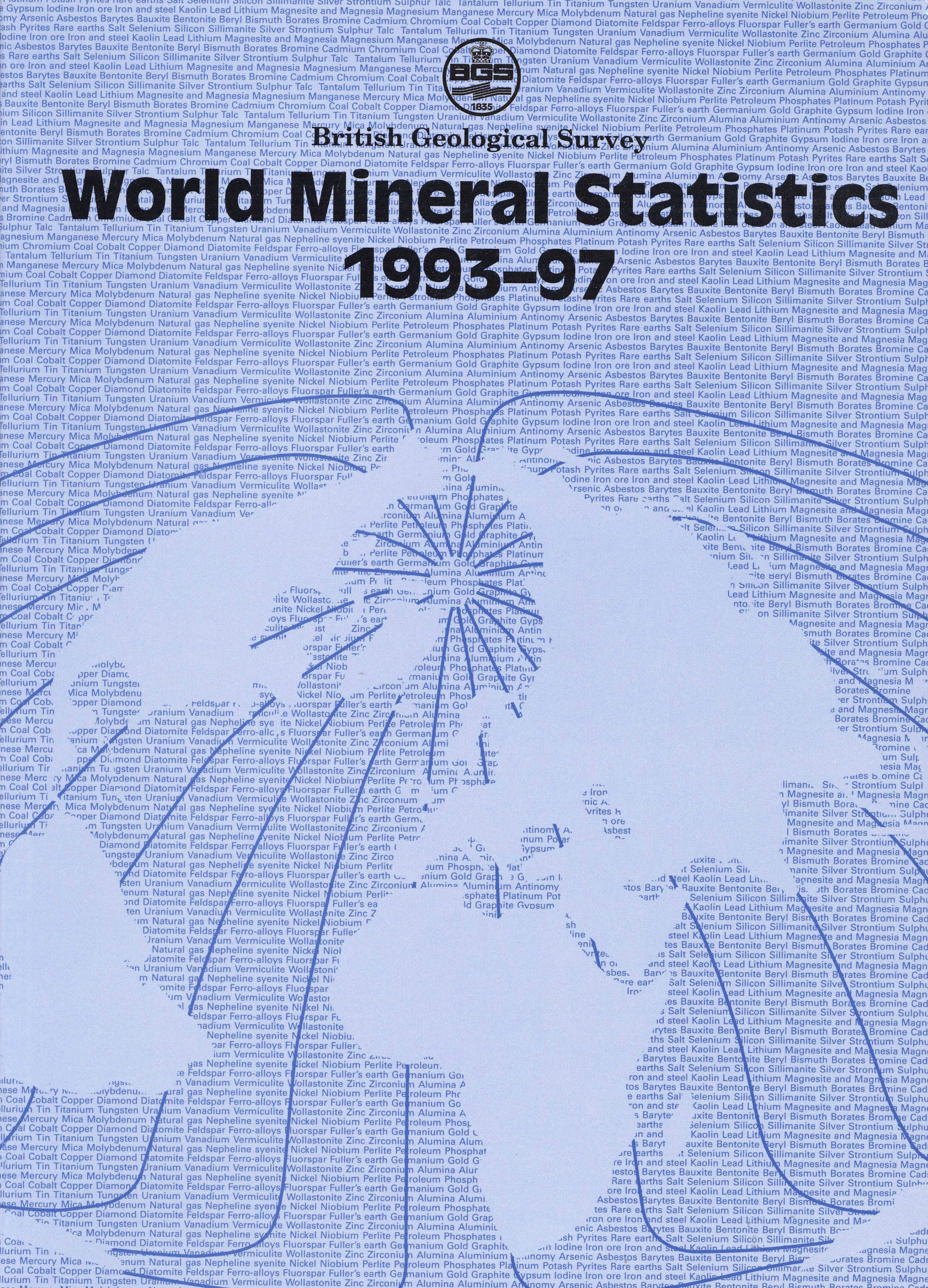




British Geological Survey

World Mineral Statistics

1993-97



BRITISH GEOLOGICAL SURVEY

WORLD MINERAL STATISTICS 1993–97

Production: Exports: Imports

Compiled by L E Stockwell, J A Hillier,
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First Published 1999

BRITISH GEOLOGICAL SURVEY

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The British Geological Survey carries out the geological survey of Great Britain and Northern Ireland (the latter as an agency service for the government of Northern Ireland), and of the surrounding continental shelf, as well as its basic research projects. It also undertakes programmes of British technical aid in geology in developing countries as arranged by the Department for International Development.

The British Geological Survey is a component body of the Natural Environment Research Council.

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Bibliographical reference

BRITISH GEOLOGICAL SURVEY. 1999. *World mineral statistics 1993-97: production: exports: imports.* (Keyworth, Nottingham: British Geological Survey.)

Compilers

Staff of the Minerals Group
British Geological Survey, Keyworth

Printed by Saxon Graphics Ltd, Derby

ISBN 0 85272 329 6

PREFACE

This volume is the twenty-first in the series *World Mineral Statistics*.

The publication is compiled from a more comprehensive database maintained by the Minerals Group of the British Geological Survey. Although it will not be apparent to users of the book the database has been mounted on new software during the past year. This has enhanced our capacity to provide, at any time, special reports tailored to users' needs. For example both production and trade data can be broken down by commodity, sub-commodity or country and provided in either hard copy or digital form. Data on consumption are not routinely compiled but it is possible to calculate apparent consumption (i.e. ignoring stock changes) of many commodities from the published production and trade data.

Most minerals and metals continued to show an upward trend in production in 1997. While growth in the output of steel, and thus also of steel-alloying metals, has been relatively slow over the five-year period illustrated by the figures, that of copper, silver, nickel and cobalt has been strong. Copper growth in particular reflects the fact that the declining intensity of its use in many applications has been more than offset by the great expansion of the world-wide market for electronic consumer goods. Industrial minerals production has also continued to grow with the exception of certain minerals, notably asbestos and fluorspar, which have been affected by environmental regulation.

Production figures for coal, oil and natural gas indicate that output of all fossil fuels increased by 7% to 8% between 1993 and 1997. Petroleum achieved a new all-time high while natural gas maintained its record level of 1996. World coal production continued its recovery from the low point of 1993, although the European Union went against this trend with a total production that was 4% lower than that for 1996. Imports of bituminous coal increased in the majority of EU countries. Among coal exporting countries it is noteworthy that Indonesia has now risen to fourth place, after the USA, Australia and South Africa.

The world maps in this edition have been completely revised and now show individual mines or mining districts, classified on the basis of either three or four size categories. It is intended that these new maps should give a clearer impression of the actual sources of the minerals concerned. Another minor change in this edition is that all European countries are presented in one single alphabetically-ordered list.

Trade information for the latest year covered by the book is necessarily incomplete since the tables are prepared before many countries have produced their national statistics of trade. Trade data for some major trading countries are reconstructed by searching the official publications of their trading partners. Such reconstructed figures are shown as estimates in the tables.

In each successive volume account is taken of revisions and information received after the publication of the previous issue so that data for every year are as up to date as is practicable. The objective remains to present the latest complete production information obtained from official bodies in individual countries, while trade data are obtained both from national statistical offices and from compilations made by other organisations. The co-operation afforded to the British Geological Survey by numerous national and international organisations is gratefully acknowledged.

A cause for concern is the number of countries that will not now release certain data on the grounds of commercial confidentiality. This appears to be done to comply with new regulations, apparently regardless of whether commercial entities wish to withhold the information. In the past year, official organisations in six EU member countries have, with regret, informed us of such a position, although in some such cases a direct approach to the companies concerned resulted in the ready provision of the figures requested. If sustainable development is to be achieved in the field of minerals the foundation of it must be the provision of accurate and timely statistics. The future availability of such information must be in question if the trend towards secrecy continues.

The British Geological Survey continues to provide a reliable, comprehensive and continuous set of data covering most of the minerals that enter international trade. We hope to continue this statistical service at its present high standard with the continued vital support of the Department of Trade and Industry whose role in helping to fund the compilation of the World Mineral Statistics Database is acknowledged.

We would welcome any criticisms and suggestions that might help us to meet your changing needs, particularly with respect to the format in which the data are made available.

David A. Falvey, PhD
Director

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Keyworth
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30 March 1999

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Maps of world production

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Bauxite	Manganese
Chromium	Nickel
Copper	Platinum group elements
Iron ore	Tin

Graphs of world production 1981-97

Bauxite	Manganese
Barytes	Nickel
Chromium	Petroleum
Coal	Natural Gas
Copper	Phosphate Rock
Diamond	Platinum Group Metals
Gold	Salt
Gypsum	Tin
Iron Ore	Titanium
Lead	Zinc

EXPLANATORY NOTES

Coverage

World Mineral Statistics covers the majority of economically important, and internationally traded, mineral commodities. For each commodity constant efforts are made to ensure that as many producing and trading countries as possible are reported and that trade data cover all major traded forms. For some commodities, where statistics on production and trade are not publicly available, estimates are made. Users of this compilation are advised that more statistical information than can be included in a publication of this nature is held in the Minerals Group files and is available for consultation. Historical data (1913-1970) can be obtained from the predecessor to this series entitled the *Statistical Summary of the Mineral Industry*.

Arrangement of countries

Countries are ordered alphabetically in geographical groupings as follows:

- Europe, 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

Metals Mine production of many metals is expressed in terms of metal content. This is clearly indicated at the head of the table, adjacent to the unit used. For aluminium, cobalt, copper, iron, lead, nickel, tin and zinc, mine production and metal production are shown in separate tables. Unless otherwise specified, metal production statistics relate to metal recovered from both domestic or imported materials, whether primary or secondary, but exclude remelted material.

Trade

South Africa Import data are taken from the trade statistics of the common customs area, which includes Botswana, Lesotho, Namibia, South Africa and Swaziland, and relate to this area as a whole. Where separate data are available for any of these countries they have also been shown even though this may result in some double counting.

Export data are taken from returns furnished by producers to the Department of Mineral and Energy Affairs, and may be shipments rather than actual exports.

Estimates for other South Africa exports, based on reconstruction from importing countries, may include material originating in any of the countries of the common customs area and so involve some double counting on tables where these are listed separately.

USA 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 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. The fact that a country is not shown as trading in a particular commodity does not necessarily imply that there is no trade in that item. The commodity may not be separately identified in the available trade statistics or may not be traded in significant quantities.

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 (Revision 3) 689.1, 8 & 9, and 699.8 & 9 (Antimony, Bismuth, Cadmium, Chromium, Cobalt, Manganese, Molybdenum, Tantalum–Niobium, Titanium, Tungsten, Vanadium and Zirconium) 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 British Geological Survey expresses its grateful acknowledgement for the information made available, whether in published form or provided by direct correspondence.

Among the numerous overseas government agencies which have provided valuable information, particular acknowledgement is made to the United States Geological Survey and the Mines Departments of other countries whose regular statements, yearbooks and other reports are worthy of direct consultations by readers in search of detail.

Specialist commodity organisations which have kindly allowed information to be reproduced include the International Copper Study Group, the International Lead and Zinc Study Group, the International Nickel Study Group, the International Fertilizer Industry Association Ltd, the UN Food and Agriculture Organization and the UNCTAD. In a few instances, information on specific commodities has been obtained directly from company sources. The co-operation of the International Consulting Group for Non-Ferrous Metals is also gratefully acknowledged.

Supplementary information is also obtained from publications dealing with a wider range of commodities such as *Annales des Mines*, *Realites Industrielles and Annuaire Statistique*; Metallgesellschaft AG, *Metallstatistik*; Mining Journal, *Mining Annual Review*; Enirisorse, *Metalli Non Ferrosi*; World Bureau of Metal Statistics, *World Metal Statistics*; and publications of the United Nations and its agencies.

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 35.3147 = cubic feet
 1 tonne of crude petroleum equals on average 7 barrels of crude petroleum.
 1 flask mercury = 34.5 kilograms
 1 metric ton unit = 10 kilograms

Conversion of national currencies to pounds sterling has been made using the annual 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
BGS	British Geological Survey
S.I.T.C.	Standard International Trade Classification

STATISTICAL TABLES

Production of Bauxite

tonnes

Country	1993	1994	1995	1996	1997
Albania	...	200	1 548	3 380	4 453
Bosnia & Herzegovina	*100 000	*75 000	*75 000	*75 000	*75 000
Croatia	1 690	1 302	1 000	—	—
France	151 000	128 000	131 000	165 000	*100 000
Greece	2 205 498	2 196 371	2 200 215	2 451 734	1 875 900
Hungary	1 561 300	835 700	1 017 600	1 055 777	742 675
Italy	90 100	23 400	11 200	—	—
Romania	186 600	184 100	175 000	175 200	127 500
Russia	4 260 000	3 633 000	3 706 000	3 928 000	3 991 000
Turkey	594 600	373 381	232 278	544 513	412 800
Yugoslavia, Federal Republic of	102 000	—	60 000	323 000	470 000
Ghana	423 700	426 100	513 000	473 200	519 200
Guinea	17 044 305	14 833 400	17 733 452	18 492 600	19 250 000
Mozambique	5 990	9 620	10 663	11 459	8 218
Sierra Leone	944 900	934 700	...	32 846	99 547
Jamaica	11 184 000	11 564 000	10 857 000	11 829 000	11 987 000
USA (b)	*55 000	*100 000	*100 000	*100 000	*100 000
Brazil (c)	10 747 535	9 803 297	11 616 402	12 258 000	12 500 000
Guyana	2 083 200	1 991 132	2 028 080	2 475 459	2 467 304
Suriname	3 156 080	3 803 103	3 530 210	3 702 527	3 877 183
Venezuela	2 530 317	4 772 877	5 020 000	4 806 915	5 083 933
China	6 468 200	6 621 300	8 255 500	8 878 800	*9 000 000
India	5 276 800	4 809 100	5 240 000	5 757 500	5 800 300
Indonesia	1 320 418	1 342 402	899 035	841 976	808 749
Iran	*50 000	*50 000	60 000	140 000	145 000
Kazakhstan	*1 700 000	2 584 000	3 318 500	3 345 900	3 416 000
Malaysia	68 824	161 919	184 433	218 680	279 066
Pakistan (a)	4 845	3 785	5 898	3 590	4 934
Australia	41 320 000	42 159 000	42 655 000	43 063 000	44 465 000
World Total	113 600 000	113 400 000	119 600 000	125 200 000	127 600 000

Note(s):-

(a) Years ended 30 June of that stated

(b) Dried bauxite equivalent

(c) Including beneficiated and direct shipping ore

Production of Alumina

tonnes (Al₂O₃ content)

Country	1993	1994	1995	1996	1997
Azerbaijan	*206 000	70 000	27 000	—	*18 000
Bosnia & Herzegovina	*50 000	*50 000	*50 000	*50 000	*50 000
Croatia	25 956	25 993	...	—	—
France	362 000	338 400	425 300	352 300	385 000
Germany	840 038	823 638	750 044	755 333	737 815
Greece	614 870	548 000	597 620	601 580	584 000
Hungary	402 707	120 156	145 735	208 061	76 370
Irish Republic	1 103 000	1 167 400	1 185 600	1 233 500	1 278 800
Italy	549 100	556 900	560 100	575 800	*597 000
Romania	293 174	301 576	322 774	261 000	281 636
Russia	*2 500 000	2 254 000	*2 300 000	2 148 000	2 379 800
Slovakia	*90 000	*90 000	65 000	56 000	46 800
Spain	692 200	699 700	699 700	715 600	725 700
Turkey	169 195	155 300	171 978	159 298	164 333
Ukraine	1 236 000	1 081 000	1 198 000	1 161 000	1 074 500
United Kingdom	120 000	110 000	108 000	99 000	*100 000
Yugoslavia, Federal Republic of	12 000	—	35 312	105 000	160 000
Guinea	655 543	640 234	616 028	640 000	650 000
Canada	1 182 000	1 170 000	1 064 000	1 060 000	1 165 000
Jamaica	2 989 360	3 221 222	3 030 167	3 199 513	3 394 177
USA	*5 290 000	*4 860 000	*4 533 000	*4 700 000	*5 093 000
Brazil	1 853 200	1 867 500	2 142 900	2 759 000	3 088 000
Suriname	1 506 550	1 498 123	1 588 827	1 642 942	1 725 857
Venezuela	1 500 064	1 551 450	1 641 000	1 778 000	*1 800 000
China	1 827 255	1 846 900	2 222 700	2 493 500	3 063 400
India	1 489 500	1 455 800	1 672 000	1 706 000	*1 940 000
Japan	460 100	674 600	743 200	718 900	*720 000
Kazakhstan	*1 100 000	822 000	1 022 000	1 083 400	1 094 200
Korea, Republic of	—	—	—	*100 000	*100 000
Australia	12 598 000	12 819 000	13 147 000	13 348 000	13 385 000
World Total	41 700 000	40 800 000	42 100 000	43 700 000	45 900 000

Note(s):-

(1) Where possible figures in this table show the alumina equivalent (Al₂O₃) of total hydrate produced whether or not calcined

Production of Primary Aluminium

tonnes

Country	1993	1994	1995	1996	1997
Azerbaijan	*7 000	10 000	*11 000	—	—
Bosnia & Herzegovina	...	...	...	...	4 000
France	432 000	387 500	364 500	380 100	399 400
Germany	551 933	504 956	575 200	576 500	571 900
Greece	146 800	144 300	144 430	141 295	132 600
Hungary	27 876	29 600	34 900	33 500	*32 500
Iceland	94 480	99 294	100 101	102 096	122 900
Italy	155 600	175 600	177 800	184 400	187 700
Netherlands	228 300	230 100	216 000	227 000	231 800
Norway (a)	887 461	856 967	846 794	863 327	918 511
Poland	46 942	49 509	55 728	51 924	51 554
Romania	112 360	119 600	140 500	140 872	154 000
Russia	2 800 800	2 670 500	2 790 000	2 874 200	2 906 000
Slovakia	35 000	33 000	60 600	115 600	110 100
Slovenia	82 682	76 700	70 200	65 800	74 400
Spain	355 900	338 100	361 882	361 828	360 061
Sweden	108 040	108 823	92 797	98 974	98 965
Switzerland	36 439	24 171	20 726	26 594	27 339
Turkey	58 501	59 700	61 513	62 100	62 020
Ukraine	104 000	102 000	95 100	90 700	100 500
United Kingdom	239 099	231 223	237 899	239 963	247 675
Yugoslavia, Federal Republic of	36 000	10 600	26 000	51 100	80 600
Cameroon	86 500	86 100	79 300	82 300	90 900
Egypt (c)	178 477	188 464	*180 000	179 774	178 507
Ghana	174 100	140 700	135 400	137 000	151 600
Nigeria	...	...	...	...	2 000
South Africa	175 867	172 111	195 292	569 607	673 000
Canada	2 308 867	2 254 683	2 171 992	2 283 212	2 327 188
Mexico	—	—	10 413	61 458	66 356
USA	3 695 000	3 299 000	3 375 100	3 577 200	3 603 400
Argentina	170 593	173 371	183 113	183 942	186 330
Brazil	1 172 000	1 184 600	1 188 100	1 197 400	1 189 100
Suriname	30 112	26 706	26 667	26 036	23 128
Venezuela	574 626	592 718	626 642	634 900	640 800
Bahrain	450 000	451 903	453 883	461 245	489 915
China	1 255 400	1 498 300	1 869 700	1 896 200	2 046 300
Dubai	241 600	246 200	247 400	258 500	377 700
India	466 400	472 000	536 500	530 600	547 400
Indonesia	205 526	221 900	228 100	223 100	222 700
Iran (b)	109 190	120 814	114 879	77 535	*90 000
Japan	18 263	16 956	18 034	16 959	16 694
Tajikistan	*253 000	236 500	237 000	198 300	188 900
Australia	1 388 000	1 318 000	1 293 000	1 371 000	1 495 000
New Zealand	277 400	269 100	273 296	283 329	310 324
World Total	19 800 000	19 200 000	19 900 000	20 900 000	21 800 000

Note(s):-

- (a) May include some super purity aluminium
(b) Years ended 20 March following that stated
(c) Years ended 30 June of that stated

Exports of Bauxite, Alumina and Aluminium

tonnes

Country	1993	1994	1995	1996	1997
Austria					
Unwrought (a)	56 495	68 078	74 676	75 411	67 267
Scrap	43 532	38 895	31 550	42 049	40 028
Azerbaijan					
Unwrought (a) (f)	*6 800	*2 000	...	*100	...
Belarus					
Unwrought (a) (f)	*12 000	*49 600	*50 700	*13 100	*1 500
Scrap (f)	*400	*300	*4 900	*6 900	*1 200
Belgium-Luxembourg					
Bauxite	442	3 352	240	317	1 734
Alumina	714	5 314	3 436	3 105	1 817
Unwrought	3 269	5 619	5 059	1 210	2 644
Unwrought alloys	84 554	98 242	109 116	61 105	72 557
Scrap	102 231	120 351	106 312	112 141	147 630
Bulgaria					
Unwrought (a)	(f) *8 300	(f) *7 800	10 103	8 842	12 765
Scrap	(f) *1 000	(f) *1 800	87	(f) *1 200	2 738
Croatia					
Bauxite	1 105	2 934	4 917	1 916	12 800
Unwrought (a)	3 625	3 896	730	2 880	2 477
Czech Republic					
Unwrought (a)	(f) *26 000	27 597	22 900	24 600	37 126
Scrap	15 900	13 100	13 600	11 900	15 148
Denmark					
Unwrought	19 101	17 355	23 796	20 683	29 623
Scrap	26 353	31 212	36 403	32 107	36 642
Estonia					
Unwrought (a) (f)	*6 000	*1 100	*4 400	*2 300	*800
Scrap (f)	*7 300	*2 800	*12 300	*4 700	*6 400
Finland					
Unwrought (a)	33 135	28 092	29 500	29 937	33 577
France					
Bauxite	10 751	13 392	18 534	11 744	2 504
Alumina	95 211	128 904	170 358	114 149	106 756
Alumina hydrate	109 883	107 738	97 127	99 735	112 946
Unwrought	67 669	94 811	94 366	185 445	91 490
Unwrought alloys	177 688	117 169	109 903	97 180	135 365
Scrap	114 458	142 299	103 694	113 282	160 329
Germany					
Bauxite	34 097	29 164	30 232	26 552	27 655
Alumina	174 152	217 733	188 481	214 801	268 415
Alumina hydrate	246 006	322 482	344 761	325 010	368 389
Unwrought	38 712	47 273	52 307	18 859	34 928
Unwrought alloys	208 711	225 553	247 081	241 472	194 687
Scrap	317 008	382 685	458 092	414 210	545 771
Greece					
Bauxite	861 487	740 851	777 455	819 411	537 011
Alumina	240 695	290 431	344 875	344 821	297 238
Alumina hydrate	134 760	52 955	33 360	24 952	34 070
Unwrought (a)	72 851	52 975	49 311	44 389	46 869
Scrap	6 432	10 024	5 082	5 429	14 532
Hungary					
Bauxite	278 004	—	—	—	59 280
Alumina	354 501	168 996	246 590	302 069	207 067
Unwrought (a)	27 886	32 369	48 617	19 227	19 163
Scrap	10 495	17 170	16 331	15 121	16 717
Iceland					
Unwrought (a)	91 801	100 567	99 657	101 117	119 794
Irish Republic					
Bauxite	112 373	13 658	54 276	—	27
Alumina	923 197	1 213 876	1 197 651	1 346 339	1 407 607
Alumina hydrate	15 063	24 258	16 100	12 882	29 860
Unwrought (a)	1 941	3 855	5 864	5 101	5 992
Scrap	11 997	11 709	10 715	9 871	9 750

Exports of Bauxite, Alumina and Aluminium

tonnes

Country	1993	1994	1995	1996	1997
Italy					
Bauxite	23 430	4 304	2 798	17 528	2 623
Alumina	320 060	296 025	468 909	404 148	471 281
Alumina hydrate	8 167	15 631	14 835	6 650	5 868
Unwrought	5 205	1 702	2 595	5 267	5 077
Unwrought alloys	29 164	23 095	34 035	34 095	32 181
Scrap	10 730	11 782	11 402	11 800	18 640
Latvia					
Unwrought (a) (f)	*27 400	*15 400	*5 700	*20 100	*13 200
Scrap (f)	*4 700	*3 600	*9 100	*8 200	*9 300
Lithuania					
Unwrought	(b) (f) *18 100	(b) (f) *6 500	3 234	1 413	898
Macedonia					
Unwrought (a) (f)	*5 400	*9 100	*5 600	*9 900	...
Moldova					
Scrap	*2 000	2 100	7 700	*7 700	...
Netherlands					
Bauxite	11 024	33 962	55 669	38 979	30 675
Alumina	93 026	84 237	482 921	116 849	214 325
Alumina hydrate	1 871	25 795	47 616	45 365	20 135
Unwrought	135 095	151 923	300 327	221 196	204 479
Unwrought alloys	263 370	318 465	342 881	262 576	250 015
Scrap	139 651	151 639	170 453	240 552	191 254
Norway					
Unwrought	264 373	290 584	215 748	210 191	192 313
Unwrought alloys	523 949	575 781	594 825	665 488	723 003
Scrap	17 009	17 539	21 011	19 443	20 516
Poland					
Unwrought (a)	21 704	20 303	28 029	25 600	...
Scrap	9 641	2 398	1 370	4 000	...
Portugal					
Scrap	9 287	10 300	8 100	9 771	11 760
Romania					
Alumina	2 029	1 485	13 402	8 826	53 218
Unwrought	75 075	99 568	94 100	105 345	107 483
Russia					
Bauxite	*300 000	386 000	648 000	195 000	...
Alumina	...	11 138	25 650	102 845	303 637
Alumina hydrate	...	...	5 712	10 495	...
Unwrought (a)	2 146 582	2 088 608	2 251 174	2 618 442	2 708 823
Scrap (f)	*90 600	*93 800	*146 600	*177 800	*231 900
Slovakia					
Unwrought	...	22 853	25 287	97 882	110 155
Scrap	*5 000	6 000	6 700	3 700	(f) *2 200
Slovenia					
Alumina	12 636	4 142	7 100	6 448	11 362
Unwrought	44 599	47 317	42 100	47 750	55 970
Spain					
Bauxite	696	1 518	2 168	2 451	4 353
Alumina	211 821	278 592	219 463	191 242	194 869
Alumina hydrate	83 771	286 077	234 116	248 779	243 999
Unwrought	9 857	3 744	2 623	9 316	7 812
Unwrought alloys	159 360	142 302	111 852	127 963	122 911
Scrap	16 059	4 746	6 987	5 130	10 971
Sweden					
Alumina	3 031	4 076	287 255	457	454
Unwrought	5 787	9 053	1 605	993	1 309
Unwrought alloys	47 200	46 198	55 280	69 671	65 134
Scrap	27 343	36 470	44 211	53 979	44 156
Switzerland					
Alumina	490	562	491	617	655
Unwrought (a)	5 671	7 600	7 462	8 473	8 945
Scrap	60 011	63 786	60 994	69 525	75 180
Turkey					
Bauxite	48 650	30 160	15 350	21 000	110
Alumina	51 301	38 442	43 503	36 986	41 706
Unwrought (a)	4 672	7 189	12 113	15 357	1 433
Scrap	108	7 554	5 849	6 245	10 339

Exports of Bauxite, Alumina and Aluminium

tonnes

Country	1993	1994	1995	1996	1997
Ukraine					
Alumina	*800 000	*800 000	*800 000	*800 000	...
Unwrought (a)	(f) *50 500	80 307	101 065	102 561	134 698
Scrap	...	1 500	1 223	3 073	35 272
United Kingdom					
Bauxite (h)	16 407	23 174	39 975	(i) 28 437	(i) 27 653
Unwrought	10 705	79 578	132 349	35 582	129 429
Unwrought alloys	118 750	142 002	178 840	171 401	241 147
Scrap	93 759	97 813	106 581	102 086	104 231
Yugoslavia, Federal Republic of					
Bauxite	...	...	...	32 000	4 655
Unwrought	7 000	7 600	21 000	34 600	(a) 62 526
Unwrought alloys	*3 000	*3 000	*5 000	4 500	...
Cameroon					
Unwrought (a)	68 400	63 200	59 032	64 500	65 600
Egypt					
Unwrought (a)	106 924	80 700	81 900	96 880	89 400
Ghana					
Bauxite	364 642	451 802	526 335	383 370	...
Unwrought (a)	112 100	153 900	111 300	120 900	119 000
Guinea					
Bauxite	13 702 340	12 571 000	13 649 599	13 996 000	...
Alumina	655 544	645 387	616 026	619 258	640 000
Morocco					
Scrap	1 600	5 100	4 300	3 000	...
Mozambique					
Bauxite	5 990	9 709	10 663	8 380	8 218
Sierra Leone					
Bauxite	944 900	734 700	—	32 846	...
South Africa					
Unwrought (a)	85 993	56 928	52 146	533 148	566 800
Scrap (f)	*1 900	*3 500	*6 700	*11 900	*11 400
Canada					
Alumina	97 178	96 591	91 483	118 264	113 385
Unwrought	1 099 199	950 212	911 512	921 214	891 017
Unwrought alloys	747 944	927 324	807 208	899 444	995 840
Scrap	199 207	236 525	237 355	242 145	271 338
Cuba					
Scrap (e)	—	844	1 198	1 348	...
Jamaica					
Bauxite	3 916 723	3 649 419	3 546 893	3 917 478	3 641 131
Alumina	2 950 270	3 349 033	3 061 646	3 270 982	3 413 959
Mexico					
Scrap	44 751	68 285	103 423	70 604	...
USA					
Bauxite	104 333	144 086	121 140	150 550	92 146
of which, re-exports	14 205	14 854	11 103	11 247	7 552
Alumina	1 370 023	1 163 805	1 051 455	925 413	1 230 903
Alumina hydrate	53 355	68 206	64 452	68 831	83 249
Unwrought	262 974	178 828	185 692	217 371	128 505
Unwrought alloys	139 733	171 830	189 056	208 604	239 759
Scrap	213 838	309 830	431 291	326 197	343 322
Argentina					
Unwrought	60 313	50 683	78 837	75 213	(a) 113 500
Unwrought alloys	25 699	30 741	21 929	18 639	...
Brazil					
Bauxite	6 509 800	4 416 136	5 045 710	4 569 442	4 373 463
Alumina	196 579	299 834	258 596	443 400	*620 000
Unwrought	775 602	736 401	681 725	689 326	682 320
Unwrought alloys	28 043	41 439	21 284	19 647	33 854
Colombia					
Scrap	1 327	7 629	7 803	6 366	...
Guyana					
Bauxite	2 050 024	1 996 492	1 971 063	2 100 568	...

