 862	9 055	7 748	18 516	13 871
Netherlands (c)					
Barytes & witherite	126 723	118 777	121 874	130 261	124 608
Austria					
Barytes & witherite	3 082	3 288	4 008	3 785	6 976
Finland					
Barytes & witherite	2 688	2 038	1 272	1 154	952
Norway					
Barytes & witherite	60 387	75 914	51 589	61 121	63 204
Poland					
Barytes	19 271	24 442	35 058	14 280	21 653
Portugal					
Barytes & witherite	1 702	2 135	485	413	458
Romania					
Barytes	8 029	...	...	...	...
Soviet Union					
Barytes	239 000	329 544	350 000	400 000	450 000
Spain					
Barytes	609	847	10 197	809	565
Sweden					
Barytes & witherite	4 451	5 381	6 153	5 390	4 660
Switzerland					
Barytes & witherite	3 306	1 948	3 089	3 324	2 880
Yugoslavia					
Barytes	1 363	1 393	760	1 110	1 206
Algeria					
Barytes	10	27 495	45 100	67 388	...
Cameroon					
Barytes	2 232	...	...	...	...
Gabon					
Barytes & witherite	5 567	322	476	—	—
Ivory Coast					
Barytes	129	90	106	3 243	3 505
Senegal					
Barytes	20	20	20	...	...
South Africa					
Barytes (a)	4 684	2 718	2 685	3 444	2 616
Tunisia					
Barytes	5 702	4 949	8 924	3 458	1 568
Canada					
Barytes	11 678	4 479	18 097	5 979	15 635
Trinidad & Tobago					
Barytes (a)	15 018	30 545	30 474	54 024	61 870
USA					
Barytes (a)	697 116	609 077	833 257	883 470	1 190 000
Brazil					
Barytes	129	221	252	163	240
Venezuela					
Barytes	53 754	29 923	...	...	...
Hong Kong					
Barytes & witherite	265	198	1 013	291	258
Indonesia					
Barytes & witherite	62 506	69 730	51 835	760	22 295

Imports of Barium Minerals

tonnes

Country	1974	1975	1976	1977	1978
Iran (b)					
Barytes & witherite	18	797	206	...	...
Iraq					
Barytes	8 729	27 540	...	...	...
Japan					
Barytes	50 037	11 164	16 516	32 771	21 278
Malaysia (d)					
Barytes	193	9 545	8 270	3 946	...
Philippines					
Barytes & witherite	1 617	2 060	272	632	1 169
Saudi Arabia					
Barytes & witherite	...	2 603	30 550	12 552	...
Syria					
Barytes & witherite	2 180	35	810	123	...
Taiwan					
Barytes & witherite	160	1 080	7 386	2 880	10 340
Australia					
Barytes	5 270	947	1 435	1 527	541
New Zealand (e)					
Barytes & witherite	1 610	7 499	5 623	1 747	...

(a) Includes minor proportion of witherite

(b) Years ended 20 March following that stated

(c) Figures up to 1976 exclude imports from Belgium-Luxembourg, if any

(d) From 1975 includes Sabah and Sarawak

(e) Years ended 30 June of that stated

Production of Bentonite and Fuller's Earth

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom					
Fuller's earth (a)	166 000	164 000	163 000	159 000	167 000
France					
Bentonite	18 665	20 299	17 297	8 063	* 21 800
Italy					
Bentonite	407 197	442 909	264 935	292 428	235 457
Fuller's earth	97 897	32 281	24 949	6 340	4 493
Greece					
Bentonite	384 408	428 466	316 769	545 570	* 347 600
Hungary					
Bentonite	77 000	87 900	71 148	80 000	82 000
Poland					
Bentonite	* 50 000	* 50 000	* 50 000	* 50 000	* 50 000
Romania					
Bentonite	* 62 800	* 62 800	* 63 000	* 63 000	* 68 000
Spain					
Bentonite	75 917	75 351	96 008	102 300	* 102 000
Turkey					
Bentonite	13 420	32 656	21 126	4 358	8 280
Yugoslavia					
Bentonite	86 000	98 000	...	...	...
Algeria					
Bentonite	21 900	22 400	27 800	* 25 000	* 31 000
Fuller's earth	22 000	* 22 000	* 22 000	* 25 000	* 25 400
Morocco					
Bentonite	3 313	3 051	4 019	4 807	* 4 990
Fuller's earth	19 800	23 720	36 768	21 025	29 880
Mozambique					
Bentonite	4 700	2 180	2 298	2 744	2 994
Senegal					
Fuller's earth (b)	9 774	16 699	4 380	4 620	6 930
South Africa					
Bentonite	37 803	37 549	39 602	37 221	34 519
Mexico					
Bentonite	61 185	32 507	55 583	59 169	33 795
Fuller's earth	53 861	38 197	20 108	61 369	39 958
USA					
Bentonite (c)	3 003 235	2 929 543	3 193 637	3 398 757	4 053 302
Fuller's earth (c)(f)	1 110 975	1 078 701	1 217 063	1 295 756	1 388 000
Argentina					
Bentonite	113 222	116 000	132 313	145 438	* 145 000
Fuller's earth	216	236	3 133	3 090	* 3 000
Brazil					
Bentonite	77 118	116 785	143 218	108 395	* 109 000
Colombia					
Bentonite	1 000	* 1 000	* 1 200	* 1 200	* 1 200
Peru					
Bentonite	12 916	* 25 000	39 545	41 545	* 45 000
Burma (d)					
Bentonite	512	204	533	* 847	* 1 000
Cyprus	4 517	12 193	5 080	13 209	13 651
India					
Bentonite	139 505	88 858	137 514	150 568	...
Iran					
Bentonite	50 000	50 000	* 50 000	* 50 000	* 50 000
Israel					
Bentonite (e)	3 800	3 000	15 000	8 000	8 000
Japan					
Bentonite	452 063	403 666	* 400 000	* 400 000	* 400 000

Production of Bentonite and Fuller's Earth

tonnes

Country	1974	1975	1976	1977	1978
Pakistan					
Bentonite	916	675	747	1 089	* 1 000
Fuller's earth	16 793	12 140	16 000	18 000	17 493
Philippines					
Bentonite	—	661	2 117	2 279	3 307
Australia					
Bentonite	803	3 350	11 954	5 603	...
Fuller's earth	78	18	9	50	...
New Zealand					
Bentonite	5 069	5 246	1 042	2 633	9 824
World total Bentonite	5 169 000	5 142 000	5 253 000	5 694 000	6 117 000
World total Fuller's earth	1 497 000	1 388 000	1 507 000	1 594 000	1 683 000

Notes:

- 1 Bentonites consist of montmorillonite (one of the smectite group of clay minerals) and occur in two main varieties, calcium bentonite, the most commonly occurring, and sodium bentonite, industrially the more important. Calcium bentonite can be converted to sodium bentonite by a sodium-exchange process. In some countries, such as the United Kingdom, calcium bentonite is known as fuller's earth, a term which is also used to refer to attapulgite, a mineralogically distinct clay mineral but exhibiting similar properties
 - 2 Austria, Canada, China, Federal Republic of Germany, Namibia, Soviet Union and Zimbabwe are also believed to produce bentonite
- (a) IGS estimates of saleable production based on data from producing companies
 (b) Attapulgite
 (c) Sold or used by producers
 (d) Years ended 31 March following that stated
 (e) A low grade form of bentonite, known as metabentonite
 (f) Mostly attapulgite

Exports of Bentonite and Fuller's Earth

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom					
Bentonite	20 608	15 483	17 862	13 680	13 954
Fuller's earth	...	...	2 613	3 361	3 772
Belgium-Luxembourg					
Bentonite	929	3 551	8 067	7 845	8 273
Denmark					
Bentonite	159	26	116	46	21
France					
Bentonite	3 564	7 182	5 722	10 073	10 371
Germany, Federal Republic of					
Bentonite	37 295	32 856	44 335	30 494	25 014
Italy					
Bentonite	23 959	19 061	23 501	18 516	20 205
Netherlands (a)					
Bentonite	17 911	12 825	10 292	17 107	23 839
Greece					
Bentonite	...	336 007	381 388	381 284	332 009
Hungary					
Bentonite	23 080	23 128	18 537	19 400	14 156
Spain					
Bentonite	18 627	24 200	25 560	40 090	37 881
Sweden					
Bentonite	37	2	1	17	11
Turkey					
Bentonite	2 420	10 200	10 150	520	...
Yugoslavia					
Bentonite	11 260	848	303	38	136
Algeria					
Bentonite (b)	...	800	460	150	...
Morocco					
Bentonite	...	1 000	1	50	812
Fuller's earth	17 956	18 036	10 303	11 194	10 965
Mozambique					
Bentonite (c)	4 327	1 430	1 760	2 474	...
Senegal					
Fuller's earth (d)	...	...	4 540	4 400	...
South Africa					
Bentonite	1 776	1 753	1 806	1 216	874
Mexico					
Bentonite	43	56	6	9	...
USA					
Bentonite	647 650	632 630	714 061	715 394	656 248
Fuller's earth	50 588	38 289	38 350	40 946	53 654
Argentina					
Fuller's earth	16 521	6 560	7 494	...	...

Exports of Bentonite and Fuller's Earth

Country	1974	1975	1976	1977	1978
India					
Bentonite	11 602	9 665	12 631	...	...
Fuller's earth	59	110	21	...	...
Kuwait					
Bentonite	32 520	22 717	...	...	...
Taiwan					
Bentonite	130	960	800	8	27

Notes:

1. See note 1 to production table
2. The figures in this table refer to natural and sodium-exchanged bentonite, and fuller's earth, Standard International Trade Classification (Revised) 278.21. Activated bentonite and fuller's earth, Standard International Trade Classification (Revised) 598.92(b) are excluded. However, some countries are believed to include sodium-exchanged bentonite, often referred to as activated bentonite, under Standard International Trade Classification (Revised) 598.92(b), e.g. Italy
3. Trade of fuller's earth is not generally recorded separately in official trade returns

(a) Figures up to 1976 exclude exports to Belgium-Luxembourg, if any

(b) Including crude kaolin

(c) May include other clays

(d) Attapulgit

Imports of Bentonite and Fuller's Earth

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom					
Bentonite	73 450	45 363	48 402	76 645	46 083
Fuller's earth	...	...	3 060	2 270	103
Belgium-Luxembourg					
Bentonite	17 296	22 654	27 822	26 556	28 628
Denmark					
Bentonite	3 219	2 084	2 169	2 867	3 612
France					
Bentonite	117 099	102 423	93 080	96 482	87 235
Germany, Federal Republic of					
Bentonite	107 035	43 533	93 290	77 527	45 879
Italy					
Bentonite	26 929	23 418	42 484	64 620	54 673
Netherlands (a)					
Bentonite	31 693	41 956	31 048	35 186	54 913
Austria					
Bentonite	792	629	541	651	514
German Democratic Republic					
Bentonite	15 643	16 876	...	...	...
Greece					
Bentonite	...	365	—	—	243
Norway					
Fuller's earth	914	344	357	221	910
Portugal					
Bentonite	10 823	11 121	15 622	21 274	...
Spain					
Bentonite	47 707	49 873	38 836	49 390	28 285
Sweden					
Bentonite	3 965	3 899	4 424	3 185	3 189
Turkey					
Bentonite	27	27	5	7	...
Yugoslavia					
Bentonite	1 444	424	343	759	16
Algeria					
Bentonite (b)	...	4 511	8 541	6 768	...
Ivory Coast					
Bentonite	125	53	371	403	508
Morocco					
Bentonite	...	40	2	500	25
Senegal					
Bentonite	1 543	3 996	...	...	...
Tunisia					
Bentonite (b)	18 312	18 701	11 032	17 234	15 034
Canada					
Bentonite	263 529	242 183	274 095	358 724	295 713
Fuller's earth	8 606	1 833	571	2 356	226
Mexico					
Bentonite	3 083	173	299	...	...
USA					
Bentonite	36	2 137	87	123	43
Fuller's earth	1	59	20	62	76
Brazil					
Bentonite	17 685	13 099	14 045	16 193	14 354
Peru					
Bentonite	...	3 006	850	876	...
Uruguay					
Bentonite	83	4	97	80	...
Venezuela					
Bentonite	17 914	7 419	19 233	...	...

Imports of Bentonite and Fuller's Earth

Country	1974	1975	1976	1977	1978
India					
Bentonite	13	7	18	...	...
Fuller's earth	33	143	231	...	...
Indonesia					
Bentonite	...	4 782	15 514	8 461	25 313
Korea, Republic of					
Bentonite	152	801	547	592	...
Kuwait					
Bentonite	50 176	38 685	...	...	...
Malaysia (c)					
Bentonite	552	2 307	2 572	1 524	...
Fuller's earth	3 488	2 490	3 325	7 601	...
Pakistan (d)					
Fuller's earth	...	...	25	175	561
Philippines	5 239	1 045	1 584	1 082	9 663
Taiwan					
Bentonite	3 551	2 241	3 903	5 375	5 077
Australia					
Bentonite	85 363	54 736	22 204	13 191	30 355

Notes:

1. See note 1 to production table
2. The figures in this table refer to natural and sodium-exchanged bentonite and fuller's earth, Standard International Trade Classification (Revised) 278.21. Activated bentonite and fuller's earth, Standard International Trade Classification (Revised) 598.92(b) are excluded. However, some countries are believed to include sodium-exchanged bentonite, often referred to as activated bentonite, under Standard International Trade Classification (Revised) 598.92(b) e.g. Italy
3. Trade of fuller's earth is not generally recorded separately in official trade returns.

(a) Figures up to 1976 exclude imports from Belgium-Luxembourg, if any

(b) Including crude kaolin

(c) From 1975 includes Sabah and Sarawak

(d) Years ended 30 June of that stated

Bismuth

Mine Production of Bismuth

tonnes (metal content)

Country	1974	1975	1976	1977	1978
France	57	56	63	52	* 60
Germany, Federal Republic of	* 10	* 11	* 10	* 10	* 10
Italy	—	—	—	8	9
Romania	* 80	* 80	* 80	* 80	* 80
Soviet Union	* 60	* 60	* 60	* 65	* 70
Sweden	* 15	* 15	* 15	* 15	* 15
Yugoslavia	100	55	78	74	13
Uganda	* 4	* 4	* 5	* 3	* 1
Canada (a)	111	157	130	165	158
Mexico	718	445	557	729	978
USA	* 400	* 400	* 400	* 400	* 400
Bolivia	614	603	612	680	482
Peru (a)	665	505	521	585	* 590
China	* 250	* 250	* 250	* 250	* 250
Japan	816	651	682	698	624
Korea, Republic of	131	113	174	134	122
Australia	1 170	883	769	932	930
World total (b)	5 200	4 300	4 400	4 900	4 800

Note: The figures in this table are in some instances derived from reported Bi content of refined and impure metal plus recoverable bismuth in ores and concentrates exported. Production for some countries may include bismuth produced from imported ores but it is thought that any resulting duplication is insignificant in the countries shown

(a) Includes Bi content of bullion and concentrates exported

(b) In addition to the countries listed, Brazil, Bulgaria, German Democratic Republic and Namibia are believed to produce bismuth

Exports of Bismuth

Country	1974	1975	1976	1977	1978
United Kingdom					
Bismuth compounds	...	...	34	28	58
Metal	466	313	285	310	402
Belgium-Luxembourg					
Metal	832	...	...	...	...
France					
Bismuth compounds	227	212	283	289	292
Metal	158	107	107	72	7
Germany, Federal Republic of					
Bismuth compounds	100	144	121	98	105
Metal	274	401	526	462	517
Italy					
Bismuth compounds	157	132	88	72	227
Metal	31	11	18	31	30
Netherlands					
Bismuth compounds (a)	51	40	27	33	25
Metal	47	41	50	46	66
Yugoslavia					
Bismuth compounds	25	10	67	21	11
Metal	36	33	19	2	—
Mexico					
Metal	...	405	304	331	...
USA					
Metal	156	158	75	43	44
Bolivia					
Ores (b)	121	28	40	52	14
Metal	593	584	264	483	117
Japan					
Metal	507	362	313	302	288
Korea, Republic of					
Metal	67	150	...	186	...

(a) Figures up to 1976 exclude exports to Belgium-Luxembourg, if any

(b) Bi content

Bismuth

Imports of Bismuth

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom					
Metal	499	353	327	394	325
Belgium-Luxembourg					
Bismuth compounds	91	49	64	56	37
Metal	717	...	...	...	...
France					
Bismuth compounds	199	115	72	58	4
Metal	1 259	640	737	644	346
Germany, Federal Republic of					
Bismuth compounds	13	6	19	16	21
Metal	129	259	246	160	113
Italy					
Bismuth compounds	45	26	56	38	24
Metal	156	160	103	96	61
Netherlands					
Bismuth compounds (a)	88	102	155	86	171
Metal	119	130	49	55	52
Spain					
Metal	101	129	161	253	96
Turkey					
Bismuth compounds	18	13	21	17	...
Yugoslavia					
Bismuth compounds	38	27	16	17	5
Metal	25	4	24	31	18
Morocco					
Bismuth compounds	15	19	11	16	19
USA					
Metal	859	604	1 056	1 206	1 208
Argentina					
Metal	21	20	20	...	...
Brazil					
Bismuth compounds	12	9	9	9	10
Metal	26	21	27	23	34
India					
Metal (b)	2	1	6	95	...
Australia					
Metal	22	5	14	14	...

(a) Figures up to 1976 exclude imports from Belgium-Luxembourg, if any

(b) Years ended 31 March following that stated

Production of Bromine

Country	1974	1975	1976	1977	1978
United Kingdom	27 200 000	28 300 000	29 900 000	24 700 000	25 100 000
France	15 880 000	16 770 000	15 180 000	15 570 000	16 200 000
Germany, Federal Republic of	5 253 000	4 270 000	4 154 000	3 736 000	3 893 000
Italy	686 000	670 000	588 000	* 600 000	* 600 000
Soviet Union	* 12 700 000	* 12 700 000	* 13 600 000	* 15 000 000	* 15 000 000
Spain	420 000	380 000	* 400 000	* 400 000	* 400 000
USA (a)	195 995 000	184 686 000	199 371 000	196 776 000	202 532 000
India	* 270 000	* 270 000	* 270 000	* 280 000	* 300 000
Israel	18 000 000	18 000 000	20 900 000	* 31 500 000	* 45 000 000
Japan	11 400 000	11 300 000	* 11 500 000	* 11 500 000	* 11 500 000
World total	287 804 000	277 346 000	295 863 000	300 062 000	320 525 000

(a) Elemental bromine sold as such or used in the preparation of bromine compounds by primary producers

Bromine

Exports of Bromine

kilograms

Country	1974	1975	1976	1977	1978
United Kingdom					
Bromine	2 047 473	1 769 662	1 583 779	2 535 619	1 834 619
Bromine compounds	527 509	413 011	737 377	764 787	(a) 272 641
Belgium-Luxembourg					
Bromine	46 000	24 400	1 200	—	138 000
Bromine compounds	181 000	133 400	86 000	133 300	146 300
Denmark					
Bromine compounds	...	41 000	5 000	10 900	(a) 200
France					
Bromine compounds	1 309 000	1 397 000	1 499 000	1 784 000	(a) 2 003 000
Germany, Federal Republic of					
Bromine	161 900	269 400	202 900	193 900	112 100
Bromine compounds	457 900	364 300	324 800	257 900	(a) 458 700
Italy					
Bromine	—	—	—	18 300	14 900
Bromine compounds	29 978	24 900	1 736	98 300	(a) 369 400
Netherlands					
Bromine (b)	12 000	69 000	61 000	304 000	1 193 000
Bromine compounds	503 000	511 000	592 000	731 000	(a) 506 000
Spain					
Bromine compounds	...	356	127	58 000	12 000
Switzerland					
Bromine compounds	9 690	5 353	3 970	20 172	(a)(g) 7 545
Algeria					
Bromine	130 840	160 660	—	—	...
USA					
Bromine	416 000	1 649 000	2 012 000	2 440 600	...
Bromine compounds	37 232 000	32 838 000	33 604 000	29 211 000	...
Hong Kong					
Bromine compounds (Re-exports)	14 529	6 858	3 607	2 743	—
Israel					
Bromine compounds (c)	1 790 000	1 367 000	2 010 000	2 041 000	...
Japan					
Bromine	(d) 8 090	(d) 300	(e) 5 517 020	(e) 5 484 493	(e) 6 020 166
Bromine compounds	463 448	588 058	592 657	569 363	581 112
Malaysia (f)					
Bromine compounds	9 516	1 851	4 784	1 533	...
Singapore					
Bromine compounds	...	1 475	4 227	2 589	32 700

(a) Excludes bromates

(b) Figures up to 1976 exclude exports to Belgium-Luxembourg, if any

(c) Figures may be incomplete as value only given in Israeli trade return for exports from some countries

(d) Includes fluorine

(e) Includes fluorine and iodine

(f) From 1975 includes Sabah and Sarawak

(g) Includes iodides

Imports of Bromine

Country	1974	1975	1976	1977	1978
United Kingdom					
Bromine	1 311 854	2 066 617	1 740 441	3 495 166	4 006 331
Bromine compounds	862 770	844 901	435 240	821 490	(a) 864 475
Belgium-Luxembourg					
Bromine	79 100	46 100	26 800	43 800	249 000
Bromine compounds	705 500	1 027 500	723 000	935 900	903 800
Denmark					
Bromine	123 000	163 000	96 200	84 000	121 900
Bromine compounds	22 200	24 000	87 000	47 300	(a) 12 500
France					
Bromine	292 000	673 000	997 000	1 970 000	2 762 000
Bromine compounds	493 000	683 000	312 000	416 000	(a) 591 000
Germany, Federal Republic of					
Bromine	1 625 200	1 805 300	3 109 900	2 204 600	1 871 000
Bromine compounds (b)	28 075 600	19 384 600	19 949 200	20 129 800	(a) 16 881 100
Italy					
Bromine	1 051 199	1 117 800	1 678 303	2 036 000	1 974 500
Bromine compounds	234 725	161 900	258 254	244 500	(a) 108 300
Netherlands					
Bromine (c)	1 201 000	764 000	1 082 000	1 983 000	3 286 000
Bromine compounds	138 000	207 000	260 000	336 000	(a) 517 000
Finland					
Bromine compounds	4 100	14 100	7 900	8 400	...
Greece					
Bromine	1 000	2 000	1 000	1 389	683
Hungary					
Bromine	...	...	250 400	574 500	587 000
Portugal					
Bromine	1 000	200	1 100	500	...
Bromine compounds	7 900	11 100	4 400	5 100	7 000
Spain					
Bromine	15 000	20 000	11 000	40 072	46 908
Bromine compounds	92 000	102 000	106 000	116 000	165 000
Sweden					
Bromine compounds	210 000	243 000	219 000	185 000	...
Switzerland					
Bromine compounds	150 611	95 332	65 115	166 446	(a)(i) 136 143
Turkey					
Bromine	379	359	249	928	...
Bromine compounds	10 660	13 198	10 202	10 273	20 000
Yugoslavia					
Bromine	6 213	6 030	2 286	15 276	11 812
Bromine compounds	8 445	20 871	17 291	25 246	77 853
Algeria					
Bromine	744	11 080	12	264	...
Bromine compounds	1 181	861	12 564	3 767	...
Canary Islands					
Bromine compounds	...	255	396	56 000	4 000
Ivory Coast					
Bromine compounds	241	7	158	231	2 435
Morocco					
Bromine	51	277	175	70	40
Bromine compounds	3 810	10 642	5 429	9 793	9 794
South Africa					
Bromine	32 100	6 100	5 700	3 600	50 900
Bromine compounds	136 000	87 600	38 000	196 700	(a) 41 000
Tunisia					
Bromine compounds	2 403	816	3 072	740	168
Zambia					
Bromine	61 167	37 996	...	...	...
Bromine compounds	33 529	56 726	...	...	...
USA					
Bromine & bromine compounds	10 000	22 000	155 000	329 400	680 600

Bromine

Imports of Bromine

kilograms

Country	1974	1975	1976	1977	1978
Argentina					
Bromine	99 963	83 571	127 794	...	...
Bromine compounds	488 486	423 623	524 436	...	...
Brazil					
Bromine	34 598	86 735	28 556	64 744	33 587
Bromine compounds	100 719	95 188	170 051	181 339	276 429
Hong Kong					
Bromine compounds	71 377	31 497	32 412	30 532	69 365
India (d)					
Bromine	—	4 368	303 983	505 598	...
Bromine compounds	6 946	4 041	13 306	27 865	...
Indonesia					
Bromine compounds	...	36 694	74 196	31 143	52 782
Iran (e)					
Bromine (f)	287 633	2 693 908	255 160	...	...
Bromine compounds	20 886	39 004	127 572	...	...
Japan					
Bromine (f)	194 680	7 000	208 200	708 033	1 079 028
Bromine compounds	463 748	20 323	55 700	119 556	76 682
Korea, Republic of					
Bromine	317	824	11 741	104 736	...
Bromine compounds	30 262	38 447	88 608	95 116	...
Malaysia (g)					
Bromine compounds	22 903	14 802	16 115	19 374	...
Philippines					
Bromine compounds	479 929	542 161	247 303	101 921	41 652
Saudi Arabia					
Bromine compounds	...	4 633	25 070	201 474	...
Singapore					
Bromine compounds	...	12 932	34 098	29 081	67 916
Syria					
Bromine	116	170	3	97	9 500
Bromine compounds	740	553	1 569	1 501	1 452
Taiwan					
Bromine	72	255	156	794	5 708
Bromine compounds	69 768	58 322	127 884	32 947	160 764
Thailand					
Bromine	1	2	—	—	39
Bromine compounds	51 663	43 338	46 278	42 654	47 219
Australia (h)					
Bromine compounds	223 470	282 528	122 750	220 435	...

(a) Excludes bromates

(b) Includes sulphides

(c) Figures up to 1976 exclude imports from Belgium-Luxembourg, if any

(d) Years ended 31 March following that stated

(e) Years ended 20 March following that stated

(f) Includes iodine

(g) From 1975 includes Sabah and Sarawak

(h) Years ended 30 June of that stated

(i) Includes iodides

Production of Cadmium

Country	1974	1975	1976	1977	1978
United Kingdom	273	275	190	295	291
Belgium	1 044	972	1 175	1 434	1 139
France	643	602	586	790	694
Germany, Federal Republic of	1 338	1 018	1 275	1 336	1 182
Italy	505	411	436	449	378
Netherlands	75	272	398	302	402
Austria	31	30	29	26	33
Bulgaria	* 200	* 220	* 220	* 200	* 210
Finland	156	217	426	527	611
German Democratic Republic	* 15	* 18	* 18	* 18	* 18
Norway	90	47	80	97	120
Poland	* 350	* 370	* 400	* 380	* 370
Romania	* 90	* 90	* 100	* 90	* 90
Soviet Union	* 2 900	* 2 950	* 2 900	* 2 900	* 3 000
Spain	178	205	246	303	253
Yugoslavia	140	150	160	189	185
Namibia	114	118	118	88	79
Zaire	272	264	260	246	237
Zambia	13	6	7	4	—
Canada (a)	1 153	1 143	1 342	1 375	1 270
Mexico	527	586	710	908	* 950
USA (b)	3 024	1 989	2 047	1 999	1 653
Bolivia	110	156	141	163	197
Peru	182	160	174	182	* 190
China	* 110	* 110	* 110	* 110	* 120
India	59	53	34	44	113
Japan	3 027	2 657	2 500	2 844	2 531
Korea, Dem P.R. of	* 110	* 110	* 120	* 120	* 120
Australia	720	549	649	671	754
World total	17 500	15 700	16 900	18 100	17 200

(a) Refined cadmium from all sources including that obtained from imported lead and zinc concentrates; includes cadmium in sponge

(b) Includes cadmium sponge and secondary metal

Cadmium

Exports of Cadmium

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom (a)	181	165	105	109	155
Belgium-Luxembourg (a)	871	917	836	945	736
France					
Cadmium (a)	150	226	353	132	219
Cadmium sulphide	5	...	2	—	4
Germany, Federal Republic of					
Cadmium (a)	237	408	477	274	313
Cadmium oxide	...	18	28	30	18
Italy (a)	51	102	424	140	124
Netherlands (a)	98	341	474	380	373
Austria	0	0	15	8	20
Finland	241	189	450	472	507
Norway	59	61	93	81	97
Poland	277	277	...	...	...
Soviet Union	925	635	1 000	1 000	900
Spain	40	176	172	208	149
Yugoslavia	54	65	153	101	176
Zaire	215	210	208	186	...
Canada	902	643	1 556	870	1 259
Mexico (b)	903	449	261	42	...
USA (a)	37	183	229	107	328
Bolivia	110	156	141	150	93
Peru	113	150	199	171	...
Japan	1 606	1 471	1 841	784	111
Korea, Dem. P.R. of	* 78	* 62	...	...	...
Australia (a)	576	519	524	557	744

(a) Including scrap

(b) Including Cd content of flue dust, etc. exported for treatment

Imports of Cadmium

Country	1974	1975	1976	1977	1978
United Kingdom (a)	1 329	913	1 310	1 299	1 174
Belgium-Luxembourg (a)	1 477	978	1 376	1 146	1 032
Denmark	7	5	9	11	11
France					
Cadmium (a)	937	697	559	625	649
Cadmium sulphide	38	21	40	55	54
Germany, Federal Republic of					
Cadmium (a)	1 093	631	1 136	988	994
Cadmium oxide	332	248	503	410	428
Italy					
Cadmium (a)	129	143	259	148	179
Cadmium sulphide	36	20	28	19	35
Netherlands (a)	94	73	169	59	55
Austria	6	1	2	6	4
Spain	—	1	1	—	0
Sweden	170	264	403	270	132
Soviet Union	264	262	260	260	260
Turkey	12	19	18	19	...
Yugoslavia	6	4	1	7	—
USA					
Cadmium (a)	1 800	2 375	3 095	2 332	2 881
Flue dust (b)	151	314	223	13	—
Brazil	175	74	153	154	55
India	4	5	0	...	...

(a) Including waste and/or scrap

(b) Cd content

Production of Chromium Ore

tonnes

Country	1974	1975	1976	1977	1978
Albania	715 000	* 779 000	* 830 000	* 880 000	* 990 000
Finland (a)	165 479	331 540	413 981	593 921	* 507 000
Greece	9 589	24 528	* 27 000	33 450	32 878
Soviet Union	* 1 950 000	* 2 080 000	* 2 100 000	* 2 180 000	* 2 300 000
Turkey	* 666 000	* 720 000	* 710 000	* 630 000	* 700 000
Yugoslavia	400	1 700	2 000	1 500	1 900
Madagascar	155 874	194 127	211 426	164 789	119 283
South Africa	1 876 913	2 075 378	2 409 235	3 058 863	3 144 741
Sudan	24 543	36 578	23 749	22 300	23 680
Zimbabwe	* 590 000	* 590 000	* 610 000	* 608 000	* 600 000
Cuba	37 734	* 38 000	* 38 000	* 30 000	...
Brazil	88 077	154 465	132 455	...	...
Colombia	* 12 000	* 12 000	5 000	5 000	5 000
Cyprus	33 809	27 623	9 156	14 230	15 339
India	396 535	500 294	402 111	352 535	265 907
Iran	* 175 000	155 456	* 160 000	* 165 000	* 130 000
Japan	28 858	23 149	22 150	17 986	8 696
Pakistan	9 479	9 961	10 872	* 12 000	* 10 000
Philippines	529 547	520 038	431 063	538 299	532 732
New Caledonia	...	1 050	9 051	8 310	8 229
World total	7 500 000	8 300 000	8 600 000	9 400 000	9 500 000

(a) Including foundry sand

Exports of Chromium Ore

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom	4 450	2 771	965	26	38
Belgium-Luxembourg	475	208	323	1 071	447
France	581	368	396	982	983
Germany, Federal Republic of	3 678	3 014	13 551	3 931	3 212
Italy	1 642	3 811	2 962	2 013	3 606
Netherlands (c)	35 035	27 289	23 675	19 548	15 150
Albania	* 625 000	* 670 000	* 690 000	* 720 000	* 800 000
Austria	50	177	294	829	923
Finland	83 942	150 421	291 483	508 305	364 461
Greece	10 787	19 274	21 957	74 939	20 381
Soviet Union	1 139 000	1 171 000	975 000	673 000	738 000
Turkey	645 896	648 484	608 435	464 640	284 558
Yugoslavia	10 011	3 280	303	3 523	5 854
Madagascar	180 320	173 239	117 414	116 232	144 662
South Africa	1 072 467	1 246 382	1 196 434	1 482 491	1 422 588
Sudan	* 18 000	* 23 400	* 32 000	...	...
Cuba	14 348	...	...	...	...
USA	105 943	167 558	188 951	225 101	47 414
of which: Re-exports	89 495	41 122	76 795	55 437	26 564
Brazil	13 378	190	9 128	71 111	81 859
Cyprus	24 845	28 126	12 343	14 234	...
India	334 364	359 380	277 798	...	...
Iran (a)	149 400	77 078	5 400	...	...
Japan	244	364	2 089	2 805	1 636
Pakistan (b)	1 000	...	15 536	23 991	4 086
Philippines	641 817	501 350	378 104	432 937	455 681
New Caledonia	3 566	1 001	9 105	4 734	4 345

(a) Years ended 20 March following that stated

(b) Years ended 30 June of that stated

(c) Figures up to 1976 exclude exports to Belgium-Luxembourg, if any

Imports of Chromium Ore

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom	138 127	144 429	137 715	197 591	138 151
Belgium-Luxembourg	4 051	3 714	2 776	3 891	2 309
France	365 348	363 723	345 481	281 006	242 480
Germany, Federal Republic of	386 545	561 035	547 293	415 593	371 738
Irish Republic	13 051	9 240	7 758	6 445	...
Italy	149 853	160 728	236 915	178 139	140 186
Netherlands (a)	27 969	38 834	21 022	26 440	6 398
Austria	114 435	123 139	62 765	85 492	61 947
German Democratic Republic (b)	44 000	58 300	48 600	43 000	51 700
Hungary (c)	* 18 000	* 17 000	* 17 000	* 17 000	* 17 000
Norway	86 204	84 501	68 862	28 146	5 372
Poland	162 266	191 884	194 720	215 604	198 540
Spain	84 597	98 260	117 392	112 657	95 165
Sweden	270 287	395 735	377 465	385 113	557 522
Yugoslavia	176 465	172 486	234 335	225 471	219 069
South Africa	75 948	80 070	167 125	66 586	1 348
Canada (b)	42 057	43 354	58 263	60 285	46 898
Mexico	49 799	49 884	51 261	47 919	...
USA	1 000 000	1 136 000	1 157 000	1 173 000	919 000
Argentina	5 250	5 708	4 111	...	...
Brazil	30 686	9 300	12 233	18 197	18 651
Chile	3 509	...	...	...	...
Venezuela	6 481	5 000	...	...	...
Japan	1 154 911	1 268 875	1 217 404	899 934	669 987
Korea, Dem. P.R. of	* 20 000	* 20 000	...	...	...
Taiwan	21 173	3 467	4 579	7 706	3 327
Australia	18 051	9 563	3 489	10 749	...

(a) Figures up to 1976 exclude imports from Belgium-Luxembourg, if any

(b) Cr₂O₃ content

(c) Exports from Soviet Union

Production of Coal

Country	1974	1975	1976	1977	1978
United Kingdom					
Mined –					
Anthracite	1 284 000	1 407 000	1 249 000	1 209 000	1 453 000
Bituminous	96 703 000	116 000 000	109 015 000	105 915 000	106 075 000
Opencast –					
Anthracite	1 353 000	1 127 000	1 114 000	1 320 000	1 499 000
Bituminous	7 877 000	9 286 000	10 830 000	12 230 000	12 668 000
Belgium					
Anthracite	2 038 000	1 506 993	1 125 716	795 741	627 500
Bituminous	6 073 000	5 971 710	6 112 022	6 272 300	5 962 768
France					
Anthracite & bituminous	22 893 052	22 424 000	21 879 000	21 294 000	19 690 000
Lignite	2 759 086	3 186 000	3 188 000	3 080 000	2 732 000
Germany, Federal Republic of (a)					
Anthracite & bituminous	94 876 248	92 393 000	89 269 000	84 840 000	83 936 000
Brown coal	126 044 000	123 377 000	134 493 000	122 920 000	123 559 000
Irish Republic					
Anthracite & semi-bituminous	67 000	47 470	49 090	53 810	30 400
Italy					
Bituminous	3 681	2 055	1 340	285	—
Brown coal	1 960 066	2 050 056	2 027 991	1 843 931	1 868 078
Netherlands					
Anthracite & bituminous	758 000	—	—	—	—
Albania					
Brown coal & lignite	* 850 000	* 900 000	* 950 000	* 1 000 000	* 1 050 000
Austria					
Brown coal (d)	3 629 284	3 397 404	3 214 598	3 127 473	3 075 680
Bulgaria					
Anthracite & bituminous	307 000	330 000	295 000	287 000	273 000
Brown coal & lignite	23 998 000	27 515 000	25 184 000	24 887 000	25 531 000
Czechoslovakia					
Bituminous	27 907 000	28 052 000	28 083 000	27 788 000	28 296 000
Brown coal	79 171 000	83 535 000	86 838 000	90 696 000	) 94 879 000
Lignite	3 619 414	3 551 000	3 488 000	3 354 000	
German Democratic Republic					
Bituminous	594 000	539 000	457 000	349 000	85 000
Brown coal	247 868 000	246 706 000	246 897 000	253 705 000	235 264 000
Greece					
Lignite	14 108 602	18 123 037	22 303 238	23 893 197	21 888 000
Hungary					
Bituminous	3 209 000	3 020 000	2 934 000	2 925 212	2 953 902
Brown coal	15 281 000	14 963 000	14 779 000	14 433 014	14 301 627
Lignite	7 271 000	6 904 000	7 544 000	8 096 270	8 413 988
Norway					
Spitzbergen –					
Bituminous	461 040	422 342	524 729	436 784	378 258
Poland					
Bituminous	162 002 000	171 625 000	179 303 000	186 112 000	192 622 000
Brown coal	39 826 000	39 865 000	39 305 000	40 760 000	41 005 000
Portugal					
Anthracite	230 209	221 621	193 447	195 265	167 103
Romania					
Anthracite & bituminous	8 523 000	8 809 000	8 696 000	8 637 000	8 794 000
Lignite	20 001 000	19 916 000	18 819 000	19 872 000	22 019 000
Brown coal	683 000	660 000	600 000	635 000	641 000
Soviet Union					
Anthracite & bituminous	473 374 000	484 675 000	494 377 000	499 768 000	501 536 000
Lignite	157 179 000	160 216 000	160 031 000	163 513 000	162 871 000
Spain					
Anthracite	2 947 980	3 154 386	3 548 099	3 760 522	3 736 304
Bituminous	7 390 778	7 469 454	6 969 235	8 114 575	7 668 100
Lignite	2 882 415	3 379 729	4 150 363	5 812 868	8 249 525

Coal

Production of Coal

tonnes

Country	1974	1975	1976	1977	1978
Turkey					
Bituminous	8 608 027	8 365 000	8 080 756	7 676 743	...
Lignite	11 050 575	11 760 000	13 694 645	14 828 606	...
Yugoslavia					
Bituminous	601 000	598 000	587 000	511 000	471 000
Brown coal & lignite	32 971 000	34 810 000	36 258 000	38 571 000	39 213 000
Botswana	25 498	71 248	224 099	294 039	314 718
Morocco					
Anthracite	574 000	652 000	702 000	707 000	720 000
Mozambique					
Bituminous	425 843	574 843	* 372 000	* 450 000	* 500 000
Nigeria					
Sub-bituminous	312 304	284 494	* 280 000	237 510	* 700 000
South Africa					
Anthracite	1 434 932	1 590 713	2 459 429	2 558 960	2 150 038
Bituminous	64 620 678	67 848 885	74 600 187	82 851 583	88 207 790
Swaziland					
Bituminous	139 541	126 872	126 140	128 990	165 874
Tanzania					
Bituminous	1 510	850	824	2 096	* 1 000
Zaire					
Bituminous	95 525	96 463	112 219	127 955	96 771
Zambia					
Bituminous	809 300	898 090	772 513	708 077	615 145
Zimbabwe (b)					
Bituminous	3 300 391	2 493 000	2 926 367	2 598 189	* 2 500 000
Canada					
Bituminous	12 708 479	15 751 913	14 388 822	15 301 000)
Sub-bituminous	5 075 580	5 958 459	6 409 619	7 902 000	) 30 273 000
Lignite	3 485 531	3 548 585	4 677 597	5 478 000)
Mexico					
Bituminous	5 165 739	5 193 448	5 649 628	6 610 223	7 100 000
USA					
Anthracite	6 002 721	5 627 549	5 650 159	5 317 088	...
Bituminous	531 160 000	570 274 000	592 863 000	596 972 912	) 587 324 000
Lignite	14 058 000	17 979 000	22 829 000	26 517 000)
Argentina					
Lignite	625 647	502 158	614 585	533 000	350 000
Brazil					
Bituminous & lignite	5 498 194	6 393 725	7 032 649	...	...
Chile					
Bituminous	1 529 105	1 483 000	1 273 000	1 350 000	...
Colombia					
Bituminous	3 600 000	3 800 000	4 000 000	4 204 100	4 930 000
Peru					
Anthracite	* 10 000	22 929	* 20 000	...	...
Bituminous	* 100 000	* 100 000	...	...	...
Venezuela					
Bituminous	57 614	* 60 000	89 000	114 000	100 000
Afghanistan (c)					
Bituminous	136 000	149 700	159 900	172 700	217 500
Burma (f)	13 154	15 555	18 698	27 433	...
China	* 450 000 000	* 470 000 000	* 440 000 000	* 550 000 000	* 618 000 000
India					
Bituminous	84 102 000	95 911 000	101 876 000	110 247 000	101 549 000
Lignite	3 044 000	2 822 000	3 895 000	3 632 000	3 613 000
Indonesia					
Bituminous	156 153	206 388	183 000	231 000	264 000
Iran (c)					
Bituminous	1 200 000	879 900	* 900 000	* 850 000	* 850 000
Japan					
Anthracite & bituminous	20 333 303	18 999 000	18 396 029	18 246 245	18 991 274
Lignite	75 466	64 000	50 421	54 711	36 839

Production of Coal

Country	1974	1975	1976	1977	1978
Korea, Dem. P.R. of					
Bituminous	* 31 000 000	* 32 000 000	* 33 000 000	* 34 000 000	* 35 000 000
Lignite	* 7 900 000	* 8 000 000	* 8 000 000	* 10 000 000	* 11 500 000
Korea, Republic of					
Anthracite	15 290 000	17 585 000	16 428 000	17 233 000	18 056 000
Mongolia (e)	2 474 000	2 726 000	2 921 000	3 318 000	3 350 000
Pakistan					
Lignite	1 147 382	1 300 000	1 300 000	1 050 000	* 1 120 000
Philippines					
Bituminous	50 746	105 128	120 810	284 554	313 009
Taiwan					
Bituminous	2 934 427	3 140 578	3 235 810	2 955 915	2 883 904
Thailand					
Lignite	484 652	462 801	680 343	438 570	638 942
Vietnam					
Anthracite	* 4 000 000	* 5 300 000	* 5 500 000	* 6 000 000	* 5 000 000
Australia					
Bituminous	66 474 000	69 676 000	69 370 000	72 679 000	74 137 000
Sub-bituminous	3 975 000	5 008 000	5 483 000	5 529 000	5 743 000
Brown coal	27 303 000	28 178 000	30 940 000	29 250 000	32 869 000
New Zealand					
Bituminous	422 215	457 414	448 000	389 000	360 000
Sub-bituminous	1 998 495	1 818 530	1 867 000	1 816 000	1 591 000
Lignite	143 607	136 449	171 000	164 000	150 000
World total	3 107 000 000	3 241 000 000	3 292 000 000	3 452 000 000	3 483 000 000

(a) Including production of brown coal only from 'small mines'

(b) Years ended 31 August of that stated

(c) Years ended 20 March following that stated

(d) Includes some anthracite

(e) Including lignite

(f) Years ended 31 March following that stated

Coal

Exports of Coal

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom					
Anthracite	1 220 680	1 490 013	1 033 725	738 967	532 684
Bituminous	629 483	691 849	400 672	1 201 678	1 732 916
Belgium-Luxembourg	588 143	562 258	391 034	366 762	271 157
France					
Anthracite	174 091	166 825	190 169	201 045	177 588
Bituminous	464 136	385 839	403 683	385 802	354 161
Lignite	26 247	14 999	19 007	12 775	6 370
Germany, Federal Republic of					
Brown coal	22 276	8 857	11 122	26 092	66 075
Other (b)	17 443 848	14 468 285	12 804 510	14 286 954	18 656 165
Irish Republic (b)	38 894	56 229	30 625	49 130	57 945
Italy (b)	10 068	4 252	5 246	15 086	5 544
Netherlands (b)	1 022 741	288 124	460 909	463 694	486 465
Austria					
Brown coal	8 987	9 991	9 031	8 341	5 433
Czechoslovakia					
Brown coal	1 391 000	1 683 000	1 607 000	1 654 000	1 515 000
Other	3 717 000	3 666 000	3 770 000	3 308 000	3 745 000
Hungary	67 659	95 529	55 455	56 138	37 460
Norway	54 042	31 120	95 731	164 422	77 042
Poland					
Brown coal	5 199 000	3 442 000	3 084 000	3 387 000	3 387 000
Other	40 093 000	38 479 000	38 944 000	39 317 000	40 200 000
Soviet Union					
Anthracite	4 611 000	4 511 000	4 600 000	4 700 000	4 700 000
Other	21 400 000	21 440 000	22 300 000	22 500 000	22 500 000
Spain					
Anthracite	61 885	18 920	14 303	21 927	16 232
Sweden (b)	59 308	33 679	5 931	32 034	31 555
Switzerland	33 687	11 647	2	104	6
Turkey	300	200	500	700	246
Yugoslavia					
Brown coal	112 773	11 101	14 402	174 429	374 013
Lignite	444 664	327 970	240 761	42 946	23 762
Morocco					
Anthracite	32 435	19 322	30 030	10 380	54 928
Mozambique	129 801	266 143	204 843	156 138	...
Nigeria	17 214	31 024	10 416	20 000	18 000
South Africa					
Anthracite	1 034 758	1 121 834	1 530 151	2 223 833	2 528 160
Bituminous	1 242 459	1 565 469	4 430 991	10 478 234	12 860 508
Swaziland	62 061	67 212	109 819	76 913	105 342
Canada	10 833 159	11 694 657	11 772 151	12 069 202	13 657 443
USA					
Anthracite	678 511	580 236	558 070	566 907	785 875
Bituminous	54 364 853	59 573 586	53 891 778	32 096 879	36 129 749
Argentina	3 010	1 438	507	...	...
Colombia					
Anthracite	...	...	15 666	...	...
China (c)	* 405 100	* 455 800	* 322 000	* 490 800	* 772 200
India (a)					
Anthracite	...	...	...	201	...
Other	450 837	402 444	598 836	639 707	...
Japan	132 488	26 110	51 213	31 651	47 740
Korea, Dem. P.R. of	* 236 800	* 36 900	* 70 000	* 80 000	* 80 000
Korea, Republic of					
Anthracite	25 200	—	10 000	—	...
Australia	29 356 000	30 353 000	32 870 000	35 933 000	* 37 500 000

Note: This table excludes bunker shipments

(a) Years ended 31 March following that stated

(b) Including anthracite

(c) IGS estimates, based on imports into Japan

Imports of Coal

Country	1974	1975	1976	1977	1978
United Kingdom	3 540 939	5 070 165	2 836 162	2 438 543	2 351 922
Belgium-Luxembourg	10 066 642	6 954 203	7 942 681	7 076 076	7 776 121
Denmark	3 627 952	4 131 845	4 177 022	5 565 900	6 110 214
France					
Anthracite	2 482 430	2 196 910	2 261 518	2 077 998	2 164 335
Bituminous	13 776 816	15 096 172	16 493 343	19 444 092	21 618 731
Lignite	23 470	10 100	11 836	11 929	11 024
Germany, Federal Republic of					
Brown coal	1 327 697	1 632 646	1 550 544	1 602 103	1 460 151
Other	5 837 224	6 244 033	5 970 316	6 353 152	5 722 144
Irish Republic					
Anthracite	57 418	26 807	27 102	37 727	56 479
Bituminous	834 349	663 003	579 326	829 943	781 907
Italy					
Anthracite	409 432	253 968	278 471	317 892	497 051
Bituminous	11 837 491	12 076 665	11 562 732	11 836 946	11 178 633
Lignite	59 539	34 710	38 342	41 891	26 572
Netherlands					
Brown coal	18 235	12 719	13 283	29 402	70 454
Other	4 262 401	4 144 222	4 910 155	5 894 227	5 030 655
Austria					
Brown coal	524 968	345 877	259 595	226 807	247 893
Other	2 896 380	2 545 996	2 606 960	2 331 643	2 257 001
Bulgaria	6 052 000	6 271 000	6 184 000	6 251 000	6 201 000
Czechoslovakia	5 168 000	5 188 000	5 209 000	5 619 000	5 591 000
Finland					
Anthracite	93 587	104 602	105 964	94 660	86 169
Other	3 843 996	3 740 400	2 676 005	4 192 568	4 703 069
German Democratic Republic	7 200 000	6 440 000	6 096 000	6 058 000	5 936 000
Greece					
Anthracite	7 965	4 087	5 810	6 303	52 000
Other	832 723	704 821	565 664	380 015	324 000
Greenland	8 164	2	3 857	...	4 000
Hungary (e)	1 430 000	1 438 000	1 297 000	1 524 000	1 420 029
Norway (a)	543 246	456 896	453 356	420 876	447 489
Poland					
Anthracite	30 000	36 000	50 000	41 000	30 000
Other	1 203 000	1 096 000	1 080 000	1 080 000	1 044 000
Portugal					
Anthracite	9 010	3 973	3 701	7 913	7 679
Other	297 228	367 529	404 155	397 325	425 321
Romania	1 871 500	2 419 500	2 622 900	3 439 900	4 668 500
Soviet Union	9 712 000	9 818 000	9 376 000	9 500 000	10 000 000
Spain					
Anthracite	6 131	17 835	35 523	10 429	7 479
Brown coal	31 165	15 547	19 695	12 327	6 391
Other	3 228 559	3 956 398	4 513 192	3 935 112	3 369 128
Sweden					
Anthracite	99 773	132 226	177 352	115 400	31 757
Other	1 401 027	1 499 293	1 840 325	1 284 208	1 512 949
Switzerland	243 168	123 486	114 024	143 047	141 499
Turkey	1 596	26 160	248 942	484 271	636 000
Yugoslavia					
Anthracite	196 883	181 362	130 492	185 493	209 565
Lignite	4 381	3 520	22 131	29 537	399
Other	1 779 534	1 965 012	2 491 297	2 418 747	(e) 2 842 000
Algeria	47 390	36 493	13 074	41 164	...
Egypt	661 656	1 514 015	978 513	1 042 455	857 267
Ghana	5 893	10 160	11 000	10 000	12 000
Kenya	66 107	43 914	61 990	62 010	47 738
Madagascar	13 734	19 623	21 554	16 798	13 206
Malawi	52 734	71 556	62 471	62 442	50 191
Morocco	13 150	15 684	10 686	8 782	7 860
Mozambique	235 864	179 201	151 415	161 381	...

Coal

Imports of Coal

tonnes

Country	1974	1975	1976	1977	1978
Nigeria	2 652	1 273	4 171	6 000	6 000
South Africa	95 896	130 194	302 894	295 663	198 593
Tunisia	35 531	52 919	23 229	20 098	27 085
Zaire	68 843	37 578	27 555	29 474	...
Canada					
Anthracite	213 438	292 010	213 381	293 171	225 638
Bituminous	12 035 680	14 814 732	14 281 066	14 882 447	12 900 419
Other	132 001	148 166	90 557	126 086	99 833
Cuba	46 600	...	...	...	...
Mexico	363 059	456 520	88 460	624 945	* 750 000
Panama	4 332	499	9	70	...
St Pierre & Miquelon	1 000	1 000	1 000	...	...
USA					
Bituminous	1 708 557	681 387	865 136	1 071 745	1 688 486
Other	222 512	185 969	243 358	583 129	1 472 684
Argentina	822 483	1 029 873	807 268	1 100 000	1 205 000
Brazil					
Anthracite	3 806	8 545	6 807	12 998	24 670
Bituminous	1 593 731	2 753 014	3 167 673	3 550 309	3 615 592
Chile	363 243	164 000	140 000	372 000	545 000
Uruguay	34 907	13 730	22 145	1 590	...
Venezuela	2 694	7 274	...	...	...
Burma	151 841	213 000	202 000	202 000	191 000
Hong Kong	10 802	10 087	12 972	11 114	7 711
India	530	2 485	35	...	...
Indonesia	424	13 437	9 342	32	2 515
Iran (b)	22 312	24	183	...	...
Israel (d)	340	222	156	195	305
Japan					
Anthracite	1 516 838	1 025 781	1 071 987	1 489 110	1 052 253
Other	62 634 477	61 080 743	59 686 541	59 351 856	51 124 931
Korea, Dem. P.R. of	* 332 000	* 328 000	* 387 000	* 365 000	* 300 000
Korea, Republic of	773 415	671 492	1 493 951	2 006 813	* 2 000 000
Malaysia (c)					
Anthracite	18 661	15 762	22 119	20 141	...
Philippines	5 077	570	5 041	25 589	51 540
Syria	1 215	1 223	1 699	1 130	...
Taiwan	541 870	77 315	213 532	757 812	1 369 200
Thailand	2 331	3 995	3 450	1 031	...
Australia	15 460	6 078	11 050	2 666	22 696

(a) Excludes coal imported from Spitzbergen

(b) Years ended 20 March following that stated

(c) From 1975 includes Sabah and Sarawak

(d) Figures may be incomplete as value only given in Israeli trade returns for imports from some countries

(e) Including anthracite

Mine Production of Cobalt

tonnes (metal content)

Country	1974	1975	1976	1977	1978
Finland	1 067	1 170	1 207	1 227	1 236
Soviet Union	* 1 750	* 1 800	* 1 800	* 1 900	* 1 950
Botswana	33	81	150	165	* 180
Morocco	1 750	1 960	911	1 561	* 1 800
Zaire	33 900	31 300	34 300	32 600	* 33 000
Zambia	3 000	4 900	3 800	4 300	4 300
Canada (a)	1 564	1 354	1 356	1 485	1 163
Cuba	* 1 600	* 1 600	* 1 600	* 1 600	* 1 600
Philippines	30	106	492	1 084	1 183
Australia	1 078	2 709	3 250	3 324	3 393
New Caledonia	3 560	3 420	4 145	4 200	4 170
World total	49 300	50 400	53 000	53 400	54 000

Note: Other countries also known to produce ores containing recoverable quantities of cobalt include Bulgaria, Cyprus, German Democratic Rep., Greece, Poland, Spain and Sweden

(a) Includes Co content of ores and residues shipped to overseas refineries including UK

Cobalt

Production of Cobalt Metal

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom (a)	...	...	...	...	...
Belgium (b)	...	...	...	...	...
France	885	769	851	742	871
Germany, Federal Republic of	339	315	384	400	300
Czechoslovakia (c)	...	...	...	...	...
Finland	812	821	892	985	1 109
Norway	1 238	773	576	705	520
Soviet Union	* 1 750	* 1 800	* 1 800	* 1 900	* 1 950
Zaire	17 545	13 638	10 686	10 208	13 146
Zambia	1 962	1 860	2 175	1 704	2 063
Canada (d)	326	254	298	459	...
USA	—	30	165	221	* 275
Japan	10	48	515	1 093	1 864
World total	25 500	20 900	18 900	19 000	23 200

(a) Details of production not known: it is believed that currently about 600 tonnes of cobalt in metal and compounds may be recovered annually in the United Kingdom from imported materials

(b) Production not reported. Much of the metal recorded under Zaire is believed to be further processed in Belgium

(c) Czechoslovakia is thought to recover cobalt from materials imported from Cuba. However no data are available to enable a reliable estimate to be made

(d) Metal produced from domestic and imported ores: 1974 includes cobalt produced in the United Kingdom

Exports of Cobalt

Country	1974	1975	1976	1977	1978
United Kingdom					
Cobalt (c)	283	502	1 428	624	885
Cobalt oxides	156	148	634	316	411
Belgium-Luxembourg (b)					
Cobalt (c)	* 4 100	* 2 100	* 3 800	* 4 500	* 4 000
Cobalt oxides	* 3 100	* 1 200	* 1 700	* 1 600	* 2 200
France					
Ingots & scrap (a)	552	461	943	1 066	1 100
Cobalt oxide	178	120	201	209	192
Germany, Federal Republic of					
Cobalt (c)	287	221	322	340	796
Cobalt oxide	56	44	67	41	86
Netherlands					
Cobalt (c)	142	117	124	95	100
Finland					
Cobalt	808	810	811	999	853
Cobalt oxides	—	33	19	—	—
Norway					
Cobalt	1 172	601	936	677	559
Sweden					
Cobalt	36	82	23	40	63
Cobalt oxides	0	0	—	2	0
Switzerland					
Cobalt oxides	—	2	7	7	11
Morocco					
Ore	14 547	13 144	8 550	9 076	8 922
Zaire					
Cobalt (a)	17 540	12 121	8 129	8 845	...
Zambia					
Cobalt	1 894	...	...	...	...
Canada					
Cobalt	968	659	1 040	687	716
of which: Re-exports	489	228	516	3	...
Cobalt oxides	673	561	471	605	748
USA					
Cobalt (c)	1 747	1 965	1 967	1 228	1 436
Cobalt oxides	414	105	161	639	816
Japan					
Cobalt oxides	12	12	11	10	87

(a) Including alloys

(b) Exports of cobalt are not separately recorded. Figures shown are IGS estimates based on known imports into certain countries

(c) Including alloys and scrap

Cobalt

Imports of Cobalt

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom					
Cobalt (b)	2 808	2 168	2 262	2 124	2 267
Cobalt oxides	1 058	884	807	1 096	1 141
Denmark					
Cobalt	32	16	23	21	33
France					
Ore	8 625	9 158	8 679	8 678	9 727
Ingots & scrap (a)	855	681	796	660	964
Cobalt oxide	296	170	198	169	293
Germany, Federal Republic of					
Cobalt (b)	1 955	1 482	1 870	2 091	2 059
Cobalt oxide	509	153	346	320	603
Italy					
Cobalt (b)	422	282	256	307	369
Cobalt oxide	362	260	256	223	214
Netherlands					
Cobalt (b)	78	76	84	17	78
Austria					
Cobalt oxides	3	1	3	5	6
Finland					
Cobalt	21	5	3	126	306
Cobalt oxides	1	19	53	52	15 252
Norway					
Cobalt	5	5	4	5	3
Cobalt oxides	24	10	19	10	9
Portugal					
Cobalt oxide	13	5	12	23	6
Spain					
Cobalt oxides	194	109	218	138	143
Sweden					
Cobalt	521	573	545	237	484
Cobalt oxides	5	3	4	5	3
Switzerland					
Cobalt oxides	15	4	7	7	16
Turkey					
Cobalt oxides	12	17	333	15	200
Yugoslavia					
Cobalt	42	41	83	71	...
Cobalt oxides	34	19	19	35	32
South Africa					
Cobalt	...	112	67	90	139
Cobalt oxides	15	16	12	2	6
USA					
Cobalt	6 709	2 763	6 862	7 635	7 479
Cobalt oxide	696	106	63	230	504
Argentina					
Cobalt	128	84	84	...	...
Brazil					
Cobalt	198	147	289	237	312
Cobalt oxide	82	50	93	78	86
Hong Kong					
Cobalt oxide	36	36	56	49	41
India					
Cobalt	203	111	59	...	...
Cobalt oxide	15	...	7	...	...
Indonesia					
Cobalt oxides	9	11	38	15	9
Iran (c)					
Cobalt oxides	21	28	79	...	...