Exports of Bauxite, Alumina and Aluminium

tonnes

Country	1993	1994	1995	1996	1997
Suriname					
Alumina	1 378 716	1 416 160	*1 500 000	*1 500 000	...
Unwrought	28 700	25 200	26 300	26 600	27 500
Venezuela					
Alumina	307 383	293 230	409 782	165 822	387 652
Unwrought	375 744	435 591	390 488	296 975	276 517
Unwrought alloys	39 610	37 669	34 056	55 249	78 642
Scrap	20 487	23 140	24 194	23 645	14 427
Bahrain					
Unwrought (a)	333 369	307 924	363 600	330 646	352 900
China					
Bauxite	520 265	378 340	449 543	201 126	160 645
Alumina	70 790	38 518	9 984	6 072	12 773
Alumina hydrate	29 486	61 855	43 606	39 958	44 617
Unwrought (a)	67 984	130 902	191 310	110 052	248 462
Scrap	11 711	17 601	17 549	6 162	4 294
Dubai					
Unwrought (a)	242 600	254 800	247 000	264 200	378 500
Hong Kong					
Alumina (g)	32 003	26 463	12 251	6 160	4 010
Unwrought	68 630	83 948	234 053	286 897	219 451
of which, re-exports	68 630	83 121	234 030	286 298	219 309
Unwrought alloys (g)	15 362	22 360	19 286	29 379	33 220
Scrap	44 091	82 148	174 913	131 968	126 052
of which, re-exports	13 684	35 939	109 190	84 020	91 350
India					
Bauxite (c)	232 423	97 210	149 968	103 925	...
Alumina (c)	544 506	479 569	466 843	582 035	...
Unwrought (a) (c)	64 487	66 907	41 297	86 171	...
Indonesia					
Bauxite	1 211 649	1 029 549	798 812	702 160	715 010
Unwrought (a)	132 348	143 552	187 986	180 331	166 194
Iran					
Unwrought (a) (f)	*17 300	*13 300	*21 200	*6 200	...
Israel					
Unwrought (a) (f)	*1 800	*2 100	*2 200	*800	*1 000
Scrap (f)	*7 600	*7 900	*9 200	*10 800	*10 600
Japan					
Alumina	71 356	68 496	73 320	77 419	97 231
Alumina hydrate	130 624	128 261	161 148	157 624	125 913
Unwrought (a)	8 643	11 694	12 839	12 012	10 259
Scrap	6 248	9 729	13 016	12 273	21 433
Jordan					
Scrap	2 487	4 662	4 813	4 309	...
Kazakhstan					
Alumina	12 000	...	976 233	977 390	1 201 868
Unwrought (a) (f)	*2 400	*3 000	*5 700	*4 900	*11 800
Scrap (f)	*300	*300	*28 400	*26 000	*39 300
Korea, Dem. P.R. of					
Unwrought (a) (f)	*3 400	*2 300	*3 000	*2 700	*3 100
Korea, Republic of					
Unwrought (a)	20 305	59 384	92 297	42 938	97 342
Kyrgyzstan					
Scrap	...	(f) *3 600	12 460	3 832	(f) *3 800
Malaysia					
Bauxite	77 900	150 125	168 674	166 782	...
Scrap	5 706	5 053	7 900	3 200	...
Singapore					
Alumina	19 096	32 299	2 978	901	17 585
of which, re-exports	19 070	32 158	2 859	887	16 880
Unwrought	77 691	90 139	119 956	139 363	92 024
of which, re-exports	72 161	86 083	117 750	137 160	...
Scrap	25 121	49 259	29 797	33 852	39 758

Exports of Bauxite, Alumina and Aluminium

tonnes

Country	1993	1994	1995	1996	1997
Taiwan					
Alumina	823	1 079	889	308	572
Unwrought (a)	97 204	104 884	127 205	125 983	137 751
Scrap	7 133	14 790	24 165	14 135	13 744
Tajikistan					
Unwrought	270 775	204 509	201 970	193 698	182 936
Australia					
Bauxite	*4 800 000	*4 900 000	*5 000 000	*5 000 000	*5 000 000
Alumina	9 753 000	10 570 000	10 727 000	10 754 000	10 902 000
Unwrought (a)	1 056 000	948 000	957 000	1 068 000	1 156 000
Scrap	40 200	63 555	56 079	60 397	...
New Zealand					
Unwrought (a) (d)	223 698	239 687	236 687	250 909	273 212
Scrap (d)	11 744	10 945	11 152	9 667	8 252

Note(s):-

- (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 term 'unwrought' aluminium corresponds to item, 684.1 of the Standard International Trade Classification (Revision 3) and comprises ingots, blocks, unwrought bars, etc.
- (3) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

- (a) Including alloys
- (b) Is likely to include re-exports
- (c) Years ended 31 March following that stated
- (d) Years ended 30 June of that stated
- (e) Imports into the Netherlands
- (f) BGS estimates, based on known imports into certain countries
- (g) Re-exports
- (h) Including alumina
- (i) Excluding refractory grade bauxite

Imports of Bauxite, Alumina and Aluminium

tonnes

Country	1993	1994	1995	1996	1997
Austria					
Bauxite	43 421	38 057	10 000	23 000	27 949
Alumina	32 727	34 362	24 867	43 932	47 437
Alumina hydrate	7 025	5 949	5 225	5 069	5 175
Unwrought	96 783	216 976	76 220	95 343	104 678
Unwrought alloys	81 999	82 050	83 337	100 137	138 453
Scrap	45 305	54 275	80 406	81 446	110 492
Azerbaijan					
Bauxite	*420 000	*400 000	*362 000	*350 000	...
Belgium-Luxembourg					
Bauxite	31 692	34 123	39 861	15 151	13 107
Alumina	10 077	10 696	10 833	9 856	9 951
Alumina hydrate	84 647	80 927	34 426	36 950	52 207
Unwrought	236 740	264 296	242 095	233 773	256 907
Unwrought alloys	74 148	104 067	122 113	117 722	131 427
Scrap	149 550	192 251	155 009	118 351	126 851
Bulgaria					
Unwrought (a)	9 000	10 300	14 990	9 218	13 960
Croatia					
Bauxite	15 428	32 000	38 909	47 163	63 101
Alumina	1 074	1 900	2 662	2 815	2 096
Unwrought (a)	15 416	26 895	25 129	23 557	23 784
Scrap	2 077	1 300	535	1 344	851
Czech Republic					
Alumina	10 700	14 214	15 700	13 900	14 289
Alumina hydrate	11 100	11 000	11 800	11 500	11 307
Unwrought	31 900	42 000	47 100	46 300	44 777
Unwrought alloys	26 600	28 400	35 600	30 100	36 302
Scrap	10 600	10 300	19 400	12 900	25 500
Denmark					
Bauxite	2 299	1 811	3 458	3 589	8 783
Alumina	493	585	557	708	903
Alumina hydrate	4 638	3 247	6 016	12 864	15 279
Unwrought (a)	21 204	29 547	35 396	33 594	41 018
Scrap	21 030	24 325	20 295	18 515	22 118
Estonia					
Alumina	*2 000	*5 000	5 200	8 500	...
Scrap	*5 000	*5 000	*5 000	*5 000	...
Finland					
Bauxite	6 243	7 495	8 269	8 017	9 431
Alumina	5 781	3 537	1 669	3 366	2 353
Alumina hydrate	30 814	39 603	29 507	35 320	38 834
Unwrought	16 834	22 321	11 776	19 660	17 882
Unwrought alloys	8 868	16 435	11 247	13 377	15 647
Scrap	55 664	60 333	43 074	50 794	54 430
France					
Bauxite	974 777	1 216 638	1 516 018	1 696 143	1 457 723
Alumina	605 774	558 350	474 112	536 034	438 896
Alumina hydrate	39 797	79 476	49 884	31 908	40 599
Unwrought	258 859	272 287	284 776	276 778	230 911
Unwrought alloys	150 460	172 541	187 076	216 169	266 763
Scrap	142 553	144 503	160 128	134 542	160 004
Germany					
Bauxite	2 243 062	2 275 916	2 011 489	1 354 738	2 181 018
Alumina	563 200	485 303	520 287	620 149	785 291
Alumina hydrate	62 769	134 698	300 092	309 106	293 677
Unwrought	517 910	741 826	705 619	564 377	698 561
Unwrought alloys	346 934	461 246	635 236	544 379	701 649
Scrap	181 768	218 969	249 206	259 670	440 194
Greece					
Bauxite	73 716	71	268	415	3
Alumina	2 488	2 665	428	2 092	995
Unwrought (a)	19 321	56 689	79 668	71 457	119 450
Scrap	22 790	1 903	3 302	2 620	6 476
Hungary					
Bauxite	933	4 530	30 589	66 195	1 664
Unwrought (a)	95 285	130 669	134 309	134 248	170 157

Imports of Bauxite, Alumina and Aluminium

tonnes

Country	1993	1994	1995	1996	1997
Iceland					
Alumina	158 224	169 580	229 470	203 152	155 801
Irish Republic					
Bauxite	2 184 776	2 369 136	2 720 864	2 882 167	2 881 584
Alumina	3 571	3 358	3 769	3 855	7 753
Unwrought (a)	10 693	10 236	5 362	7 270	11 028
Italy					
Bauxite	1 706 723	2 076 101	1 816 302	2 079 363	1 949 915
Alumina	88 462	92 295	169 452	190 608	195 571
Alumina hydrate	65 588	82 792	85 267	119 762	124 986
Unwrought	230 036	293 952	276 341	236 144	266 744
Unwrought alloys	206 203	284 800	298 136	248 755	308 337
Scrap	211 168	252 659	244 116	266 187	352 300
Netherlands					
Bauxite	151 078	112 425	164 210	81 771	38 981
Alumina	470 794	608 171	746 542	727 089	708 510
Alumina hydrate	58 843	93 899	123 197	87 336	118 140
Unwrought	264 842	395 834	547 874	347 845	444 457
Unwrought alloys	106 238	86 084	130 324	116 454	92 056
Scrap	124 726	254 300	213 318	187 604	225 060
Norway					
Bauxite	25 614	39 545	32 747	22 549	31 402
Alumina	1 722 893	1 720 504	1 576 786	1 693 565	1 733 334
Alumina hydrate	28 060	30 214	35 638	37 136	41 186
Unwrought	70 590	147 605	104 380	122 265	155 421
Unwrought alloys	32 125	49 305	47 923	27 275	40 842
Scrap	35 666	68 505	60 576	63 038	68 723
Poland					
Bauxite	26 353	34 441	37 994	35 800	...
Alumina	86 225	108 811	138 198	138 300	...
Alumina hydrate	16 091	19 029	21 047	...	...
Unwrought (a)	42 547	38 258	45 141	49 529	...
Portugal					
Bauxite	2 555	1 526	2 000	1 941	3 094
Alumina	1 303	3 100	*3 900	5 324	8 427
Unwrought	6 616	(a) 67 797	16 700	9 335	4 305
Unwrought alloys	48 738	...	56 600	58 341	75 464
Romania					
Bauxite	521 045	540 716	660 493	546 446	...
Alumina	12 747	2 304	15 526	100 626	155 404
Russia					
Bauxite	2 792 300	3 331 060	2 848 476	1 249 488	1 020 999
Alumina	*1 470 000	*1 320 000	1 882 500	3 685 800	...
Alumina hydrate	*10 000	*21 000	22 500	48 700	...
Unwrought	...	...	240	25 422	32 016
Scrap	177	—	252	3 406	8 294
Slovakia					
Bauxite	287 990	191 000	138 000	132 000	...
Alumina	...	7 186	103 624	222 508	...
Unwrought (a)	12 092	11 983	19 658	14 876	...
Slovenia					
Bauxite	8 712	28 593	15 000	14 933	45 887
Alumina	189 747	140 833	145 100	159 993	184 114
Unwrought	21 214	27 204	25 200	29 570	41 750
Scrap	600	3 500	4 200	4 100	...
Spain					
Bauxite	1 586 305	2 007 139	2 252 329	2 457 173	2 392 221
Alumina	22 319	26 061	29 550	27 234	33 325
Alumina hydrate	18 111	28 022	18 333	12 678	18 318
Unwrought	68 307	106 820	78 681	82 781	125 442
Unwrought alloys	20 063	23 518	47 192	44 813	62 882
Scrap	23 922	34 370	37 628	41 781	45 697

Imports of Bauxite, Alumina and Aluminium

tonnes

Country	1993	1994	1995	1996	1997
Sweden					
Bauxite	54 145	44 808	327 613	46 890	32 526
Alumina	173 606	175 425	336 541	178 839	184 706
Alumina hydrate	57 245	57 318	...	...	...
Unwrought	31 145	102 606	36 624	44 818	54 652
Unwrought alloys	32 905	54 845	53 069	60 705	62 415
Scrap	5 944	8 682	7 823	6 167	6 721
Switzerland					
Alumina	73 151	59 658	55 731	69 092	66 803
Unwrought	63 520	105 402	102 184	87 994	108 871
Unwrought alloys	27 514	31 762	28 649	29 412	34 683
Scrap	4 053	6 646	8 359	11 434	13 034
Turkey					
Bauxite	48 296	65 475	28 723	34 837	25 680
Alumina	2 340	3 220	13 631	9 952	13 906
Unwrought	50 335	29 495	59 930	47 017	60 568
Unwrought alloys	70 552	38 007	41 646	53 979	81 767
Scrap	2 604	767	2 822	10 430	34 681
Ukraine					
Bauxite	...	(b) 2 180 540	2 678 119	3 097 062	2 045 854
Alumina	*4 000	*74 000	*50 000	*50 000	...
Unwrought (a)	...	(b) 3 096	2 240	...	...
United Kingdom					
Bauxite	327 832	334 988	412 320	(e) 317 885	(e) 322 215
Alumina	404 327	416 560	435 065	525 758	505 974
Alumina hydrate	39 388	59 387	64 263	80 501	77 572
Unwrought	479 556	374 244	281 063	539 672	310 882
Unwrought alloys	115 708	100 141	106 343	130 334	132 373
Scrap	48 350	61 782	70 788	83 913	107 567
Yugoslavia, Federal Republic of					
Alumina	*1 500	*1 500	*3 000	4 700	1 310
Unwrought (a)	4 200	6 100	6 500	1 300	4 170
Algeria					
Unwrought (a)	5 700	5 985	*6 000	5 573	...
Cameroon					
Alumina	*174 000	*170 000	196 411	128 667	...
Egypt					
Bauxite	...	134 854	241 000	400 670	...
Ghana					
Alumina	*260 000	*240 000	*240 000	*260 000	...
Kenya					
Alumina	2 137	2 691	2 781	2 601	3 893
Morocco					
Bauxite	2 306	9 937	18 164	19 944	...
Alumina	4 600	4 500	5 260	5 612	...
Unwrought (a)	2 844	2 460	3 234	1 599	...
Nigeria					
Unwrought (a)	*2 700	*2 200	*2 000	*2 000	...
South Africa					
Bauxite	8 811	15 693	10 966	13 403	13 542
Alumina	330 890	314 278	606 335	1 099 359	1 241 634
Alumina hydrate	15 125	17 313	13 373	15 458	14 279
Unwrought (a)	56	1 024	662	1 695	3 728
Scrap	1 367	1 549	2 259	2 188	1 719
Tunisia					
Alumina	102	54	383	295	...
Alumina hydrate	31 800	32 377	31 122	33 837	...
Unwrought	3 870	1 848	4 378	4 217	...
Canada					
Bauxite	2 860 528	2 929 411	2 623 621	2 574 206	3 134 947
Alumina	3 275 750	3 347 836	3 172 083	3 586 895	3 226 775
Unwrought	34 877	37 184	25 880	23 563	21 084
Unwrought alloys	74 203	104 392	108 017	115 973	154 537
Scrap	52 934	63 361	55 885	67 405	90 599
Costa Rica					
Unwrought (a)	7 206	6 620	7 891	7 448	...

Imports of Bauxite, Alumina and Aluminium

tonnes

Country	1993	1994	1995	1996	1997
El Salvador					
Unwrought (a)	2 241	2 888	2 824	4 169	4 783
Mexico					
Bauxite	36 334	18 950	41 768	24 621	...
Alumina	20 914	17 010	78 851	156 119	...
Alumina hydrate	45 025	48 223	57 260	63 696	...
Unwrought	84 370	59 310	31 432	39 109	...
Unwrought alloys	46 758	58 070	46 027	34 761	...
Scrap	14 821	20 907	20 415	25 647	...
Panama					
Unwrought (a)	1 645	1 694	1 627	1 690	...
USA					
Bauxite, crude dried	11 638 115	10 400 000	10 000 000	9 930 000	10 200 000
Bauxite, calcined	237 000	349 000	482 000	352 000	369 000
Alumina	3 969 901	3 282 111	4 050 263	4 380 845	4 042 664
Unwrought	1 089 509	1 565 047	1 158 007	1 057 773	1 153 740
Unwrought alloys	755 998	931 889	800 039	869 164	928 970
Scrap	308 537	389 502	419 211	401 579	453 568
Argentina					
Bauxite	38 229	40 168	42 980	36 162	34 292
Alumina	293 426	330 666	367 947	371 768	...
Alumina hydrate	11 050	18 253	6 424	17 556	...
Brazil					
Bauxite	112	5 132	225	1 100	39 800
Alumina	851 328	683 503	444 301	90 300	5 400
Unwrought	3 860	1 985	9 958	4 983	3 164
Unwrought alloys	2 633	5 306	5 291	3 610	2 544
Scrap	770	975	2 431	2 630	1 422
Chile					
Bauxite	8 471	4 147	7 000	5 403	2 174
Unwrought	14 154	14 253	15 651	13 891	15 529
Colombia					
Bauxite	4 649	4 114	5 584	9 987	...
Alumina	6 438	8 610	6 471	5 764	...
Unwrought	16 972	16 682	18 208	17 144	...
Unwrought alloys	13 038	18 620	16 127	18 149	...
Ecuador					
Unwrought (a)	4 766	8 106	9 513	6 675	...
Peru					
Bauxite	3 930	4 211	3 025	4 468	...
Alumina	1 885	1 690	2 933	2 738	...
Unwrought (a)	3 543	4 793	4 555	3 578	...
Uruguay					
Bauxite	2 800	1 124	4 048	5 438	7 796
Alumina	1 506	1 543	1 540	1 061	1 565
Unwrought	2 101	2 076	2 152	2 209	3 351
Venezuela					
Bauxite	1 657 613	26 883	233 018	14 168	...
Alumina	5 283	8 990	9 138	8 089	...
Alumina hydrate	570	390	404	326	...
Unwrought (a)	3 241	484	699	283	...
Abu Dhabi					
Scrap	7 979	10 019	5 380	4 947	5 729
Bahrain					
Alumina	943 653	864 417	899 849	844 625	838 089
China					
Bauxite	95 998	106 385	92 265	213 090	137 131
Alumina	972 328	1 909 584	1 193 967	1 155 545	1 096 375
Unwrought (a)	165 640	168 853	387 925	366 733	288 891
Scrap	61 307	109 336	357 198	299 914	335 898
Dubai					
Alumina	484 800	530 370	381 255	...	...

Imports of Bauxite, Alumina and Aluminium

tonnes

Country	1993	1994	1995	1996	1997
Hong Kong					
Bauxite	1 626	160	240	10 282	15 856
Alumina	34 604	33 382	23 341	9 882	4 112
Unwrought	105 582	122 841	338 619	434 806	443 478
Unwrought alloys	23 517	25 072	23 435	30 804	35 982
Scrap	24 507	73 033	202 480	138 277	103 941
India					
Alumina (c)	3 772	8 453	11 756	10 606	...
Unwrought (a) (c)	43 823	78 903	92 460	134 603	...
Scrap (c)	22 063	20 482	23 332	24 006	...
Indonesia					
Alumina	377 018	362 408	437 127	356 545	391 517
Alumina hydrate	77 919	74 678	69 786	57 401	68 233
Unwrought	36 416	62 546	96 261	75 813	84 402
Unwrought alloys	31 354	38 072	42 120	42 685	65 388
Iran					
Alumina	43 000	...	423	...	...
Unwrought (g)	15 576	*10 000	1 097	...	...
Israel					
Alumina (f)	*1 300	*700	*300	...	...
Unwrought (a)	29 330	41 268	40 000	...	...
Japan					
Bauxite	1 852 019	1 856 447	1 939 656	2 080 086	1 995 236
Alumina	30 279	42 117	31 571	39 380	36 543
Alumina hydrate	97 568	73 718	82 811	74 310	69 871
Unwrought	1 926 429	1 984 596	2 046 422	2 066 178	2 163 622
Unwrought alloys	677 923	654 810	756 359	692 675	863 913
Scrap	206 448	217 252	175 997	149 442	158 893
Jordan					
Alumina	12 913	12 118	12 736	18 646	...
Unwrought (a)	6 886	7 087	6 250	...	...
Korea, Dem. P.R. of					
Alumina (f)	*60 100	...	*9 400	...	...
Unwrought (a) (f)	*4 100	*2 700	*2 600	...	...
Korea, Republic of					
Bauxite	58 058	63 312	124 384	181 352	180 978
Alumina	41 894	48 576	51 964	70 004	63 390
Alumina hydrate	335 765	177 451	173 975	138 967	99 874
Unwrought	418 456	503 432	610 691	551 730	605 021
Unwrought alloys	162 887	185 893	172 731	168 149	166 314
Scrap	32 306	35 490	52 362	66 575	80 760
Malaysia					
Alumina	19 665	32 394	45 632	29 200	...
Unwrought	37 505	43 258	140 500	130 000	...
Unwrought alloys	51 113	62 265	61 700	73 400	...
Scrap	4 145	25 807	39 282	29 000	...
Pakistan					
Alumina	4 048	4 899	5 067	7 060	...
Unwrought (a) (d)	14 131	11 091	...	20 104	10 160
Scrap (d)	98 828	77 144	68 851	58 890	53 020
Philippines					
Bauxite	2 356	739	568	4 618	...
Alumina	8 661	6 748	6 960	6 520	...
Unwrought (a)	23 037	30 615	33 591	12 279	...
Saudi Arabia					
Bauxite	117 655	111 477	259 510	298 071	...
Unwrought (a)	6 036	50 405	1 220	5 024	...
Singapore					
Alumina	2 030	1 952	1 852	3 157	4 177
Alumina hydrate	60 557	45 879	67 903	38 052	28 789
Unwrought	110 042	120 453	198 713	99 334	102 586
Scrap	3 221	2 961	2 583	2 618	5 445

Imports of Bauxite, Alumina and Aluminium

tonnes

Country	1993	1994	1995	1996	1997
Taiwan					
Bauxite	48 599	61 832	83 727	70 906	79 577
Alumina	44 414	43 294	34 411	30 548	31 455
Alumina hydrate	32 073	41 159	45 648	54 596	42 949
Unwrought	231 111	291 623	339 043	301 137	355 481
Unwrought alloys	164 458	167 845	148 859	135 166	156 604
Scrap	113 868	168 744	137 859	132 510	212 883
Tajikistan					
Alumina	*504 000	*480 000	*460 000	*400 000	...
Thailand					
Bauxite	37 168	30 029	51 044	35 030	...
Alumina	7 513	8 769	10 682	12 525	...
Alumina hydrate	27 852	31 046	41 169	49 174	...
Unwrought	96 288	91 507	128 759	120 364	...
Unwrought alloys	85 336	93 040	125 399	100 444	...
Scrap	2 619	1 190	1 491	3 492	...
Australia					
Bauxite	21 000	12 000	17 000	6 000	15 000
Unwrought (a)	4 700	3 598	6 904	13 085	4 164
Scrap	3 000	3 700	5 300	3 838	...
New Zealand					
Bauxite (d)	3 159	2 561	2 208	...	1 618
Alumina (d)	444 586	506 587	533 648	...	537 032
Unwrought (a) (d)	2 888	5 064	12 291	*12 000	14 232
Scrap (d)	2 234	2 835	1 995	...	3 658

Note(s):-

- (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 term 'unwrought' aluminium corresponds to item 684.1 of the Standard International Trade Classification (Revision 3) and comprises ingots, blocks, unwrought bars, etc.
 - (3) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys
- (a) Including alloys
 - (b) Excludes intra-CIS trade
 - (c) Years ended 31 March following that stated
 - (d) Years ended 30 June of that stated
 - (e) Excluding refractory grade bauxite
 - (f) BGS estimates, based on known exports from certain countries
 - (g) Years ended 20 March following that stated

Mine Production of Antimony

tonnes (metal content)

Country	1993	1994	1995	1996	1997
Russia	4 000	3 000	3 000	2 500	*2 500
Turkey	111	75	416	285	...
Morocco	168	175	198	152	160
South Africa	4 111	4 534	5 537	5 137	3 415
Zimbabwe	51	35	20	—	—
Canada	673	643	684	1 773	776
Guatemala	90	219	384	880	*880
Mexico	1 494	1 758	1 783	983	1 909
USA	266	215	262	242	356
Bolivia	5 556	7 050	6 426	6 488	5 999
Peru (a)	219	385	230	305	242
China	60 000	91 000	125 000	128 900	*120 000
Kyrgyzstan	*2 500	*1 500	*1 500	*1 200	*1 200
Tajikistan	*2 000	*2 000	*1 500	*1 500	*1 500
Thailand	800	700	300	100	*100
Australia (b)	1 700	1 700	900	1 300	1 300
World Total	84 000	115 000	148 000	152 000	141 000

Note(s):-

- (1) This table includes antimony content of antimonial lead alloys
(2) In addition to the countries listed, Afghanistan, Hungary and Iran are believed to produce antimony

- (a) Including Sb content of antimonial lead plus Sb content of ores for export
(b) Including Sb content of lead and zinc concentrates

Exports of Antimony

tonnes

Country	1993	1994	1995	1996	1997
Belgium-Luxembourg					
Oxide (a)	*3 100	*3 400	*3 200	*4 100	*5 200
France					
Metal	277	288	709	387	74
Oxide	5 105	6 183	4 199	4 893	5 270
Germany					
Metal	72	90	58	84	32
Oxide	843	1 024	1 044	791	957
Italy					
Metal	7	6	73	10	9
Oxide	211	399	...	...	101
Netherlands					
Metal	183	312	424	303	434
Oxide	1 332	1 067	1 252	...	962
Russia					
Metal	(a) *2 600	(a) *900	(a) *600	239	(a) *500
Oxide	(a) *200	(a) *200	39	216	(a) *200
Spain					
Metal	459	131	36	44	85
Oxide	491	962	906	...	370
Sweden					
Ores & concentrates	712	2 902	...	...	...
Turkey					
Metal	—	117	146	4	2
United Kingdom					
Metal	135	79	116	146	116
Oxide (a)	*5 600	*5 500	*4 700	*3 800	*4 300
South Africa					
Ore (c)	0	60	1	1	...
Oxide (a)	*3 400	*3 600	*3 400	*3 700	*3 300
Canada					
Ores & concentrates	1 497	1 307	1 547	1 305	195
Mexico					
Ores & concentrates	186	182	224	...	...
Metal	4 423	1 532	1 934	906	...
Oxide	3 226	3 306	2 160	3 945	...
USA					
Ores & concentrates	1 456	2 546	2 834	2 350	3 798
Metal	365	1 543	1 715	583	774
Oxide	4 714	8 385	7 721	4 832	4 033
Bolivia					
Ore	1 422	5 565	3 068	1 859	1 385
Metal	*450	625	374	147	139
Oxide	5 439	6 283	5 609	5 504	5 968
Peru					
Metal	151	96	222	213	...
China					
Ores & concentrates	2 652	420	1 917	2 257	3 859
Metal	36 249	53 862	40 909	34 539	31 034
Oxide	17 367	17 731	20 668	20 040	28 329
Sulphide	2 518	13 229	6 101	6 769	13 850
Hong Kong					
Metal (b)	24 930	14 454	14 103	17 856	16 672
India					
Metal (e)	0	102	158	0	...
Japan					
Oxide	1 692	1 561	2 123	2 016	2 157
Korea, Republic of					
Metal	6	240	74	20	145
Oxide	167	543	1 073	1 154	1 335
Kyrgyzstan					
Metal (a)	...	*3 000	*3 400	*2 500	*2 000
Oxide (a)	...	*200	*400	*400	*700

Antimony

Exports of Antimony

tonnes

Country	1993	1994	1995	1996	1997
Taiwan					
Metal	4	43	26	57	655
Oxide	691	443	1 144	1 170	1 161
Thailand					
Metal	1 408	3 035	934	1 001	...
Australia					
Ores & concentrates (d)	2 872	...	...	...	...

Note(s):-

- (a) BGS estimates, based on known imports into certain countries
- (b) Re-exports
- (c) Sb content
- (d) Years ended 30 June of that stated
- (e) Years ended 31 March following that stated

Imports of Antimony

tonnes

Country	1993	1994	1995	1996	1997
Austria					
Metal	138	185	227	93	192
Oxide	195	237	148	202	176
Belgium-Luxembourg					
Ore	515	1 268	2 631	1 614	1 876
Metal	3 785	4 603	4 663	4 824	6 277
Oxide	797	1 189	687	675	772
Bulgaria					
Metal	(b) *100	(b) *600	60	98	103
Finland					
Oxide	173	183	215	254	...
France					
Ore	19 025	8 663	1 619	298	32
Metal	7 517	11 194	6 446	5 720	8 569
Oxide	729	890	821	832	1 008
Germany					
Metal	804	1 151	1 154	568	620
Oxide	4 955	6 182	5 428	5 352	5 064
Italy					
Metal	1 105	1 196	1 170	686	626
Oxide	2 917	3 967	...	...	4 078
Netherlands					
Metal	578	360	860	818	724
Oxide	2 497	2 023	2 696	...	2 510
Norway					
Metal	9	21	10	1	29
Oxide	195	213	175	152	347
Poland					
Metal	339	285	267	258	...
Oxide (b)	*100	*750	...	...	...
Portugal					
Metal	52	121	75	17	8
Romania					
Metal	(b) *400	(b) *2 700	(b) *700	(b) *60	71
Russia					
Metal (b)	*10 400	*25 300	*11 000	*300	*100
Spain					
Metal	1 058	1 528	1 940	1 179	1 130
Oxide	438	618	382	...	902
Sweden					
Metal	75	234	36	19	75
Oxide	426	424	...	...	543
Switzerland					
Ores & concentrates	—	14	10 820	3 092	1 416
Metal	16	7	29	35	0
Oxide	622	743	536	414	677
Ukraine					
Metal (b)	...	*280	*800	*1 100	...
United Kingdom					
Ore (b)	*150	...	...	...	...
Metal	2 441	4 302	3 358	2 171	2 808
Oxide	1 637	1 734	1 764	1 629	1 883
Yugoslavia, Federal Republic of					
Metal	...	...	...	91	100
South Africa					
Metal	282	608	292	317	162
Tunisia					
Metal	...	66	60	76	...
Canada					
Metal	209	354	424	381	433
Oxide	1 490	1 752	1 728	1 952	1 965
Mexico					
Ores & concentrates	1 816	2 253	1 991	2 635	...
Metal	559	1 034	218	493	...
Oxide	681	1 291	2 711	1 014	...

Antimony

Imports of Antimony

tonnes

Country	1993	1994	1995	1996	1997
USA					
Ore	1 720	7 616	6 136	1 630	1 513
Metal	14 364	18 619	17 015	18 293	14 975
Oxide	19 322	21 364	18 568	22 098	27 906
Brazil					
Ores & concentrates	422	452	461	...	...
Metal	657	470	573	*600	...
Oxide	264	624	530	...	...
Sulphide	54	35	39	...	...
Colombia					
Metal	117	30	80	43	...
Venezuela					
Metal	49	22	19	37	...
China					
Ores & concentrates	1 986	4 382	7 840	7 691	9 010
Metal	2 686	3 314	3 699	3 020	2 675
Oxide	353	154	859	544	502
Hong Kong					
Metal	23 446	13 819	13 813	15 088	11 948
India					
Metal (a)	1 244	1 325	1 020	1 487	...
Oxide (a)	85	101	133	115	...
Indonesia					
Metal	363	324	304	422	279
Oxide	216	235	371	337	392
Japan					
Ores & concentrates	4 496	3 312	4 135	2 593	1 077
Metal	5 059	6 639	6 799	6 796	8 796
Oxide	9 490	10 258	10 875	10 276	11 162
Sulphide	251	378	472	310	283
Korea, Republic of					
Metal	5 507	8 512	9 181	8 783	10 456
Oxide	711	1 015	529	1 053	690
Malaysia					
Metal	490	498	370	430	...
Pakistan					
Metal	38	150	245	106	...
Taiwan					
Metal	1 957	2 469	3 094	4 607	4 644
Oxide	2 254	2 491	3 118	3 465	5 516
Thailand					
Ores & concentrates	1 897	896	179	875	...
Oxide	430	348	486	638	...
Australia					
Metal	...	420	188	203	...
Oxide (c)	415	...	...	...	...

Note(s):-

- (a) Years ended 31 March following that stated
(b) BGS estimates, based on known exports from certain countries
(c) Years ended 30 June of that stated

Production of White Arsenic

tonnes

Country	1993	1994	1995	1996	1997
Belgium	*2 000	*2 000	*2 000	*2 000	*2 000
France	*3 000	*6 000	*5 000	*3 000	*2 500
Georgia	*1 000	*500	*400	*400	*400
Germany	*300	*300	*250	*250	*250
Russia	*2 000	*1 500	*1 500	*1 500	*1 500
Ghana	902	3 897	4 409	5 443	4 577
Namibia (a)	2 290	2 775	1 661	1 302	1 297
Canada	*250	*250	*250	*250	*250
Mexico (b)	5 870	5 861	4 778	3 883	3 959
Bolivia	663	341	362	255	282
Chile (c)	6 242	3 940	2 977	9 368	11 159
Peru	4 415	4 224	4 616	4 969	*3 500
China	*14 000	*18 000	*21 000	*15 000	*15 000
Japan	*40	*40	*40	*40	*40
Kazakhstan	*2 000	*1 500	*1 568	*1 500	*1 500
Philippines	*2 000	*2 000	*2 000	*2 000	*2 000

Note(s):-

- (1) This table includes calculated trioxide equivalent of arsenic metal produced except where this would involve double counting
(2) In addition to the countries listed, Argentina, Austria, former Czechoslovakia, Finland, Hungary, Spain, United Kingdom and former Yugoslavia are believed to produce arsenic

- (a) Output of Tsumeb Corp. only, trioxide equivalent of reported black arsenic
(b) Including trioxide equivalent of black arsenic
(c) Exports

Arsenic

Exports of Arsenic

tonnes

Country	1993	1994	1995	1996	1997
Belgium-Luxembourg					
Metallic arsenic	22	1	—	—	2
France					
Metallic arsenic	3 486	1 736	142	19	7
Germany					
Metallic arsenic	14	—	19	19	13
Italy					
Metallic arsenic	5	1	...	...	0
Netherlands					
Metallic arsenic	41	34	41	...	26
United Kingdom					
Metallic arsenic	10	11	12	5	3
Namibia					
White arsenic	2 474	2 246	2 133	1 550	1 044
USA					
Metallic arsenic	367	107	482	81	81
Bolivia					
White arsenic	663	341	362	255	282
Chile					
White arsenic	6 242	3 940	2 977	9 368	11 159
China					
White arsenic (a)	*12 500	*15 400	*16 000	*11 200	*16 100
Metallic arsenic	1 882	3 466	2 262	1 368	1 901
Kazakhstan					
White arsenic	...	...	1 044	3 279	1 062
Korea, Republic of					
White arsenic	128	97	34	—	...

Note(s):-

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

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

Imports of Arsenic

tonnes

Country	1993	1994	1995	1996	1997
Austria					
Metallic arsenic	14	21	20	18	18
Belgium-Luxembourg					
Metallic arsenic	97	90	...	32	20
France					
Metallic arsenic	85	94	259	79	76
Germany					
Metallic arsenic	...	8	—	42	19
Italy					
Metallic arsenic	166	82	...	...	76
Netherlands					
Metallic arsenic	58	75	93	...	...
Norway					
Metallic arsenic	24	20	553	36	36
Poland					
Metallic arsenic	62	42	70	35	...
Spain					
Metallic arsenic	58	104	124	...	73
Sweden					
Metallic arsenic	21	14	...	...	13
Turkey					
White arsenic	51	21	52	79	403
United Kingdom					
Metallic arsenic	268	120	62	83	122
USA					
White arsenic	27 514	26 791	29 037	27 969	29 996
Metallic arsenic	781	1 349	576	252	909
Brazil					
White arsenic	382	559	472	...	...
India					
White arsenic (b)	220	897	917	1 162	...
Metallic arsenic (b)	503	403	192	48	...
Indonesia					
White arsenic	140	134	140	98	—
Japan					
Metallic arsenic	40	28	35	0	78
Korea, Republic of					
Metallic arsenic	24	51	99	34	103
Taiwan					
White arsenic	607	278	0	40	0
Thailand					
Metallic arsenic	38	2	34	10	...
Australia					
White arsenic (a)	1 062	...	...	...	...
New Zealand					
Metallic arsenic (a)	8	29	28	...	11

Note(s):-

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

(a) Years ended 30 June of that stated

(b) Years ended 31 March following that stated

Asbestos

Production of Asbestos

tonnes

Country	1993	1994	1995	1996	1997
Bosnia & Herzegovina	*500	*300	—	—	—
Bulgaria	*500	*500	*100	*400	*1 000
Greece	56 948	55 502	75 003	80 213	72 000
Russia	866 677	*800 000	*800 000	*720 000	*700 000
Yugoslavia, Federal Republic of	314	498	497	509	765
Egypt (b)	603	514	392	552	776
South Africa					
Crocidolite	11 614	6 273	7 396	5 100	232
Chrysotile	92 380	88 511	81 246	56 700	49 754
Swaziland					
Chrysotile	28 360	26 720	28 574	26 014	25 888
Zimbabwe					
Chrysotile	156 881	151 905	169 487	165 494	144 959
Canada					
Chrysotile	516 618	523 545	524 392	475 130	469 000
USA (a)	13 704	10 100	9 290	9 550	6 890
Argentina	309	260	300	446	*400
Brazil	186 662	183 079	210 352	213 210	208 400
Colombia (c)	*150 000	128 800	122 717	137 277	136 700
China	307 000	407 100	447 000	440 500	*450 000
India					
Amphibole	42 699	26 778	25 065	23 215	*25 000
Iran	*4 500	*4 500	*4 500	*4 500	*4 500
Japan					
Chrysotile	2 636	2 306	2 399	2 269	...
Kazakhstan	*225 000	139 806	160 829	134 484	181 818
World Total	2 700 000	2 600 000	2 700 000	2 500 000	2 500 000

Note(s):-

(1) In addition to the countries listed, Democratic P.R. of Korea, and Romania are believed to produce asbestos

(a) Sold or used by producers

(b) Years ended 30 June of that stated

(c) Crude

Exports of Unmanufactured Asbestos

tonnes

Country	1993	1994	1995	1996	1997
Austria	320	—	—	—	19
Belgium-Luxembourg	1 290	136	94	11	263
France	17	83	224	14 053	164
Germany	140	3	—	—	0
Greece	47 309	58 156	67 991	74 043	51 720
Italy	156	8	22	51	42
Lithuania	...	(a) *3 600	5 173	4 656	7 113
Poland	1 996	529	948	200	...
Russia	74 926	80 268	76 820	33 411	98 831
Spain	4	...	142	625	19
United Kingdom	29	36	14	967	16
South Africa	110 080	92 099	87 976	60 005	38 209
Swaziland	*19 000	*19 000	*19 000	*20 000	...
Zimbabwe	105 407	129 289	174 558	152 091	143 169
Canada	510 386	530 394	509 575	504 069	430 288
USA	27 356	19 558	16 556	24 231	23 061
Brazil	76 062	75 631	71 747	78 294	63 165
China	3 049	3 402	3 465	9 392	13 553
India (b)	216	1 215	14	275	...
Japan	142	108	74	133	160
Kazakhstan	...	36 000	115 400	139 100	...
Kyrgyzstan (a)	*500	*1 700	*2 900	...	...
Saudi Arabia	4 000	4 515	8 400	*8 000	...
Singapore	405	10	125	33	22
of which, re-exports	404	6	102	22	5

Note(s):-

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

(b) Years ended 31 March following that stated

Imports of Unmanufactured Asbestos

tonnes

Country	1993	1994	1995	1996	1997
Albania	*1 500	*1 500	*1 000	*1 000	...
Austria	751	0	0	25	—
Belgium-Luxembourg	9 575	13 359	10 462	5 715	2 366
Croatia	3 783	...	3 045	2 363	3 033
Czech Republic	7 800	4 659	4 500	1 400	1 315
Denmark	544	450	345	225	125
Estonia	*1 000	*1 000	1 200	800	...
France	34 599	34 869	48 205	20 576	...
Germany	708	163	98	119	143
Greece	552	215	272	252	239
Hungary	5 264	5 995	3 356	5 249	5 759
Irish Republic	4 463	...	6 355	4 638	2 468
Italy	17 036	61	126	127	...
Latvia	...	600	2 200	1 200	...
Lithuania	...	...	718	6 343	10 819
Moldova	...	100	2 800	*2 000	...
Netherlands	385	—	—	...	...
Poland	22 273	33 473	31 315	15 700	...
Portugal	7 426	7 009	9 163	6 442	7 324
Romania	20 753	18 799	27 425	39 130	6 807
Russia	*10 000	17 800	41 400	31 500	...
Slovakia	1 898	2 600	*2 600	3 322	1 215
Slovenia	4 984	7 700	4 900	5 000	...
Spain	23 352	32 593	26 852	27 030	21 192
Sweden	298	315	298	158	...
Turkey	21 622	19 143	25 471	26 863	33 725
United Kingdom	9 681	11 467	10 157	7 099	4 820
Yugoslavia, Federal Republic of	(b) *3 500	(b) *2 800	...	...	1 365
Algeria	12 200	15 600	*10 000	7 102	...
Egypt	5 899	6 995	7 600	29 849	...
Morocco	4 800	4 751	5 023	5 643	...
Nigeria	*15 000	*15 000	*15 000	*10 000	...
Senegal	300	*300	*300	...	...
South Africa	8 984	9 734	7 891	9 133	9 571
Tunisia	8 779	6 490	7 297	6 081	...
Zambia	*3 000	*3 000	*3 000	*3 000	...
Zimbabwe	*2 500	*2 500	*1 500	*1 500	...
Canada	854	960	297	353	128
Cuba (b)	...	...	*3 000	*7 100	*6 600
El Salvador	268	1 297	398	398	999
Mexico	25 499	35 254	19 154	29 097	...
Panama	491	1 268	844	650	...
USA	30 840	25 800	21 941	30 449	20 922
Argentina	9 049	7 879	5 788	5 791	6 549
Bolivia	1 526	1 008	1 575	1 567	...
Brazil	34 590	32 805	43 524	31 765	38 941
Chile	10 406	10 151	11 666	9 349	9 198
Colombia	26 811	17 749	19 925	20 548	...
Ecuador	542	744	805	1 278	...
Peru	2 701	3 537	4 947	4 098	...
Uruguay	1 499	1 075	903	895	1 511
Venezuela	3 035	1 881	5 012	1 561	...
China	27 998	48 255	68 300	77 959	103 265
India (c)	73 861	85 536	91 909	84 378	...
Indonesia	39 124	43 610	50 231	48 331	41 845
Iran (a)	46 321	28 889	54 933	...	...
Israel	2 715	1 780	*2 200	...	...
Japan	209 846	199 836	191 475	177 869	176 021
Korea, Republic of	82 854	83 276	88 722	77 145	44 985
Kyrgyzstan	...	...	11 446	12 542	...
Malaysia	21 220	22 029	28 200	19 600	...
Oman	1 800	1 000	200	200	...
Pakistan	5 820	5 314	4 621	5 550	...
Philippines	2 108	2 807	2 904	1 770	...

Imports of Unmanufactured Asbestos

tonnes

Country	1993	1994	1995	1996	1997
Saudi Arabia	3 618	1 687	306	*500	...
Singapore	1 356	577	475	429	243
Sri Lanka	7 116	35 570	35	4 818	18
Syria	2 429	1 912	1 222	2 672	...
Taiwan	5 003	5 517	5 582	6 164	5 773
Thailand	148 164	163 927	181 692	190 205	...
United Arab Emirates	6 100	*6 000	*6 000	*6 000	...
Australia	1 700	1 700	1 500	1 366	...

Note(s):-

- (a) Years ended 20 March following that stated
- (b) BGS estimates, based on known exports from certain countries
- (c) Years ended 31 March following that stated

Barytes

Production of Barytes

tonnes

Country	1993	1994	1995	1996	1997
Belgium	*30 000	*30 000	*30 000	*30 000	*30 000
Bosnia & Herzegovina	*2 000	*1 000	*1 000	*500	...
Bulgaria	*140 000	...	...	120 000	...
Croatia	*1 500	*1 000	*1 000	*500	...
France	67 200	72 100	75 400	81 200	*80 000
Georgia	5 255	2 684	11 589	1 473	2 782
Germany	147 614	145 223	122 268	121 476	118 698
Greece	988	701	668	671	842
Irish Republic	53 000	—	—	—	—
Italy	52 697	57 856	44 393	42 795	26 300
Poland	8 500	9 100	6 100	6 200	...
Romania	*115 000	104 700	18 169	12 541	...
Slovakia	*30 000	45 700	41 600	44 930	62 102
Spain	17 656	28 037	30 103	81 621	...
Turkey	118 367	57 429	100 751	104 872	140 840
United Kingdom	*55 000	*54 000	*85 000	93 000	*74 000
Algeria	47 232	22 286	29 838	31 348	39 140
Egypt (f)	1 125	419	2	48	320
Morocco	349 613	229 587	289 451	282 537	338 096
Nigeria	...	...	75 000	131 620	...
South Africa	2 000	1 945	6 048	7 428	2 071
Tunisia	15 100	15 400	8 100	15 360	12 847
Zimbabwe	120	—	—	1 150	1 217
Canada	39 000	61 000	67 000	58 000	98 000
Guatemala	4 742	3 590	570	2 776	...
Mexico	135 891	86 605	248 367	470 028	236 606
USA (b)	315 000	583 000	543 000	662 000	692 000
Argentina	14 761	27 828	28 907	14 038	*15 000
Bolivia	—	3 307	10 845	4 745	4 402
Brazil (d)	32 068	41 831	30 750	39 662	*39 700
Chile	2 035	3 670	3 080	2 559	2 654
Colombia	4 840	*7 000	1 500	6 800	900
Peru (e)	14 747	38 934	34 987	23 341	...
Afghanistan (c)	*2 000	*2 000	*2 000	*2 000	...
China	948 000	*1 300 000	*1 300 000	1 950 000	...
India	597 676	483 791	420 704	*370 000	*400 000
Iran (c)	226 379	139 202	161 401	158 844	...
Japan	11 532	—	—	—	...
Kazakhstan	*300 000	*300 000	286 000	285 000	...
Laos	4 900	1 490	2 740	5 200	7 330
Malaysia	11 551	17 144	16 966	17 458	2 608
Myanmar (a)	15 783	29 337	30 641	22 436	14 606
Pakistan (f)	26 336	18 334	8 254	9 645	23 390
Philippines	*500	*500	*500	*500	...
Thailand	42 385	53 248	58 807	48 074	54 817
Australia	*11 000	*11 000	11 729	*12 000	*15 000
World Total	4 100 000	4 300 000	4 400 000	5 400 000	5 300 000

Note(s):-

- (1) This table may include small quantities of witherite
(2) In addition to the countries listed, Cuba is believed to produce barytes

- (a) Years ended 31 March following that stated
(b) Sold or used by producers
(c) Years ended 20 March following that stated
(d) Including beneficiated and directly shipped material
(e) Exports
(f) Years ended 30 June of that stated

Exports of Barytes

tonnes

Country	1993	1994	1995	1996	1997
Belgium-Luxembourg	22 518	36 073	45 101	34 701	15 802
Bulgaria	...	(b) *8 700	68 366	82 855	116 505
Germany	16 080	17 936	15 256	17 470	18 552
Irish Republic	35 013	28 468	—	—	—
Italy	2 121	1 943	1 422	1 082	427
Netherlands	52 908	78 532	74 571	59 982	34 350
Norway	3 274	308	1 811	6 945	16 207
Slovakia	*20 000	38 400	35 300	38 400	...
Spain	7 468	14 030	29 392	64 381	80 981
Turkey	50 873	63 508	103 176	121 124	125 412
United Kingdom	13 459	10 025	9 237	5 483	9 475
Morocco	306 600	307 649	350 682	297 932	276 541
Tunisia	12 200	11 840	5 787	5 483	...
Canada	11 092	13 063	12 267	15 391	21 075
Mexico	68 264	89 803	129 536	125 008	...
USA	18 928	20 731	15 919	31 547	23 245
Bolivia	—	3 307	10 845	4 745	4 402
Peru	14 747	38 934	34 987	23 341	...
Venezuela	6 276	9 678	1 182	1 988	...
China	843 486	1 166 311	1 197 597	1 860 388	2 927 095
Hong Kong (c)	4 412	3 585	4 288	1 942	120
India (a)	50 337	244 642	751 486	140 023	...
Indonesia	4 907	1 580	1 847	2 384	4 031
Kazakhstan	...	...	115 177	98 089	30 135
Laos	4 400	1 710	3 330	2 740	3 000
Singapore	6 214	11 076	16 054	10 936	8 072
of which, re-exports	3 094	5 851	10 815	6 413	4 664
Thailand	37 661	38 610	47 085	43 000	...
Australia	...	4 078	3 156	2 259	...