Cobalt

tonnes

Imports of Cobalt

Country	1974	1975	1976	1977	1978
Japan					
Cobalt (b)	3 716	1 581	3 932	2 085	1 359
Cobalt oxide	819	252	754	597	615
Korea, Republic of					
Cobalt oxides	17	20	18	25	...
Taiwan					
Cobalt oxides	18	10	46	32	31
Australia					
Cobalt ingots, etc.	80	30	28	20	...
Cobalt oxide	94	6	23	7	13

(a) Including alloys

(b) Including alloys and scrap

(c) Years ended 20 March following that stated

Mine Production of Copper

tonnes (metal content)

Country	1974	1975	1976	1977	1978
United Kingdom (b)	434	652	552	453	135
France	392	500	500	300	600
Germany, Federal Republic of	1 734	1 961	1 613	1 200	800
Irish Republic	12 700	9 839	4 097	4 829	4 700
Italy	900	800	1 000	700	500
Albania	7 000	9 000	10 000	10 000	11 500
Austria	2 612	1 923	1 138	—	—
Bulgaria	51 600	* 55 000	* 57 000	* 57 000	* 60 000
Czechoslovakia	10 900	10 700	8 500	9 300	10 000
Finland	36 667	38 000	41 700	46 746	46 818
German Democratic Republic	* 18 000	* 16 500	* 16 000	* 17 000	* 16 000
Greece	1 500	2 500	2 600	3 500	300
Norway	24 120	28 115	31 080	29 053	28 348
Poland	185 000	230 000	267 000	289 300	318 000
Portugal	568	447	387	331	300
Romania	* 40 000	* 45 000	* 55 000	* 40 000	* 40 000
Soviet Union	* 1 060 000	* 1 100 000	* 1 130 000	* 1 100 000	1 140 000
Spain (a)	46 753	55 193	64 962	61 410	* 60 000
Sweden	40 637	40 634	44 860	44 764	47 600
Turkey	30 000	27 300	29 323	38 300	30 000
Yugoslavia	112 080	114 900	120 100	116 200	123 300
Algeria	350	378	* 400	* 400	* 400
Botswana	2 755	6 504	12 473	11 783	14 614
Congo	2 100	2 187	972	2 407	* 1 000
Kenya	* 70	* 70	* 70	—	...
Mauritania	20 079	6 582	10 000	8 000	2 830
Morocco	4 670	4 600	4 400	3 370	4 300
Namibia	33 200	34 900	43 500	49 200	37 700
South Africa	179 111	178 927	196 880	205 414	205 745
Uganda	11 500	* 8 500	* 7 000	* 4 000	* 1 300
Zaire	499 331	464 928	443 948	452 716	472 533
Zambia	697 956	647 163	711 681	658 788	654 012
Zimbabwe	40 000	48 000	44 000	33 000	32 000
Canada (c)	821 381	733 826	730 930	759 423	657 521
Cuba	2 901	3 000	2 000	3 000	3 000
Guatemala	1 600	3 300	3 500	2 300	2 023
Mexico	82 670	78 196	88 970	89 662	87 200
Nicaragua	1 775	645	631	534	...
USA (d)	1 448 776	1 282 184	1 456 564	1 364 375	1 351 900
Argentina	315	380	265	337	100
Bolivia	7 433	5 882	4 680	3 670	3 267
Brazil	3 075	1 922	54	25	...
Chile (d)	899 700	828 300	1 005 200	1 056 200	1 035 500
Colombia	—	—	260	310	400
Ecuador	179	239	267	765	507
Peru (d)	211 593	165 813	220 269	341 000	366 400
Burma	* 70	* 86	* 92	* 100	* 100
China	* 130 000	* 140 000	* 150 000	* 155 000	* 160 000
Cyprus	12 828	9 866	7 900	6 800	4 678
India	20 457	25 155	25 400	30 200	24 400
Indonesia	64 600	63 500	69 100	57 100	58 000
Iran	4 000	4 000	6 000	6 000	6 000
Israel	9 488	8 035	2 100	—	—
Japan	82 135	84 639	81 606	81 395	73 385
Korea, Dem. P.R. of	* 14 000	* 15 000	* 15 000	* 15 000	* 15 000
Korea, Republic of	3 235	2 330	2 097	1 688	668
Malaysia	—	3 800	18 200	24 000	26 000
Philippines	225 485	225 775	237 588	272 792	273 275
Taiwan	2 500	1 900	2 000	2 000	800

Mine Production of Copper

tonnes (metal content)

Country	1974	1975	1976	1977	1978
Australia	251 340	218 961	218 480	221 579	219 260
Papua New Guinea	184 100	172 477	176 519	182 291	198 603
<i>World total</i>	7 700 000	7 300 000	7 900 000	8 000 000	7 900 000

(a) Excluding copper contained in iron pyrites

(b) In a mixed copper-zinc concentrate

(c) Blister copper plus recoverable copper in ores and matte exported

(d) Recoverable

Copper

Smelter Production of Copper

tonnes

Country	1974	1975	1976	1977	1978
Belgium	78 500	40 000	72 000	61 600	55 900
France (a)	43 800	39 600	39 328	45 045	41 345
Germany, Federal Republic of	244 671	224 600	244 500	248 000	221 500
Albania	7 400	8 500	10 000	9 000	9 000
Austria (a)	26 713	26 931	28 589	31 707	31 485
Bulgaria	* 55 000	* 60 000	* 57 000	* 57 000	* 60 000
Czechoslovakia	11 000	10 000	11 400	10 000	10 000
Finland	48 400	46 200	50 300	60 800	62 900
German Democratic Republic	* 18 000	* 16 500	* 22 500	* 18 000	* 17 000
Norway	31 737	26 349	23 393	26 575	20 056
Poland	185 000	230 000	270 000	290 000	320 000
Romania	* 48 000	42 684	40 491	41 429	38 880
Soviet Union	* 1 060 000	* 1 100 000	* 1 144 000	* 1 100 000	* 1 170 000
Spain	105 365	109 706	112 500	117 500	112 500
Sweden	59 900	57 000	62 000	61 700	67 000
Turkey	29 664	27 000	38 000	31 332	26 200
Yugoslavia (a)	150 000	137 902	136 470	143 516	151 000
Namibia	45 800	36 400	36 100	53 400	45 900
South Africa	172 600	166 800	168 000	188 400	189 400
Uganda	8 700	8 300	7 000	4 000	1 300
Zaire	470 000	462 600	413 000	443 000	390 700
Zambia	709 500	659 000	705 900	650 500	657 100
Zimbabwe	* 30 000	* 30 000	* 23 500	* 28 000	* 28 000
Canada (b)	515 600	496 300	488 600	500 300	425 300
Mexico	78 310	76 374	85 175	87 457	87 000
USA	1 424 113	1 312 813	1 392 186	1 301 970	1 288 378
Chile	724 300	724 400	856 300	888 400	927 400
Peru	181 142	157 714	185 549	306 259	319 000
China	* 150 000	* 160 000	* 165 000	* 175 000	* 175 000
India	11 773	22 020	24 696	23 489	19 480
Japan	952 500	821 500	838 200	915 200	910 500
Korea, Dem. P.R. of	* 14 000	* 18 000	* 20 000	* 20 000	* 20 000
Korea, Republic of (a)	12 399	21 957	30 911	42 880	52 442
Taiwan	9 859	8 539	11 660	11 511	13 000
Australia	196 129	180 037	167 353	167 664	165 065
World total	7 900 000	7 600 000	8 000 000	8 200 000	8 100 000

(a) Refined

(b) Cu content of blister and anode copper

Exports of Copper

Country	1974	1975	1976	1977	1978
United Kingdom					
Ore & concentrates	288	30	—	2 099	973
Unwrought –					
Matte & unrefined	1 859	746	1 866	—	4
Refined	35 023	15 730	12 291	6 880	11 110
Alloys	36 339	27 436	18 866	38 238	28 759
Scrap	29 688	35 285	39 056	29 483	40 476
Belgium-Luxembourg					
Ore	1 004	4 399	772	1 539	3 443
Unwrought –					
Unrefined (a)	5 886	1 204	1 428	884	2 128
Refined	288 880	248 610	307 507	320 965	304 783
Alloys	6 464	6 078	8 507	6 885	6 466
Scrap	16 116	7 851	12 898	16 573	19 912
Denmark					
Unwrought	43	2	—	151	15
Unwrought alloys	1 545	541	819	862	867
Scrap	11 459	7 841	8 849	11 120	12 499
France					
Ore	2 710	1 682	455	2 309	0
Matte (j)	557	397	551	1 390	504
Unwrought –					
Unrefined	7 770	2 183	4 439	5 076	3 665
Refined	2 789	4 427	6 488	7 388	17 248
Alloys	3 570	1 488	2 711	5 248	4 343
Scrap	74 413	55 713	100 508	96 091	98 204
Germany, Federal Republic of					
Ore	5 015	—	77	—	—
Matte (j)	...	1 182	212	338	300
Unwrought –					
Unrefined	50 222	38 463	38 913	32 364	29 589
Refined	82 440	49 790	53 700	66 954	112 695
Alloys	8 439	7 321	9 576	8 395	9 347
Scrap	41 790	28 493	39 565	46 340	53 956
Irish Republic					
Ore & concentrates	32 222	41 268	18 529	18 985	25 002
Italy					
Ore	3 095	2 961	2 817	1 588	3 606
Unwrought –					
Unrefined	3 787	2 747	2 560	2 131	877
Refined	5 218	1 290	1 520	790	751
Alloys	1 734	2 829	3 036	1 794	1 574
Scrap	4 955	3 249	12 144	10 929	9 088
Netherlands					
Unwrought	16 751	10 477	7 354	2 342	2 241
Unwrought alloys	5 833	4 194	3 400	2 916	2 312
Scrap	37 513	25 211	37 357	35 371	41 509
Austria					
Ore	948	2 236	1 246	550	91
Unwrought	9 916	9 821	12 155	12 192	17 238
Unwrought alloys	1 077	1 118	1 662	1 280	1 425
Scrap	500	622	704	1 304	2 474
Finland					
Unwrought –					
Refined	11 911	14 312	23 107	34 558	16 048
Alloys	281	149	526	2 749	1 492
Scrap	366	1 534	1 000	338	217
Norway					
Ore	52 964	83 270	105 715	98 728	98 239
Unwrought –					
Unrefined	6 290	6 969	5 865	6 841	5 586
Refined	25 777	17 917	14 793	19 558	14 614
Alloys	2 266	446	1 318	1 126	1 587
Scrap	2 152	1 362	2 303	2 673	4 221

Copper

Exports of Copper

tonnes

Country	1974	1975	1976	1977	1978
Poland					
Unwrought	58 036	90 329	96 062	117 919	147 200
Portugal					
Unwrought	466	22	—	—	1 118
Soviet Union					
Unwrought	251 725	209 859	227 000	227 000	247 000
Spain					
Ore	3 909	3	1 141	2 637	36
Matte	1 275	—	626	575	689
Unwrought	6 696	16 539	29 803	43 438	46 504
Unwrought alloys	...	699	4 626	3 944	5 890
Scrap	176	140	1 093	1 592	705
Sweden					
Ore	33 855	20 884	32 064	36 231	15 794
Unwrought	16 631	19 499	33 153	36 978	27 122
Unwrought alloys	3 966	2 703	3 116	3 787	2 748
Scrap	353	932	1 053	718	350
Switzerland					
Unwrought –					
Refined	1 005	151	540	826	557
Alloys	4 216	3 839	5 029	5 362	4 809
Scrap	15 034	6 854	7 266	6 633	4 972
Turkey					
Unwrought	13 270	5 540	—	—	—
Yugoslavia					
Unwrought	72 235	47 132	60 639	18 740	16 070
Algeria					
Ore	820	1 690	1 337	1 000	...
Scrap	1 467	1 688	2 781	4 489	...
Botswana					
Ores & concentrates (b)	—	4 500	12 300	12 500	15 600
Congo					
Ores & concentrates	...	3 274	670	261	...
Ivory Coast					
Matte & scrap	1 018	655	628	708	1 046
Mauritania					
Ore (b)	23 683	6 300	11 000	7 000	2 800
Morocco					
Ore	17 586	8 511	22 700	18 095	10 419
Scrap	1 389	352	1 548	905	1 462
Senegal					
Unwrought & scrap	677	442	...	...	...
South Africa (f)					
Ore & concentrates	* 68 000	* 62 000	* 78 000	* 70 000	* 50 000
Unwrought	* 163 000	* 144 400	* 151 600	* 201 900	* 214 700
Tunisia					
Unwrought & scrap (g)	556	162	720	853	359
Uganda					
Unwrought	9 653	7 884	5 452	2 201	...
Zaire					
Ores & concentrates	77 742	83 472	30 869	142 854	...
Unwrought –					
Blister (e)	199 300	240 300	315 489	357 090	301 290
Refined	252 000	224 000	73 981	90 643	103 645
Scrap	375	381	366	447	...
Zambia					
Unwrought –					
Blister	35 570	17 687	21 105	8 128	25 600
Refined	636 399	621 673	712 346	647 086	549 900
Residues	1 428	1 761	...	...	...

Exports of Copper

Country	1974	1975	1976	1977	1978
Canada					
Ores, concentrates & matte (b)	344 271	314 518	303 055	279 583	282 162
Unwrought	289 650	319 958	317 455	294 285	247 732
Scrap	39 335	31 103	33 003	37 156	41 196
Mexico					
Concentrates	3 147	7 367	2 579	399	...
Unwrought –					
Unrefined	8 496	12 003	5 098	8 780	6 480
Refined	—	422	51	4 105	...
Nicaragua					
Ore & concentrates	6 862	3 310	...	...	...
USA					
Ore & concentrates (b)	11 309	7 345	7 138	21 934	17 486
Matte (b)	20	191	6 337	3 001	...
Unwrought –					
Unrefined	2 416	1 415	2 486	14 877	10 384
Refined	113 274	156 181	102 343	56 053	95 296
Master alloys	2 509	2 307	1 546	1 447	7 899
Scrap	144 853	130 900	103 712	109 054	156 065
Bolivia					
Ore (b)	7 923	5 991	4 681	3 174	2 990
Chile					
Ore & concentrates (b)	155 900	103 800	156 200	171 000	112 400
Unwrought –					
Blister	214 500	179 800	231 000	216 700	163 300
Refined	487 800	504 200	594 700	617 500	702 100
Peru					
Ore (b)	24 113	31 033	12 085	17 530	48 100
Unwrought	161 130	122 194	170 244	293 990	307 000
Cyprus					
Ores & concentrates	46 471	39 311	42 520	31 215	...
Cupreous pyrites	23 334	19 778	...	—	...
Cement copper	2 354	—	...	—	...
Hong Kong					
Scrap	6 425	5 287	8 157	9 167	11 219
Indonesia					
Ores & concentrates	...	175 247	216 828	182 292	186 601
Iran					
Ore (c)	...	8 700	4 200	...	...
Israel (i)					
Matte	2 083	173	239	299	148
Cement copper	12 512	9 595	4 180	266	—
Scrap	190	208	1 759	2 648	2 223
Japan					
Unwrought	279 837	21 974	29 333	48 044	55 383
Scrap	719	362	467	669	558
Malaysia (h)					
Ore	...	13 278	81 354	98 859	...
Scrap	1 149	2 351	1 794	1 782	...
Philippines					
Ore & concentrates	861 306	816 333	956 558	1 007 365	895 299
Unwrought	45	68	8	36	—
Scrap	2 235	100	1 305	930	1 679
Singapore					
Unwrought	49	54	13	3	31
Scrap	...	4 471	7 193	7 531	9 896
Taiwan					
Ore & concentrates	708	792	264	—	—
Unwrought	361	440	787	537	448
Scrap	1 776	1 634	4 828	3 150	5 518

Copper

Exports of Copper

tonnes

Country	1974	1975	1976	1977	1978
Australia					
Ores, concentrates & matte (b)	51 101	51 540	51 962	44 926	41 418
Unwrought –					
Blister	12 464	12 308	9 935	9 075	4 144
Refined	70 536	91 508	76 240	74 689	60 065
Alloys	6	40	23	43	158
Scrap	396	575	393	475	348
New Zealand (d)					
Unwrought	640	161	92	132	...
Scrap	498	490	1 016	493	...
Papua New Guinea					
Ores & concentrates (b)	191 256	169 862	179 194	182 048	193 299

Note: In this table the description 'unwrought' copper corresponds to item 682.1 of The Standard International Trade Classification and includes both blister and refined copper. Additionally the term 'unwrought' as used here includes alloys unless these are separately specified. The term 'scrap' includes scrap alloys

(a) Figures up to 1977 include matte

(b) Cu content

(c) Years ended 20 March following that stated

(d) Year ended 30 June of that stated

(e) Including leach cathodes

(f) IGS estimates, based on known imports into certain countries

(g) Including matte

(h) From 1975 includes Sabah and Sarawak

(i) Figures may be incomplete as value only given in Israeli trade return for exports to some countries

(j) From 1977 includes cement copper

Imports of Copper

Country	1974	1975	1976	1977	1978
United Kingdom					
Ore & matte	46	307	1 491	1 112	1 996
Unwrought –					
Blister	82 711	81 734	50 989	58 583	50 851
Electrolytic	361 753	352 588	353 710	369 830	336 217
Other refined	22 489	16 998	29 378	14 604	17 026
Alloys	2 459	669	838	1 698	906
Scrap	15 953	9 618	11 898	12 362	9 592
Belgium-Luxembourg					
Ore	32 406	46 651	24 053	21 283	(i) 5 485
Unwrought –					
Unrefined (a)	201 189	214 471	229 932	223 311	196 244
Refined	187 769	187 891	302 216	358 305	361 165
Alloys	4 233	2 765	5 573	3 465	2 741
Scrap	100 321	58 545	82 098	69 660	64 993
Denmark					
Unwrought	4 153	3 787	4 859	6 670	5 164
Unwrought alloys	1 321	672	990	1 032	805
Scrap	747	1 564	1 473	817	1 436
France					
Ore	501	6	31	1 008	1
Matte (j)	2 480	872	1 179	544	522
Unwrought –					
Unrefined	42 001	26 777	23 894	33 733	22 734
Refined	370 637	350 226	338 080	305 311	279 251
Alloys	7 325	4 965	5 442	4 305	4 229
Scrap	17 816	14 228	16 705	15 450	19 086
Germany, Federal Republic of					
Ore	571 146	564 352	615 285	576 307	531 355
Burnt cupreous pyrites	785 736	842 068	888 865	818 467	510 709
Matte (j)	743	2 051	1 027	6 837	7 561
Unwrought –					
Unrefined	98 160	119 850	130 790	118 921	109 225
Refined	440 025	393 936	401 303	440 276	428 794
Alloys	34 193	40 320	49 566	49 303	47 951
Scrap	95 141	89 294	114 699	109 941	137 563
Irish Republic					
Unwrought	264	182	274	333	161
Italy					
Unwrought –					
Unrefined	3 582	2 379	4 853	5 778	4 654
Refined	303 670	281 848	292 496	298 205	351 646
Alloys	33 655	15 117	22 799	16 620	14 033
Scrap	66 762	55 940	69 061	72 354	69 579
Netherlands					
Unwrought	47 328	47 974	59 102	50 248	26 322
Unwrought alloys	1 829	1 555	1 494	2 060	1 699
Scrap	10 791	11 975	12 420	14 588	16 485
Austria					
Unwrought –					
Unrefined	6 569	8 268	9 706	12 949	15 948
Refined	26 477	15 869	10 348	8 066	4 406
Alloys	1 523	882	1 935	1 445	1 036
Scrap	8 937	11 904	12 938	12 116	15 602
Finland					
Ore	36 265	2 878	15 805	11 813	4 192
Unwrought –					
Refined	14 487	11 815	16 277	9 996	13 913
Alloys	1 261	2 827	394	512	420
Scrap	21	517	781	171	366
Greece					
Unwrought	14 812	23 993	23 663	22 233	22 544
Scrap	120	310	17	200	193

Copper

Imports of Copper

tonnes

Country	1974	1975	1976	1977	1978
Hungary					
Unwrought (c)	42 633	44 528	30 248	37 639	32 888
Norway					
Unwrought	1 205	1 382	2 481	1 161	1 216
Unwrought alloys	498	1 668	964	588	1 863
Scrap	285	1 121	1 005	1 410	414
Poland					
Unwrought	10 404	1 139	1 512	1 023	589
Portugal					
Ore	...	50	696	805	100
Unwrought	8 361	10 085	10 141	17 352	17 486
Scrap	1 728	502	732	2 666	821
Soviet Union					
Ore (l)	* 18 500	* 25 500	* 59 200	* 67 100	* 66 600
Unwrought	4 900	8 532	8 000	8 000	8 000
Spain					
Ore	128 689	115 388	174 126	188 928	222 248
Matte & cement	...	24 505	26 039	28 481	11 785
Unwrought –					
Unrefined	...	2 932	4 052	4 121	2 704
Refined	...	54 753	44 742	53 852	37 527
Alloys	...	169	49	101	126
Scrap	11 906	16 138	9 044	6 746	11 466
Sweden					
Ore	40 360	56 387	57 946	44 738	34 323
Matte (j)	3 118	6 685	8 643	2 564	11 616
Unwrought –					
Unrefined	—	—	—	10	7
Refined	66 190	68 531	65 668	49 141	70 916
Alloys	3 944	6 483	3 866	2 641	3 797
Scrap	5 036	8 484	3 189	2 817	4 074
Switzerland					
Unwrought –					
Refined	31 176	33 890	21 303	24 899	21 852
Alloys	1 437	1 238	1 629	1 799	1 359
Scrap	1 986	4 170	1 945	4 255	4 952
Turkey					
Ore	...	2	—	25 364	...
Unwrought	354	1 275	5 154	3 893	1 894
Scrap	10	498	240	1 890	269
Yugoslavia					
Concentrates	78 325	9 991	30 701	20 137	23 994
Unwrought	56 176	33 042	27 087	25 747	36 478
Unwrought alloys	4 984	4 507	4 725	1 438	3 583
Scrap	54	...	8	10	0
Algeria					
Unwrought	3 990	84	2 192	3 830	...
Egypt					
Unwrought & scrap (k)	1 140	3 499	559	2 002	2 790
South Africa					
Ore & concentrates	76 770	11 076	8 827	199	—
Unwrought	10 066	4 221	3 821	3 535	967
Unwrought alloys	32	23	32	104	111
Scrap	1 088	369	709	197	210
Canada					
Ores, concentrates, scrap (d)	49 139	16 519	13 930	16 487	18 398
Unwrought	22 106	10 908	9 122	18 821	21 439
Unwrought alloys	8 839	5 937	6 663	8 069	9 940
Scrap	5 191	3 728	4 743	3 765	7 586
Mexico					
Unwrought	5 419	58	9	49	...

Imports of Copper

Country	1974	1975	1976	1977	1978
USA					
Ore & concentrates (d)	48 463	58 856	64 126	38 177	20 916
Matte (d)	2 381	8 248	16 586	16 175	...
Unwrought -					
Unrefined (d)	188 540	80 695	40 355	41 898	(k) 89 407
Refined	275 737	132 416	346 112	354 506	414 697
Alloys	9 956	1 139	3 833	4 097	7 251
Scrap	37 788	18 352	26 654	25 953	28 619
Argentina					
Unwrought, refined	44 696	38 932	28 526	...	...
Brazil					
Unwrought, refined	131 418	127 664	150 552	182 299	156 989
Colombia					
Unwrought & scrap	4	...	1 192	...	...
Uruguay					
Unwrought	...	22	1	61	...
China					
Refined (m)	112 100	36 900	32 100	37 300	57 300
Hong Kong					
Unwrought	1 533	146	163	156	106
Scrap	2 242	2 365	2 079	2 988	1 644
India					
Unwrought (e)	39 466	11 318	29 703	32 609	...
Scrap	28	1 139	7 113	...	...
Indonesia					
Unwrought	624	971	462	348	292
Iran (f)					
Unwrought	382	1 118	873	...	...
Scrap	1 529	2 691	2 499	...	...
Israel (h)					
Unwrought	310	...	...	...	226
Scrap	78	...	...	47	14
Japan					
Ore & concentrates	3 123 600	2 605 399	2 587 392	2 823 007	2 817 967
Matte	16 392	—	—	—	141
Unwrought	292 356	207 990	232 344	273 395	333 073
Unwrought alloys	11 098	4 261	678	45	50
Scrap	35 198	38 953	33 798	40 991	55 049
Korea, Republic of					
Ore	21 843	29 030	67 859	90 804	...
Unwrought	11 364	6 900	10 501	21 520	...
Scrap	24 079	24 643	28 988	33 132	...
Malaysia (b)					
Unwrought	63	58	34	71	...
Philippines					
Unwrought	4 781	3 404	4 789	2 012	6 464
Singapore					
Unwrought	268	399	353	319	165
Scrap	...	1 497	1 368	1 341	1 561
Syria					
Unwrought (k)	...	1 257	1 412	849	...
Taiwan					
Ores & concentrates	12 743	10 000	8 025	55 118	20 654
Unwrought	22 588	19 555	24 443	36 940	33 928
Scrap	2 324	5 662	5 705	10 426	14 083
Thailand					
Unwrought	672	2 739	2 851	4 363	...
Scrap	712	631	393	1 447	...

Copper

Imports of Copper

tonnes

Country	1974	1975	1976	1977	1978
Australia					
Unwrought	503	4	8	33	10
Unwrought alloys	73	52	66	458	120
Scrap	1 407	1 169	957	796	869
New Zealand (g)					
Unwrought	2 261	1 077	1 141	2 245	...

Note: In this table the description 'unwrought' copper corresponds to item 682.1 of the Standard International Trade Classification and includes both blister and refined copper. Additionally the term 'unwrought' as used here includes alloys unless these are separately specified. The term 'scrap' includes scrap alloys

- (a) Figures up to 1977 include matte
- (b) From 1975 includes Sabah and Sarawak
- (c) Including semi-manufactures
- (d) Cu content
- (e) Years ended 31 March following that stated
- (f) Years ended 20 March following that stated
- (g) Years ended 30 June of that stated
- (h) Figures may be incomplete as value only given in Israeli trade return for imports from some countries
- (i) Partial figure. Imports from certain countries are confidential
- (j) From 1977 includes cement copper
- (k) Including matte
- (l) IGS estimates, based on known exports from certain countries
- (m) Imports from western countries only

Production of Diamond

carats

Country	1974	1975	1976	1977	1978
Soviet Union	* 9 500 000	* 9 700 000	* 9 900 000	* 10 300 000	* 10 550 000
Angola	1 959 272	991 000	340 000	353 000	400 000
Botswana	2 718 000	2 413 839	2 384 000	2 691 000	2 784 928
Central African Republic	337 800	338 894	286 007	296 908	284 000
Ghana (a)	2 571 745	2 328 278	2 283 000	1 947 000	1 950 000
Guinea	* 80 000	* 80 000	* 80 000	* 80 000	* 80 000
Ivory Coast	278 533	209 023	60 000	17 800	—
Lesotho (b)	11 798	3 466	7 051	22 688	48 977
Namibia	1 569 961	1 747 739	1 693 994	2 001 217	1 898 211
Sierra Leone	1 716 230	1 377 191	999 441	746 290	778 073
South Africa	7 510 075	7 295 133	7 022 770	7 643 291	7 726 605
Tanzania	489 569	447 800	431 601	507 294	* 401 600
Zaire	13 596 935	12 810 319	11 821 000	11 932 000	10 599 000
Brazil	254 032	261 641	76 045	64 000	65 000
Guyana	29 976	20 762	13 897	16 679	17 226
Venezuela	1 199 973	1 060 000	849 000	687 000	738 000
India	20 975	19 994	20 487	18 297	16 542
Indonesia	* 15 000	* 15 000	* 15 000	* 15 000	* 15 000
World total (c)	44 500 000	41 100 000	38 300 000	39 300 000	38 400 000

Note: This table does not show production of synthetic diamond

(a) Includes diamonds produced by companies and private diggers

(b) Figures up to 1976 are exports

(c) Does not include an estimate for China

Exports of Diamond

carats

Country	1974	1975	1976	1977	1978
United Kingdom					
Industrial	9 285 309	8 117 468	4 221 088	20 588 095	12 840 840
Other	45 550 524	56 214 326	72 127 733	66 731 636	70 306 670
Belgium-Luxembourg					
Rough	5 478 689	8 458 788	15 330 053	22 333 014	24 577 800
Cut	2 277 308	2 255 639	2 627 110	3 143 400	3 076 942
Industrial	9 131 617	5 897 850	8 817 103	9 106 907	8 650 019
France					
Rough	50 090	290	7 825	40 628	29 758
Cut	34 075	60 565	34 075	92 190	35 874
Industrial	478 900	946 365	423 890	43 978	148 426
Germany, Federal Republic of					
Industrial	210 000	122 530	190 715	220 132	355 445
Other	85 000	129 090	158 595	142 898	149 643
Netherlands					
Industrial	1 829 149	1 386 012	4 540 473	4 185 224	1 071 953
Other	168 193	364 535	1 719 919	2 901 996	1 933 848
Portugal					
Industrial	563 152	397 679	70 455	68 081	...
Other	1 438 693	1 035 946	290 253	189 631	...
Sweden					
Gem	£1 682 006	£291 805	£330 470	£651 820	£1 088 300
Industrial	£39 884	£52 680	£36 860	£21 730	£94 500
Central African Republic	342 000	331 672	277 837	282 252	...
Congo	£494 000	£742 000	£740 000	...	...
Ghana					
Industrial	2 555 925	2 371 592	...	...	..
Ivory Coast	242 559	255 000	95 000	50 000	...
Lesotho	11 000	3 000	5 000	14 977	67 722
Liberia	635 723	420 014	320 298	326 214	...
Sierra Leone	1 631 202	1 466 645	919 871	521 402	...
South Africa					
Rough	£125 006 000	£149 656 000	£236 172 000	£434 501 000	£455 640 000
Cut	£76 044 000	£55 570 000	£58 425 000	£102 099 000	£171 573 000
Industrial	£16 696 000	£31 997 000	£24 967 000	£29 185 000	£15 735 000
Tanzania	339 169	595 045	445 625	407 533	293 311
Togo	£115 300	£56 400	...	...	...
Zaire					
Gem	8 050 000	5 156 891	2 810 000	2 558 200	...
Industrial	436 842	729 147	188 556	114 375	...
Canada					
Cut	27 398	26 976	38 333	41 843	...
of which: Re-exports	27 398	26 733	38 333	41 843	...
Industrial	228 413	370 936	251 198	203 183	...
of which: Re-exports	228 413	321 940	229 682	198 481	...
USA					
Rough	1 059 089	1 055 169	1 025 923	1 119 829	1 291 864
of which: Re-exports	1 059 089	1 049 903	1 025 183	1 113 988	1 179 038
Cut	402 179	388 186	485 735	436 800	307 433
of which: Re-exports	117 043	128 579	173 622	126 481	87 960
Industrial	3 837 451	3 374 784	3 076 661	3 508 044	2 955 584
of which: Re-exports	2 856 323	2 425 083	2 437 573	3 131 930	2 666 434
Bort	476 675	373 647	432 808	325 239	...
of which: Re-exports	465 445	370 619	355 816	319 525	...
Brazil	12 085	14 445	7 615	4 970	34 810
of which: Re-exports	—	—	6 015	3 895	6 825
Guyana	25 954	16 920	11 844	9 625	10 999
Hong Kong	351 161	334 789	443 349	354 560	338 938
of which: Re-exports	348 603	327 705	440 808	348 852	331 879
India					
Gem	£45 883 000	£47 359 000	£121 610 000	...	...
Israel (a)					
Cut	2 766 000	3 118 000	3 637 000	3 637 000	2 884 000

Exports of Diamond

carats

Country	1974	1975	1976	1977	1978
Japan					
Cut	7 460	3 200	1 664	798	232
Industrial	11 405	3 675	479	1 283	1 185
Malaysia (b)					
Rough	—	—	£51 700	£80 500	...
Cut	...	£38 500	£1 900	£10 700	...
Singapore					
Rough	£57 900	£73 800	£332 800	£1 400	£1 300
Cut	£908 500	£3 625 400	£888 500	£1 196 200	£2 003 700
Industrial	£194 700	...	£39 800	£19 700	£6 300
Australia					
Industrial	209 766	178 169	187 416	357 624	200 593

Note: Carats have been used as the unit in this table except where the only obtainable figure is the value. In these cases the national currency figure has been converted to £ sterling. (See explanatory notes, page iv)

(a) Figures may be incomplete as value only given in Israeli trade return for exports to some countries

(b) From 1975 includes Sabah and Sarawak

Diamond

Imports of Diamond

carats

Country	1974	1975	1976	1977	1978
United Kingdom	£773 322 227	£876 924 539	£1 124 873 744	£1 814 585 000	£2 400 929 566
Belgium-Luxembourg					
Rough	10 425 711	12 535 215	19 753 106	29 198 889	26 294 445
Cut	1 275 866	1 279 131	1 692 393	2 388 354	2 524 643
Industrial	8 573 186	7 778 513	9 392 852	9 493 268	10 183 231
France					
Rough	35 185	27 915	30 820	30 145	24 256
Cut	313 150	265 825	313 150	1 797 506	541 062
Industrial	859 370	851 845	781 350	1 030 531	675 580
Germany, Federal Republic of					
Industrial	900 000	891 525	774 880	933 158	1 175 419
Other	455 000	575 930	728 425	781 172	725 575
Netherlands					
Industrial	2 161 769	1 699 972	10 054 317	4 141 476	1 245 078
Other	292 654	382 094	4 601 628	10 485 734	3 839 227
Norway					
Industrial	10 000	55 000	10 000	10 000	10 000
Other	10 000	25 000	80 000	110 000	45 000
Portugal	2 193 843	1 097 118	363 618	968 853	...
Sweden					
Gem	£4 996 000	£5 500 165	£7 082 820	£9 591 630	£10 310 500
Industrial	£688 000	£740 460	£487 820	£607 980	£606 800
Yugoslavia					
Industrial	375 000	66 700	537 105	736 645	35 000
Other	...	...	15 000	80 000	100 000
Madagascar	20 000	160 000	...	105 000	...
South Africa					
Rough	47 500	74 000	27 000	75 000	29 000
Cut	14 000	9 000	13 000	67 500	48 500
Industrial	7 741 000	9 043 500	6 708 500	2 851 000	765 000
Tanzania					
Cut	47 490	124 355	213 660	91 050	...
Zambia					
Industrial	57 010 000	53 870 000	...	...	...
Canada					
Cut	128 872	157 978	191 538	208 971	165 170
Industrial	1 126 199	1 032 396	885 361	829 589	1 023 583
Mexico					
Cut	1 870	42 015	37 885	...	...
Industrial	4 895 000	170 000	6 715 000	...	...
USA					
Rough	2 450 152	2 341 415	2 464 053	2 909 360	2 478 830
Cut	2 142 517	2 266 265	3 111 993	3 526 802	3 209 183
Industrial	6 404 058	5 220 124	5 291 337	7 145 344	6 922 093
Bort	143 081	283 269	186 264	260 456	177 082
Argentina					
Industrial	90 000	...	145 000	...	...
Brazil					
Rough	26 500	41 515	6 390	2 590	3 695
Cut	421 725	16 185	4 940	3 300	7 400
Industrial	392 865	408 740	433 155	412 440	418 640
Costa Rica					
Industrial	125 000	15 000	135 000	40 000	...
China					
Gem (e)	* 67 532	* 43 807	* 13 019	—	* 12 321
Industrial (d)	* 3 900	* 119 900	* 31 800	—	* 99 100
Hong Kong					
Gem	1 022 549	1 005 204	1 227 553	1 291 573	1 296 252
Industrial	£258 500	£28 000	£70 000	£45 000	£149 000
India					
Gem	£26 071 000	£38 426 000	£90 739 000	...	...
Industrial & bort	490 000	795 000	480 000	...	...

Imports of Diamond

Country	1974	1975	1976	1977	1978
Iraq					
Cut	75 000	50 000	...	...	...
Israel					
Rough	(c) 6 120 000	(c) 6 894 000	(c) 10 003 000	(c) 12 251 000	(d) 8 493 000
Cut	(c) 56 000	(c) 63 000	(c) 107 000	(d) 146 000	(d) 217 000
Industrial	(c) 1 486 000	(c) 1 745 000	(c) 2 250 000	(d) 2 565 000	(d) 3 044 000
Japan					
Rough	20 950	23 875	32 977	41 863	27 423
Cut	518 310	619 845	683 028	690 704	742 070
Industrial	822 675	421 255	636 198	735 799	697 283
Korea, Republic of					
Industrial	...	50 000	136 025	40 330	...
Malaysia (a)					
Rough	—	£60 500	£596 800	£874 100	...
Cut	£1 012 100	£496 200	£331 900	£187 000	...
Industrial	£7 200	£2 600	£19 700	£14 200	...
Philippines					
Industrial	85 580	82 020	54 905	73 300	76 733
Singapore					
Rough	£256 600	£268 100	£48 500	£1 400	—
Cut	£4 149 600	£6 871 200	£6 895 000	£5 279 300	£11 422 100
Industrial	£7 600	£5 300	£184 900	£105 300	£146 900
Thailand					
Industrial	19 351	26 901	18 990	29 040	...
Australia					
Gem	77 646	94 307	93 800	79 415	76 046
Industrial	1 199 805	698 403	850 177	971 689	892 220
New Zealand (b)					
Industrial	£30 300	£37 000	£51 500	£77 100	...
Other	£1 045 400	£776 600	£831 600	£825 600	...

Note: Carats have been used as the unit in this table except where the only obtainable figure is the value. In these cases the national currency figure has been converted to £ sterling. (See explanatory notes, page iv)

(a) From 1975 includes Sabah and Sarawak

(b) Years ended 30 June of that stated

(c) Figures may be incomplete as value only given in Israeli trade return for imports from some countries

(d) IGS estimates, based on known exports from certain countries

(e) Exports from the United Kingdom

Diatomite

Production of Diatomite

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom	* 6 000	* 6 000	* 2 000	* 2 000	* 2 000
Denmark (a)					
Diatomite	6 119	4 409	5 196	6 858	5 980
Moler (e)	108 000	93 000	93 000	96 000	102 000
France (b)	205 205	188 075	210 255	* 210 000	* 200 000
Germany, Federal Republic of	(a) 10 586	53 035	21 190	17 762	14 326
Italy	31 715	29 970	* 32 000	* 30 000	* 30 000
Austria	1 986	1 570	1 882	242	536
Iceland	24 745	21 318	21 668	20 170	20 955
Portugal	1 933	2 090	3 150	3 390	2 500
Soviet Union	* 400 000	* 410 000	* 420 000	* 430 000	* 440 000
Spain (b)	27 297	20 370	18 931	28 281	* 20 000
Sweden	566	423	327	—	—
Algeria	3 400	4 900	4 300	4 100	4 000
Egypt	1 633	1 600	327	373	99
Kenya	1 657	1 799	2 668	2 441	1 723
South Africa	786	649	619	666	930
Canada	* 500	* 500	* 500	* 500	* 500
Costa Rica	* 1 000	* 1 000	717	680	610
Mexico	23 630	22 723	26 294	23 574	22 452
USA (c)	602 646	519 438	572 778	587 895	591 000
Argentina	17 069	15 905	13 850	15 716	* 15 000
Brazil	625	2 202	4 179	9 559	* 12 000
Colombia	550	600	650	630	630
Peru	2 410	17 239	* 18 000	18 800	19 000
Korea, Republic of	11 688	19 285	13 483	22 980	18 845
Australia	7 438	5 543	1 480	1 288	416
New Zealand	4 558	3 055	1 425	1 113	—
World total (d)	1 500 000	1 500 000	1 500 000	1 500 000	1 500 000

(a) Sales

(b) Including tripoli

(c) Sold or used by producers

(d) Excluding diatomite known to have been produced in Hungary, Norway, Romania and Japan

(e) Moler is an impure diatomite containing a large proportion of clay

Exports of Diatomite

Country	1974	1975	1976	1977	1978
United Kingdom	1 912	1 390	2 220	1 069	859
Belgium-Luxembourg	5 491	8 162	6 829	4 103	3 567
Denmark					
Diatomite	6 041	4 408	6 451	7 957	6 111
Moler	58 872	56 203	57 428	54 900	46 569
Moler bricks	42 783	25 849	24 937	28 872	27 255
France	19 428	18 186	17 577	19 363	24 982
Germany, Federal Republic of	5 157	4 883	4 805	3 909	3 999
Italy	1 273	1 441	1 174	991	1 185
Netherlands	191	222	207	294	520
Austria	313	729	681	1 058	1 027
Finland	34	10	34	8	8
Iceland	24 055	20 264	22 699	20 985	20 020
Norway	15	16	83	75	45
Portugal	64	21	1 018	1 189	1 212
Spain	1 766	1 239	2 919	2 286	1 658
Sweden	216	124	195	107	160
Yugoslavia	11	12	...	—	—
Algeria	5 380	4 146	850	795	...
Kenya	...	...	185	879	361
Costa Rica	7	780	1 280	1 028	...
Mexico	15 505	3 305	3 606	3 005	...
USA	169 739	133 211	135 360	138 269	138 865
Japan	981	908	1 151	1 024	1 298
Korea, Republic of	82	70	300	50	...
Taiwan	2	31	236	100	123

Diatomite

Imports of Diatomite

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom	13 950	12 034	12 221	9 918	9 090
Moler (a)(f)	4 209	2 622	1 541	1 118	1 282
Activated diatomite	12 490	11 222	14 750	...	...
Siliceous Insulating Bricks (g)	15 666	8 393	7 058	8 950	9 248
Belgium-Luxembourg	8 402	7 403	6 341	7 747	9 607
Denmark	4 024	3 869	4 059	4 607	4 212
France	6 116	7 688	6 861	5 254	8 878
Germany, Federal Republic of	59 961	57 842	54 507	46 813	39 100
Italy	6 635	2 973	3 273	3 728	5 391
Netherlands	13 736	15 482	15 964	15 769	16 241
Austria	6 741	5 675	6 474	9 570	7 206
Finland	1 361	1 114	1 077	1 281	1 295
Greece	251	300	387	404	590
Iceland	0	0	1	3	34
Norway	1 422	1 292	1 480	2 368	1 960
Poland	4 880	3 276	...	...	...
Portugal	3 847	2 772	3 032	3 786	3 534
Spain	2 801	2 815	2 434	2 689	3 061
Sweden	4 808	4 147	4 063	3 883	4 097
Switzerland	3 230	3 231	4 539	6 207	8 098
Turkey	294	231	818	362	204
Yugoslavia	731	109	77	87	152
Cameroon	521	...	...	...	...
Canary Islands	61	20	69	93	66
Ivory Coast	353	257	375	310	384
Morocco	352	197	426	297	405
South Africa	8 805	8 745	4 922	4 735	7 730
Togo	17 489	23 128	...	...	...
Tunisia	104	137	150	385	137
Zaire	1 097	977	940	905	...
Zambia	419	440	...	...	...
Canada	29 098	30 270	35 765	27 180	25 371
Costa Rica	433	300	440	204	...
El Salvador	316	1 295	2 335	1 500	...
Guatemala	746	490	519	416	...
Honduras	899	626	888	409	260
Mexico	247	338	270	292	...
Nicaragua	1 841	...	...	...	...
USA	3 348	3 477	4 676	591	...
Argentina	4 353	2 351	3 027	...	...
Brazil	1 577	1 913	1 554	2 127	1 365
Chile	108	...	...	...	...
Uruguay	99	154	116	154	...
Venezuela	5 284	3 978	...	...	...
Cyprus	42	90	83	...	...
Hong Kong	267	142	199	286	264
India (d)	2 318	1 121	1 127	826	...
Indonesia	337	463	375	525	508
Iran (c)	889	978	1 481	...	...
Israel	400	...	(h) 90	(h) 230	(h) 130
Japan	4 582	4 105	2 656	5 046	5 871
Malaysia (b)	307	24	177	385	...

Diatomite

Imports of Diatomite

tonnes

Country	1974	1975	1976	1977	1978
Philippines	1 974	1 306	2 485	2 255	1 715
Saudi Arabia	...	22 418	3 773	2 490	...
Singapore	490	604	232	339	320
Taiwan	646	1 022	1 372	1 428	2 284
Thailand	11	5	21	18	...
Australia	13 316	8 468	9 059	9 587	13 707
New Zealand (e)	737	1 210	558	793	...

(a) In bulk

(b) From 1975 includes Sabah and Sarawak

(c) Years ended 20 March following that stated

(d) Years ended 31 March following that stated

(e) Years ended 30 June of that stated

(f) Based on Danish exports

(g) Mainly moler bricks from Denmark

(h) IGS estimates, based on known exports from certain countries

Production of Feldspar

tonnes

Country	1974	1975	1976	1977	1978
France (c)	105 562	192 001	201 855	192 000	211 000
Germany, Federal Republic of (b)	374 844	395 883	419 976	393 793	385 590
Italy	241 577	185 209	182 605	213 593	251 083
Austria	—	—	3 800	3 645	2 886
Finland	63 557	68 577	68 213	71 890	71 330
Norway (d)	168 116	44 957	37 690	70 799	* 71 000
Poland	* 30 000	* 30 000	* 30 000	* 30 000	* 30 000
Portugal	29 900	16 374	10 051	10 803	17 225
Romania	* 58 200	* 58 000	* 58 000	* 60 000	* 60 000
Soviet Union	* 275 000	* 280 000	* 280 000	* 290 000	* 300 000
Spain (c)	72 296	86 275	90 964	93 222	* 90 000
Sweden (e)	31 964	44 742	44 746	52 167	* 52 000
Turkey	—	—	57 800	75 200	* 75 000
Yugoslavia	50 000	52 000	25 000	56 000	48 000
Egypt	2 228	850	2 128	2 633	3 337
Kenya	2 842	1 616	1 115	1 869	964
Mozambique	840	* 850	* 850	* 900	* 900
Nigeria	* 5 000	* 5 000	* 5 000	* 5 000	* 5 000
South Africa	39 540	30 354	46 138	51 230	52 545
Zambia	1 256	851	1 027	832	799
Mexico	185 304	143 808	73 239	114 319	127 554
USA (e)	691 931	607 721	671 030	665 900	666 800
Argentina	56 953	63 845	68 224	77 359	* 77 000
Brazil	97 292	76 429	85 114	99 767	...
Chile	2 806	382	96	2 452	903
Colombia	28 700	30 000	30 000	26 508	26 455
Peru	4 088	3 905	* 4 000	4 320	* 4 000
Uruguay	1 757	1 759	1 145	1 625	* 2 000
Venezuela	...	...	65 608	26 020	70 262
Burma (a)	660	864	1 709	513	1 422
Hong Kong	5 566	2 059	2 299	3 378	3 157
India	54 496	42 572	55 307	54 710	47 783
Japan	551 921	360 466	393 698	365 445	415 950
Korea, Republic of	24 617	20 138	26 208	49 374	69 200
Pakistan	3 396	2 704	2 705	3 699	* 3 700
Philippines	10 245	3 907	15 240	15 073	17 206
Sri Lanka	779	1 270	3 199	3 679	3 160
Thailand	6 998	13 025	12 257	17 619	32 583
Australia	4 145	3 054	4 519	1 877	2 770
World total (f)	3 280 000	2 870 000	3 100 000	3 210 000	3 400 000

(a) Years ended 31 March following that stated

(b) Including feldspar sand and pegmatite

(c) Including pegmatite

(d) Underground

(e) Sold or used by producers

(f) Excluding feldspar known to have been produced in Czechoslovakia, Namibia
China and the United Kingdom

Exports of Feldspar

Country	1974	1975	1976	1977	1978
United Kingdom	4 380	2 759	2 516	2 413	1 956
Belgium-Luxembourg (a)	11 902	8 867	6 744	6 975	8 544
France	43 153	38 362	37 528	43 640	52 453
Germany, Federal Republic of	22 884	10 324	13 553	20 080	17 696
Italy	32 929	21 926	23 633	28 793	28 483
Netherlands (b)	15	30	241	2 714	2 524
Austria (a)	80	100	1	23	—
Finland (a)	46 369	49 169	51 681	52 466	54 082
Norway					
Crude	33 992	35 336	32 040	23 728	25 300
Ground	80 017	69 946	53 967	50 480	53 436
Portugal (a)	7 800	3 000	1 946	3 931	2 146
Spain (a)	5 656	1 406	2 474	5 720	6 989
Sweden (a)	39 060	31 776	30 106	40 253	37 832
Switzerland (a)	288	380	593	509	397
Yugoslavia	17 449	10 483	6 974	8 932	7 904
South Africa	3 558	1 878	3 247	2 543	2 712
USA (a)	17 312	8 748	5 711	5 627	9 372
Hong Kong (c)	406	161	1 667	3 928	6 385
of which: Re-exports	276	72	384	2 556	4 175
India	9 600	6 509	11 983	...	...
Japan	7 409	4 495	9 512	11 224	15 157
Korea, Republic of	10 350	5 268	10 951	17 955	...
Singapore	90	196	691	1 049	585
Thailand	1 355	962	221	4 610	...

(a) May include some leucite and nepheline

(b) Figures up to 1976 exclude exports to Belgium-Luxembourg, if any

(c) Including fluorspar

Imports of Feldspar

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom	137 519	132 310	132 725	132 041	125 735
Belgium-Luxembourg (a)	78 559	61 531	66 232	70 659	64 403
Denmark	7 025	9 497	10 416	9 557	8 903
France	15 211	8 669	10 806	17 323	17 024
Germany, Federal Republic of	59 120	49 279	41 250	48 666	54 364
Italy	13 542	6 678	7 745	9 238	7 983
Netherlands (b)	7 852	4 703	20 910	11 701	25 630
Austria (a)	9 776	6 488	6 650	6 713	5 948
Finland (a)	38	46	27	162	1 917
Greece (a)	7 183	7 497	10 810	12 325	13 404
Poland	14 152	15 800	16 383	16 714	15 399
Portugal (a)	1 545	2 301	1 976	2 142	2 687
Spain (a)	16 448	16 633	13 452	13 693	15 203
Sweden (a)	4 947	4 488	11 803	11 674	7 166
Switzerland (a)	18 391	9 250	12 308	14 785	10 065
Turkey	96	85	105	13	...
Yugoslavia	81	1 070	629	1 189	1 001
Algeria (a)	1 344	952	1 371	2 585	...
Morocco (a)	119	27	25	58	20
South Africa (a)(c)	1 159	95	135	26	40
Tunisia (c)	1 458	800	750	1 070	1 686
Mexico	1 718	2 259	1 416	600	...
USA	83	263	84	220	35
Venezuela	400	147	...	...	...
Hong Kong (c)	1 127	1 910	2 312	3 975	6 327
Indonesia (a)	1 355	1 144	2 584	6 014	6 766
Iran (a)(c)(e)	641	1 972	2 224	...	...
Israel (a)	2 700	(g) 459	(g) 610	(g) 2 264	(h) 440
Japan (a)	20 633	5 091	5 346	12 335	9 064
Malaysia (f)	6 763	2 497	6 333	7 037	...
Philippines (c)	4 456	2 649	3 695	2 968	2 940
Singapore	4 462	2 013	4 906	5 057	4 448
Taiwan (a)(c)	20 153	7 933	17 885	28 471	48 280
Thailand (a)	910	737	1 207	300	...
Australia (a)	12 913	10 591	4 577	10 250	...
New Zealand (a)(c)(d)	2 157	1 608	1 243	1 925	...

(a) May include some leucite and nepheline

(b) Figures up to 1976 exclude imports from Belgium-Luxembourg, if any

(c) Including fluorspar

(d) Years ended 30 June of that stated

(e) Years ended 20 March following that stated

(f) From 1975 includes Sabah and Sarawak

(g) Figures may be incomplete as value only given in Israeli trade return for imports from some countries

(h) IGS estimate, based on known exports from certain countries

Production of Fluorspar

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom (a)	227 000	235 000	217 000	206 000	189 269
France (b)	690 000	730 000	675 000	531 600	529 600
Germany, Federal Republic of	74 118	74 642	64 210	83 750	75 722
Italy	249 831	231 253	210 812	185 749	171 216
Czechoslovakia	* 90 000	* 90 000	* 90 000	* 100 000	* 100 000
German Democratic Republic	* 90 000	* 90 000	* 90 000	* 100 000	* 100 000
Romania	* 15 000	* 15 000	* 15 000	* 20 000	* 20 000
Soviet Union	* 450 000	* 475 000	* 490 000	* 500 000	* 510 000
Spain	360 574	334 864	293 469	310 461	382 166
Sweden	4 074	3 405	3 324	2 414	—
Turkey	* 2 000	1 405	1 300	1 700	1 253
Egypt	1 121	2 365	1 557	2 365	2 270
Kenya	38 500	54 600	75 027	124 000	108 274
Morocco	19 050	47 421	51 450	40 000	54 400
South Africa	207 933	202 583	290 718	350 679	393 276
Tunisia	28 318	30 161	34 538	28 887	34 000
Zimbabwe	* 180	* 180	* 200	* 200	* 200
Canada	154 300	55 100	59 700	59 500	—
Mexico	1 112 247	1 088 816	896 535	660 087	702 330
USA	182 449	126 927	170 796	153 758	117 900
Argentina	40 672	54 358	40 077	44 473	* 45 000
Brazil	105 873	109 176	49 396	* 30 000	* 30 000
China	* 300 000	* 350 000	* 350 000	* 350 000	* 360 000
India	14 458	14 345	17 632	18 791	17 333
Korea, Dem. P.R. of	* 30 000	* 30 000	* 30 000	* 40 000	* 40 000
Korea, Republic of	32 981	28 296	20 270	12 981	11 368
Mongolia	* 250 000	* 302 000	* 302 000	* 320 000	* 360 000
Pakistan	68	11	10	* 20	...
Thailand	428 691	286 149	200 364	239 805	* 225 000
World total (c)	5 200 000	5 000 000	4 700 000	4 500 000	4 600 000

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

(b) Washed or sorted

(c) Excludes fluorspar known to have been produced in Bulgaria

Fluorspar

Exports of Fluorspar

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom	84 996	48 443	34 531	23 468	7 930
France	146 743	109 339	92 135	93 343	95 284
Germany, Federal Republic of	15 907	20 925	14 478	10 979	14 789
Italy	75 512	84 416	104 609	55 749	60 951
Spain	249 461	224 302	226 175	200 722	193 485
Sweden	352	381	651	336	538
Kenya (a)	37 019	49 163	90 465	100 208	102 900
Morocco	5 500	29 295	27 548	78 201	69 823
South Africa	123 588	126 554	215 915	288 626	384 387
Tunisia (a)	25 566	12 050	16 670	14 000	—
Mexico	1 077 146	902 253	663 166	602 254	...
USA	10 712	8 215	4 601	6 026	7 518
Argentina	995	2 034	5 739	...	...
Brazil	31 360	11 075	203	50	—
China (b)	* 295 500	* 194 000	* 220 000	* 250 000	* 262 000
Korea, Dem. P.R. of (b)	* 6 400	* 1 500	...	...	...
Korea, Republic of	9 776	10 730	6 607	3 864	1 152
Thailand	305 541	211 699	284 287	241 459	...

(a) Including feldspar

(b) IGS estimates, based on known imports into certain countries

Imports of Fluorspar

Country	1974	1975	1976	1977	1978
United Kingdom	2 561	70	20	5 795	3 782
Belgium-Luxembourg	15 433	9 101	16 202	14 855	9 953
Denmark	2 368	2 885	3 969	2 179	4 462
France	4 343	16 089	2 152	14 845	1 796
Germany, Federal Republic of	285 472	261 093	244 644	206 708	240 385
Italy	64 361	36 066	50 062	30 634	46 973
Netherlands (b)	26 177	23 232	26 452	15 063	13 863
Austria	14 395	14 533	14 609	13 172	16 077
Finland	5 191	4 385	3 775	6 383	2 204
Greece	107	1 224	1 224	1 877	...
Norway	41 173	48 180	38 306	42 270	44 972
Poland	48 911	45 130	48 548	72 315	86 640
Soviet Union	487 361	493 890	500 000	550 000	550 000
Sweden	14 373	13 357	15 054	10 502	13 651
Turkey	654	160	110	609	...
Yugoslavia	5 708	6 638	5 618	6 861	3 140
South Africa (a)(c)	1 159	95	135	26	40
Tunisia (c)	1 458	800	750	1 070	1 686
Canada	142 246	157 222	137 310	124 494	170 236
USA	1 202 140	1 005 836	889 170	912 786	821 493
Chile	3 876	...	...	...	...
Venezuela	828	390	...	...	...
Hong Kong (c)	1 127	1 910	2 312	3 975	6 327
India	16 857	4 206	4 062	...	...
Iran (a)(c)(e)	641	1 972	2 224	...	...
Japan	541 304	362 500	383 390	373 228	371 387
Malaysia (a)(d)	7 458	1 308	2 533	7 698	...
Philippines (c)	4 456	2 649	3 695	2 968	2 940
Taiwan (a)(c)	20 153	7 933	17 885	28 471	48 280
Australia	29 076	20 042	36 046	27 029	32 711
New Zealand (a)(c)(f)	2 157	1 608	1 243	1 925	...

(a) May include some leucite and nepheline

(b) Figures up to 1976 exclude imports from Belgium-Luxembourg, if any

(c) Including feldspar

(d) From 1975 includes Sabah and Sarawak

(e) Years ended 20 March following that stated

(f) Years ended 30 June of that stated

Gold

Production of Gold

kilograms

Country	1974	1975	1976	1977	1978
France	1 521	1 556	1 898	1 569	1 855
Germany, Federal Republic of	41	66	76	* 74	...
Finland	645	690	820	852	905
Portugal	357	356	312	274	245
Romania	* 1 900	* 1 900	* 1 900	* 2 000	* 2 000
Soviet Union	* 300 000	* 300 000	* 300 000	* 300 000	* 300 000
Spain (e)	4 140	3 361	3 963	3 371	...
Sweden	2 126	1 965	1 934	2 113	...
Yugoslavia	4 041	3 856	3 963	5 033	* 6 300
Angola	* 62	* 31	* 31	* 31	...
Burundi	11	11	13	* 14	...
Cameroon	2	3	8	6	...
Congo	19	16	8	18	...
Ethiopia (b)	525	621	842	270	240
Gabon	327	130	96	80	...
Ghana	19 098	16 326	16 561	14 957	12 505
Liberia (a)	* 93	* 140	* 140	* 140	...
Madagascar	2	5	2	2	4
Mauritania	* 1 620	* 1 305	* 690	* 620	...
South Africa	758 559	713 447	713 390	699 887	704 449
Tanzania	2	2	0	0	...
Zaire	4 064	3 826	2 746	2 715	2 286
Zambia (c)	* 265	* 265	341	244	...
Zimbabwe	* 25 000	* 25 000	* 20 000	* 20 000	* 20 000
Canada	52 826	51 433	52 621	53 921	52 875
Costa Rica	560	* 560	* 300	* 400	...
Dominican Republic	—	6 080	12 871	10 839	10 800
El Salvador	190	271	95	67	...
Honduras	31	78	71	77	...
Mexico	4 182	4 501	5 064	6 616	6 296
Nicaragua	2 570	2 186	2 359	2 046	2 300
USA	35 051	32 729	32 598	34 225	30 018
Bolivia	1 309	1 649	896	431	770
Brazil	5 861	5 351	4 922	* 5 300	* 6 500
Chile	3 696	4 064	4 017	3 507	3 100
Colombia	8 244	9 624	9 274	7 992	7 563
Ecuador	241	254	361	238	...
French Guiana	35	76	88	150	90
Guyana	381	562	487	370	479
Peru	3 123	3 135	2 511	2 993	* 2 500
Surinam	10	5	1	12	9
Venezuela	515	570	513	544	* 300
China	* 1 500	* 1 500	* 1 500	* 1 900	* 1 900
India	3 145	2 825	3 132	3 014	2 724
Indonesia	265	329	355	256	254
Japan	4 346	4 464	4 282	4 635	4 562
Kampuchea, Democratic	* 124	* 15	* 30	* 30	...
Korea, Dem. P.R. of	* 5 000	* 5 000	* 5 000	* 5 600	* 5 600
Korea, Republic of	740	415	583	665	852
Malaysia	135	114	141	153	210
Philippines	16 682	15 632	15 589	17 373	18 957
Sarawak	31	37	30	23	30
Taiwan	710	688	838	466	417

Production of Gold

kilograms

Country	1974	1975	1976	1977	1978
Australia	15 944	16 386	15 637	19 417	20 253
Fiji	2 144	2 138	2 045	1 519	872
New Zealand	146	85	102	223	219
Papua New Guinea (f)	21 093	19 827	20 103	20 773	* 24 000
Solomon Islands	27	25	24	14	* 18
World total (d)	1 300 000	1 300 000	1 300 000	1 300 000	1 300 000

(a) Years ended 31 August of that stated

(b) Years ended 6 July of that stated

(c) Contained in blister copper, refinery muds and electrolytic copper

(d) Gold is also produced in Bulgaria, Czechoslovakia and in small quantities in Argentina, Burma, German Democratic Republic, Hungary, Kenya, Mali, Mozambique, Niger, Nigeria, Sudan and Thailand

(e) Gold content of bullion produced from 1975

(f) Years ended 30 June of that stated

Gold

Exports of Gold

kilograms

Country	1974	1975	1976	1977	1978
United Kingdom					
Metal –					
Refined	678 324	510 206	563 674	659 948	640 573
Other	4 975	4 457	3 333	2 659	13 928
Belgium-Luxembourg					
Metal	23 550	14 786	12 446	12 415	13 902
France					
Metal	137 222	110 282	91 954	40 790	23 350
Germany, Federal Republic of					
Metal	30 514	20 819	22 883	23 710	50 335
Italy					
Metal	904	786	574	429	2 063
Netherlands					
Metal	13 245	16 932	16 653	22 605	26 450
Austria					
Metal	192	245	267	473	367
Finland					
Metal	22	238	39	110	130
Norway					
Metal	67	63	208	255	159
Sweden					
Metal	1 000	2 000	2 000	2 000	2 000
Switzerland					
Metal	32 456	22 876	50 237	82 104	(c) 5 809
Ghana					
Metal	21 650	15 962	...	...	...
Zaire					
Metal (d)	...	* 600	* 8 700	* 100	...
Canada					
Ores & concentrates (b)	5 847	6 544	5 724	5 098	8 316
Metal	39 441	49 488	57 655	48 854	50 446
Nicaragua					
Metal	2 255	2 153	1 920	...	...
USA					
Ore (a)	9 583	12 254	10 498	12 310	15 086
Metal	110 581	96 479	99 323	257 390	156 282
Colombia					
Ore	...	...	417 800	...	...
Metal	...	...	204	...	...
Guyana					
Metal	2 572	344	16	2	1
Peru					
Ore	1 142	1 006	...	...	...
Hong Kong					
Metal (Re-exports)	56 073	14 923	12 081	445	2 611
Japan					
Metal	...	...	5 088	4 817	6 378
Philippines					
Ores & concentrates (b)	11 638	10 431	12 290	13 045	12 789
Metal	5 191	4 833	4 358	2 921	38

Exports of Gold

Country	1974	1975	1976	1977	1978
Australia					
Ores, concentrates & unrefined metal (b)	5 914	5 155	4 549	4 857	2 435
Refined metal	5 641	3 187	10 147	8 865	2 636
Fiji					
Metal	2 143	2 139	2 045	...	...
Papua New Guinea					
Metal (e)	21 093	19 827	20 103	20 773	...