Note(s):-

(1) Trade in barytes is reported under item 278.92 of the Standard International Trade Classification (Revision 3) and is described as 'barytes and witherite'. However, only small quantities of witherite are traded

(a) Years ended 31 March following that stated

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

(c) Re-exports

Imports of Barytes

tonnes

Country	1993	1994	1995	1996	1997
Albania	(b) *7 000	...	...	3 810	1 701
Austria	2 048	3 255	1 451	2 992	2 924
Belgium-Luxembourg	13 659	10 821	14 075	13 533	12 384
Croatia	76	400	72	243	560
Czech Republic	31 752	30 596	39 964	14 693	11 008
Denmark	5 196	1 145	1 553	5 023	15 988
Finland	1 363	1 469	1 748	1 745	2 134
France	31 405	26 571	25 989	17 667	24 860
Germany	96 066	185 613	223 031	203 474	230 696
Greece	3 242	545	1 295	4 373	1 951
Hungary	2 576	2 517	*3 000	*3 000	...
Irish Republic	801	702	548	574	676
Italy	32 564	31 821	52 925	67 046	74 827
Netherlands	109 612	74 488	109 287	136 882	136 604
Norway	129 235	102 829	108 669	142 150	158 036
Poland	4 450	3 936	4 222	5 416	...
Portugal	897	900	1 100	5 060	1 176
Romania	20 444	21 720	21 750	18 419	18 984
Russia	*125 000	*120 000	*120 000	*130 000	...
Spain	12 790	21 126	19 054	10 429	23 686
Sweden	4 061	4 935	3 125	2 668	4 155
Switzerland	1 674	2 727	2 263	1 961	3 663
United Kingdom	158 783	132 099	110 700	85 018	139 065
Algeria	8 600	5 000	18 100	*10 000	...
Cameroon	*2 000	*2 000	3 200	4 400	...
Congo,	1 900	2 700	*3 000	*3 000	...
Gabon	2 100	1 400	1 700	1 300	...
Ghana	*3 000	*3 000	*3 000	*3 000	...
Nigeria	*15 000	*15 000	*15 000	*15 000	...
South Africa	2 892	643	2 198	1 886	1 980
Tunisia	3 700	1 900	1 100	3 800	...
Canada	15 015	14 780	16 667	15 631	21 860
Mexico	54 517	30 672	7 593	10 615	...
Trinidad & Tobago	8 491	6 527	20 655	30 051	...
USA	803 929	1 074 319	1 043 138	1 538 056	2 244 245
Argentina	307	3 239	10 321	4 269	8 762
Colombia	12 856	20 901	55 283	46 159	...
Ecuador	2 304	4 674	1 168	5 311	...
Venezuela	123 476	148 308	163 138	117 277	...
Abu Dhabi	41 651	25 300	31 907	10 494	3 069
Hong Kong	1 901	2 801	1 186	259	222
Indonesia	41 984	57 083	40 430	70 705	85 550
Japan	116 327	85 124	130 135	139 559	114 384
Korea, Republic of	39 758	54 013	61 045	85 211	63 695
Malaysia	2 773	3 607	11 232	50 500	...
Oman	8 200	8 400	8 900	*9 000	...
Philippines	1 609	4 218	1 407	1 679	...
Saudi Arabia	2 122	670	30 734	972	...
Singapore	17 928	14 190	23 932	11 833	7 845
Syria	10 928	6 786	2 078	4 100	...
Taiwan	6 899	8 170	9 847	6 965	5 538
Thailand	6 912	7 291	6 180	*6 000	...
Australia	14 000	27 900	15 300	21 213	...
New Zealand (a)	902	845	896	...	750

Note(s):-

(1) Trade in barytes is reported under item 278.92 of the Standard International Trade Classification (Revision 3) and is described as 'barytes and witherite'. However, only small quantities of witherite are traded

(a) Years ended 30 June of that stated

(b) BGS estimates, based on known exports from certain countries

Production of Bentonite and Fuller's Earth

tonnes

Country	1993	1994	1995	1996	1997
Armenia					
Bentonite	*50	*100	110	2 750	*2 750
Bosnia & Herzegovina					
Bentonite	*800	*800	*800	*800	*800
Bulgaria					
Bentonite	78 000	76 300	125 800	118 212	*13 000
Croatia					
Bentonite	*10 000	10 391	7 327	9 728	7 331
Czech Republic					
Bentonite	63 000	65 000	54 000	59 000	110 000
Denmark					
Bentonite	...	5 596	6 695	8 050	*2 000
France					
Bentonite	7 000	—	—	—	—
Georgia					
Bentonite	*13 000	*13 000	*13 000	13 000	12 000
Germany					
Bentonite	473 102	498 849	529 446	491 346	511 190
Fuller's earth	670 000	498 000	*600 000	*600 000	*600 000
Greece					
Bentonite	677 578	697 773	1 115 119	973 517	*950 000
Hungary					
Bentonite	9 400	14 700	15 000	15 376	14 848
Italy					
Bentonite	326 992	374 491	590 845	471 535	512 900
Fuller's earth	20 000	23 500	33 600	26 455	*30 000
Macedonia					
Bentonite	*35 000	*30 000	*30 000	*30 000	*30 000
Poland					
Bentonite	9 100	1 100	1 500	1 800	...
Fuller's earth	4 700	5 200	4 800	6 200	...
Romania					
Bentonite	50 000	41 056	42 277	43 543	27 133
Slovakia					
Bentonite	*25 000	60 310	74 960	74 820	79 760
Spain					
Bentonite	162 400	148 600	172 265	151 045	*150 000
Attapulгите	90 900	91 100	94 266	130 140	...
Sepiolite	465 700	495 100	531 192	565 636	...
Turkey					
Bentonite	456 597	516 187	605 499	482 057	519 487
Sepiolite	...	...	...	4 051	11 277
United Kingdom					
Fuller's earth (a)	187 100	133 500	132 300	142 600	134 800
Algeria					
Bentonite	20 833	20 215	17 088	16 723	17 657
Fuller's earth	3 229	4 550	4 061	2 803	3 960
Egypt					
Bentonite (e)	6 013	2 379	4 625	2 210	1 267
Morocco					
Bentonite	10 811	24 919	29 308	39 680	49 633
Fuller's earth (f)	38 680	22 782	15 027	17 223	24 465
Mozambique					
Bentonite	—	1 568	277	796	...
Senegal					
Attapulгите	119 409	*119 000	*120 000	*120 000	*100 000
South Africa					
Bentonite	50 441	71 773	70 927	48 076	33 326
Attapulгите	7 032	10 090	8 049	14 318	9 421
Canada					
Bentonite (d)	10 500	13 900	12 400	15 300	...
Guatemala					
Bentonite	4 198	4 410	5 839	3 755	...
Mexico					
Bentonite	94 584	92 476	72 599	69 810	111 503
Fuller's earth	36 068	21 377	15 755	41 800	51 430

Production of Bentonite and Fuller's Earth

tonnes

Country	1993	1994	1995	1996	1997
Nicaragua					
Bentonite	980	694	*800	*850	...
USA					
Bentonite (c)	2 870 000	3 290 000	3 820 000	3 740 000	4 020 000
Fuller's earth (c)	2 483 821	2 640 000	2 640 000	2 600 000	2 370 000
Argentina					
Bentonite	96 706	113 407	111 011	134 588	*130 000
Fuller's earth	*1 600	*1 600	*1 600	*1 500	*1 500
Brazil					
Bentonite	164 452	168 484	166 675	110 454	...
Colombia					
Bentonite	...	1 018	9 000	...	8 640
Peru					
Bentonite	10 250	27 682	26 961	18 592	*18 600
Cyprus					
Bentonite	60 000	50 000	51 000	71 000	100 000
India					
Bentonite (h)	230 000	230 000	313 000	...	...
Fuller's earth (h)	87 000	88 000	54 000	...	...
Indonesia					
Bentonite	13 707	14 409	26 057	*26 000	*25 000
Iran					
Bentonite (g)	53 667	71 759	54 798	84 404	*85 000
Japan					
Bentonite	515 307	484 115	478 056	468 728	495 646
Korea, Republic of					
Bentonite	48 623	121 262	66 157	93 864	142 027
Fuller's earth	18 918	23 852	27 563	21 820	24 829
Myanmar					
Bentonite	200	795	2 655	*2 600	*2 500
Pakistan					
Bentonite (e)	7 991	12 459	7 802	8 769	10 169
Fuller's earth (e)	35 191	16 702	14 844	11 864	12 307
Philippines					
Bentonite	4 600	3 415	7 636	*8 000	*8 000
Thailand					
Bentonite	2 780	5 125	8 285	11 260	3 200
Turkmenistan					
Bentonite	*50 000	*50 000	*50 000	50 000	50 000
Australia					
Bentonite (e)	66 000	*70 000	*70 000	*70 000	...
Fuller's earth	20 632	19 412	18 159	17 173	28 262
New Zealand					
Bentonite	1 613	930	3 699	13 734	12 802
World Total Bentonite	6 800 000	7 500 000	8 870 000	8 380 000	8 790 000
World Total Fuller's Earth (b)	4 290 000	4 220 000	4 320 000	4 380 000	4 160 000

Note(s):-

- (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
- (2) Calcium bentonite can be converted to sodium bentonite by a sodium-exchange process
- (3) 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
- (4) In addition to the countries listed, Austria, China, Tanzania and other former Soviet Union countries are believed to produce bentonite. France, Iran and Japan may produce fuller's earth
- (a) Saleable production based on data from producing companies
- (b) Including attapulgite and sepiolite
- (c) Sold or used by producers
- (d) Data for Saskatchewan only
- (e) Years ended 30 June of that stated
- (f) Smectite
- (g) Years ended 20 March following that stated
- (h) Years ended 31 March following that stated

Exports of Bentonite and Fuller's Earth

tonnes

Country	1993	1994	1995	1996	1997
Austria					
Bentonite	2 007	2 236	...	...	6 757
Belgium-Luxembourg					
Bentonite	563	975	418	1 392	1 447
Bulgaria					
Bentonite (c)	*21 900	*41 200	*54 800	*59 600	...
Croatia					
Bentonite	...	...	1 018	1 294	436
Czech Republic					
Bentonite	13 976	19 317	18 048	21 633	20 608
France					
Bentonite	16 524	21 405	24 412	22 569	25 523
Fuller's earth	2 236	1 893	2 164	2 689	2 975
Germany					
Bentonite	59 661	61 070	42 259	26 021	72 839
Fuller's earth	1 307	441	507	658	135
Greece					
Bentonite	53 864	66 809	130 824	65 071	12 002
Hungary					
Bentonite	3 597	1 653	696	620	501
Italy					
Bentonite	16 278	96 936	182 918	172 627	182 225
Netherlands					
Bentonite	44 518	65 538	79 790	71 432	85 313
Fuller's earth	1 166	5 568	15 891	...	6 205
Slovakia					
Bentonite (c)	*39 800	*49 000	*39 300	*58 000	...
Spain					
Bentonite	6 793	4 650	12 046	12 446	13 398
Sepiolite	...	...	582 387	...	...
Fuller's earth	7 380	10 412	10 347	...	7 490
Turkey					
Bentonite	28 038	53 692	50 935	68 124	61 999
United Kingdom					
Bentonite	57 860	63 799	73 210	84 357	96 781
Fuller's earth	28 996	26 435	20 821	32 730	61 077
Morocco					
Bentonite	...	18 478	28 174	27 775	27 245
Fuller's earth	...	8 542	12 450	1 192	...
Canada					
Bentonite	949	929	1 605	3 241	1 397
Guatemala					
Bentonite	2 167	2 542	3 110	2 153	...
Mexico					
Bentonite	3 794	3 408	6 518	13 074	...
USA					
Bentonite	599 297	774 861	735 077	796 289	860 077
Fuller's earth	67 838	86 572	62 618	111 820	146 667
Argentina					
Bentonite	21 100	22 037	24 008	29 671	35 102
Colombia					
Bentonite	1 534	1 019	841	642	...
China					
Bentonite	40 717	55 360	67 997	73 169	65 248
Fuller's earth	729	17 897	1 289	1 182	5 967
Cyprus					
Bentonite	29 756	22 573	14 127	31 397	51 912
India					
Bentonite (d)	129 960	147 005	147 856	174 117	...
Indonesia					
Bentonite	8 016	7 005	10 947	5 208	6 196
Fuller's earth	2 423	1 514	3 295	4 510	3 079
Iran					
Fuller's earth (e)	5	8 142	7 042	...	...

Exports of Bentonite and Fuller's Earth

tonnes

Country	1993	1994	1995	1996	1997
Japan					
Bentonite	1 589	1 075	1 986	2 038	2 245
Korea, Republic of					
Bentonite	6 625	10 203	12 696	11 221	6 102
Singapore					
Bentonite	14 775	16 943	18 148	15 703	14 900
of which, re-exports	9 357	9 210	10 803	8 635	10 262
Australia					
Bentonite	...	14 572	15 494	21 550	...

Note(s):-

- (1) See notes 1-3 to production table
- (2) The figures in this table refer to natural and sodium-exchanged bentonite, and fuller's earth, Standard International Trade Classification (Revision 3) 278.27
- (3) Activated bentonite and fuller's earth, Standard International Trade Classification (Revision 3) 598.65 are excluded
- (4) Some countries are believed to include sodium-exchanged bentonite, often referred to as activated bentonite, under Standard International Trade Classification (Revision 3) 598.65, e.g. Italy

- (a) Re-exports
- (b) Attapulgite
- (c) BGS estimates, based on known imports into certain countries
- (d) Years ended 31 March following that stated
- (e) Years ended 20 March following that stated

Imports of Bentonite and Fuller's Earth

tonnes

Country	1993	1994	1995	1996	1997
Austria					
Bentonite	22 178	34 165	...	...	45 596
Belgium-Luxembourg					
Bentonite	10 064	11 551	12 687	15 055	16 800
Fuller's earth	1 323	689	1 122	1 398	2 991
Croatia					
Bentonite	760	...	1 116	295	5 171
Czech Republic					
Bentonite	4 308	3 329	3 065	5 394	7 162
Denmark					
Bentonite	18 331	24 968	19 077	23 589	19 689
Fuller's earth	3 089	1 024	551	502	589
Finland					
Bentonite	8 808	12 583	18 688	22 722	48 473
France					
Bentonite	68 397	112 530	110 679	87 451	135 717
Fuller's earth	1 628	5 332	6 184	2 668	3 345
Germany					
Bentonite	185 056	204 678	246 047	164 551	207 106
Fuller's earth	28 118	32 750	30 365	21 878	9 538
Greece					
Bentonite	759	337	1 200	301	3 298
Italy					
Bentonite	53 677	66 920	64 483	57 941	67 677
Fuller's earth	7 744	8 993	...	...	11 396
Lithuania					
Bentonite	...	...	1 018	894	1 302
Netherlands					
Bentonite	142 800	137 777	172 660	185 906	177 283
Fuller's earth	7 505	5 788	18 806	...	31 364
Norway					
Bentonite	35 543	18 484	28 440	24 533	17 242
Poland					
Bentonite	48 843	60 287	55 464	71 300	...
Portugal					
Bentonite	8 625	...	...	12 844	13 941
Spain					
Bentonite	40 584	61 262	46 796	38 940	54 551
Sweden					
Bentonite	8 284	18 269	122 765	110 649	90 429
Fuller's earth	10 212	3 281	...	...	221
Switzerland					
Bentonite	19 486	19 416	20 971	20 541	21 245
Fuller's earth	1 793	1 845	1 812	2 328	2 187
United Kingdom					
Bentonite	114 247	183 613	201 555	166 278	162 819
Fuller's earth	18 420	39 013	6 144	1 720	...
South Africa					
Bentonite	930	1 857	6 841	3 753	2 112
Tunisia					
Bentonite	...	3 280	6 176	3 566	...
Canada					
Bentonite	295 356	329 639	343 826	381 042	371 660
Fuller's earth	8 622	9 266	10 169	9 009	7 873
Mexico					
Bentonite	9 250	8 270	7 993	11 173	...
USA					
Bentonite	2 014	2 042	3 114	7 514	7 562
Fuller's earth	101	1 441	100	368	3 533
Brazil					
Bentonite	34 585	26 092	34 486	...	...
Chile					
Bentonite	5 853	6 001	6 587	6 224	7 762
Colombia					
Bentonite	3 286	5 568	3 403	17 082	...

Imports of Bentonite and Fuller's Earth

tonnes

Country	1993	1994	1995	1996	1997
Peru					
Bentonite	501	1 192	1 526	2 957	...
Uruguay					
Bentonite	310	757	478	363	101
Venezuela					
Bentonite	17 213	43 565	98 770	52 729	...
Hong Kong					
Bentonite	5 722	11 290	17 784	16 181	8 408
Indonesia					
Bentonite	14 409	15 395	9 941	36 019	24 476
Japan					
Bentonite	192 543	209 306	254 970	218 252	227 816
Fuller's earth	8 280	7 058	7 015	7 479	8 350
Korea, Republic of					
Bentonite	21 461	15 203	11 494	18 857	26 724
Fuller's earth	...	19	334	937	1 861
Kuwait					
Bentonite	...	...	14 019	29 889	5 461
Malaysia					
Bentonite	71 250	102 692	63 441	...	...
Fuller's earth	15 878	12 932	10 211	...	...
Pakistan					
Bentonite	849	6 039	1 597	1 773	...
Philippines					
Bentonite	7 008	17 201	13 537	6 375	...
Fuller's earth	4 225	4 737	6 376	6 984	...
Saudi Arabia					
Bentonite	2 881	15 722	13 522	18 099	...
Singapore					
Bentonite	24 411	30 552	17 395	26 401	24 554
Fuller's earth	891	218	232	47	26
Taiwan					
Bentonite	37 955	40 846	36 741	33 839	34 838
Fuller's earth	631	682	743	1 247	2 173
Thailand					
Bentonite	31 486	38 303	42 479	...	...
Fuller's earth	3 083	2 526	66	...	...
Australia					
Bentonite (a)	21 004	16 227	29 151	4 202	9 633

Note(s):-

- (1) See notes 1-3 to production table
- (2) The figures in this table refer to natural and sodium-exchanged bentonite, and fuller's earth, Standard International Trade Classification (Revision 3) 278.27
- (3) Activated bentonite and fuller's earth, Standard International Trade Classification (Revision 3) 598.65 are excluded
- (4) Some countries are believed to include sodium-exchanged bentonite, often referred to as activated bentonite, under Standard International Trade Classification (Revision 3) 598.65, e.g. Italy

(a) Years ended 30 June of that stated

Mine Production of Bismuth

tonnes (metal content)

Country	1993	1994	1995	1996	1997
Romania	*40	*40	*40	*40	*40
Russia	25	25	23	10	10
Yugoslavia, Federal Republic of	5	0	0	0	—
Canada	144	152	187	176	216
Mexico	908	1 047	995	1 070	1 642
USA	*100	*100	*100	*100	*50
Peru (a)	*1 300	1 210	*900	*1 000	*1 000
China	1 052	850	739	360	...
Japan	497	505	591	562	550
Kazakhstan	180	85	33	15	13
Tajikistan	*16	*12	*11	*5	*5
Uzbekistan	*10	*10	*10	*11	*11
Australia	*400	*400	*400	*400	*400
World Total	4 700	4 400	4 000	4 000	4 000

Note(s):-

- (1) The figures in this table are in some instances derived from reported bismuth content of refined and impure metal plus recoverable in ores and concentrates exported
 - (2) 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
 - (3) In addition to the countries listed, Brazil is believed to produce bismuth
- (a) Including Bi content of bullion and concentrates exported

Bismuth

Exports of Bismuth

tonnes

Country	1993	1994	1995	1996	1997
Belgium-Luxembourg					
Compounds	417	46	519	454	842
France					
Compounds	80	34	44	40	81
Metal	18	61	93	77	47
Germany					
Compounds	99	33	50	79	336
Metal	247	359	267	133	75
Italy					
Metal	1	2	10	...	3
Netherlands					
Metal	50	105	16	170	48
Spain					
Compounds	50	76	77	...	...
United Kingdom					
Metal	665	635	743	859	2 038
Canada					
Metal	43	165	220	141	150
Mexico					
Metal	720	1 008	865	914	...
USA					
Metal	75	176	269	161	243
Peru					
Metal	722	1 009	521	660	...
China					
Metal	2 020	5 806	3 511	1 199	1 603
Hong Kong					
Metal (a)	305	118	187	117	9
Japan					
Metal	35	4	36	5	11
Kazakhstan					
Ores	...	...	7 731	9 615	22 104
Metal	...	...	...	10	11
Korea, Republic of					
Metal	41	102	97	75	107

Note(s):-

(1) The compounds recorded in this table are bismuth carbonate and/or bismuth nitrate

(a) Re-exports

Imports of Bismuth

tonnes

Country	1993	1994	1995	1996	1997
France					
Compounds	141	19	47	75	163
Metal	329	332	335	312	283
Germany					
Compounds	420	455	626	471	426
Metal	864	534	647	421	940
Italy					
Metal	92	147	166	96	165
Netherlands					
Compounds	102	157	256	...	393
Metal	207	73	44	170	188
Spain					
Metal	78	235	107	191	135
Sweden					
Metal	15	23	22	11	34
Switzerland					
Metal	10	11	15	10	10
United Kingdom					
Metal	1 128	450	451	795	1 256
USA					
Metal	1 335	1 661	2 201	1 502	2 183
Brazil					
Metal	51	82	68	...	...
Hong Kong					
Metal	336	873	390	381	46
India					
Metal (a)	42	89	34	84	...
Japan					
Metal	41	281	190	181	380

Note(s):-

(1) The compounds recorded in this table are bismuth carbonate and/or bismuth nitrate

(a) Years ended 31 March following that stated

Bromine

Production of Bromine

kilograms

Country	1993	1994	1995	1996	1997
Azerbaijan	*4 000 000	*3 000 000	*2 000 000	*2 000 000	*2 000 000
France	2 290 000	2 190 000	2 260 000	2 020 000	*2 000 000
Italy	*300 000	*300 000	*300 000	*300 000	*300 000
Spain	*200 000	*200 000	*200 000	*100 000	*100 000
Ukraine	*5 000 000	*4 000 000	*3 500 000	*3 000 000	*3 000 000
United Kingdom	27 423 000	33 800 000	26 200 000	30 600 000	35 600 000
USA (a)	177 000 000	195 000 000	218 000 000	227 000 000	247 000 000
China	*24 600 000	*31 400 000	*30 000 000	*30 000 000	31 000 000
India	2 320 000	2 248 250	1 800 240	2 524 430	2 509 160
Israel	*135 000 000	*135 000 000	*135 000 000	*135 000 000	*135 000 000
Japan	*15 000 000	*15 000 000	*15 000 000	*15 000 000	*20 000 000
Turkmenistan	*100 000	*100 000	*100 000	102 000	130 000
World Total	393 000 000	422 000 000	434 000 000	448 000 000	479 000 000

Note(s):-

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

Exports of Bromine

Bromine

kilograms

Country	1993	1994	1995	1996	1997
Belgium-Luxembourg	225 300	442 000	881 000	1 784 000	1 663 800
Germany	338 900	125 400	4 500	3 700	12 300
Italy	9 600	25 600	...	...	4 532
Netherlands	797 000	791 000	...	...	...
Russia (a)	*44 500	*41 200	*48 800	*59 400	...
Ukraine (a)	*420 200	*68 000	*336 800	*535 900	...
United Kingdom	2 756 829	2 676 118	4 536 061	5 345 184	5 025 081
Yugoslavia, Federal Republic	...	(a) *11 300	...	...	17 000
USA	6 030 616	6 564 811	3 236 285	2 924 481	2 465 395
China	—	—	82 500	41 772	58 716
Israel (a)	*21 388 000	*23 955 000	*15 051 000	...	...

Note(s):-

(1) This table does not purport to be comprehensive: trade in bromine is not separately distinguished from other halogens by many countries

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

Bromine

Imports of Bromine

kilograms

Country	1993	1994	1995	1996	1997
Austria	...	...	76 200	97 600	104 900
Belgium-Luxembourg	2 473 900	2 602 900	1 896 000	1 234 000	1 162 100
Denmark	—	400	400	6 000	118
France	4 888 000	6 929 800	8 797 000	9 072 000	7 888 000
Germany	3 710 400	3 719 000	3 328 200	3 148 000	3 092 100
Hungary	10 000	12 400	...	...	...
Irish Republic	—	—	—	—	33 992
Italy	455 700	805 800	...	...	239 468
Netherlands	6 735 000	19 168 000	10 984 000	...	...
Poland	48 000	71 000	61 000	28 000	...
Spain	124 000	...	119 000	...	194 767
United Kingdom	5 826 164	4 841 758	5 184 957	7 045 247	5 213 006
Canada	1 562 099	1 652 167	1 426 681	1 230 197	1 326 667
Mexico (d)	211 340	130 209	189 796	199 213	...
USA	850 446	330 296	2 221 619	421 580	1 648 027
Brazil	46 000	61 000	71 000	...	...
China	647 824	445 568	233 238	137 446	1 892 148
India (a)	1 176 192	756 200	2 553 629	1 755 579	...
Israel (c)	*17 800	...	...	...	...
Korea, Republic of	940 877	902 281	957 867	1 091 227	...
Pakistan (b)	12 491	9 000	...	...	...
Taiwan	141 779	53 172	141 840	111 500	...

Note(s):-

(1) This table does not purport to be comprehensive: trade in bromine is not separately distinguished from other halogens by many countries

(a) Years ended 31 March following that stated

(b) Years ended 30 June of that stated

(c) BGS estimates, based on known exports from certain countries

(d) May include some fluorine

Production of Cadmium

tonnes

Country	1993	1994	1995	1996	1997
Belgium	1 572	1 556	1 710	1 580	1 420
Bulgaria	266	286	280	*280	*280
Finland	332	548	534	648	490
France	136	6	—	92	309
Germany (a)	1 056	1 145	1 145	*950	*920
Italy	517	475	308	296	287
Macedonia	249	73	74	*80	*70
Netherlands	526	307	704	603	753
Norway	226	284	317	274	305
Poland	149	61	—	—	22
Russia	742	582	670	716	716
Spain	365	387	397	307	334
Turkey	31	22	36	42	86
Ukraine	*7	10	*15	2	2
United Kingdom	458	469	549	537	455
Yugoslavia, Federal Republic of	17	—	11	79	45
Algeria	65	59	50	44	*40
Congo, Democratic Republic	12	—	—	—	—
Namibia	13	19	15	7	2
Canada (a)	1 888	2 173	2 349	2 433	2 384
Mexico (b)	1 332	1 146	1 179	1 206	1 275
USA (a)	1 094	1 011	1 266	1 525	2 059
Argentina	49	27	43	40	45
Brazil	*135	162	144	132	*130
Peru	471	510	560	405	474
China	1 161	1 282	1 533	1 567	*1 500
India	270	230	254	269	298
Japan	2 832	2 629	2 652	2 344	2 472
Kazakhstan	*1 200	1 097	794	567	745
Korea, Dem. P.R. of	*200	*200	*200	*200	*200
Korea, Republic of	719	909	1 665	501	570
Thailand	449	643	365	385	*440
Australia	951	910	838	639	632
World Total	19 500	19 200	20 700	18 800	19 800

Note(s):-

(1) Data in this table excludes secondary metal unless otherwise stated

(a) Including cadmium sponge and/or secondary metal

(b) Including oxides

Cadmium

Exports of Cadmium

tonnes

Country	1993	1994	1995	1996	1997
Austria					
Metal	14	6	13	1	0
Belgium-Luxembourg					
Metal	2 321	1 585	2 206	1 591	1 816
Sulphide	22	53	44	31	14
Bulgaria					
Metal	(b) *140	(b) *10	277	...	248
Finland					
Metal	706	810	496	496	476
France					
Metal	444	159	4 155	879	1 493
Germany					
Metal	794	2 022	766	595	47
Italy					
Metal	566	583	220	221	301
Netherlands					
Metal	594	2 040	544	711	858
Norway					
Metal	356	346	169	172	321
Poland					
Metal	1	12	—	—	...
Russia					
Metal	(b) *100	(b) *50	(b) *950	692	(b) *880
Spain					
Metal	381	301	335	380	263
United Kingdom					
Metal	134	134	299	174	18
Namibia					
Metal	10	31	33	9	2
South Africa					
Metal	...	...	207	(b) *100	(b) *100
Canada					
Metal	1 857	1 904	2 463	1 694	2 539
Mexico					
Metal	808	617	693	661	...
USA					
Metal	39	1 468	1 094	204	558
Sulphide	31	205	506	797	399
Peru					
Metal	...	412	305	315	...
China					
Metal	0	3 479	1 449	241	372
Hong Kong					
Metal (a)	392	248	691	452	231
Japan					
Metal	80	15	19	31	98
Kazakhstan					
Metal	...	(b) *240	739	794	866
Korea, Republic of					
Metal	461	1 198	1 274	773	1 576
Australia					
Metal	*950	861	750	782	...