Note: In this table the term 'metal' as used here includes both unwrought and partly worked gold and alloys but excludes gold coin

(a) Including scrap

(b) Gold content

(c) Partly worked only

(d) IGS estimates, based on part figures given in trade account

(e) Years ended 30 June of that stated

Gold

Imports of Gold

kilograms

Country	1974	1975	1976	1977	1978
United Kingdom					
Metal –					
Refined	554 558	479 216	602 607	641 999	511 235
Unrefined	5 996	7 706	5 455	4 435	2 215
Other	4 128	2 114	2 241	7 139	4 599
Belgium-Luxembourg					
Metal	108 844	81 585	40 421	31 468	25 768
Denmark					
Metal	...	...	2 546	2 901	2 472
France					
Metal	158 190	118 780	99 595	77 439	71 401
Germany, Federal Republic of					
Metal	100 709	67 002	91 787	111 427	113 863
Italy					
Metal	50 087	86 458	162 190	187 692	214 206
Netherlands					
Metal	21 069	30 095	33 843	23 464	35 720
Austria					
Metal	66 215	8 392	30 071	10 709	8 292
Finland					
Metal	851	776	1 088	952	1 312
Malta					
Metal	880	551	527	607	876
Norway					
Metal	836	651	1 210	1 983	1 194
Sweden					
Metal	1 000	1 000	2 000	1 000	1 000
Switzerland					
Metal	4 342	3 779	2 887	4 245	(b) 1 294
Ivory Coast					
Metal	5	60	196	228	301
Kenya					
Metal	345	154	20	9	8
Madagascar					
Metal	113	575	37	470	—
Morocco					
Metal	48	3 447	5 748	5 150	2 762
South Africa					
Metal	243	193	249	74	58
Tunisia					
Metal	636	992	624	767	1 173
Canada					
Ores & concentrates (e)	3 149	4 849	1 395	1 741	348
Metal	19 159	13 161	6 755	11 911	41 274
USA					
Ore (a)	10 244	9 737	5 173	7 448	14 066
Metal	72 223	73 062	77 439	131 093	138 320
Brazil					
Metal	1 258	3 057	3 245	2 590	3 156
Brunei					
Metal	...	5	93	162	140
Cyprus					
Metal	120	343	533	621	...
Hong Kong					
Metal	16 517	21 694	115 772	28 814	54 372
Indonesia					
Metal	...	293	313	10 250	5 720
Iran (d)					
Metal	4 422	32 379	95 436	...	...
Japan					
Metal	...	...	73 540	51 649	98 514
Malaysia (c)					
Metal	634	323	1 453	536	...

Imports of Gold

Country	1974	1975	1976	1977	1978
Saudi Arabia					
Metal	...	55 956	827 197	93 907	...
Syria					
Metal	41	200	6 600	22	...
Taiwan					
Metal	12 892	5 699	11 901	14 300	8 143
Thailand					
Metal	23	69	79	686	...
Australia					
Metal	2 524	2 842	2 853	1 736	820

Note: In this table the term 'metal' as used here includes both unwrought and partly worked gold and alloys but excludes gold coin

(a) Including scrap

(b) Partly worked only

(c) From 1975 includes Sabah and Sarawak

(d) Years ended 20 March following that stated

(e) Gold content

Graphite

Production of Graphite (Natural)

tonnes

Country	1974	1975	1976	1977	1978
Germany, Federal Republic of (b)	16 485	13 557	14 026	13 456	11 927
Italy	2 530	1 492	3 848	3 819	4 108
Austria (a)	29 550	30 586	33 057	35 288	40 501
Norway	9 698	8 925	9 071	9 097	10 118
Romania	* 6 000	* 6 000	* 6 000	* 6 000	* 6 000
Soviet Union	* 90 000	* 90 000	* 95 000	* 95 000	* 95 000
Madagascar	17 280	13 313	16 216	14 677	16 624
South Africa	1 554	523	530	911	583
Mexico	62 551	60 814	60 337	58 432	52 264
Argentina	60	15	145	117	* 90
Brazil	5 544	5 260	6 018	9 187	* 12 400
Burma (d)	305	102	161	95	...
China	* 40 000	* 50 000	* 50 000	* 50 000	* 50 000
India	26 456	31 255	38 273	48 455	60 057
Korea, Dem. P.R. of	* 75 000	* 75 000	* 75 000	* 75 000	* 75 000
Korea, Republic of	104 861	47 232	41 690	65 955	56 319
Sri Lanka	10 427	7 918	8 135	8 893	10 708
World total (c)	498 000	442 000	458 000	494 000	502 000

(a) Crude

(b) Including production from imported crude graphite

(c) Excludes graphite known to have been produced in Czechoslovakia, Namibia, USA and Zimbabwe

(d) Years ended 31 March following that stated

Exports of Graphite (Natural)

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom	1 824	2 795	1 717	2 544	2 648
Belgium-Luxembourg	474	250	508	68	67
France	1 079	589	1 029	662	1 051
Germany, Federal Republic of	10 790	6 107	7 284	7 483	7 927
Italy	2 858	1 792	1 314	1 943	2 822
Netherlands	327	217	493	191	594
Austria	16 914	15 500	16 374	16 859	17 787
Norway	9 570	8 395	9 019	9 147	10 870
Sweden	246	73	97	40	28
Madagascar	17 451	14 490	17 021	17 003	16 861
South Africa	954	434	—	374	311
Mexico	58 429	47 798	45 706	45 520	...
USA	11 058	9 603	11 100	12 808	8 776
China (a)	* 11 900	* 12 000	* 12 200	* 13 100	* 13 700
Hong Kong (Re-exports)	2 031	2 559	1 886	840	622
India	176	50	14	...	...
Japan	418	860	1 704	1 311	1 406
Korea, Dem. P.R. of	* 20 400	* 20 400	...	...	...
Korea, Republic of	69 959	35 500	41 141	64 644	50 807
Sri Lanka	9 776	6 744	7 609	8 769	...
Taiwan	44	314	737	614	785

(a) IGS estimates, based on known imports into certain countries

Imports of Graphite (Natural)

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom	15 706	13 998	13 244	17 827	17 165
Belgium-Luxembourg	1 454	1 915	1 069	891	3 959
Denmark	363	459	493	741	824
France	8 859	6 564	5 890	5 727	6 781
Germany, Federal Republic of	26 787	26 043	29 665	29 369	28 583
Italy	5 554	3 287	4 782	4 679	5 535
Netherlands	437	388	479	456	892
Austria	286	796	269	779	1 614
Finland	824	516	188	181	104
German Democratic Republic	5 173	5 216	5 553	5 725	6 214
Greece	331	205	246	339	233
Norway	493	892	981	615	664
Poland	11 014	11 583	12 207	10 025	11 906
Portugal	286	217	284	270	294
Spain	1 649	1 545	1 501	1 095	1 484
Sweden	1 271	861	1 501	855	549
Switzerland	272	179	219	175	190
Turkey	517	573	586	450	415
Yugoslavia	1 867	1 569	1 853	1 806	1 812
Algeria	57	98	122	473	...
Ethiopia	...	73	...	140	1
Morocco	9	11	11	5	13
Mozambique	7	12	2	6	...
South Africa	557	894	480	461	522
Sudan	58	—	—	110	14
Mexico	337	154	176	239	...
USA	73 545	58 322	70 486	76 538	87 711
Argentina	705	488	425	...	...
Brazil	182	142	109	48	96
Chile	249	...	...	...	...
Uruguay	29	12	11	14	...
Venezuela	356	279	...	...	...
Hong Kong	2 359	2 891	2 171	1 344	1 201
India	780	404	647	...	...
Indonesia	142	165	93	206	107
Iran (a)	1 847	2 522	756	...	...
Israel (d)	38	4	8	27	17
Japan	86 015	57 638	33 539	64 991	48 895
Malaysia (c)	365	357	427	375	...
Philippines	160	168	113	182	160
Singapore	199	198	215	162	151
Taiwan	7 471	5 825	5 451	5 943	9 512
Thailand	1 234	1 217	1 457	1 324	...
Australia	1 938	983	1 367	1 720	...
New Zealand (b)	264	141	55	108	...

(a) Years ended 20 March following that stated

(b) Years ended 30 June of that stated

(c) From 1975 includes Sabah and Sarawak

(d) Figures may be incomplete as value only given in Israeli trade return for imports from some countries

Production of Gypsum

Country	1974	1975	1976	1977	1978
United Kingdom					
Gypsum	3 506 000	3 258 000	3 324 000	3 236 000	3 230 000
Anhydrite	296 000	221 000	26 000	25 000	92 000
Belgium (a)	102 000	221 000	220 000	167 439	183 487
France	(a) 6 265 200	(a) 5 874 000	5 854 000	6 063 000	6 044 000
Germany, Federal Republic of					
Gypsum	1 967 314	1 726 835	1 709 316	1 796 706	1 749 136
Anhydrite	334 905	357 405	390 498	421 172	489 219
Irish Republic	384 000	331 000	355 000	342 000	385 790
Italy	4 226 993	4 172 174	4 200 000	4 180 474	* 4 170 000
Luxembourg	5 613	5 266	5 037	5 319	4 476
Austria					
Gypsum	678 931	619 713	661 849	655 413	626 475
Anhydrite	124 811	95 230	108 370	153 688	139 490
Bulgaria	* 288 000	* 276 000	* 288 000	* 300 000	* 300 000
Czechoslovakia (a)	629 000	637 000	660 000	682 000	697 000
German Democratic Republic (c)	* 651 000	305 756	301 595	320 000	...
Greece	441 759	416 357	444 686	518 680	* 500 000
Poland (d)	322 000	326 000	326 000	341 000	329 000
Portugal	143 039	149 873	101 699	115 935	94 575
Soviet Union	* 6 000 000	* 5 000 000	* 5 000 000	* 5 200 000	* 5 300 000
Spain	4 173 000	4 220 024	4 908 673	5 481 522	* 5 000 000
Turkey	* 38 000	* 38 000	* 32 000	65 327	60 332
Yugoslavia	403 000	545 727	504 730	579 092	...
Algeria	* 48 000	* 175 000	* 175 000	* 175 000	* 175 000
Angola	39 916	* 40 000	* 40 000	* 40 000	* 40 000
Egypt	561 515	600 426	466 604	508 635	...
Kenya	* 100 000	* 100 000	78 020	25 999	4 080
Libya	3 665	2 891	60 000	* 290 000	...
Mauritania	8 312	9 000	10 965	10 163	13 400
Niger	2 200	1 017	2 588	* 2 500	...
South Africa	563 448	538 622	482 375	439 688	388 734
Sudan	838	16 257	7 523	11 361	* 20 500
Tanzania	21 124	12 839	57 149	1 159	...
Zambia	3 771	7 536	4 650	4 634	1 734
Canada (a)	7 225 203	5 719 451	6 002 154	7 233 931	7 889 000
Dominican Republic	383 892	353 397	174 960	161 168	168 178
Guatemala	* 13 000	12 319	12 535	19 623	37 771
Jamaica	233 517	239 579	248 963	214 824	132 403
Mexico	1 386 813	1 255 903	1 414 237	1 495 730	* 1 600 000
Nicaragua	13 714	* 35 000	* 30 000	* 36 000	...
USA	10 885 000	8 846 000	10 868 000	12 147 000	13 509 000
Argentina	510 872	612 733	507 125	554 947	...
Brazil	395 753	403 847	545 463	* 550 000	...
Chile	135 000	181 000	120 771	* 120 000	...
Colombia	198 000	200 000	205 000	210 000	255 000
Paraguay	14 600	15 000	16 000	14 000	* 15 000
Peru	348 548	210 543	171 726	* 200 000	...
Venezuela	164 564	211 686	175 000	160 000	172 000

Gypsum

Production of Gypsum

tonnes

Country	1974	1975	1976	1977	1978
Burma (b)	6 798	11 219	14 878	28 449	...
China	* 800 000	* 900 000	* 1 000 000	* 1 000 000	* 1 000 000
Cyprus	22 353	30 481	66 043	86 364	...
India	1 073 441	816 000	727 000	778 000	854 000
Iran (e)	* 4 000 000	* 5 400 000	* 6 500 000	* 6 700 000	* 6 700 000
Israel	* 200 000	* 200 000	* 200 000	* 200 000	* 200 000
Japan	333 939	187 105	64 831	1 000	—
Pakistan (a)	262 608	328 403	447 000	286 000	275 000
Philippines	121 765	6 867	2 820	1 710	...
Saudi Arabia	19 304	30 482	30 481	30 481	...
Syria	60 480	93 600	64 800	88 800	...
Taiwan	3 975	3 687	2 303	7 412	3 385
Thailand	311 795	255 242	267 822	380 090	280 904
Australia	1 068 852	932 638	941 944	915 991	946 331
World total (f)	62 500 000	57 800 000	61 600 000	65 800 000	67 500 000

(a) Including anhydrite

(b) Years ended 31 March following that stated

(c) Crude estimated from production of calcined gypsum

(d) Calcined

(e) Years ended 20 March following that stated

(f) Excluding gypsum produced in Cuba, Ethiopia, Honduras, Jordan, Lebanon, Mongolia, Romania and Switzerland

Exports of Gypsum

Country	1974	1975	1976	1977	1978
United Kingdom					
Crude	4 863	4 708	3 600	3 886	4 069
Calcined	9 696	10 013	11 594	10 881	12 402
Belgium-Luxembourg					
Crude	24 163	12 542	13 854	3 874	10 136
Calcined	9 841	34 465	53 640	34 134	43 980
Denmark					
Crude & calcined	1 527	56	67	270	130
France					
Crude	1 030 698	842 878	723 997	898 203	798 698
Calcined	222 961	225 225	208 380	213 559	209 855
Germany, Federal Republic of					
Crude	) 333 012	122 456	75 623	94 146	129 380
Calcined	)	163 665	196 402	240 104	226 603
Irish Republic					
Crude	85 296	67 594	66 504	62 787	66 123
Italy					
Crude	5 297	151	712	353	247
Calcined	21 275	10 408	9 311	11 086	10 906
Netherlands					
Crude & calcined	3 479	11 081	13 538	1 902	2 366
Austria					
Crude	106 400	91 062	96 626	94 814	99 276
Calcined	28 851	36 496	56 842	70 987	90 468
German Democratic Republic					
Calcined	89 701	64 471	76 730	77 208	68 681
Greece	5	1 115	6 193	7 305	5 623
Norway					
Crude	13 362	20 297	17 014	11 454	—
Poland	523 133	342 142	261 541	62 711	26 470
Spain					
Crude & calcined	211 540	133 096	363 196	635 032	775 745
Switzerland					
Ground & calcined	5 673	3 190	2 447	923	620
Turkey					
Crude & calcined	1 500	1 500	50	1 950	5 000
Egypt	...	650	9 523	25 019	18 693
Mauritania	8 312	...	...	...	...
Morocco					
Crude	179 082	195 496	146 172	173 520	218 073
Calcined	2 158	2 460	3 140	2 037	4 160
South Africa	10 165	14 069	11 400	14 229	3 654
Tanzania	3 474	—	—	4 000	...
Canada					
Crude	5 212 454	3 691 676	3 798 243	4 994 324	5 978 604
Dominican Republic	269 881	150 252	137 892	113 297	195 998
Jamaica	219 439	248 355	215 504	(a) 216 000	(a) 151 000
Mexico					
Crude	1 227 280	959 214	1 086 799	805 835	...
Calcined	10 528	16	33	17	...
Nicaragua	13 814	...	...	...	...
USA					
Crude	12 919	8 661	19 314	16 632	17 867
Calcined	107 277	59 824	239 006	114 740	696 720
Argentina	16 809	23 373	16 727	...	...
Bolivia	3 251	570	...	—	1 000
Venezuela	15 500	16 960	...	...	...
Cyprus					
Crude	10 713	20	10 324	24 592	...
Calcined	20	—	884	701	...

Gypsum

Exports of Gypsum

tonnes

Country	1974	1975	1976	1977	1978
Iran (b)					
Crude	864	1 942)		
Calcined	613	1 636	) 176	...	...
Iraq					
Crude & calcined	3 000	7 243	...	...	...
Japan					
Crude	35	52	342	767	1 394
Calcined	2 808	2 532	15 370	5 707	4 778
Korea, Republic of					
Crude	144 290	680	15	71 897	...
Calcined	109 280	65 790	89 745	19	...
Saudi Arabia					
Crude & calcined	...	19 411	468	2 708	...
Singapore					
Crude & calcined	815	357	610	682	881
Syria	40 714	46 504	3 689	65 682	...
Taiwan	150	209	642	535	1 564
Thailand					
Crude	117 387	92 030	65 850	59 980	...
Calcined	85	507	439	457	...
Australia					
Crude & calcined	303 166	215 776	187 723	190 512	181 040

Note: In this table the term 'crude' as used here may include some anhydrite

(a) Imports into USA

(b) Years ended 20 March following that stated

Imports of Gypsum

Country	1974	1975	1976	1977	1978
United Kingdom					
Crude	60 922	13 201	44 490	37 854	55 725
Calcined	61 472	75 021	41 438	49 055	40 240
Belgium-Luxembourg					
Crude	420 162	345 896	353 155	320 512	341 702
Calcined	106 700	96 217	63 679	119 275	104 978
Denmark					
Crude	405 294	272 875	287 910	366 031	293 907
Calcined	4 081	3 666	4 011	3 948	4 105
France					
Crude	5 007	9 639	13 529	10 274	12 544
Calcined	3 282	4 442	5 225	3 737	4 356
Germany, Federal Republic of					
Crude	)	31 478	25 597	22 123	29 532
Calcined	) 285 100	271 842	302 108	323 163	344 731
Italy					
Crude	165	211	192	133	65
Calcined	3 520	8 786	14 353	16 057	17 895
Netherlands					
Crude	)			280 322	268 012
Calcined	) 355 551	376 549	363 211	126 173	122 327
Austria					
Crude	635	1 371	1 990	2 121	3 238
Calcined	24 302	6 774	9 413	5 366	8 187
Finland					
Crude	180 755	148 557	120 610	123 075	81 492
Calcined	3 853	3 115	3 063	2 295	2 066
Greece					
Crude	213	24	48	18	35
Calcined	1 239	853	885	886	1 166
Hungary					
Calcined	52 741	60 418	66 359	67 465	74 382
Iceland	8 691	10 986	6 873	8 453	7 481
Norway					
Crude	237 187	210 857	185 867	168 039	141 858
Calcined	4 542	4 084	3 337	2 775	2 504
Portugal					
Crude	23 299	19 932	24 569	25 922	) 29 844
Calcined	976	1 204	535	420)
Spain					
Crude & calcined	1 986	3 230	3 351	4 193	4 902
Sweden					
Crude	410 760	285 675	213 357	302 736	256 304
Calcined	17 174	9 721	6 522	6 342	5 970
Switzerland					
Crude	73 797	54 640	40 973	34 593	27 182
Ground & calcined	46 073	25 312	21 482	21 574	25 272
Yugoslavia	4 698	7 712	5 179	11	9
Algeria					
Crude & calcined	9 235	5 881	1 168	4 480	...
Cameroon					
Crude & calcined	8 799	5 493	5 804	7 748	20 867
Ghana					
Crude & calcined	17 502	16 590	...	...	...
Ivory Coast					
Crude	32 610	35 699	41 367	45 167	68 066
Calcined	2 974	3 426	3 465	4 284	5 098
Liberia					
Crude & calcined	10	1 008	2 955	1 596	...
Libya					
Crude & calcined	4 612	4 593	2 870	3 253	...
Madagascar	3 225	5 298	2 064	2 240	3 004

Gypsum

Imports of Gypsum

tonnes

Country	1974	1975	1976	1977	1978
Melilla	862	1 914	1 345	653	1 845
Mozambique					
Crude	15 391	8 939	6 952	3 994	...
Calcined	8	19	14	19	...
Senegal					
Crude	1 438	—	...	...	...
Calcined	473	608	...	...	...
South Africa					
Crude & calcined	6 179	5 616	5 826	5 605	5 218
Togo					
Crude & calcined	3 198	8 709	...	...	...
Tunisia					
Crude & calcined	40	169	190	199	169
Zaire					
Crude & calcined	7 086	12 705	22 413	395	...
Zambia	208	177	...	...	...
Canada					
Crude	56 251	55 338	54 769	24 042	70 995
Calcined	15 301	19 705	25 613	21 289	21 377
Costa Rica					
Crude	13 628	16 400	14 330	15 062	...
Calcined	577	508	601	582	...
El Salvador					
Crude	7 500	8 293	8 201	16 224	...
Calcined	93	132	184	284	...
Mexico					
Crude	25 729	15 028	12 721	9 824	...
Calcined	8 113	7 849	9 549	7 804	...
Panama	25 050	9 850	20 708	16 014	...
USA					
Crude	6 735 000	4 942 000	5 653 000	6 417 000	7 216 000
Ground & calcined	2 000	2 000	20 000	4 000	2 716
Brazil	4 133	625	68	12	960
Uruguay					
Crude & ground	15 387	21 616	29 314	24 269	...
Venezuela	570	589	...	...	...
Hong Kong	31 571	27 542	25 657	52 823	62 120
Indonesia	32 306	47 556	79 753	109 653	157 757
Iran (a)	983	1 546	1 275	...	...
Israel (d)	150	29	23	96	186
Japan					
Crude	110 657	14 507	35 029	30 181	15 148
Calcined	253	127	365	230	187
Jordan	...	690	6 292	1 185	1 992
Korea, Republic of	1 737	865	3 416	5 429	...
Kuwait	16 304	15 789	16 859	...	...
Malaysia (c)					
Crude & calcined	54 940	51 049	58 645	55 162	...
Philippines					
Crude & calcined	10 631	28 242	69 777	86 121	88 214
Singapore					
Crude & calcined	25 226	46 120	69 988	53 708	71 003
Sri Lanka	16 257	...	818	10 413	...
Taiwan					
Crude	79 567	15 333	55 774	24 169	24 522
Calcined	14 316	6 718	1 713	2 104	2 178
Thailand					
Crude & calcined	336	217	316	416	...

Imports of Gypsum

Country	1974	1975	1976	1977	1978
Australia	959	1 001	1 183	1 174	...
Fiji	5 768	2 490	281	...	...
New Zealand (b)					
Crude	199 219	168 574	129 579	110 421	...
Calcined	1 201	1 096	638	690	...

Note: In this table the term 'crude' as used here may include some anhydrite

(a) Years ended 20 March following that stated

(b) Years ended 30 June of that stated

(c) From 1975 includes Sabah and Sarawak

(d) Figures may be incomplete as value only given in Israeli trade return for imports from some countries

Production of Iron Ore

thousand tonnes

Country	1974	1975	1976	1977	1978
United Kingdom	3 602	4 490	4 582	3 745	4 239
Belgium	123	93	63	47	43
France	54 260	49 647	45 181	36 630	33 454
Germany, Federal Republic of (a)	4 439	3 288	2 256	2 493	1 601
Italy	598	632	514	478	353
Luxembourg	2 686	2 315	2 079	1 548	835
Albania (h)	* 400	* 650	* 760	* 760	...
Austria	4 245	3 833	3 784	3 449	2 788
Bulgaria	2 684	2 337	2 316	2 270	2 453
Czechoslovakia	1 688	1 773	1 904	1 994	2 023
Finland	569	348	602	761	712
German Democratic Republic	53	59	60	72	80
Hungary	545	642	602	525	534
Norway	3 904	4 109	3 972	3 635	3 775
Poland	1 296	1 192	674	659	529
Portugal (f)	53	56	49	52	* 50
Romania	3 265	3 065	2 835	2 467	2 511
Soviet Union	225 000	232 803	239 109	239 716	244 231
Spain	8 237	7 641	7 050	7 375	8 219
Sweden	36 153	30 867	29 861	24 839	21 487
Turkey	2 285	2 238	3 448	3 117	3 209
Yugoslavia	5 034	5 285	4 260	4 451	4 564
Algeria	3 820	3 188	2 789	3 200	3 050
Angola	5 606	5 604	* 5 500	...	...
Egypt	1 032	1 087	1 242	1 202	1 399
Liberia	25 706	18 400	20 783	17 384	* 20 800
Mauritania	11 741	8 677	9 420	7 467	6 400
Morocco	534	554	343	407	63
Sierra Leone (b)	2 014	1 339	—	—	—
South Africa (c)	11 553	12 298	15 663	26 481	24 206
Swaziland	2 077	2 240	1 936	1 441	1 266
Tunisia	795	616	512	344	400
Zimbabwe	* 600	* 600	* 600	* 550	* 550
Canada (g)	46 785	44 893	55 416	53 621	39 622
Mexico	4 982	5 054	5 466	5 381	* 5 000
USA	85 709	80 132	81 277	54 920	83 864
Argentina	415	286	506	531	550
Brazil	73 955	89 000	92 611	74 980	75 441
Chile	10 271	11 050	10 389	7 896	9 666
Colombia	444	537	498	460	454
Peru	9 525	7 753	4 776	6 185	4 923
Venezuela	25 983	24 772	18 684	13 690	13 520
China	* 60 000	* 65 000	* 65 000	* 65 000	* 65 000
Hong Kong	160	167	37	—	—
India	35 485	41 794	43 868	42 598	38 155
Indonesia (d)	365	353	292	312	191
Iran (i)	1 000	1 022	* 1 100	* 1 100	* 1 000
Japan (d)	778	682	745	686	594
Korea, Dem. P.R. of	* 9 400	* 9 400	* 9 500	* 9 500	* 10 000
Korea, Republic of	625	644	755	791	693
Malaysia	481	348	308	330	320
Philippines	1 608	1 352	571	—	5
Thailand	36	32	25	63	88

Production of Iron Ore

thousand tonnes

Country	1974	1975	1976	1977	1978
Australia	96 950	97 651	93 255	95 923	83 189
New Zealand	2 353	2 297	2 473	2 968	3 946
World total (e)	894 000	896 000	902 000	842 000	838 000

(a) Marketable production

(b) Exports

(c) Including by-product magnetite

(d) Including iron sand

(e) Iron ore also produced in other countries including Cuba, Lebanon and Vietnam

(f) Including manganiferous iron ore

(g) Including shipments of by-product iron ore

(h) Nickeliferous iron ore

(i) Years ended 20 March following that stated

Exports of Iron Ore

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom	374	249	383	767	384
Belgium-Luxembourg					
Iron ore	69 154	70 731	26 710	148 185	83 852
Burnt pyrites	173 713	156 033	178 193	169 979	153 437
Denmark					
Iron ore	6 033	12 656	8 442	4 764	10 323
Burnt pyrites	22 996	—	—	—	608
France					
Iron ore	19 833 116	15 990 720	15 849 360	12 122 375	11 370 828
Burnt pyrites	29 329	12 664	4 509	4 700	52
Germany, Federal Republic of					
Iron ore	5 086	4 551	3 836	3 292	7 176
Burnt pyrites	195 784	139 198	106 754	244 788	184 218
Irish Republic					
Burnt pyrites	29 019	27 645	27 776	31 092	37 352
Italy					
Iron ore	17 908	12 055	2	4 761	3 703
Burnt pyrites	243 860	223 723	142 878	125 993	67 216
Netherlands (b)	196 292	95 949	34 613	147 676	11 825
Austria	1 243	1 131	1 710	334	853
Finland	22	862	2 811	1 165	13 302
Greece					
Burnt pyrites	21 200	19 804	18 575	11 555	25 000
Norway					
Iron ore	2 657 165	3 267 338	2 729 241	2 695 573	3 074 126
Burnt pyrites	152 508	113 194	137 842	43 601	48 047
Portugal					
Burnt pyrites	42 997	37 681	106 254	64 555	15 000
Soviet Union	43 267 000	43 626 000	43 126 000	40 946 000	40 605 000
Spain					
Iron ore	2 917 660	1 959 610	2 187 541	1 466 371	2 024 815
Burnt pyrites	476 308	530 825	627 882	461 199	261 987
Sweden					
Iron ore	33 105 000	20 332 000	22 030 000	18 913 000	22 204 000
Burnt pyrites	418 000	430 000	388 000	330 000	355 000
Switzerland (b)	33	40	39	224	41
Yugoslavia					
Iron ore	141	30 000	...	—	—
Burnt pyrites	909	5 998	25 423	27 674	33 833
Algeria					
Iron ore	2 912 514	1 386 003	1 733 781	1 433 577	...
Burnt pyrites	74 109	236 012	42 870	—	...
Angola	5 271 400	* 2 500 000	...	...	...
Canary Islands					
Burnt pyrites	39 575	49 500	124 860	69 895	57 970
Liberia	25 591 746	18 400 778	20 533 153	17 663 184	20 764 765
Mauritania	11 667 891	8 677 064	9 660 808	8 423 415	...
Morocco					
Burnt pyrites	530 297	79 745	238 423	429 342	39 935
Sierra Leone	2 064 428	1 453 557	...	...	...
South Africa (e)	2 892 529	* 2 743 000	* 3 535 000	* 10 535 000	* 13 699 000
Swaziland	2 481 248	1 964 472	1 744 464	1 384 315	1 046 383
Tunisia	526 354	295 612	112 632	55 023	24 981
Canada	37 447 874	36 060 194	44 684 874	45 060 397	31 928 927
Mexico	4	2 674	11 497	935	...
USA (b)	2 360 517	2 578 374	2 960 061	2 177 714	4 281 635
Bolivia (c)	7 587	19 740	...	4 328	35 313
Brazil	59 439 451	72 521 995	67 085 514	58 540 946	66 371 318
Chile	9 390 299	9 401 000	8 942 000	7 570 000	6 520 000
Peru	(c) 6 332 631	5 331 965	4 302 644	6 103 347	...
Venezuela	26 277 000	19 405 000	15 672 000	* 11 880 000	...

Exports of Iron Ore

Country	1974	1975	1976	1977	1978
Hong Kong	179 107	164 562	55 547	—	—
India	21 900 000	22 796 000	23 403 000	...	...
Korea, Dem. P.R. of	* 304 500	* 202 700	...	...	...
Korea, Republic of	75 994	61 639	4 076	1 360	...
Malaysia (d)	176 366	94 008	8 936	141 488	...
Philippines					
Iron ore	1 121 117	1 305 085	835 806	1 982 596	3 279 988
Burnt pyrites	5 000	16 751	34 090	56 429	54 992
Singapore	...	...	18	7	40
Australia	83 654 000	80 363 000	81 231 000	78 908 000	75 101 000
New Zealand (a)	2 102 400	2 389 716	2 236 308	2 222 860	...

(a) Years ended 30 June of that stated

(b) Including burnt pyrites

(c) Fe content of concentrates

(d) From 1975 includes Sabah and Sarawak

(e) From 1975, IGS estimates, based on known imports into certain countries

Iron Ore

Imports of Iron Ore

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom					
Iron ore	19 951 686	15 770 712	18 578 558	15 542 322	15 453 310
Burnt pyrites	289 959	304 499	225 460	211 658	226 684
Belgium-Luxembourg					
Iron ore	33 429 641	25 520 025	26 978 608	21 522 153	24 242 568
Burnt pyrites	496 740	213 634	233 447	250 525	215 053
Denmark (a)	29 350	31 126	40 735	36 670	41 168
France					
Iron ore	15 821 542	13 169 862	13 888 931	15 431 925	14 603 972
Burnt pyrites	131 826	107 092	80 312	78 187	92 272
Germany, Federal Republic of					
Iron ore	57 719 818	44 321 709	46 775 277	39 748 814	42 133 179
Burnt pyrites	791 555	842 622	905 680	821 780	532 633
Irish Republic	...	101	1	60	—
Italy (a)	18 094 880	15 649 542	17 304 469	15 281 313	16 296 692
Netherlands (a)	7 061 432	7 372 230	6 532 791	6 921 394	5 577 835
Austria					
Iron ore	2 799 808	2 577 732	2 876 479	2 610 912	2 618 559
Burnt pyrites	211 160	181 487	119 143	113 074	54 424
Czechoslovakia	13 985 000	14 802 000	15 400 000	15 970 000	...
Finland	1 133 316	1 206 359	972 529	1 161 788	1 530 234
German Democratic Republic (b)	1 802 400	2 118 400	2 053 300	2 267 000	2 046 000
Greece	1 025 382	786 017	370 313	645 893	235 000
Hungary	4 105 000	4 261 000	4 234 000	4 258 000	4 200 053
Norway	35 821	37 766	163 512	119 993	121 106
Poland	15 609 000	15 423 000	15 829 000	16 943 000	17 198 000
Portugal	387 361	386 028	534 395	447 360	389 000
Romania	10 001 800	10 878 700	11 740 000	12 402 200	13 843 000
Spain (a)	5 280 498	6 205 514	6 149 472	4 898 661	4 627 766
Sweden					
Iron ore	82 000	319 000	189 000	120 000	121 000
Burnt pyrites	—	1 000	—	—	—
Switzerland (a)	39 489	44 640	31 835	31 406	59 552
Turkey	310 217	233 922	412 790	666 719	173 000
Yugoslavia	430 529	597 924	481 892	515 443	547 006
Kenya	2	—	10 500	7 644	35 602
Libya	6 305	30	9 000	2 844	...
Nigeria	...	16	1 944	...	...
South Africa	10 978	8 244	2	—	—
Tanzania	1 601	1 500	1 050	2 336	...
Canada	2 333 194	4 844 417	3 020 131	2 505 204	4 685 844
Mexico	37 203	34 144	159	7	...
USA (a)	48 799 831	47 492 262	45 101 857	38 512 962	34 155 820
Argentina	1 003 483	1 520 153	1 744 805	...	...
India	322	—	181	...	...
Japan					
Iron ore (c)	141 950 764	131 748 610	133 749 526	132 596 591	114 688 039
Burnt pyrites	68	4 173	8 924	17 556	2 891
Korea, Republic of	1 394 791	1 493 705	1 187 669	2 360 179	...
Philippines	...	...	...	2 406 905	3 405 249
Singapore	10 134	23 712	77	143 934	16 459
Taiwan					
Iron ore	143 862	143 342	151 143	1 176 079	2 488 737
Burnt pyrites	5 000	17 590	29 479	77 560	74 209
Australia	28 140	16 759	50 716	27 210	30 731

(a) Including burnt pyrites

(b) Fe content of concentrates

(c) Including manganiferous iron ore

Production of Pig-Iron and Blast-Furnace Ferro-Alloys

thousand tonnes

Country	1974	1975	1976	1977	1978
United Kingdom	13 902	12 131	13 835	12 232	11 434
Belgium	13 020	9 072	9 864	8 911	10 128
France (a)	22 518	17 921	19 023	18 257	18 497
Germany, Federal Republic of	40 221	30 068	31 849	28 959	30 218
Italy	11 761	11 411	11 696	11 473	11 403
Luxembourg	5 468	3 889	3 756	3 568	3 721
Netherlands	4 804	3 970	4 265	3 922	4 613
Austria (a)	3 443	3 056	3 273	2 969	3 077
Bulgaria (a)	1 483	1 509	1 558	1 614	1 493
Czechoslovakia	8 905	9 281	9 475	9 715	9 944
Finland	1 381	1 408	1 370	1 797	1 903
German Democratic Republic	2 280	2 456	2 528	2 628	2 560
Hungary	2 290	2 219	2 221	2 286	2 330
Norway (a)	648	638	656	512	556
Poland	8 213	8 206	8 320	10 079	11 668
Portugal	281	327	344	357	353
Romania (a)	6 081	6 602	7 415	7 784	8 155
Soviet Union	99 868	102 968	105 384	107 368	110 702
Spain (a)	6 900	6 842	6 626	6 705	6 249
Sweden	2 979	3 309	2 952	2 330	2 363
Switzerland (a)	35	35	23	27	35
Turkey (a)	126	160	473	...	...
Yugoslavia (a)	2 207	2 000	1 918	1 938	2 081
Egypt (a)	275	420	569	74	...
South Africa (a)	5 256	5 177	5 797	6 114	7 096
Zimbabwe	* 300	* 310	* 310	* 300	...
Canada (a)	9 452	9 150	9 826	9 661	10 338
Mexico (a)	3 208	2 962	3 528	4 329	5 002
USA (a)	86 615	72 505	78 807	73 780	79 600
Argentina (a)	1 047	1 045	1 367	1 385	1 657
Brazil (a)	5 816	7 053	8 170	9 787	* 10 000
Chile (a)	516	416	403	432	540
Colombia (a)	269	293	286	223	...
Peru (a)	303	302	223	244	...
Venezuela (a)	545	535	427	497	...
China (a)	* 30 000	* 32 000	* 30 000	25 050	34 790
India (a)	7 342	8 433	9 727	9 796	9 432
Japan (a)	90 437	86 876	86 576	85 886	78 588
Korea, Dem. P.R. of	* 3 000	* 2 900	* 3 000	* 3 100	...
Korea, Republic of (a)	987	1 186	1 937	2 425	2 741
Taiwan (a)	111	67	105	119	...
Thailand (a)	16	12	12	19	...
Australia (a)	7 250	7 475	7 417	6 753	7 337
World total	512 000	479 000	497 000	486 000	506 000

(a) Pig-iron only

Production of Steel Ingots and Castings

thousand tonnes

Country	1974	1975	1976	1977	1978
United Kingdom	22 323	20 098	22 274	20 411	20 311
Belgium	16 232	11 592	12 144	11 268	12 604
Denmark	535	559	722	686	863
France	27 023	21 530	23 221	22 094	22 841
Germany, Federal Republic of	53 232	40 415	42 415	38 985	41 253
Irish Republic	112	82	58	58	66
Italy	23 803	21 836	23 447	23 334	24 283
Luxembourg	6 448	4 624	4 566	4 329	4 790
Netherlands	5 840	4 823	5 189	4 927	5 590
Austria	4 698	4 068	4 477	4 093	4 335
Bulgaria	2 188	2 265	2 460	2 589	2 469
Czechoslovakia	13 640	14 323	14 693	15 054	15 294
Finland	1 656	1 618	1 644	2 196	2 333
German Democratic Republic	6 165	6 472	6 732	6 849	6 976
Greece	612	1 100	* 800	...	...
Hungary	3 157	3 730	3 712	3 782	3 884
Norway	956	907	898	711	813
Poland	14 566	15 004	15 639	17 841	19 251
Portugal	386	417	464	504	614
Romania	8 848	9 549	10 733	11 457	11 779
Soviet Union	136 206	141 325	144 805	146 655	151 400
Spain	11 473	11 137	11 002	11 670	11 158
Sweden	5 972	5 614	5 178	3 979	4 325
Switzerland	593	420	545	656	784
Turkey	1 464	1 464	1 405	1 397	1 628
Yugoslavia	2 837	2 916	2 751	3 184	3 452
Algeria	250	221	356	400	...
Egypt	* 400	348	457	263	...
South Africa	5 834	6 580	6 926	7 376	7 892
Tunisia	132	129	103	156	...
Zimbabwe	* 270	* 300	* 300	* 300	* 300
Canada	13 623	13 025	13 290	13 631	14 898
Mexico	5 138	5 272	5 298	5 601	6 571
USA	132 195	105 816	116 120	113 700	124 000
Argentina	2 036	2 070	2 431	2 676	2 783
Brazil	7 507	8 308	9 169	11 052	12 120
Chile	596	457	456	509	574
Colombia	244	266	252	209	265
Peru	450	432	349	379	...
Uruguay	14	16	15	17	...
Venezuela	1 058	1 075	937	855	840
Bangladesh	81	101	86	116	...
China	* 27 000	* 29 000	* 27 000	23 740	31 780
India	6 820	7 829	9 403	9 852	9 917
Indonesia	80	100	100	* 100	...
Iran	567	551	549	* 550	...
Iraq	...	* 210	* 200	* 200	* 200
Israel	* 75	* 60	* 80	* 100	...
Japan	117 131	102 314	107 399	102 405	102 103
Jordan	...	* 182	* 200	* 200	* 200
Korea, Dem. P.R. of	* 2 700	* 2 900	* 3 000	* 3 100	* 3 100
Korea, Republic of	1 935	2 010	2 698	2 737	3 138
Malaysia	183	195	200	* 200	...
Philippines	* 279	* 280	* 300	* 300	* 300
Saudi Arabia	...	* 160	* 160	* 160	* 160
Singapore	* 220	187	200	* 200	...
Syria	...	* 135	* 150	* 150	* 150
Taiwan	570	520	597	644	...
Thailand	220	258	280	* 300	...

Production of Steel Ingots and Castings

thousand tonnes

Country	1974	1975	1976	1977	1978
Australia (a)	7 755	7 843	7 774	7 313	7 589
New Zealand	194	185	214	* 200	...
World total	707 000	647 000	679 000	669 000	706 000

Note: The figures in this table refer to crude steel and cast semi-manufactures are not included

(a) Includes recovery from scrap

Production of Ferro-Alloys

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom					
Blast furnace ferro-alloys –					
Spiegeleisen	8 000	—	—	—	—
Ferro-manganese	83 000	85 000	122 000	97 000	69 000
France					
Blast furnace ferro-alloys –					
Spiegeleisen & ferro-					
manganese	533 000	427 000	367 000	373 000	397 000
Electric furnace & alumino-					
thermic ferro-alloys –					
Ferro-silicon (50% Si)	236 600	242 303	236 531	241 048	192 829
Silico-spiegeleisen &					
silico-manganese	36 743	51 251	36 164	42 205	18 863
Ferro-chrome & silico-					
chrome	114 490	56 485	111 975	105 716	96 980
Ferro-titanium, ferro-					
tungsten, ferro-					
molybdenum, ferro-					
vanadium (a)	9 550	7 092	7 222	6 358	4 216
Other ferro-alloys	82 520	77 880	93 097	92 883	123 781
Germany, Federal Republic of					
Spiegeleisen & ferro-					
manganese	320 000	210 000	220 000	175 000	209 000
Electric furnace ferro-					
alloys	283 000	257 000	239 000	210 000	139 000
Italy					
Spiegeleisen	5 203	3 208	2 635	5 930	...
Ferro-manganese	80 078	71 466	78 459	75 160	...
Ferro-silicon	65 372	70 970	78 934	76 511	...
Silico-manganese	41 100	36 289	41 386	40 050	...
Ferro-chrome	40 041	44 511	45 264	39 753	...
Ferro-titanium & silico-					
titanium	1 049	1 025	1 126	1 517	...
Ferro-vanadium	370	339	258	237	...
Ferro-molybdenum	3 207	2 804	1 931	2 043	...
Silicon metal	16 190	14 100	17 703	...	...
Silicon-pig iron (10-12% Si)	2 959	1 629	2 246	2 861	...
Silico-spiegeleisen	1 780	1 176	—	—	...
Silico-chrome	—	85	—	—	...
Calcium-silicide	5 272	4 003	2 473	5 723	...
Ferro-phosphorus	454	529	416	651	...
Silico-magnesium	1 929	2 089	2 063	4 320	...
Austria					
Electric furnace ferro-					
alloys	6 300	8 000	8 000	7 000	6 000
Czechoslovakia					
Blast furnace ferro-alloys	34 000	28 000	2 000	—	—
Electric furnace ferro-					
alloys	127 000	132 000	136 000	175 000	...
Greece					
Ferro-nickel (d)	14 761	14 862	16 448	* 9 000	...
Hungary					
Ferro-silicon	7 755	7 329	6 925	6 846	7 636
Norway					
Ferro-silicon	310 098	294 780	278 027	223 422	268 613
Ferro-manganese	335 764	338 801	375 196	283 800)
Silico-manganese	187 443	162 860	168 476	126 694)
Ferro-chrome & silico-chrome	31 550	28 303	32 351	22 630)
Other ferro-alloys	9 529	30 345	30 506	30 899)
Portugal					
Electric furnace ferro-					
alloys	10 819	8 866	11 951	16 452	14 341

Production of Ferro-Alloys

tonnes

Country	1974	1975	1976	1977	1978
Soviet Union					
Spiegeleisen	107 000	104 000	* 102 000	* 100 000	...
Ferro-manganese	859 000	878 000	* 850 000	* 850 000	...
Other blast furnace ferro-alloys	26 000	27 000	* 28 000	* 25 000	...
Spain					
Ferro-chrome	21 326	15 718	20 039	18 820	13 800
Ferro-manganese	112 681	126 613	133 737	164 650	138 340
Silico-manganese	79 241	86 944	90 610	67 050	111 100
Ferro-silicon	54 439	55 442	56 604	84 120	101 990
Sweden					
Ferro-silicon	51 813	52 102	37 498	22 383	...
Silico-manganese	9 910	8 776	7 549	—	...
Ferro-chrome	103 997	96 146	120 005	134 452	...
Silico-chrome	45 008	44 743	36 998	37 386	...
Ferro-tungsten	585	722	422	487	...
Ferro-molybdenum	2 035	1 659	1 830	1 003	...
Ferro-vanadium	456	407	575	423	...
Yugoslavia					
Ferro-alloys	189 790	195 000	200 000	192 000	220 000
South Africa					
Ferro-manganese	355 000	337 000	350 000	400 000	...
Silico-manganese	10 000	15 000	22 000	25 000	...
Ferro-chrome	194 000	299 000	350 000	380 000	...
Silico-chrome	29 000	21 000	22 000	28 900	...
Ferro-silicon	48 000	76 000	79 000	100 000	...
Other ferro-alloys	200	200	300	300	...
Canada					
Ferro-manganese	* 90 700	* 51 000	* 78 000	* 74 000	...
Ferro-silicon	95 103	57 365	* 93 120	* 99 120	...
Other ferro-alloys	* 62 136	* 51 624	* 53 860	* 20 137	...
Dominican Republic					
Ferro-nickel (d)	30 492	26 900	24 400	24 905	14 302
Mexico					
Ferro-manganese	46 915	64 598	54 418	99 304	...
Ferro-silicon	19 834	17 824	17 957	22 888	...
Silico-manganese	14 351	15 720	17 580	26 911	...
Ferro-chrome	—	—	3 246	2 739	...
Other ferro-alloys	336	343	241	156	...
USA					
Ferro-chrome	305 333	178 557	195 103	196 418	...
Silico-chrome	89 788	47 166	49 153	48 328	...
Ferro-manganese	493 836	522 365	437 864	303 121	...
Silico-manganese	177 935	129 965	116 952	108 638	...
Ferro-niobium	1 065	558	1 093	1 015	...
Ferro-phosphorus	96 602	93 346	100 610	80 417	...
Ferro-silicon	845 362	717 456	780 904	811 717	...
Other ferro-alloys (b)	61 636	58 237	51 242	41 758	...
Argentina					
Ferro-manganese	15 337	18 892	23 309	* 25 000	...
Ferro-silicon	15 690	13 871	18 947	* 20 000	...
Other ferro-alloys	5 557	5 082	6 169	* 5 000	...
Brazil					
Ferro-chrome	37 801	52 986	59 730	65 969	...
Silico-chrome	1 803	2 304	5 880	4 121	...
Ferro-manganese	79 560	86 850	98 738	128 922	...
Silico-manganese	32 626	38 828	63 843	75 108	...
Ferro-molybdenum	766	612	863	1 117	...
Ferro-nickel	9 852	9 646	9 971	10 860	...
Ferro-silicon	52 178	54 276	45 252	60 290	...
Silico-calcium-magnesium	5 293	5 526	7 531	11 916	...
Ferro-niobium	6 951	3 996	10 010	6 809	...
Other ferro-alloys	1 087	914	10 070	6 139	...

Production of Ferro-alloys

tonnes

Country	1974	1975	1976	1977	1978
Chile					
Ferro-manganese	7 912	6 082	8 301	1 832	...
Ferro-silicon	2 846	3 519	4 480	2 993	...
Silico-manganese	2 820	2 807	1 550	528	...
Other ferro-alloys	1 030	934	685	* 500	...
China					
Ferro-alloys	* 600 000	* 600 000	* 650 000	* 700 000	...
India					
Ferro-manganese	146 015	142 549	175 760	193 908	219 517
Silico-manganese	...	...	4 689	10 240	2 799
Ferro-silicon	29 682	40 928	53 947	44 675	52 899
Ferro-chrome	15 300	10 282	17 005	18 068	21 474
Silico-chrome	1 312	3 200	5 100	4 155	3 970
Other ferro-alloys	332	339	303	395	1 156
Japan					
Ferro-calcium-silicon	6 412	5 112	3 992	5 634	...
Ferro-chrome	542 000	486 067	463 541	398 782	...
Silico-chrome	14 679	25 199	11 046	11 411	...
Ferro-manganese	624 000	649 834	632 160	527 418	...
Silico-manganese	448 000	435 107	373 196	333 692	...
Ferro-molybdenum	3 682	3 928	4 501	3 705	...
Ferro-nickel	251 000	200 569	198 411	224 339	...
Ferro-silicon	369 000	327 478	313 077	291 446	...
Ferro-tungsten	776	494	3 447	404	...
Ferro-vanadium	3 261	3 165	3 940	2 546	...
Other ferro-alloys	3 657	2 435	3 536	...	...
Korea, Dem. P.R. of					
Ferro-alloys	* 100 000	* 100 000	* 100 000	* 100 000	...
Korea, Republic of					
Ferro-silicon	34 478	21 300	34 733	26 826	...
Taiwan					
Ferro-silicon	27 180	23 178	15 761	15 621	...
Australia (c)					
Ferro-chrome	2 351	1 611	—	—	...
Ferro-manganese	42 660	38 784	49 927	71 012	...
Ferro-silicon	8 982	247	6 954	18 667	...
Silico-manganese (60% Mn)	21 573	11 297	14 651	23 430	...
New Caledonia					
Ferro-nickel (d)	48 533	52 802	38 169	28 283	19 889

(a) Ti, W, Mo, V content

(b) Includes ferro-boron and other complex boron additive alloys, ferro-nickel, ferro-molybdenum, ferro-tungsten, ferro-vanadium, spiegeleisen, ferro-zirconium and other miscellaneous alloys

(c) Years ended 30 November of that stated

(d) Ni content

Exports of Iron, Steel and Ferro-alloys

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom					
Pig-iron –					
Forge & foundry	21 346	5 888	46 046	42 972	27 526
Other including refined	10 633	12 609	14 846	4 232	6 227
Powders, shot & sponge	30 360	25 825	21 940	21 131	21 002
Ferro-aluminium, ferro-silico- aluminium & ferro-silico- mangano-aluminium	1 623	2 488	6 029	5 194	4 357
Ferro-chrome	2 314	2 098	588	1 919	1 706
Ferro-silico-chrome	10	150	987	75	52
Ferro-manganese	1 087	1 176	617	684	1 959
Ferro-silico-manganese	742	408	105	—	169
Ferro-molybdenum	1 597	1 091	1 811	1 701	1 507
Ferro-nickel	31	52	39	—	—
Ferro-niobium & ferro- niobium-tantalum	826	609	857	352	439
Ferro-silicon	3 604	1 199	1 224	1 480	1 948
Ferro-titanium	3 058	2 591	3 675	2 592	3 844
Ferro-tungsten	3 457	2 488	3 503	3 172	3 701
Ferro-vanadium	62	50	144	99	137
Other ferro-alloys	1 497	1 859	1 937	1 959	1 496
Ingots, blooms, billets	221 162	255 582	257 619	415 131	332 108
Old & scrap (a)	314 094	915 552	597 807	937 985	1 564 902
Belgium-Luxembourg					
Pig-iron	11 126	11 957	33 503	56 473	35 675
Spiegeleisen	514	859	351	405	235
Ferro-aluminium, ferro-silico- aluminium & ferro-silico- mangano-aluminium	48	36	71	146	72
Ferro-chrome	3 968	4 189	9 376	14 665	9 559
Ferro-manganese	58 387	43 417	70 377	49 539	30 450
Ferro-silicon	1 258	797	1 356	5 094	4 223
Ferro-titanium & ferro- silico-titanium	2 615	1 643	1 664	1 212	1 894
Ferro-tungsten & ferro- silico-tungsten	254	108	495	90	176
Ferro-silico-manganese, ferro- molybdenum & ferro-vanadium	9 043	8 153	12 241	15 215	24 451
Other ferro-alloys	348	411	401	1 022	1 286
Ingots, blooms, billets	1 248 132	1 393 924	1 071 544	644 272	677 072
Old & scrap	726 571	531 778	527 292	501 333	537 558
Denmark					
Ingots, blooms, billets	12 173	983	1 084	6 734	2 717
Old & scrap	129 642	90 698	115 673	57 006	81 429
France					
Pig-iron	358 788	220 992	226 780	192 285	127 570
Spiegeleisen	123	710	433	2 683	689
Ferro-aluminium, ferro-silico- aluminium & ferro-silico- mangano-aluminium	3 519	1 288	1 661	1 021	1 600
Ferro-chrome	4 963	12 681	22 526	8 256	9 834
Ferro-silico-chrome	9 648	3 017	6 264	4 369	2 564
Ferro-manganese	397 743	267 796	266 616	269 411	321 088
Ferro-silico-manganese	8 272	5 372	11 792	9 299	10 778
Ferro-molybdenum	306	392	1 178	837	372
Ferro-nickel	74 013	59 352	55 424	50 574	34 569
Ferro-silicon	106 213	47 709	84 797	78 631	78 704
Ferro-silico-magnesium	1 979	4 313	5 808	8 636	7 744
Ferro-silico-zirconium	6 050	1 256	2 141	3 194	3 592
Ferro-titanium & ferro- silico-titanium	2 730	1 433	1 486	1 258	1 608
Ferro-tungsten & ferro- silico-tungsten	832	410	859	662	1 046
Ferro-vanadium	516	356	553	112	513
Other ferro-alloys	37 609	22 893	22 550	23 922	26 991
Ingots, blooms, billets	508 417	615 306	435 725	339 266	265 339
Old & scrap	3 724 123	2 809 306	3 421 382	3 357 071	3 662 495

Exports of Iron, Steel and Ferro-alloys

tonnes

Country	1974	1975	1976	1977	1978
Germany, Federal Republic of					
Pig-iron	1 360 934	742 937	821 077	704 029	736 119
Sponge	3 804	4 888	37 851	27 740	40 066
Spiegeleisen	4 445	2 205	1 514	520	2 716
Ferro-chrome	41 190	30 826	65 495	36 426	31 419
Ferro-silico-chrome	999	1 300	5 124	1 629	1 623
Ferro-manganese	78 614	40 730	45 918	74 037	49 391
Ferro-silico-manganese	1 213	567	2 052	2 215	742
Ferro-molybdenum	431	426	1 540	1 328	375
Ferro-silicon	23 845	15 936	16 612	23 244	25 818
Ferro-titanium & ferro-silico-titanium	198	143	148	232	277
Ferro-tungsten & ferro-silico-tungsten	109	103	137	133	216
Ferro-vanadium	737	1 207	1 595	1 373	1 511
Other ferro-alloys	15 724	9 479	13 038	12 959	11 066
Ingots, blooms, billets	793 320	987 554	1 048 794	981 046	1 174 858
Old & scrap	2 475 126	2 205 545	2 596 883	2 481 079	2 765 240
Irish Republic					
Old & scrap	11 196	7 528	8 207	7 910	54 100
Italy					
Pig-iron	2 819	694	103	644	5 457
Ferro-chrome & ferro-silico-chrome	10 249	13 301	18 523	11 632	8 455
Ferro-manganese	13 667	5 021	2 155	2 143	10 450
Ferro-silico-manganese	874	613	327	247	1 001
Ferro-molybdenum	1 872	852	376	954	760
Ferro-silicon	1 844	5 501	9 456	4 311	7 345
Ferro-silico-magnesium	270	671	1 081	2 075	1 162
Ferro-titanium	722	549	889	1 069	1 751
Ferro-vanadium	248	133	232	260	265
Other ferro-alloys	409	358	83	144	518
Ingots, blooms, billets	192 183	371 170	123 363	66 028	158 160
Scrap	11 411	5 231	23 936	10 882	6 684
Netherlands					
Pig-iron	55 750	7 381	756	139	1 876
Sponge & powder	76	41	68	20	41
Ferro-chrome (f)	817	1 479	7 770	9 523	10 402
Ferro-manganese (f)	678	0	2 339	2 606	1 326
Ferro-molybdenum (f)	3	49	184	131	60
Ferro-silicon (f)	3 845	3 349	3 724	3 236	1 000
Ferro-vanadium (f)	480	597	776	620	700
Other ferro-alloys (f)	194	84	169	316	446
Ingots, blooms, billets	548 542	664 989	669 512	500 088	589 780
Old & scrap	1 373 067	1 095 313	1 103 234	925 075	1 190 000
Austria					
Pig-iron	20 762	2 391	412	143	—
Ferro-alloys	7 606	8 505	9 130	9 383	9 280
Ingots & blooms	87 068	161 872	54 033	4 283	10 181
Scrap	12 865	50 482	43 806	7 530	7 344
Finland					
Pig-iron	169 835	95 563	85 205	68 633	...
Ferro-chrome & ferro-silico-chrome	44 573	30 997	32 745	26 199	39 332
Other ferro-alloys	3 415	—	3	811	3 469
Blooms & billets	240 272	236 938	232 963	214 306	190 809
Old & scrap	8 545	5 106	3 662	3 235	973
Greece					
Ferro-nickel	81 569	49 525	57 035	44 697	67 458
Hungary					
Pig-iron	281 203	99 398	136 050	116 093	47 262
Iceland					
Scrap	5 276	3 445	2 992	2 224	8 842
Malta					
Scrap	9 173	6 173	4 260	4 338	9 351

Exports of Iron, Steel and Ferro-alloys

tonnes

Country	1974	1975	1976	1977	1978
Norway					
Pig-iron	120 986	100 857	96 613	88 185	106 518
Ferro-chrome & ferro-silico-chrome	27 558	21 204	28 023	15 027	18 385
Ferro-manganese	309 365	256 639	327 222	244 041	266 733
Ferro-silicon	308 848	222 187	247 787	228 180	314 673
Ferro-silico-manganese	189 658	126 319	153 044	117 499	162 498
Ferro-vanadium	658	729	733	903	821
Other ferro-alloys	686	15 531	16 740	14 946	16 909
Ingots, blooms, billets	212 418	185 312	207 116	149 801	217 526
Old & scrap	34 446	19 515	17 826	14 124	36 146
Poland					
Pig-iron & ferro-alloys	3 165	4 996	46	—	—
Portugal					
Pig-iron	343	7 527	4 328	238	29
Ferro-manganese	—	35 668	44 438	45 094	63 778
Ferro-silicon	9 659	6 500	11 699	14 216)
Ferro-tungsten	378	298	290	169	) 39 938
Other ferro-alloys	338	701	1 053	4 533)
Old & scrap	2 501	1 710	2 808	4 166	9 648
Soviet Union					
Pig-iron	4 910 300	4 729 229	4 527 340	4 500 000	4 500 000
Ferro-chrome	46 430	44 601	48 777)	
Ferro-manganese	118 300	129 188	125 273	) 420 000	420 000
Ferro-silicon	151 420	154 492	160 246)	
Ferro-vanadium	1 600	1 427	1 658)	
Scrap	1 465 281	1 138 660	1 836 591	2 189 347	1 678 578
Spain					
Pig-iron	29	906	827	56	64 411
Ferro-chrome	8 381	7 244	6 376	3 465	3 882
Ferro-manganese	35 943	17 215	39 532	29 444	47 242
Ferro-silico-manganese	23 282	13 365	15 952	5 427	28 770
Ferro-silico-aluminium, ferro-silico-mangano-aluminium & ferro-silico-alumino-calcium	125	102	234	361	—
Ferro-silicon	15 365	4 625	16 483	17 126	39 760
Ferro-molybdenum	5	0	75	26	588
Ferro-titanium & ferro-silico-titanium	14	21	18	0	16
Other ferro-alloys	53	73	651	1 019	1 387
Ingots, blooms, billets	23 668	12 506	48 801	22 562	36 155
Sweden					
Pig-iron	207 018	193 332	53 904	156 208	510 538
Sponge & powder	103 465	100 679	86 092	96 244	95 035
Ferro-manganese	3 200	1 190	3 039	293	463
Ferro-silicon	32 634	29 300	20 051	15 350	663
Ferro-silico-manganese	6 462	3 792	3 482	325	209
Ferro-chrome	34 296	27 627	47 722	86 080	152 742
Ferro-silico-chrome	7 139	3 428	6 830	4 677	10 503
Ferro-molybdenum	906	689	1 217	1 581	872
Ferro-nickel	4	335	124	501	1 006
Ferro-titanium	367	66	25	80	892
Ferro-tungsten	174	163	200	309	176
Ferro-vanadium	168	152	151	418	446
Other ferro-alloys	117	20	67	60	100
Ingots, blooms, billets	201 320	127 587	185 934	274 900	520 743
Old & scrap	10 624	10 820	8 624	74 652	78 832
Switzerland					
Pig-iron	302	2	—	191	338
Ferro-silicon	962	165	563	428	128
Other ferro-alloys	1 065	197	124	708	1 582
Old & scrap	116 999	117 217	70 689	61 938	88 080
Turkey					
Ferro-chrome	9 388	6 063	8 050	7 965	25 921

Exports of Iron, Steel and Ferro-alloys

tonnes

Country	1974	1975	1976	1977	1978
Yugoslavia					
Pig-iron	353 582	107 110	50 148	73 971	22 330
Ferro-chrome	33 057	18 475	23 389	35 939	59 980
Ferro-manganese	4 552	4 091	4 625	20 460	29 585
Ferro-silico-manganese	10 411	9 193	10 278	10 305	19 970
Ferro-silicon	57 003	32 741	50 039	40 502	46 878
Other ferro-alloys	104	3	6	55	231
Ingots, blooms, billets	21 985	6 196	35 174	9 901	16 551
Scrap	9 635	1 007	19 641	42 399	76 407
Algeria					
Pig-iron	106 477	194 331	107 887	99 147	...
Scrap	61 098	70 801	113 905	74 246	...
Egypt					
Pig-iron & spiegeleisen	75 482	97 420	38 584	14 671	1 439
Ferro-alloys	2 474	2 000	1 000	—	—
Ivory Coast					
Scrap	33 114	25 028	17 576	19 806	19 031
Kenya					
Scrap	4 707	4 675	4 827	3 211	3 949
Morocco					
Scrap	79 650	29 122	48 954	50 240	44 774
Mozambique					
Scrap	10 087	8 908	8 487	...	...
Nigeria					
Scrap	628	27	336	...	...
Senegal					
Scrap	32 587	20 875	...	...	...
South Africa (i)					
Pig-iron	* 240 800	* 2 000	* 250	...	* 15 500
Ferro-manganese	* 243 000	* 219 000	* 302 000	* 244 600	* 362 600
Ferro-silicon	* 37 000	* 32 000	* 31 500	* 26 800	* 26 000
Ferro-chrome	* 250 000	* 277 000	* 419 000	* 397 000	* 580 000
Other ferro-alloys	* 38 000	* 12 000	* 6 000	* 5 400	* 13 800
Ingots, blooms, billets	* 68 000	* 43 000	* 23 000	* 91 400	* 66 400
Scrap	* 4 600	* 10 800	* 14 700	* 10 400	* 17 100
Sudan					
Scrap	4 313	1 959	5 179	4 500	—
Tanzania					
Scrap	299	110	387	...	...
Tunisia					
Pig-iron	7 116	751	—	—	—
Ingots, blooms, billets	39 347	2 164	—	—	20 400
Scrap	1 974	3 571	1 300	11	1 280
Canada					
Pig-iron	517 580	406 272	281 558	505 277	544 713
Ferro-manganese	10 295	1 240	9 861	23 150	19 924
Ferro-silicon	47 650	29 101	34 257	45 512	60 147
Other ferro-alloys	7 040	2 024	7 275	2 034	...
of which: Re-exports	3 575	778	5 543	236	...
Ingots, blooms, billets	249 508	35 499	130 098	239 964	279 470
Old & scrap	257 352	417 414	1 020 901	691 914	871 256
Tin-plate scrap	8 666	6 317	5 202	5 086	2 915
Trinidad & Tobago					
Old & scrap	13 818	1 424	7 722	865	1 822
USA					
Pig-iron	91 246	56 342	52 424	58 622	) 69 610
Spiegeleisen	497	304	4 988	36)
Powder & sponge	48 890	14 372	22 725	14 728	14 139
Ferro-chrome	7 638	13 288	12 865	13 786	18 717
Ferro-manganese	9 455	29 908	6 445	5 821	8 966
Ferro-molybdenum	1 857	1 017	1 631	724	665
Ferro-phosphorus	3 335	396	1 484	2 160	3 781
Ferro-silicon	5 965	37 035	14 910	48 252	11 549
Ferro-vanadium	1 211	926	1 098	624	1 187
Other ferro-alloys	16 574	7 549	6 132	7 299	12 912
Ingots, blooms, billets (b)	731 724	293 958	236 847	225 171	219 757
Scrap (a)(c)	7 898 208	8 718 861	7 371 317	5 606 707	8 452 531

Exports of Iron, Steel and Ferro-alloys

tonnes

Country	1974	1975	1976	1977	1978
Brazil					
Pig-iron	252 255	510 524	774 947	850 604	1 026 479
Ferro-chrome	26 764	34 469	47 461	46 661	42 393
Ferro-manganese	5 245	10 080	11 028	33 876	40 115
Ferro-nickel	2 929	3 838	1 736	415	—
Ferro-niobium	—	4 135	9 155	7 052	10 852
Ferro-silicon	5 224	3 027	6 118	2 347	12 308
Ferro-silico-spiegeleisen & silico-manganese	3 030	3 734	4 087	5 453	33 573
Ferro-silico-mangano- aluminium	500	1 310	7 180	17 600	6 700
Other ferro-alloys	8 201	413	36	276	1 573
Ingots, blooms, billets	79 474	13 313	92 139	113 392	332 920
Chile					
Ferro-manganese	514	...	...	...	...
Ferro-molybdenum	1 048	...	...	...	...
Venezuela					
Ingots	51 669	...	...	...	...
Brunei					
Scrap	6 377	1 391	1 626	19	4 021
Hong Kong					
Old & scrap	258 434	157 478	175 152	224 232	282 607
of which: Re-exports	12 639	4 339	3 708	5 571	19 978
Tin plate scrap	2 167	1 100	1 450	3 053	3 772
India					
Pig-iron	126 534	210 399	855 868	...	...
Ferro-chrome	4 767	3 115	4 813	...	...
Ferro-manganese	32 961	...	24 154	...	...
Ferro-silicon	2 006	—	8 316	...	...
Ingots, blooms, billets (d)	22 770	155 197	327 959	...	...
Old & scrap	96 535	126 446	218 154	...	...
Israel (h)					
Scrap	150	1 055	3 414	2 473	3 969
Japan					
Pig-iron	72 070	406 846	146 331	563 911	32 678
Ferro-chrome	57 578	85 228	54 509	16 307	6 365
Ferro-manganese	54 265	130 625	121 934	48 634	37 147
Ferro-silicon	22 574	26 163	8 224	2 972	2 336
Ferro-silico-manganese	36 002	8 933	9 863	3 112	342
Ferro-nickel	2 274	4 566	13 262	2 268	21 773
Ferro-titanium	196	116	—	—	—
Ferro-vanadium	115	54	39	13	71
Other ferro-alloys	4 063	4 409	2 995	2 502	2 266
Ingots, blooms, billets	629 006	1 890 376	1 060 057	427 861	107 256
Scrap	301 163	274 759	202 659	210 740	164 395
Korea, Dem. P.R. of					
Pig-iron	* 106 200	* 141 400	...	...	...
Korea, Republic of					
Pig-iron	3 657	150	419	15 070	...
Ferro-manganese	250	100	15	110	...
Ferro-silicon	3 775	5 506	17 212	14 336	...
Ferro-silico-manganese	770	2 165	1 995	4 302	...
Other ferro-alloys	...	9	24	516	...
Ingots, blooms, billets (b)	28 043	16 380	11 662	18 077	...
Kuwait					
Scrap	72 072	18 864	29 351	...	...
Malaysia (g)					
Scrap	86	2 518	14 070	8 418	...
Philippines					
Ferro-silicon	...	2 000	7 298	4 778	11 399
Saudi Arabia					
Scrap	...	5 737	1 269	49	...