Note(s):-

(a) Re-exports

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

Imports of Cadmium

tonnes

Country	1993	1994	1995	1996	1997
Belgium-Luxembourg					
Metal	4 959	2 973	5 009	4 169	3 289
Sulphide	22	51	33	119	...
Finland					
Metal	230	125	0	24	...
France					
Metal	995	1 290	1 312	820	823
Sulphide	36	32	342	296	2
Germany					
Metal	454	395	267	178	26
Italy					
Metal	31	62	63	51	43
Sulphide	6	9	...	...	1
Netherlands					
Metal	206	332	575	286	267
Spain					
Metal	104	127	105	13	129
Sweden					
Metal	140	345	393	263	265
United Kingdom					
Metal	416	893	131	345	854
Canada					
Sulphide	26	110	299	667	412
USA					
Metal	1 415	1 104	817	843	790
Brazil					
Oxide	121	124	181	...	...
China					
Metal	1 105	465	607	1 151	1 323
Hong Kong					
Metal	431	997	433	624	234
India					
Metal (a)	758	404	418	2 214	...
Japan					
Metal	3 098	3 844	6 046	4 442	4 772
Korea, Republic of					
Metal	63	47	35	11	47
Taiwan					
Oxide	369	314	325	343	323
Sulphide	47	6	16	11	5

Note(s):-

(a) Years ended 31 March following that stated

Chromium

Production of Chromium Ores and Concentrates

tonnes

Country	1993	1994	1995	1996	1997
Albania	281 130	222 879	242 998	236 358	157 203
Finland (b)	516 457	572 747	597 674	573 909	588 856
Greece	3 697	—	—	—	—
Macedonia	*5 000	*5 000	*5 000	*5 000	*5 000
Russia	120 800	143 000	165 000	106 000	*100 000
Turkey (a)	706 250	790 000	1 932 000	1 250 000	*1 100 000
Madagascar	144 311	75 000	105 747	137 000	*120 000
South Africa	2 838 044	3 599 472	5 086 053	4 970 945	5 740 997
Sudan	11 500	25 000	44 988	12 000	*43 000
Zimbabwe	252 033	516 801	707 433	658 416	669 757
Cuba	10 354	*20 000	30 693	37 300	44 000
Brazil (a)	240 247	399 977	446 893	*400 000	*300 000
China	*54 000	*62 000	*94 000	130 200	*120 000
India	1 064 400	1 060 500	1 536 386	1 363 205	*1 400 000
Indonesia	—	—	10 000	13 300	2 165
Iran (b) (c)	114 780	354 163	363 610	322 367	...
Kazakhstan	2 968 200	2 020 000	2 871 000	1 190 000	1 798 300
Oman	10 236	6 166	5 298	15 200	17 900
Pakistan	44 384	12 410	9 560	26 961	23 763
Philippines (b)	61 464	65 122	80 125	99 465	82 190
Vietnam	6 900	6 300	24 000	...	...
Australia	—	—	—	*5 500	18 756
World Total	9 500 000	10 000 000	14 400 000	11 600 000	12 700 000

Note(s):-

(1) In addition to the countries listed, Bulgaria, Democratic P.R. of Korea, and Thailand are believed to produce chromite

(a) Including beneficiated and direct shipping ore

(b) Including foundry sand and/or lumpy ore

(c) Years ended 20 March following that stated

Exports of Chromium

tonnes

Country	1993	1994	1995	1996	1997
Albania					
Ores & concentrates	83 100	95 600	89 600	89 200	...
Austria					
Metal	18	14	130	180	1 057
Belgium-Luxembourg					
Ores & concentrates	12 942	18 715	21 694	22 155	17 266
Metal	35	204	87	104	702
Czech Republic					
Metal	1	3	131	189	102
Finland					
Ores & concentrates	1 101	694	951	1 005	675
France					
Ores & concentrates	1 354	1 101	768	671	2 060
Metal	2 384	2 944	3 083	3 101	4 128
Germany					
Ores & concentrates	11 497	9 543	8 041	7 130	9 372
Metal	787	634	652	499	1 878
Greece					
Ores & concentrates	14 525	1 000	18 872	3 920	...
Italy					
Ores & concentrates	1 690	1 824	2 083	2 330	16 551
Metal	89	49	17	51	25
Lithuania					
Metal	*30	262	528	*500	...
Netherlands					
Ores & concentrates	16 665	24 206	35 087	37 520	47 461
Metal	396	848	592	382	847
Poland					
Ores & concentrates	3 749	1 074	9 382	14 900	...
Metal	30	328	348	437	...
Russia					
Ores & concentrates	*25 000	27 800	5 800	8 100	...
Metal	2 056	4 065	4 192	5 099	7 774
Slovakia					
Metal	12	16	154	1 583	...
Spain					
Ores & concentrates	...	627	776	1 126	1 754
Metal	18	5	400	584	803
Turkey					
Ores & concentrates	321 818	601 100	1 032 803	374 213	623 914
Ukraine					
Metal	*10	*30	79	*80	...
United Kingdom					
Ores & concentrates	1 391	5 710	947	881	886
Metal	2 337	3 261	2 859	3 204	5 732
Madagascar					
Ores & concentrates	137 800	74 200	128 543	65 255	...
South Africa					
Ores & concentrates	983 656	903 308	1 147 940	1 339 567	1 275 983
Sudan					
Ores & concentrates	—	43 000	27 000	—	...
Zimbabwe					
Ores & concentrates	47	90	5 410	32 862	38
USA					
Ores & concentrates	12 772	47 344	19 531	70 728	25 882
Metal	477	494	763	1 432	2 466
Brazil					
Ores & concentrates	36 130	156 373	33 121	51 632	...
China					
Ores & concentrates	6 940	4 107	3 975	4 712	12 817
Metal	7 078	5 654	10 577	2 952	3 736
India					
Ores & concentrates (a)	308 267	490 212	347 705	565 825	...

Chromium

Exports of Chromium

tonnes

Country	1993	1994	1995	1996	1997
Iran					
Ores & concentrates (b)	*73 600	*244 300	*357 500	*147 900	*164 600
Japan					
Ores & concentrates	359	323	...	390	8 649
Metal	1 336	1 484	912	544	327
Kazakhstan					
Ores & concentrates	373 126	450 400	1 029 601	262 709	579 647
Metal	...	...	195	117	268
Oman					
Ores & concentrates	...	3 287	6 900	4 125	...
Pakistan					
Ores & concentrates	27 997	7 263	48 807	68 591	...
Philippines					
Ores & concentrates	80 695	83 881	98 992	73 589	...
Singapore					
Ores & concentrates (c)	952	902	737	366	114
Taiwan					
Ores & concentrates	122	1 034	2 254	1 417	1 264
Metal	149	90	186	329	390
United Arab Emirates					
Ores & concentrates	18 000	54 000	37 000	...	...

Note(s):-

(1) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

(a) Years ended 31 March following that stated

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

(c) Re-exports

Imports of Chromium

tonnes

Country	1993	1994	1995	1996	1997
Austria					
Ores & concentrates	41 732	26 865	36 400	48 157	55 345
Metal	101	194	196	147	611
Belgium-Luxembourg					
Ores & concentrates	24 170	17 160	28 527	22 116	25 082
Metal	281	564	435	554	947
Croatia					
Ores & concentrates	30 416	...	27	14 796	69 168
Czech Republic					
Ores & concentrates	2 900	4 400	6 600	10 700	3 737
Metal	64	20	45	136	41
Denmark					
Ores & concentrates	349	269	724	506	666
France					
Ores & concentrates	18 853	22 742	29 701	29 538	27 620
Metal	926	1 209	1 240	586	917
Germany					
Ores & concentrates	205 765	172 534	159 793	177 909	180 312
Metal	1 441	1 852	1 819	1 479	1 950
Greece					
Ores & concentrates	162	78	58	1 638	3 007
Hungary					
Ores & concentrates	456	875	1 200	1 008	...
Metal	59	78	34	44	...
Italy					
Ores & concentrates	143 716	102 366	204 345	123 272	105 047
Metal	286	474	435	419	626
Lithuania					
Metal	*35	46	529	...	...
Moldova					
Metal	*5	10	53	*50	...
Netherlands					
Ores & concentrates	29 944	32 858	47 695	69 338	57 589
Metal	274	1 306	584	1 039	1 318
Norway					
Ores & concentrates	130 000	141 000	*108 000	*100 000	...
Poland					
Ores & concentrates	59 061	26 807	84 138	55 200	...
Metal	96	43	—	—	...
Portugal					
Ores & concentrates	1 559	5 600	2 100	2 755	1 603
Romania					
Ores & concentrates	24 604	26 500	67 262	43 200	15 348
Metal	49	16	70	219	...
Russia					
Ores & concentrates	*700 000	780 000	722 800	360 637	...
Slovakia					
Ores & concentrates	83 701	133 200	100 800	66 500	39 413
Metal	*15	23	186	2	...
Slovenia					
Ores & concentrates	23 974	38 401	71 775	47 498	...
Metal	157	32	15	13	...
Spain					
Ores & concentrates	4 758	5 914	5 047	8 696	4 459
Metal	361	148	257	299	200
Sweden					
Ores & concentrates	254 126	374 426	294 600	*300 000	...
Metal	530	462	575	486	557
Switzerland					
Ores & concentrates	891	936	1 057	1 165	1 117
Metal	130	217	240	113	155
United Kingdom					
Ores & concentrates	128 409	151 563	166 633	176 199	157 914
Metal	668	1 318	1 403	1 181	1 554
Yugoslavia, Federal Republic of					
Ores & concentrates	*2 000	*2 000	*2 000	3 600	3 128
Metal	*5	*5	*25	43	...

Chromium

Imports of Chromium

tonnes

Country	1993	1994	1995	1996	1997
Canada					
Ores & concentrates	20 998	20 232	36 992	39 757	33 690
Metal	371	463	365	413	436
Mexico					
Ores & concentrates	14 295	5 749	6 357	7 700	6 177
USA					
Ores & concentrates	254 802	201 273	251 359	251 160	303 598
Metal	6 199	6 465	7 242	8 266	10 037
Argentina					
Ores & concentrates	14 583	14 723	43 730	37 695	39 392
Brazil					
Ores & concentrates	31 897	8 045	48 046	5 352	14 156
Chile					
Ores & concentrates	7 023	11 110	20 052	10 592	9 809
Peru					
Ores & concentrates	1 000	2 355	2 832	1 609	...
Venezuela					
Ores & concentrates	2 243	2 641	2 408	2 233	...
China					
Ores & concentrates	618 757	651 001	1 380 935	764 377	894 001
Metal	613	310	449	1 327	1 815
India					
Metal (a)	143	153	226	170	...
Japan					
Ores & concentrates	601 629	664 545	607 268	686 451	577 402
Metal	1 572	2 046	2 123	1 953	1 973
Korea, Republic of					
Ores & concentrates	449	537	478	539	385
Metal	216	487	517	675	748
Singapore					
Ores & concentrates	1 977	1 036	1 245	508	494
Taiwan					
Ores & concentrates	6 372	6 991	9 993	8 179	8 852
Metal	53	93	126	258	166
Thailand					
Ores & concentrates	8 132	7 514	1 778	6 478	...
Australia					
Ores & concentrates	8 300	10 300	12 600	12 253	...
Metal	...	158	144	163	...

Note(s):-

(1) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

(a) Years ended 31 March following that stated

Production of Coal

tonnes

Country	1993	1994	1995	1996	1997
Albania					
Lignite	164 000	158 000	105 000	90 000	38 000
Armenia	...	...	25 000	6 000	5 000
Austria					
Brown coal & lignite	1 691 175	1 368 717	1 249 308	1 108 058	1 130 339
Bosnia & Herzegovina					
Lignite	*1 500 000	*1 500 000	*1 500 000	*1 000 000	...
Brown coal	*1 000 000	*1 000 000	*1 000 000	*1 000 000	...
Bulgaria					
Anthracite & bituminous	263 000	173 000	194 000	205 100	146 000
Brown coal & lignite	28 770 000	28 584 000	30 636 000	32 050 700	29 420 000
Croatia					
Bituminous	104 617	96 205	75 208	64 369	48 535
Czech Republic					
Bituminous	23 862 000	20 910 000	21 309 000	21 784 000	20 847 000
Lignite	1 263 000	913 000	775 000	902 000	747 000
Brown coal	66 891 000	59 811 000	57 954 000	59 539 000	57 395 000
France					
Anthracite & bituminous	8 576 000	7 458 000	7 014 000	7 312 000	5 779 000
Lignite	1 675 000	1 501 000	1 401 000	798 000	1 030 000
Georgia	82 200	44 500	42 600	22 500	4 600
Germany					
Anthracite & bituminous	58 282 312	52 407 727	53 563 599	48 196 515	46 790 000
Brown coal	221 840 512	207 095 866	192 758 592	187 246 925	177 160 000
Greece					
Lignite	54 817 062	57 532 515	56 553 231	54 732 680	58 340 000
Hungary					
Bituminous	942 000	1 021 115	843 747	996 019	934 764
Lignite	6 894 000	6 727 049	7 150 518	7 575 255	8 131 814
Brown coal	6 598 000	6 158 199	6 457 659	6 538 456	6 552 186
Italy					
Bituminous	17 000	109 000	—	41 000	...
Lignite	1 053 000	517 000	365 800	223 400	203 061
Macedonia					
Lignite	6 917 774	6 859 762	*7 000 000	*7 000 000	*7 000 000
Norway					
Bituminous (d)	266 734	301 190	292 094	229 636	220 000
Poland					
Bituminous	130 479 200	133 933 100	137 166 300	137 987 200	137 792 476
Lignite	68 104 900	66 770 200	63 547 100	63 845 400	63 169 437
Portugal					
Anthracite	197 278	147 154	—	—	—
Romania					
Anthracite & bituminous	5 757 000	6 307 000	6 356 000	6 965 000	...
Brown coal & lignite	36 684 000	36 891 000	37 632 000	37 809 000	...
Russia	306 000 000	272 000 000	262 000 000	254 800 000	244 000 000
Slovakia					
Bituminous	960 000	1 040 000	1 065 000	...	...
Brown coal	2 300 000	2 620 000	2 660 000	(b) 3 756 000	(b) 3 853 000
Slovenia					
Lignite	3 921 000	3 775 000	3 917 000	4 000 000	*4 000 000
Brown coal	1 200 000	1 079 000	967 000	241 001	811 734
Spain					
Anthracite	6 087 836	6 728 157	6 691 344	6 498 980	6 688 000
Bituminous	8 199 460	7 257 719	6 907 297	7 195 634	7 200 000
Sub-bituminous	4 114 975	4 137 149	4 036 000	4 071 521	4 115 000
Lignite	13 347 265	11 361 535	10 676 000	9 585 773	8 463 000
Turkey					
Anthracite	(b) 5 000 000	4 210 780	3 377 334	3 581 788	4 444 865
Bituminous	...	108 364	147 154	126 751	117 310
Lignite	51 359 417	55 038 339	56 031 099	57 532 425	56 093 384
Ukraine					
Bituminous	115 800 000	94 600 000	87 841 000	75 719 000	76 947 000
Lignite	4 100 000	2 700 000	2 292 000	1 587 000	1 433 000
United Kingdom					
Anthracite	1 404 000	...	...	...	...
Bituminous	66 795 000	(g) 48 971 000	(g) 53 037 000	(g) 50 197 000	(g) 48 495 000

Coal

Production of Coal

tonnes

Country	1993	1994	1995	1996	1997
Yugoslavia, Federal Republic of					
Bituminous	73 000	81 672	56 678	62 754	91 540
Lignite	36 829 000	37 740 199	39 939 297	37 827 576	42 312 896
Brown coal	531 000	529 105	559 778	538 759	512 228
Botswana	890 497	900 298	898 383	763 240	776 917
Congo, Democratic Republic					
Bituminous	14 000	11 000	*10 000	*10 000	...
Egypt	...	...	...	350 000	350 000
Malawi (h)	44 958	60 217	18 169	64 037	60 749
Morocco					
Anthracite	603 800	650 400	649 600	505 600	376 300
Mozambique					
Bituminous	8 740	*10 000	40 000	40 000	140 000
Niger	*150 000	*150 000	*150 000	*150 000	*150 000
Nigeria					
Sub-bituminous	27 686	13 153	19 505	27 116	...
South Africa					
Anthracite	3 245 936	2 280 446	2 137 368	2 465 611	1 997 314
Bituminous	179 030 241	193 524 994	204 104 596	203 896 422	216 855 107
Swaziland					
Bituminous	49 644	227 730	171 666	128 973	203 115
Tanzania					
Bituminous	40 248	45 027	43 200	52 000	...
Zambia					
Bituminous	301 496	162 899	141 282	100 000	98 500
Zimbabwe					
Bituminous	5 284 734	5 515 336	5 537 579	5 174 685	5 300 749
Canada					
Bituminous	35 323 442	36 644 455	38 605 686	40 026 879	41 257 324
Sub-bituminous	23 661 046	25 494 274	25 621 599	24 985 963	25 782 791
Lignite	10 044 870	10 684 628	10 739 710	10 838 575	11 652 553
Mexico					
Bituminous	10 215 352	11 432 222	11 800 258	13 746 817	12 707 443
USA					
Anthracite	3 921 000	4 215 000	4 274 000	4 325 000	...
Bituminous	523 130 000	580 834 000	556 798 000	572 199 000	(i) 987 579 000
Sub-bituminous	249 386 000	272 624 000	297 555 000	308 707 000	...
Lignite	81 237 000	79 906 000	78 471 000	79 883 000	...
Argentina					
Bituminous	172 771	348 000	304 485	328 762	*350 000
Brazil					
Bituminous & lignite (e)	4 854 301	5 352 248	5 524 961	4 740 000	5 630 000
Chile					
Bituminous	792 681	480 825	361 554	233 600	136 028
Lignite	1 000 385	1 182 138	1 123 313	1 210 483	1 278 868
Colombia					
Bituminous	21 223 000	22 600 000	25 869 000	29 594 000	32 797 000
Peru					
Anthracite	31 095	26 445	16 240	16 778	*20 000
Bituminous	*41 000	*45 000	*45 000	*45 000	*45 000
Venezuela					
Bituminous	3 958 192	4 434 354	4 257 650	4 181 000	5 284 000
Afghanistan					
Bituminous (c)	*250 000	*200 000	140 000	200 000	220 000
Bhutan	56 000	63 912	71 112	68 000	*70 000
China					
Anthracite	250 550 800	249 910 900	304 486 800	314 766 800	...
Bituminous	843 310 200	931 138 300	996 584 200	1 015 383 900	(g) 1 330 000 000
Lignite	56 810 000	60 950 800	59 660 500	66 548 700	30 000 000
India					
Bituminous	246 100 000	254 000 000	263 500 000	283 000 000	295 900 000
Lignite	18 800 000	19 200 000	22 000 000	25 000 000	25 000 000
Indonesia					
Anthracite & bituminous	27 584 418	31 238 458	41 516 722	47 338 609	52 074 283

Production of Coal

tonnes

Country	1993	1994	1995	1996	1997
Iran					
Bituminous (c)	1 665 164	1 884 985	1 847 994	1 726 297	*1 750 000
Japan					
Anthracite & bituminous	7 200 000	6 900 000	6 300 000	6 480 000	4 275 000
Lignite	53 039	60 886	...	66 140	...
Kazakhstan					
Bituminous	107 211 000	101 500 000	(a) 83 271 000	(a) 76 831 000	(a) 72 647 000
Lignite	4 669 000	2 500 000	...	...	...
Korea, Dem. P.R. of					
Anthracite	43 000 000	...	40 000 000	30 300 000	70 000 000
Lignite	...	...	...	13 000 000	21 000 000
Korea, Republic of					
Anthracite	9 442 700	7 438 300	5 719 600	4 951 000	4 614 000
Kyrgyzstan	1 700 000	800 000	474 000	400 000	500 000
Laos	...	3 280	35 490	74 680	97 350
Malaysia	263 604	173 749	112 100	73 747	105 231
Mongolia					
Anthracite & bituminous	...	1 430 000	1 445 000	1 256 700	...
Brown coal & lignite	(i) 5 608 500	3 550 000	3 558 000	3 853 900	(i) 4 951 200
Myanmar (h)	33 384	31 485	34 708	31 225	22 537
Pakistan (a)	3 305 028	3 082 221	2 996 571	3 344 536	*3 300 000
Philippines					
Bituminous	1 531 487	1 458 000	1 320 000	1 123 000	1 100 000
Taiwan					
Bituminous	328 124	285 099	234 965	147 497	98 203
Tajikistan	200 000	100 000	30 000	20 000	10 000
Thailand					
Anthracite	15 500	11 900	5 000	3 000	...
Lignite	15 592 759	17 099 654	18 418 738	21 685 894	23 443 000
Uzbekistan	3 655 000	3 800 000	3 100 000	2 830 000	3 130 000
Vietnam					
Anthracite	5 500 000	6 100 000	7 200 000	10 900 000	10 700 000
Australia					
Bituminous (f)	180 045 000	182 723 000	193 534 000	198 638 000	216 490 000
Brown coal (j)	47 648 000	49 980 000	50 751 000	53 604 000	60 700 000
New Zealand					
Bituminous	975 109	1 265 328	1 570 220	1 671 730	1 500 145
Sub-bituminous	1 932 057	1 516 327	1 631 936	1 588 840	1 950 548
Lignite	183 613	251 541	242 882	248 764	213 341
World Total	4 420 000 000	4 514 000 000	4 635 000 000	4 699 000 000	4 766 000 000

Note(s):-

(1) There is no international agreement as to the separate definition of lignite and brown coal. In some cases they are distinguished. Elsewhere both may be aggregated under one or other term

- (a) Including lignite
- (b) Including bituminous
- (c) Years ended 20 March following that stated
- (d) Spitzbergen: not including production from mines controlled by the former Soviet Union
- (e) Including beneficiated and directly shipped material
- (f) Including sub-bituminous
- (g) Including anthracite
- (h) Years ended 31 March following that stated
- (i) Coal; all forms
- (j) Years ended 30 June of that stated

Exports of Coal

tonnes

Country	1993	1994	1995	1996	1997
Albania					
Lignite	*152 000	...	...	...	21 000
Belgium-Luxembourg					
Anthracite	195 230	220 055	254 998	283 988	289 285
Other coal	735 009	1 165 871	1 271 207	1 304 851	1 652 469
Briquettes	31 913	28 400	28 139	28 024	31 303
Czech Republic					
Hard coal (b)	5 137 000	6 499 000	7 022 000	6 738 000	6 647 799
Lignite	5 008 000	5 282 000	6 903 000	6 173 000	4 664 842
Denmark (b)	23 725	48 577	59 572	115 130	106 416
Estonia (c)	*338 000	*174 000	*157 000	...	...
France					
Anthracite	24 464	18 884	19 046	27 368	15 107
Other coal	575 660	561 128	424 847	262 423	204 038
Briquettes	40 092	21 093	13 956	32 049	43 570
Germany					
Hard coal (b)	970 011	2 190 765	1 736 383	1 037 327	513 327
Brown coal	350 722	723 794	674 751	544 460	339 407
Briquettes	608 953	190 745	157 713	132 804	427 260
Irish Republic (b)	6 639	4 184	3 322	1 538	—
Italy (b)	1 388	10 701	35 262	7 947	3 709
Netherlands					
Anthracite	91 794	64 324	71 206	86 315	112 565
Other coal	1 891 588	2 807 844	2 768 777	2 236 539	2 824 677
Briquettes	10 058	3 750	82 864	23 590	32 210
Norway (b)	227 233	178 624	180 276	156 071	...
Poland					
Anthracite	252 619	221 225	73 892	...	...
Other coal	22 715 388	27 473 866	31 794 304	(b) 28 925 379	(b) 27 000 000
Lignite	908 916	651 000	367 000	78 000	...
Russia					
Hard coal (b)	19 675 000	24 100 000	30 360 000	26 085 000	21 600 000
Lignite	477 000	(c) *299 000	1 911 031	2 058 470	842 901
Slovakia					
Lignite	113 067	...	...	...	...
Slovenia					
Lignite	38 233	24 743	...	2 725	1 974
Spain (b)	312	19 762	581	424	5 821
Sweden (b)	105 431	23 393	1 754	2 236	2 048
Ukraine	(c) *579 000	(c) *2 720 000	1 686 031	2 288 843	2 374 743
United Kingdom					
Anthracite	316 790	278 030	351 552	420 230	393 772
Other coal	796 943	958 407	572 411	553 789	666 119
Briquettes	94 258	105 285	123 502	117 070	97 803
South Africa					
Anthracite	2 090 031	2 225 494	2 016 844	2 203 555	1 648 594
Other coal	49 642 941	52 366 594	57 659 214	58 020 847	55 641 190
Zimbabwe (b)	19 799	74 272	63 537	30 775	45 740
Canada					
Hard coal (b)	28 275 491	31 228 345	34 068 703	34 748 142	35 613 722
Lignite	73 624	62 293	35 461	11 589	72 788
USA					
Anthracite	430 955	444 788	734 999	700 105	580 216
Other coal	67 238 436	64 480 289	79 680 628	82 076 000	75 667 653
Lignite	29 808	21 080	83 808	235 283	455 778
Briquettes	26 478	15 986	34 473	12 852	29 832
Colombia	17 616 000	18 437 000	18 274 000	24 780 000	27 389 000
Venezuela	4 361 311	4 088 315	3 802 598	3 604 000	4 700 000
China					
Anthracite	1 914 475	1 863 031	2 528 687	1 729 132	2 115 741
Other coal	17 899 388	22 436 550	26 087 483	27 267 751	28 606 785
India (a)	515 099	673 053	651 734	478 229	...

Exports of Coal

tonnes

Country	1993	1994	1995	1996	1997
Indonesia					
Anthracite	1 051 008	1 142 525	1 825 065	1 368 830	1 091 542
Other coal	17 568 547	24 221 450	29 745 435	30 586 265	41 038 390
Briquettes	116 002	406 271	382 104	78 500	168 000
Kazakhstan					
Hard coal	659 000	...	20 767 491	20 839 652	24 857 304
Lignite	...	...	202 290	232 381	223 403
Korea, Dem. P.R. of (c)	*615 000	*474 000	*432 000	...	...
Kyrgyzstan					
Hard coal	...	...	170 638	92 277	...
Laos	—	—	10 000	43 000	129 200
Malaysia	32 062	63 570	77 421	15 330	...
Singapore (b)	73 565	1 257	147	396	48
of which, re-exports	73 417	1 148	147	5	1
Vietnam	2 300 000	2 300 000	2 500 000	3 200 000	3 600 000
Australia	133 077 000	131 228 000	136 435 000	140 813 000	157 760 000
New Zealand (d)	746 915	1 000 429	1 125 970	1 440 253	1 305 664

Note(s):-

(1) This table excludes bunker shipments

(a) Years ended 31 March following that stated

(b) Including anthracite

(c) BGS estimates, based on known imports into certain countries

(d) Years ended 30 June of that stated

Coal

Imports of Coal

tonnes

Country	1993	1994	1995	1996	1997
Armenia	2 000	3 500	75 000	94 000	2 000
Austria					
Hard coal (c)	3 176 414	2 998 512	...	...	3 796 610
Brown coal	1 320	18 873	...	...	18 863
Briquettes	248 910	196 657	...	...	139 250
Belgium-Luxembourg					
Anthracite	890 145	890 726	1 023 094	933 612	856 978
Other coal	11 254 181	12 392 380	12 036 234	11 103 000	11 862 591
Brown coal	208 017	112 321	177 159	149 215	158 490
Briquettes	155 193	143 847	96 524	42 690	38 967
Bulgaria					
Anthracite	1 671 700	1 046 700	630 900	(g) 3 394 275	(g) 3 293 360
Briquettes	1 229 900	876 300	1 231 600	...	...
Croatia					
Anthracite	14 878	...	90	17	45
Other coal	576 146	350 570	89 387	61 407	62 452
Lignite	147 106	...	154 471	146 924	133 684
Czech Republic	1 940 000	1 721 000	2 676 000	3 211 000	2 274 356
Denmark					
Hard coal (c)	10 468 023	11 805 569	12 939 448	12 462 819	14 075 359
Lignite	8 314	8 998	4 029	4 805	10 459
Finland					
Hard coal (c)	5 953 057	8 104 915	5 887 234	6 178 787	7 439 189
France					
Anthracite	1 994 813	2 013 315	1 687 257	1 390 400	1 904 691
Other coal	12 047 753	10 585 090	11 629 364	14 365 536	11 661 093
Lignite	49 304	58 928	53 125	41 251	37 919
Briquettes	182 065	160 422	95 041	111 050	139 330
Germany					
Anthracite	169 098	219 182	363 811	258 966	348 536
Other coal	12 883 376	15 264 156	14 710 286	16 089 372	19 511 920
Brown coal	2 990 577	3 023 604	2 642 506	2 558 933	2 150 892
Briquettes	436 331	76 182	63 636	111 376	530 856
Greece (c)	1 446 000	1 430 186	1 412 867	1 572 505	1 230 221
Hungary					
Hard coal (c)	1 242 093	1 961 051	1 761 496	1 893 219	1 742 672
Brown coal	985 104	622 434	386 006	549 207	456 029
Briquettes	66 210	54 544	26 779	18 847	14 725
Iceland	53 964	71 007	64 927	65 569	58 255
Irish Republic					
Anthracite	135 505	95 650	106 983	111 763	109 108
Other coal	2 754 712	*2 400 000	2 401 743	2 486 235	3 053 424
Briquettes	44 690	40 898	31 716	33 907	40 867
Italy					
Anthracite	634 356	448 692	351 196	391 852	658 500
Other coal	13 264 130	15 308 172	18 267 000	16 331 639	15 249 673
Briquettes	21 583	19 754	16 740	18 446	16 523
Latvia	610 156	465 554	159 560	207 251	143 194
Lithuania					
Hard coal (c)	156 500	353 500	234 600	387 454	323 538
Lignite	...	...	24 473	26 584	3 421
Macedonia					
Anthracite	63 086	...	...	...	...
Malta	245 818	208 412	37 733	1 036	...
Moldova	1 938 000	2 444 000	1 314 799	...	...
Netherlands					
Anthracite	250 392	335 059	126 045	299 485	156 257
Other coal	15 159 987	16 791 802	17 437 949	17 528 000	18 998 000
Brown coal	32 545	32 616	42 893	43 698	43 828
Briquettes	45 101	47 979	17 703	12 419	42 113
Norway					
Anthracite (a)	81 191	93 097	106 412	83 151	106 361
Other coal (a)	612 709	673 841	788 440	706 033	725 246
Lignite (a)	21 702	27 563	32 845	40 755	28 809
Poland					
Hard coal (c)	129 134	1 069 272	1 498 131	1 976 700	...
Lignite	920	1 477	13 020	39 300	...

Imports of Coal

tonnes

Country	1993	1994	1995	1996	1997
Portugal					
Anthracite	557 451	667 648	...	322 221	447 943
Other coal	4 141 740	4 346 000	(c) 5 661 794	4 776 330	5 160 295
Romania	2 916 496	4 079 985	4 732 778	4 728 117	5 248 649
Russia (e)	...	*25 900 000	*18 300 000	*20 000 000	...
Slovakia					
Bituminous	2 666 545	4 956 290	4 842 520	4 994 457	2 392 569
Lignite	...	3 460 896	3 695 506	3 355 351	...
Briquettes	721 146	...	...	...	...
Slovenia					
Hard coal (c)	18 769	15 552	...	20 377	32 907
Lignite	318 189	219 645	...	412 979	341 558
Spain					
Anthracite	194 074	289 499	199 141	282 449	159 315
Other coal	12 454 217	11 549 223	13 777 894	11 845 564	11 180 489
Sweden					
Anthracite	24 134	32 661	61 770	95 962	42 372
Other coal	3 180 865	3 013 709	3 437 536	3 139 894	2 972 087
Switzerland					
Hard coal (c)	124 832	131 449	214 158	130 954	80 496
Briquettes	14 441	13 450	9 168	11 722	8 540
Turkey					
Hard coal (c)	5 472 825	6 652 514	4 340 199	7 853 373	9 600 283
Ukraine (e)	*1 261 000	*2 673 000	*2 750 000	*1 068 000	...
United Kingdom					
Anthracite	1 371 121	1 681 720	1 785 611	1 127 416	1 247 553
Other coal	14 624 142	13 406 765	14 135 749	16 512 925	18 581 823
Briquettes	127 493	84 599	55 665	56 279	25 119
Yugoslavia, Federal Republic of	...	(e) *334 000	(e) *269 000	(e) *30 000	112 418
Algeria	1 091 555	425 326	710 364	318 097	...
Egypt	1 522 015	1 852 000	...	1 875 508	...
Kenya					
Anthracite	—	—	1 752	9 651	12 363
Other coal	130 094	32 632	84 251	66 100	31 975
Malawi	...	26 869	135 238	...	...
Morocco (c)	978 598	1 290 000	1 882 417	2 208 734	...
South Africa	343 497	556 968	805 160	1 218 664	1 143 497
Tunisia					
Anthracite	14 733	9 383	1 443	3 776	...
Zimbabwe	—	24 213	38 612	—	3
Canada					
Anthracite	265 645	343 961	427 044	527 520	523 133
Other coal	8 450 491	8 704 363	9 317 111	11 123 242	14 181 304
Cuba	152 000	153 000	157 000	...	...
Mexico					
Hard coal (c)	81 026	289 668	1 255 697	1 540 509	...
Lignite	1 675	1 034	1 654	1 721	...
Panama	49 921	61 861	66 766	66 968	...
USA					
Anthracite	219 417	341 517	34 974	107 954	25 194
Other coal	6 336 742	6 482 178	6 512 516	6 343 234	6 715 663
Lignite	73 624	62 384	35 505	11 625	72 788
Briquettes	54 471	27 246	443	28 212	—
Argentina	966 884	1 278 572	1 155 449	1 029 290	1 051 391
Brazil					
Anthracite	375 291	903 860	459 549	...	...
Other coal	12 225 382	11 475 229	12 082 413	(c) 13 000 427	(c) 12 255 095
Chile	1 688 897	2 343 242	2 871 638	4 673 570	4 638 125
Peru	262 086	354 702	287 007	360 236	...
Venezuela	23 722	31 534	29 114	20 532	...

Coal

Imports of Coal

tonnes

Country	1993	1994	1995	1996	1997
Bangladesh	55 946	...	...	...	...
China					
Anthracite	842 058	624 692	523 170	380 941	85 724
Other coal	579 031	584 485	1 085 376	2 823 516	1 912 883
Lignite	7 090	8 745	26 615	12 240	4 997
Cyprus	110 342	152 043	169 182	158 828	122 626
Hong Kong (c)	11 828 277	8 449 610	9 107 453	6 768 343	5 575 100
India (c) (d)	7 331 098	10 739 630	12 512 088	3 174 902	...
Indonesia (c)	511 189	300 805	644 321	411 046	384 852
Iran (b)	258 810	842 698	411 744	...	...
Israel	5 381 000	...	...	...	...
Japan					
Anthracite	2 478 369	2 444 482	2 780 788	3 233 592	3 474 785
Other coal	111 417 834	114 688 991	123 398 387	126 182 656	129 453 043
Lignite	23 176	20 782	19 943	20 371	13 382
Korea, Dem. P.R. of (e)	*2 008 000	*1 552 000	*1 106 000	*324 000	*268 000
Korea, Republic of					
Anthracite	783 332	699 176	722 839	874 640	721 918
Other coal	34 958 730	38 507 007	43 113 442	44 932 078	48 860 765
Briquettes	3 269	6 331	5 150	9 300	3 000
Kyrgyzstan	1 028 000	...	4 092 267	7 092 911	...
Malaysia					
Anthracite	28 194	17 126	14 541	39 400	...
Other coal	1 623 489	1 363 448	1 809 461	2 905 820	...
Lignite	25 927	268	95	...	...
Pakistan (f)	1 442 000	857 000	1 018 000	944 000	909 000
Philippines (c)	925 444	1 064 043	1 645 511	1 659 482	...
Taiwan					
Anthracite	51 026	53 248	78 253	59 645	50 605
Other coal	24 876 728	26 689 095	29 160 642	30 747 694	36 646 759
Briquettes	—	13 121	52 250	15 335	—
Thailand (c)	964 372	1 417 363	2 322 192	3 795 532	...
Australia (f)	76 379	...	...	...	...
New Caledonia	156 781	206 030	184 914	227 995	258 341

Note(s):-

- (a) Excludes coal imported from Spitzbergen
- (b) Years ended 20 March following that stated
- (c) Including anthracite
- (d) Years ended 31 March following that stated
- (e) BGS estimates, based on known exports from certain countries
- (f) Years ended 30 June of that stated
- (g) Including briquettes

Mine Production of Cobalt

tonnes (metal content)

Country	1993	1994	1995	1996	1997
Finland	167	121	—	—	—
Russia	*3 500	*3 000	*3 500	*3 300	*4 100
Botswana	205	225	271	406	334
Congo, Democratic Republic	829	2 329	3 422	3 540	2 808
Morocco	405	427	548	540	770
South Africa	243	246	190	244	318
Zambia (a)	4 840	3 600	5 908	*7 900	*6 100
Zimbabwe	113	126	109	106	126
Canada	5 108	4 265	5 339	5 714	5 700
Cuba	1 258	1 141	1 854	2 300	2 500
Brazil	1 200	1 300	1 100	1 000	...
China	189	199	986	192	*250
Indonesia	800	800	814	*800	*800
Australia	1 159	1 394	1 433	1 423	*1 450
New Caledonia	2 407	2 756	2 601	2 356	2 964
World Total	22 400	21 900	28 100	29 800	29 200

Note(s):-

- (1) There is frequently a considerable disparity between the cobalt content of ore raised and cobalt actually recovered
- (2) Figures in this table relate where possible to cobalt recovered. The principal exceptions to this are Brazil and New Caledonia, the figures for which relate to cobalt in ore raised

(a) Years ended 31 March following that stated

Cobalt

Production of Cobalt Metal

tonnes

Country	1993	1994	1995	1996	1997
Finland	940	1 443	1 709	2 110	...
Norway	2 414	2 824	2 804	3 097	3 417
Russia	*3 000	3 341	3 940	3 151	*4 100
Congo, Democratic Republic	829	2 329	3 422	3 540	2 808
Morocco	—	—	—	80	226
South Africa (b)	172	246	189	244	318
Zambia	4 212	2 608	2 934	4 799	3 949
Canada (a)	2 695	2 971	3 259	3 601	3 738
Brazil	153	166	166	193	266
China	950	800	900	1 200	*1 200
Japan	191	161	222	228	263
World Total	15 600	16 900	19 500	22 200	22 400

Note(s):-

(1) In addition to the production listed above, several countries, including the United Kingdom, Finland, France and USA, are known to produce substantial amounts of cobalt compounds

(2) Much of the metal recorded under Democratic Republic of the Congo, is believed to be further processed in Belgium and elsewhere

(a) Including oxides

(b) Includes metal and metal contained in sulphate

Exports of Cobalt

tonnes

Country	1993	1994	1995	1996	1997
Austria					
Metal	181	104	2 125	63	75
Belgium-Luxembourg					
Metal (a)	*1 900	*1 900	*2 200	*2 200	*1 700
Oxides (a)	*1 400	*900	*1 900	*2 100	*2 000
Estonia					
Oxides	*25	*40	53	105	...
Finland					
Metal	829	1 352	1 558	1 776	2 074
Oxides	1 283	1 524	1 416	1 876	2 264
France					
Metal	465	742	607	468	573
Oxides	53	43	219	19	60
Germany					
Metal	1 250	1 789	1 543	1 255	1 387
Oxides	72	57	78	51	197
Irish Republic					
Oxides	304	205	193	173	104
Italy					
Metal	372	82	125	76	71
Oxides	114	59	78	30	56
Netherlands					
Metal	408	534	978	3 614	1 354
Oxides	40	47	119	137	85
Norway					
Metal	2 554	2 680	2 830	3 149	3 461
Russia					
Metal	553	2 042	2 207	2 554	4 572
Oxides	(d) *100	(d) *200	277	142	261
Spain					
Metal	2	...	16	49	50
Sweden					
Metal	281	205	170	181	103
Oxides	589	660	898	396	251
Switzerland					
Metal	151	139	128	124	183
United Kingdom					
Metal	1 822	2 001	2 338	2 362	1 858
Oxides	1 090	2 151	2 163	1 233	1 229
Congo, Democratic Republic					
Metal	*800	*2 300	*3 400	*3 500	*2 800
Morocco					
Ore	...	4 080	4 591	4 893	...
Metal	...	...	...	100	218
South Africa					
Metal	191	179	152	194	256
Zambia					
Metal	*4 200	*2 600	*2 900	*4 800	*3 900
Canada					
Metal	3 098	4 155	4 697	4 821	6 002
Oxides	396	209	—	632	549
Cuba					
Oxide, sinter & sulphide (b)	*1 200	*1 200	*1 700	*2 300	*2 400
USA					
Metal	834	1 820	1 624	2 028	1 902
Oxides	322	495	336	408	676
Brazil					
Metal	...	260	107	100	...
China					
Metal	10	767	135	171	216
Oxides	35	484	235	114	204
Hong Kong					
Metal (c)	814	1 034	910	850	1 154
Oxides (c)	44	522	1 010	1 989	1 819

Cobalt

Exports of Cobalt

tonnes

Country	1993	1994	1995	1996	1997
Japan					
Metal	269	401	448	788	900
Oxides	28	41	73	65	88
Taiwan					
Metal	22	118	29	202	445

Note(s):-

- (a) Exports of cobalt are not separately recorded. Figures shown are BGS estimates based on known imports into certain countries
- (b) Co content
- (c) Re-exports
- (d) BGS estimates, based on known imports into certain countries

Imports of Cobalt

tonnes

Country	1993	1994	1995	1996	1997
Austria					
Metal	271	355	353	283	439
Oxides	24	18	26	16	17
Belgium-Luxembourg					
Metal	(b) *300	(d) 1 080	(b) *1 000	(b) *1 000	(b) *1 000
Oxides	202	348	475	258	340
Denmark					
Metal	18	27	24	123	8
France					
Metal	978	1 453	1 643	1 256	2 023
Oxides	555	578	602	539	649
Germany					
Metal	1 819	2 220	2 360	2 508	2 127
Oxides	478	621	479	346	339
Irish Republic					
Metal	408	249	140	149	191
Italy					
Metal	603	698	629	682	691
Oxides	608	655	734	669	735
Netherlands					
Metal	254	476	615	577	456
Oxides	211	212	257	244	452
Norway					
Metal	1 075	922	1 637	1 754	1 100
Oxides	890	912	1 018	696	408
Russia					
Metal	*100	(b) *100	(b) *500	...	...
Spain					
Metal	183	113	144	190	163
Oxides	362	135	437	540	783
Sweden					
Metal	510	741	1 085	816	669
Switzerland					
Metal	287	295	335	275	353
Turkey					
Oxides	46	34	39	46	80
United Kingdom					
Metal	3 344	3 501	3 458	3 875	3 980
Oxides	554	603	604	713	799
South Africa					
Metal	158	1 202	580	195	432
Oxides	16	10	12	2	7
Canada					
Metal	546	950	1 246	856	1 224
Mexico					
Metal	46	53	36	52	...
Oxides	138	166	125	176	...
USA					
Metal	6 140	6 945	6 682	6 651	7 858
Oxide	444	768	808	892	1 149
Brazil					
Metal	355	418	358	*400	...
Oxide	73	74	94	*100	...
Venezuela					
Oxides	51	55	104	*100	...
China					
Metal	581	435	1 052	428	572
Oxides	69	324	197	108	150
Hong Kong					
Metal	1 207	1 427	1 171	1 342	1 626
Oxide	211	771	309	153	333
India (a)					
Metal	233	322	330	361	...
Indonesia					
Oxides	60	54	48	69	3 628
Japan					
Metal	4 107	5 809	5 548	6 662	7 016
Oxide	498	620	808	1 119	1 753

Cobalt

Imports of Cobalt

tonnes

Country	1993	1994	1995	1996	1997
Korea, Republic of					
Metal	577	717	796	573	626
Oxides	133	121	140	172	147
Malaysia					
Metal	131	1 689	300	200	...
Oxides	43	67	64	40	...
Saudi Arabia					
Oxides	254	19	537	142	...
Singapore					
Metal	41	542	257	355	619
Oxide	101	157	159	290	207
Taiwan					
Metal	271	474	517	790	879
Oxides	178	223	244	232	197
Australia					
Metal (c)	43	...	...	...	...
Oxide	54	77	71	75	...

Note(s):-

- (a) Years ended 31 March following that stated
- (b) BGS estimates, based on known exports from certain countries
- (c) Years ended 30 June of that stated
- (d) Excluding unwrought metal

Mine Production of Copper

tonnes (metal content)

Country	1993	1994	1995	1996	1997
Albania	3 400	2 500	3 650	2 630	324
Armenia	*500	*500	1 697	1 909	*300
Bulgaria	60 400	75 500	77 400	84 800	75 500
Finland	13 657	13 243	9 049	9 261	8 500
Georgia	*5 000	*3 000	3 700	...	*4 000
Macedonia	*10 000	*10 000	*10 000	*13 500	*13 000
Norway	8 743	7 408	6 799	7 394	6 671
Poland	382 600	378 000	384 200	421 900	414 737
Portugal	150 430	130 255	129 726	107 773	*107 000
Romania	25 250	26 034	24 520	24 434	23 190
Russia	594 000	573 300	525 900	523 000	526 000
Slovakia	...	...	400	386	314
Spain	6 691	5 944	24 519	38 398	38 300
Sweden	88 909	79 384	83 603	71 659	86 610
Turkey	39 200	43 400	44 500	52 200	64 600
Yugoslavia, Federal Republic of	57 375	74 351	74 619	69 467	73 567
Botswana	20 132	22 780	20 461	23 299	19 820
Congo, Democratic Republic	60 000	40 642	34 958	40 165	37 658
Morocco	14 300	13 400	13 600	15 100	15 400
Namibia	29 146	26 555	22 530	14 904	17 879
South Africa	189 000	173 000	182 000	188 000	153 058
Zambia	431 500	384 400	341 900	339 700	331 200
Zimbabwe	8 187	9 350	8 045	9 028	4 993
Canada	732 591	616 776	726 293	688 426	657 954
Cuba	*2 000	*2 000	*2 000	*2 000	*1 000
Honduras	1 000	*500	390	—	...
Mexico	303 989	305 487	339 347	327 978	338 933
USA	1 801 382	1 850 000	1 850 100	1 919 200	1 939 600
Brazil	43 568	39 674	48 933	46 203	39 814
Chile	2 055 400	2 219 900	2 488 600	3 115 800	3 392 000
Peru	381 250	365 513	409 693	485 595	502 970
China	345 695	395 630	441 900	436 400	435 000
India	49 416	45 944	47 000	47 800	48 000
Indonesia	378 000	434 000	618 000	525 900	548 300
Iran	86 600	117 900	102 200	107 600	117 300
Japan	10 277	6 043	2 376	1 145	932
Kazakhstan	263 489	215 444	232 579	250 200	316 166
Korea, Dem. P.R. of	*12 000	*12 000	*12 000	*12 000	*12 000
Malaysia	25 182	25 267	20 751	20 219	18 600
Mongolia	117 010	120 160	121 900	124 600	130 000
Myanmar	3 581	5 025	5 282	*5 000	*6 000
Oman	8 800	4 300	—	—	—
Pakistan	...	...	4 400	*3 000	—
Philippines	136 258	116 163	105 655	62 300	48 638
Saudi Arabia	...	...	...	800	700
Uzbekistan	78 000	49 000	40 000	64 000	74 400
Australia	430 000	418 000	398 000	547 000	558 000
Papua New Guinea	203 945	206 329	212 737	186 715	111 515
World Total	9 700 000	9 700 000	10 300 000	11 000 000	11 300 000

Smelter Production of Copper

tonnes

Country	1993	1994	1995	1996	1997
Belgium	141 700	147 600	151 900	157 300	142 500
Bulgaria	71 900	83 151	92 200	*90 000	*90 000
Finland	136 647	129 265	113 803	178 675	*180 000
Germany	141 300	292 200	308 100	385 400	349 100
Norway	37 206	39 516	31 146	31 248	32 900
Poland	411 200	401 881	410 200	414 800	442 000
Romania	26 000	23 449	23 355	32 700	29 000
Russia	533 700	514 300	512 000	*570 000	*570 000
Slovakia	22 400	22 000	22 000	*22 000	*22 000
Spain	135 800	157 900	139 900	248 500	288 900
Sweden	80 981	81 159	83 289	92 600	94 922
Turkey	33 456	30 437	24 416	30 341	32 491
Yugoslavia, Federal Republic of	57 398	86 600	87 410	125 200	119 418
Congo, Democratic Republic (a)	48 400	29 300	28 800	42 200	37 700
Namibia	34 411	29 781	29 799	20 705	24 997
South Africa	156 600	158 300	154 400	148 400	163 600
Zambia (a)	367 600	276 700	299 900	324 100	315 800
Zimbabwe	18 900	18 200	17 500	*18 000	*18 000
Canada	518 301	515 088	522 761	529 346	529 524
Mexico	300 710	300 791	327 563	311 264	332 999
USA	1 265 200	1 311 108	1 250 000	1 300 000	1 440 000
Brazil	161 102	170 073	164 996	172 075	177 060
Chile	1 389 100	1 460 400	1 666 200	1 991 300	2 270 600
Peru	317 211	333 017	373 297	414 152	426 071
China	443 700	482 400	538 000	615 600	762 700
India	37 000	51 200	39 500	45 300	59 400
Iran (b)	74 844	100 440	92 613	102 038	*100 000
Japan	1 184 825	1 121 999	1 168 481	1 233 400	1 350 400
Kazakhstan	*300 000	276 100	262 800	250 195	315 960
Korea, Dem. P.R. of	*19 800	*20 000	*20 000	*20 000	*20 000
Korea, Republic of	141 962	135 200	153 900	157 400	153 800
Oman	27 800	31 800	34 200	23 300	22 800
Philippines	212 446	200 255	206 800	178 300	206 200
Uzbekistan	*64 000	*80 000	*50 000	*66 000	*72 000
Australia	247 000	257 000	140 000	186 000	208 000
World Total	9 200 000	9 400 000	9 500 000	10 500 000	11 400 000

Note(s):-

(1) This table shows, where possible, primary metal in the form of blister and anode produced from concentrates, but may include some secondary metal produced from scrap, residues, etc.