Exports of Iron, Steel and Ferro-alloys

tonnes

Country	1974	1975	1976	1977	1978
Singapore					
Pig-iron	6 934	7 407	5 130	3 715	3 784
Ingots & blooms	15 676	8 448	5 726	1 476	7 872
Scrap	1 945	1 539	3 102	6 858	3 745
Syria					
Scrap	11 205	1 225	6 000	5 002	...
Taiwan					
Pig-iron	243	2 802	1 000	1 170	527
Ferro-chrome	102	250	723	432	602
Ferro-manganese	1 957	25 714	9 192	6 612	3 516
Ferro-silicon	19 290	25 113	30 400	9 642	12 481
Other ferro-alloys	45	—	1 665	659	2 827
Ingots, blooms, billets	5 068	5 657	858	15 147	187 297
Scrap	43 072	32 348	63 290	35 473	156 420
Australia					
Pig-iron	735 111	519 942	698 176	646 560	685 431
Ferro-alloys	1 309	432	783	20 181	...
Ingots, blooms, billets	774 950	1 635 836	1 538 060	1 280 410	1 013 467
Scrap	811 901	577 401	620 658	530 243	484 327
Tin-plate scrap (e)	5 588	10 799	4 908	3 619	3 624
Fiji					
Scrap	510	1 994	846	...	...
New Caledonia					
Ferro-nickel	181 321	168 542	124 180	124 325	98 984
New Zealand (e)					
Scrap	2 489	2 550	1 847	2 161	...

(a) Excluding ships intended for breaking up

(b) Including alloys

(c) Including tin-plate and terne-plate scrap

(d) Years ended 31 March following that stated

(e) Years ended 30 June of that stated

(f) Figures up to 1976 exclude exports to Belgium-Luxembourg, if any

(g) From 1975 includes Sabah and Sarawak

(h) Figures may be incomplete as value only given in Israeli trade return for exports to some countries

(i) IGS estimates, based on known imports into certain countries

Imports of Iron, Steel and Ferro-alloys

Country	1974	1975	1976	1977	1978
United Kingdom					
Pig-iron –					
Forge & foundry	10 422	15 216	30 722	36 245	11 062
Hematite	62 414	23 768	100 371	81 406	98 224
Other	44 566	31 986	34 471	32 487	22 008
Shot & powder	6 822	5 077	13 416	17 568	18 682
Sponge	14 109	11 447	42 584	12 648	19 218
Ferro-chrome	62 394	59 587	99 414	73 337	48 484
Ferro-silico-chrome	5 555	5 245	8 974	3 866	2 529
Ferro-manganese	124 396	95 925	118 257	86 116	83 799
Ferro-silico-manganese	20 432	20 106	21 260	21 985	22 071
Ferro-molybdenum	727	650	834	880	779
Ferro-nickel	17 612	11 233	11 746	16 857	15 406
Ferro-niobium	429	404	1 157	504	724
Ferro-silicon	114 623	117 199	112 315	93 088	95 279
Ferro-titanium	66	11	254	192	349
Ferro-tungsten	215	255	360	335	249
Ferro-vanadium	460	349	281	446	445
Other ferro-alloys	13 695	14 000	13 682	14 770	13 883
Ingots, blooms, billets	137 021	218 297	398 107	244 251	254 459
Old & scrap (a)	138 324	88 352	693 301	100 388	458 596
Belgium-Luxembourg					
Pig-iron	232 828	161 185	203 410	166 925	119 227
Sponge	3 336	1 581	1 108	151	93
Spiegeleisen	263	398	74	366	407
Ferro-aluminium, ferro-silico- aluminium & ferro-silico- mangano-aluminium	2 639	1 107	2 015	2 052	1 546
Ferro-chrome	26 286	33 217	42 114	35 927	24 205
Ferro-silico-chrome	2 061	1 013	1 394	992	965
Ferro-manganese	121 951	75 238	100 658	71 741	77 262
Ferro-silico-manganese	20 224	10 614	13 411	10 642	18 854
Ferro-molybdenum	466	157	216	163	269
Ferro-nickel	5 989	3 173	5 386	1 441	2 566
Ferro-titanium & ferro- silico-titanium	736	417	250	307	314
Ferro-tungsten & ferro- silico-tungsten	52	10	194	46	149
Ferro-vanadium	177	80	68	91	100
Ferro-silicon	41 352	27 134	31 313	30 496	35 587
Other ferro-alloys	1 738	1 746	1 547	1 486	1 877
Ingots, blooms, billets	521 085	307 458	430 625	647 800	792 205
Old & scrap	1 239 902	707 238	586 001	493 209	979 683
Denmark					
Pig-iron	71 096	77 371	35 672	24 984	19 184
Ferro-aluminium, ferro-silico- aluminium & ferro-silico- mangano-aluminium	114	488	2 044	2 042	2 828
Ferro-chrome & ferro- silico-chrome	997	958	979	1 411	1 152
Ferro-manganese	6 038	8 213	8 621	6 000	9 995
Ferro-silico-manganese	3 005	2 721	1 604	1 670	2 952
Ferro-molybdenum	28	25	22	11	18
Ferro-silicon	3 924	4 408	5 681	5 677	5 142
Other ferro-alloys	170	78	165	129	117
Ingots, blooms, billets	64 660	52 678	14 968	19 449	9 599
Old & scrap	4 347	3 191	7 072	12 815	262 833

Imports of Iron, Steel and Ferro-alloys

tonnes

Country	1974	1975	1976	1977	1978
France					
Fig-iron –					
Hematite	285 171	293 133	402 316	455 602	402 693
Other	4 821	5 018	1 971	3 910	4 669
Sponge & powder	35 440	25 848	47 631	23 238	12 781
Spiegeleisen	1 101	247	205	233	76
Ferro-aluminium, ferro-silico- aluminium & ferro-silico- mangano-aluminium	52	84	186	102	44
Ferro-chrome	24 322	13 591	41 397	38 711	47 484
Ferro-silico-chrome	1 926	1 429	401	40	5
Ferro-manganese	42 136	21 021	32 620	34 916	30 114
Ferro-silico-manganese	1 066	597	2 651	4 270	12 779
Ferro-molybdenum	763	698	1 032	666	1 145
Ferro-nickel	121 824	159 924	104 316	96 728	72 364
Ferro-silicon	3 835	5 097	9 337	12 788	12 308
Ferro-titanium & ferro- silico-titanium	279	266	229	449	425
Ferro-tungsten & ferro- silico-tungsten	63	85	82	119	95
Ferro-vanadium	302	157	202	315	340
Other ferro-alloys	714	622	779	1 034	1 514
Ingots, blooms, billets	653 166	434 680	871 806	847 923	1 013 801
Old & scrap	326 980	276 290	273 632	287 030	393 803
Germany, Federal Republic of					
Pig-iron	188 810	158 092	291 534	311 445	293 221
Spiegeleisen	351	503	301	41	37
Ferro-aluminium, ferro-silico- aluminium & ferro-silico- mangano-aluminium	305	195	331	107	141
Ferro-chrome	80 826	88 369	138 673	129 125	194 540
Ferro-silico-chrome	21 637	12 541	20 086	18 922	5 491
Ferro-manganese	166 811	156 501	174 052	158 512	160 026
Ferro-silico-manganese	73 357	70 274	70 649	68 585	101 215
Ferro-molybdenum	3 665	2 674	3 681	3 392	3 140
Ferro-nickel	56 026	37 649	55 650	38 997	60 668
Ferro-niobium	...	1 345	1 939	1 660	2 082
Ferro-silicon	133 978	116 066	136 137	141 033	159 410
Ferro-titanium & ferro- silico-titanium	2 645	1 667	2 743	2 142	3 952
Ferro-tungsten & ferro- silico-tungsten	814	308	517	209	499
Ferro-vanadium	1 371	1 304	1 513	1 554	1 961
Other ferro-alloys	10 089	5 120	7 021	9 169	4 932
Ingots, blooms, billets	1 290 926	1 272 977	1 154 391	1 166 408	1 305 977
Old & scrap	1 661 756	1 716 219	1 540 029	1 419 455	1 546 633
Irish Republic					
Pig-iron & sponge	5 904	1 206	739	785	2 309
Ferro-alloys	1 421	1 492	1 379	1 013	1 594
Ingots, blooms, billets	2 150	1 536	1 483	2 139	1 074

Imports of Iron, Steel and Ferro-alloys

Country	1974	1975	1976	1977	1978
Italy					
Pig-iron	1 035 867	660 117	770 184	626 763	386 811
Sponge & powder	12 695	6 732	30 573	28 432	57 947
Spiegeleisen	4 554	1 402	3 069	919	413
Ferro-aluminium, ferro-silico- aluminium & ferro-silico- mangano-aluminium	256	410	1 305	1 062	1 297
Ferro-chrome	45 708	43 099	55 753	56 864	84 084
Ferro-silico-chrome	8 958	5 395	8 011	3 560	4 243
Ferro-manganese	154 563	124 823	117 185	125 484	106 151
Ferro-silico-manganese	31 041	17 161	19 846	24 943	28 553
Ferro-molybdenum	402	1 495	3 190	2 681	1 178
Ferro-nickel	16 672	13 796	19 555	16 512	14 562
Ferro-niobium	1 547	942	2 204	1 698	1 125
Ferro-silicon	52 023	34 329	40 588	41 796	47 099
Ferro-silico-magnesium	389	764	1 220	1 106	2 008
Ferro-titanium & ferro- silico-titanium	854	774	801	722	1 254
Ferro-tungsten & ferro- silico-tungsten	158	179	55	75	53
Ferro-vanadium	332	972	330	270	661
Other ferro-alloys	6 407	1 005	1 018	870	989
Ingots, blooms, billets	453 418	294 107	583 547	531 919	499 713
Old & scrap	6 299 497	5 413 472	6 329 498	5 825 025	6 566 026
Netherlands					
Pig-iron (b)	65 691	48 352	41 557	38 146	41 252
Sponge & powder	5 112	3 964	3 887	3 206	2 803
Ferro-aluminium, ferro-silico- aluminium & ferro-silico- mangano-aluminium (c)	136	128	146	127	27
Ferro-chrome (c)	3 169	6 579	7 194	12 264	10 709
Ferro-manganese (c)	36 658	27 168	30 177	25 221	25 576
Ferro-silico-manganese (c)	3 096	2 230	3 167	2 303	4 163
Ferro-molybdenum (c)	64	71	215	156	91
Ferro-silicon (c)	11 009	9 603	10 157	7 827	7 731
Ferro-titanium & ferro- silico-titanium (c)	77	30	73	44	83
Ferro-tungsten & ferro- silico-tungsten (c)	51	2	25	42	0
Ferro-vanadium (c)	2	5	58	23	9
Other ferro-alloys (c)	496	483	775	636	392
Ingots, blooms, billets	593 168	296 743	458 721	208 916	229 725
Old & scrap	148 380	204 098	199 037	112 868	166 358
Austria					
Pig-iron	79 256	45 431	101 587	89 718	136 317
Spiegeleisen	187	97	87	75	85
Ferro-chrome	21 707	17 861	25 643	24 879	26 085
Ferro-manganese	23 791	21 257	21 364	18 461	20 525
Ferro-molybdenum	10	41	7	729	145
Ferro-niobium & ferro- niobio-tantalum	14	55	52	96	245
Ferro-titanium	354	229	371	332	385
Ferro-tungsten	127	1	173	278	424
Ferro-vanadium	74	12	89	152	284
Ferro-silicon	16 509	10 969	14 071	12 643	15 411
Other ferro-alloys	13 212	11 143	9 771	11 289	12 817
Ingots & blooms	132 897	79 205	122 408	183 041	305 990
Scrap	88 277	33 316	44 802	79 099	115 474
Bulgaria					
Pig-iron	340 414	330 070	335 897	367 000	408 000
Czechoslovakia					
Pig-iron	802 000	1 108 000	826 000	833 000	919 000

Imports of Iron, Steel and Ferro-alloys

tonnes

Country	1974	1975	1976	1977	1978
Finland					
Pig-iron	40 006	52 186	371	548	2 212
Ferro-chrome & ferro-silico-chrome	1 468	1 065	904	1 171	2 556
Ferro-manganese	4 857	2 915	2 326	2 336	2 955
Ferro-silico-manganese	9 458	9 057	11 201	10 902	12 924
Ferro-molybdenum	162	106	200	168	170
Ferro-silicon	10 184	9 080	8 725	10 918	8 728
Ferro-titanium	89	70	31	126	201
Ferro-vanadium	26	30	40	36	83
Other ferro-alloys	1 357	2 371	555	1 015	5 416
Blooms & billets	6 724	23 444	65 434	5 773	13 639
Old & scrap	84 795	94 940	54 191	63 215	22 832
German Democratic Republic					
Pig-iron	868 000	(g) 805 735	(g) 636 570	...	...
Ferro-alloys	27 600	23 700	26 600	...	...
Greece					
Pig-iron	15 329	15 431	14 599	17 387	15 275
Ferro-manganese	5 150	3 097	3 659	3 284	2 054
Ferro-silico-manganese	891	415	1 011	2 878	(p)
Ferro-silicon	6 703	1 896	3 006	3 930	2 534
Other ferro-alloys	188	378	382	472	(q) 5 997
Ingots, blooms, slabs	47 526	39 200	29 708	54 256	298 161
Old & scrap	23 780	98 167	90 700	93 359	198 133
Hungary					
Pig-iron	256 481	253 000	288 952	227 435	251 068
Ferro-chrome	7 155	...	4 989	6 066	6 602
Ferro-manganese	43 306	40 349	46 536	29 331	40 136
Ferro-molybdenum	366	...	569	251	198
Ferro-silicon	5 099	6 617	4 775	4 109	6 530
Other ferro-alloys	8 107	14 730	8 337	19 053	17 732
Ingots	142 782	262 000	298 023	518 433	546 616
Malta					
Ingots	1 893	773	...	* 15	30
Norway					
Pig-iron	18 072	10 267	11 725	10 913	6 362
Ferro-alloys	1 319	2 018	1 379	490	1 285
Ingots, blooms, billets	17 142	21 239	10 169	2 869	2 135
Old & scrap	50 995	53 337	71 326	18 346	10 064
Poland					
Pig-iron & ferro-alloys	1 675 967	1 812 215	1 995 836	1 751 899	1 710 000
Scrap	3 024	2 121	47 099	30 064	9 000
Portugal					
Ferro-manganese	781	100	152	20	2 210
Ferro-silico-manganese	40	51	71	106	...
Ferro-silicon	371	283	571	443	...
Other ferro-alloys	2 726	2 658	675	488	840
Ingots, blooms, billets	140	970	1 250	1 825	746
Old & scrap	8 113	5 482	28 588	95 329	662 636
Romania					
Pig-iron	540 000	583 000	560 600	646 300	526 600
Ferro-alloys	153 500	172 000	223 300	160 000	879 100
Soviet Union					
Pig-iron	138 879	134 848	228 855	200 000	200 000
Ferro-alloys	30 218	40 420	33 269	35 000	35 000

Imports of Iron, Steel and Ferro-alloys

Country	1974	1975	1976	1977	1978
Spain					
Pig-iron	59 886	35 440	53 713	37 092	33 783
Ferro-aluminium & ferro-silico-aluminium	1 026	131	133	109	0
Ferro-chrome	8 712	10 174	16 426	15 286	26 836
Ferro-silico-chrome	1 737	1 875	1 250	491	590
Ferro-manganese	543	428	233	965	188
Ferro-silico-manganese	769	653	572	2	44
Ferro-molybdenum	895	639	722	749	156
Ferro-nickel	3 295	1 818	1 081	1 216	2 392
Ferro-silicon	3 567	4 060	3 280	2 619	2 115
Ferro-titanium & ferro-silico-titanium	471	427	355	289	497
Ferro-tungsten & ferro-silico-tungsten	30	41	53	30	2
Ferro-vanadium	232	336	390	473	449
Other ferro-alloys	1 893	896	1 198	1 134	1 311
Ingots, blooms, billets	131 904	672 593	1 960 077	141 853	51 175
Old & scrap	1 924 586	2 197 923	2 657 123	1 993 353	1 949 810
Sweden					
Pig-iron	208 872	223 820	227 306	82 038	40 489
Sponge & powder	516	1 678	308	688	827
Ferro-manganese	49 518	54 185	50 146	24 900	37 427
Ferro-chrome	45 833	35 344	48 520	15 872	29 482
Ferro-silico-chrome	2 584	3 241	1 138	992	2 937
Ferro-molybdenum	2 714	1 890	2 439	2 093	1 953
Ferro-nickel	64 601	49 356	29 633	20 037	21 425
Ferro-niobium	606	470	523	219	226
Ferro-silicon	24 704	20 176	21 991	22 477	32 805
Ferro-silico-manganese	17 247	14 537	16 065	5 468	7 894
Ferro-titanium	1 684	968	957	824	2 044
Ferro-tungsten	657	459	602	376	217
Ferro-vanadium	807	836	757	602	940
Other ferro-alloys	3 614	4 132	3 177	1 325	554
Ingots, blooms, billets	128 028	200 111	138 695	103 489	87 501
Old & scrap	368 234	338 257	137 046	32 592	117 642
Switzerland					
Pig-iron	71 894	54 611	61 922	74 883	69 493
Ferro-aluminium	5	46	127	103	227
Ferro-silicon	8 704	3 254	5 751	4 550	3 962
Other ferro-alloys	18 774	8 341	16 046	13 776	14 583
Ingots, blooms, billets (m)	109 288	58 539	32 760	25 269	21 906
Old & scrap	110 355	96 803	43 793	57 751	87 236
Turkey					
Pig-iron	52 924	107 338	79 759	14 870	5 416
Ingots, blooms, billets	295 276	550 413	540 830	672 263	616 372
Ferro-manganese	14 171	20 030	25 204	22 997	21 197
Ferro-silicon	2 923	5 328	9 398	7 767	) 7 396
Other ferro-alloys	169	367	428	549)
Scrap	118 795	84 999	235 975	299 989	323 024
Yugoslavia					
Pig-iron	62 325	105 103	40 248	17 757	71 612
Ferro-chrome	116	58	88	137	167
Ferro-manganese	2 762	1 801	998	799	815
Ferro-molybdenum	451	647	519	596	503
Ferro-phosphorus	404	820	1 399	2 728	1 478
Ferro-silicon	966	1 293	1 180	1 122	1 219
Ferro-tungsten	106	94	126	126	90
Ferro-vanadium	218	237	210	194	329
Other ferro-alloys	2 519	2 636	2 442	2 886	2 769
Ingots, blooms, billets	258 488	394 500	411 054	627 102	607 575
Scrap	427 781	346 398	342 345	409 022	402 594

Imports of Iron, Steel and Ferro-alloys

tonnes

Country	1974	1975	1976	1977	1978
Algeria					
Pig-iron	607	9 059	8 630	8 379	...
Ferro-manganese	959	888	1 371	1 026	...
Ferro-silicon	1 008	1 780	1 751	959	...
Ferro-silico-manganese	304	266	70	72	...
Other ferro-alloys	192	363	18	263	...
Egypt					
Pig-iron & spiegeleisen	23 257	57 341	36 571	32 649	28 518
Ferro-alloys	9 902	7 537	1 078	7 835	3 681
Ingots & billets	37 708	68 068	8 878	2 488	47 139
Scrap	73 758	80 718	69 323	115 402	41 679
Ghana					
Pig-iron	455	1 524	...	...	...
Ferro-manganese	284	854	...	...	...
Ingots & blooms	68	179	...	...	...
Scrap	5 908	6 949	...	...	...
Ivory Coast					
Ingots, blooms, billets	10 462	8 076	10 858	13 070	11 231
Kenya					
Pig-iron & ferro-alloys (b)	273	1 023	641	1 015	1 063
Ingots & blooms	19 437	13 485	29 906	18 995	30 690
Libya					
Pig-iron & ferro-alloys (b)(i)	213	1 817	157	43	...
Ingots, blooms, billets	2 261	1 498	2 674	3 643	...
Mauritius					
Pig-iron & ingots	11 593	3 829	10 427	9 405	...
Morocco					
Pig-iron	3 418	2 250	3 690	3 269	1 964
Ferro-manganese	205	157	219	224	178
Ferro-silicon	106	135	199	125	73
Ferro-silico-manganese	48	36	40	60	50
Ferro-chrome	22	18	34	37	26
Ingots, blooms, billets	13 850	15 779	21 707	21 025	17 432
Scrap	—	—	218	705	1 090
Nigeria					
Ferro-manganese	197	741	814	...	...
Ingots & blooms	109 627	61 560	63 946	...	...
South Africa					
Pig-iron (d)	89	36 699	79 252	204	218
Ferro-silicon	2 098	1 600	1 054	182	318
Ferro-chrome	2 420	3 656	2 705	7 390	3 189
Other ferro-alloys	1 412	1 422	795	588	1 319
Ingots & blooms	27 484	144 168	10 892	2 116	7 994
Scrap	10 383	18 022	34 261	30 486	16 516
Sudan					
Ingots, blooms, billets	5 858	9 056	35	6 025	7 472
Tanzania					
Pig-iron & ferro-alloys (b)	1 082	2 664	1 187	2 936	...
Ingots & blooms	13 950	9 074	11 857	5 719	...
Tunisia					
Pig-iron	63	71	51	546	100
Ferro-alloys	648	920	317	1 257	1 455
Scrap	941	662	1 586	2 051	2 487
Uganda					
Pig-iron & ferro-alloys (b)	171	—	150	...	...
Ingots & blooms	109	—	—	...	...
Zaire					
Ferro-alloys	314	456	478	622	...
Zambia					
Pig-iron	542	161	...	...	...
Ferro-alloys	889	518	...	...	...
Ingots, blooms, billets	45	466	...	...	...
Scrap	2 164	0	...	...	...

Imports of Iron, Steel and Ferro-alloys

tonnes

Country	1974	1975	1976	1977	1978
Canada					
Pig-iron	2 243	4 078	8 836	11 913	2 556
Sponge	12 627	5 838	3 869	3 969	4 026
Ferro-chrome	38 392	41 109	21 923	32 947	30 426
Ferro-manganese & spiegeleisen	17 114	35 701	25 054	29 404	26 809
Ferro-silico-manganese & silico-spiegeleisen	542	5 732	12 022	4 835	15 842
Ferro-silicon	10 560	26 353	10 386	9 131	10 482
Ferro-tungsten	186	45	77	103	75
Ferro-vanadium	370	100	105	138	152
Other ferro-alloys	17 699	8 880	24 972	17 115	17 357
Ingots, blooms, billets	47 804	106 572	22 348	61 327	53 915
Scrap	766 539	929 349	823 552	583 981	951 846
Costa Rica					
Ingots & blooms	27 521	28 854	44 549	43 152	...
El Salvador					
Ingots, blooms, billets	31 689	27 074	10 626	17 432	...
Scrap	1 073	44	30	46	...
Honduras					
Ingots & blooms	3 395	777	5 618	2 836	3 263
Jamaica					
Pig-iron & sponge	328	302	237	...	...
Ingots & blooms	9 381	14 161	319	...	...
Mexico					
Pig-iron	53 896	122 952	110 021	23 154	...
Ferro-chrome	3 738	4 205	1 878	...	...
Ferro-manganese	4 381	5 694	7 058	...	...
Ferro-nickel	102	10	39	...	...
Ferro-silicon	346	3 380	1 111	...	...
Ferro-vanadium	163	16	52	...	...
Other ferro-alloys	1 010	655	645	...	...
Ingots, blooms, billets	126 051	153 168	49 795	26 116	...
Scrap	777 153	1 165 431	506 705	331 833	...
Tin-plate scrap	14 211	17 652	16 199	21 104	...
Trinidad & Tobago					
Pig-iron	9	16	51	38	55
Ingots, blooms, billets	2 294	4 634	11 776	2 950	10 584
USA					
Pig-iron	310 573	433 730	376 176	338 169	594 580
Sponge	11 275	14 394	90 283	116 082	76 024
Ferro-chrome	147 586	289 219	220 079	203 284	284 443
Ferro-silico-chrome	6 852	3 752	14 265	14 722	...
Ferro-manganese	382 126	360 344	487 530	484 820	612 462
Ferro-silico-manganese	61 463	49 644	72 682	79 742	85 000
Ferro-nickel	92 923	59 009	50 549	70 644	67 911
Ferro-silicon	129 228	63 899	89 171	104 134	...
Ferro-titanium & ferro-silico-titanium	2 083	486	816	1 031	...
Ferro-tungsten & ferro-silico-tungsten	458	232	473	281	* 320
Ferro-vanadium	204	163	393	506	485
Ferro-zirconium	771	497	609	867	1 031
Ingots, blooms, billets	166 241	220 607	217 824	270 228	375 509
Scrap	171 000	266 000	450 000	) 500 000	600 000
Tin-plate scrap	12 000	11 000	10 000)	
Argentina					
Pig-iron	146 601	179 404	71 534	...	...
Ferro-manganese	823	1 681	1 034	...	...
Ferro-silicon	217	3 328	2 008	...	...
Ferro-silico-manganese	...	508	...	...	...
Ferro-molybdenum	473	212	412	...	...
Ferro-titanium	55	68	64	...	...
Blooms & billets	410 057	619 980	423 362	...	...
Old & scrap	148 335	319 049	72 372	...	...

Imports of Iron, Steel and Ferro-alloys

tonnes

Country	1974	1975	1976	1977	1978
Brazil					
Ferro-chrome	6 131	1 624	542	4 511	1 331
Ferro-silico-chrome	2 331	366	320	465	548
Ferro-manganese	2 242	2 525	68	99	—
Ferro-silicon	3 055	1 115	1 173	11 382	1 087
Other ferro-alloys	1 114	1 007	336	188	132
Ingots, blooms, billets	219 553	455 620	266	4	10 329
Chile					
Pig-iron (b)	3 501	...	...	...	...
Ferro-chrome	504	...	...	...	...
Ferro-manganese	52	...	...	...	...
Other ferro-alloys	184	...	...	...	...
Colombia					
Ferro-manganese	...	...	6 208	...	...
Ferro-silicon	...	...	1 144	...	...
Ingots, blooms, billets	...	...	4 778	...	...
Scrap	...	...	8 814	...	...
Uruguay					
Ferro-alloys	284	234	354	409	...
Ingots, blooms, billets	26 881	19 623	13 608	25 336	...
Venezuela					
Pig-iron	65 437	139 599	...	...	...
Ferro-alloys	21 868	9 909	...	...	...
Scrap	164 736	56 174	...	...	...
Ingots, blooms, billets	1 698	413 260	...	...	...
Burma					
Pig-iron (d)	1 530	...	...	...	...
Ingots, blooms, billets	6 948	...	...	...	...
China					
Pig-iron & ferro-alloys	* 692 000	...	...	...	...
Scrap	* 173 000	...	...	...	...
Cyprus					
Pig-iron	662	524	553	(n) 2 013	...
Hong Kong					
Pig-iron	6 195	14 858	16 449	19 286	15 411
Ferro-manganese	710	230	958	1 053	3
Other ferro-alloys	325	425	308	53	1 207
Ingots, blooms, billets	80 939	73 628	70 575	137 526	183 770
Old & scrap	104 663	49 136	121 651	40 285	126 093
Tin-plate scrap	670	170	640	228	39
India					
Ingots, blooms, billets (e)	13 592	23 094	4 685	3 872	...
Ferro-chrome	29	11	106	...	...
Ferro-manganese	7	—	—	...	...
Ferro-silicon	66	76	43	...	...
Ferro-molybdenum	80	271	128	...	...
Other ferro-alloys	855	507	517	...	...
Old & scrap	12 013	15 714	28 135	...	...
Indonesia					
Pig-iron (d)	)	7 280	14 812	34 411	32 429
Ferro-manganese	) 9 532	537	1 200	1 251	2 594
Other ferro-alloys	)	1 293	2 310	1 381	1 578
Ingots, blooms, billets	36 965	75 693	120 432	163 756	198 557
Scrap	12 739	16 043	29 462	47 084	80 690
Iran (f)					
Pig-iron	17 193	6 194	9 810	...	...
Ingots, blooms, billets	196 452	507 814	266 549	...	...
Ferro-manganese	2 137	6 231	2 214	...	...
Other ferro-alloys	5 589	7 119	11 731	...	...
Old & scrap	6 129	7 238	502	...	...
Iraq					
Pig-iron	27 955	7 509	...	...	...

Imports of Iron, Steel and Ferro-alloys

Country	1974	1975	1976	1977	1978
Israel (l)					
Pig-iron	6 472	1 408	451	426	260
Spiegeleisen	—	...	400	51	—
Ferro-manganese	520	631	25	584	236
Other ferro-alloys	770	190	509	747	1 156
Ingots, blooms, billets	70 900	17 125	24 567	4 640	62 063
Japan					
Pig-iron	1 232 076	399 475	584 093	542 746	639 506
Ferro-manganese	16 153	1 900	1 850	5 777	17 017
Ferro-silicon	70 658	33 905	46 717	45 293	100 316
Ferro-chrome	38 815	29 104	93 002	104 098	168 597
Ferro-silico-chrome	...	...	13 657	5 497	5 951
Ferro-nickel	18 001	9 858	14 307	19 858	20 485
Ferro-niobium	...	...	1 723	905	1 177
Ferro-molybdenum	2 172	646	1 036	222	651
Ferro-tungsten	231	121	555	209	118
Ferro-vanadium	...	...	1 559	877	1 692
Other ferro-alloys	40 624	14 654	4 708	8 265	45 185
Ingots, blooms, billets	132 252	69 389	112 131	158 793	119 277
Old & scrap	3 559 283	3 092 847	1 802 320	1 440 286	3 229 156
Jordan					
Pig-iron	30 694	13 401	10 030	1 021	5 601
Ingots, blooms, billets	...	24 196	87 678	51 362	55 642
Korea, Republic of					
Pig-iron	90 735	75 201	8 770	19 680	...
Ferro-chrome	424	412	904	1 694	...
Ferro-manganese	2 926	494	1 245	1 682	...
Ferro-silicon	36	63	1 100	1 217	...
Other ferro-alloys	149	184	369	844	...
Scrap	1 119 543	844 193	1 093 699	1 571 429	...
Ingots & blooms	108 155	191 431	132 882	274 149	...
Kuwait					
Scrap	9 942	5 828	...	...	...
Malaysia (j)					
Pig-iron	7 462	8 520	7 093	5 195	...
Ferro-manganese	3 299	1 407	1 824	2 083	...
Other ferro-alloys	1 519	1 437	1 191	3 043	...
Ingots, blooms, billets	8 423	10 017	24 724	10 723	...
Scrap	8 678	4 443	2 478	2 550	...
Pakistan (h)					
Scrap	71 017	...	138 334	103 818	210 623
Philippines					
Pig-iron	45 903	28 102	62 851	52 419	35 133
Ferro-manganese	6 588	1 161	1 279	1 743	2 936
Ferro-silicon	2 904	1 554	155	205	262
Other ferro-alloys	1 369	304	567	946	694
Ingots, blooms, billets	207 294	152 727	259 707	350 653	276 083
Scrap	17 316	61 363	95 715	62 234	79 282
Sabah (k)					
Ingots	569				
Saudi Arabia					
Pig-iron	...	2 996	7 748	8 445	...
Ferro-alloys	...	444	242	863	...
Ingots, blooms, billets	...	7 982	5 348	5 102	...
Scrap	...	433	2 052	225	...
Singapore					
Pig-iron (d)	26 261	71 901	21 800	7 852	55 807
Ferro-manganese	2 520	1 562	705	110	2 143
Other ferro-alloys	2 023	1 444	4 082	2 310	3 920
Ingots & blooms	38 052	101 024	136 697	32 288	63 452
Scrap	33 099	96 052	54 754	23 458	92 940
Sri Lanka					
Ingots, blooms, billets	35 001	19 075	16 537	...	...
Syria					
Pig-iron	1 491	2 889	10 682	12 048	...
Ingots, blooms, billets	25 404	23 576	204 797	80 245	...
Scrap	2 901	4 153	6 105	4 211	...

Imports of Iron, Steel and Ferro-alloys

tonnes

Country	1974	1975	1976	1977	1978
Taiwan					
Pig-iron	52 158	6 213	68 556	10 278	68 686
Ferro-manganese	2 271	215	421	438	633
Ferro-silicon	...	83	110	135	206
Ferro-chrome	296	94	297	543	1 224
Other ferro-alloys	348	170	5 260	400	584
Ingots, blooms, billets	70 437	16 496	81 305	94 205	26 673
Old & scrap	785 874	407 913	297 090	571 057	622 219
Thailand					
Pig-iron (d)	2 133	2 313	553	20 337	...
Ferro-manganese	639	194	2 060	2 315	...
Ferro-silicon	2 991	3 188	2 728	3 484	...
Other ferro-alloys	1 208	536	336	826	...
Scrap	255 920	257 187	275 609	423 615	...
Australia					
Ferro-chrome	13 816	4 964	6 019	12 482	18 730
Ferro-manganese (i)	10 874	4 424	4 882	3 101	5 033
Ferro-silico-manganese	394	1 037	603	115	...
Ferro-molybdenum	620	149	92	205	191
Ferro-silicon	17 618	17 161	11 800	6 437	6 363
Ferro-nickel	1 506	1 207	5	38	—
Other ferro-alloys	2 919	1 465	3 196	1 869	...
Ingots & billets	1 306	1 023	300	554	...
Scrap (h)	114	492	359	191	659
Fiji					
Pig-iron	134	64	132	...	...
Ingots, blooms, billets	3 373	2 553	9 183	...	...
New Zealand (h)					
Pig-iron	4 277	4 307	2 718	1 039	...
Spiegeleisen	209	50	142	108	...
Ferro-manganese	2 041	3 096	993	2 335	...
Other ferro-alloys	1 905	2 085	1 022	1 914	...
Billets & blooms	17 071	23 024	7 095	4 141	...
Solomon Islands					
Billets & blooms	895	1 313	575	876	1 446

(a) Excluding ships intended for breaking up

(b) Including spiegeleisen

(c) Figures up to 1976 exclude imports from Belgium-Luxembourg, if any

(d) Including cast iron

(e) Years ended 31 March following that stated

(f) Years ended 20 March following that stated

(g) Exports from Soviet Union

(h) Years ended 30 June of that stated

(i) Including powder

(j) From 1975 includes Sabah and Sarawak

(k) From 1975 included with Malaysia

(l) Figures may be incomplete as value only given in Israeli trade return for imports from some countries

(m) Excluding high carbon steel, if any

(n) Including ferro-alloys

(p) Included with 'other ferro-alloys'

(q) Including ferro-silico-manganese

Production of Kaolin

Country	1974	1975	1976	1977	1978
United Kingdom (a)	3 023 000	2 266 000	2 533 000	2 775 000	2 859 000
Belgium	* 100 000	* 100 000	* 100 000	* 110 000	* 110 000
Denmark (a)	67	195	* 80	* 70	* 30
France (b)	723 311	568 794	612 541	* 770 000	* 770 000
Germany, Federal Republic of (i)	395 000	335 000	365 000	399 000	413 000
Italy	90 081	76 800	81 709	83 772	70 511
Austria (d)	312 425	281 200	270 742	272 250	275 695
Bulgaria	* 150 000	* 150 000	* 150 000	* 150 000	* 154 000
Czechoslovakia (c)	484 000	526 000	545 000	580 000	592 000
Greece	66 651	73 785	70 350	67 686	62 741
Hungary (c)	79 000	89 000	72 000	77 600	70 000
Poland	85 600	83 800	94 800	90 500	66 000
Portugal	60 724	59 355	63 895	62 619	62 185
Romania	* 87 400	* 87 400	* 90 000	* 90 000	* 90 000
Soviet Union	* 2 100 000	* 2 200 000	* 2 200 000	* 2 300 000	* 2 400 000
Spain (c)	349 616	346 672	339 094	345 270	...
Sweden (h)	50	—	...	298	—
Turkey	25 000	34 535	65 611	60 000	54 000
Yugoslavia (h)	46 000	44 000	...	...	...
Algeria	10 200	10 507	7 790	11 600	17 200
Angola	0	0	—	* 500	...
Egypt	25 840	33 364	28 267	38 648	63 489
Ethiopia	* 40 000	* 50 000	* 45 000	* 40 800	* 31 800
Kenya	—	—	2	495	2 719
Madagascar	3 505	4 307	25 397	2 152	2 722
Mozambique	475	454	* 650	* 600	...
South Africa	48 844	56 808	59 733	88 619	122 024
Swaziland	2 236	2 660	989	—	...
Tanzania	792	1 004	2 385	77	* 1 000
Mexico	93 372	120 440	71 350	87 589	45 360
USA (e)	5 799 475	4 839 059	5 559 011	5 860 943	6 325 800
Argentina	93 237	113 482	83 726	89 218	* 86 000
Brazil	173 669	172 834	209 704	259 000	* 240 000
Chile	75 000	60 000	67 000	50 188	48 100
Colombia	* 105 000	* 125 000	* 150 000	* 150 000	* 150 000
Ecuador	1 737	2 270	1 138	8 790	4 613
Paraguay	* 12 000	* 12 000	* 14 000	* 22 000	* 35 000
Peru	4 077	9 516	9 116	10 600	* 10 900
Bangladesh	1 200	4 472	3 367	4 186	6 350
Hong Kong	3 320	1 490	1 305	2 466	25 046
India (c)	426 000	371 000	438 000	445 000	424 000
Indonesia	25 972	25 132	29 323	36 676	34 500
Iran	* 100 000	* 100 000	127 400	* 130 000	* 100 000
Israel	4 536	12 193	10 000	5 500	* 6 400
Japan	413 329	215 607	212 965	203 327	227 895
Korea, Republic of	271 812	381 734	379 595	356 550	366 370
Malaysia	146 371	16 807	26 252	31 856	31 174
Pakistan	983	1 424	572	* 240	* 900
Sri Lanka	5 888	3 698	4 334	5 159	5 512
Thailand	60 878	15 782	16 660	24 810	33 600

Kaolin

Production of Kaolin

tonnes

Country	1974	1975	1976	1977	1978
Australia (c)(f)	98 152	80 674	69 303	88 884	* 86 000
New Zealand	16 711	26 997	58 834	94 742	33 471
World total (g)	16 200 000	14 200 000	15 400 000	16 400 000	17 000 000

(a) Sales

(b) Including kaolinitic clay

(c) Partly beneficiated material

(d) Crude

(e) Sold or used by producers

(f) White clays: including kaolin and ball clay

(g) Other countries known to produce kaolin include China, German Democratic Republic, Lebanon, Nigeria, Vietnam and Zimbabwe

(h) Beneficiated

(i) Washed and dried

Exports of Kaolin

Country	1974	1975	1976	1977	1978
United Kingdom	2 456 640	1 767 802	2 061 921	2 267 534	2 312 528
Belgium-Luxembourg	8 778	3 656	9 220	6 187	3 176
Denmark	807	956	856	738	936
France	135 397	110 954	104 472	120 996	121 325
Germany, Federal Republic of	111 390	108 378	97 734	101 120	102 600
Italy	47 834	40 918	51 012	64 547	42 546
Netherlands	64 825	52 192	71 535	71 194	84 085
Austria	26 648	13 188	16 630	13 404	21 271
Czechoslovakia	297 000	296 000	397 000	412 000	382 000
German Democratic Republic	95 443	80 250	108 260	83 475	87 413
Greece	...	16 024	17 155	15 565	...
Hungary	...	...	7 236	7 724	7 025
Portugal	535	3	0	—	—
Soviet Union (b)	* 66 100	* 40 600	* 39 400	* 25 000	* 22 200
Spain	61 973	47 693	59 237	57 720	59 802
Sweden	263	147	78	744	131
Turkey	13 285	1 506	66	—	—
Yugoslavia	724	4 765	7 668	10 638	9 812
Algeria (c)	4 233	800	460	150	...
South Africa	2 135	634	941	1 047	988
Swaziland	2 236	2 642	989	...	...
USA	772 369	798 140	764 135	864 427	1 065 860
Argentina	117	—	20	...	...
Brazil	3 224	2 845	818	11 470	21 445
Hong Kong	4 031	1 932	1 830	2 941	2 336
India	3 239	1 818	3 778	...	...
Japan	3 995	4 341	3 926	2 386	2 470
Korea, Republic of	164 092	109 340	119 818	104 781	88 112
Malaysia (a)	14 617	9 865	11 921	11 845	...
Singapore	244	144	611	893	1 593

(a) From 1975 includes Sabah and Sarawak

(b) IGS estimates, based on known imports into certain countries

(c) Including bentonite

Imports of Kaolin

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom	9 588	9 466	5 350	7 363	6 560
Belgium-Luxembourg	301 766	237 206	252 834	275 973	289 598
Denmark	50 828	29 721	25 162	32 746	33 465
France	353 893	278 500	288 500	322 324	306 755
Germany, Federal Republic of	767 992	554 821	653 325	679 510	716 893
Italy	742 567	430 841	565 442	631 931	673 576
Netherlands	412 558	309 345	377 792	371 919	393 188
Austria	95 837	73 043	89 085	96 950	102 546
Finland	379 203	221 627	290 678	361 648	330 644
German Democratic Republic	28 873	32 128	27 825	27 500	47 400
Greece	...	65 473	65 631	69 624	...
Hungary	24 423	28 533	28 797	24 871	34 563
Norway	86 521	77 800	76 585	77 512	79 369
Poland	127 871	155 699	163 651	161 034	185 221
Portugal	7 406	4 760	6 211	9 334	...
Spain	139 804	121 382	134 504	165 756	165 311
Sweden	262 728	222 855	224 857	245 800	257 343
Turkey	2 599	5 334	4 973	5 041	...
Yugoslavia	48 332	59 528	60 389	67 062	73 464
Algeria (d)	1 040	6 281	12 769	12 393	...
Egypt (e)	4 257	15 543	22 314	18 846	—
Ivory Coast	79	51	120	114	167
Morocco	4 959	1 868	4 583	3 303	2 119
Tunisia (d)	18 312	18 701	11 032	17 234	15 034
Canada	181 260	148 378	176 751	153 775	181 890
Costa Rica	991	810	1 694	1 244	...
Guatemala	2 572	3 419	13 457	6 779	...
Mexico	41 921	32 696	39 598	45 463	...
Nicaragua	6 163	3 324	...	...	...
USA	17 337	17 351	20 962	17 838	11 592
Argentina	17 812	12 400	16 853	...	...
Brazil	20 312	4 505	14 813	4 096	2 453
Chile	563	...	...	...	...
Colombia	...	...	3 208	...	...
Uruguay	2 356	1 114	1 638	1 864	...
Venezuela	17 075	16 542	...	...	...
Hong Kong	2 380	5 653	3 387	1 088	387
India	310	10	5	...	...
Iran (a)	17 034	18 848	22 663	...	...
Japan	351 372	284 389	373 820	404 320	467 410
Korea, Republic of	12 676	8 129	14 301	116 028	...
Malaysia (c)	1 457	1 313	1 544	1 816	...
Pakistan (b)	...	...	2 483	3 756	3 824
Philippines	8 545	4 686	5 226	7 168	9 107
Saudi Arabia	...	466	9 931	7 538	...
Singapore	4 171	2 464	2 741	4 925	4 802
Taiwan	30 219	20 857	28 119	32 418	42 171
Thailand	5 055	2 546	6 844	1 342	...
Australia	36 495	1 718	5 262	6 432	10 202
New Zealand (b)	1 998	2 288	1 394	3 927	...

(a) Years ended 20 March following that stated

(b) Years ended 30 June of that stated

(c) From 1975 includes Sabah and Sarawak

(d) Including bentonite

(e) May include other clays

Mine Production of Lead

tonnes (metal content)

Country	1974	1975	1976	1977	1978
United Kingdom	3 800	6 426	7 053	8 178	4 582
France	22 976	22 305	27 996	31 481	32 500
Germany, Federal Republic of	30 514	32 343	31 667	31 132	22 374
Irish Republic	37 695	36 247	32 612	41 012	47 744
Italy	23 300	29 500	29 300	31 500	30 000
Austria	5 785	6 101	5 393	5 002	5 524
Bulgaria	* 110 000	* 108 000	* 110 000	* 117 000	* 117 000
Czechoslovakia	* 5 400	* 4 700	* 4 700	* 4 800	* 5 000
Finland (a)	1 532	900	1 100	627	791
Greece	22 100	13 206	* 27 000	16 024	20 300
Greenland	(c) 37 000	32 000	38 000	39 500	43 200
Hungary	1 239	864	259	175	1 023
Norway	3 376	3 229	3 861	3 163	3 200
Poland	64 000	65 000	60 000	54 900	49 600
Romania	* 45 000	* 40 000	* 42 500	* 42 000	* 40 000
Soviet Union	* 590 000	* 600 000	* 600 000	* 625 000	* 600 000
Spain	64 127	58 518	66 396	65 540	70 149
Sweden	73 656	70 383	81 625	88 132	81 900
Turkey	7 400	6 500	4 900	24 600	19 900
Yugoslavia	119 826	126 896	122 500	130 000	124 500
Algeria	3 000	3 200	2 100	900	1 600
Congo	1 650	1 997	2 100	* 2 100	...
Morocco	92 537	67 812	64 146	104 308	109 500
Namibia	55 200	53 100	46 400	41 200	38 600
Nigeria	* 220	* 130	* 130	* 50	...
South Africa	3 316	3 605	—	—	—
Tunisia	12 664	9 930	9 694	9 032	8 000
Zambia (b)	24 596	18 832	13 583	13 109	12 878
Canada	301 362	352 502	243 956	327 593	373 000
Guatemala	112	71	(b) 109	(b) 108	(b) 119
Honduras	18 433	23 263	18 590	23 538	21 800
Mexico	218 021	178 615	200 027	163 479	170 500
USA (a)	602 253	563 783	552 971	537 499	528 787
Argentina	37 826	30 046	33 004	33 071	30 700
Bolivia	17 623	16 018	18 581	18 441	18 042
Brazil	25 922	22 365	22 615	24 000	21 000
Chile	420	309	1 816	789	400
Colombia	126	114	* 140	* 115	* 120
Peru (a)	165 798	154 168	159 758	166 068	...
Burma	4 500	9 800	7 100	8 000	9 200
China	* 140 000	* 140 000	* 140 000	* 150 000	* 150 000
India	8 900	12 300	12 800	14 400	12 900
Iran (d)	47 500	50 000	40 000	30 000	30 000
Japan	44 248	47 208	48 906	50 132	51 770
Korea, Dem. P.R. of	* 120 000	* 120 000	* 120 000	* 110 000	* 105 000
Korea, Republic of	10 498	12 164	14 533	16 552	16 100
Philippines	1 303	3 381	4 530	3 695	1 696
Thailand	1 452	1 443	851	476	* 1 400
Australia	375 304	407 801	397 403	432 204	398 429
World total	3 600 000	3 600 000	3 500 000	3 600 000	3 600 000

(a) Recoverable

(b) Smelter

(c) Includes 5 months production from 1973

(d) Years ended 20 March following that stated

Lead

Production of Refined Lead

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom (a)	276 900	241 300	251 500	264 405	247 366
Belgium (a)	109 608	114 948	121 524	104 100	104 200
Denmark	14 900	13 700	18 600	23 200	26 200
France	177 738	150 746	172 231	184 100	183 678
Germany, Federal Republic of	321 402	260 166	278 305	309 617	305 000
Italy	65 200	43 900	64 200	63 800	55 800
Netherlands	26 400	23 900	21 890	21 132	18 172
Austria (a)	14 668	14 792	16 191	16 900	15 900
Bulgaria	* 105 000	* 110 000	* 112 000	* 112 000	* 112 000
Czechoslovakia	17 870	18 447	19 116	19 015	20 000
German Democratic Republic (a)	* 35 000	* 36 000	* 36 000	* 37 000	* 36 000
Greece	14 600	16 300	18 600	20 400	21 100
Norway	1 200	600	—	500	400
Poland	71 600	76 200	80 600	85 400	86 700
Portugal	687	340	388	241	* 240
Romania	* 45 000	38 875	42 465	41 702	42 815
Soviet Union	* 660 000	* 660 000	* 600 000	* 620 000	* 600 000
Spain	82 000	80 100	77 800	87 300	87 800
Sweden	45 247	38 673	49 405	52 030	45 300
Turkey	5 600	3 000	3 200	3 000	3 600
Yugoslavia	114 001	125 691	111 220	129 890	117 000
Morocco	—	7 900	26 400	33 200	30 000
Namibia	64 200	44 300	39 600	42 700	39 500
Tunisia	27 500	23 394	23 475	19 160	16 100
Zambia	24 596	18 832	13 583	13 109	12 878
Canada	126 443	171 516	175 720	187 457	192 000
Guatemala	175	189	109	108	119
Mexico	200 180	172 928	189 731	153 948	...
USA	619 508	579 008	596 491	554 825	570 425
Argentina	37 200	36 000	50 000	45 000	31 300
Brazil	41 686	37 540	43 672	48 303	48 000
Peru	80 557	71 142	93 500	106 000	99 900
Burma (b)	5 176	2 587	2 882	3 376	3 600
China (a)	* 140 000	* 140 000	* 140 000	* 150 000	* 150 000
India	3 986	4 769	5 435	7 588	10 059
Japan	227 960	194 217	219 053	221 398	228 442
Korea, Dem. P.R. of	* 80 000	* 80 000	* 70 000	* 70 000	* 70 000
Korea, Republic of	4 606	5 739	7 781	6 742	7 218
Australia	192 757	159 793	181 941	181 501	204 019
World total	4 100 000	3 800 000	4 000 000	4 000 000	4 000 000

Note: This table includes lead content of antimonial lead

(a) Including secondary metal

(b) Years ended 31 March following that stated

Exports of Lead

Country	1974	1975	1976	1977	1978
United Kingdom					
Ores & concentrates	5 871	10 414	9 272	5 558	6 860
Unwrought	116 560	79 643	77 072	103 751	105 195
Unwrought alloys	22 590	26 889	26 562	22 320	16 931
Scrap	24 856	19 046	11 616	6 874	16 615
Belgium-Luxembourg					
Ore	4 866	2	7	16	25
Unwrought	47 996	55 387	67 383	69 312	76 206
Unwrought alloys	4 872	5 102	5 827	7 617	9 782
Scrap	11 253	6 642	8 328	12 698	15 653
Denmark					
Ore	485	245	633	600	580
Unwrought	2 857	1 362	4 028	9 559	9 834
Unwrought alloys	5 129	3 933	6 892	8 796	8 127
Scrap	621	402	468	1 189	801
France					
Ore	104	7 513	64	29	40
Unwrought	6 878	7 807	16 829	16 932	34 959
Unwrought alloys	12 891	13 357	16 016	20 330	18 466
Scrap	14 035	5 139	15 055	76 642	32 661
Germany, Federal Republic of					
Ore	3 689	3 434	7 094	6 639	10
Unwrought	74 734	63 372	52 817	81 642	82 124
Unwrought alloys	13 015	17 530	19 381	23 761	24 686
Scrap	16 701	17 769	21 710	18 564	16 801
Irish Republic					
Ore & concentrates	74 195	58 641	56 836	71 886	69 175
Unwrought (a)	3 825	2 029	2 194	3 079	3 231
Italy					
Ore	12 584	20 017	26 554	26 980	19 207
Unwrought (a)	1 602	3 529	4 145	6 673	6 347
Netherlands					
Unwrought	10 620	12 218	7 795	5 951	5 663
Unwrought alloys	9 757	12 376	15 118	9 002	16 059
Scrap	21 602	11 611	16 671	39 874	32 825
Austria					
Unwrought	908	404	204	766	673
Scrap	499	638	877	665	12
Finland					
Ore	3 803	...	4 089	...	2 022
Unwrought (a)	195	66	9	1 303	808
Greece					
Ore	28 480	12 988	37 708	20 832	47 795
Greenland					
Ores & concentrates	37 687	37 159	35 581	41 660	...
Norway					
Ore	6 015	4 100	4 599	5 846	4 432
Unwrought (a)	362	575	430	90	36
Scrap	4 748	4 744	7 017	6 687	6 303
Poland					
Concentrates	25 522	15 263	17 827	...	...
Portugal					
Ore	...	—	—	140	980
Unwrought (a)	21	3	40	1	504
Soviet Union					
Unwrought	95 513	98 889	99 000	95 000	95 000
Spain					
Unwrought (a)	342	1 563	1 444	1 769	10 548
Sweden					
Ore	46 690	49 520	61 036	68 445	58 385
Unwrought	26 802	26 561	37 590	46 827	52 779
Unwrought alloys	2 310	1 487	1 621	1 965	1 555
Scrap	25	0	118	99	86
Switzerland					
Unwrought	1 391	1 768	1 512	3 387	2 796
Scrap	9 105	5 485	7 549	9 443	8 530

Lead

Exports of Lead

tonnes

Country	1974	1975	1976	1977	1978
Turkey					
Ore (e)	40 123	4 875	9 450	8 448	...
Concentrates	850	1 750	—	4 525	...
Yugoslavia					
Concentrates	23 289	...	11 288	5 430	39 893
Unwrought	44 556	50 845	47 035	50 848	41 015
Unwrought alloys	281	178	118	563	3 401
Algeria					
Ore	77 183	4 695	4 555	2 682	...
Scrap	...	1 102	1 200	790	...
Congo					
Ore	...	11 501	11 404	9 656	...
Ivory Coast					
Scrap	947	324	434	563	547
Kenya					
Ores & concentrates	797	1 774	800	—	—
Scrap	689	2 431	459	663	360
Morocco					
Ore	125 905	74 762	71 239	120 571	119 614
Unwrought	...	5 364	17 547	29 942	21 335
Nigeria					
Ore & concentrates	242	177	40	...	...
Senegal					
Unwrought & scrap	148	165	...	...	...
South Africa					
Concentrates	1 141	5 557	1 626	—	—
Unwrought	31 900	27 100	16 700	24 000	39 000
Sudan					
Scrap	100	830	598	43	297
Tanzania					
Scrap	292	253	145	...	...
Tunisia					
Ore	...	...	5 859	1 550	—
Unwrought	23 578	20 132	20 750	14 549	12 153
Scrap	24 478	450	—	14 580	—
Zambia					
Unwrought	18 776	19 376	15 000	11 400	10 000
Canada					
Ore (b)	194 089	211 909	140 942	137 820	142 641
Unwrought	76 027	110 776	114 551	130 823	131 955
Scrap	9 868	12 144	14 911	15 963	17 606
Honduras					
Ore & concentrates	...	36 604	28 651	36 354	34 338
Mexico					
Ores & concentrates	17 263	10	7 434	9 899	...
Unwrought –					
Refined	108 104	98 338	56 354	75 773	70 800
Base bullion	5 348	3 368	9 116	1 676	...
USA					
Lead & zinc concentrates	100 857	141 391	135 988	127 567	65 204
Unwrought	43 645	16 028	2 020	1 842	2 145
Unwrought alloys	6 857	846	1 946	2 741	1 024
Scrap	53 932	45 400	42 553	77 692	98 687
Bolivia					
Ore (b)	19 353	17 665	18 580	19 878	16 482
Colombia					
Ore	...	...	234	...	...
Peru					
Ores & concentrates	(b) 83 633	118 080	162 983	127 732	147 900
Refined	80 465	62 699	83 044	96 299	92 525
Burma					
Unwrought	4 713	6 796	...	...	...
Hong Kong					
Scrap	1 927	1 258	2 001	490	1 122

Exports of Lead

Country	1974	1975	1976	1977	1978
Iran (c)					
Ore	45 813	82 381	4 444	...	...
Japan					
Ores & concentrates	7 405	...	3 728	6 964	9 312
Unwrought (a)	33 097	39 494	8 641	8 297	7 815
Scrap	1 131	1 468	2 855	3 673	1 425
Korea, Republic of					
Ore	7 638	6 710	8 360	7 640	...
Taiwan					
Unwrought	155	703	1 104	1 303	4 577
Thailand					
Ore	170	821	1 234	3 710	...
Australia					
Ore & concentrates (b)(d)	45 599	61 000	40 278	57 668	95 091
Base bullion (b)	148 302	142 414	172 032	167 533	147 101
Unwrought	133 264	116 254	157 852	125 108	149 814
Unwrought alloys	5 587	4 950	6 644	7 730	...
Scrap	786	1 162	1 027	2 440	9 757

Note: In this table the description 'unwrought' lead corresponds to item 685.1 of the Standard International Trade Classification (Revised) and comprises base bullion, pigs, unwrought bars, etc

(a) Including alloys

(b) Pb content

(c) Years ended 20 March following that stated

(d) Including lead content of matte, slags, etc

(e) Complex lead-zinc ore

Lead

Imports of Lead

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom					
Ore & concentrates (b)	42 664	29 563	* 7 900	30 217	30 865
Unwrought (a)	216 756	201 968	236 716	184 667	198 998
Scrap	3 685	1 560	1 762	7 268	2 618
Belgium-Luxembourg					
Ore	88 030	90 268	132 588	52 912	74 541
Unwrought	19 243	16 203	28 334	48 478	50 557
Unwrought alloys	5 543	4 133	5 048	6 222	5 837
Scrap	11 497	12 439	9 619	12 682	14 593
Denmark					
Unwrought	10 922	6 245	6 516	7 060	6 932
Unwrought alloys	1 371	1 376	835	1 048	349
Scrap	5 631	6 013	12 545	20 273	21 869
France					
Ore	165 544	129 816	96 536	125 561	134 738
Unwrought	36 652	50 825	47 433	39 775	34 048
Unwrought alloys	7 288	6 973	8 955	7 856	4 190
Scrap	21 757	12 575	6 611	58 893	17 246
Germany, Federal Republic of					
Ore	184 036	208 978	190 104	195 020	170 055
Unwrought	115 180	114 414	93 500	94 208	107 567
Unwrought alloys	13 513	8 416	16 954	20 611	23 535
Scrap	35 773	10 205	23 769	50 538	45 621
Irish Republic					
Unwrought (a)	1 691	1 679	2 424	2 627	4 443
Italy					
Ore	61 144	13 616	19 969	14 262	18 589
Unwrought (a)	164 623	129 511	159 586	161 482	138 318
Scrap	30 213	18 531	22 312	40 832	38 275
Netherlands					
Unwrought	38 265	35 823	39 641	45 323	45 884
Unwrought alloys	8 623	8 056	12 216	15 362	14 034
Scrap	20 489	19 291	9 805	16 706	10 882
Austria					
Ore	5 116	7 424	7 561	7 822	4 258
Unwrought	20 199	15 909	22 999	23 198	24 510
Scrap	1 133	1 609	2 435	2 114	1 203
Finland					
Unwrought (a)	13 549	13 982	14 605	14 613	12 332
Greece					
Ore	4 848	7 614	19 294	7 277	...
Unwrought	14 763	7 875	9 995	7 013	5 658
Hungary					
Unwrought & semi-manufactures	12 051	12 392	14 319	16 582	15 005
Iceland					
Unwrought	60	17	98	68	66
Norway					
Unwrought	9 224	8 224	7 211	7 282	7 430
Unwrought alloys	4 479	4 647	7 453	4 772	5 748
Poland					
Unwrought	20 298	13 170	12 076	9 384	9 579
Portugal					
Unwrought (a)	14 086	8 362	13 796	12 349	16 603
Scrap	263	77	182	51	73
Soviet Union					
Unwrought	77 214	56 700	60 000	55 000	60 000
Spain					
Ore	14 638	26 028	17 887	24 372	33 344
Unwrought (a)	22 663	6 848	8 995	1 396	3 653
Scrap	1 214	454	2 494	462	4 024
Sweden					
Unwrought	4 753	3 176	2 031	443	426
Unwrought alloys	3 693	1 497	2 541	2 808	1 263
Scrap	1 740	1 452	2 456	6 030	5 045

Imports of Lead

Country	1974	1975	1976	1977	1978
Switzerland					
Unwrought	22 378	14 355	14 748	14 477	15 048
Turkey					
Unwrought (a)	9 192	4 724	7 468	7 406	3 328
Scrap	1 829	2 069	1 286	103	...
Yugoslavia					
Concentrates	6 233	20 106	8 123	22	1 923
Unwrought	16 149	15 597	3 824	5 321	8 188
Scrap	2 088	3 130	938	2 187	...
Algeria					
Unwrought	4 233	7 817	3 495	1 098	...
Unwrought alloys	408	1 168	467	376	...
Egypt					
Unwrought & scrap	5 994	15 242	6 545	10 066	15 955
Ghana					
Unwrought (a)	190	141	...	...	...
Kenya					
Unwrought (a)	2 204	329	563	2 185	878
Libya					
Unwrought	1 464	3 358	343	3 251	...
Madagascar					
Unwrought (a)	393	377	223	344	379
Mauritius					
Unwrought (a)	3	8	5	24	...
Morocco					
Unwrought	2 021	2 084	225	0	—
Unwrought alloys	118	205	84	5	6
Mozambique					
Unwrought	3 883	268	478	465	...
Nigeria					
Unwrought (a)	51	115	154	...	...
South Africa					
Ore	25 508	1 004	5 766	—	—
Unwrought	4 043	3 297	5 009	2 202	5 662
Scrap	4 665	8 299	12 474	4 957	49 445
Sudan					
Unwrought	204	88	360	440	56
Tanzania					
Unwrought (a)	29	32	38	...	...
Tunisia					
Ore	26 715	24 089	18 523	5 850	4 080
Barbados					
Unwrought (a)	63	25	20	20	51
Canada					
Unwrought	11 357	1 962	1 941	822	1 715
Costa Rica					
Unwrought & semi-manufactures (a)	243	144	277	288	...
El Salvador					
Unwrought (a)	50	164	65	100	...
Honduras					
Unwrought (a)	85	75	95	57	21
Jamaica					
Unwrought (a)	41	186	33	...	...
Mexico					
Unwrought	12	309	465	818	...
Nicaragua					
Unwrought (a)	171	166	...	...	...
Trinidad & Tobago					
Unwrought (a)	223	177	286	484	562

Lead

Imports of Lead

tonnes

Country	1974	1975	1976	1977	1978
USA (b)					
Ores & concentrates	85 546	79 434	69 278	66 533	52 984
Base bullion	754	419	2 117	7 319	4 307
Unwrought	96 778	79 589	119 852	218 951	202 617
Unwrought alloys	10 603	11 593	8 454	12 966	21 451
Scrap	713	1 177	2 023	3 158	2 767
Argentina					
Unwrought	1 763	6 115	299	...	...
Brazil					
Ore	24 237	24 836	29 799	42 601	44 765
Unwrought (a)	20 168	13 254	9 144	14 857	754
Chile					
Unwrought & scrap	3 306	...	...	...	...
Colombia					
Unwrought (a)	...	...	2 924	...	...
Uruguay					
Unwrought	892	1 191	1 071	1 189	...
Venezuela					
Unwrought (a)	524	3 194	...	...	...
China					
Refined (i)	* 15 000	* 44 300	* 26 300	* 10 600	* 23 900
Hong Kong					
Unwrought	675	508	1 017	1 112	(a) 1 190
Scrap	1 116	96	540	241	288
India					
Ore	18	30	145	...	...
Unwrought (c)	36 697	22 251	45 825	43 453	) * 15 500
Unwrought alloys (c)	412	1 575	412	3 152)
Indonesia					
Unwrought (f)	2 235	2 598	3 414	4 299	6 547
Iran (d)					
Unwrought	6 016	602	1 001	...	...
Iraq					
Unwrought (a)	2 676	19	...	...	...
Israel (g)					
Unwrought	1 100	106	1	706	2 266
Japan					
Ore	217 568	200 758	154 601	193 875	222 447
Unwrought	33 731	15 822	32 203	28 478	50 923
Unwrought alloys	2 823	1 380	2 826	3 597	8 436
Scrap	1 677	1 103	1 402	2 856	6 704
Jordan					
Unwrought & scrap	1 770	1 760	3 176	1 687	3 786
Korea, Republic of					
Unwrought (a)	6 812	4 528	6 568	11 493	20 500
Scrap	6 907	3 728	4 394	15 251	...
Malaysia (h)					
Unwrought (a)	1 034	1 000	1 497	2 228	...
Scrap	1 172	739	903	757	...
Philippines					
Unwrought (a)	4 565	6 354	4 978	6 651	7 698
Singapore					
Unwrought	3 524	2 590	3 629	3 946	4 560
Syria					
Unwrought & scrap	1 310	2 547	3 169	3 774	...

Imports of Lead

Lead

tonnes

Country	1974	1975	1976	1977	1978
Taiwan					
Unwrought (a)	4 384	5 171	6 361	8 654	8 794
Scrap	3 350	4 474	7 575	12 869	22 061
Thailand					
Unwrought (a)	5 396	7 779	7 528	6 429	...
New Zealand (e)					
Unwrought (a)	7 529	7 770	8 889	7 497	...

Note: In this table the description 'unwrought' lead corresponds to item 685.1 of the Standard International Trade Classification (Revised) and comprises base bullion, pigs, unwrought bars, etc

(a) Including alloys

(b) Pb content

(c) Years ended 31 March following that stated

(d) Years ended 20 March following that stated

(e) Years ended 30 June of that stated

(f) 1974 figures include semi-manufactures

(g) Figures may be incomplete as value only given in Israeli trade return for imports from some countries

(h) From 1975 includes Sabah and Sarawak

(i) Imports from western countries only

Lithium

Production of Lithium Minerals

tonnes

Country	1974	1975	1976	1977	1978
Portugal					
Lepidolite	1 200	1 100	1 100	1 000	800
Soviet Union	* 45 000	* 45 000	* 45 000	* 50 000	* 50 000
Mozambique					
Lepidolite	...	* 730	* 730	* 750	* 750
Spodumene	...	* 25	* 25	* 30	* 30
Namibia	37 762	51 373	5 892	2 548	...
Rwanda					
Amblygonite	* 30	* 30	* 30	* 30	* 30
Zimbabwe	* 3 600	* 9 000	* 9 000	* 9 000	* 9 000
USA (a)(b)	* 3 500	* 4 000	* 4 000	* 4 000	* 4 000
Argentina	164	487	675	412	* 500
Brazil					
Amblygonite	171	156	185	489	500
Lepidolite	460	468	1 332	579	550
Petalite	3 569	3 697	968	1 028	1 000
Spodumene	1 200	792	413	112	100
China	* 9 000	* 9 000	* 9 000	* 10 000	* 10 000
World total (a)	* 5 000	* 6 000	* 5 500	* 6 000	* 6 000

(a) Li content

(b) Mostly spodumene

Exports of Lithium

Country	1974	1975	1976	1977	1978
United Kingdom					
Metal	1	1	0	1	1
Belgium-Luxembourg					
Lithium minerals	6 030	3 685	1 390	61	...
France					
Lithium minerals	10	—	421	24	...
Germany, Federal Republic of					
Lithium minerals	267	186	505	1 307	...
Metal	18	15	8	13	16
Mozambique					
Lithium minerals (a)	* 8 000	* 1 000	—	* 1 000	...
South Africa					
Lithium minerals (a)	* 6 000	* 7 700	* 6 000	* 5 000	...
USA					
Lithium minerals, compounds & metal (b)	900	800	1 500	1 600	1 800
Argentina					
Lithium minerals	40	45	50	...	...
Brazil					
Lithium minerals	200	4 146	1 187	758	...

(a) IGS estimates, based on known imports into certain countries

(b) Lithium content

Lithium

Imports of Lithium

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom					
Metal	3	2	3	3	2
Belgium-Luxembourg					
Lithium minerals	7 525	4 586	1 310	297	...
Metal	—	5	—	0	10
France					
Lithium minerals	4 783	1 406	1 980	1 942	...
Metal	7	7	5	22	19
Germany, Federal Republic of					
Lithium minerals	4 243	3 521	4 308	5 662	...
Metal	16	26	17	18	17
Italy					
Lithium minerals	378	772	643	1 389	...
Metal	8	14	4	2	26
Spain					
Lithium minerals	2 226	271	92	435	313
Metal	...	19	0	10	—
South Africa					
Lithium minerals	270	2 273	5 880	11 722	9 262
USA					
Lithium minerals	2 871	4 126	62	* 60	* 60

Production of Manganese Ore

tonnes

Country		1974	1975	1976	1977	1978
Italy	(27%)	14 008	—	4 461	9 314	9 741
Austria (e)		80 430	72 768	70 595	64 734	51 351
Bulgaria	(28%)	34 000	35 000	40 000	* 40 000	* 40 000
Czechoslovakia (d)	(17%)	973	999	1 100	910	—
Greece	(50%)	7 950	8 294	6 730	8 860	...
Hungary	(30%)	114 000	131 000	125 000	119 700	156 181
Romania	(22%)	* 140 000	* 140 000	* 140 000	* 140 000	* 140 000
Soviet Union	(35%)	8 155 000	8 459 000	* 8 636 000	* 8 595 000	* 8 600 000
Turkey	(38%)	3 240	18 637	33 783	33 715	87 159
Yugoslavia	(34%)	13 000	17 000	19 000	25 000	27 000
Egypt	(35%)	4 947	3 581	4 256	3 509	27
Gabon	(50%)	2 137 932	2 245 000	2 217 000	1 918 000	1 661 020
Ghana	(40%)	252 130	408 742	312 000	305 967	* 290 000
Morocco	(50%)	174 691	130 947	117 304	113 585	...
South Africa						
Metallurgical	(40%)	4 647 124	5 683 503	5 354 387	4 876 365	4 179 995
Chemical	(55%)	98 262	85 529	97 871	171 590	137 049
Ferruginous	(20%)	89 602	111 703	50 964	242 155	95 699
Sudan	(48%)	...	...	465	450	...
Zaire	(48%)	308 775	307 859	182 185	249 492	...
Mexico	(35%)	403 100	428 500	452 800	486 622	* 483 000
USA (a)	(13%)	247 578	144 447	232 813	195 855	283 154
Argentina	(30%)	26 062	51 219	53 086	53 272	53 000
Brazil	(45%)	1 678 096	2 033 279	1 545 429	* 900 000	* 1 000 000
Chile	(38%)	28 695	20 016	23 639	18 002	23 243
Peru	(32%)	1 634	740	2 045	...	...
China	(30%)	* 1 000 000	* 1 000 000	* 1 000 000	* 1 000 000	* 1 000 000
India (f)	(35%)	1 501 856	1 605 000	1 835 000	1 865 000	1 567 000
Indonesia	(50%)	18 037	13 870	9 833	5 976	...
Iran (b)	(34%)	* 30 000	* 36 000	40 000	40 000	30 000
Japan	(35%)	166 578	101 822	142 885	127 387	105 629
Korea, Republic of	(40%)	2 107	3 160	1 383	664	747
Malaysia (d)		85 262	133 308	94 112	94 732	...
Philippines	(44%)	857	—	10 576	20 599	3 556
Thailand	(45%)	28 966	24 914	50 225	76 962	72 211
Australia	(48%)	1 521 989	1 554 909	2 154 167	1 389 004	1 289 994
New Hebrides	(42%)	33 624	39 817	31 444	34 293	19 288
World total (c)		23 100 000	25 100 000	25 100 000	23 200 000	21 900 000

Note: Estimated average Mn content is given in parentheses for each country, relating where possible to the later years

(a) Shipments of manganiferous iron ore only

(b) Years ended 20 March following that stated

(c) Excludes Cuba and Vietnam

(d) Manganiferous iron ore

(e) Mn content of domestic iron ore

(f) Includes ore grading 54% to less than 35% Mn

Exports of Manganese Ore

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom (a)	5 613	3 784	8 087	6 767	7 169
Belgium-Luxembourg	7 634	8 886	9 507	9 888	11 324
France (a)	2 212	4 509	9 225	8 323	5 606
Germany, Federal Republic of (a)	1 295	3 474	4 919	6 983	2 089
Netherlands	33 553	26 030	31 854	31 557	37 452
Greece	7 623	2 966	1 515	2 109	0
Hungary	...	...	13 739	37 961	49 649
Norway	1 831	2 730	420	950	—
Portugal	3 680	—	14 005	4 993	4 000
Romania	54 800	29 200	—	—	—
Soviet Union	1 482 000	1 411 000	1 342 000	1 352 000	1 186 000
Sweden	849	413	2 672	215	166
Turkey	2 000	—	20	14 314	15 000
Yugoslavia	4 818	5 415	1 611	3 070	—
Angola	* 60 000	...	* 32 000	...	...
Gabon	2 077 719	1 967 990	(e) * 1 754 500	(e) * 1 449 500	(e) * 1 142 000
Ghana	280 501	372 902	(e) * 355 500	(e) * 281 500	(e) * 228 500
Morocco	164 940	110 960	104 438	130 663	140 623
South Africa (e)	* 3 500 000	* 3 700 000	* 3 300 000	* 2 600 000	* 2 500 000
Zaire	199 366	115 081	306 000	192 000	...
Mexico	256 919	199 069	179 165	239 173	...
USA	236 618	203 530	173 547	157 754	219 105
Brazil	1 493 170	1 557 703	1 072 697	560 110	894 458
China (e)	* 61 300	* 46 300	* 39 700	* 51 400	* 45 400
India (b)	1 034 603	793 359	714 438	...	...
Indonesia	388 762	310 841	265 076	260 044	88 528
Iran (d)	* 20 000	* 30 000	...	...	...
Japan	4 887	3 976	6 128	5 206	4 831
Malaysia (c)	107 663	108 351	23 737	12 697	...
Philippines	2 127	1 518	6 800	10 660	7 715
Singapore	2 404	2 808	6 356	12 949	18 501
Thailand	18 780	23 626	42 710	55 322	...
Australia	1 203 000	1 132 470	1 711 008	811 000	1 301 000
New Hebrides	47 311	46 250	45 208	...	...

(a) Includes manganiferous iron ore

(b) Includes ferruginous manganese ore

(c) From 1975 includes Sabah and Sarawak

(d) Years ended 20 March following that stated

(e) IGS estimates, based on known imports into certain countries

Imports of Manganese Ore

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom	388 151	253 201	498 869	327 784	261 238
Belgium-Luxembourg	400 246	313 263	328 969	206 726	252 842
Denmark	2 816	2 772	2 520	1 286	1 383
France (b)	1 428 444	1 157 613	1 014 559	922 709	958 428
Germany, Federal Republic of (b)	828 337	733 479	610 496	453 243	672 978
Irish Republic	35	27 116	3 859	26 039	37 120
Italy (b)	308 613	315 982	356 078	268 535	284 319
Netherlands	69 681	47 330	45 654	81 242	73 223
Austria	898	479	573	643	520
Czechoslovakia	475 000	456 000	448 000	1 324 000	...
Finland	29 563	4	27 813	17 297	19 737
German Democratic Republic (c)	67 400	74 200	79 700	81 700	73 400
Greece	22 570	2 422	11 081	103	18 208
Hungary	...	...	15 130	15 054	14 787
Norway	1 033 047	1 072 944	982 384	591 350	803 130
Poland	555 624	555 900	538 351	697 863	651 414
Portugal	508	50 617	37 658	201 054	144 615
Spain	384 103	437 378	410 151	433 184	369 679
Sweden	37 870	35 149	40 101	9 424	3 290
Turkey	3 381	4 852	3 130	760	1 978
Yugoslavia	74 136	77 610	101 684	126 860	96 346
Ivory Coast	1	497	720	802	1 078
Kenya	535	639	1 056	1 672	1 595
South Africa	1 029	830	3 112	4 906	3 339
Canada (c)	125 103	69 773	118 972	57 644	136 449
USA (d)	1 111 331	1 427 950	1 194 592	844 541	476 653
Argentina	98 673	77 600	67 263	...	...
Brazil	11 552	17 682	18 276	65 997	152 276
Hong Kong	680	620	547	554	515
India	2 776	5 430	190	...	...
Indonesia	3 281	4 802	4 826	7 940	8 605
Japan (b)	4 042 317	3 832 379	3 378 130	2 779 553	2 055 071
Korea, Dem. P.R. of	* 21 000	* 20 000	...	...	...
Korea, Republic of	56 168	45 550	111 743	67 003	...
Malaysia (a)	1 179	1 047	2 027	2 410	...
Philippines	1 192	2 571	3 216	9 501	6 982
Singapore	4 932	23 709	18 293	21 820	44 980
Taiwan	28 885	79 371	41 310	64 293	96 254
Thailand	8 292	185	4 838	3 686	...
Australia	3 380	179	1 120	2 421	2 962

(a) From 1975 includes Sabah and Sarawak

(b) Includes manganiferous iron ore

(c) Manganese content

(d) Over 35% Mn

Production of Mercury

kilograms

Country	1974	1975	1976	1977	1978
Irish Republic	26 800	11 000	—	—	...
Italy	897 000	1 092 000	768 000	14 351	2 725
Czechoslovakia	191 000	204 000	191 000	183 000	180 000
Finland	6 310	10 654	13 186	21 718	39 477
Soviet Union	* 1 862 000	* 1 898 000	* 1 932 000	* 2 000 000	2 070 000
Spain	1 897 569	1 621 569	1 384 140	931 845	1 070 000
Turkey	304 497	183 096	168 884	155 439	59 000
Yugoslavia	546 000	584 000	431 000	108 000	—
Algeria	525 000	974 400	1 067 000	1 035 000	* 1 034 000
Canada	482 622	413 676	—	—	—
Mexico	894 000	490 000	518 000	333 000	76 000
USA	75 461	253 928	797 464	973 657	833 868
Chile	31 750	3 344	448	684	—
Colombia	2 700	—	—	—	—
Peru	112 117	52 739	—	—	—
China	* 900 000	* 900 000	* 900 000	* 700 000	* 600 000
Philippines	28 069	8 414	—	—	—
Australia	71	210	140	50	—
World total	8 800 000	8 700 000	8 200 000	6 500 000	6 000 000

Exports of Mercury

Country	1974	1975	1976	1977	1978
United Kingdom	153 891	54 500	38 741	45 692	51 092
Belgium-Luxembourg	184 100	57 900	34 000	43 400	56 000
France	5 000	2 000	39 000	42 000	122 000
Germany, Federal Republic of	85 900	58 300	70 300	58 000	76 000
Italy	626 663	1 705 200	1 426 507	355 000	772 000
Netherlands (a)	12 000	43 000	79 000	64 000	62 000
Austria	15 900	13 100	12 400	7 800	28 200
Finland	1 200	4 200	6 300	11 600	13 900
Norway	2 000	—	0	0	39 000
Spain	1 346 000	649 000	801 000	773 069	1 480 000
Sweden	7 000	4 000	16 000	54 000	26 000
Switzerland	4 865	3 336	1 083	1 252	2 048
Turkey	159 142	3 296	108 429	196 611	296 000
Yugoslavia	327 870	289 632	289 632	48 272	...
Algeria	530 265	296 625	51 923	271 404	...
Tunisia	19 345	...	—	6	—
Mexico	1 011 514	396 563	296 960	479 640	...
USA	16 077	17 003	17 660	32 877	* 35 000
Peru	93 500	...	...	...	...
China	* 150 000	...	...	...	...
Japan	33 012	66 276	42 166	79 256	238 847
Singapore	576	459	4 125	1 921	1 249

(a) Figures up to 1976 exclude exports to Belgium-Luxembourg, if any

Imports of Mercury

kilograms

Country	1974	1975	1976	1977	1978
United Kingdom	833 366	734 329	407 550	303 168	422 567
Belgium-Luxembourg	1 985 500	308 900	72 700	94 800	96 000
Denmark	22 700	14 100	19 900	6 600	14 000
France	336 000	268 000	221 000	212 000	182 000
Germany, Federal Republic of	418 900	264 500	686 900	244 500	434 100
Italy	152 258	8 600	26 353	20 000	45 000
Netherlands (d)	72 000	94 000	104 000	42 000	85 000
Austria	32 800	61 700	34 200	13 100	14 300
Finland	23 100	48 000	20 200	9 700	10 900
Greece	2 000	14 000	1 000	4 211	9 102
Norway	6 000	9 000	14 000	5 000	1 000
Poland	205 000	261 000	...	...	...
Portugal	20 000	15 400	43 800	28 100	35 000
Sweden	73 000	51 000	74 000	11 000	25 000
Switzerland	20 324	25 332	21 311	24 587	24 201
Yugoslavia	11 385	58 000	15 006	2 012	7 946
Algeria	1 194	43 687	5 021	286	...
Madagascar	—	100	228	208	2 065
Morocco	2 340	1 653	597	2 123	4 355
Mozambique	78	17	—	—	...
South Africa	62 900	81 700	39 500	67 700	72 100
Tunisia	72	13 147	524	21 829	3 559
Zaire	1 000	1 000	—	1 000	...
Canada	108 817	73 527	62 641	21 909	43 046
USA	1 796 138	1 533 075	1 529 407	991 101	1 528 131
Argentina	59 148	39 745	82 755	...	...
Brazil	169 263	165 832	178 705	151 476	144 361
Chile	7 169	...	...	...	...
Uruguay	3 300	...	1 600	1 800	...
Venezuela	5 940	15 723	...	...	...
Burma	1 372	...	...	...	...
Hong Kong	33 982	32 039	93 855	23 967	53 380
India	341 000	242 000	329 000	...	...
Indonesia	...	23 578	5 688	9 974	22 515
Iran (b)	16 277	27 076	22 600	...	...
Iraq	14 512	19 225	...	...	...
Israel (e)	3 000	1 000	1 000	—	3 000
Japan	264 985	88 476	77 299	89 447	105 697
Korea, Republic of	31 349	31 725	42 075	41 065	...
Malaysia (a)	4 654	39 672	12 823	7 000	...
Philippines	190	5 492	29 966	35 395	26 039
Singapore	11 400	235	9 661	333	4 188
Syria	1 015	202	705	4 205	...
Taiwan	...	123 179	54 407	54 338	91 859
Thailand	8 718	2 117	7 448	8 455	...
Australia	47 702	55 616	44 736	43 899	75 941
New Zealand (c)	4 050	2 601	2 521	3 000	...

(a) From 1975 includes Sabah and Sarawak

(b) Years ended 20 March following that stated

(c) Years ended 30 June of that stated

(d) Figures up to 1976 exclude imports from Belgium-Luxembourg, if any

(e) Figures may be incomplete as value only given in Israeli trade return for imports from some countries

Production of Mica

Country	1974	1975	1976	1977	1978
France	* 4 000	* 4 000	* 4 000	* 4 000	* 4 000
Norway (b)	6 465	6 165	(a) 3 100	(a) 2 800	(a) 2 700
Soviet Union	* 41 000	* 42 000	* 43 000	* 44 000	* 45 000
Yugoslavia	87	86	68	139	...
Madagascar					
Phlogopite (c)	857	544	69	80	1 567
Mozambique	852	900	* 900	* 800	...
South Africa					
Waste	2 696	2 511	2 380	2 890	2 542
Tanzania					
Sheet	9	6	10	4	...
Mexico	844	620	1 303	771	...
USA (d)					
Sheet (e)	* 9	2	2	0	0
Waste (f)	124 253	122 091	128 000	160 000	165 000
Argentina					
Sheet	426	412	329	) 2 890	...
Waste	2 771	2 490	2 291)	...
Brazil (a)	2 613	1 100	2 799	1 955	4 553
India					
Crude	13 804	11 501	9 485	9 352	9 246
Waste	4 876	...	4 305	5 319	4 523
Sri Lanka	180	2 504	137	...	101
World total (g)	206 000	202 000	202 000	235 000	244 000

(a) Exports

(b) Crude only

(c) Block and splittings

(d) Sold or used by producers

(e) Uncut

(f) Including mica recovered from kaolin and mica schists

(g) Other countries known to produce mica include China, Romania and Namibia

Mica

Exports of Mica

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom					
Unmanufactured	132	84	225	476	810
Ground & waste	1 967	1 519	2 275	3 113	2 540
Belgium-Luxembourg					
Unmanufactured (b)	8	70	322	24	52
Ground	62	38	54	91	43
France					
Unmanufactured (b)	88	103	62	71	46
Ground	2 879	2 643	3 080	2 869	3 074
Germany, Federal Republic of					
Unmanufactured (b)	9	47	14	11	68
Ground	903	721	910	743	709
Italy					
Unmanufactured (a)	72	135	58	76	134
Ground	530	365	1 026	981	666
Netherlands					
Unmanufactured (a)	600	1 137	527	831	713
Austria					
Unmanufactured (a)	3	9	15	12	57
Norway					
Unmanufactured	4 158	3 577	3 083	2 818	2 688
Portugal					
Unmanufactured (a)	—	—	498	138	360
Spain					
Unmanufactured	61	1 027	2 042	738	2 900
Sweden					
Unmanufactured (a)	4	13	4	3	5
Switzerland					
Unmanufactured (a)	87	44	92	66	73
Madagascar					
Unmanufactured	1 871	1 315	841	204	316
Mozambique					
Unmanufactured	952	801	515	200	...
South Africa					
Ground	2 037	2 542	932	343	1 994
Waste	2 535	510	244	58	571
Tanzania					
Unmanufactured	10	7	7	7	6
USA					
Unmanufactured (b)(c)	7 788	5 070	6 667	8 356	8 693
Argentina					
Unmanufactured	1 332	223	1 367	...	...
Brazil					
Unmanufactured (a)	2 613	1 100	2 799	1 955	4 553
India					
Block	940	574	882	...	...
Splittings	6 105	3 482	3 546	...	...
Condenser films	138	126	146	...	...
Ground	9 080	7 878	9 238	...	...
Waste	18 952	22 457	8 055	...	...
Japan					
Unmanufactured (a)	148	123	162	144	303
Korea, Republic of					
Unmanufactured (a)	3 576	1 900	1 057	1 719	...
Singapore					
Unmanufactured (a)	104	312	150	79	14
Sri Lanka					
Waste	180	...	162	146	...

(a) Including splittings and/or waste

(b) Including block, film and splittings; waste and scrap

(c) Including ground mica

Imports of Mica

Country	1974	1975	1976	1977	1978
United Kingdom					
Block	212	165	205	92	98
Splittings	796	543	350	469	462
Ground & waste	7 001	9 578	11 304	12 592	14 778
Belgium-Luxembourg					
Unmanufactured (e)	2 237	5 940	266	3 076	2 526
Ground	934	1 094	1 768	1 039	1 104
Denmark					
Unmanufactured (b)	264	247	274	226	255
France					
Unmanufactured (e)	6 342	8 706	3 316	2 672	9 171
Ground	1 256	544	922	942	993
Germany, Federal Republic of					
Unmanufactured (e)	5 690	4 490	4 631	4 741	6 691
Ground	3 815	3 518	3 427	3 381	3 038
Irish Republic					
Unmanufactured (a)	196	189	240	202	594
Italy					
Unmanufactured (a)	897	494	320	552	511
Ground	563	461	833	103	735
Netherlands					
Unmanufactured (e)	) 1 737	42	22	261	52
Ground	)	1 611	2 193	1 552	1 866
Austria					
Unmanufactured (a)	285	257	296	313	340
Finland					
Unmanufactured (a)	257	231	245	273	246
German Democratic Republic	2 907	2 250	2 779	1 116	1 767
Greece					
Unmanufactured	55	124	51	124	117
Norway					
Unmanufactured	331	280	202	89	147
Waste	3 724	3 878	2 585	2 322	1 825
Poland					
Unmanufactured	1 390	1 763	1 152	1 902	1 641
Portugal					
Unmanufactured (a)	294	314	448	393	399
Soviet Union					
Unmanufactured	725	498	500	500	550
Spain					
Unmanufactured	1 104	892	1 041	1 153	837
Sweden					
Unmanufactured (a)	883	589	534	366	345
Switzerland					
Unmanufactured (a)	695	493	657	544	638
Turkey					
Unmanufactured (a)	53	104	123	76	52
Yugoslavia					
Unmanufactured	266	396	315	523	541
Algeria					
Unmanufactured	297	15	—	—	...
Kenya					
Unmanufactured (a)	18	21	14	25	34
Morocco					
Ground	17	3	23	18	19
Mozambique					
Unmanufactured	47	9	—	—	...
South Africa					
Unmanufactured (a)	357	423	775	559	569
Mica & micranite sheets	56	50	58	43	44
Tanzania					
Unmanufactured (a)	25	19	18	16	...
Tunisia					
Unmanufactured (b)	43	26	68	249	28

Mica

Imports of Mica

tonnes

Country	1974	1975	1976	1977	1978
Canada					
Unmanufactured	4 876	5 111	4 696	6 309	3 492
Costa Rica					
Unmanufactured	12	17	19	2	...
Guatemala					
Unmanufactured	28	9	59	35	...
Jamaica					
Unmanufactured	135	165	143	...	...
Mexico					
Unmanufactured	296	21	149	191	...
Waste	51	9	54	3	...
Trinidad & Tobago					
Unmanufactured (a)	61	39	110	137	174
USA					
Block	264	112	158	210	112
Splittings	2 255	1 719	776	971	1 740
Ground	102	92	248	132	1 568
Waste	3 009	4 841	1 911	1 065	554
Other unmanufactured	130	300	593	782	2 164
Argentina					
Unmanufactured	20	48	20	...	...
Brazil					
Unmanufactured (b)	8	2	4	1	6
Chile					
Unmanufactured	49	...	...	...	...
Venezuela					
Unmanufactured	460	412	...	...	...
Brunei					
Unmanufactured (a)	72	106	152	5	11
Hong Kong					
Unmanufactured	51	28	61	51	31
Indonesia					
Unmanufactured (a)(f)	999	208	418	270	339
Iran (c)					
Unmanufactured	(a) 1 612	(a) 2 733	2 291	...	...
Israel					
Unmanufactured (a)	(g) 29	(g) 8	(g) 1	(i) 60	(i) 50
Japan					
Block	885	99	2 234	185	272
Splittings	1 008	166	400	635	527
Waste	4 364	2 597	4 209	4 307	4 092
Other unmanufactured	3 199	3 466	2 480	4 279	3 707
Korea, Republic of					
Unmanufactured (a)	195	176	151	102	...
Malaysia (h)					
Unmanufactured (a)	14	19	141	56	...
Philippines					
Unmanufactured (a)	50	81	38	133	87
Saudi Arabia					
Unmanufactured	...	1 039	189	880	...
Singapore					
Unmanufactured (a)	2 227	878	389	704	270
Taiwan					
Unmanufactured (a)	295	109	108	119	153
Ground	180	110	199	144	282
Thailand					
Unmanufactured	93	34	44	78	...

Imports of Mica

Country	1974	1975	1976	1977	1978
Australia					
Unmanufactured (e)	648	231	415	387	203
Ground	463	340	555	701	277
New Zealand (d)					
Unmanufactured (a)	£28 800	£40 600	£76 500	£37 700	...

(a) Including splittings and/or waste

(b) Including ground

(c) Years ended 20 March following that stated

(d) Years ended 30 June of that stated

(e) Including block, film and splittings; waste and scrap

(f) 1974 figure includes manufactured

(g) Figures may be incomplete as value only given in Israeli trade return for imports from some countries

(h) From 1975 includes Sabah and Sarawak

(i) IGS estimates, based on known exports from certain countries

Molybdenum

Production of Molybdenumtonnes (MoS₂ content or equivalent)

Country	1974	1975	1976	1977	1978
Bulgaria	* 230	* 230	* 230	* 250	* 250
Soviet Union	* 14 600	* 15 100	* 15 600	* 16 200	* 16 500
Canada	23 237	21 712	24 365	27 613	23 447
Mexico	72	28	27	2	...
USA	84 700	80 100	85 600	92 538	* 100 000
Chile	16 274	15 152	18 165	18 230	21 800
Peru	1 085	739	772	...	...
China	* 2 500	* 2 500	* 2 500	* 2 500	* 2 500
Japan	177	234	* 250	* 250	145
Korea, Republic of	126	126	200	169	367
World total (a)	143 000	136 000	148 000	159 000	166 000

Notes:

1 This table includes byproducts of other metal mining and processing

2 1.668 tonnes MoS₂ = 1 tonne Mo

(a) Excluding molybdenum ore known to be produced in other countries including Argentina, Korea Dem. P.R., Namibia, Nigeria and Romania

Exports of Molybdenum

Country	1974	1975	1976	1977	1978
United Kingdom					
Ores & concentrates	439	1 705	1 442	3 471	3 921
Metal	149	128	121	144	147
Belgium-Luxembourg					
Ores & concentrates	3 317	3 964	6 542	4 338	5 872
France					
Ores & concentrates	—	—	10	162	336
Oxides & hydroxides	35	48	273	245	34
Germany, Federal Republic of					
Ores & concentrates	327	654	631	1 173	1 117
Metal	172	199	259	217	236
Italy					
Ores & concentrates	—	56	—	459	269
Netherlands					
Metal	75	191	137	187	153
Oxide & hydroxide (b)	146	770	1 576	1 609	1 621
Austria					
Metal	706	569	763	922	872
Sweden					
Ores & concentrates	416	884	730	1 241	921
Metal	16	10	11	154	13
Canada					
Ores & concentrates (a)	12 690	15 689	14 554	15 310	15 143
USA					
Ores & concentrates (a)	35 680	28 401	28 352	29 786	31 422
Metal	443	435	352	517	776
Chile					
Ores & concentrates	6 391	...	...	...	...
Peru					
Ores & concentrates	* 1 500	1 014	814	1 061	...
Japan					
Metal	21	16	18	43	39
Korea, Republic of					
Ores & concentrates	75	52	50	90	...
Philippines					
Ores & concentrates	17	32	—	11	19

(a) Molybdenum content

(b) Figures up to 1976 exclude exports to Belgium-Luxembourg, if any

Imports of Molybdenum

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom					
Ores & concentrates	10 569	13 528	13 617	13 934	14 382
Metal	196	167	133	162	220
Belgium-Luxembourg					
Ores & concentrates	12 545	13 175	11 909	12 517	13 381
Oxides & hydroxides	16	61	22	64	331
France					
Ores & concentrates	8 836	7 138	7 633	7 314	6 963
Oxides & hydroxides	134	136	75	55	359
Metal	158	183	168	149	114
Germany, Federal Republic of					
Ores & concentrates	17 556	14 736	41 674	17 987	19 203
Metal	354	365	482	533	640
Italy					
Ores & concentrates	8 230	6 229	5 397	5 645	5 637
Metal	79	91	260	188	176
Netherlands					
Ores & concentrates (b)	29 000	25 000	24 000	27 000	27 644
Metal	170	172	201	208	153
Austria					
Oxide	1 351	688	1 421	1 489	1 375
Finland					
Ores & concentrates	...	78 270	79	269	40 111
Metal	4	3	74	91	2
Sweden					
Ores & concentrates	8 456	7 052	7 477	5 305	6 484
Metal	71	74	50	84	75
Yugoslavia					
Metal	15	16	10	12	18
South Africa					
Metal	8	24	18	19	17
Canada					
Oxide	86	56	111	192	330
Mexico					
Ores & concentrates	981	874	589	459	...
USA					
Metal	71	40	197	1 022	...
Argentina					
Oxides & molybdates	105	125	173	...	...
Brazil					
Ores & concentrates	1 400	1 063	1 413	2 169	2 874
India					
Metal	67	44	106	...	...
Japan					
Ores & concentrates	17 778	12 128	17 916	16 495	16 645
Metal	146	106	84	113	184
Oxide	520	90	482	498	497
Malaysia (a)					
Metal	56	18	13	8	...
Philippines					
Metal	147	62	3	169	60
Singapore					
Metal	...	27	2	11	8
Taiwan					
Metal	216	6	6	27	41
Australia					
Ores & concentrates	713	213	91	309	...

(a) From 1975 includes Sabah and Sarawak

(b) May include other ores

Mine Production of Nickel

tonnes (metal content)

Country	1974	1975	1976	1977	1978
Albania	* 6 000	* 6 000	* 6 000	* 6 000	* 6 000
Finland	6 300	5 700	6 400	5 810	4 377
Greece (d)	15 100	14 800	16 448	9 610	15 100
Norway	536	304	400	500	1 000
Poland	* 2 000	* 2 500	* 2 800	* 2 800	* 2 800
Soviet Union	* 120 000	* 125 000	* 130 000	* 135 000	* 140 000
Botswana	2 572	6 467	12 581	12 099	16 109
Morocco	* 500	* 500	* 200	* 200	* 100
South Africa (a)	* 22 100	20 754	22 371	21 955	...
Zimbabwe	* 11 500	* 10 000	* 16 000	* 13 000	* 11 000
Canada (b)	269 071	242 180	240 825	232 512	130 054
Cuba (c)	33 879	37 300	36 800	37 000	37 000
Dominican Republic (d)	30 492	26 900	24 400	24 905	14 302
USA	15 076	15 410	14 940	13 015	12 300
Brazil	3 536	3 190	5 273	4 200	4 000
Burma (e)	22	19	24	17	...
Indonesia	16 000	14 600	13 800	16 100	18 900
Philippines	326	9 364	15 239	36 781	31 046
Australia	45 981	75 825	82 532	85 868	80 950
New Caledonia (f)	136 800	133 282	118 945	115 755	66 145
World total (g)	740 000	750 000	770 000	770 000	610 000

(a) Refined nickel and nickel in matte

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

(c) Ni content of sulphide slurry and oxide

(d) Ni content of ferro-nickel

(e) Ni content of nickel speiss. Years ended 31 March following that stated

(f) Includes Ni content of ores, nickel matte and ferro-nickel

(g) Ores containing nickel are also known to be produced in German Democratic Republic

Nickel

Exports of Nickel

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom					
Mattes, sinters etc.	1 558	774	72	445	265
Unwrought (a)	40 070	31 526	29 653	26 321	20 411
Scrap	4 237	4 065	5 550	6 552	3 423
Nickel oxide	1 498	901	380	228	220
Belgium-Luxembourg					
Unwrought	253	321	99	60	90
Unwrought alloys	107	132	152	222	243
Scrap	2 002	1 037	1 603	1 309	1 219
Denmark					
Scrap	134	122	131	130	52
France					
Mattes, sinters etc.	137	8	401	94	832
Unwrought	6 733	5 196	4 398	4 769	5 324
Unwrought alloys	514	40	71	220	536
Scrap	3 406	1 744	2 746	2 429	2 454
Germany, Federal Republic of					
Unwrought	1 946	1 978	1 328	5 573	2 760
Unwrought alloys	116	133	74	1 242	2 416
Scrap	3 788	3 013	5 682	8 025	7 150
Netherlands					
Mattes, sinters etc.	) 6 305	4 037	3 764	681	2 568
Unwrought (a)	)			1 968	3 246
Scrap	1 835	2 461	3 933	1 795	1 845
Austria					
Scrap	379	438	973	367	42
Finland					
Unwrought	(a) 5 509	(a) 5 862	6 143	7 928	5 882
Norway					
Ore	13 515	6 885	12 522	14 222	12 212
Unwrought	43 778	29 489	34 071	20 732	40 854
Scrap	309	354	394	453	562
Sweden					
Mattes, sinters etc.	—	—	51	358	798
Unwrought (a)	2 507	2 902	2 382	2 449	1 720
Scrap	622	714	845	831	498
Switzerland					
Unwrought, mattes, sinters, etc. & scrap	1 086	463	594	476	245
South Africa (b)					
Mattes, sinters etc.	* 3 000	* 5 000	* 4 500	* 4 400	* 7 800
Unwrought	* 17 400	* 14 900	* 17 600	* 16 600	* 24 200
Canada					
Ores, concentrates, mattes, sinters etc. (c)	85 240	84 391	72 688	80 546	39 078
Unwrought	134 528	100 370	99 241	79 039	105 666
Scrap	2 728	3 322	2 510	2 208	2 308
Nickel oxide (c)	51 118	38 527	47 958	35 005	27 792
Cuba					
Nickel oxide (e)	16 033	) * 37 000	* 36 500	* 37 000	* 37 000
Nickel sulphide (e)	18 012)			
Dominican Republic					
Ferro-nickel (c)	* 31 000	...	...	59 946	50 007
USA					
Unwrought (a)	2 891	6 157	13 284	13 844	11 332
Scrap	6 116	6 468	14 493	7 665	4 238
Burma					
Unwrought	345	...	...	...	...
Indonesia					
Ore	928 368	639 020	565 357	640 631	576 377

Exports of Nickel

Country	1974	1975	1976	1977	1978
Japan					
Unwrought (a)	523	1 478	2 340	3 914	2 989
Philippines					
Ores & concentrates	2 437	225	—	488 597	578 034
Unwrought	...	6 298	11 030	15 861	12 016
Taiwan					
Unwrought	56	93	275	188	152
Scrap	195	202	639	364	349
Australia (d)	* 32 000	* 43 000	* 62 000	* 62 600	* 61 400
New Caledonia					
Ores	3 146 607	2 466 429	2 692 729	2 604 354	1 540 093
Mattes, sinters etc.	26 183	25 082	27 830	31 314	21 752
Ferro-nickel	181 321	168 542	124 180	124 325	98 984

Note: In this table the description 'unwrought' nickel corresponds to item 683.1 of the Standard International Trade Classification (Revised) which excludes all electro-plating anodes

(a) Including alloys

(b) IGS estimates, based on known imports into certain countries

(c) Ni content

(d) IGS estimates; Unwrought metal and Ni content of ores, concentrates, matte etc., based on known imports into certain countries

(e) Ni-Co content (mainly nickel)

Imports of Nickel

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom					
Mattes, sinters etc.	49 854	66 876	54 382	61 418	31 693
Unwrought	22 371	21 685	18 609	20 009	15 535
Unwrought alloys	2 408	2 246	2 130	1 506	1 272
Scrap	4 198	2 688	4 199	3 476	2 854
Nickel oxide	1 589	1 880	667	451	700
Belgium-Luxembourg					
Unwrought	2 703	2 689	2 431	1 710	2 893
Unwrought alloys	1 285	894	1 091	148	573
Scrap	1 323	1 059	1 171	1 376	1 072
Denmark					
Unwrought	135	153	166	128	152
Unwrought alloys	56	109	46	51	45
France					
Mattes, sinters etc.	13 377	15 203	15 161	18 404	10 650
Unwrought	14 418	15 994	15 370	10 648	12 177
Unwrought alloys	889	1 036	673	1 489	2 566
Scrap	1 544	1 537	1 499	1 340	719
Germany, Federal Republic of					
Mattes, sinters etc.	6 145	6 550	13 820	16 136	16 465
Unwrought (a)	44 306	36 387	43 080	36 422	38 881
Scrap	8 160	6 454	7 408	4 636	4 003
Irish Republic					
Unwrought (a)	82	433	141	149	284
Italy					
Mattes, sinters etc.	4 462	4 907	5 426	5 552	7 537
Unwrought	10 863	6 101	6 839	10 184	11 060
Unwrought alloys	4 501	966	1 102	1 250	852
Scrap	1 609	833	1 450	970	299
Nickel oxides	2 536	1 897	3 070	1 900	3 720
Netherlands					
Mattes, sinters, etc. (e)	1 309	384	446	697	3 224
Unwrought (e)	4 705	4 255	3 095	2 264	3 975
Unwrought alloys (e)	115	139	64	178	79
Scrap	3 317	2 396	1 576	2 245	728
Nickel oxides	1 019	465	579	825	887
Austria					
Mattes, sinters etc.	1 444	904	1 165	1 278	1 362
Unwrought (a)	2 369	1 904	2 255	2 288	2 401
Scrap	381	1 056	902	2 767	262
Finland					
Ore	12 608	10 276	12 876	13 193	14 275
Mattes, sinters etc.	663	5	1 030	2 191	2 249
Unwrought (a)	831	297	558	1 093	2 297
Scrap	34	86	327	1 749	925
Norway					
Ore	—	51	188	376	—
Mattes, sinters etc.	93 243	79 337	71 329	71 330	54 429
Unwrought (a)	718	83	685	220	65
Scrap	—	—	—	3	573
Spain					
Mattes, sinters etc.	5 901	4 809	7 785	10 888	9 109
Unwrought (a)	259	185	173	131	253
Sweden					
Mattes, sinters etc.	1 852	2 989	4 651	2 438	5 249
Unwrought	12 774	13 105	10 921	7 928	8 138
Unwrought alloys	972	433	347	295	285
Scrap	1 056	1 960	3 464	2 322	2 002
Switzerland					
Unwrought, mattes, sinters, etc. & scrap	1 392	1 899	2 321	1 539	1 520
Yugoslavia					
Unwrought	1 030	1 282	1 207	1 915	1 487

Imports of Nickel

Country	1974	1975	1976	1977	1978
South Africa					
Mattes, sinters etc.	29	375	321	1 653	909
Unwrought	39	718	951	742	2 394
Scrap	1	—	51	300	236
Canada					
Ore, concentrates & scrap (b)	10 677	17 894	24 566	32 815	31 879
Unwrought (a)	16 083	13 369	17 308	2 988	4 018
Mexico					
Unwrought	818	2 699	1 428	2 997	...
Nickel oxide	234	116	309	269	...
USA					
Ore (b)	1	16	155	3	—
Slurry (b)	30 536	16 511	22 722	16 855	33 017
Unwrought (a)	124 848	98 507	101 157	94 629	136 360
Scrap	3 356	2 135	2 140	2 880	3 351
Argentina					
Unwrought	766	480	415	...	...
Brazil					
Unwrought (a)	3 159	1 499	1 894	2 310	3 016
Chile					
Unwrought	61	...	...	...	...
Hong Kong					
Unwrought	490	289	526	727	1 943
India					
Unwrought (c)	1 412	1 831	3 391	3 371	...
Unwrought alloys (c)	427	676	1 235	703	...
Scrap (c)	97	221	852	1 586	...
Japan					
Ore	4 218 308	3 396 775	3 450 189	3 951 141	2 999 406
Mattes, sinters etc.	39 780	27 442	45 245	41 008	30 044
Unwrought	16 298	8 451	11 986	11 046	10 603
Unwrought alloys	401	188	277	154	287
Scrap	1 436	1 535	4 737	3 883	3 522
Korea, Republic of					
Unwrought	535	541	1 583	653	...
Scrap	651	159	226	104	...
Malaysia (f)					
Unwrought (a)	117	227	239	178	...
Taiwan					
Unwrought (a)	1 601	233	968	1 457	4 188
Australia					
Mattes, sinters etc.	408	528	1 931	3 380	1 502
Unwrought	1 345	726	1 436	677	3 066
Unwrought alloys	905	543	172	353	172
New Zealand (d)					
Unwrought (a)	250	105	38	6	...