(a) Including leach cathodes

(b) Years ended 20 March following that stated

Production of Refined Copper

tonnes

Country	1993	1994	1995	1996	1997
Austria	53 036	51 590	53 408	69 120	*70 000
Belgium	378 890	375 200	376 000	354 000	386 000
Bulgaria	26 347	26 482	25 468	22 300	34 500
Finland	73 373	69 187	73 665	110 715	116 000
France	44 120	41 730	42 500	39 100	35 600
Germany	631 900	591 860	616 390	670 700	673 400
Italy	90 300	84 000	98 000	85 800	85 700
Norway	37 206	39 415	34 332	33 937	32 900
Poland	404 170	405 093	405 700	424 708	440 644
Romania	25 000	22 000	22 000	29 000	22 900
Russia	562 200	502 200	559 800	577 100	610 000
Slovakia	23 200	23 000	21 400	28 100	30 300
Spain	179 230	188 307	164 213	263 989	292 000
Sweden	102 231	102 819	110 939	126 379	128 414
Turkey	92 700	83 000	98 500	100 712	114 600
United Kingdom	46 578	46 664	51 867	56 615	60 402
Yugoslavia, Federal Republic of	51 000	72 100	78 451	104 000	113 534
Congo, Democratic Republic	*40 000	29 300	33 088	42 200	37 700
South Africa	127 900	129 600	131 700	116 000	130 200
Zambia	403 448	360 384	307 181	317 000	327 800
Zimbabwe	18 900	18 200	24 000	22 000	17 900
Canada	561 580	549 869	572 616	559 200	560 312
Mexico	124 531	149 852	189 990	171 410	212 597
USA	2 252 487	2 230 000	2 279 800	2 340 800	2 445 300
Argentina	*15 000	*16 000	*16 000	*16 000	*16 000
Brazil	161 102	170 073	164 996	172 075	177 060
Chile	1 268 200	1 277 400	1 491 500	1 748 200	2 116 600
Peru	259 700	252 997	281 957	341 950	384 085
China	730 332	736 106	1 079 700	1 120 500	1 230 000
India	36 815	49 034	39 569	39 303	65 900
Iran (a)	101 479	133 149	121 631	135 340	*140 000
Japan	1 188 776	1 119 168	1 187 959	1 251 373	1 278 699
Kazakhstan	317 485	278 461	255 559	267 144	301 056
Korea, Dem. P.R. of	*20 000	*30 000	*30 000	*30 000	*30 000
Korea, Republic of	219 519	221 977	233 171	244 434	265 426
Oman	20 500	24 200	21 300	20 400	23 600
Philippines	165 954	154 713	158 109	155 800	146 600
Uzbekistan	65 000	90 000	95 000	104 000	115 000
Australia	334 000	356 000	286 000	331 000	271 100
World Total	11 300 000	11 100 000	11 800 000	12 600 000	13 500 000

Note(s):-

(1) Figures relate to both primary and secondary refined copper, whether electrolytic or fire refined. Metal recovered from secondary materials by remelting alone is excluded

(2) In addition to the countries listed, Albania, Cyprus, Egypt and Myanmar produce refined copper

(a) Years ended 20 March following that stated

Copper

Exports of Copper

tonnes

Country	1993	1994	1995	1996	1997
Austria					
Unwrought	56 732	59 859	77 921	73 521	97 477
Unwrought alloys	4 304	5 134	5 464	6 312	2 330
Scrap	17 458	21 289	18 150	27 171	23 045
Belarus					
Unwrought (f)	*6 700	*7 400	*2 000	*500	*500
Scrap (f)	*4 300	*5 200	*2 700	*500	*2 600
Belgium-Luxembourg					
Unwrought	238 067	170 727	201 477	147 725	149 049
Unwrought alloys	6 821	11 636	9 443	8 141	7 972
Scrap	53 334	56 609	56 744	60 157	92 842
Bosnia & Herzegovina					
Scrap (f)	...	...	*800	*4 000	...
Bulgaria					
Ore	119 000	107 100	72 103	86 996	94 150
Unwrought	(f) *43 000	(f) *81 000	79 221	...	109 782
Scrap	6 500	6 100	781	2 047	1 838
Croatia					
Scrap	3 642	3 300	5 505	5 298	5 810
Czech Republic					
Unwrought	(f) *5 700	7 705	4 900	4 600	4 586
Scrap	28 300	25 600	29 200	26 600	26 574
Denmark					
Scrap	39 527	41 510	52 169	31 610	30 743
Estonia					
Unwrought	2 900	(f) *900	...	(f) *1 400	...
Scrap (f)	*22 200	*3 100	*8 300	*5 600	*5 200
Finland					
Unwrought, unrefined	32 524	27 182	13 458	35 102	39 275
Unwrought, refined	21 913	20 649	24 873	40 703	49 261
Unwrought alloys	529	405	678	960	1 388
Scrap	23 473	16 297	22 951	28 611	37 445
France					
Ore	368	2	2 194	1 429	1 673
Matte & cement	544	5 752	4 762	226	555
Unwrought, unrefined	262	2 237	3 216	505	97
Unwrought, refined	23 454	19 514	12 640	16 065	19 931
Unwrought alloys	10 225	8 707	11 222	7 283	10 169
Scrap	153 237	160 357	141 999	126 414	132 939
Germany					
Ore	3 127	67	22 031	14 898	24 727
Matte & cement	225	795	957	776	1 087
Unwrought, unrefined	45	1 105	556	532	4 171
Unwrought, refined	18 751	152 393	135 134	246 759	146 752
Unwrought alloys	18 751	22 344	23 410	21 905	25 952
Scrap	195 281	214 076	263 687	248 568	335 664
Greece					
Unwrought	22	192	344	132	235
Scrap	2 928	7 014	7 512	6 372	10 859
Hungary					
Unwrought	3 173	1 800	500	305	1 502
Scrap	14 894	17 834	22 125	13 305	13 268
Irish Republic					
Scrap	9 329	10 101	9 795	9 202	11 043
Italy					
Matte & cement	254	131	2 073	1 794	59
Unwrought	3 636	7 571	12 668	9 676	5 215
Unwrought alloys	6 081	8 383	10 100	9 275	13 125
Scrap	20 977	34 664	43 829	46 468	57 488
Latvia					
Unwrought (f)	*4 000	*4 700	*3 900	*100	*400
Scrap (f)	*23 500	*11 600	*18 000	*22 600	*16 200
Lithuania					
Unwrought	(c) (f) *7 400	(c) (f) *5 100	955	585	126
Scrap	(c) (f) *14 300	(c) (f) *8 600	—	18 177	12 301

Exports of Copper

tonnes

Country	1993	1994	1995	1996	1997
Macedonia					
Unwrought	18 227	(f) *24 900	(f) *14 600	(f) *2 400	(f) *300
Moldova					
Scrap	(f) *3 700	(f) *4 700	11 515	*12 000	...
Netherlands					
Unwrought	8 232	13 722	15 344	12 938	11 173
Scrap	115 262	111 298	135 850	104 176	106 125
Norway					
Ore	44 319	32 413	32 970	35 024	32 485
Unwrought	37 092	41 691	35 493	35 183	35 081
Scrap	9 420	8 800	12 535	10 998	13 034
Poland					
Ores & concentrates	15 510	1 455	3	8	15 808
Matte & cement	710	54	944	...	...
Unwrought	260 998	254 672	193 926	200 005	208 999
Unwrought alloys	5 326	9 758	7 762	7 978	11 377
Scrap	12 731	1 902	548	1 739	3 258
Portugal					
Ore	666 408	555 026	517 892	492 279	465 368
Scrap	13 658	11 500	9 300	9 222	9 044
Romania					
Unwrought	7 462	5 685	6 504	13 254	15 141
Russia					
Ore	90 563	73 809	141 196	56 779	34 693
Matte & cement	2 000	(f) *2 800	...	2 000	...
Unwrought	163 766	455 406	471 061	562 772	571 451
Scrap	15 635	2 956	21 692	135 040	355 480
Slovakia					
Unwrought	18 200	8 300	(f) *1 200	(f) *700	(f) *800
Scrap (f)	*600	*2 700	*3 000	*2 600	*4 300
Spain					
Ore	22 911	17 574	43 185	81 981	54 205
Unwrought	79 543	69 584	43 053	113 599	140 305
Unwrought alloys	4 193	4 184	4 474	3 238	4 714
Scrap	34 165	32 691	37 148	39 750	46 328
Sweden					
Ore	102 013	68 271	58 040	42 150	60 147
Unwrought, unrefined	5 093	1 298	6 084	...	...
Unwrought, refined	14 377	12 783	9 750	26 625	18 637
Unwrought alloys	4 430	5 187	4 910	5 951	11 375
Scrap	25 340	20 517	18 033	17 996	18 112
Switzerland					
Unwrought, refined	2 028	1 012	79	14	290
Unwrought alloys	4 208	4 420	3 918	4 755	5 927
Scrap	31 058	37 760	42 761	43 626	53 012
Turkey					
Ore	81 475	41 233	83 834	121 985	180 669
Unwrought	16 257	5 106	3 797	10 018	8 139
Ukraine					
Unwrought (f)	*8 700	*9 700	*5 200	*3 500	*5 000
Scrap	4 112	5 128	(f) *13 700	(f) *25 700	(f) *78 800
United Kingdom					
Ore & matte	68	416	726	1 072	10 163
Unwrought	3 566	20 363	5 848	6 767	5 852
Unwrought alloys	22 863	24 575	25 617	25 384	24 053
Scrap	109 180	120 566	113 567	115 731	111 722
Yugoslavia, Federal Republic of					
Unwrought	8 200	19 500	...	66 808	72 710
Algeria					
Scrap	4 300	1 900	*1 500	9 337	...
Botswana					
Matte & cement (b)	21 600	20 200	17 900	...	...
Congo, Democratic Republic					
Unwrought, unrefined (e)	44 400	*35 000	*20 000	*20 000	...
Unwrought, refined	28 300	13 700	4 500	17 200	...

Copper

Exports of Copper

tonnes

Country	1993	1994	1995	1996	1997
Morocco					
Ore	44 342	41 831	40 080	40 650	...
Matte & cement	1 703	1 819	1 561	1 894	2 744
Scrap	6 900	6 600	7 158	5 527	...
Namibia					
Unwrought	30 193	26 226	25 074	18 306	21 360
South Africa					
Ores & concentrates (b)	7 603	4 866	7 627	...	8 617
Unwrought	88 566	76 361	71 598	69 478	68 669
Scrap (f)	*29 900	*24 800	*26 400	*42 400	*26 900
Tunisia					
Scrap	4 100	3 847	4 013	2 168	...
Uganda					
Unwrought, unrefined	220	1 546	1 286	...	...
Zambia					
Unwrought, refined	436 522	360 657	291 869	276 079	303 784
Zimbabwe					
Unwrought	13 616	10 314	7 498	7 566	6 064
Canada					
Ores & concentrates (b)	295 079	218 347	260 977	386 200	492 534
Matte & cement (b)	10 743	19 205	13 480	18 315	17 181
Unwrought	408 773	388 843	471 897	466 096	457 437
Scrap	115 593	110 878	120 509	113 559	126 177
Cuba					
Concentrates (b)	1 400	2 900	1 200	*1 200	...
Scrap (a)	1 120	1 864	4 317	4 500	...
Mexico					
Concentrates	83	8 083	31 653	49 685	39 000
Matte & cement	10 063	19 023	5 238	2 936	...
Unwrought	162 021	138 304	186 731	153 704	184 379
Scrap	35 167	47 665	82 363	73 756	...
USA					
Ores & concentrates (b)	217 337	250 456	228 092	185 219	124 186
Matte & cement	890	1 782	6 972	14 999	32 075
Unwrought, unrefined	10 849	13 311	29 521	22 973	31 643
Unwrought, refined	218 580	157 744	217 419	178 167	93 342
Unwrought alloys	23 855	18 013	16 246	19 017	24 725
Scrap	260 772	360 297	552 985	400 413	386 286
Brazil					
Unwrought, refined	79 976	55 906	58 423	41 819	35 987
Chile					
Ores & concentrates (b)	654 000	687 700	815 200	1 123 400	1 107 100
Unwrought, unrefined	139 600	198 100	178 200	226 900	158 400
Unwrought, refined	1 189 100	1 193 300	1 400 600	1 603 600	2 031 700
Scrap	600	2 400	1 600	...	...
Colombia					
Ore	5 076	3 003	5 355	13 762	...
Scrap	659	4 231	6 949	6 142	...
Peru					
Ore	(f) *77 200	(f) *195 700	187 477	201 684	295 679
Unwrought, unrefined	92 888	98 023	89 390	83 247	56 790
Unwrought, refined	217 514	218 260	251 857	230 102	361 477
Venezuela					
Scrap	13 543	13 911	15 484	12 696	8 638
China					
Unwrought	6 439	16 306	43 047	53 003	84 265
Scrap	18 037	15 860	19 032	8 024	11 934
Cyprus					
Matte & cement	440	—	—	—	...
Scrap	(e) 960	399 394	33 336	20 366	2 046
of which, re-exports	960	380 644	19 916	20 366	1 059

Exports of Copper

tonnes

Country	1993	1994	1995	1996	1997
Hong Kong					
Unwrought	40 995	20 036	32 786	54 598	59 835
of which, re-exports	40 912	19 970	32 642	54 296	59 694
Scrap	181 792	167 528	306 390	293 945	313 847
of which, re-exports	92 619	89 626	205 673	200 620	242 233
India					
Ores & concentrates (g)	7 972	6 599	3 475	...	...
Indonesia					
Ores & concentrates	922 508	1 075 634	1 412 057	1 860 070	1 716 828
Iran					
Ores & concentrates (h)	26 000	42 408	11 200	...	...
Unwrought	(f) *53 300	(f) *18 900	(h) 1 673	(f) *4 000	(f) *1 600
Scrap	(f) *2 500	(f) *1 300	(h) 5 967	(f) *3 500	...
Israel					
Scrap	5 974	9 013	(f) *10 600	(f) *11 700	(f) *11 000
Japan					
Unwrought	171 376	124 843	166 332	*175 000	193 060
Scrap	19 975	39 868	51 887	60 136	79 940
Jordan					
Scrap	2 034	2 157	2 906	3 440	...
Kazakhstan					
Ores & concentrates	5 543	...	2 391	20 339	11 097
Unwrought	114 773	122 489	216 603	266 626	306 033
Scrap	...	...	2 534	8 289	20 465
Korea, Republic of					
Unwrought	6 599	7 254	4 592	8 643	...
Scrap	4 520	8 005	14 369	13 210	27 761
Kyrgyzstan					
Unwrought (f)	*500	*1 300	*5 600	*5 300	*5 500
Scrap	(f) *2 500	(f) *15 400	17 485	9 262	(f) *6 900
Malaysia					
Ore	108 353	96 801	88 201	86 969	...
Scrap	16 159	50 780	38 696	35 000	...
Mongolia					
Ores & concentrates (b)	*96 900	*99 600	*120 200	*124 600	...
Oman					
Unwrought	20 326	23 064	22 098	20 400	...
Scrap	75 100	79 600	...	...	...
Pakistan					
Scrap	1 261	39 802	1 313	1 865	...
Philippines					
Ores & concentrates	370 789	347 414	314 088	178 678	...
Unwrought	136 920	145 464	140 330	143 330	...
Scrap	29 772	9 734	16 076	21 766	...
Saudi Arabia					
Unwrought	...	62 840	...	...	...
Scrap	9 900	1 475	...	...	...
Singapore					
Unwrought	87 778	97 835	199 112	197 161	201 835
Scrap	43 107	47 892	59 111	65 453	64 963
of which, re-exports	87 251	96 354	197 224	195 067	200 556
Taiwan					
Unwrought	8 436	6 942	6 870	5 137	5 494
Scrap	19 139	27 785	30 202	21 888	33 146
Uzbekistan					
Unwrought (f)	*1 700	*2 700	*6 000	*27 400	...
Australia					
Ores & concentrates	396 600	435 000	391 000	788 000	979 000
Matte & cement	*4 000	3 014	240	32	...
Unwrought, unrefined	10 115	5 817	17	40	54
Unwrought, refined	156 219	175 872	106 024	117 288	115 927
Unwrought alloys	2 100	1 684	1 581	1 049	...
Scrap (d)	16 785	23 600	37 000	...	...

Copper

Exports of Copper

tonnes

Country	1993	1994	1995	1996	1997
New Zealand					
Unwrought (d)	62	628	175	32	65
Scrap (d)	2 148	1 402	2 482	2 415	2 165
Papua New Guinea					
Ores & concentrates (b)	203 184	206 368	227 856	186 715	111 515

Note(s):-

(1) In this table the term 'unwrought' copper corresponds to item 682.1 of the Standard International Trade Classification (Revision 3) and includes both unrefined (including blister) and refined copper

(2) The term 'unwrought' as used here includes alloys unless these are separately specified. The term 'scrap' includes scrap alloys

(a) Imports into the Netherlands

(b) Cu content

(c) Is likely to include re-exports

(d) Years ended 30 June of that stated

(e) Including leach cathodes

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

(g) Years ended 31 March following that stated

(h) Years ended 20 March following that stated

Imports of Copper

tonnes

Country	1993	1994	1995	1996	1997
Austria					
Unwrought, unrefined	3 443	6 626	3 434	7 962	3 468
Unwrought, refined	14 066	31 862	34 275	34 438	39 497
Unwrought alloys	2 400	2 350	7 336	5 993	3 138
Scrap	42 310	62 053	66 519	55 765	90 668
Belgium-Luxembourg					
Ore	6 885	1 643	10 615	17 421	2 888
Unwrought, unrefined	163 505	147 603	130 563	123 023	101 160
Unwrought, refined	149 604	169 038	106 247	75 526	102 245
Unwrought alloys	8 072	6 266	7 070	6 330	4 690
Scrap	169 222	196 638	202 849	176 683	186 786
Bulgaria					
Ores & concentrates	...	79 800	83 884	92 674	86 580
Unwrought	(a) *6 200	8 800	...	...	...
Czech Republic					
Unwrought	10 895	10 003	13 500	...	12 142
Denmark					
Unwrought	1 761	1 885	1 892	2 057	2 432
Scrap	26 651	13 363	10 351	8 243	6 509
Finland					
Ore	324 384	292 784	293 676	494 217	464 435
Unwrought, refined	18 459	34 262	39 497	20 503	21 206
Unwrought alloys	2 611	4 120	4 304	4 378	5 546
Scrap	29 063	9 790	20 228	28 461	34 309
France					
Matte & cement	460	1 530	2 974	1 101	2 755
Unwrought, unrefined	13 656	5 993	4 214	9 066	4 785
Unwrought, refined	438 249	462 694	494 447	455 948	527 980
Unwrought alloys	6 310	10 524	17 607	16 446	20 011
Scrap	64 172	77 228	90 991	90 091	87 556
Germany					
Ore	506 447	652 833	663 299	689 055	640 856
Matte & cement	7 721	12 728	9 571	12 002	20 230
Unwrought, unrefined	67 954	84 797	49 644	81 345	62 636
Unwrought, refined	496 751	523 105	546 899	450 441	526 854
Unwrought alloys	33 957	44 316	45 100	42 407	39 486
Scrap	360 125	411 367	442 442	427 249	568 738
Greece					
Unwrought	66 900	61 585	79 064	89 723	96 933
Unwrought alloys	1 251	746	894	464	815
Scrap	263	293	1 322	1 631	4 088
Hungary					
Unwrought	17 533	18 872	14 400	12 400	15 967
Scrap	2 805	2 049	4 001	2 871	2 754
Irish Republic					
Unwrought	563	234	236	385	400
Scrap	630	999	468	300	1 080
Italy					
Unwrought, unrefined	2 366	6 314	14 290	25 113	5 579
Unwrought, refined	402 739	396 630	405 950	437 613	450 196
Unwrought alloys	18 887	26 367	31 374	27 100	20 829
Scrap	180 429	237 565	205 979	228 079	259 546
Moldova					
Scrap	...	767	2 843	...	...
Netherlands					
Unwrought	16 655	33 871	35 788	37 515	44 133
Unwrought alloys	1 056	843	1 318	1 547	3 028
Scrap	94 793	103 876	110 571	95 804	101 936
Norway					
Unwrought	2 613	2 632	3 265	3 155	4 422
Scrap	6 290	5 838	4 743	5 777	5 892
Poland					
Ores & concentrates	—	10	14 790	10 807	...
Unwrought	8 458	1 222	3 151	1 686	...
Scrap	1 290	576	1 162	1 376	...
Portugal					
Unwrought	12 977	6 227	200	4 087	3 955
Scrap	649	400	100	710	902

Copper

Imports of Copper

tonnes

Country	1993	1994	1995	1996	1997
Romania					
Ores & concentrates	—	—	18 885	35 902	22 584
Unwrought	694	281	2 101	4 628	754
Russia					
Ore	116 518	76 778	202 032	214 673	143 159
Slovakia					
Unwrought, refined	5 158	6 235	5 188	4 788	7 769
Unwrought alloys	1 764	1 753	1 688	1 112	1 319
Spain					
Ore	476 001	520 196	442 689	736 576	888 487
Unwrought, unrefined	30 203	23 636	30 916	13 958	2 533
Unwrought, refined	34 794	19 290	26 535	21 226	12 431
Unwrought alloys	4 794	5 713	6 742	6 233	10 274
Scrap	42 364	43 201	58 104	59 273	67 737
Sweden					
Ore	37 501	38 109	72 264	85 258	67 018
Unwrought	54 615	53 140	66 143	45 300	49 101
Unwrought alloys	3 360	4 839	3 317	4 914	4 926
Scrap	23 800	31 769	33 879	29 025	32 096
Switzerland					
Scrap	9 381	11 515	13 243	14 493	19 055
Turkey					
Unwrought	70 802	58 900	63 676	79 546	112 331
Scrap	1 544	1 630	7 539	20 536	17 443
United Kingdom					
Unwrought, unrefined	10 273	9 525	6 469	6 618	2 262
Unwrought, refined	378 614	259 132	268 310	328 106	365 895
Unwrought alloys	4 815	1 645	3 106	3 601	3 353
Scrap	27 389	27 039	40 943	47 366	54 856
Yugoslavia, Federal Republic of					
Ores & concentrates	...	...	...	189 580	184 399
Unwrought	*2 800	*2 800	*2 600	10 200	6 459
Algeria					
Unwrought	800	1 217	1 300	2 055	...
Morocco					
Unwrought	578	809	587	535	...
Scrap	2 800	400	39	31	...
Namibia					
Ores & concentrates (d)	917	4 516	3 903	1 029	9 628
South Africa					
Ores & concentrates	742	4 710	94	22 365	5 259
Matte & cement	3 095	3 018	—	68	...
Unwrought	391	954	3 944	1 328	942
Unwrought alloys	286	237	293	953	751
Scrap	8 562	4 410	5 600	4 922	4 850
Tunisia					
Unwrought	1 471	1 551	2 054	3 062	...
Zambia					
Ores & concentrates (d)	21 424	13 786	8 882	4 599	4 560
Canada					
Ores & concentrates (d)	132 716	180 882	148 638	134 825	134 121
Unwrought	30 028	34 083	59 402	46 206	49 738
Unwrought alloys	2 474	2 770	8 556	5 364	6 892
Scrap	53 711	98 452	167 236	153 322	172 870
Cuba					
Unwrought	3 000	...	...	...	...
Mexico					
Ores & concentrates	42 858	44 301	22 004	16 167	...
Unwrought	46 494	40 052	19 181	47 690	...
Scrap	6 439	6 147	15 253	15 157	...

Imports of Copper

Country	1993	1994	1995	1996	1997
USA					
Ores & concentrates (d)	53 887	82 612	129 663	62 718	45 829
Matte & cement (d)	1 242	79	907	754	1 111
Unwrought, unrefined	141 862	119 014	152 036	106 661	155 384
Unwrought, refined	349 930	467 187	436 305	621 903	646 058
Unwrought alloys	11 888	16 461	14 575	17 415	22 122
Scrap	199 809	194 413	221 617	212 370	211 621
Argentina					
Unwrought, refined	40 334	40 224	31 668	33 594	36 100
Brazil					
Ores & concentrates	403 490	433 968	394 034	379 668	413 411
Unwrought	67 239	67 223	91 329	102 710	116 518
Scrap	3 081	7 491	21 145	4 984	2 066
Colombia					
Unwrought	1 024	697	1 246	603	...
Venezuela					
Unwrought, refined	13 762	14 123	22 849	16 711	5 200
Unwrought alloys	403	169	333	464	...
China					
Ores & concentrates	241 134	248 708	484 280	824 810	937 776
Unwrought	362 396	121 407	187 505	290 941	210 825
Scrap	568 642	773 856	1 188 926	710 983	796 841
Hong Kong					
Unwrought	55 046	23 266	51 263	91 546	146 820
Scrap	163 225	158 762	340 704	355 475	332 420
India					
Unwrought (b)	88 960	84 761	83 663	157 914	...
Scrap (b)	97 784	85 070	110 931	137 263	...
Indonesia					
Unwrought	48 432	87 995	86 932	105 233	58 997
Unwrought alloys	1 847	2 923	2 026	2 152	1 795
Scrap	4 634	2 629	2 158	1 188	2 755
Japan					
Ores & concentrates	3 740 807	3 457 054	3 825 212	3 840 935	3 769 017
Matte & cement	401	1 945	3 294	7 065	12 283
Unwrought	403 463	402 723	410 620	366 103	358 711
Unwrought alloys	12 953	9 662	9 195	6 026	6 342
Scrap	142 887	156 367	153 102	145 783	193 549
Kazakhstan					
Ores & concentrates	...	...	170 729	60 774	12 313
Korea, Republic of					
Ore	571 187	426 421	468 714	347 994	518 112
Matte & cement	2 746	2 448	—	0	18
Unwrought	258 871	351 783	406 806	390 781	505 286
Scrap	132 209	123 278	151 409	111 575	119 921
Kuwait					
Unwrought	9 928	10 673	9 223	14 651	13 221
Kyrgyzstan					
Unwrought	...	...	1 915	143	...
Scrap	...	...	5 080	1 781	...
Malaysia					
Unwrought	94 466	110 244	116 384	274 791	...
Oman					
Ores & concentrates	57 004	103 673	94 909	...	...
Pakistan					
Unwrought	5 280	5 456	10 657	11 697	...
Scrap (c)	17 511	5 235	1 932	4 722	2 776
Philippines					
Concentrates	371 318	420 862	499 073	509 068	496 322
Unwrought	20 457	28 407	16 880	18 669	14 937
Saudi Arabia					
Unwrought	58 443	88 749	85 072	67 597	...
Singapore					
Unwrought	106 684	93 805	261 525	196 244	213 115
Scrap	16 480	16 178	21 770	27 437	28 221

Copper

Imports of Copper

tonnes

Country	1993	1994	1995	1996	1997
Taiwan					
Unwrought	489 173	558 851	579 635	557 226	600 178
Scrap	16 769	15 424	26 150	35 052	37 498
Thailand					
Unwrought	122 544	177 013	154 091	161 159	...
Scrap	6 106	1 686	3 007	3 342	...
Australia					
Ores & concentrates (c)	45 354	...	...	...	...
Unwrought	152	11 931	27 722	17 002	7 705
Scrap	2 500	4 400	4 500	2 920	...
New Zealand					
Unwrought (c)	5 234	6 090	10 924	...	9 749

Note(s):-

- (1) In this table the term 'unwrought' copper corresponds to item 682.1 of the Standard International Trade Classification (Revision 3) and includes both unrefined (including blister) and refined copper
 - (2) The term 'unwrought' as used here includes alloys unless these are separately specified. The term 'scrap' includes scrap alloys
- (a) BGS estimates, based on known exports from certain countries
 - (b) Years ended 31 March following that stated
 - (c) Years ended 30 June of that stated
 - (d) Cu content