Note: In this table the description 'unwrought' nickel corresponds to item 683.1 of the Standard International Trade Classification (Revised) which excludes all electro-plating anodes

(a) Including alloys

(b) Ni content

(c) Years ended 31 March following that stated

(d) Years ended 30 June of that stated

(e) Figures up to 1976 exclude imports from Belgium-Luxembourg, if any

(f) From 1975 includes Sabah and Sarawak

Production of Crude Petroleum

thousand tonnes

Country	1974	1975	1976	1977	1978
United Kingdom	88	1 222	11 632	37 420	52 932
Denmark	86	167	199	514	430
France	1 080	1 028	1 058	1 037	1 117
Germany, Federal Republic of	6 191	5 741	5 524	5 401	5 059
Italy	1 025	1 118	1 109	1 083	1 452
Netherlands	1 461	1 419	1 371	1 382	1 402
Albania	2 200	2 300	2 350	* 2 300	* 2 300
Austria	2 238	2 037	1 931	1 787	1 790
Bulgaria	144	122	117	129	* 120
Czechoslovakia	149	142	131	123	* 120
German Democratic Republic	54	56	53	67	...
Hungary	1 997	2 006	2 142	2 191	2 200
Norway	1 700	9 241	13 799	13 554	17 083
Poland	550	553	455	364	363
Romania	14 486	14 590	14 700	14 650	13 724
Soviet Union	458 948	490 801	519 677	545 799	572 500
Spain	1 976	2 028	1 772	989	902
Turkey	3 304	3 095	2 595	2 709	2 545
Yugoslavia	3 458	3 692	3 880	3 951	4 076
Algeria	47 192	45 788	50 123	52 400	58 400
Angola	8 750	8 750	5 400	8 665	6 635
Congo	2 455	1 789	2 002	1 668	2 000
Egypt	7 789	12 233	16 756	20 846	23 392
Gabon	10 206	11 316	11 325	11 267	11 335
Libya	72 921	70 930	92 887	98 907	95 528
Morocco	25	20	8	22	48
Nigeria	110 000	95 316	108 293	109 436	98 896
Tunisia	4 139	4 609	3 710	4 304	4 735
Zaire	...	3	1 259	1 215	916
Canada	89 162	75 534	69 397	69 891	68 048
Cuba	168	* 170	* 170	* 120	* 120
Mexico	29 594	36 456	41 336	50 407	62 015
Trinidad & Tobago	9 889	11 411	11 274	12 137	12 160
USA	431 732	412 076	401 211	405 671	428 138
Argentina	21 246	20 119	20 437	21 852	22 957
Bolivia	2 054	1 822	1 837	1 568	1 490
Brazil	9 638	9 383	9 127	8 023	8 001
Chile	1 458	1 298	1 215	1 029	842
Colombia	8 910	8 311	7 747	7 286	6 923
Ecuador	9 378	8 528	9 922	9 725	10 690
Peru	4 074	3 829	4 055	4 427	7 429
Venezuela	156 167	122 400	120 170	117 189	113 628
Abu Dhabi	68 061	66 628	77 687	79 700	...
Bahrain	3 363	3 050	2 902	2 895	2 637
Brunei	9 545	* 9 350	10 004	10 540	11 146
Burma (d)	763	1 029	1 246	1 589	1 200
China (a)	* 64 000	* 75 000	* 85 000	93 640	104 050
Dubai	12 108	12 762	15 776	15 901	...
India	7 491	8 283	8 430	10 185	11 251
Indonesia	68 296	64 896	74 894	83 712	81 206
Iran	298 223	264 946	294 200	282 230	257 877
Iraq	97 032	110 952	112 284	111 000	128 750
Israel (b)	5 298	3 969	38	28	24
Japan	716	643	616	689	630
Kuwait	114 390	104 769	113 965	104 233	107 022
Neutral Zone (c)	26 600	26 526	25 153	19 937	24 922
Oman	15 356	18 085	19 420	18 027	15 602
Pakistan	317	306	305	509	499

Production of Crude Petroleum

thousand tonnes

Country	1974	1975	1976	1977	1978
Qatar	25 059	21 102	24 018	23 554	25 783
Sabah	30	475	2 439	3 658	4 023
Sarawak	3 845	4 208	5 587	5 324	4 544
Saudi Arabia	408 360	351 940	427 809	458 839	424 294
Sharjah	2 576	1 826	1 802	...	...
Syria	6 426	9 572	10 039	9 117	8 941
Taiwan	192	196	226	232	246
Australia	24 559	23 829	24 249	24 986	25 187
New Zealand (e)	201	206	548	785	660
World total	2 801 000	2 688 000	2 913 000	3 017 000	3 063 000

Note: The figures shown in this table exclude natural gasoline

(a) Including oil from shale and coal

(b) Figures up to and including 1975, include estimated production from occupied Sinai

(c) Neutral zone of Kuwait and Saudi Arabia

(d) Years ended 31 March following that stated

(e) Petroleum condensate

Production of Natural GasMillion m³

Country	1974	1975	1976	1977	1978
United Kingdom	34 825	36 267	38 513	40 565	39 109
Belgium	61	50	33	40	44
France	7 330	7 394	6 938	7 598	7 610
Germany, Federal Republic of	19 732	18 248	18 659	19 104	20 450
Italy	15 228	14 562	15 640	13 717	13 732
Netherlands	83 725	90 853	97 302	96 899	88 730
Austria	2 207	2 359	2 144	2 393	2 414
Bulgaria	180	111	31	10	* 8
Czechoslovakia	827	811	801	940	* 950
German Democratic Republic	7 732	* 7 300	* 8 600	* 8 500	* 8 600
Hungary	5 101	5 182	6 082	6 611	7 333
Poland	5 739	5 963	6 699	7 296	7 991
Romania	30 440	33 306	36 330	35 281	35 543
Soviet Union	260 553	289 268	320 953	346 000	372 000
Yugoslavia	1 447	1 484	1 730	1 897	1 935
Algeria	5 978	7 817	10 300	10 000	* 14 000
Gabon	46	47	50	60	57
Libya	9 775	10 800	14 300	13 800	...
Morocco	59	71	79	70	* 75
Nigeria	404	456	485	665	799
Tunisia	201	210	214	230	285
Barbados	2	2	4	4	* 7
Canada	86 273	87 520	87 684	90 884	87 494
Mexico	13 950	14 402	14 032	* 14 600	* 29 000
Trinidad & Tobago	1 666	1 522	1 704	2 031	2 401
USA	611 659	569 414	564 990	567 058	565 602
Argentina	7 242	7 871	8 234	8 609	7 954
Bolivia	1 714	1 728	1 769	1 673	* 1 800
Brazil	498	* 700	* 710	* 780	* 1 000
Chile	3 610	3 406	4 017	3 791	...
Colombia	1 863	1 797	1 711	2 102	* 2 100
Peru	901	1 138	1 205	1 218	* 1 500
Venezuela	23 340	17 040	16 632	17 657	17 021
Afghanistan (c)	2 946	2 959	2 546	2 582	* 2 600
Bahrain	1 975	2 079	2 178	2 367	* 2 360
Bangladesh	648	666	887	916	* 1 100
Brunei	4 296	* 6 000	6 953	7 965	7 789
Burma (b)	157	217	240	289	...
China	* 35 000	* 40 000	* 80 000	* 95 000	* 105 000
India	1 010	1 253	1 514	1 631	1 381
Indonesia	5 727	6 293	8 839	15 370	23 223
Iran	22 296	21 830	22 477	22 000	* 29 000
Iraq	1 162	1 654	2 107	1 580	* 1 600
Israel	66	60	58	57	51
Japan	2 572	2 437	2 462	2 804	2 641
Kuwait (a)	4 980	5 205	5 600	5 130	5 562
Pakistan	4 709	5 000	5 141	5 047	5 187
Qatar	* 1 300	2 209	1 476	1 607	* 1 400
Sarawak	78	80	90	93	94
Saudi Arabia (a)	* 6 200	* 6 300	* 8 300	* 9 400	...
Taiwan	1 586	1 575	1 836	1 886	...
Australia	4 677	5 026	5 929	6 728	7 320
New Zealand	484	525	1 421	2 257	2 125
World total	1 346 000	1 350 000	1 449 000	1 507 000	1 565 000

Note: So far as possible the figures in this table represent gas utilised as fuel

(a) Includes one-half of the output of the Neutral Zone

(b) Years ended 31 March following that stated

(c) Years ended 20 March following that stated

Exports of Crude Petroleum

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom	1 011 832	1 053 382	3 397 242	15 470 043	23 138 777
Belgium-Luxembourg	58 660	81 505	335	51	80 903
Germany, Federal Republic of	39	14 285	31 061	33	31
Norway	1 982 464	7 771 166	13 623 874	13 556 881	16 685 295
Soviet Union	80 600 000	93 070 000	110 790 000	110 000 000	115 000 000
Yugoslavia	46	4 010	—	61	41
Algeria	41 959 307	38 436 725	43 372 077	47 456 571	* 48 000 000
Angola	7 604 000	7 263 900	579 378	7 574 900	* 7 220 000
Congo	2 450 729	2 400 000	1 845 844	1 200 922	* 1 300 000
Egypt	940 072	922 747	3 922 421	3 990 570	4 270 009
Gabon	9 121 886	10 508 565	9 911 525	10 167 300	...
Libya	72 015 356	68 925 584	89 183 262	103 051 406	...
Nigeria	96 437 049	81 696 514	95 871 533	100 003 104	* 86 250 000
Tunisia	3 726 783	4 759 695	3 686 782	4 144 877	4 673 652
Canada	48 466 191	38 093 491	26 514 965	17 546 865	14 211 016
Mexico	279 064	5 543 969	6 358 185	10 379 000	* 15 000 000
Netherlands Antilles	5 894 000	1 260 000	908 000	1 874 000	* 1 000 000
Trinidad & Tobago	5 186 141	7 362 951	7 259 185	7 858 093	7 733 409
USA (h)	155 715	2 720	323 189	2 483 182	4 725 147
Bolivia	1 335 700	1 024 500	997 600	555 000	* 450 000
Ecuador	8 600 000	7 700 000	8 900 000	6 656 000	* 7 000 000
Peru	...	195 202	264 213	84 856	* 1 200 000
Venezuela	93 679 000	77 992 000	72 793 000	69 984 000	65 933 000
Brunei (a)	22 516 058	8 835 306	10 351 980	10 762 801	11 200 833
Indonesia	54 450 000	52 506 623	59 267 473	68 030 214	69 560 158
Iran (b)	212 013 043	166 313 693	122 350 711	...	...
Iraq	91 038 000	100 995 000	102 635 000	112 688 000	* 118 000 000
Israel (g)	4 909 800	3 593 700	—	—	—
Japan	2 281	565	—	—	—
Kuwait	111 488 700	91 684 636	81 867 650	76 258 917	...
Malaysia (d)(e)	3 167 970	3 794 538	7 217 652	7 354 577	* 8 500 000
Neutral Zone (c)	26 154 400	23 563 100	23 101 000	15 511 800	...
Oman	15 356 000	18 114 000	19 492 700	17 695 331	* 16 000 000
Qatar	24 635 604	20 695 172	23 200 000	17 395 655	23 431 046
Sarawak (d)(f)	2 991 226	...	...	...	...
Saudi Arabia	391 084 528	304 515 700	390 874 100	428 171 200	* 380 000 000
Singapore	9 521	247 520	1	187 637	90 487
Syria	6 159 929	9 529 750	9 661 691	7 948 610	* 7 500 000
United Arab Emirates	81 428 799	81 721 085	94 396 570	96 273 199	* 89 400 000

(a) Exported to Sarawak for refining

(b) Years ended 20 March following that stated

(c) Neutral zone of Kuwait and Saudi Arabia

(d) Including crude imported into Sarawak from Brunei and re-exported

(e) From 1975 includes Sabah and Sarawak

(f) From 1975 included with Malaysia

(g) Figures may be incomplete as value only given in Israeli trade return for exports to some countries

(h) Including partly refined

Imports of Crude Petroleum

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom	113 286 344	88 514 919	88 618 428	70 202 450	65 902 178
Belgium-Luxembourg	29 301 947	26 168 207	28 811 418	34 998 483	30 795 740
Denmark	9 355 520	7 915 462	7 583 897	7 335 965	7 725 154
France	130 351 074	107 004 656	122 354 540	118 274 281	116 387 810
Germany, Federal Republic of	102 542 676	88 413 924	97 669 209	96 289 675	94 375 050
Irish Republic	2 625 058	2 405 863	1 698 738	2 218 546	2 067 755
Italy	111 456 183	94 443 439	100 590 258	99 740 179	107 837 604
Netherlands	60 647 000	55 225 000	62 587 039	65 969 575	57 827 057
Austria	6 358 131	6 045 035	7 267 468	6 786 993	8 066 333
Bulgaria	10 629 000	10 459 000	10 839 000	11 763 000	* 11 900 000
Czechoslovakia	14 655 000	15 839 000	17 082 000	18 322 000	* 18 800 000
Finland	9 365 798	9 622 045	11 135 668	11 517 229	10 453 872
German Democratic Republic	16 434 000	16 997 000	18 036 000	19 042 000	19 925 000
Greece	12 196 574	12 891 494	11 637 787	9 403 074	12 371 000
Hungary	6 817 000	8 431 000	8 785 000	8 538 000	9 960 047
Norway	6 729 164	5 745 726	8 076 284	8 557 892	8 391 833
Poland	10 582 000	13 306 000	15 095 000	16 404 000	16 615 000
Portugal	5 686 739	5 554 710	5 926 172	5 949 028	6 385 819
Romania	4 538 000	5 085 000	8 475 000	8 844 000	12 937 000
Soviet Union	4 390 000	6 499 000	6 425 000	6 500 000	6 000 000
Spain	36 332 007	41 345 552	48 955 999	39 035 773	39 136 394
Sweden	10 051 427	12 139 687	13 566 219	14 278 448	15 641 573
Switzerland	6 008 689	4 385 046	4 014 478	4 144 882	3 872 225
Turkey	10 464 484	8 920 133	11 512 727	11 750 450	10 762 000
Yugoslavia	7 422 063	7 415 955	8 312 569	9 652 760	10 379 841
Canary Islands	7 560 319	4 719 675	6 207 563	6 871 572	5 934 783
Egypt	36 300	2 320 000	640 800	—	—
Ethiopia	470 562	519 197	469 900	620 081	611 633
Ghana	1 195 976	1 242 488	1 117 727	1 191 852	* 1 207 000
Ivory Coast	1 655 681	1 464 822	1 529 627	1 601 868	1 550 623
Kenya	2 807 206	2 825 542	2 489 976	2 460 109	2 369 217
Liberia	634 876	549 833	601 576	—	...
Madagascar	604 094	781 564	554 024	449 859	487 608
Morocco	2 584 895	2 620 151	2 802 013	2 849 846	2 872 440
Mozambique	254 573	328 554	360 760	327 317	...
Senegal	612 302	652 805	* 710 000	* 776 000	* 810 000
Sierra Leone	277 956	188 904	219 620	231 441	...
South Africa	* 14 000 000	* 17 790 000	* 16 000 000	* 16 175 000	* 15 865 000
Sudan	1 132 100	1 220 100	1 132 300	—	...
Tanzania	802 964	729 149	957 211	* 675 000	* 700 000
Tunisia	843 157	1 014 089	1 156 018	1 034 711	942 498
Zaire	296 236	386 285	483 040	218 400	...
Zambia	896 806	1 284 638	994 800	900 000	* 900 000
Bahamas	* 10 900 000	* 10 500 000	* 9 255 000	* 9 500 000	* 9 300 000
Barbados	115 891	119 748	107 223	128 273	* 140 000
Canada	42 253 965	43 313 843	40 124 139	34 763 715	33 588 944
Costa Rica	390 717	271 435	251 388	335 247	* 341 000
Cuba	5 875 000	5 797 000	* 6 080 000	* 6 340 000	* 6 400 000
Dominican Republic	1 523 000	1 329 000	1 767 000	1 546 315	1 736 062
El Salvador	603 217	517 267	514 298	859 685	...
Guatemala	977 800	2 647 229	2 155 596	805 616	...
Honduras	311 897	699 081	397 000	450 810	228 145
Jamaica	* 2 220 000	1 508 190	1 290 000	1 127 000	* 1 210 000
Mexico	1 375 157	0	2	...	...
Netherlands Antilles	41 334 000	25 522 000	35 060 000	28 979 000	* 28 500 000
Nicaragua	622 409	714 151	737 000	662 000	* 695 000
Panama	3 505 841	4 159 307	2 843 940	2 853 159	* 3 070 000
Trinidad & Tobago	14 591 616	7 743 275	12 057 702	8 525 499	8 214 344
USA	212 765 025	241 082 904	307 108 329	365 731 800	347 232 619
Argentina	3 079 238	2 099 112	2 979 459	2 885 000	* 2 800 000
Brazil	32 730 692	34 205 975	40 094 943	40 089 067	44 749 557
Chile	4 746 732	3 657 000	3 128 000	3 448 000	...
Ecuador	860 000	1 090 000	1 056 000	...	...
Uruguay	1 735 900	1 374 988	1 896 063	1 360 343	* 1 900 000

Imports of Crude Petroleum

tonnes

Country	1974	1975	1976	1977	1978
Bahrain	8 864 700	7 556 000	10 511 500	9 984 000	* 10 900 000
Bangladesh	621 200	837 800	1 262 600	2 057 500	...
Burma	460 455	...	...	...	...
Cyprus	544 608	383 980	426 450	447 303	...
India	13 972 000	14 006 000	14 032 000	14 747 900	* 14 400 000
Indonesia	216 003	93 869	47 717	2 941 677	2 180 800
Israel	7 696 100	7 383 800	7 677 100	7 682 300	* 7 670 000
Japan	253 956 666	240 255 207	231 843 542	241 750 785	238 729 354
Jordan	773 263	860 366	1 168 566	1 181 000	1 332 285
Korea, Republic of	16 456 788	15 394 639	18 298 761	20 743 348	* 24 500 000
Kuwait	4 156 500	4 164 000	4 065 700	4 477 600	...
Lebanon	2 572 100	2 205 200	2 407 200	1 852 000	* 2 150 000
Malaysia (b)	2 885 358	3 159 642	3 625 098	3 771 711	* 4 000 000
Pakistan	3 120 300	2 988 100	2 839 500	2 946 500	...
Philippines	8 484 799	9 138 106	9 562 189	9 530 599	10 021 582
Sarawak (c)	692 595				
Singapore	23 059 420	18 101 445	21 254 959	23 631 341	27 651 237
Sri Lanka	1 526 469	1 598 300	1 544 320	1 524 816	* 1 550 000
Syria	1 725 810	2 412 770	2 763 745	2 916 065	* 1 500 000
Taiwan	13 740 155	7 532 457	12 392 048	13 569 489	17 129 796
Thailand	6 001 442	7 628 822	8 031 895	8 844 627	...
Yemen, People's Dem. Rep. of	2 699 912	1 596 816	1 707 292	2 151 700	...
Australia	9 138 665	8 140 691	8 591 330	9 183 360	10 150 320
New Zealand (a)	3 276 968	3 438 217	2 762 561	2 165 972	...

(a) Years ended 30 June of that stated

(b) From 1975 includes Sabah and Sarawak

(c) From 1975 included with Malaysia

Phosphates

Production of Phosphate Rock

tonnes

Country	1974	1975	1976	1977	1978
France (d)	40 000	18 000	28 000	19 000	24 500
Germany, Federal Republic of	85 064	81 278	85 624	80 497	—
Soviet Union	* 22 505 000	* 24 150 000	* 24 200 000	* 24 250 000	* 24 800 000
Algeria	802 400	703 000	742 000	1 001 000	1 136 000
Egypt	506 890	536 274	489 000	527 591	638 734
Kenya					
Guano	352	297	219	55	20
Morocco	19 600 000	14 119 400	15 656 155	17 577 254	19 278 000
Senegal					
Phosphate rock	1 472 000	1 599 971	1 591 000	1 800 000	1 843 000
Aluminium phosphates	405 000	201 445	208 000	275 000	...
South Africa	1 384 100	1 866 300	1 731 300	2 403 100	2 699 100
Spanish Sahara (a)	2 174 000	2 682 000	173 000	232 000	400 000
Togo	2 252 000	1 660 000	2 067 000	2 857 000	2 800 000
Tunisia	3 823 000	3 488 209	3 293 943	3 614 617	3 712 000
Uganda					
Apatite	* 11 000	* 10 000	* 5 000	* 5 000	—
Zimbabwe					
Apatite	* 130 000	* 130 000	* 130 000	* 140 000	* 100 000
Mexico	194 095	282 480	224 428	285 470	...
Netherlands Antilles	107 000	82 000	54 000	79 000	80 000
USA (c)	41 446 000	44 285 000	44 671 000	47 256 000	50 037 000
Brazil					
Apatite	327 274	406 030	489 617	605 000	1 094 000
Chile					
Guano	19 000	14 000	16 000	* 16 000	...
Colombia	12 000	13 000	9 300	5 800	1 360
Venezuela	141 500	155 000	80 000	139 100	108 700
China	* 3 000 000	* 3 400 000	* 3 750 000	* 4 100 000	* 4 300 000
Christmas Island (b)(e)	1 808 854	1 342 450	1 036 950	1 262 608	1 378 046
India					
Apatite	12 034	30 338	38 280	35 361	29 460
Phosphate rock	433 438	429 089	644 058	704 961	751 830
Indonesia	5 563	7 902	5 000	4 000	5 000
Israel	951 000	882 000	639 000	1 228 000	1 553 900
Jordan	1 595 000	1 351 529	1 683 141	1 771 141	2 328 700
Korea, Dem. P.R. of	* 400 000	* 450 000	* 450 000	* 450 000	* 450 000
Philippines					
Phosphate rock	26 506	5 401	11 923	10 323	4 000
Guano	13 552	125 813	1 757	162	...
Syria	660 430	857 300	511 000	425 000	800 000
Thailand	5 603	5 805	7 250	3 100	...
Vietnam					
Apatite	* 1 200 000	* 1 400 000	* 1 500 000	* 1 600 000	* 1 600 000
Australia	1 484	123 883	275 600	449 631	250 415
Banaba (b)	548 450	520 400	422 050	418 650	468 400
Nauru(b)	2 323 182	1 533 728	754 474	1 145 674	1 998 900
World total	110 000 000	109 000 000	108 000 000	117 000 000	125 000 000

(a) Since 1976, not administered by Spain

(b) Exports

(c) Marketable production

(d) 10% P₂O₅

(e) Including phosphate dust

Exports of Phosphate Rock

tonnes

Country	1974	1975	1976	1977	1978
Belgium-Luxembourg	39 805	27 996	9 104	11 553	14 203
France	2 759	3 704	1 952	10 085	16 503
Germany, Federal Republic of	11 902	7 797	1 880	1 280	1 230
Netherlands	81 990	25 998	73 676	75 915	66 605
Soviet Union					
Apatite ore	...	26 000	26 000	25 000	25 000
Apatite concentrates	6 000 000	5 830 053	5 900 000	5 900 000	6 000 000
Sweden	22 200	23 617	13 868	42 187	65 045
Algeria	353 784	213 365	568 760	775 501	* 700 000
Egypt	120 260	104 670	119 383	59 166	64 093
Morocco (a)	18 700 096	13 110 058	14 684 162	15 783 537	17 284 372
Senegal					
Calcium phosphate	1 582 994	1 317 209	1 322 649	1 575 649	} 1 686 000
Aluminium phosphate	315 046	199 706	202 000	203 000	
Seychelles					
Guano	3 541	3 988	5 670	5 277	...
South Africa					
Phosphate rock	37 097	13 229	11 118	4 510	—
Spanish Sahara (c)	2 179 000	2 677 000	277 000	25 000	441 000
Togo	2 580 088	1 125 919	1 997 000	2 886 000	2 849 000
Tunisia (a)	2 650 745	2 053 772	1 961 841	2 091 426	1 560 220
Mexico	5 239	257	747	2 344	...
Netherlands Antilles	106 500	54 341	77 483	75 206	78 800
USA	12 889 022	11 450 681	9 995 786	14 016 378	13 692 646
Christmas Island					
Phosphate rock	1 637 300	1 197 100	895 300	1 114 350	1 224 700
Phosphate dust	171 544	145 350	141 650	148 258	153 346
Israel (b)	422 000	259 127	341 445	479 708	479 401
Jordan	1 468 958	1 111 877	1 653 244	1 788 414	2 159 920
Singapore	17 959	33 467	30 986	22 550	13 019
Syria	489 096	307 905	421 376	610 219	...
Banaba	548 450	520 400	422 050	418 650	468 400
Nauru	2 323 182	1 533 728	754 474	1 145 674	1 998 900

(a) Including hyperphosphates

(b) Figures may be incomplete as value only given in Israeli trade return for exports to some countries

(c) Since 1976, not administered by Spain

Imports of Phosphate Rock

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom	2 016 674	1 561 535	1 764 068	1 826 694	1 771 980
Belgium-Luxembourg	2 406 599	1 771 440	1 582 138	1 926 116	1 941 348
Denmark	350 879	257 688	260 718	271 580	281 525
France	5 860 603	3 447 909	4 069 956	4 736 195	4 965 571
Germany, Federal Republic of	3 089 146	2 291 581	2 369 873	2 694 445	2 441 220
Irish Republic	449 270	146 253	188 292	120 995	104 728
Italy	2 138 425	1 639 130	1 540 881	1 572 711	1 618 707
Netherlands	2 365 380	1 591 134	1 762 720	1 991 525	2 207 702
Austria	611 983	408 316	307 865	347 705	314 341
Czechoslovakia (a)	387 000	376 000	347 000	348 000	317 000
Finland	570 010	623 003	337 963	407 366	429 807
German Democratic Republic (a)	527 900	509 700	518 000	506 300	460 200
Greece	330 376	454 638	346 544	132 467	99 064
Hungary	603 000	702 000	503 845	646 416	759 076
Norway	418 001	414 490	318 641	367 935	419 329
Poland					
Apatite concentrates	741 000	806 000	598 000	569 000	) 3 232 000
Phosphate rock	2 120 000	2 502 000	2 634 000	2 989 000	
Portugal	308 075	310 044	333 718	349 717	389 748
Romania (a)	561 300	516 000	684 900	778 900	879 100
Spain	1 188 695	1 068 237	1 367 345	2 762 471	2 947 057
Sweden	695 850	675 900	580 913	582 049	574 401
Switzerland	13 799	8 737	8 124	10 393	11 393
Turkey	590 994	907 787	793 112	642 831	...
Yugoslavia	1 199 220	846 484	880 487	1 066 091	902 610
Canary Islands	49	198	2 663	11 579	8 270
Ivory Coast	3 480	6 897	1 584	7 175	9 315
Madagascar	150	—	—	—	—
Mauritius					
Guano	7 546	6 023	5 558	—	—
Mozambique	3 000	4 000	2 000	5 000	3 000
Nigeria	...	3 000	12 000	16 000	3 000
South Africa	34	1 810	74	—	4
Tanzania	80 145	22 213	49 387	27 102	28 400
Tunisia	400	560	1 395	2 468	1 801
Zambia	1 720	57	...	...	...
Canada	3 366 339	3 282 257	2 241 086	2 361 631	2 961 362
Mexico	1 492 270	813 108	172 722	1 420 008	...
USA	166 194	33 231	46 434	252 950	920 305
Brazil	1 310 537	887 176	1 434 440	1 617 126	1 155 826
Colombia (e)	94 988	43 939	16 733	52 433	69 099
Uruguay	305 986	77 473	47 266	75 275	...
Bangladesh	86 000	30 000	40 000	94 000	86 000
China	1 220 000	1 194 000	1 229 000	1 336 000	1 412 000
India	1 106 161	567 314	471 521	1 054 000	1 145 000
Japan	3 844 959	2 903 715	2 334 970	2 652 308	2 599 162
Korea, Dem. P.R. of	39 000	91 000	119 000	107 000	217 000
Korea, Republic of	562 270	705 880	746 367	1 169 231	1 645 000
Lebanon	383 400	127 000	—	316 000	236 000
Malaysia (b)	134 082	140 698	152 026	169 303	221 100

Imports of Phosphate Rock

tonnes

Country	1974	1975	1976	1977	1978
Sabah (d)	5				
Sarawak (d)	2 674				
Pakistan (c)	43 000	...	34 444	25 022	42 432
Philippines	116 856	174 403	60 776	79 918	21 776
Singapore	20 802	24 611	27 199	26 071	14 108
Sri Lanka	32 813	...	195	319	...
Taiwan	251 340	210 600	227 578	309 750	287 758
Australia	3 056 000	1 937 000	1 201 000	1 438 000	2 052 000
New Zealand (c)	1 070 554	1 209 676	935 597	1 049 744	...

(a) P₂O₅ content

(b) From 1975 includes Sabah and Sarawak

(c) Years ended 30 June of that stated

(d) From 1975 included with Malaysia

(e) Exports from the USA

Platinum Metals

Production of Platinum Group Metals

kilograms (metal content)

Country	1974	1975	1976	1977	1978
Finland (a)	* 20	* 13	* 15	* 22	—
Soviet Union					
Crude platinum	* 77 800	* 82 430	* 87 100	* 90 200	* 95 000
Ethiopia (f)					
Crude platinum	7	6	7	6	...
South Africa					
Platinum	* 87 950	* 80 795	* 83 900	* 91 685	* 91 685
Osmiridium (c)(d)	* 78	* 75	* 75	* 75	* 75
Canada					
Platinum metals (e)	11 963	12 417	12 965	14 475	8 678
USA					
Platinum metals (b)					
Platinum	128	165	85	26)
Palladium	269	341	125	134)
Iridium	12	7	8	2	) * 150
Osmium	2	1	1	0)
Rhodium	1	1	1	0)
Colombia					
Crude platinum	656	688	522	539	447
Japan					
Platinum	170	189	270	303	...
Palladium	417	461	563	707	...
Philippines					
Platinum	42	18	—	—	—
Palladium	72	26	—	—	—
Australia					
Platinum	60	10	6	—	...
Palladium	164	299	286	121	...
World total	180 000	178 000	186 000	198 000	197 000

(a) Recovered from copper refining

(b) Recovered by refineries from domestic platinum, gold and copper ores

(c) From gold ores

(d) Sales

(e) Platinum metals content of concentrates (produced from Ni-Cu ores), residues and matte exported

(f) Years ended 6 July of that stated

Exports of Platinum Group Metals

Country	1974	1975	1976	1977	1978
United Kingdom					
Platinum	40 855	25 893	20 159	19 658	21 517
Palladium	9 192	11 289	15 738	9 162	10 807
Other platinum metals	6 263	1 996	2 974	3 077	5 377
Belgium-Luxembourg					
Platinum	1 088	1 081	928	1 172	1 365
Platinum metals	1 471	2 124	2 912	2 025	2 295
France					
Platinum	4 038	3 374	23 848	2 121	1 889
Platinum metals	1 614	3 094	3 409	2 870	1 352
Germany, Federal Republic of					
Platinum	7 105	7 083	7 846	8 559	7 853
Palladium	) 8 050	7 658	6 369	6 031	3 450
Other platinum metals	)	3 006	2 798	3 429	2 518
Italy					
Platinum	1 698	1 499	1 165	1 661	2 064
Platinum metals	238	288	112	231	45
Netherlands					
Platinum	505	227	410	394	723
Platinum metals	358	960	620	1 056	454
Austria					
Platinum & platinum metals	267	1 289	293	215	238
Norway					
Platinum & platinum metals	959	1 455	1 509	1 240	968
Soviet Union					
Platinum & platinum metals (a)	* 101 300	* 48 400	* 64 300	* 60 600	* 57 800
Switzerland					
Platinum	12 236	13 302	17 755	19 065	27 869
Yugoslavia					
Platinum	—	—	76	145	2 076
Palladium	10	140	210	2 193	...
South Africa					
Platinum & platinum metals (a)	* 51 400	* 57 600	* 67 800	* 69 600	* 81 100
Canada					
Ores & concentrates (b)	16 321	13 472	12 072	12 391	10 557
Platinum metals	1 998	2 599	2 039	2 159	...
of which: Re-exports	1 178	539	384	1 040	...
USA					
Ores & concentrates (b)	1 415	240	194	558	451
Platinum	13 296	13 524	6 938	4 950	4 911
of which: Re-exports	3 249	5 304	2 924	685	368
Platinum metals	15 739	11 821	7 024	5 452	11 441
of which: Re-exports	5 500	4 282	1 635	1 374	766
Colombia					
Platinum	...	...	428	...	...
Japan					
Platinum	2 185	4 263	2 214	2 271	1 282
Platinum metals	4 935	967	1 317	1 546	2 519
Taiwan					
Platinum & platinum metals	2	100	—	22	42
Australia					
Platinum & platinum metals	726	550	623	2 236	...

Note: In this table the description 'Platinum' and/or 'Platinum metals' as used here includes unwrought, partly worked and alloys

(a) IGS estimates, based on known imports into certain countries

(b) Platinum metals content

Imports of Platinum Group Metals

kilograms

Country	1974	1975	1976	1977	1978
United Kingdom					
Ores & concentrates (a)	* £61 808 000	* £54 549 000	* £62 468 000	* £61 380 000	* £81 500 000
Platinum	4 689	5 979	3 536	5 631	3 860
Palladium	4 489	2 091	2 464	1 985	5 135
Other platinum metals	603	1 436	1 776	2 476	2 155
Belgium-Luxembourg					
Platinum	1 332	1 096	227 692	1 923	2 159
Platinum metals	2 055	7 702	388	1 100	494
France					
Platinum	5 289	5 673	5 615	6 494	5 396
Platinum metals	3 604	4 106	3 955	4 023	2 544
Germany, Federal Republic of					
Platinum	9 133	8 903	9 831	11 703	9 374
Palladium	) 17 445	11 449	18 276	13 404	11 458
Other platinum metals	)	2 384	3 139	2 562	3 982
Italy					
Platinum	2 861	1 621	2 324	17 523	2 760
Platinum metals	2 875	1 469	4 452	3 073	4 127
Netherlands					
Platinum	1 229	8 259	2 038	1 202	964
Platinum metals	1 118	1 207	835	1 532	943
Austria					
Platinum & platinum metals	276	109	211	215	1 628
Finland					
Platinum & platinum metals	246	230	715	183	104
Norway					
Platinum & platinum metals	327	105	90	149	298
Portugal					
Platinum & platinum metals	167	75	151	188	0
Spain					
Platinum & platinum metals	...	1 756	1 163	878	342
Sweden					
Platinum & platinum metals	2 000	3 000	1 000	2 000	3 000
Switzerland					
Platinum	16 494	14 445	20 110	18 033	15 741
Turkey					
Platinum & platinum metals	102	19	83	1 587	0
Yugoslavia					
Platinum	136	47	136	601	2 220
Palladium	1 191	961	1 658	2 481	...
Libya					
Platinum & platinum metals	117	121	100	2	...
Nigeria					
Platinum & platinum metals	19	56	56	...	...
South Africa					
Platinum & platinum metals	1 001	2 213	509	329	664
Tunisia					
Platinum	...	13	8	40	3
Zambia					
Platinum	78	21	...	...	...
Canada					
Platinum & platinum metals (c)	1 528	1 896	1 325	1 091	1 747
Costa Rica					
Platinum & platinum metals	341	269	...	...	...
Mexico					
Platinum	45	132	17	...	...
Palladium	103	126	49	...	...
Other platinum metals	32	37	19	...	...
USA					
Ores & concentrates (d)	1 181	1	—	150	308
Platinum	34 527	21 256	31 114	25 595	36 523
Platinum metals –					
Palladium	41 620	16 301	34 940	35 822	38 075
Iridium, osmium & osmiridium	1 109	716	902	706	1 501
Rhodium	3 067	2 551	1 995	2 486	3 202
Ruthenium	1 999	527	2 385	1 672	2 287

Imports of Platinum Group Metals

kilograms

Country	1974	1975	1976	1977	1978
Argentina					
Platinum	246	16	17	...	...
Palladium	7 060	64	40	...	...
Brazil					
Platinum	207	225	157	263	119
Palladium	1 071	926	317	406	388
Venezuela					
Platinum & platinum metals	690	136	...	...	...
China					
Platinum & platinum metals	£1 521 200	...	...	...	...
Hong Kong					
Platinum & platinum metals	2 892	5 795	8 643	5 244	3 834
India					
Platinum	502	531	560	...	...
Iran (f)					
Platinum & scrap	£97 000	£68 000	£72 000	...	...
Japan					
Platinum	37 545	49 183	38 519	36 879	38 946
Platinum metals	22 539	15 903	20 713	17 324	25 143
Korea, Republic of					
Platinum	535	1 014	556	1 607	...
Malaysia (e)					
Platinum & platinum metals	32	27	15	53	...
Singapore					
Platinum	11	62	199	425	44
Taiwan					
Platinum & platinum metals	873	5 436	3 386	4 538	3 868
Thailand					
Platinum & platinum metals	1	39	19	44	...
Australia					
Platinum metals	1 439	1 425	784	26 413	4 670
New Zealand (b)					
Platinum & platinum metals	111	140	87	39	...

Note: In this table the description 'Platinum' and/or 'Platinum metals' as used here includes unwrought, partly worked and alloys

(a) Values shown refer to imports of 'ores and concentrates of silver, platinum and platinum metals', assuming that the imports of silver ores and concentrates are negligible

(b) Years ended 30 June of that stated

(c) Derived from Canadian ores and concentrates exported for treatment

(d) Platinum metals content

(e) From 1975 includes Sabah and Sarawak

(f) Years ended 20 March following that stated

Production of Potashtonnes (K₂O content)

Country	1974	1975	1976	1977	1978
United Kingdom					
Chloride	11 585	16 615	48 645	85 365	157 342
France					
Potassic salts	2 275 000	2 085 000	1 738 000	1 719 000	1 928 000
Germany, Federal Republic of					
Kainite, sylvinite	3 089 544	2 607 113	2 440 924	2 798 347	2 951 555
Italy					
Potassic salts	245 000	220 000	203 000	342 567	248 310
German Democratic Republic					
Potassic salts	2 864 000	3 019 000	3 161 000	3 229 000	3 320 300
Soviet Union	* 6 586 000	* 7 944 000	* 8 310 000	* 8 347 000	* 8 500 000
Spain					
Potassic salts	495 282	567 040	630 252	693 789	612 577
Congo	288 000	286 000	254 000	* 83 000	—
Canada					
Chloride	5 480 433	5 435 706	4 995 863	6 088 587	6 123 544
USA					
Potassic salts	2 315 000	2 269 000	2 177 000	2 229 000	2 253 000
Chile					
Nitrate	* 13 000	* 12 000	* 15 000	* 16 000	...
China	* 300 000	* 300 000	* 300 000	* 300 000	* 300 000
Israel					
Chloride	607 000	716 000	690 000	600 000	...
World total	24 600 000	25 500 000	25 000 000	26 500 000	27 000 000

Potash

tonnes

Exports of Potash

Country	1974	1975	1976	1977	1978
United Kingdom					
Fertiliser salts	3 032	4 428	24 070	35 057	62 981
Caustic potash	1 221	310	713	650	231
Belgium-Luxembourg					
Fertiliser salts (a)	207	90	101	82	138
Sulphate (a)(g)	284 466	215 030	217 520	237 810	274 416
Chloride (a)	2 510	3 585	4 407	7 189	8 551
Carbonate	3 348	907	1 049	943	1 370
Nitrate	143	104	483	1 440	281
France					
Fertiliser salts	24 148	11 993	12 869	12 420	11 533
Sulphate (a)(g)	2 212	714	244	2	6
Chloride (a)	417 815	423 229	327 013	359 284	492 681
Caustic potash	19 110	11 396	11 865	12 792	11 212
Nitrate	5 740	2 386	3 236	3 747	3 781
Germany, Federal Republic of					
Fertiliser salts (f)	43 117	7 438	7 046	5 984	5 234
Sulphate (a)(g)	222 324	233 060	191 683	205 083	227 540
Chloride (a)	1 014 132	763 431	675 998	772 382	1 128 304
Caustic potash	(b) 16 214	8 848	12 468	16 155	11 606
Carbonate	24 167	17 601	21 172	20 338	21 501
Italy					
Sulphate (g)	31 210	67 789	93 552	132 090	106 804
Caustic potash	775	864	1 591	2 928	...
Netherlands					
Sulphate (a)	414	445	118	(g) 105	(g) 177
Chloride (a)	1 199	2 328	587	483	473
Caustic potash	95	136	45	211	456
Carbonate	648	17	91	35	563
Nitrate (d)	227	13	82	236	399
German Democratic Republic					
Fertiliser salts (a)	2 089 000	2 252 000	2 428 000	2 740 000	2 744 000
Caustic potash	9 782	8 842	8 130	...	...
Carbonate	9 315	8 225	8 644	...	...
Poland					
Potassic salts	7 105	5 750	8 633	8 437	8 342
Portugal					
Sulphate (a)	368	—	500	3 699	1 315
Chloride	75	3	193	—	—
Caustic potash	4	5	13	1	...
Soviet Union					
Fertiliser salts	5 600 000	5 985 643	5 566 833	6 024 367	5 771 093
Spain					
Sulphate (a)	79 740	62 946	62 320	61 785	64 460
Chloride	151 073	65 035	346 309	430 979	340 268
Nitrate	208	156	133	633	233
Sweden					
Chloride	0	1 803	1 244	1 705	3 371
Caustic potash	3 816	2 265	2 832	3 228	3 062
Carbonate	—	6	3	21	26
Congo					
Potassic fertilisers	405 730	408 159	400 379	291 002	...
Ivory Coast					
Potassic fertilisers	815	1 152	71	201	57
Canada					
Chloride	9 044 493	7 242 070	8 278 141	9 206 094	9 387 451
USA					
Fertiliser salts (a)	1 153	2 722	1 921	1 300	...
Chloride (a)	604 840	564 542	735 666	721 000	687 000
Other potassic fertilisers (a)	107 788	139 399	119 641	123 000	122 000
Caustic potash (a)	4 754	6 703	8 024	* 14 000	* 18 000

Potash

Exports of Potash

tonnes

Country	1974	1975	1976	1977	1978
India					
Caustic potash (c)	595	249	384	390	...
Carbonate (c)	1 104	349	168	189	...
Nitrate	18	18	6	...	...
Israel (e)					
Carbonate	1 961	1 901	2 946	2 575	3 413
Japan					
Sulphate	100	5 174	3 751	543	4 149
Chloride	80	401	1 307	1 622	4
Caustic potash	4 373	5 279	5 165	5 106	5 499
Chlorate	185	410	613	119	118
Singapore					
Potassic fertilisers	182 968	134 740	153 045	128 271	203 616
Taiwan					
Chlorate	557	1 250	947	1 155	1 110

Note: Potassium sulphate and chloride shown in this table refer to fertiliser grade [Standard International Trade Classification (Revised) code 562.3] unless otherwise stated. Those shown as chemical grade relate to S.I.T.C. code 523

(a) K₂O content

(b) Including sodium hydroxide and potassium peroxide

(c) Years ended 31 March following that stated

(d) Figures up to 1976 exclude exports to Belgium-Luxembourg, if any

(e) Figures may be incomplete as value only given in Israeli trade return for exports to some countries

(f) From 1975, K₂O content

(g) Including chemical grade

Imports of Potash

Country	1974	1975	1976	1977	1978
United Kingdom					
Fertiliser salts	23 685	28 449	30 727	20 443	23 569
Sulphate (j)	31 957	21 449	26 119	23 669	22 227
Chloride	799 267	658 593	705 663	710 980	646 160
Other potassic fertilisers	10 105	1 870	—	—	—
Caustic potash	3 824	2 186	3 715	3 266	3 418
Carbonate	13 305	8 983	11 791	11 180	12 186
Nitrate	11 666	7 430	6 931	10 220	10 176
Belgium-Luxembourg					
Fertiliser salts (a)	13 493	12 862	9 831	9 521	8 419
Sulphate (a)(j)	7 202	16 648	18 956	7 401	18 980
Chloride (a)	632 900	515 897	467 575	542 188	558 427
Carbonate	7 573	4 891	6 229	5 741	5 889
Chlorates	421	491	227	483	217
Nitrate	1 237	1 088	1 692	3 199	1 696
Denmark					
Sulphate (a)(j)	582	253	246	1 229	6 512
Chloride (a)	129 247	109 315	111 244	121 812	97 151
Caustic potash	1 153	1 018	1 590	2 091	2 321
Carbonate	288	202	264	344	388
Chlorate (f)	18	6	14	14	17
Nitrate	1 305	1 490	1 535	1 501	1 845
France					
Sulphate (a)(j)	64 384	46 552	65 769	74 356	74 117
Chloride (a)	141 191	181 434	106 800	146 382	164 869
Caustic potash	129	115	220	93	662
Nitrate	12 374	6 660	14 700	17 875	22 245
Germany, Federal Republic of					
Chloride (a)	45 538	35 786	43 222	49 887	55 247
Caustic potash (i)	2 210	5 171	1 089	674	2 809
Carbonate	3 904	5 310	5 935	5 415	6 590
Chlorate (f)	314	379	348	473	398
Nitrate	3 512	2 499	2 220	3 611	3 650
Irish Republic					
Potassic fertilisers	268 727	169 894	256 290	279 153	334 022
Caustic potash (k)	602	283	1 157	748	583
Italy					
Fertiliser salts	29 471	23 027	24 116	22 186	19 153
Sulphate (j)	21 039	10 017	11 689	57 273	52 194
Chloride	345 306	263 372	314 161	392 008	479 212
Caustic potash	1 421	679	767	878	763
Carbonate	11 357	6 513	8 274	8 816	9 803
Nitrate	14 280	3 743	7 849	8 933	10 471
Netherlands					
Fertiliser salts (a)(e)	696	890	701	526	403
Sulphate (a)	38 032	29 153	30 712	(j) 52 036	(j) 38 921
Chloride (a)	175 386	120 192	145 033	165 082	154 944
Caustic potash	6 755	4 342	4 905	5 996	6 334
Carbonate	7 331	5 479	6 623	6 198	5 776
Nitrate (e)	6 992	5 816	6 317	7 882	9 300
Austria					
Fertiliser salts	39 746	19 257	19 982	24 738	19 231
Sulphate (a)	40 556	25 568	23 889	33 953	29 113
Chloride	299 428	214 248	188 417	253 598	215 872
Caustic potash	1 553	1 319	1 937	1 972	1 725
Carbonate	1 897	1 201	1 508	1 365	1 534
Nitrate	917	449	607	673	588
Czechoslovakia					
Fertiliser salts (a)	591 000	690 000	634 000	627 000	670 000

Potash

Imports of Potash

tonnes

Country	1974	1975	1976	1977	1978
Finland					
Fertiliser salts	—	2	2	2	6
Sulphate	17 595	25 943	12 355	18 671	...
Chloride	268 801	279 965	193 500	240 664	243 382
Caustic potash	431	474	467	457	474
Carbonate	2 352	1 680	538	582	534
Nitrate	1 216	1 325	543	1 016	1 057
Greece					
Sulphate	11 036	28 120	51 306	5 600	18 804
Caustic potash	512	171	210	290	139
Carbonate	...	674	1 919	771	...
Nitrate	136	168	1 584	215	177
Hungary					
Fertiliser salts	991 000	1 373 000	1 172 000	1 248 000	...
Iceland					
Fertiliser salts	7 395	2 974	6 555	10 118	5 801
Caustic potash	—	25	30	25	16
Carbonate	95	97	185	182	116
Norway					
Fertiliser salts	219	212	151	228	380
Sulphate	97 865	92 435	72 217	90 650	106 612
Chloride	170 685	176 873	146 765	142 525	161 677
Caustic potash	799	904	1 214	1 308	2 935
Carbonate	407	394	398	451	489
Chlorate	132	138	71	122	58
Nitrate	3 903	2 602	2 993	881	2 120
Poland					
Fertiliser salts	2 658 000	2 933 000	2 857 000	2 958 000	2 430 000
Chloride	19 520	22 103	19 650	21 094	22 599
Carbonate	7 208	5 750	7 206	7 421	8 852
Portugal					
Sulphate (a)	550	2	0	0	...
Chloride	52 696	35 105	58 349	79 765	72 983
Caustic potash	203	352	368	571	367
Carbonate	454	504	621	798	...
Chlorate	341	304	330	315	...
Nitrate	635	542	803	718	...
Romania					
Fertiliser salts (a)	64 700	91 900	109 500	128 500	161 900
Soviet Union					
Caustic potash	5 300	7 519	10 015	...	...
Sweden					
Fertiliser salts	650	329	418	567	920
Chloride	272	171	62	4	3
Caustic potash	2 557	795	518	1 836	504
Carbonate	2 044	1 807	1 717	1 376	1 268
Nitrate	1 889	1 526	1 391	1 392	1 408
Switzerland					
Fertiliser salts	101 665	84 741	80 564	80 314	84 004
Sulphate	94	185	49	47	16
Caustic potash	1 391	1 136	1 409	1 390	1 341
Carbonate	2 760	2 243	3 141	3 712	2 690
Nitrate	1 187	603	565	712	664
Turkey					
Sulphate (a)	—	1	4 974	6 093	...
Caustic potash	400	632	1 153	471	718
Carbonate	1 236	2 735	3 882	3 082	...
Chlorates	669	544	602	884	...
Nitrate	401	854	298	257	...
Yugoslavia					
Fertiliser salts	...	...	22	1	2
Sulphate	7 561	9 461	14 905	12 240	17 768
Chloride	375 860	237 853	318 090	366 491	425 403
Caustic potash	1 809	1 992	1 104	176	33

Imports of Potash

Country	1974	1975	1976	1977	1978
Algeria					
Sulphate	43 180	57 355	37 728	78 535	...
Chloride	9 628	2	0	0	...
Angola					
Sulphate (a)	...	...	...	1 500	500
Chloride (a)	...	...	...	1 200	600
Cameroon					
Fertiliser salts	1 757	330	1 610	6 925	20 481
Potassic fertilisers	9 176	11 190	4 691	10 825	...
Canary Islands					
Nitrate	601	300	900	1 430	1 359
Ghana					
Potassic fertilisers	2 709	...	...	...	...
Ivory Coast					
Chloride	23 910	26 270	33 665	26 886	41 176
Other potassic fertilisers	12 086	6 999	1 750	10	8 314
Caustic potash	8	5	131	622	140
Kenya					
Potassic fertilisers	3 531	334	3 917	7 338	10 752
Liberia					
Potassic fertilisers	3 069	468	1 847	1 070	...
Libya					
Potassic fertilisers	—	6 162	—	19 960	...
Madagascar					
Potassic fertilisers	4 462	6 688	7 552	4 348	6 900
Malawi					
Potassic fertilisers	—	785	140	—	1 568
Mauritius					
Potassic fertilisers	21 089	17 220	20 866	22 674	...
Morocco					
Sulphate	40 617	33 275	40 750	37 416	31 285
Chloride	17 377	38 183	18 491	24 409	22 428
Caustic potash	147	142	192	127	194
Chlorate	146	189	142	235	198
Nitrate	2 122	390	1 377	656	989
Mozambique					
Potassic fertilisers	3 391	1 541	2 514	3 291	...
Nigeria					
Potassic fertilisers	1 443	4 605	5 762	...	...
Senegal					
Potassic fertilisers	12 709	31 636	...	...	...
Sierra Leone					
Potassic fertilisers	...	229	264	—	...
South Africa					
Fertiliser salts	309 820	245 809	205 279	222 043	153 650
Potassic fertilisers	18 179	22 402	11 613	3 958	111 520
Caustic potash	1 963	1 050	428	1 298	2 016
Sudan					
Caustic potash	5	29	28	131	36
Tanzania					
Fertiliser salts	6 179	9 032	5 695	...	...
Togo					
Potassic fertilisers	242	...	...	...	...
Tunisia					
Potassic fertilisers	18 739	14 794	4 982	4 851	6 719
Nitrate	169	...	95	—	—
Uganda					
Potassic fertilisers	—	350	—	...	...
Zaire					
Potassic fertilisers	960	313	1 869	4 397	...
Zambia					
Sulphate	585	210	...	...	...
Chloride	835	...	...	...	...
Barbados					
Potassic fertilisers	711	356	307	866	...

Potash

Imports of Potash

tonnes

Country	1974	1975	1976	1977	1978
Belize					
Potassic fertilisers	—	421	1 165	14	...
Canada					
Sulphate	22 131	10 432	7 831	11 447	19 819
Chloride	312	347	4 199	30 456	1 795
Other potassic fertilisers	51 637	44 458	45 134	63 731	53 818
Caustic potash	1 953	5 949	5 375	4 932	5 252
Carbonate	1 481	1 034	987	759	1 212
Nitrate	3 316	2 618	1 691	1 967	2 288
Costa Rica					
Potassic fertilisers	45 752	47 296	45 715	58 795	...
El Salvador					
Potassic fertilisers	11 741	8 022	1 268	13 720	...
Guatemala					
Potassic fertilisers	3 094	7	63	8 579	...
Honduras					
Potassic fertilisers	3 746	354	6 122	10 819	9 443
Jamaica					
Potassic fertilisers	15 013	21 514	15 076	...	...
Martinique					
Potassic fertilisers	2 589	1 918	2 024	2 419	624
Mexico					
Sulphate	20 081	16 180	32 802	18 431	...
Chloride	67 504	95 119	94 351	49 873	...
Caustic potash	1 702	513	1 916	1 566	...
Carbonate	2 874	464	3 953	2 111	...
Nicaragua					
Potassic fertilisers	5 556	753	...	...	...
Panama					
Potassic fertilisers	5 742	5 033	10 219	1 063	...
Trinidad & Tobago					
Potassic fertilisers	27 042	4 373	4 485	2 189	5 075
USA					
Sulphate (a)	26 255	34 912	21 250	34 500	29 000
Chloride (a)	3 889 420	3 393 305	4 136 278	4 554 000	4 643 000
Other potassic fertilisers (a)	772	100	180	...	...
Caustic potash (a)	1 358	5 205	524	* 540	* 930
Carbonate (a)	1 197	1 239	1 262	...	...
Chlorate & perchlorate (a)	142	73	415	...	...
Cyanide (a)	731	189	731	...	...
Nitrate, crude (a)	5 120	12 987	4 943	9 000	30 000
Nitrate, refined (a)	144	347	58	...	...
Argentina					
Sulphate	1 151	1 724	2 337	...	...
Chloride	10 795	3 904	6 824	...	...
Caustic potash	1 111	740	511	...	...
Carbonate	1 388	769	935	...	...
Chlorate	496	576	514	...	...
Nitrate	215	159	165	...	...
Brazil					
Sulphate	27 529	29 409	32 824	28 382	34 904
Chloride	989 097	884 330	1 157 614	1 554 049	1 602 315
Other potassic fertilisers	14 815	17 749	13 650	24 040	23 416
Caustic potash	3 695	2 083	6 066	3 351	2 152
Carbonate	5 384	2 873	4 191	3 724	1 405
Nitrate	10 713	8 274	3 485	15 667	21 371
Chile					
Sulphate	16 479	...	...	...	...
Chloride	28 440	...	...	...	...
Other potassic fertilisers	16 195	...	...	...	...
Caustic potash	144	...	...	...	...
Colombia					
Chloride	...	...	16 700	...	...
Guyana					
Potassic fertilisers	5 220	5 351	3 486	3 482	661

Imports of Potash

Country	1974	1975	1976	1977	1978
Uruguay					
Caustic potash	213	158	21	29	...
Nitrate	21	21	8	15	...
Venezuela					
Chloride	4 500	12 359	...	...	...
Caustic potash	25	457	...	...	...
Carbonate	10	100	...	...	...
Chlorate	—	343	...	...	...
Nitrate	263	4 475	...	...	...
Brunei					
Potassic fertilisers	3 404	92	3 127	1 101	11
China					
Potassic fertilisers	* 214 000	...	...	...	...
Cyprus					
Potassic fertilisers	1 453	1 225	270	765	...
Hong Kong					
Potassic fertilisers	10	...	1	—	—
Caustic potash	33	36	75	473	67
Carbonate	150	137	107	180	226
Chlorate	54	26	109	13	57
Nitrate	466	435	709	747	598
India (b)					
Sulphate	10 016	6	1 000	6 702	...
Chloride	471 025	233 272	291 251	626 048	...
Other potassic fertilisers	69 770	53 012	112 682	162 677	...
Caustic potash	...	...	926	765	...
Carbonate	34	...	33	14	...
Indonesia					
Sulphate	...	3 614	7 249	3 572	315
Other potassic fertilisers	72 109	25 119	35 152	34 401	107 352
Caustic potash	...	706	196	273	507
Nitrate	...	355	476	369	798
Iran (c)					
Potassic fertilisers	8 945	2 023	47	...	...
Caustic potash	51	149	297	...	...
Japan					
Sulphate (fertiliser grade)	189 840	152 961	118 087	177 500	200 703
Chloride	1 282 360	1 216 454	972 586	1 102 303	1 088 061
Other potassic fertilisers	48 182	15 711	18 499	30 936	33 687
Sulphate (chemical grade)	14 756	24 594	11 076	11 337	8 596
Jordan					
Potassic fertilisers	310	961	4 425	—	1 850
Korea, Republic of					
Sulphate	14 339	34 420	33 655	30 910	...
Chlorides	191 853	297 950	195 757	96 393	...
Other potassic fertilisers	...	5 506	—	36 168	...
Caustic potash	622	485	1 035	1 315	...
Carbonate	1 366	1 061	1 277	2 215	...
Chlorate	30	6	36	—	...
Nitrate	2 504	3 357	507	492	...
Malaysia (g)					
Fertiliser salts	137	928	10 716	24 826	...
Potassic fertilisers	164 666	168 418	229 208	239 726	...
Philippines					
Sulphate	1 981	4 500	4 600	4 800	4 560
Other potassic fertilisers	87 485	85 868	68 819	65 041	5 380
Caustic potash	37	108	25	383	444
Carbonate	183	151	101	254	294
Sabah (h)					
Fertiliser salts	8 401				
Sarawak (h)					
Fertiliser salts	473				
Potassic fertilisers	3 007				
Singapore					
Potassic fertilisers	226 279	194 850	186 924	260 396	247 697

Imports of Potash

tonnes

Country	1974	1975	1976	1977	1978
Sri Lanka					
Potassic fertilisers	25 598	...	28 301	...	...
Taiwan					
Chloride	204 868	198 894	170 133	165 092	107 110
Caustic potash	225	347	1 249	2 610	1 183
Carbonate	3 206	1 508	2 968	3 252	3 655
Nitrate	415	94	501	922	695
Thailand					
Sulphate	...	6 504	5 500	550	...
Chloride	300	6 401	150	3 630	...
Other potassic fertilisers	6 259	13 075	6 800	2 750	...
Caustic potash	82	33	307	909	...
Chlorate	251	225	240	289	...
Nitrate	1 796	1 799	4 505	5 967	...
Australia (d)					
Sulphate	7 860	12 552	9 428	24 962	18 213
Chloride	166 711	198 555	100 542	140 448	134 907
Other potassic fertilisers	8 310	1	219	61	4 277
Caustic potash	2 152	2 762	1 190	2 449	2 264
Carbonate	2 374	2 228	958	1 237	1 376
Nitrate	5 401	6 084	5 879	285	3 823
Other compounds	970	605	137	218	512
New Zealand (d)					
Sulphate	2 878	3 381	2 906	2 000	...
Chloride	299 283	233 448	194 988	226 088	...
Other potassic fertilisers	178	254	26	—	...
Caustic potash	617	787	96	308	...
Nitrate	396	663	317	431	...

Note: Potassium sulphate and chloride shown in this table refer to fertiliser grade [Standard International Trade Classification (Revised) code 562.3] unless otherwise stated. Those shown as chemical grade relate to S.I.T.C. code 523.

- (a) K₂O content
- (b) Years ended 31 March following that stated
- (c) Years ended 20 March following that stated
- (d) Years ended 30 June of that stated
- (e) Figures up to 1976 exclude imports from Belgium-Luxembourg, if any
- (f) Includes potassium and ammonium chlorate
- (g) From 1975 includes Sabah and Sarawak
- (h) From 1975 included with Malaysia
- (i) Figures up to 1977 include sodium hydroxide
- (j) Including chemical grade
- (k) May include some sodium peroxide

Production of Salt

Country	1974	1975	1976	1977	1978
United Kingdom					
Rock salt	990 000	754 000	611 000	905 000	1 311 000
Brine salt	1 862 000	1 740 000	1 918 000	1 871 000	1 760 000
Salt in brine (a)	5 569 000	5 136 000	5 477 000	5 426 000	4 239 000
Denmark	422 815	244 295	349 020	313 717	325 093
France					
Rock salt	529 000	371 000	618 000	603 000	966 500
Salt in brine	3 515 000	3 054 000	3 300 000	3 490 000	4 100 000
Sea salt	1 080 000	1 127 000	1 431 000	557 000	864 500
Germany, Federal Republic of					
Rock salt	6 982 667	5 378 996	6 623 000	7 409 000	7 211 000
Brine salt	820 190	785 853	816 000	841 000	868 313
Salt in brine	3 517 519	3 151 093	4 105 000	4 306 454	4 880 030
Italy					
Rock salt & brine salt	4 006 300	3 212 364	3 410 280	3 600 388	3 721 258
Sea salt	973 507	945 791	433 236	600 000	...
Netherlands (b)	3 387 000	2 690 000	3 026 000	3 111 000	2 939 000
Albania	* 50 000	* 50 000	* 50 000	* 50 000	* 50 000
Austria					
Rock salt	337	899	953	1 031	1 173
Evaporated salt	294 392	257 848	332 330	323 345	320 886
Bulgaria	* 130 000	* 88 900	* 99 800	* 100 000	* 100 000
Czechoslovakia	318 116	322 603	336 439	348 085	...
German Democratic Republic	2 328 000	2 430 100	2 559 600	2 642 000	2 741 000
Greece	148 880	175 659	140 918	191 029	...
Malta (c)	900	800	800	797	759
Poland					
Rock salt	1 405 000	1 582 000	1 652 000	1 562 000	1 435 000
Brine salt	) 1 890 000	324 000	428 000	783 000	880 000
Other salt	)	1 618 000	1 738 000	2 012 000	2 078 000
Portugal					
Rock salt	309 797	293 914	306 492	350 178	316 122
Sea salt	223 107	212 687	163 436	148 484	200 000
Romania	3 923 000	3 833 000	4 210 000	4 535 000	4 739 000
Soviet Union	* 13 400 000	* 13 700 000	* 14 000 000	* 15 500 000	* 15 700 000
Spain					
Rock salt	1 624 912	1 833 440	1 999 869	1 901 335	...
Sea salt	605 819	1 276 353	1 136 314	1 175 668	...
Other salt	26 318	22 508	22 198	24 448	...
Switzerland	306 757	237 097	311 611	365 890	390 591
Turkey	913 401	679 296	* 680 000	* 680 000	929 000
Yugoslavia					
Sea salt	25 857	38 061	12 881	20 576)
Rock salt	93 082	78 466	91 230	85 210	) 298 000
Brine salt	15 273	5 530	) 185 000	184 000)
Vacuum salt	186 617	173 803)))
Algeria					
Brine salt & sea salt	117 000	125 825	133 000	142 000	...
Angola	* 100 000	* 100 000	* 100 000	* 100 000	...
Cape Verde Is.	34 580	20 941	13 701	31 317	14 225
Egypt	485 233	621 399	606 000	565 000	754 843
Ethiopia (d)	121 932	101 794	* 98 000	* 80 000	...
Ghana	* 52 000	* 52 000	* 52 000	* 50 000	...
Kenya	30 256	5 553	49 906	39 932	19 827
Libya	7 548	9 434	* 10 000	* 10 000	...
Madagascar	10 000	26 000	27 000	26 000	30 000
Mali	4 000	4 000	5 000	* 5 000	...
Mauritius (c)	5 500	5 500	6 000	6 000	* 6 000
Morocco	36 054	33 574	15 232	12 442	...
Mozambique	31 000	32 000	* 28 000	* 28 000	...
Namibia	* 209 000	* 210 000	* 220 000	* 220 000	...
Senegal	150 000	133 000	142 000	140 000	...
South Africa	220 839	264 412	223 662	242 254	489 925
Sudan	68 062	67 094	82 817	91 712	...

Salt

Production of Salt

tonnes

Country	1974	1975	1976	1977	1978
Tanzania	38 400	44 390	46 441	39 118	...
Tunisia (c)	306 000	350 000	285 000	405 000	...
Uganda	* 3 000	* 3 000	* 3 000	* 3 000	* 3 000
Bahamas	1 027 000	1 233 000	1 491 400	1 871 000	...
Canada					
Rock salt	3 783 078	3 626 123	4 354 684	4 320 304	4 625 322
Other salt (e)	1 663 642	1 496 450	1 639 335	1 719 178	1 826 959
Costa Rica	14 000	15 000	20 000	27 000	...
Cuba	79 383	* 90 000	...	...	...
Dominican Republic					
Rock salt	2 154	—	—	—	...
Sea salt	37 676	34 984	36 295	65 798	...
El Salvador (c)	34 708	40 519	40 987	* 45 000	...
Guatemala (c)	8 884	8 800	10 924	11 000	...
Honduras	* 32 000	31 000	* 15 000	2 000	...
Mexico	5 507 863	5 354 000	4 591 000	4 900 000	...
Nicaragua (c)	* 10 000	* 12 000	* 14 000	* 16 000	...
Panama (c)	20 597	12 293	12 274	19 567	15 201
USA (f)					
Rock salt	13 458 000	12 957 000	14 214 000	13 570 000)
Salt in brine	23 386 000	19 415 000	20 790 000	20 663 000	) 39 626 000
Evaporated salt	5 372 000	4 849 000	5 087 000	5 150 000)
Argentina					
Rock salt	1 188	1 111	1 454	1 000	...
Other salt	954 936	1 566 371	659 935	703 000	...
Brazil (c)	1 552 418	2 145 345	2 472 638	* 2 500 000	...
Chile	239 316	292 795	427 766	424 165	...
Colombia					
Rock salt	432 380	440 973	338 870	347 020	365 908
Sea salt	551 805	586 547	739 364	594 415	459 559
Peru	338 245	304 215	* 304 000	* 310 000	...
Venezuela (c)	223 000	290 000	* 300 000	241 000	...
Afghanistan (g)	50 848	62 000	72 700	77 700	81 112
Bangladesh	169 342	750 000	784 000	542 000	...
Burma (b)(c)(h)	125 170	129 000	199 000	201 000	...
China	* 25 000 000	* 30 000 000	* 30 000 000	* 17 100 000	* 19 530 000
Cyprus	3 608	6 096	3 320	—	3 293
India					
Rock salt	5 272	3 330	4 438	3 759	4 380
Other salt	5 910 727	6 396 670	3 068 000	1 757 000	...
Indonesia	71 250	52 000	213 000	563 000	...
Iran (g)	400 000	400 000	700 000	700 000	700 000
Iraq	* 60 000	* 64 000	* 64 000	* 60 000	...
Israel	114 566	116 792	86 561	* 100 000	...
Japan (i)	1 115 111	1 068 000	1 020 600	1 056 000	...
Jordan (b)	15 895	15 943	12 000	12 200	153 000
Korea, Dem. P.R. of	* 544 000	* 544 000	* 544 000	* 540 000	* 540 000
Korea, Republic of	574 189	665 330	690 000	794 000	...
Kuwait	13 000	15 000	15 426	16 703	18 972
Lebanon (c)	* 35 000	* 35 000	* 35 000	* 35 000	* 35 000
Pakistan					
Rock salt	355 488	409 216	417 000	385 000	402 000
Sea-salt	124 974	127 000	142 000	114 000	217 600
Philippines (c)	195 671	70 625	203 386	213 452	214 000
Sri Lanka	120 287	120 997	140 555	47 104	115 320
Syria	40 642	34 546	54 000	48 400	...
Taiwan (c)	368 228	268 149	496 873	496 058	...
Thailand	* 163 000	* 153 000	* 156 000	* 163 000	...

Production of Salt

tonnes

Country	1974	1975	1976	1977	1978
Vietnam	* 350 000	* 350 000	* 350 000	* 375 000	...
Yemen Arab Republic	...	* 50 000	* 100 000	* 200 000	...
Yemen Democratic Republic	* 75 000	* 75 000	* 75 000	* 75 000	* 75 000
Australia	5 008 775	4 569 561	5 488 753	4 715 873	...
New Zealand	54 864	40 000	41 000	53 000	65 000
World total (j)	164 000 000	161 000 000	168 000 000	156 000 000	162 000 000

(a) Used for purposes other than salt-making

(b) Brine salt

(c) Sea salt

(d) Years ended 6 July of that stated

(e) Including salt in brine

(f) Sold or used by producers

(g) Years ended 20 March following that stated

(h) Years ended 31 March following that stated

(i) Government licensed plants

(j) Salt is known to have been produced in many countries for which statistics are not available. Among these are Democratic Kampuchea, Laos, Martinique, Mauritania, Mongolia, Netherlands Antilles, Nigeria and Somalia

Salt

Exports of Salt

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom	605 600	518 870	575 964	467 589	405 086
Belgium-Luxembourg	123 690	103 992	106 011	137 723	139 470
Denmark	124 537	81 216	95 917	61 531	67 094
France	236 913	106 907	128 836	197 195	167 728
Germany, Federal Republic of	2 207 356	1 588 897	1 820 887	2 021 929	1 934 742
Italy	70 813	59 453	91 833	192 611	497 316
Netherlands	2 239 662	1 896 637	2 072 079	1 988 435	1 891 672
German Democratic Republic					
Rock salt	945 000	1 008 000	1 102 000	1 145 000	1 213 000
Norway					
Common salt	3 414	2 732	2 553	1 765	1 863
Poland	239 378	245 941	279 900	292 274	307 848
Portugal	467	568	16 311	23 431	4 000
Romania	734 300	678 600	667 500	714 600	780 600
Soviet Union	346 300	320 704	429 767	398 772	402 720
Spain	2 264	36 520	345 941	644 524	816 355
Sweden	730	261	5 837	340	2 619
Switzerland	2 250	711	1 004	1 995	377
Algeria	27 469	10 500	21 298	4 400	...
Cape Verde Islands	19 207	12 042	21 850	20 650	14 501
Egypt	14 857	10 151	7 006	72 102	98 925
Ethiopia	...	2 354	...	...	—
Ivory Coast	264	538	259	13	53
Kenya	343	363	312	815	85
Madagascar	3 078	1 967	1 845	—	1 342
Mali	2 932	1 000	...	...	...
Mozambique	5 125	8 577	1 921	558	...
Senegal	110 314	110 168	77 700	...	...
South Africa	10 133	6 770	19 596	10 672	38 260
Sudan	81	128	1 288	681	241
Tanzania	8 242	8 821	9 141	6 826	6 816
Tunisia	259 253	197 710	267 490	382 015	382 618
Uganda	560	123	35	...	...
Bahamas	974 757	1 108 960	...	...	...
Canada	...	...	1 423 848	1 163 301	1 608 539
El Salvador	15 371	19 270	20 296	23 238	...
Honduras	...	465	507	117	62
Mexico	4 469 837	3 622 290	3 281 676	3 686 400	...
Nicaragua	8 058	7 143	...	...	...
USA	472 618	1 240 933	913 867	916 507	704 203
Argentina	82 583	54 535	24 201	...	...
Brazil	18	32 421	1	—	111 679
Chile	13 686	...	...	...	...
Venezuela	25 257	975	...	...	...
Burma	2 011	...	...	...	...
India (b)	263 707	359 379	240 224	231 607	...
Iran (c)	2 059	1 974	1 603	...	...
Israel (e)	20	4	63	94	3 136
Japan	1 120	1 858	1 059	958	2 934
Jordan	748	...	2 948	392	...
Korea, Republic of	475	88	221	236	...
Kuwait	733	268	...	...	...
Malaysia (a)	461	2 443	1 267	995	...
Pakistan (d)	5 808	...	4 363	8 033	11 236
Saudi Arabia	...	3 406	1 726	1 298	...
Singapore	12 153	12 408	11 996	18 146	17 029
Taiwan	400	6 600	7 948	14 078	12 377

Exports of Salt

Salt
tonnes

Country	1974	1975	1976	1977	1978
Thailand					
Sea salt	122 101	111 367	83 765	71 093	...
Other salts	3 855	4 794	6 237	6 064	...
Australia					
Refined salt	829	867	817	550	...
Other salt	4 210 165	3 650 777	4 257 502	4 056 892	4 653 000

(a) From 1975 includes Sabah and Sarawak

(b) Years ended 31 March following that stated

(c) Years ended 20 March following that stated

(d) Years ended 30 June of that stated

(e) Figures may be incomplete as value only given in Israeli trade return for exports to some countries

Salt

Imports of Salt

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom					
Salt, fishery	9 012	7 384	6 104	) 84 758	235 753
Other salt	14 715	12 554	13 411		
Belgium-Luxembourg					
Common salt	153 653	135 400	165 747	169 694	138 735
Refined salt	990 367	660 635	768 923	736 971	666 660
Denmark	265 364	122 124	205 686	377 889	279 107
France	162 087	131 412	127 494	156 397	104 968
Germany, Federal Republic of	777 476	641 976	776 954	795 845	700 421
Irish Republic	63 928	65 249	69 429	72 259	77 221
Italy	49 589	41 211	139 149	205 703	148 252
Netherlands	24 448	24 318	32 123	27 057	39 567
Austria	8 629	494	107	29 678	63 418
Faeroe Islands	6 703	31 988	20 014	27 545	...
Finland	648 276	513 996	480 889	482 916	547 251
Greece	51 087	...	—	—	780
Greenland	3 365	614	405	1 976	...
Hungary	450 000	478 000	477 000	513 000	660 000
Iceland					
Common salt	66 080	56 316	35 659	48 722	56 776
Refined salt	269	268	272	191	222
Malta					
Refined salt	£9 700	£15 100	£28 100	£27 200	£27 300
Other salt	1 513	1 053	801	1 417	1 323
Norway					
Common salt	160 858	141 929	127 878	162 977	134 995
Refined salt	175 441	171 371	160 737	180 790	205 722
Portugal	48 326	33 045	15 011	22 110	92 512
Spain	96 478	5 854	2 629	4 417	1 999
Sweden	1 203 559	1 222 025	1 210 308	1 306 462	1 239 766
Switzerland	2 261	2 143	1 737	1 735	1 840
Turkey	14	25	41 613	76 964	132 293
Yugoslavia	128 605	113 547	141 761	158 055	149 216
Cameroon	20 272	20 417	28 980	37 394	27 264
Canary Islands	1 422	425	290	287	236
Central African Empire	4 071	4 075	6 940	3 142	...
Chad	5 240	4 731	...	...	...
Congo	1 826	3 034	2 106	2 806	...
Gabon	...	1 914	...	...	...
Ghana	590	93	...	...	...
Ivory Coast	33 884	32 920	30 716	36 267	38 852
Kenya	28 858	961	1 914	19 364	35 354
Liberia	4 319	2 998	372	4 003	...
Libya	342	3 068	863	4 878	...
Madagascar	156	108	17	16	22
Malawi	15 641	10 735	10 669	11 997	3 445
Mali	15 310	23 700	32 600	...	...
Mauritius	335	394	392	797	...
Morocco	5	11	4	5	9 103
Mozambique	154	118	271	...	...
Niger	9 393	...	6 785	...	...
Nigeria	181 650	199 466	289 859	...	...
Reunion	2 744	...	1 868	3 489	...
Seychelles	264	382	252	...	...
Sierra Leone	13 690	8 681	6 710	8 833	...
South Africa	16 594	48 491	46 585	35 637	14 557
Tanzania	4 400	1 173	2 240	...	...
Togo	4 244	6 188	6 428	4 748	...
Uganda	24 441	16 985	14 345	...	...
Upper Volta	13 812	18 634	14 900	...	...
Zaire	39 850	19 723	31 748	41 622	...
Zambia	12 124	20 687	...	...	...

Imports of Salt

Country	1974	1975	1976	1977	1978
Bahamas					
Crude salt	30 718	27 869	...	...	...
Refined salt	386	339	...	...	...
Barbados	...	108	4 694	2 231	16
Belize	490	94	665	971	...
Canada	736 573	1 183 144	1 523 345	1 126 226	1 330 465
Costa Rica	9 400	7 691	8 931	4 005	...
Dominica	400	358	...	...	...
Guadeloupe	2 497	2 617	2 163	2 940	2 061
Guatemala	15 568	19 060	18 924	19 440	...
Honduras	349	190	133	396	210
Jamaica	22 755	16 065	1 477	...	...
<i>Martinique</i>	2 363	2 377	2 642	1 968	2 232
Mexico	1 263	817	1 548	1 022	...
Nicaragua	32 194	26 464	...	...	...
Panama	672	1 780	614	725	...
St Kitts-Nevis-Anguilla	111	123	57	235	...
St Lucia					
Common salt	424	713	435	542	...
Refined salt	302	52	1 703	441	...
St Vincent	483	434	...	...	...
Trinidad & Tobago	15 813	13 043	9 156	13 119	...
USA	3 046 000	2 917 000	3 948 000	4 109 000	4 799 000
Brazil	123	144	5	68	15
French Guiana	202	166	198	389	234
Guyana	3 885	5 504	3 349	5 338	4 090
Paraguay	27 317	22 965	23 687	24 895	23 036
Surinam	1 784	1 915	1 521	1 333	...
Uruguay	57 068	54 892	74 668	51 855	...
Brunei	902	3 012	4 745	5 707	1 026
Cyprus	349	505	504	3	...
Hong Kong	46 377	42 162	54 306	55 144	37 985
India	1 079	399	252	...	...
Indonesia	12 213	181 246	319 684	2 327	2 734
Iran (a)	51	283	28	...	...
Iraq	—	90	...	...	...
Japan	7 749 426	6 301 192	6 341 503	6 415 321	6 436 106
Korea, Republic of	261 315	311 581	517 967	380 315	...
Kuwait	6 230	4 523	...	...	...
Malaysia (b)	73 166	115 764	114 182	142 166	...
Philippines					
Crude	44 943	46 234	54 631	61 539	45 133
Refined	504	29	520	61	128
Qatar	640	764	1 891	1 336	1 666
Sabah (d)	3 801				
Sarawak (d)	8 684				
Saudi Arabia	...	1 784	4 780	4 331	...
Singapore	55 192	39 941	46 898	51 090	50 993
Syria	46	32	673	21	...
Taiwan	509 313	375 460	1 260 842	393 350	492 717
Thailand	196	149	209	293	...
Australia	8 321	13 603	33 051	24 752	19 444
Fiji	2 236	2 170	2 546	...	...
New Hebrides	248	* 163	* 100	...	...
<i>New Zealand (c)</i>	44 847	26 636	48 080	61 859	...
Papua New Guinea (c)	2 756	3 774	3 208	...	...
Solomon Islands	284	445	382	689	501
Western Samoa	151	298	729	684	...

(a) Years ended 20 March following that stated

(b) From 1975 includes Sabah and Sarawak

(c) Years ended 30 June of that stated

(d) From 1975 included with Malaysia

Sillimanite

Production of Sillimanite Minerals

tonnes

Country	1974	1975	1976	1977	1978
France					
Andalusite	9 852	9 708	18 131	26 834	33 000
Soviet Union					
Kyanite (a)	* 75 000	* 50 000	* 50 000	* 50 000	* 50 000
Spain					
Andalusite & kyanite	7 311	5 042	5 541	2 981	...
South Africa					
Andalusite	64 008	77 149	77 464	113 076	112 040
Sillimanite	13 087	16 911	25 733	15 455	9 540
USA					
Kyanite (b)	* 85 000	* 90 000	* 91 000	* 100 000	* 100 000
Brazil					
Kyanite	752	230	256	* 260	...
India					
Andalusite	...	...	...	387	225
Kyanite	45 337	53 474	48 779	42 123	28 214
Sillimanite	2 950	8 278	14 859	15 023	13 295
Korea, Republic of					
Andalusite	115	106	520	115	61
Australia					
Sillimanite (c)	751	588	567	550	708
World total (d)	304 200	311 500	332 900	366 800	350 400

(a) May include other sillimanite minerals

(b) Includes related minerals

(c) Excluding sillimanite clay

(d) In addition synthetic mullite is known to have been produced in other countries including Denmark, France, Federal Republic of Germany, Hungary, Italy, Japan, Soviet Union, Spain, Yugoslavia, United Kingdom and the USA

Exports of Sillimanite Minerals

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom					
Sillimanite minerals, chamotte & dinas earth	8 349	5 921	4 428	4 688	5 408
Belgium-Luxembourg					
Sillimanite minerals					
Crude	143	689	200	129	62
Other	1 536	2 245	981	651	405
France					
Sillimanite minerals					
Crude	11	26	72	72	16
Other	3 149	2 312	4 391	5 809	2 074
Germany, Federal Republic of					
Sillimanite minerals					
Crude	1 293	424	344	356	540
Calcined	483	5 058	2 351	5 190	5 659
Italy					
Sillimanite minerals					
Crude & calcined	27	—	25	—	11
Other	21	97	45	1	—
Netherlands					
Sillimanite minerals					
Crude (b)	50	162	458	413	54
Other (b)	2 332	1 595	1 356	267	207
South Africa					
Andalusite	18 759	23 773	16 357	71 739	54 457
Sillimanite	18 737	16 524	12 960	14 235	14 195
USA					
Kyanite & related minerals (a)	123 361	136 412	57 451	35 254	* 36 000
Brazil					
Kyanite	...	...	...	3 019	1 874
India					
Kyanite					
Crude	18 595	10 314	6 096	...	...
Calcined	6 564	7 798	5 295	...	...
Sillimanite	829	100	455	...	...
Iran (c)					
Sillimanite minerals, chamotte & dinas earth	6 692	2 258	1 168	...	...
Japan					
Sillimanite minerals, chamotte & dinas earth	20 768	8 592	10 165	16 496	16 470

Note: In this table 'Sillimanite minerals' is understood to include any or all of andalusite, kyanite, sillimanite and mullite – unless mullite is separately specified

(a) Including mullite

(b) Figures up to 1976 exclude exports to Belgium-Luxembourg, if any

(c) Years ended 20 March following that stated

Sillimanite

Imports of Sillimanite Minerals

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom					
Sillimanite minerals, chamotte & dinas earth	36 599	44 315	36 292	84 171	66 979
Belgium-Luxembourg					
Sillimanite minerals					
Crude	10 431	10 362	3 204	770	982
Other	2 331	692	481	1 563	1 331
France					
Sillimanite minerals					
Crude	2 059	3 111	1 418	2 274	2 930
Other	3 385	4 017	2 495	2 576	3 266
Germany, Federal Republic of					
Sillimanite minerals					
Crude	18 820	18 716	14 889	19 444	15 327
Calcined	5 557	4 997	18 234	34 878	41 931
Italy					
Sillimanite minerals					
Crude	13 442	5 660	5 517	4 508	6 851
Other	8 332	5 294	3 137	16 401	6 015
Netherlands					
Sillimanite minerals					
Crude (b)	1 118	1 514	87	189	1 726
Other (b)	4 065	1 706	490	345	417
Norway					
Sillimanite minerals, chamotte & dinas earth	12 391	2 729	1 826	1 091	1 538
Greece					
Sillimanite minerals	8 251	...	...	92	...
USA					
Sillimanite minerals	176	59	100	48	...
Argentina					
Sillimanite minerals	507	116	124	...	...
Iran (a)					
Sillimanite minerals, chamotte & dinas earth	1 211	534	2 557	...	...
Japan					
Sillimanite minerals	28 836	23 541	22 139	22 432	22 987
Mullite, chamotte & dinas earth	96 567	72 014	39 690	48 768	50 534
Australia					
Sillimanite minerals (c)	1 216	1 612	1 304	1 451	385

Note: In this table 'Sillimanite minerals' is understood to include any or all of andalusite, kyanite, sillimanite and mullite – unless mullite is separately specified

(a) Years ended 20 March following that stated

(b) Figures up to 1976 exclude imports from Belgium-Luxembourg, if any

(c) Includes dinas earth, beginning July 1974

Mine Production of Silver

kilograms (metal content)

Country	1974	1975	1976	1977	1978
United Kingdom (d)	...	4 354	3 345	4 166	1 272
France	52 557	48 790	84 632	93 449	85 664
Germany, Federal Republic of	38 400	33 600	32 000	33 000	23 300
Irish Republic	61 600	39 000	26 000	29 000	20 000
Italy (a)	41 810	36 368	48 403	37 543	30 708
Bulgaria	* 25 000	* 25 000	* 28 000	* 25 000	* 28 000
Czechoslovakia	* 40 000	* 37 000	* 37 000	* 37 000	* 36 000
Finland (a)	25 215	23 160	24 070	25 824	35 245
German Democratic Republic	* 60 000	* 55 000	* 50 000	* 50 000	* 50 000
Greece	48 300	29 800	57 400	33 300	42 300
Poland	* 180 000	* 410 000	* 501 000	* 550 000	* 590 000
Portugal	743	774	881	801	700
Romania	* 35 000	* 47 000	* 40 000	* 39 000	* 35 000
Soviet Union	* 1 300 000	* 1 340 000	* 1 370 000	* 1 400 000	* 1 430 000
Spain (a)	127 483	107 218	115 152	91 400	96 200
Sweden	141 371	140 442	143 617	169 153	180 000
Yugoslavia (a)	121 000	143 595	144 000	146 000	159 000
Algeria	* 4 043	* 3 732	* 4 670	* 6 220	...
Morocco	27 637	26 837	21 066	21 739	* 29 800
Namibia	59 200	43 500	34 200	40 400	34 200
South Africa	83 940	95 923	87 736	97 364	96 559
Tunisia	4 230	9 095	7 850	7 351	1 960
Zaire	51 290	88 990	80 562	110 340	113 544
Zambia (d)	34 200	31 100	33 100	33 000	..
Zimbabwe	4 850	5 260	3 640	3 550	...
Canada	1 331 531	1 234 642	1 281 437	1 313 685	1 206 000
Dominican Republic	—	3 390	28 212	42 216	57 343
El Salvador	5 422	5 591	5 088	3 484	...
Honduras	113 872	118 258	92 193	99 844	* 90 000
Mexico	1 167 814	1 182 822	1 326 243	1 462 718	1 579 400
Nicaragua	8 400	10 100	6 345	5 200	15 000
USA	1 050 136	1 086 706	1 067 752	1 187 123	1 199 720
Argentina	96 455	71 011	54 432	* 56 000	* 60 000
Bolivia	148 520	155 702	176 914	183 098	200 284
Brazil	16 378	7 323	626	* 7 500	...
Chile	207 558	193 960	228 350	263 179	254 600
Colombia	2 342	2 727	3 288	2 833	2 388
Ecuador	1 097	1 152	1 471	1 776	890
Peru (c)	1 084 907	1 058 350	1 106 656	936 200	1 213 000
Burma	22 457	23 300	21 800	24 600	* 25 000
China	* 30 000	* 30 000	* 30 000	* 31 000	* 31 000
India	4 581	2 582	3 183	13 228	12 084
Indonesia	6 414	4 758	3 397	3 000	2 506
Japan	227 502	243 625	259 457	285 673	281 640
Korea, Dem. P.R. of	* 52 000	* 55 000	* 50 000	* 50 000	* 50 000
Korea, Republic of	40 163	46 780	57 793	65 512	43 073
Philippines	53 067	50 373	46 053	50 429	51 864
Taiwan	1 021	193	3 109	2 112	2 343
Australia	669 954	726 218	778 658	856 110	773 166
Fiji	947	871	615	457	323
Papua New Guinea (b)	46 227	44 638	44 880	45 186	...
New Zealand	56	62	16	236	63
World total	8 957 000	9 186 000	9 656 000	10 077 000	10 370 000

(a) Smelter and/or refinery production

(b) Years ended 30 June of that stated

(c) Recoverable

(d) Recovered as a byproduct of base metal refining

Silver

Exports of Silver

kilograms

Country	1974	1975	1976	1977	1978
United Kingdom					
Metal	2 155 748	1 588 035	2 137 734	1 649 353	1 703 862
Belgium-Luxembourg					
Metal	883 190	785 916	753 015	708 268	639 178
Denmark					
Metal	12 900	8 308	21 503	17 424	27 232
France					
Metal	746 501	570 382	472 648	897 453	428 783
Germany, Federal Republic of					
Metal	(a) 1 050 918	789 246	947 578	889 057	1 032 626
Italy					
Metal	116 880	39 400	31 181	37 200	35 500
Netherlands					
Metal	135 554	90 702	230 890	493 564	277 663
Austria					
Metal	21 400	22 000	27 100	36 300	60 200
Finland					
Metal	30 183	18 983	6 946	17 926	22 430
Norway					
Metal	26 825	29 853	33 332	36 965	24 160
Poland					
Metal	...	...	285 000	333 000	348 000
Spain					
Metal	39 561	32 712	1 013	1 442	52 000
Sweden					
Metal	139 000	254 000	171 000	208 000	245 000
Switzerland					
Metal	1 177 683	832 423	860 322	1 087 182	1 212 793
Yugoslavia					
Metal	111 062	114 895	110 495	87 246	67 369
Morocco					
Metal	8 385	26 778	26 333	22 306	18 036
South Africa (d)					
Metal	* 75 000	* 65 000	* 60 000	* 65 000	* 71 100
Tunisia					
Metal	2 101	2 600	5 012	7 000	—
Canada					
Ores & concentrates (b)	602 906	471 421	435 800	464 086	479 755
Metal	733 300	753 811	961 552	1 144 873	1 070 284
El Salvador					
Metal	4 758	5 487	5 242	3 489	...
Honduras					
Concentrates (b)	...	95 619	99 840	82 710	85 920
Metal	7 418	4 112	5 974	50 426	33 181
Mexico					
Ores & concentrates (c)	18 921 187	32 140 216	32 819 000	...	...
Metal (e)	750 744	891 346	830 618	719 997	...
Nicaragua					
Metal	6 151	4 431	...	...	...
USA					
Ores & concentrates (b)	1 645	1 959	4 960	3 038	1 065
Metal	649 566	1 013 007	405 690	364 861	339 469
Argentina					
Metal	200	1	1 017	...	...
Bolivia					
Ores & concentrates (b)	179 399	203 638	176 914	209 294	197 746
Peru					
Ores & concentrates (b)	554 043	415 894	...	...	...
Metal	581 509	566 355	667 720	777 593	700 885
Alloys (b)	114 474	97 243	...	...	...

Exports of Silver

Country	1974	1975	1976	1977	1978
Burma					
Metal	13 069	10 010	...	...	...
Hong Kong					
Metal (Re-exports)	62 547	88 112	29 435	20 094	13 341
India					
Metal	435 862	1 316 381	1 271 354	...	...
Japan					
Metal	308 773	264 479	63 528	25 997	35 368
Korea, Republic of					
Metal	5 434	38 524	74 706	32 696	...
Philippines					
Metal	6 238	1 966	2 746	282	3 041
Singapore					
Metal	9 565	2 325	100	539	2 268
Thailand					
Metal	200	19 427	29 000	30 012	...
Australia					
Silver-lead bullion	293 264	306 589	376 596	370 849	290 207
Silver in all ores, concentrates etc.	152 846	133 714	141 911	153 687	166 102
Metal	112 222	126 998	100 140	135 827	85 496
Fiji					
Metal	704	1 383	733	...	...
Papua New Guinea					
Metal (a)	46 227	44 638	44 880	45 186	...

Notes:

- 1 This table excludes silver coin but includes silver shipped for minting
- 2 In this table the term 'metal' as used here includes both unwrought and partly worked silver and alloys

(a) Years ended 30 June of that stated

(b) Ag content

(c) Gross weight

(d) IGS estimates, based on known imports into certain countries

(e) Refined only

Silver

Imports of Silver

kilograms

Country	1974	1975	1976	1977	1978
United Kingdom					
Metal	1 478 788	2 519 044	1 560 198	1 118 911	1 450 531
Belgium-Luxembourg					
Metal	731 456	566 257	646 382	1 246 443	864 801
Denmark					
Metal	91 400	60 858	96 839	76 066	81 684
France					
Metal	1 169 591	1 085 231	1 482 256	1 535 899	1 343 305
Germany, Federal Republic of					
Metal	(c) 1 424 241	985 117	1 322 775	1 658 856	1 358 517
Italy					
Metal	1 302 498	849 100	951 851	924 600	897 300
Netherlands					
Metal	182 326	189 434	485 583	281 530	251 933
Austria					
Metal	248 800	419 600	306 300	451 300	358 700
Finland					
Metal	107 540	82 915	78 285	57 198	48 557
Greece					
Metal	81 000	87 000	95 000	134 000	301 719
Malta					
Metal	3 246	2 142	3 096	1 913	3 123
Norway					
Metal	105 660	83 637	103 810	136 886	109 842
Portugal					
Metal (a)	38 625	11 908	20 207	35 941	119 000
Spain					
Metal	235 000	151 000	141 000	117 000	59 676
Sweden					
Metal	258 000	303 000	271 000	247 000	466 000
Switzerland					
Metal	523 125	1 288 264	1 074 674	1 183 586	1 120 040
Turkey					
Metal (b)	3 778	4 378	2 046	4 442	6 000
Yugoslavia					
Metal	55 937	48 805	38 034	237 625	39 917
Algeria					
Metal	1 106	1 554	337	11 152	...
Ivory Coast					
Metal	1 028	1 990	6 982	4 641	6 858
Kenya					
Metal	636	505	608	554	192
Libya					
Metal	2 335	12 538	10 791	9 303	...
Madagascar					
Metal	186	142	257	417	121
Morocco					
Metal	60 782	7 020	1 687	3 644	894
Mozambique					
Metal	9 719	—	0	—	...
Nigeria					
Metal	9	11	39	...	...
Senegal					
Metal	2 356	3 584	...	...	...
South Africa					
Metal	35 045	124 385	49 756	12 647	29 514
Tunisia					
Metal	2 118	887	460	1 658	741
Zaire					
Metal (c)	...	* 250	* 1 100	* 1 500	...
Zambia					
Metal	37	0	...	...	...
Canada					
Metal	909 676	420 088	59 137	33 004	35 576
Costa Rica					
Metal	1 022	277	2 026	963	...

Imports of Silver

Country	1974	1975	1976	1977	1978
Guatemala					
Metal	275	23	71	313	...
Mexico					
Metal	1 116	151	234	...	...
Nicaragua					
Metal	300	13	...	...	...
Trinidad & Tobago					
Metal	2 690	2 351	3 140	3 655	...
USA					
Ores & concentrates	1 147 316	725 013	556 764	573 777	670 372
Metal (e)	2 783 312	1 915 932	2 089 800	2 160 191	1 916 299
Brazil					
Metal	114 672	76 896	135 112	135 738	152 080
Chile					
Metal	851 540	...	...	...	...
Guyana					
Metal	234	...	...	...	...
Brunei					
Metal	475	136	401	—	11
Cyprus					
Metal	5 768	3 585	9 276	10 016	...
Hong Kong					
Metal	25 587	43 011	24 317	27 641	19 806
India					
Metal	453	671	1 767	...	...
Indonesia					
Metal	...	54	497	3 200	506
Iran (d)					
Metal	32 040	39 454	64 552	...	...
Japan					
Ores & concentrates	3 050 000	3 450 000	4 250 000	4 000 000	4 109 000
Metal	963 096	530 077	638 388	557 127	535 253
Korea, Republic of					
Metal	50 616	3 912	18 978	24 892	...
Philippines					
Metal	177	16	44	1 344	3 061
Saudi Arabia					
Metal	841	5 293	11 627	47 944	...
Singapore					
Metal	17 063	6 597	12 783	13 036	21 377
Taiwan					
Metal	35 339	16 015	65 897	47 774	59 118
Thailand					
Metal	2 199	1 637	144 999	224 572	...
Australia					
Metal	2 838	802	887	2 330	1 115

Notes:

- 1 This table excludes silver coin but includes silver shipped for minting
- 2 In this table the term 'metal' as used here includes both unwrought and partly worked silver and alloys

(a) Including scrap

(b) Including gilt

(c) IGS estimates, based on part figures given in trade account

(d) Years ended 20 March following that stated

(e) Refined only

Production of Sulphur and Pyrites

thousand tonnes (sulphur content)

Country		1974	1975	1976	1977	1978
United Kingdom						
Recovered (a)(c)		61	36	41	58	53
Recovered (d)		65	58	77	60	70
Belgium						
Recovered (c)(d)		223	196	248	257	267
Denmark						
Recovered (d)		5	9	10	11	14
France						
Recovered (d)(e)		1 919	1 872	1 874	2 020	2 075
Germany, Federal Republic of						
Pyrites (45%)		214	221	233	235	221
Recovered (c)		387	361	390	385	...
Recovered (d)		60	114	119	186	...
Recovered (e)		411	384	460	631	768
Recovered (i)		232	202	162	165	...
Italy						
Pyrites (43%)		503	348	367	414	...
Recovered (d)		213	228	211	259	...
Sulphur ore		61	52	35	63	70
Netherlands						
Recovered (c)(d)		85	107	105	95	...
Bulgaria						
Pyrites (42%)		* 102	* 170	* 280	* 305	...
Czechoslovakia						
Pyrites (42%)		* 133	* 67	* 50	* 55	...
Finland						
Pyrites (44%)		340	332	318	193	53
Recovered (c)		346	347	370	280	232
Recovered (d)		10	15	25	25	29
German Democratic Republic						
Pyrites (42%)		* 10	* 10	* 10	* 10	...
Recovered		89	355	243	340	...
Greece						
Pyrites (45%)		97	66	79	58	...
Norway						
Pyrites (45%)		314	233	188	152	151
Poland						
Frasch (g)		4 093	4 771	4 891	4 765	5 051
Recovered (c)(d)		* 250	* 255	* 260	* 270	...
Portugal						
Pyrites (44%)		225	203	183	159	139
Recovered (c)(d)		3	3	3	3	...
Romania						
Pyrites (42%)		* 375	* 375	* 375	* 395	...
Recovered		...	* 90	* 98	* 110	...
Soviet Union						
Pyrites (46%)		* 3 600	* 3 200	* 3 300	* 3 300	...
Recovered		* 1 900	* 2 000	* 2 100	* 3 000	...
Sulphur ore		* 2 400	* 1 870	* 2 200	* 2 400	...
Spain						
Pyrites (47%)		1 308	1 264	1 100	1 099	1 044
Recovered (c)(d)		* 108	* 107	* 128	* 141	...
Sweden						
Pyrites (48%)		218	211	194	193	...
Recovered (c)(d)		* 140	* 140	* 160	* 160	...
Turkey						
Pyrites (45%)		36	11	40	11	...
Sulphur ore		19	19	21	20	...
Yugoslavia						
Pyrites (42%)		107	145	185	165	171
Egypt						
Recovered (d)(e)		3	10	5	5	...

Production of Sulphur and Pyrites

thousand tonnes (sulphur content)

Country		1974	1975	1976	1977	1978
Morocco						
Pyrites	(48%)	112	121	31	74	...
South Africa						
Pyrites	(48%)	274	312	353	398	367
Recovered (d)		28	25	27	28	...
Recovered (c)		70	80	91	105	...
Zaire						
Recovered (c)		55	50	37	31	...
Zambia						
Pyrites	(42%)	29	7	9	9	1
Recovered		45	80	91	116	...
Zimbabwe						
Pyrites	(42%)	* 30	* 30	* 30	* 30	* 30
Canada						
Pyrites	(50%)	24	11	15	12	5
Recovered (c)		663	695	705	736	673
Recovered (d)(e)		6 950	6 487	6 442	6 500	6 311
Mexico						
Frasch		2 257	2 074	2 054	1 723	1 730
Recovered (c)		* 15	* 52	* 75	* 80	* 80
Recovered (d)(e)		65	90	96	133	168
Netherlands Antilles						
Recovered (d)		117	87	95	95	...
Trinidad & Tobago						
Recovered (d)		29	49	55	55	...
USA						
Frasch		8 028	7 327	6 365	5 915	5 648
Pyrites	(40%)	165	241	291	169	301
Recovered (c)		735	855	1 035	1 019	1 164
Recovered (d)(e)		2 676	3 017	3 187	3 624	4 062
Argentina						
Recovered (c)(d)		24	22	19	20	...
Sulphur ore (f)		25	10	20	20	* 20
Bolivia (h)						
Sulphur ore		42	22	15	6	15
Brazil						
Recovered (d)		9	20	30	44	...
Chile						
Recovered (c)		23	26	29	26	...
Sulphur ore (b)		33	21	18	32	...
Colombia						
Recovered (d)		* 3	2	2	3	...
Sulphur ore		30	30	26	22	* 29
Ecuador						
Recovered (d)(e)		* 4	* 8	* 8	* 8	...
Sulphur ore		5	0	1	1	...
Venezuela						
Recovered (d)		109	82	90	95	...
China						
Pyrites	(45%)	* 900	* 900	* 900	* 945	* 945
Recovered		* 120	* 80	* 90	* 100	* 100
Sulphur ore		* 130	* 90	* 90	* 90	* 90
Cyprus						
Pyrites	(44%)	79	90	83	64	56
India						
Pyrites	(37%)	13	19	19	12	20
Recovered (c)		135	127	111	117	...
Recovered (d)		6	6	7	8	8
Indonesia						
Sulphur ore		2	4	3	2	...
Iran						
Recovered (d)		605	446	399	527	542
Sulphur ore		* 20	* 20	* 20	* 20	...

Production of Sulphur and Pyrites

thousand tonnes (sulphur content)

Country		1974	1975	1976	1977	1978
Iraq						
Frasch		610	600	610	605	600
Recovered (d)(e)		* 50	* 110	* 65	* 55	* 40
Israel						
Recovered (d)(e)		* 10	* 10	* 10	* 10	...
Japan						
Pyrites	(49%)	624	456	471	389	) 1 624
Recovered (c)(g)		1 459	1 199	1 252	1 336	) 1 624
Recovered (d)		726	749	925	1 100	1 104
Korea, Dem. P.R. of						
Pyrites	(40%)	* 240	* 260	* 245	* 250	...
Recovered (c)		* 16	* 16	* 20	* 12	...
Kuwait						
Recovered (d)(e)		57	73	75	79	100
Philippines						
Pyrites	(46%)	76	75	77	50	* 55
Saudi Arabia						
Recovered (d)(e)		* 3	3	3	3	...
Singapore						
Recovered (d)		* 6	6	6	6	...
Taiwan						
Pyrites	(36%)	4	5	3	3	0
Recovered		* 2	* 2	* 2	* 2	...
Sulphur ore		3	5	5	8	10
Australia						
Pyrites	(48%)	108	106	108	108	67
Recovered (c)		304	335	315	337	326
Total Frasch		15 000	14 800	13 900	13 000	13 000
Total Pyrites		10 200	9 500	9 500	9 200	9 100
Total Recovered		21 600	21 800	22 500	24 900	25 300
Total Sulphur ore		2 800	2 100	2 500	2 700	2 700
World total (all forms)		49 600	48 200	48 400	49 800	50 100

Note: Pyrites: nominal sulphur content is shown in parentheses

- (a) 'Spent Oxide'
- (b) Includes 'caliche' at 45% S content
- (c) From smelter gases
- (d) From petroleum refining
- (e) From natural gas
- (f) Caliche
- (g) Includes S content of 'sulphur ore'
- (h) Exports
- (i) Other

Exports of Sulphur and Pyrites

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom					
Sulphur	3 078	2 017	1 965	1 598	1 590
Belgium-Luxembourg					
Pyrites	545	312	57	412	53
Sulphur –					
Crude	18 651	23 804	36 525	17 255	10 026
Sublimed & precipitated	108	92	113	99	635
Denmark					
Sulphur –					
Sublimed & precipitated	1	971	3 621	5 409	4 441
France					
Sulphur –					
Crude	870 299	538 715	740 815	941 767	1 154 784
Refined	993	543	681	840	194
Sublimed	3 073	3 327	2 660	5 847	3 605
Precipitated	1	9	34	4	7
Germany, Federal Republic of					
Pyrites	594	500	3 863	636	1 361
Sulphur –					
Crude	140 525	199 018	144 197	341 928	304 693
Sublimed & precipitated	3 756	2 516	2 420	2 496	1 568
Italy					
Pyrites	54 696	40 314	13 632	23 799	3 189
Sulphur –					
Crude	1 167	50	303	60	4
Other	5 960	4 245	2 870	4 257	3 605
Sublimed & precipitated	31	659	126	625	187
Netherlands					
Sulphur –					
Crude	4 089	7 038	13 180	10 759	9 648
Sublimed & precipitated	257	1	2	17	57
Finland					
Sulphur –					
Crude	8 475	1 423	—	—	8
Sublimed & precipitated	11 729	9 500	17 630	1 633	—
Greece					
Sulphur	10 125	10 021	9 532	23 937	20 260
Norway					
Pyrites	410 573	231 251	140 290	59 623	63 139
Sulphur	67	21	42	442	2 298
Poland					
Sulphur	3 024 000	3 080 000	3 530 000	4 399 000	4 296 000
Portugal					
Pyrites	94 426	61 820	20 218	782	100
Sulphur	815	221	—	64	92
Soviet Union					
Pyrites	1 800 000	1 260 000	873 000	826 000	852 000
Sulphur	439 600	440 978	* 199 000	* 192 000	* 190 000
Spain					
Pyrites –					
Iron	202 766	208 216	334 810	243 924	228 372
Cupreous	8	—	—	50 328	13 930
Sulphur –					
Crude	540	110	1 403	4 437	17 445
Sublimed & precipitated	165	65	9 821	16 178	8 508
Sweden					
Sulphur	—	0	19 394	19 838	17 332
Switzerland					
Sulphur –					
Crude	159	5	11	11	10
Sublimed & precipitated	7	22	4	8	13
Turkey					
Pyrites	18 130	—	—	—	—
Yugoslavia					
Pyrites	24 328	171 920	209 015	214 214	93 421
Sulphur	5 689	435	1 185	4 235	3 520

Exports of Sulphur and Pyrites

tonnes

Country	1974	1975	1976	1977	1978
Algeria					
Pyrites	74 109	236 012	...	...	...
Morocco					
Sulphur	209	955	—	—	—
Canada					
Pyrites	£283 000	£75 000	£85 000	£114 000	£26 000
Sulphur	4 252 206	3 284 329	3 719 992	4 291 032	4 984 523
Mexico					
Sulphur	1 906 031	1 386 655	1 020 069	1 014 988	...
USA					
Pyrites	4 501	1 139	912	1 829	...
Sulphur –					
Crude	2 624 991	1 308 303	1 202 173	1 076 237	) 832 581
Sublimed & precipitated	21 225	7 131	15 545	11 761	
Bolivia					
Sulphur	41 778	21 921	14 883	6 276	14 726
Venezuela					
Sulphur	30 980	7 419	...	...	...
Cyprus					
Iron pyrites	287 160	408 632	146 853	168 861	...
Cupreous pyrites	23 334	19 778	...	—	...
Iran (a)					
Sulphur –					
Crude	60 807	84 535	30 971	...	...
Sublimed & precipitated	211 144	43 323	287 346	...	...
Japan					
Sulphur –					
Crude	62 986	117 267	335 660	467 929	320 986
Sublimed & precipitated	114	831	457	519	220
Singapore					
Sulphur –					
Crude	18 223	15 541	14 110	13 371	17 137
Sublimed & precipitated	8 036	5 394	8 158	2 075	4 905
Taiwan					
Sulphur –					
Crude	20	1 188	902	1 949	2 252
Sublimed & precipitated	142	91	206	225	188
Australia					
Zinc concentrates (b)	105 800	87 500	116 500	87 900	...

(a) Years ended 20 March following that stated

(b) Recoverable sulphur

Imports of Sulphur and Pyrites

Country	1974	1975	1976	1977	1978
United Kingdom					
Pyrites	35 047	28 160	10 604	19 624	) 1 134 109
Sulphur	1 386 137	939 010	1 183 319	1 110 504	
Belgium-Luxembourg					
Pyrites	257 916	207 810	220 452	214 322	202 917
Sulphur –					
Crude	936 170	440 100	460 970	451 692	482 732
Sublimed & precipitated	2 363	1 576	540	450	1 076
Denmark					
Pyrites	21 352	36	—	3	31
Sulphur –					
Crude	76 274	68 942	61 629	63 376	74 146
Sublimed & precipitated	1 840	734	1 022	119	126
France					
Pyrites	88 959	52 374	30 991	691	617
Sulphur –					
Crude	797 610	568 776	504 018	660 584	660 455
Refined	454	571	751	704	741
Sublimed & precipitated	456	264	267	334	415
Germany, Federal Republic of					
Pyrites	780 281	498 245	175 247	154 291	116 670
Sulphur –					
Crude	471 836	303 909	480 574	419 352	385 843
Sublimed & precipitated	228	519	461	548	572
Irish Republic					
Sulphur	99 577	27 888	12 374	10 900	8 592
Italy					
Pyrites	296 929	316 733	161 091	163 487	247 158
Sulphur –					
Crude	766 257	558 158	560 082	622 544	606 051
Sublimed & precipitated	802	1 133	1 212	1 897	1 573
Netherlands					
Pyrites	207	229	75	61	103
Sulphur –					
Crude	498 025	347 799	398 392	424 685	452 920
Sublimed & precipitated	600	503	277	233	133
Austria					
Pyrites	13 383	13 558	13 874	10 781	5 856
Sulphur –					
Crude	154 016	112 356	81 419	97 787	101 332
Sublimed & precipitated	47	66	2 919	16	234
Czechoslovakia					
Pyrites (a)	57 000	11 000	9 000	...	...
Sulphur	329 000	493 000	477 000	422 000	456 000
Finland					
Sulphur –					
Crude	34 296	27 413	10 426	23 349	26 580
Sublimed & precipitated	2 240	4 568	2 001	6 347	1 859
German Democratic Republic					
Pyrites (a)	61 144	48 694	71 473	63 100	39 200
Greece					
Pyrites	118 868	154 015	106 585	37 198	18 994
Sulphur	23 000	9 884	161 781	68 783	81 005
Hungary					
Pyrites	79 000	88 000	81 417	59 318	81 451
Sulphur	161 000	209 000	143 447	171 477	162 043
Malta					
Sulphur	472	323	253	1 850	38
Norway					
Sulphur –					
Crude	22 055	19 327	17 899	11 926	6 014
Sublimed & precipitated	26	33	30	12	13
Portugal					
Sulphur –					
Crude	30 078	27 276	29 870	30 943	42 424
Sublimed & precipitated	169	48	37	3	1

Imports of Sulphur and Pyrites

tonnes

Country	1974	1975	1976	1977	1978
Soviet Union					
Sulphur	471 800	689 999	600 000	600 000	600 000
Spain					
Sulphur –					
Crude	101 986	61 674	92 583	168 179	119 401
Sublimed & precipitated	161	120	42	21	133
Sweden					
Pyrites	101 472	81 116	102 223	59 715	60 372
Sulphur –					
Crude	129 715	94 015	69 551	56 059	58 377
Sublimed & precipitated	101	34	18	15	2
Switzerland					
Pyrites	45 009	32 081	8 116	24 110	164
Sulphur –					
Crude	44 072	27 816	33 676	44 859	46 656
Sublimed & precipitated	358	261	251	287	213
Turkey					
Pyrites	77 190	100 453	19 605	197 474	...
Sulphur –					
Crude	210	2 004	6 475	26 250	61 085
Sublimed & precipitated	131	634	329	126	115
Yugoslavia					
Pyrites	231 452	101 309	11 980	72 625	19 126
Sulphur –					
Crude	2 871	4 034	12 618	2 428	2 833
Refined	43 504	38 755	35 639	54 301	55 339
Sublimed & precipitated	1 385	1 832	205	1 852	1 763
Algeria					
Sulphur –					
Crude	83 172	82 420	28 940	87 870	...
Sublimed & precipitated	2 048	975	10 804	19 238	...
Canary Islands					
Sulphur	12 592	—	4 195	10 167	5 250
Egypt					
Pyrites	80 719	62 857	20 179	66 521	23 000
Sulphur	68 808	38 130	75 954	110 966	83 170
Ethiopia					
Sulphur	—	164	...	115	...
Ivory Coast					
Sulphur	5 586	8 017	5 363	5 337	8 750
Kenya					
Sulphur	1 748	614	1 099	2 132	2 526
Madagascar					
Sulphur	3	6	11	9	2
Mauritius					
Sulphur	9	11	9	17	...
Morocco					
Sulphur –					
Crude	77 418	39 115	183 345	427 714	77 136
Refined	55	35	85	30 095	297 400
Sublimed	61	12	2	5	3
Mozambique					
Sulphur	19 380	232	5 236	349	...
Niger					
Sulphur	7 302	6 000	...	...	...
Nigeria					
Sulphur	468	12	865	...	...
Senegal					
Sulphur –					
Crude	10	14	...	...	...
Sublimed	26 951	18 572	...	...	...

Imports of Sulphur and Pyrites

tonnes

Country	1974	1975	1976	1977	1978
South Africa					
Pyrites	34	31	47	30	55
Sulphur –					
Crude	358 799	260 117	451 480	548 225	637 915
Sublimed & precipitated	1 086	713	1 342	10 236	1 250
Tanzania					
Sulphur	22 725	453	27 679	12 610	...
Tunisia					
Pyrites	...	5 000	4	—	—
Sulphur	372 976	178 912	387 587	406 061	371 584
Uganda					
Sulphur	2 591	687	17	...	...
Zaire					
Sulphur	9 570	17 609	7 085	8 686	...
Zambia					
Sulphur –					
Crude	53	24	...	...	...
Refined	3 102	21	...	...	...
Precipitated	2 040	18 069	...	...	...
Canada					
Sulphur	31 389	14 335	15 717	14 065	8 133
Costa Rica					
Sulphur	49	160	100	41	...
Cuba					
Sulphur	140 326	...	...	...	...
El Salvador					
Sulphur	5 763	4 520	5 186	5 556	...
Guatemala					
Sulphur	6 262	182	4 296	4 428	...
Jamaica					
Sulphur	330	4 951	932	...	...
Mexico					
Sulphur	525	214	756	697	...
Nicaragua					
Sulphur	328	230	...	...	...
Trinidad & Tobago					
Sulphur	22	16	24	7 728	...
USA					
Pyrites	48 490	22 550	30 982	24 730	9 870
Sulphur	2 184 809	1 927 551	1 754 746	2 010 059	2 177 593
Argentina					
Sulphur	78 497	97 221	105 745	...	...
Brazil					
Sulphur –					
Crude	605 386	408 048	606 875	657 252	631 410
Refined	5 741	3 077	1 451	1 412	867
Sublimed & precipitated	218	202	222	218	277
Chile					
Sulphur	103 831	...	...	...	...
Colombia					
Sulphur	...	...	24 750	...	...
Uruguay					
Sulphur	19 280	11 453	11 810	15 735	...
Venezuela					
Sulphur	367	44	...	...	...
Burma					
Sulphur	831	...	...	...	...
China					
Sulphur	* 300 000	...	...	...	...
Cyprus					
Sulphur	853	1 581	2 518	...	...
Hong Kong					
Sulphur –					
Crude	1 199	1 046	253	209	264
Sublimed	1 220	966	1 765	2 101	1 360

Imports of Sulphur and Pyrites

tonnes

Country	1974	1975	1976	1977	1978
India					
Sulphur –					
Crude	587 454	616 685	588 257	...	...
Sublimed	659	430	506	...	...
Indonesia					
Sulphur –					
Crude	28 843	1 125	616	2 132	1 335
Sublimed & precipitated	13 550	12 166	18 164	28 273	45 155
Iran (c)					
Sulphur	571	422	744	...	...
Iraq					
Sulphur	130	41	...	...	...
Israel (b)					
Sulphur	42 000	* 45 000	...	...	...
Japan					
Pyrites	65 535	55 887	59 403	34 060	30 000
Sulphur	36 207	296	603	781	563
Jordan					
Sulphur –					
Crude	2 675	801	527	2 462	1 430
Sublimed & precipitated	1 317	212	524	289	440
Korea, Dem. P.R. of					
Sulphur	* 6 200	* 5 900	...	...	...
Korea, Republic of					
Sulphur –					
Crude	213 446	228 016	292 153	421 913	...
Sublimed & precipitated	241	330	298	1 160	...
Malaysia (e)					
Sulphur –					
Crude	17 103	15 551	14 098	13 843	...
Sublimed & precipitated	613	654	835	740	...
Pakistan (d)					
Sulphur	2 934	...	7 031	3 818	8 355
Philippines					
Sulphur –					
Crude	25 800	22 326	12 173	12 301	7 587
Sublimed & precipitated	9 110	3 600	6 770	159	16 972
Singapore					
Sulphur –					
Crude	2 861	2 627	267	188	373
Sublimed & precipitated	3 414	474	405	362	315
Syria					
Sulphur –					
Crude	809	2 142	2 546	2 763	...
Sublimed & precipitated	1 495	563	298	1 151	...
Taiwan					
Sulphur –					
Crude	156	96 308	89 122	198 952	176 855
Sublimed & precipitated	228 091	101 845	121 124	117 780	187 499
Thailand					
Sulphur –					
Crude	17 228	25 898	2 226	27 110	...
Refined	16 015	13 037	109	4 854	...
Sublimed & precipitated	351	145	29	87	...
Australia					
Sulphur	685 282	281 757	205 766	407 675	496 804
New Zealand (d)					
Sulphur	238 361	251 417	196 215	229 803	...

(a) S content

(b) Figures may be incomplete as value only given in Israeli trade return for imports from some countries

(c) Years ended 20 March following that stated

(d) Years ended 30 June of that stated

(e) From 1975 includes Sabah and Sarawak

Production of Talc

Country	1974	1975	1976	1977	1978
United Kingdom	20 600	19 100	14 800	14 700	18 000
France	298 000	241 000	256 000	267 000	275 000
Germany, Federal Republic of	29 731	21 092	18 282	15 971	15 446
Italy	163 024	144 082	153 836	162 437	175 157
Austria	98 440	86 512	100 649	103 743	106 848
Finland	128 269	124 260	148 531	156 584	195 200
Greece	4 320	5 869	5 543	2 723	1 078
Hungary	5 977	4 688	5 318	5 272	4 053
Norway	113 026	104 993	118 211	98 087	...
Portugal	1 170	1 570	1 146	1 507	1 265
Romania	* 60 000	* 60 000	* 60 000	* 60 000	* 60 000
Soviet Union	* 410 000	* 420 000	* 440 000	* 450 000	* 470 000
Spain	54 988	47 318	47 617	60 070	...
Sweden	28 404	23 846	20 441	21 214	...
Egypt	3 942	4 407	5 636	6 993	4 654
South Africa					
Talc	9 589	9 237	7 039	8 095	7 487
Wonderstone (pyrophyllite)	8 510	6 782	5 784	5 109	5 159
Canada	85 952	66 029	68 834	73 000	67 000
Mexico	2 649	1 480	192	163	...
USA					
Talc	1 073 925	792 000	) 991 039	(997 000	1 150 000
Pyrophyllite	95 892	83 364	)	( 96 000	105 000
Argentina					
Talc	34 698	40 081	44 185)	
Pyrophyllite	5 412	8 357	9 132	) 56 373	...
Steatite	460	328	840)	
Brazil					
Talc	155 371	154 893	151 245	) * 225 000	...
Pyrophyllite	45 813	65 778	74 094)	
Chile	1 684	475	1 109	427	...
Colombia	800	1 000	1 200	1 380	1 320
Paraguay	250	* 250	140	130	...
Peru	13 781	13 864	* 14 000	* 14 000	...
Uruguay	2 075	1 268	1 268	1 659	...
Afghanistan (a)	3 000	6 300	8 700	6 800	* 2 000
China	* 300 000	* 270 000	* 300 000	* 300 000	* 300 000
India					
Steatite	292 896	217 000	220 461	247 000	276 000
Pyrophyllite	15 562	15 021	34 080	34 619	32 249
Japan					
Talc	177 673	78 931	74 384	97 782	95 834
Pyrophyllite	1 396 184	420 172	447 795	409 514	290 723
Korea, Dem. P.R. of	* 120 000	* 130 000	* 130 000	* 130 000	* 130 000
Korea, Republic of					
Talc	113 674	92 907	147 774	171 925	202 078
Pyrophyllite	328 418	322 967	348 694	433 304	463 005
Pakistan	8 108	4 663	5 035	8 879	...
Philippines	2 333	1 342	1 411	1 200	...
Taiwan	13 517	12 050	15 481	10 160	9 946
Thailand	1 798	10 647	6 557	10 368	...
Australia					
Talc	63 992	67 242	77 447	112 920	151 613
Pyrophyllite	15 845	15 145	14 650	16 039	...
World total	5 810 000	4 200 000	4 600 000	4 900 000	5 100 000

(a) Years ended 20 March following that stated

Exports of Talc

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom	1 783	1 642	2 894	4 348	3 978
Belgium-Luxembourg	21 813	15 656	32 185	19 857	18 286
France	76 432	63 397	59 426	73 578	77 310
Germany, Federal Republic of	7 114	5 718	7 057	7 056	7 949
Italy	53 887	41 960	51 247	58 727	56 591
Netherlands	740	1 556	2 051	2 785	3 674
Austria	84 495	72 732	85 032	87 811	87 097
Finland	1 855	4 750	11 190	31 876	27 509
Norway	66 883	55 318	61 674	60 771	59 166
Portugal	71	21	18	63	127
Spain	182	1 938	4 775	9 608	6 128
Sweden	3 590	4 110	4 275	3 812	4 703
Switzerland	1 056	151	60	58	71
Turkey	125	179	375	12	42
South Africa					
Talc	214	116	—	614	—
Wonderstone (pyrophyllite)	5 335	3 367	3 834	753	6 837
Zambia	345	—	...	...	...
Mexico	...	38	5	190	...
USA	170 405	143 058	192 740	291 928	242 047
Argentina	670	271	183	...	...
Brazil	469	189	247	190	159
China (a)	* 241 200	* 167 700	* 195 300	* 209 100	* 271 300
Hong Kong (Re-exports)	1 508	226	2 422	4 843	5 729
India	11 565	7 158	8 783	...	...
Japan	746	454	1 499	1 721	1 803
Korea, Dem. P.R. of	* 106 100	* 119 300	...	...	...
Korea, Republic of	49 691	42 212	68 244	82 110	77 878
Malaysia (b)	387	283	473	160	...
Singapore	1 150	807	1 156	1 658	735
Syria	47	5	18	1	...
Taiwan	538	457	982	2 348	1 312
Australia	51 325	45 457	62 306	87 271	106 177

(a) IGS estimates, based on known imports into certain countries

(b) From 1975 includes Sabah and Sarawak

Imports of Talc

Country	1974	1975	1976	1977	1978
United Kingdom	61 838	98 282	61 281	60 552	62 473
Belgium-Luxembourg	39 958	23 412	39 026	35 579	22 758
Denmark	13 195	9 366	11 525	10 842	10 578
France	8 521	6 909	8 392	12 147	19 258
Germany, Federal Republic of	110 359	87 517	111 223	113 164	127 515
Irish Republic	2 422	2 021	2 444	1 950	1 988
Italy	25 417	14 667	18 546	18 176	18 892
Netherlands	15 651	13 999	17 183	17 473	21 192
Austria	2 109	1 141	1 901	2 860	2 427
Finland	1 685	822	715	656	656
Greece	2 092	2 919	1 655	1 666	2 681
Norway	3 352	3 890	3 047	4 597	3 419
Poland	29 714	24 728	19 960	24 081	25 540
Portugal	3 399	2 685	3 485	3 459	3 952
Soviet Union	...	91 000	100 000	100 000	120 000
Spain	10 079	8 708	12 282	15 729	11 948
Sweden	24 729	22 306	22 872	18 857	18 780
Switzerland	14 018	9 216	9 379	11 042	10 766
Turkey	549	410	506	877	189
Yugoslavia	3 027	2 488	2 461	3 261	5 127
Algeria	2 171	3 425	2 829	5 169	...
Cameroon	330	...	...	...	...
Ghana	1 390	489	...	...	...
Ivory Coast	1 212	717	748	1 558	1 030
Morocco	1 007	1 070	1 270	1 048	936
Mozambique	300	162	140	217	...
Senegal	193	161	...	...	...
South Africa	3 304	1 654	2 132	1 962	1 750
Togo	69	59	...	...	...
Tunisia	1 784	2 597	1 591	3 563	1 580
Zaire	193	231	218	120	...
Canada	36 248	30 428	46 397	33 769	33 349
Costa Rica	681	439	591	925	...
El Salvador	143	140	127	292	...
Guatemala	342	282	325	490	...
Honduras	100	23	71	148	152
Mexico					
Talc	102 615	89 113	110 027	117 677	...
Pyrophyllite	233	234	281	50	...
Nicaragua	499	179	...	...	...
Panama	376	313	273	396	...
USA	27 444	21 208	18 208	20 040	17 000
Argentina	521	489	327	...	...
Brazil	132	79	174	122	131
Chile	897	...	...	...	...
Venezuela	6 909	6 492	...	...	...
Cyprus	4 220	213	297	...	...
Hong Kong	2 765	1 353	4 037	7 207	7 684
Indonesia	6 115	5 138	7 744	12 834	11 159
Iran (a)	583	192	327	...	...
Iraq	1 006	16	...	...	...
Israel (c)	1 200	42	519	80	120
Japan	299 013	236 196	301 945	360 612	447 718
Malaysia (d)	4 241	3 182	4 798	6 027	...

Talc

Imports of Talc

tonnes

Country	1974	1975	1976	1977	1978
Philippines	5 918	3 546	5 306	4 722	8 547
Singapore	9 192	5 711	8 025	8 746	6 054
Syria	1 946	1 617	490	5 112	...
Taiwan	2 454	1 646	1 868	3 758	3 943
Thailand	8 421	3 619	7 366	10 776	...
Australia	1 606	947	371	335	527
New Zealand (b)	2 558	2 409	2 481	3 963	...

(a) Years ended 20 March following that stated

(b) Years ended 30 June of that stated

(c) Figures may be incomplete as value only given in Israeli trade return for imports from some countries

(d) From 1975 includes Sabah and Sarawak

Mine Production of Tantalum and Niobium

tonnes

Country	1974	1975	1976	1977	1978
Portugal					
Tantalite-columbite	9	9	3	2	8
Mozambique					
Columbo-tantalite	46	46	* 30	* 37	...
Microlite	62	44	56	* 43	...
Nigeria					
Columbite	1 193	922	708	860	666
Tantalite	1	1	* 1	1	...
Rwanda					
Columbo-tantalite	75	47	45	94	54
Uganda					
Columbo-tantalite	* 4	* 2	* 2	* 2	* 2
Zaire					
Columbo-tantalite (a)	64	90	79	113	47
Zimbabwe					
Columbo-tantalite	* 40	* 40	* 40	* 40	* 40
Canada					
Pyrochlore (b)	1 920	1 662	1 499	2 509	2 535
Tantalite (c)	199	181	128	146	* 150
Brazil					
Pyrochlore	17 878	14 605	19 003	15 613	* 20 000
Columbo-tantalite	92	100	198	210	200
Malaysia					
Columbite	93	50	46	45	23
Thailand					
Columbite	10	7	—	33	...
Tantalite	82	103	7	41	...
Australia					
Tantalite-columbite	138	150	118	157	125
World total (d)	24 000	20 000	24 000	23 000	27 000

Note: Niobium and tantalum ores are believed to have been produced also in the Soviet Union, and minor quantities in Burundi, India, Spain, Somalia, Namibia, USA and Zambia

(a) Including columbo-tantalite content of tin-tantalite-columbite

(b) Nb₂O₅ content

(c) Ta₂O₅ content

(d) Expressed as weight of concentrates produced; Canadian concentrates have been taken as approximately twice the weight of oxides content

Exports of Tantalum and Niobium

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom					
Niobium & tantalum ores & concentrates	469	384	(b) 117	(b) 44	(b) 86
Tantalum	31	62	5	24	36
France					
Niobium & tantalum ores (b)	...	—	356	10	—
Tantalum	12	7	19	19	12
Germany, Federal Republic of					
Tantalum	58	29	61	61	48
Niobium	6	16	22	11	19
Italy					
Niobium & tantalum ores	70	...	—	—	—
Tantalum	3	6	4	1	10
Niobium	1	3	1	1	6
Netherlands					
Tantalum	2	1	6	7	7
Austria					
Tantalum	12	7	28	10	10
Portugal					
Columbite	4	11	4	3	...
Mozambique					
Tantalum ore	103	88	) 92	45	...
Columbite	95	52)		...
Nigeria					
Columbite	2 277	977	1 036	...	...
Rwanda					
Columbite-tantalite	35	...	...	...	...
Uganda					
Columbite-tantalite	10	...	...	...	...
Zaire					
Columbite-tantalite (c)	...	* 50	* 40	* 60	...
Canada					
Pyrochlore	* 3 500	* 3 000	* 2 500	* 4 500	* 4 500
Tantalite	* 370	* 330	* 240	...	...
USA					
Tantalum ores & concentrates	91	27	27	67	29
Tantalum	335	287	266	320	411
Niobium	15	24	30	35	* 30
Brazil					
Pyrochlore	4 342	2 895	4 381	3 310	...
Columbite-tantalite	147	125	130	169	129
Japan					
Tantalum	25	9	15	45	42
Malaysia (a)					
Columbite & tantalite	160	82	116	263	...
Tin slags	9 330	12 398	19 402	5 792	...
Thailand					
Columbite & tantalite	65	30	103	230	...
Tin slags	5 052	1 733	1 890	2 575	...
Australia					
Tantalite-columbite	128	132	124	158	125

(a) From 1975 includes Sabah and Sarawak

(b) Includes vanadium ores

(c) IGS estimates, based on part figures given in trade account

tonnes

Imports of Tantalum and Niobium

Country	1974	1975	1976	1977	1978
United Kingdom					
Niobium & tantalum ores & concentrates	1 677	1 666	(a) 1 349	(a) 610	(a) 466
Tantalum	59	29	57	115	105
France					
Niobium & tantalum ores (a)	1 081	1 241	196	11	25
Tantalum	34	21	24	18	30
Niobium	1	3	1	...	11
Germany, Federal Republic of					
Niobium & tantalum ores (a)	2 985	2 097	1 651	1 557	870
Tantalum	88	137	125	219	251
Niobium	12	5	3	4	11
Italy					
Niobium & tantalum ores	544	235	5	—	(a) 1 798
Tantalum	15	14	4	9	8
Niobium	1	10	10	6	1
Netherlands					
Tantalum	2	3	1	2	3
Austria					
Tantalum	14	9	12	19	15
USA					
Tantalum concentrates (d)	357	286	375	(f) 979	(f) 794
Niobium concentrates (e)	718	383	998	(f) 1 104	(f) 1 225
Tantalum	84	30	24	(b)	(b)
Niobium	0	1	—	(b)	(b)
Tin slags –					
Ta content	345	107	195	(b)	(b)
Nb content	209	65	134	(b)	(b)
Japan					
Niobium minerals	1 900	2 350	1 813	1 751	1 858
Tantalum ores & concentrates	109	62	62	170	128
Tantalum	66	21	54	53	54
Malaysia (c)					
Tantalum	5	20	5	13	...
Thailand					
Tantalum ores	15	...	...	—	...

(a) Includes vanadium ores

(b) Included with concentrates

(c) From 1975 includes Sabah and Sarawak

(d) Ta content

(e) Nb content

(f) Includes metal and content of tin slags

Mine Production of Tin

tonnes (metal content)

Country	1974	1975	1976	1977	1978
United Kingdom	3 827	4 091	4 015	4 189	3 132
France	148	49	—	—	—
German Democratic Republic	* 1 000	* 1 100	* 1 300	* 1 400	* 1 500
Portugal	424	375	332	267	300
Spain	643	737	720	642	520
Cameroon	* 25	26	19	10	...
Namibia	781	760	735	* 1 000	* 1 000
Niger	79	89	84	* 84	* 96
Nigeria	5 455	4 652	3 710	3 267	2 935
Rwanda	* 1 300	* 1 250	* 1 440	* 1 450	* 1 400
South Africa	2 490	2 771	3 257	2 876	2 876
Uganda	199	88	* 120	* 120	* 120
Zaire	4 675	4 574	3 950	3 900	* 3 450
Zimbabwe	* 600	* 600	* 600	* 600	* 600
Canada (a)	324	319	274	323	376
Mexico	400	378	481	220	313
USA	* 100	* 100	* 100	* 100	* 100
Argentina	556	538	358	* 500	* 400
Bolivia	29 027	30 251	30 355	32 616	30 881
Brazil	3 555	* 5 000	* 5 900	* 6 400	* 8 500
Peru (b)	155	255	273	* 330	* 760
Burma	* 600	* 750	* 400	* 400	* 700
China (c)	* 20 000	* 22 000	* 20 000	* 20 000	* 20 000
Indonesia	25 709	25 337	22 203	24 000	24 100
Japan	548	644	766	595	599
Korea, Republic of	24	* 24	* 24	* 24	56
Laos	612	518	576	* 600	* 600
Malaysia	68 122	64 364	63 401	58 703	62 650
Thailand	20 339	16 406	20 452	24 205	30 186
Australia	10 481	9 577	10 611	10 634	11 547
World total (d)	202 000	198 000	196 000	199 000	210 000

(a) Sn in concentrates exported and in tin-lead alloys produced

(b) Recoverable

(c) Smelter

(d) Excluding tin ore known to have been produced in other countries including Czechoslovakia and Soviet Union

Smelter Production of Tin

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom	11 948	11 585	11 161	10 458	8 445
Belgium	3 418	4 562	4 068	5 008	5 195
Germany, Federal Republic of	1 384	1 306	1 449	2 897	3 241
Netherlands (a)	—	1 800	2 000	2 100	1 625
Czechoslovakia	120	107	120	120	120
German Democratic Republic	* 1 100	* 1 300	* 1 400	* 1 400	* 1 500
Portugal	450	409	319	588	520
Spain	5 862	5 249	4 359	5 307	4 575
Nigeria	5 574	4 677	3 667	3 315	2 984
South Africa	854	780	683	582	* 600
Zaire	685	647	718	765	* 900
Zimbabwe	* 600	* 600	* 600	* 600	* 600
Mexico	1 000	1 000	800	1 000	1 000
USA	6 096	6 500	5 700	6 700	4 000
Argentina	* 120	* 120	* 120	* 120	* 120
Bolivia (a)	7 131	7 775	9 868	13 048	16 181
Brazil	4 850	* 5 400	6 423	7 685	8 354
China	* 20 000	* 22 000	* 20 000	* 20 000	* 20 000
Indonesia	15 065	17 826	23 322	24 005	25 830
Japan	1 327	1 219	1 145	1 271	1 140
Malaysia	84 394	83 070	78 017	66 305	71 953
Thailand	19 827	16 630	20 337	23 102	28 945
Australia	6 714	5 254	5 603	5 561	5 129
World total (b)	198 000	200 000	202 000	202 000	213 000

(a) Refined, including alloys

(b) Excluding tin metal known to have been produced in Soviet Union

Exports of Tin

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom					
Ores & concentrates	1 913	2 819	185	180	3 608
Unwrought	9 010	6 443	6 867	6 800	6 971
Unwrought alloys	3 834	3 140	3 293	1 917	1 529
Belgium-Luxembourg					
Unwrought	1 670	1 831	3 231	2 454	2 343
Unwrought alloys	179	76	102	161	74
Denmark					
Unwrought	73	27	43	30	37
Unwrought alloys	1 108	1 123	609	835	620
France					
Ore	208	81	54	18	10
Unwrought	399	251	80	259	739
Unwrought alloys	121	230	185	164	129
Germany, Federal Republic of					
Unwrought	1 167	1 311	1 505	3 577	4 353
Unwrought alloys	415	406	698	785	460
Italy					
Unwrought (a)	476	462	138	242	228
Netherlands					
Unwrought (a)	1 707	1 135	1 439	1 758	1 274
Austria					
Unwrought (a)	42	42	53	2	38
Norway					
Unwrought (a)	280	42	65	99	59
Portugal					
Unwrought	9	10	0	7	0
Spain					
Unwrought	1 565	1 453	2 253	1 624	153
Sweden					
Unwrought	27	72	56	209	40
Unwrought alloys	63	11	7	29	14
Switzerland					
Unwrought	123	52	65	91	84
Niger					
Ore	120	127	(b) 63	...	...
Nigeria					
Unwrought (a)	5 761	4 729	3 419	3 039	3 079
Rwanda					
Concentrates (b)	1 401	1 326	1 370	1 607	1 398
South Africa					
Concentrates (b)	1 768	2 273	1 768	2 386	2 212
Tanzania					
Ores & concentrates	68	40	22	18	14
Uganda					
Ores & concentrates	243	85	20	...	...
Zaire					
Ore (b)	4 028	4 275	3 130	3 179	2 766
Unwrought	536	755	329	160	...
Canada					
Concentrates (b)	1 316	1 052	796	876	943
USA					
Unwrought (a)	8 550	3 596	2 338	5 487	4 693
of which: Re-exports	2 547	2 152	1 798	4 941	4 194
Argentina					
Tin-silver ore	3 786	1 918	—	...	...
Bolivia					
Concentrates (b)	21 906	18 944	20 487	18 413	13 818
Unwrought	7 049	7 497	9 868	12 047	14 198
Brazil					
Unwrought	2 655	3 491	1 845	2 112	1 665
Peru					
Ores & concentrates	...	703	759	754	...

Exports of Tin

tonnes

Country	1974	1975	1976	1977	1978
Burma					
Ores & concentrates (b)	332	886	1 740	1 213	1 141
China					
Unwrought	* 10 200	* 13 000	* 7 000	* 3 400	* 3 500
Hong Kong					
Unwrought (Re-exports)	37	248	65	135	223
Indonesia					
Ores & concentrates	11 752	10 056	1 526	1 968	976
Unwrought (a)	15 412	5 772	2 875	21 314	22 859
Japan					
Unwrought (a)	813	220	56	205	66
Laos					
Ore (b)	964	426	438	264	72
Malaysia (c)					
Unwrought	85 715	77 947	81 527	66 517	70 110
Singapore					
Ore	1 629	2 343	5 498	10 440	8 271
Unwrought	137	108	1 372	2 702	7 096
Unwrought alloys	504	459	735	742	751
Thailand					
Unwrought	20 768	16 661	20 048	21 439	28 943
Unwrought alloys	...	629	1 126	2 276	...
Australia					
Ores & concentrates (b)	4 295	4 521	3 363	5 126	* 6 100
Unwrought (a)	2 519	2 470	2 315	2 320	2 146

Note: In this table the description 'unwrought' tin corresponds to item 687.1 in the Standard International Trade Classification (Revised) and comprises ingots, pigs, unwrought bars, sticks, etc

(a) Including alloys

(b) Sn content

(c) From 1975 includes Sabah and Sarawak

Tin

Imports of Tin

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom					
Ores & concentrates	39 631	42 908	41 712	45 104	39 105
Unwrought (a)	7 880	6 166	7 735	9 343	8 370
Belgium-Luxembourg					
Ore	5 281	7 210	5 173	5 299	4 718
Unwrought	2 790	1 601	2 298	2 044	2 105
Unwrought alloys	171	155	209	108	128
Denmark					
Unwrought	568	245	323	371	226
Unwrought alloys	189	57	98	104	122
France					
Unwrought	11 670	9 968	10 602	10 079	10 650
Unwrought alloys	346	174	230	430	178
Germany, Federal Republic of					
Ore	10 816	9 883	9 550	6 282	7 989
Unwrought	15 625	12 998	15 453	14 914	14 700
Unwrought alloys	1 879	959	837	705	781
Irish Republic					
Unwrought (a)	34	15	27	21	50
Italy					
Unwrought	10 410	5 418	7 445	6 221	5 899
Unwrought alloys	495	664	463	481	527
Netherlands					
Ore	2 375	3 083	2 882	3 938	2 820
Unwrought (a)	6 713	4 362	5 764	5 299	5 430
Austria					
Unwrought	582	418	555	479	469
Finland					
Unwrought (a)	386	172	183	121	211
Greece					
Unwrought	497	587	335	401	320
Hungary					
Unwrought & semi-manufactures	1 603	1 786	1 718	1 520	1 739
Norway					
Unwrought	593	651	596	524	547
Unwrought alloys	202	136	200	98	97
Poland					
Unwrought	4 450	4 510	5 096	4 680	4 616
Portugal					
Unwrought	418	307	471	479	464
Soviet Union					
Unwrought	5 235	9 654	8 130	6 090	7 000
Spain					
Ore	6 156	7 466	7 486	6 125	5 083
Sweden					
Unwrought	533	702	667	247	336
Unwrought alloys	108	104	165	90	79
Switzerland					
Unwrought	808	727	769	705	932
Turkey					
Unwrought	1 113	1 168	894	996	744
Yugoslavia					
Unwrought (a)	1 640	1 037	1 366	1 960	1 833
Egypt					
Unwrought & scrap	505	353	854	215	361
Kenya					
Unwrought (a)	51	21	28	44	0
Morocco					
Unwrought (a)	234	230	195	154	148
Nigeria					
Unwrought (a)	21	63	978	...	...
South Africa					
Unwrought	1 037	835	835	845	450

Imports of Tin

Country	1974	1975	1976	1977	1978
Sudan					
Unwrought	—	...	6	—	2
Tanzania					
Unwrought (a)	23	12	14	...	...
Tunisia					
Unwrought & scrap	40	74	55	40	51
Zambia					
Unwrought	24	37	...	...	...
Canada					
Unwrought	5 556	4 487	4 224	5 028	4 804
Mexico					
Ores & concentrates	2 190	2 995	2 162	3 095	...
Unwrought	456	100	—	152	...
USA					
Ore (b)	5 971	6 415	5 733	6 724	3 873
Unwrought	40 237	44 365	45 055	48 350	46 776
Unwrought alloys	985	887	693	702	770
Argentina					
Unwrought	2 017	1 777	984	631	...
Brazil					
Ore	6 015	3 137	1 493	3 911	* 4 250
Chile					
Unwrought	2 222	...	...	...	...
Colombia					
Unwrought (a)	...	...	321	...	...
Uruguay					
Unwrought	41	...	34	61	...
Venezuela					
Unwrought	299	587	...	...	...
Hong Kong					
Unwrought	629	610	988	896	1 445
India					
Unwrought (a)	1 771	2 319	3 114	...	...
Iran (d)					
Unwrought	453	357	602	...	...
Iraq					
Unwrought (a)	82	51	...	...	...
Israel (f)					
Unwrought	20	7	1	6	16
Japan					
Ores & concentrates	3	—	92	—	—
Unwrought	31 163	21 968	31 120	28 200	28 563
Korea, Republic of					
Ores & concentrates	12 594	10	295	519	...
Unwrought (a)	636	821	1 093	4 271	...
Malaysia (c)					
Ore	21 517	27 772	12 349	11 495	...
Unwrought (a)	266	139	126	35	...
Philippines					
Unwrought (a)	995	267	277	704	767
Singapore					
Ore	23	37	982	3 177	3 118
Unwrought	636	838	544	338	1 174
Unwrought alloys	302	281	309	450	498
Syria					
Unwrought & scrap	30	94	115	93	...
Taiwan					
Unwrought	705	915	814	1 777	3 199

Tin

Imports of Tin

tonnes

Country	1974	1975	1976	1977	1978
Australia					
Unwrought	56	28	32	222	204
New Zealand (e)					
Unwrought (a)	284	300	290	341	...

Note: In this table the description 'unwrought' tin corresponds to item 687.1 in the Standard International Trade Classification (Revised) and comprises ingots, pigs, unwrought bars, sticks, etc

(a) Including alloys

(b) Sn content

(c) From 1975 includes Sabah and Sarawak

(d) Years ended 20 March following that stated

(e) Years ended 30 June of that stated

(f) Figures may be incomplete as value only given in Israeli trade return for imports from some countries

Production of Titanium Minerals

Country	1974	1975	1976	1977	1978
Finland					
Ilmenite	152 000	122 600	122 600	124 700	131 900
Norway					
Ilmenite	848 138	526 666	766 664	828 503	767 033
Portugal					
Ilmenite	274	212	367	229	251
Soviet Union					
Concentrates	* 307 000	* 327 000	* 380 000	* 400 000	* 400 000
Canada (a)					
Slag (d)	844 750	749 850	814 040	692 341	...
USA					
Ilmenite (b)	675 464	650 706	591 851	579 240	553 000
Brazil					
Ilmenite	6 743	4 596	14 615	13 268	* 14 000
Rutile	146	104	128	* 130	...
India					
Ilmenite	* 132 000	* 82 000	* 90 000	* 140 000	...
Rutile	5 800	* 3 600	* 4 000	* 6 000	...
Malaysia (c)					
Ilmenite	153 530	112 248	180 004	153 679	* 186 816
Sri Lanka					
Ilmenite	81 098	64 010	64 654	33 946	35 904
Rutile	3 051	3 111	1 019	950	11 497
Australia					
Ilmenite	816 746	991 433	959 203	1 033 358	1 237 666
Rutile	318 702	348 350	389 750	325 281	265 625
Leucoxene	14 782	16 871	12 223	10 621	16 104
World total (e)					
Ilmenite (Wt. of concs)	2 866 000	2 554 000	2 790 000	2 909 000	3 068 000
Rutile (Wt. of concs)	328 000	355 000	395 000	332 000	283 000
All forms (TiO ₂ content)	* 2 502 000	* 2 318 000	* 2 541 000	* 2 464 000	* 2 502 000

Note: The figures in this table refer to gross tonnage of titanium concentrates

(a) Canada produces some ilmenite which is sold as such and not processed into slag, but tonnages are small

(b) Includes a mixed product containing ilmenite, leucoxene and rutile

(c) Exports

(d) Gross weight of 70–72% TiO₂ slag produced

(e) South Africa commenced production of titanium concentrates in 1978 but figures are withheld

Titanium

Exports of Titanium

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom					
Ores & concentrates	1 846	15 177	386	234	3 081
France					
Titanium minerals	372	515	425	370	331
Titanium metal	786	674	532	636	530
Germany, Federal Republic of					
Ilmenite	176	24	187	27	639
Other titanium minerals	868	922	1 881	2 334	5 556
Titanium metal	1 169	1 579	1 411	1 643	1 905
Netherlands (e)					
Ilmenite	...	1 664	1 985	886	563
Other titanium minerals	...	9 432	12 413	9 574	377
Norway					
Titanium minerals	776 814	534 606	728 346	723 543	714 108
Sweden					
Titanium minerals	72	—	—	—	—
Titanium metal	148	200	578	412	520
Canada					
Titanium dioxide slag (c)	...	...	...	...	...
USA					
Ores & concentrates	3 064	3 521	4 576	23 108	5 070
Titanium metal –					
Unwrought (a)	4 291	3 928	5 590	3 100	5 143
Wrought	1 576	1 783	979	980	1 943
India					
Ilmenite	118 634	68 975	120 727	...	...
Japan					
Titanium metal	3 630	3 274	2 555	3 444	5 741
Malaysia (d)					
Ilmenite	153 530	112 248	180 004	153 679	...
Other titanium minerals	153	—	—	16 004	...
Sri Lanka					
Ilmenite	87 182	...	70 615	39 841	...
Rutile	2 393	...	—	—	...
Australia					
Rutile	344 539	319 006	346 862	246 724	371 268
Ilmenite (b)	750 091	545 031	964 686	1 095 232	1 000 152

(a) Including alloys and scrap

(b) Including leucosene

(c) Sorelslag (70–72% TiO₂): estimated at 700 000 tonnes per year

(d) From 1975 includes Sabah and Sarawak

(e) Figures up to 1976 exclude exports to Belgium-Luxembourg, if any

Imports of Titanium

Country	1974	1975	1976	1977	1978
United Kingdom (a)					
Ilmenite	317 421	225 264	297 087	298 983	261 405
Other titanium minerals	72 507	33 379	84 232	89 055	45 302
Titanium metal	1 258	1 069	681	612	2 302
Belgium-Luxembourg					
Ilmenite	598	205	36	2 041	63 641
Other titanium minerals	120 527	31 350	101 941	67 244	36 979
Titanium metal	1 739	1 598	1 659	607	1 463
France					
Ilmenite	167 836	108 280	185 073	135 944	146 577
Other titanium minerals	8 523	9 134	8 929	8 183	7 900
Titanium metal	1 137	1 518	1 660	1 025	965
Germany, Federal Republic of					
Ilmenite	419 623	246 434	384 357	478 333	406 992
Other titanium minerals	108 815	83 757	88 376	121 029	112 570
Titanium metal	3 806	4 431	3 298	2 284	3 871
Italy					
Ilmenite	155 029	99 270	176 382	133 985	126 428
Other titanium minerals	12 200	3 659	3 372	7 486	4 531
Titanium metal	1 974	2 195	1 609	1 921	2 770
Netherlands (b)					
Ilmenite	...	2 513	5 807	2 021	412
Other titanium minerals	...	25 550	5 213	5 971	934
Finland					
Titanium minerals	17 561	15 282	3 315	10 368	6 399
Portugal					
Rutile	259	180	239	523	...
Spain					
Ilmenite	76 596	54 851	101 302	133 272	106 200
Sweden					
Titanium minerals	4 797	4 234	3 075	2 718	1 448
Titanium metal	961	1 554	1 396	737	1 169
Turkey					
Titanium minerals	502	2 132	2 350	3 226	—
Yugoslavia					
Rutile	36 757	51 969	45 093	47 305	45 980
Algeria					
Titanium minerals	111	322	462	277	...
Canada					
Titanium metal	416	405	439	372	631
USA					
Ilmenite	74 796	110 686	152 772	303 898	280 022
Titanium slag	214 342	192 942	155 695	136 589	135 327
Rutile	223 611	203 662	255 565	112 309	262 736
Titanium metal	10 337	5 060	3 584	6 788	5 975
Titaniferous iron ore	182 576	41 759	83 182	75 072	46 847
Argentina					
Titanium minerals	2 433	1 568	1 809	...	...
Brazil					
Ilmenite	35 880	15 233	41 250	69 632	56 335
Rutile	3 213	3 216	4 800	2 066	4 070
Hong Kong					
Titanium minerals	150	90	60	70	—
Japan					
Titanium minerals	680 511	444 056	496 750	495 967	399 131
Korea, Republic of					
Titanium minerals	18 469	5 222	15 861	22 292	...
Rutile sand	1 456	1 675	2 343	3 220	...

Titanium

Imports of Titanium

tonnes

Country	1974	1975	1976	1977	1978
Philippines					
Rutile	552	573	539	252	726
Singapore					
Titanium minerals	144	196	397	491	655
Thailand					
Titanium minerals	591	...	—	441	...

Note: Significant quantities of titanium Sorelslag are believed to be imported into various Western European countries, but details are not available

(a) United Kingdom is known to import about 70 000 tonnes per annum of Sorelslag (70–72% TiO₂)

(b) Figures up to 1976 exclude imports from Belgium-Luxembourg, if any

Production of Tungsten Ore

Country	1974	1975	1976	1977	1978
United Kingdom	20	13	13	96	82
France	900	780	798	824	767
Netherlands (e)	612	815	* 740	...	...
Austria	—	415	1 813	1 772	1 954
Czechoslovakia	* 100	* 100	* 100	* 100	* 100
Portugal (c)	1 851	1 796	1 588	1 267	1 372
Soviet Union	* 9 600	* 9 800	* 10 100	* 10 300	* 10 700
Spain	438	442	414	387	434
Sweden	271	180	245	251	730
Turkey	—	* 13	1 170	* 1 500	...
Namibia (d)	—	9	10	10	...
Rwanda	316	387	484	492	427
Uganda	* 137	* 137	* 139	* 139	...
Zaire (d)	246	322	303	216	...
Zimbabwe	115	48	32	* 32	...
Canada (a)	1 614	1 478	2 168	2 284	2 886
Mexico	390	349	296	241	* 250
USA (b)	4 482	3 140	3 357	3 445	4 118
Argentina	119	73	78	69	* 80
Bolivia	3 444	3 168	3 278	3 706	3 997
Brazil (a)	1 149	1 151	1 180	* 1 250	* 1 250
Peru	887	788	650	666	* 725
Burma (d)	630	415	590	562	...
China	* 10 700	* 11 300	* 11 350	* 11 350	...
Hong Kong	* 6	* 6	* 6	* 6	* 6
India	19	24	29	28	26
Japan	970	1 023	1 049	978	954
Korea, Dem. P.R. of	* 2 720	* 2 710	* 2 710	* 2 710	* 2 710
Korea, Republic of	2 935	3 082	3 262	3 322	3 381
Malaysia	165	134	81	125	...
Thailand	2 779	2 237	2 590	2 779	4 017
Australia (c)	1 419	1 888	2 508	2 973	3 379
New Zealand	7	—	* 10	—	...
World total	48 000	47 000	52 000	54 000	58 000

(a) Mainly scheelite

(b) Shipments from mine

(c) Wolframite and scheelite

(d) Including tin-wolframite concentrates

(e) Estimated production from separation complex ores, excluded from world totals

Tungsten

Exports of Tungsten

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom					
Tungsten ore	1 038	189	206	366	135
Tungsten metal	414	694	337	455	358
Belgium-Luxembourg					
Tungsten ore	160	84	36	49	45
Tungsten metal	136	123	116	230	217
France					
Tungsten ore	1 067	1 399	1 322	1 125	1 613
Tungsten metal	580	263	372	338	297
Germany, Federal Republic of					
Tungsten metal	2 002	588	585	573	541
Netherlands					
Tungsten ore (b)	939	1 254	1 239	864	1 260
Tungsten metal	295	192	130	220	243
Austria					
Tungsten ore	20	30	450	252	130
Tungsten metal	177	150	183	363	581
Portugal					
Tungsten ore	3 195	1 940	1 875	1 555	1 692
Spain					
Scheelite ore	262	365	274	191	174
Other tungsten ore	208	208	193	276	213
Sweden					
Tungsten ore	33	—	135	86	103
Tungsten metal	99	43	110	28	49
Switzerland					
Tungsten metal	97	19	132	64	23
Rwanda					
Tungsten ore & concentrates (a)	315	379	384	* 400	...
South Africa					
Tungsten ore (a)	* 130	* 260	* 285	* 180	...
Uganda					
Wolframite ore	176	229	136	* 200	...
Zaire					
Tungsten ore	235	206	152	171	...
Canada (a)	* 1 240	* 1 200	* 1 430	* 1 690	* 1 930
Mexico					
Tungsten ore & concentrates	349	731	381	295	...
USA					
Tungsten ore & concentrates	1 044	1 158	1 520	1 128	1 600
Metal, alloys & scrap	1 213	927	1 049	973	1 191
Bolivia					
Tungsten ore (a)	2 618	2 551	3 275	2 820	2 852
Brazil					
Tungsten ore	1 389	1 411	1 044	1 353	992
Peru					
Tungsten ore & concentrates (a)	631	738	637	564	* 600
Burma					
Tungsten ore & concentrates	808	338	...	...	...
Tin-tungsten ores	432	306	...	...	...
China					
Tungsten ore & concentrates (a)	* 5 500	* 4 000	* 3 000	* 3 000	...
Japan					
Tungsten metal	114	200	184	130	172
Korea, Dem. P.R. of (a)	* 1 100	* 1 100	* 1 000	* 1 000	...
Korea, Republic of					
Tungsten ore	2 898	3 278	2 366	2 029	2 361

Exports of Tungsten

Country	1974	1975	1976	1977	1978
Malaysia					
Wolframite ore	254	228	134	147	...
Singapore					
Tungsten ore	80	13	562	137	440
Tungsten metal	...	246	65	44	57
Thailand					
Tungsten ore	4 929	3 382	4 061	4 094	5 773
Australia					
Wolframite ores & concentrates	339	575	467	714	827
Scheelite ores & concentrates	1 508	2 201	2 688	2 873	3 936

(a) W content

(b) Figures up to 1976 exclude exports to Belgium-Luxembourg, if any

Tungsten

Imports of Tungsten

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom					
Tungsten ore	4 009	3 355	3 829	3 365	3 653
Tungsten metal	126	224	153	208	567
Belgium-Luxembourg					
Tungsten ore	458	170	418	98	—
Tungsten metal	180	157	165	237	199
France					
Tungsten ore	2 777	2 188	2 386	2 034	2 468
Tungsten metal	116	94	186	173	251
Germany, Federal Republic of					
Tungsten ore	4 246	3 365	4 362	2 981	3 422
Tungsten metal	3 513	591	603	924	1 150
Italy					
Tungsten ore	277	240	137	25	126
Tungsten metal	82	63	91	99	125
Netherlands					
Tungsten ore (a)	3 428	1 880	3 218	1 341	1 699
Tungsten metal	381	143	161	220	205
Austria					
Tungsten ore	1 996	1 717	2 722	2 205	4 533
Tungsten metal	62	195	196	744	492
Poland					
Tungsten concentrates	3 186	3 318	3 762	3 360	4 103
Soviet Union					
Tungsten concentrates	7 044	8 120	* 2 000	* 2 000	* 3 000
Sweden					
Tungsten ore	1 909	3 679	3 201	2 665	2 420
Tungsten metal	34	103	117	102	43
Switzerland					
Tungsten metal	138	63	24	73	92
Yugoslavia					
Tungsten metal	12	9	11	18	23
South Africa					
Tungsten ore & concentrates	539	422	341	483	508
Tungsten metal	71	33	13	32	142
USA					
Tungsten ore (b)	5 346	3 133	2 632	3 106	4 148
Tungsten metal	120	137	280	255	345
India					
Tungsten ore	255	216	517	429	...
Tungsten metal	12	59	18	...	...
Japan					
Tungsten ore	3 818	2 027	2 605	3 247	2 264
Tungsten metal	336	22	106	113	126
Singapore					
Tungsten ore	71	11	163	68	417
Tungsten metal	...	52	44	42	54
Australia (c)					
Tungsten metal	14	12	4	5	5

(a) Figures up to 1976 exclude imports from Belgium-Luxembourg, if any

(b) W content

(c) Years ended 30 June of that stated

Mine Production of Vanadium

tonnes (metal content)

Country	1974	1975	1976	1977	1978
Finland	1 480	1 275	1 496	1 964	2 954
Norway	* 450	* 460	* 530	* 540	* 460
Soviet Union	(b) * 2 930	* 8 000	* 9 000	* 9 000	* 9 000
Namibia (a)	820	562	709	* 750	...
South Africa (c)	* 8 155	* 10 645	9 872	11 243	...
USA (d)	4 418	4 303	6 691	5 900	3 875
Chile (b)	* 580	* 600	* 1 100	* 860	* 690
World total	18 800	26 000	29 400	30 300	28 700

Note: Vanadium pentoxide is also known to have been produced in France as a byproduct of alumina manufacture; the V content of this was reported as 78 tonnes in 1970 but subsequent figures are not available

(a) Years ended 30 June of that stated

(b) Estimated vanadium content of slag exported only

(c) Includes V content of slag

(d) Recoverable vanadium

Vanadium

Exports of Vanadium

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom					
Pentoxide	153	99	76	144	158
Metal	11	146	1	2	0
Belgium-Luxembourg					
Vanadiferous residues	1 052	861	713	294	260
Pentoxide	10	142	14	167	105
France					
Vanadiferous residues	1 143	333	23	—	422
Pentoxide	30	23	20	75	2
Germany, Federal Republic of					
Vanadiferous residues	1 115	1 240	1 280	860	1 137
Metal	15	30	0	1	55
Netherlands					
Vanadiferous residues (c)	883	3 082	23	80	107
Vanadium-titanium pig-iron (c)	1 132	—	—	2	95
Finland					
Pentoxide	2 681	2 407	2 571	3 500	4 931
Soviet Union					
Vanadiferous residues	36 600	20 598	12 913	20 000	20 000
South Africa					
Pentoxide (a)	* 4 500	* 6 200	* 5 400	* 4 600	* 6 200
Vanadiferous residues (d)	* 8 500	* 10 000	* 11 000	...	...
Lead vanadium concentrates (b)	* 8 348	5 771	7 240	...	—
USA					
Ore, concentrates, oxides & vanadates (d)	329	349	160	316	309
Australia					
Ores & concentrates (e)	418	10 541	711	165	...

Note: In this table the description 'pentoxide' also includes vanadium oxides and hydroxides, if any

(a) IGS estimates, based on known imports into certain countries

(b) Output from the South West Africa Co Ltd, years ended 30 June of that stated

(c) Figures up to 1976 exclude exports to Belgium-Luxembourg, if any

(d) V₂O₅ content

(e) Years ended 30 June of that stated

Imports of Vanadium

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom					
Pentoxide	914	822	989	702	875
Vanadium-titanium pig-iron	700	362	100	200	100
Metal	19	11	17	59	103
Belgium-Luxembourg					
Vanadiferous residues	3 687	5 738	6 790	7 815	5 085
Pentoxide	1 278	9 151	1 009	643	1 771
Metal	—	16	39	20	20
France					
Vanadiferous residues	74	1 459	47	5	—
Pentoxide	1 599	1 387	1 694	796	1 444
Vanadium-titanium pig-iron	4 117	4 564	173	101	51
Metal	21	6	1	1	1
Germany, Federal Republic of					
Vanadiferous residues	29 800	26 920	20 531	22 237	26 903
Pentoxide	...	408	433	1 324	1 851
Vanadium-titanium pig-iron	644	1 103	280	359	342
Metal	14	5	7	19	27
Italy					
Pentoxide	588	527	417	375	1 009
Vanadium-titanium pig-iron	2 204	219	200	392	225
Vanadiferous residues	3 952	3 257	2 094	3 169	3 610
Netherlands					
Vanadiferous residues (b)	13 644	4 469	3 809	7 675	8 802
Pentoxide (b)	23	298	81	74	8
Vanadium-titanium pig-iron (b)	32	40	60	100	100
Sweden					
Pentoxide	711	680	797	700	1 016
USA					
Vanadiferous residues (a)	2 254	2 626	2 720	2 551	2 027
Pentoxide (a)	484	1 156	606	403	595
Brazil					
Pentoxide	560	330	358	667	796
Japan					
Pentoxide	3 099	2 876	3 225	2 052	2 656

Note: In this table the description 'pentoxide' also includes vanadium oxides and hydroxides, if any

(a) V content

(b) Figures up to 1976 exclude imports from Belgium-Luxembourg, if any

Mine Production of Zinc

tonnes (metal content)

Country	1974	1975	1976	1977	1978
United Kingdom (a)	2 800	4 000	4 786	7 528	2 718
France	14 465	13 810	34 700	41 828	39 900
Germany, Federal Republic of	116 044	116 072	115 345	115 638	88 863
Irish Republic	66 300	66 643	62 775	116 298	176 029
Italy	77 700	78 800	86 400	79 300	73 800
Austria	20 977	23 040	22 651	22 037	24 821
Bulgaria	* 80 000	* 83 000	* 85 500	* 87 000	* 88 000
Czechoslovakia	9 300	8 900	9 300	9 400	10 000
Finland (b)	59 300	52 800	59 200	61 317	53 225
Greece	24 510	14 140	29 815	18 427	25 600
Greenland	(d) 168 000	152 000	142 000	132 000	143 000
Hungary	* 2 700	2 200	2 235	2 962	2 827
Norway	22 036	24 004	29 319	31 277	29 100
Poland	200 000	190 000	180 000	218 500	218 500
Romania	60 000	60 000	60 000	55 000	53 000
Soviet Union	* 950 000	* 1 030 000	* 1 020 000	* 1 040 000	* 1 040 000
Spain	94 759	85 297	83 730	98 316	140 543
Sweden	113 699	111 325	128 326	140 233	162 800
Turkey	31 600	25 600	34 300	41 500	43 100
Yugoslavia	94 700	103 400	106 600	112 400	97 400
Algeria	10 200	11 300	7 900	3 100	4 000
Congo	3 300	4 000	5 100	5 200	4 800
Morocco	14 600	19 000	14 500	11 200	5 100
Namibia	39 400	37 700	26 900	38 300	36 600
South Africa	37 400	67 300	77 061	72 416	68 400
Tunisia	6 254	6 355	6 854	6 244	* 7 000
Zaire	88 078	77 542	70 298	81 832	88 533
Zambia (c)	58 338	46 922	36 327	40 114	42 462
Canada	1 240 192	1 229 481	1 145 013	1 300 228	1 244 100
Honduras	24 300	26 000	25 000	26 500	24 300
Mexico	262 716	288 851	259 183	265 469	244 900
Nicaragua	14 818	11 177	14 287	10 142	3 600
USA (b)	453 476	425 792	439 543	407 888	306 283
Argentina	39 647	37 351	40 593	39 200	36 600
Bolivia	45 973	46 466	49 206	60 766	59 323
Brazil	37 800	37 400	46 500	52 500	54 000
Chile	3 349	3 174	5 056	3 918	...
Colombia	37	7	60	—	—
Ecuador	202	83	123	1 229	1 339
Peru (b)	378 029	364 915	456 000	475 900	457 500
Burma	4 500	4 200	2 300	3 300	4 800
China	* 130 000	* 135 000	* 135 000	* 150 000	* 150 000
India	19 257	22 838	27 100	35 500	38 400
Iran	43 300	80 000	72 000	61 500	45 000
Japan	240 788	258 201	283 630	302 822	291 096
Korea, Dem. P.R. of	* 162 000	* 160 000	* 150 000	* 150 000	* 145 000
Korea, Republic of	40 734	45 919	59 136	68 355	66 439
Philippines	7 772	10 453	11 643	12 442	9 330
Thailand	33 500	5 600	—	—	—
Vietnam	5 000	10 000	10 000	10 000	10 000
Australia	464 358	500 846	468 586	491 608	469 284
World total	6 100 000	6 200 000	6 200 000	6 600 000	6 500 000

(a) In a mixed copper-zinc concentrate

(b) Recoverable

(c) Smelter

(d) Includes production for last 5 months of 1973

Smelter Production of Zinc

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom	84 351	53 442	41 583	81 481	73 575
Belgium	288 800	218 200	236 100	258 223	240 511
France	276 669	181 127	233 496	238 271	231 197
Germany, Federal Republic of	400 049	294 725	304 754	354 780	306 836
Italy	184 215	179 732	191 246	176 593	177 121
Netherlands	78 200	116 000	123 200	109 400	135 300
Austria	16 450	16 273	16 547	16 774	21 655
Bulgaria	* 80 000	* 80 000	* 92 500	* 90 000	* 92 000
Finland	91 786	109 885	110 633	138 000	133 000
German Democratic Republic	* 15 000	* 15 200	* 15 000	* 15 500	* 16 000
Norway	72 434	60 891	64 352	69 790	71 320
Poland	233 000	243 000	237 000	228 200	222 000
Romania	* 50 000	* 55 700	* 53 300	51 900	55 000
Soviet Union	* 980 000	* 1 030 000	* 1 000 000	1 020 000	1 055 000
Spain	130 006	138 045	161 136	154 600	167 500
Yugoslavia	79 681	89 062	95 469	98 845	95 000
Algeria	4 000	5 000	6 000	16 000	25 700
South Africa	65 400	63 723	66 299	76 000	79 100
Zaire	66 714	65 588	60 622	51 490	43 565
Zambia	58 358	46 922	36 327	40 114	42 462
Canada	437 725	426 941	472 316	494 888	495 400
Mexico	137 302	154 993	175 792	175 166	173 100
USA	503 658	397 393	452 554	408 365	400 000
Argentina	37 200	39 500	35 200	29 000	23 900
Brazil	30 519	31 428	43 154	47 032	56 100
Peru	71 378	65 712	64 680	66 949	62 900
China	* 130 000	* 140 000	* 150 000	* 155 000	* 160 000
India	21 103	25 730	26 785	35 997	59 354
Japan	849 897	701 794	742 069	778 406	768 072
Korea, Dem. P.R. of	* 130 000	* 140 000	* 135 000	* 135 000	* 130 000
Korea, Republic of	11 548	20 937	27 548	32 756	58 970
Australia	276 831	193 310	242 635	249 741	290 062
World total	5 892 000	5 400 000	5 713 000	5 894 000	5 962 000

Exports of Zinc

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom					
Ores & concentrates	14 008	25 280	7 495	9 795	9 443
Unwrought	7 911	13 421	7 296	17 160	14 558
Unwrought alloys	4 775	4 456	5 884	6 746	6 576
Scrap	4 634	5 240	4 004	3 856	6 018
Belgium-Luxembourg					
Ore	68 950	22 669	28 200	27 585	11 676
Unwrought (a)	193 632	180 211	188 043	188 824	187 101
Scrap	8 372	4 734	7 075	3 948	4 147
Denmark					
Unwrought	300	82	65	760	110
Unwrought alloys	117	51	97	39	22
Scrap	3 816	3 328	3 675	3 684	4 440
France					
Ore	18 938	17 235	19 990	24 174	54 588
Unwrought	25 075	15 018	32 136	38 692	51 974
Unwrought alloys	4 348	3 072	2 103	4 190	4 258
Scrap	1 276	2 822	2 895	2 385	1 786
Germany, Federal Republic of					
Ore	76 116	64 158	79 179	76 823	72 494
Unwrought	72 767	69 832	95 211	118 230	76 031
Unwrought alloys	8 691	7 557	9 358	13 205	11 507
Scrap	12 194	6 934	5 245	11 236	7 254
Irish Republic					
Ores & concentrates	133 916	146 535	128 208	210 506	344 426
Italy					
Ore	15	10 339	17 039	2 286	32
Unwrought	20 659	28 735	35 971	26 633	27 879
Unwrought alloys	1 877	1 278	3 848	1 099	1 507
Netherlands					
Ore	57 985	28 875	24 162	15 142	3 200
Unwrought	67 560	87 521	129 078	(a) 109 219	(a) 123 205
Scrap	12 233	7 457	5 158	6 053	6 352
Austria					
Ore	5 085	4 632	6 456	6 000	—
Unwrought (a)	521	236	934	320	656
Scrap	128	42	149	88	75
Finland					
Concentrates	7 097	3 660	...	—	—
Unwrought	66 584	78 576	108 057	124 165	109 752
Unwrought alloys	434	1 190	242	—	3 853
Scrap	633	375	956	474	6
Greece					
Ore & concentrates	51 289	26 110	50 462	23 364	45 005
Greenland					
Ores & concentrates	161 777	169 467	135 007	135 772	...
Norway					
Ore	20 488	14 765	18 898	17 717	12 242
Unwrought	45 338	32 759	46 254	53 741	48 228
Unwrought alloys	9 900	9 054	12 072	6 876	8 801
Scrap	371	114	347	395	871
Poland					
Unwrought	85 256	84 524	58 586	59 231	46 300
Soviet Union					
Unwrought	114 800	100 575	100 000	100 000	100 000
Spain					
Ore	10 492	7 378	6 545	4 657	7 515
Unwrought (a)	2 812	30 549	34 491	38 030	81 838
Sweden					
Ore	231 066	211 765	253 367	280 901	293 044
Unwrought (a)	1 772	475	575	313	167
Scrap	1 103	511	3 527	4 113	5 241
Switzerland					
Unwrought	586	641	30	48	207
Scrap	1 251	945	1 038	671	757

Exports of Zinc

Country	1974	1975	1976	1977	1978
Turkey					
Ores & concentrates	54 746	51 549	25 952	17 716	...
Yugoslavia					
Concentrates	1 411	7 698	594	...	2 271
Unwrought (a)	40 699	51 208	47 962	41 968	45 241
Algeria					
Ore	3 556	—	—	17 000	...
Unwrought	—	6 542	6 032	14 412	...
Scrap	481	666	293	84	...
Congo					
Ore	626	—	3	...	...
Morocco					
Ore	26 449	26 499	19 091	21 115	15 409
Nigeria					
Ores & concentrates	1 230	...	71	...	...
South Africa					
Ores & concentrates	39 422	66 706	86 048	59 569	41 600
Unwrought (b)	* 800	* 1 900	* 3 300	* 5 500	* 8 100
Tunisia					
Ore	10 600	8 196	15 586	5 440	3 525
Zaire					
Ores & concentrates	235	206	—	—	...
Unwrought	50 994	40 975	35 288	47 343	40 900
Zambia					
Unwrought	50 227	41 264	51 100	34 800	39 500
Canada					
Ore (c)	866 698	705 088	644 094	598 451	686 232
Unwrought	300 754	249 545	354 480	298 898	443 474
Scrap	20 225	16 305	16 186	19 137	19 173
Guatemala					
Ore	—	—	160	1 856	...
Honduras					
Ores & concentrates	46 623	52 462	46 570	52 716	51 481
Mexico					
Ores & concentrates	291 956	115 644	153 476	141 656	...
Unwrought	73 711	92 445	122 944	105 814	111 800
USA					
Unwrought (a)	35 698	10 655	5 048	1 524	1 386
Scrap (c)	11 269	4 631	8 164	8 373	14 985
Argentina					
Unwrought	467	...	1 212	...	...
Bolivia					
Ores (c)	49 015	49 544	49 207	61 356	51 621
Brazil					
Ore	8 525	8 510	7 067	6 128	5 688
Peru					
Concentrates	(c) 358 415	647 621	665 883	610 728	703 199
Unwrought	46 849	58 771	73 656	77 582	64 935
Burma					
Concentrates	6 947	6 985	...	...	...
Iran (d)					
Ore	70 483	63 308	32 765	...	...
Japan					
Unwrought	115 959	52 841	76 127	70 105	57 857
Unwrought alloys	14 392	3 076	2 693	2 173	1 372
Scrap	778	300	1 304	3 063	4 245

Zinc

Exports of Zinc

tonnes

Country	1974	1975	1976	1977	1978
Korea, Republic of					
Ore	54 474	47 620	48 786	48 573	...
Philippines					
Concentrates	14 216	14 778	17 490	24 234	16 126
Scrap	436	354	36	—	—
Singapore					
Unwrought	3 412	1 701	2 687	4 257	8 137
Scrap	...	179	559	226	698
Australia					
Ores & concentrates (c)	212 513	177 418	235 310	175 009	* 243 000
Unwrought (a)	161 560	117 693	152 699	151 772	215 368

Note: In this table the description 'unwrought' zinc corresponds to item 686.1 in the Standard International Trade Classification (Revised) and comprises blocks, pigs, slabs, etc

- (a) Including alloys
- (b) IGS estimates, based on known imports into certain countries
- (c) Zn content
- (d) Years ended 20 March following that stated

Imports of Zinc

Country	1974	1975	1976	1977	1978
United Kingdom					
Ores & concentrates	197 692	108 161	119 081	182 749	160 201
Unwrought	195 400	192 180	193 523	197 888	181 649
Unwrought alloys	10 440	7 384	8 991	5 400	7 117
Scrap	3 047	1 828	3 319	1 755	1 036
Belgium-Luxembourg					
Ore	644 850	610 984	594 982	544 917	532 471
Unwrought (a)	69 592	23 885	29 051	28 854	24 927
Scrap	12 066	14 330	8 316	9 448	5 551
Denmark					
Unwrought	13 532	11 159	10 152	13 793	13 614
Unwrought alloys	1 680	1 475	1 719	2 140	1 773
Scrap	60	61	123	245	270
France					
Ore	540 498	388 657	459 300	466 580	454 582
Unwrought	75 822	62 266	61 903	64 829	76 451
Unwrought alloys	6 369	12 667	21 247	21 306	17 281
Scrap	23 884	13 236	12 191	7 997	8 028
Germany, Federal Republic of					
Ore	640 056	550 887	601 349	562 456	498 930
Unwrought	91 025	86 729	124 441	123 008	139 880
Unwrought alloys	3 845	3 806	9 336	14 934	12 415
Scrap	5 177	5 414	6 339	4 859	9 637
Irish Republic					
Unwrought (a)	2 325	2 419	2 820	2 020	2 184
Italy					
Ore	300 794	193 940	242 140	193 432	206 600
Unwrought	42 473	39 204	44 540	49 971	43 097
Unwrought alloys	9 555	7 612	9 305	15 221	10 946
Scrap	4 387	2 971	2 107	1 553	1 710
Netherlands					
Ore	205 898	295 722	309 138	262 532	307 817
Unwrought	43 290	25 510	27 964	27 248	21 803
Unwrought alloys	912	940	813	992	423
Scrap	8 066	4 031	4 476	6 118	7 191
Austria					
Ore	373	128	7	2 200	1
Unwrought	9 371	7 571	5 237	7 896	4 080
Scrap	398	155	191	54	322
Finland					
Ore	112 326	121 358	110 391	127 162	169 199
Unwrought (a)	1 095	2 488	2 148	1 534	197
Scrap	526	31	—	21	0
German Democratic Republic					
Unwrought (a)	46 254	49 998	...	...	...
Greece					
Unwrought	11 363	11 655	12 964	13 350	15 887
Hungary					
Crude & refined (g)	24 516	26 513	28 735	21 709	22 820
Iceland					
Unwrought (a)	42	43	63	130	143
Norway					
Ore	86 805	61 983	72 146	57 581	74 386
Unwrought	3 549	4 140	3 099	2 458	733
Scrap	2 279	2 693	3 155	1 604	1 713
Poland					
Concentrates	95 187	137 196	125 431	68 451	28 640
Unwrought	3 802	2 908	3 797	2 624	2 520
Portugal					
Unwrought	11 463	8 131	12 547	15 218	16 940
Scrap	182	36	138	105	98

Imports of Zinc

tonnes

Country	1974	1975	1976	1977	1978
Soviet Union					
Unwrought	48 700	44 504	45 000	45 000	60 000
Unwrought alloys	3 600	4 576	4 000	4 000	4 000
Spain					
Ore	126 404	137 900	117 814	117 343	78 451
Unwrought (a)(b)	1 041	253	423	571	997
Sweden					
Unwrought	40 714	43 356	39 130	31 093	35 519
Unwrought alloys	3 911	4 981	4 462	3 323	3 920
Scrap	444	227	193	109	16
Switzerland					
Unwrought	24 895	16 887	20 169	26 696	25 855
Turkey					
Unwrought	22 597	17 383	23 450	18 150	1 515
Yugoslavia					
Concentrates	68 318	58 046	67 891	33 482	33 465
Unwrought	25 890	18 772	12 973	14 127	4 794
Algeria					
Unwrought	2 600	2 188	201	—	...
Egypt					
Unwrought	3 526	8 363	1 464	1 222	2 597
Ghana					
Unwrought (a)	202	206	...	...	...
Ivory Coast					
Unwrought (b)	1 269	781	2 050	2 995	3 800
Kenya					
Unwrought (a)	4 980	876	2 056	4 254	8 000
Libya					
Unwrought	5	1 332	1	0	...
Morocco					
Unwrought	1 547	1 085	1 948	2 299	2 785
Mozambique					
Unwrought	1 145	214	425	145	...
Nigeria					
Unwrought (a)	2 841	10 116	9 961	...	...
South Africa					
Ores & concentrates	38 077	20 704	22 095	1	4 196
Unwrought	4 691	1 880	410	463	...
Scrap	604	306	320	61	...
Sudan					
Unwrought	—	...	250	—	600
Tanzania					
Unwrought (a)	3 683	3 732	4 095	3 532	...
Tunisia					
Unwrought (b)	740	723	848	1 042	1 018
Uganda					
Unwrought (a)	225	167	33	...	...
Canada					
Ores & concentrates (b)(c)	2 125	756	3 449	6 048	6 145
Unwrought	7 272	802	12 703	3 486	2 677
Costa Rica					
Unwrought (a)	2 371	921	3 205	4 364	...
Honduras					
Unwrought	323	427	692	661	1 631
Jamaica					
Unwrought	569	695	749	...	...
Nicaragua					
Unwrought	1 193	292	...	...	...
Trinidad & Tobago					
Unwrought	564	224	484	462	1 096

Imports of Zinc

Country	1974	1975	1976	1977	1978
USA					
Ore (c)	217 763	131 350	88 101	111 410	188 003
Unwrought (a)	499 885	345 257	648 198	523 589	617 863
Scrap	2 194	1 286	1 635	9 188	3 310
Argentina					
Unwrought	960	4 083	3 258	...	...
Brazil					
Unwrought	49 854	42 562	50 429	58 455	67 122
Unwrought alloys	13 615	7 602	3 663	24	189
Chile					
Unwrought	4 145	...	...	...	...
Colombia					
Unwrought (a)	...	...	11 630	...	...
Uruguay					
Unwrought	925	10 876	1 367	1 620	...
Venezuela					
Unwrought	10 947	8 267	...	...	...
Unwrought alloys	1 450	1 532	...	...	...
Burma					
Unwrought (a)	114	...	...	...	...
Cyprus					
Unwrought (a)	1	33	12	...	...
Hong Kong					
Unwrought	13 653	9 297	17 165	16 884	(a) 25 838
Scrap	13	7	93	5	87
India					
Ore & concentrates	10 321	23 079	38 493	...	...
Unwrought (d)	51 885	24 492	38 155	41 445	...
Unwrought alloys (d)	14 759	6 704	13 320	30 724	...
Scrap	465	1 126	590	...	...
Indonesia					
Unwrought (a)	16 623	18 079	28 206	36 645	44 617
Scrap	866	840	340	166	—
Iran (e)					
Unwrought	2 295	8 071	5 505	...	...
Israel (h)					
Unwrought	1 724	780	1 200	9 889	8 103
Japan					
Ore	1 215 879	946 272	986 053	962 984	936 586
Unwrought	23 814	22 181	28 123	28 918	32 088
Unwrought alloys	540	—	237	204	1 395
Scrap	144	117	316	43	149
Korea, Republic of					
Unwrought	18 362	3 105	5 961	15 080	11 900
Scrap	2 195	2 192	4 134	5 595	...
Malaysia (i)					
Ore	2 409	41	29	26	...
Unwrought	5 486	5 868	8 223	8 841	...
Unwrought alloys	745	748	1 095	759	...
Philippines					
Unwrought (a)	12 964	9 371	13 985	18 521	27 095
Singapore					
Unwrought	10 432	9 340	11 813	13 653	17 877
Scrap	...	108	396	483	403
Syria					
Unwrought (b)	141	315	489	479	...
Taiwan					
Unwrought	22 277	12 307	26 068	27 891	50 868
Scrap	1 446	1 425	2 156	6 341	7 826
Thailand					
Unwrought	23 085	17 820	19 470	29 301	...

Imports of Zinc

tonnes

Country	1974	1975	1976	1977	1978
Australia (f)					
Ores & concentrates	21 935	6 468	—	—	13
New Zealand (f)					
Unwrought (a)	19 760	21 485	15 498	23 344	...

Note: In this table the description 'unwrought' zinc corresponds to item 686.1 in the Standard International Trade Classification (Revised) and comprises blocks, pigs, slabs, etc

(a) Including alloys

(b) Including scrap

(c) Zn content

(d) Years ended 31 March following that stated

(e) Years ended 20 March following that stated

(f) Years ended 30 June of that stated

(g) Including semi-manufactures

(h) Figures may be incomplete as value only given in Israeli trade return for imports from some countries

(i) From 1975 includes Sabah and Sarawak

Production of Zirconium Minerals

Country	1974	1975	1976	1977	1978
South Africa (a)	11 978	11 594	11 252	16 825	...
USA	* 110 000	* 110 000	* 110 000	* 110 000	* 110 000
Brazil (b)	2 518	2 925	3 058	* 3 200	...
Korea, Republic of	40	* 20	...	—	—
Malaysia (c)	20 036	10 407	3 131	1 823	...
Sri Lanka	21	39	10	374	3 194
Thailand	2 002	383	55	* 50	...
Australia (d)	362 143	375 548	413 655	393 233	387 824
World total (Wt. of concs)	549 000	553 000	587 000	569 000	566 000

Note: Zirconium minerals are known to have been produced in other countries including China, India, Democratic Kampuchea, Nigeria, Soviet Union and Spain

(a) Baddeleyite concentrates

(b) Zircon and Baddeleyite

(c) Exports

(d) Zircon content of concentrates

Zirconium

Exports of Zirconium Minerals

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom	289	847	859	1 144	602
Germany, Federal Republic of	2 270	4 177	3 791	7 100	6 885
South Africa (b)	6 256	4 102	3 319	* 3 000	* 16 000
USA	20 321	18 395	10 353	13 608	7 505
Malaysia (a)	20 036	10 407	3 131	1 823	...
Thailand	840	50	—	1	...
Australia	384 478	299 336	344 536	327 721	391 275

(a) From 1975 includes Sabah and Sarawak

(b) From 1977, IGS estimates, based on known imports into certain countries

Imports of Zirconium Minerals

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom	36 106	34 654	21 809	33 655	43 015
France	42 114	34 721	27 822	31 549	38 787
Germany, Federal Republic of	23 552	24 761	(b) 41 674	29 456	36 817
Italy	32 947	34 530	44 448	42 508	42 209
Spain	...	9 249	10 393	9 720	20 991
Sweden	720	841	943	665	981
Turkey	17	37	121	93	...
South Africa	41	49	232	129	...
USA	56 702	36 473	58 643	59 152	82 562
Argentina	20	108	10	...	...
Brazil	7 891	6 903	10 864	7 694	11 193
Chile	58	...	...	...	...
Japan	119 469	85 389	112 925	68 040	89 729
Korea, Republic of	477	180	536	627	...
Malaysia (a)	492	206	49	48	...
Singapore	126	31	35	107	155

(a) From 1975 includes Sabah and Sarawak

(b) Including molybdenum ore

Production of Beryl

tonnes

Country	1974	1975	1976	1977	1978
Portugal	15	25	—	—	0
Soviet Union	* 1 500	* 1 600	* 1 650	* 1 700	* 1 750
Angola	91	30	—	—	—
Rwanda	59	18	46	68	80
South Africa	2	3	3	3	4
Uganda	54	* 55	* 55	* 45	...
Zambia	* 200	* 200	...	—	—
Zimbabwe	* 60	* 60	* 60	* 60	* 40
Argentina	269	167	112	103	75
Brazil (a)	640	646	369	450	739

Production of Borates (b)

tonnes

Country	1974	1975	1976	1977	1978
Soviet Union	* 315 000	* 318 000	* 227 000	* 227 000	* 227 000
Turkey	1 038 588	970 951	911 800	1 099 400	* 1 100 000
USA (c)	1 075 000	1 063 000	1 130 000	1 333 000	1 410 000
Argentina	77 989	76 629	80 851	96 000	* 100 000

Production of Germanium (j)

tonnes (metal content)

Country	1974	1975	1976	1977	1978
Soviet Union	* 9	* 10	* 14	* 14	* 14
Namibia	* 9	* 9	* 9	...	...
Zaire	62	12	...	...	...
USA (f)	* 16	* 14	* 16	* 16	* 16
Japan	17	15	16	13	11

Production of Primary Magnesium Metal

tonnes

Country	1974	1975	1976	1977	1978
France	6 939	7 532	8 035	8 683	8 500
Italy	7 431	6 344	7 033	7 286	7 729
Norway	39 795	38 337	38 808	38 165	39 150
Soviet Union	* 60 000	* 60 000	* 63 000	* 65 000	* 70 000
Yugoslavia	—	—	—	—	* 2 000
Canada	5 956	3 826	6 092	7 633	8 269
USA	* 123 000	* 109 000	* 109 000	* 114 000	* 136 000
China	* 1 000	* 1 000	* 1 000	* 1 000	* 1 000
India	—	—	30	107	23
Japan	8 659	8 700	11 200	9 400	11 200

Production of Nepheline Syenite (e)

tonnes

Country	1974	1975	1976	1977	1978
Norway	211 982	200 853	216 607	210 012	232 271
Canada	559 986	468 427	540 121	574 558	579 000

Production of Perlite (k)

tonnes

Country	1974	1975	1976	1977	1978
Italy (k)	...	...	...	...	...
Greece	213 017	163 391	228 081	358 153	224 000
Hungary	93 000	72 040	96 180	103 270	92 630
Soviet Union (k)	...	...	...	...	...
Turkey	15 503	10 527	24 546	30 000	26 861
Mexico	12 136	19 066	14 555	24 315	...
USA	613 000	640 000	660 000	790 000	807 000
Japan (k)	...	...	...	...	...
Philippines	1 131	665	1 649	1 864	...
Australia	2 061	3 447	3 448	2 115	...
New Zealand	465	1 500	1 500	1 000	558

Production of Selenium Metal (i)

tonnes

Country	1974	1975	1976	1977	1978
Belgium (a)	75	40	72	167	157
Finland	10	8	10	12	17
Sweden	48	67	70	80	70
Yugoslavia	40	43	45	50	* 45
Canada (f)	334	342	226	320	* 250
Mexico	50	58	58	50	* 50
USA	292	162	182	227	231
Chile	18	12	14	16	* 16
Peru	8	7	9	10	* 18
Japan	334	417	460	456	* 454

Production of Strontium minerals

tonnes

Country	1974	1975	1976	1977	1978
United Kingdom	2 440	1 934	5 365	5 142	4 324
Italy	750	* 670	* 670	* 670	570
Spain	7 480	7 040	6 600	9 680	7 000
Algeria	200	4 300	6 500	* 4 800	* 5 000
Canada	22 988	10 000	3 884	—	—
Mexico	29 545	14 722	22 157	45 633	30 750
Argentina (g)	300	1 467	2 054	839	* 1 000
Iran (m)	* 300	* 300	* 200	...	...
Pakistan (n)	196	994	957	* 270	* 500

Production of Tellurium Metal (l)

tonnes

Country	1974	1975	1976	1977	1978
Canada (f)	63	42	53	37	* 30
USA	87	59	* 60	* 70	* 70
Peru	36	21	12	18	15
Japan	26	33	23	* 70	* 75

Production of Uranium (h)

tonnes (metal content)

Country	1974	1975	1976	1977	1978
France	1 716	1 854	2 111	2 236	2 561
Portugal	92	115	101	111	...
Spain	62	191	193	163	...
Gabon	770	930	965	907	1 022
Niger	1 120	1 400	1 460	1 441	2 062
South Africa	2 712	2 488	2 788	3 368	3 975
Canada	3 689	4 679	5 438	5 787	8 005
USA	8 868	8 923	9 770	11 385	...
Argentina	32	32	174	157	* 135
Australia	...	...	359	356	516

Production of Vermiculite

tonnes

Country	1974	1975	1976	1977	1978
Kenya	1 683	7 483	3 587	4 320	1 893
South Africa	182 613	207 529	222 077	165 419	209 093
Tanzania	20	* 20	* 20	* 20	...
USA (c)	309 000	299 000	276 000	326 000	306 000
Argentina	3 825	3 412	4 098	4 173	...
Brazil	6	800	946	* 1 100	...
India	2 895	2 245	3 435	2 878	1 806
Australia	225	268	716	—	...

Production of Wollastonite (d)

tonnes

Country	1974	1975	1976	1977	1978
Finland	9 118	13 091	6 165	8 900	...
Kenya	100	60	120	300	102
Mexico	1 984	543	1 143	692	...
USA	* 54 000	* 46 000	* 68 000	* 63 000	...
India	954	1 102	4 541	3 330	1 964

(a) Exports

(b) Borates are also known to have been produced in Federal Republic of Germany, Iran and China

(c) Sold or used by producers

(d) Wollastonite is also known to have been produced in Turkey

(e) Large quantities of nepheline syenite are known to be produced in the Soviet Union

(f) Includes production of secondary metal

(g) May contain unbeneficiated material

(h) Uranium is also known to have been produced in other countries including China, Federal Republic of Germany, Finland, India, Italy, Mozambique, Soviet Union, and Sweden

(i) Other countries known to produce selenium metal include Australia, Federal Republic of Germany, Soviet Union and possibly Zambia since 1976

(j) Belgium-Luxembourg and the Federal Republic of Germany are known to refine sizeable amounts of germanium from imported or domestic material. Other countries known to produce smaller amounts include United Kingdom, France, Italy and Yugoslavia

(k) Perlite is also known to be produced in Italy (about 100,000 tonnes a year), Soviet Union (in excess of 300,000 tonnes a year), Japan (60-70,000 tonnes a year), Bulgaria, Iceland, South Africa and Yugoslavia

(l) Other countries known to produce tellurium metal include Australia, Belgium, Federal Republic of Germany and Soviet Union

(m) Years ended 20 March following that stated

(n) Years ended 30 June of that stated

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