Production of Diamond

carats

Country	1993	1994	1995	1996	1997
Russia	*16 000 000	*17 000 000	*18 000 000	*18 500 000	*19 100 000
Angola	145 000	300 000	2 900 000	2 500 000	1 234 000
Botswana	14 730 000	15 550 000	16 802 438	17 707 000	20 111 000
Central African Republic	599 707	627 883	477 698	487 458	486 781
Congo, Democratic Republic	15 626 000	16 259 000	22 024 000	22 240 000	22 038 000
Ghana	616 000	722 800	622 700	714 300	829 524
Guinea (b)	167 011	381 464	364 841	200 664	280 000
Ivory Coast (a)	*15 000	*84 400	*75 300	*75 000	...
Liberia	*150 000	*100 000	*150 000	*150 000	*150 000
Namibia	1 141 352	1 312 348	1 381 757	1 402 129	1 416 334
Sierra Leone	200 300	255 000	213 600	270 092	104 000
South Africa	10 177 283	10 853 653	9 682 744	9 946 750	10 088 405
Swaziland	61 686	76 100	75 000	*70 000	...
Tanzania	40 847	15 668	49 538	115 438	127 000
Zimbabwe	43 850	173 588	204 416	437 266	421 307
Brazil	*1 000 000	*300 000	676 269	*200 000	*300 000
Guyana	51 539	37 957	55 498	49 000	35 612
Venezuela	410 750	582 522	296 116	172 016	248 208
China	*1 080 000	*1 080 000	*1 130 000	*1 130 000	*1 130 000
India	19 228	26 265	*22 000	*32 000	26 000
Indonesia	*27 000	*28 000	*29 000	*29 000	...
Australia	41 883 000	43 789 000	40 693 000	41 993 000	40 175 000
World Total	104 200 000	109 600 000	115 900 000	118 400 000	118 500 000

Note(s):-

(1) This table does not show production of synthetic diamond

(a) Excluding artisanal production smuggled out of the country

(b) Including artisanal production

Diamond

Exports of Diamond

carats

Country	1993	1994	1995	1996	1997
Austria					
Industrial	100 000	275 000	2 015	1 543	2 229
Other	30 000	95 000	6 526	42 194	9 285
Belgium-Luxembourg					
Rough	84 245 755	79 292 864	99 137 000	115 956 000	133 249 000
Cut	5 267 466	5 651 790	7 641 000	7 230 000	7 723 000
Industrial	9 965 023	7 682 865	10 677 000	13 915 000	28 104 000
Dust	18 281 675	23 813 690	35 000 000	51 615 000	67 265 000
Finland					
Industrial	80 000	—	—	—	—
Other	25 000	10 000	142	45	...
France					
Rough	6 683	153	...	2 721	4 368
Cut	29 549	35 862	26 288	41 232	54 494
Industrial	37 519	26 843	...	3 353	3 277
Dust	607 447	22 233 995	3 883 870	...	3 708 955
Germany					
Industrial	188 635	1 263 256	91 318	63 783	74 078
Dust	38 515 000	68 190 000	76 790 000	89 060 000	46 710 000
Other	136 070	129 623	240 872	150 199	108 246
Irish Republic					
Industrial	1 375 000	16 175 000	5 010 000	11 775 000	59 785 000
Italy					
Industrial	£200 000	£392 000	£950 000	£448 000	...
Dust	4 125 000	3 930 000	...	...	...
Other	£9 055 000	£2 089 000	£2 344 000	£5 251 000	...
Malta	29 000	—	—	...	...
Netherlands					
Rough	82 070	12 776	10 347	...	...
Cut	75 500	35 416	5 550	...	...
Industrial	171 707	238 589	863	...	...
Dust	525 735	625 000	765 000	...	...
Portugal	£44 807 000	£50 013 000	£3 871 000	£34 258 000	...
Romania	614 521	688 142	1 651 790	4 064 080	879 100
Russia	11 303 000	26 400 000	40 400 000	...	...
Spain					
Industrial	214 143	719	376	...	...
Other	3 248	5 320	2 760	...	...
Sweden					
Industrial	£53 000	£83 000	£23 000	£45 000	...
Other	£749 000	£526 000	£92 000	£186 000	...
Switzerland					
Industrial	15 000	1 345 000	185 000	13 000	375 000
Dust	35 840 000	39 265 000	44 750 000	60 770 000	72 285 000
Other	6 350 000	5 095 000	4 730 000	4 935 000	3 510 000
United Kingdom					
Rough	58 187 659	38 125 581	56 399 794	76 570 141	80 874 670
Cut	174 052	1 703 400	212 168	1 441 476	2 667 551
Industrial	4 123 611	8 413 438	12 131 021	25 737 087	25 772 889
Dust	19 201 420	29 582 380	34 254 440	41 146 270	73 505 020
Central African Republic					
Gem	390 137	531 992	352 015	333 781	340 120
Industrial	104 785	95 957	125 683	153 677	146 661
Guinea	220 190	381 464	364 841	200 664	...
Mauritius	£17 377 000	£16 062 000	£15 584 000	£16 841 000	...
Namibia	1 314 018	1 130 768	1 569 228	1 486 457	1 475 738
Sierra Leone	155 500	220 800	213 600	270 100	...
South Africa (c)	£1 932 457 000	£1 763 497 000	£1 479 821 000	£1 261 861 000	£1 636 135 000
Tunisia					
Industrial	...	125 000	...	135 000	...

Exports of Diamond

carats

Country	1993	1994	1995	1996	1997
Canada					
Cut	28 834	43 784	42 325	47 082	37 751
of which, re-exports	21 551	25 471	28 331	19 847	27 714
Industrial	16 537	62 115	41 896	82 104	51 164
of which, re-exports	16 425	42 732	18 437	21 834	43 183
Dust	504 994	1 032 864	545 341	144 333	214 006
of which, re-exports	382 776	835 589	374 217	36 842	130 296
USA					
Rough	2 104 875	1 657 178	1 235 978	1 194 692	1 293 584
of which, re-exports	1 843 940	1 509 514	1 066 637	1 086 086	1 199 306
Cut	1 156 816	1 317 499	2 140 525	1 929 108	2 562 779
of which, re-exports	1 025 667	1 087 150	1 982 098	1 853 409	2 475 724
Industrial	3 873 248	4 789 250	5 794 434	3 927 204	4 003 704
of which, re-exports	2 656 117	4 132 599	5 003 881	2 958 963	3 260 520
Dust	2 984 714	2 743 860	4 105 161	4 592 212	5 874 621
of which, re-exports	322 087	234 621	160 088	46 329	66 798
Brazil					
Gem	40 147	88 903	59 289	...	...
Rough	186 349	30 479	47 431	...	...
China					
Industrial	8 096 650	9 589 490	5 420 000	3 185 000	13 611 550
Other	409 415	435 205	525 000	605 000	904 645
Hong Kong					
Rough (b)	826 532	2 045 003	1 104 799	1 223 601	1 679 345
Cut	1 664 653	2 017 780	2 069 739	2 202 611	2 568 985
of which, re-exports	1 643 536	1 997 075	2 011 831	2 166 337	2 568 985
Industrial (b)	35 419	2 199 571	2 438 035	1 322 837	1 375 890
India					
Gem (a)	13 499 544	15 361 520	18 582 073	16 239 748	...
Israel					
Industrial	£928 000	£3 653 000	£4 029 000	£3 527 000	£5 653 000
Other	£2 689 837 000	£3 194 183 000	£3 589 600 000	£3 971 616 000	£4 112 322 000
Japan					
Industrial	1 165 273	2 144 122	1 646 253	1 932 442	2 018 739
Dust	9 100 802	8 504 300	10 886 046	12 007 423	15 066 371
Other	51 418	5 720	2 726	1 402	964
Korea, Republic of	12 600	50 000	...	15 656	...
Kuwait					
Gem	...	...	80 000	1 215 000	635 000
Malaysia					
Cut	£51 931 000	£5 569 000	£54 545 000	£53 852 000	...
Other	£696 000	£1 640 000	£2 407 000	£1 921 000	...
Singapore					
Gem	£32 297 000	£32 429 000	£70 092 000	£143 305 000	£140 313 000
of which, re-exports	£30 903 000	£31 732 000	£67 433 000	£13 692 000	...
Industrial	£56 302 000	£46 187 000	£29 232 000	£19 061 000	£12 068 000
of which, re-exports	£54 103 000	£46 044 000	£25 350 000	£18 377 000	£7 626 000
Sri Lanka					
Industrial	144 043	18 886	17 835	421	3 554
Other	3 002 380	417 783	492 253	503 200	419 087
Taiwan					
Industrial	7 725 000	2 115 000	8 800 000	12 455 000	295 000
Dust	18 625 000	11 950 000	8 720 000	19 220 000	53 745 000
Other	30 000	165 000	790 000	10 000	4 495 000
Thailand					
Industrial	275 879	36 629	39 856	10 321	...
Other	12 490 873	2 651 973	2 294 141	2 697 525	...

Diamond

Exports of Diamond

carats

Country	1993	1994	1995	1996	1997
Australia					
Gem	668 000	3 022 000	30 000	28 000	33 000
Rough	*21 659 000	*24 519 000	*23 357 000	*47 441 000	*40 409 000
Industrial	168 000	175 000	65 000	60 000	2 000
New Zealand					
Cut (b) (d)	£704 000	£199 000	£320 000	£308 000	£156 000

Note(s):-

- (1) 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
- (2) See explanatory notes at the front of the volume regarding currency conversion

- (a) Years ended 31 March following that stated
- (b) Re-exports
- (c) Values shown are for the common customs area
- (d) Years ended 30 June of that stated

Imports of Diamond

carats

Country	1993	1994	1995	1996	1997
Austria					
Industrial	235 000	250 000	5 400	16 718	63 103
Dust	8 070 000	11 975 000	11 825 000	12 430 000	15 984 000
Other	175 000	185 000	102 310	57 684	21 838
Belgium-Luxembourg					
Rough	85 548 262	64 277 548	95 735 000	127 963 000	137 318 000
Cut	5 058 935	5 282 850	5 922 000	6 759 000	6 418 000
Industrial	25 704 141	17 746 248	17 018 000	27 258 000	35 803 000
Dust	28 681 045	35 405 820	90 000 000	52 965 000	83 005 000
Finland					
Industrial	70 000	25 000	3 572	503	...
Other	20 000	15 000	10 614	14 403	...
France					
Rough	667 011	23 970	...	...	207 388
Cut	216 759	241 319	274 686	313 148	350 793
Industrial	223 899	119 955	...	213 447	388 951
Dust	2 680 487	14 090 090	38 245 430	10 468 125	13 560 155
Germany					
Rough	702	—	24	573	11 568
Cut	426 688	464 196	532 259	527 129	494 351
Industrial	560 512	2 324 416	561 634	470 303	1 797 380
Dust	44 190 000	60 695 000	95 655 000	74 230 000	51 350 000
Greece					
Industrial	£260 000	£534 000	£506 000	£711 000	£788 000
Other	£1 385 000	£1 718 000	£3 073 000	£3 045 000	£2 609 000
Irish Republic					
Industrial	122 745 000	119 645 000	124 525 000	53 580 000	61 785 000
Dust	4 400 000	...	...	...	...
Other	6 310 000	59 600 000	9 530 000	9 515 000	14 180 000
Italy					
Industrial	£1 731 000	£2 873 000	£3 358 000	£3 266 000	...
Dust	43 895 000	50 985 000	...	...	...
Other	£86 818 000	£94 607 000	£115 553 000	£164 500 000	...
Malta					
Rough	£199 000	£89 000	£264 000	£118 000	...
Industrial	£1 262 000	£2 093 000	£115 000	£15 000	...
Netherlands					
Rough	42 475	18 269	16 755	...	...
Cut	41 460	52 249	136 081	...	...
Industrial	262 299	365 841	8 997	...	...
Dust	1 672 360	1 220 000	1 610 000	...	...
Norway					
Industrial	330 000	205 000	400 000	...	...
Other	30 000	35 000	5 000	25 000	...
Poland					
Gem	10 000	35 000	30 000	340 000	...
Industrial	105 000	235 000	55 000	100 000	...
Portugal					
Gem	£2 397 000	£6 007 000	£3 231 000	£3 522 000	...
Romania					
Gem	832 019	928 247	296 021	199 393	166 776
Spain					
Rough	1 217	788	2 547	...	...
Industrial	295 606	410 114	236 955	...	...
Dust	16 266 410	19 677 700	18 684 305	...	...
Other	634 377	439 015	180 158	...	...
Sweden					
Industrial	£407 000	£374 000	£58 000	£57 000	...
Other	£3 400 000	£2 911 000	£2 888 000	£2 918 000	...
Switzerland					
Industrial	410 000	580 000	690 000	475 000	575 000
Dust	47 090 000	55 705 000	65 190 000	67 550 000	107 225 000
Other	5 870 000	5 260 000	3 395 000	4 690 000	4 555 000
Turkey					
Industrial	180 000	35 000	95 000	111 921	1 111 596
Other	3 440 000	920 000	3 795 000	3 068 452	7 627 692

Diamond

Imports of Diamond

carats

Country	1993	1994	1995	1996	1997
United Kingdom					
Rough	£2 254 268 000	£2 354 155 000	£2 522 195 000	£2 854 795 000	£2 850 224 000
Cut	£210 842 000	£276 281 000	£293 303 000	£393 167 000	£535 275 000
Industrial	£252 033 000	£14 425 000	£11 846 000	£13 521 000	£23 714 000
Dust	£13 280 000	£15 521 000	£13 454 000	£11 837 000	£13 441 000
Mauritius					
Industrial	£133 000	£65 000	£1 457 000	£6 787 000	...
Other	£17 776 000	£15 800 000	£15 141 000	£12 743 000	...
South Africa					
Rough	834 050	710 830	462 005	855 555	658 136
Cut	5 290	6 370	5 595	6 936	70 467
Industrial	1 177 070	965 335	678 343	917 470	1 526 052
Tunisia					
Industrial	...	20 000	...	100 000	...
Dust	...	5 000	...	30 000	...
Other	...	120 000	...	185 000	...
Canada					
Cut	181 805	231 605	211 272	190 926	211 239
Industrial	1 030 636	1 516 829	1 494 537	2 266 981	1 733 188
Dust	303 687	356 946	409 264	1 071 916	2 899 167
Other	£29 618 000	£21 562 000	£14 485 000	£16 990 000	£14 547 000
Costa Rica					
Industrial	40 000	350 000	715 000	...	...
Mexico					
Industrial	5 930 000	569 475	637 345	636 125	...
Dust	2 600 000	1 725 120	457 095	1 427 255	...
Panama					
Gem	185 000	570 000	40 000	50 000	...
USA					
Rough	1 784 295	1 449 988	1 737 171	1 528 537	1 951 120
Cut	9 734 958	10 718 063	11 875 425	12 256 625	13 448 617
Industrial	7 196 508	3 865 650	5 302 414	4 616 345	4 432 122
Dust	8 077 382	11 150 767	20 463 530	17 331 253	19 302 761
Chile					
Industrial	222 960	234 825	162 145	...	...
Dust	97 450	230 665	312 985	636 835	704 690
Venezuela					
Cut	3 700 000	100 000	135 000	...	...
Industrial	...	...	3 235 000	1 425 000	...
Abu Dhabi					
Gem	210 000	...	660 000	665 000	255 000
China					
Industrial	1 425 760	866 650	1 870 000	1 465 900	2 332 965
Dust	2 883 250	1 144 800	1 185 000	8 493 900	11 838 030
Other	947 240	1 651 260	1 450 000	1 764 000	2 217 090
Cyprus					
Gem	£6 293 000	£8 890 000	£3 962 000	£2 852 000	£6 541 000
Hong Kong					
Rough	957 167	1 247 478	...	2 181 101	2 628 915
Cut	4 648 500	5 765 215	...	6 639 758	7 261 058
Industrial	748 583	2 846 977	...	448 374	1 023 602
India					
Rough (a)	78 740 392	38 553 427	55 992 457	81 234 294	...
Cut (a)	381 759	660 273	699 893	884 496	...
Israel					
Rough	£1 995 606 000	£2 275 464 000	£2 491 479 000	£2 708 907 000	...
Cut	£362 328 000	£417 663 000	£2 949 870 000	...	£3 094 842 000
Industrial	£8 921 000	£12 672 000	£19 439 000	£11 590 000	£17 821 000
Dust	£4 810 000	£5 986 000	...	...	...
Japan					
Rough	36 976	46 160	36 134	39 338	32 204
Cut	3 261 105	3 672 521	4 178 153	3 610 982	2 659 711
Industrial	1 173 477	500 976	591 898	969 731	1 976 261
Dust	1 540 643	1 838 027	2 295 965	2 418 571	2 725 505

Imports of Diamond

carats

Country	1993	1994	1995	1996	1997
Korea, Republic of					
Industrial	461 985	100 000	900 000	304 777	...
Dust	1 701 590	40 000	60 000	75 511	...
Other	97 005	10 000	140 000	311 492	...
Kuwait					
Gem	155 000	205 000	300 000	945 000	1 560 000
Malaysia					
Rough	£47 467 719	£53 325 000	£42 635 000	£48 281 000	...
Cut	£29 284 000	£45 756 000	£41 368 000	£43 286 000	...
Industrial	...	£6 003 000	£7 666 000	£2 369 000	...
Philippines					
Industrial	80 195	91 698	94 367	4 463 035	...
Qatar					
Gem	365 945	...	...	...	...
Saudi Arabia					
Other	43 000	...	...	360 000	...
Singapore					
Rough	£81 000	£42 000	£554 000	£25 000	£1 047 000
Cut	£106 545 000	£156 528 000	£269 328 000	£341 338 000	£298 971 000
Industrial	£93 312 000	£37 700 000	£12 303 000	£6 727 000	£8 917 000
Sri Lanka					
Industrial	140 217	129 631	103 311	113 573	139 628
Other	1 328 759	1 646 553	1 319 695	914 959	875 797
Taiwan					
Industrial	650 000	235 000	140 000	955 000	3 030 000
Dust	36 200 000	23 805 000	30 940 000	36 600 000	33 830 000
Other	175 000	470 000	910 000	425 000	590 000
Thailand					
Rough	10 923 016	4 649 965	5 682 845	2 495 403	...
Cut	12 087 341	12 880 564	4 265 502	4 366 744	...
Industrial	376 843	492 384	155 666	272 902	...
Dust	21 709 740	14 452 695	12 133 662	5 639 409	...
Australia					
Gem	124 000	178 000	184 000	213 000	757 000
Rough	10 000	10 000	7 000	24 000	14 000
Industrial	1 299 000	1 388 000	1 521 000	1 684 000	1 163 000
Dust	924 000	1 131 000	1 001 000	767 000	1 561 000
New Zealand					
Industrial (b)	£57 000	£55 000	£55 000	...	£43 000
Other (b)	£4 638 000	£5 663 000	£6 325 000	...	£7 630 000

Note(s):-

- (1) Carats have been used as the unit in this table except where the only obtainable figure is the value. In these cases the national figure has been converted to £ sterling
- (2) See explanatory notes at the front of the volume regarding currency conversion

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

Diatomite

Production of Diatomite

tonnes

Country	1993	1994	1995	1996	1997
Czech Republic	39 000	40 000	29 000	35 000	42 000
Denmark					
Diatomite (a)	*1 000	*1 000	*1 000	*1 000	*1 000
Moler (a) (d)	*95 000	*95 000	*95 000	*95 000	*95 000
France	*85 000	*90 000	*90 000	*80 000	*80 000
Germany	51 745	42 646	43 021	47 728	*50 000
Iceland	17 743	25 197	28 142	*20 000	*20 000
Italy	*25 000	*25 000	*25 000	*25 000	*25 000
Poland	1 500	2 700	2 200	1 700	*2 000
Portugal	1 860	2 150	1 780	1 550	1 510
Romania	9 972	34 858	49 790	60 420	*60 000
Soviet Union (f)	*150 000	*120 000	*110 000	*100 000	*90 000
Spain	66 302	(b) 34 248	(b) 42 400	*40 000	*40 000
Algeria	3 471	2 845	3 294	3 173	2 332
Kenya	829	592	577	415	297
Canada	600	*1 000	*1 000	*1 000	...
Costa Rica	7 300	*7 000	*7 000	*7 500	*7 500
Mexico	46 077	52 100	50 200	52 200	59 463
USA (c)	649 000	646 000	722 000	729 000	773 000
Argentina	3 096	6 260	4 928	8 647	*5 000
Brazil (e)	27 298	21 809	17 074	11 300	...
Chile	5 774	10 129	11 451	11 592	11 825
Colombia	*4 000	*4 000	*4 000	*4 000	*4 000
Peru	*35 100	*35 100	*35 100	*35 100	*35 100
Korea, Republic of	67 324	82 738	81 303	69 543	53 538
Thailand	8 290	5 874	5 591	1 576	...
Australia (g)	*11 000	*11 000	12 473	12 144	11 674
World Total	1 410 000	1 400 000	1 470 000	1 450 000	1 480 000

Note(s):-

(1) In addition to the countries listed, Egypt, Hungary, Japan and Turkey are believed to produce diatomite

(a) Sales

(b) Including tripoli

(c) Sold or used by producers

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

(e) Including beneficiated and directly shipped material

(f) Dissolved in December 1991. Information is not available to provide estimates for all individual former Soviet Union countries

(g) Years ended 30 June of that stated

Exports of Diatomite

tonnes

Country	1993	1994	1995	1996	1997
Austria	4 701	7 215	...	...	7 852
Belgium-Luxembourg	2 630	4 831	3 177	2 420	2 417
Czech Republic	5 827	6 591	7 714	7 359	6 563
Denmark	84 270	80 246	...	...	...
France	29 199	30 323	34 036	34 684	31 561
Germany	2 178	13 317	6 788	5 727	7 408
Iceland	19 555	24 560	27 740	26 358	29 935
Italy	2 336	1 113	1 249	1 106	1 260
Netherlands	995	804	462	262	347
Poland	5 291	6 028	6 842	11 691	...
Spain	4 759	1 166	1 345	2 122	1 577
Sweden	330	543	1 187	1 343	1 223
United Kingdom	543	690	1 038	2 620	486
Mexico	9 601	8 924	9 626	9 442	...
USA	164 562	157 178	143 803	145 340	140 965
Chile	2 799	3 739	4 867	4 566	5 581
China	77 093	85 109	134 330	132 872	138 309
Hong Kong (a)	5 719	6 288	3 844	3 327	2 641
Japan	2 631	2 760	1 840	2 068	1 715
Singapore (a)	736	608	417	640	502
Taiwan	162	159	1 584	4 448	4 921
Australia	...	631	327	350	...

Note(s):-

(a) Re-exports

Imports of Diatomite

tonnes

Country	1993	1994	1995	1996	1997
Austria	14 621	16 785	...	...	19 156
Belgium-Luxembourg	18 096	10 970	8 857	5 721	6 635
Bulgaria	(b) *500	(b) *900	900	472	701
Croatia	439	...	1 183	772	799
Czech Republic	1 506	2 090	2 718	5 602	6 301
Denmark	6 105	5 202	4 825	9 897	7 867
Finland	3 119	3 457	3 115	3 486	3 146
France	21 392	11 716	11 612	13 733	13 116
Germany	45 762	45 988	49 764	47 509	46 530
Greece	2 007	1 354	1 856	2 325	962
Hungary	871	2 604	...	...	...
Irish Republic	392	345	247	445	483
Italy	6 796	6 890	7 755	7 244	7 186
Netherlands	10 488	9 840	9 567	14 214	22 359
Norway	998	1 396	1 079	1 472	1 889
Poland	6 119	6 062	6 215	5 812	...
Portugal	726	...	...	1 186	1 243
Romania	1 779	1 422	2 027	1 893	2 144
Spain	3 944	4 020	4 620	4 218	5 258
Sweden	3 047	3 595	5 889	5 130	4 885
Switzerland	5 456	4 838	3 930	4 084	3 669
Turkey	659	703	1 109	1 308	893
United Kingdom	12 102	13 944	15 974	16 276	20 595
Yugoslavia, Federal Republic of	...	...	*100	...	1 269
Cameroon	381	352	...	...	...
Morocco	...	...	2 324	984	...
South Africa	3 327	3 873	3 439	2 009	4 506
Tunisia	...	1 089	1 172	980	...
Canada	22 265	23 954	22 283	23 079	25 002
Costa Rica	341	1 159	66	182	...
El Salvador	522	631	630	634	1 676
Guatemala	1 144	1 595	838	819	...
Honduras	479	464	607	588	...
Mexico	1 137	1 311	830	971	...
Panama	643	479	613	650	...
USA	1 822	379	259	1 551	2 040
Brazil	3 186	1 408	2 123	2 375	...
Colombia	1 423	2 157	3 039	3 063	...
Ecuador	125	223	329	312	...
Peru	1 125	1 398	2 690	1 941	...
Venezuela	3 139	3 749	2 683	732	...
China	4 608	2 579	3 796	3 149	5 848
Cyprus	217	190	190	195	126
Hong Kong	3 781	3 407	4 354	4 539	3 191
India (d)	1 030	1 055	1 357	2 504	...
Indonesia	3 450	3 693	4 871	3 533	4 231
Iran (c)	396	553	176	...	...
Israel (b)	*1 300	*1 000	*700	...	...
Japan	4 626	5 864	6 442	8 130	8 668
Korea, Republic of	3 779	1 761	99	90	83
Malaysia	2 467	2 678	...	...	...
Pakistan	13	737	100	326	...
Philippines	809	1 387	888	3 722	...
Saudi Arabia	5 287	876	938	585	...
Singapore	2 290	2 180	1 803	2 191	1 773
Taiwan	13 746	15 371	15 040	11 028	11 020
Thailand	408	207	295	...	...
Australia (a)	7 027	...	...	...	...
New Zealand (a)	1 414	1 571	1 686	...	1 470

Note(s):-

(a) Years ended 30 June of that stated

(b) BGS estimates, based on known exports from certain countries

(c) Years ended 20 March following that stated

(d) Years ended 31 March following that stated

Production of Feldspar

tonnes

Country	1993	1994	1995	1996	1997
Austria	8 492	4 883	—	—	—
Czech Republic	203 000	170 000	183 000	211 000	243 000
Finland	45 141	43 483	41 801	40 265	40 000
France	274 000	390 000	632 000	546 000	*550 000
Germany	303 154	302 626	329 624	359 666	455 969
Greece	22 210	35 000	27 000	60 000	...
Italy	1 534 421	1 806 935	2 199 315	2 287 086	2 200 000
Macedonia	13 201	3 282	...	...	...
Norway	*75 000	62 905	75 397	*75 000	*75 000
Poland	30 700	38 100	45 600	52 700	...
Portugal	90 547	87 196	106 559	98 596	*97 000
Romania	87 701	31 123	30 920	35 229	*35 000
Russia	*70 000	*55 000	*55 000	*45 000	*45 000
Slovakia	22 477	...	13 300	23 240	22 720
Spain	235 200	312 900	379 284	415 189	455 000
Sweden	35 942	44 520	47 226	43 167	*50 000
Turkey	519 762	502 608	760 250	912 204	1 017 697
United Kingdom (c)	6 956	8 400	8 900	8 211	8 108
Yugoslavia, Federal Republic of	2 679	3 238	5 441	4 801	4 880
Algeria	6 500	6 939	*7 000	*7 000	*7 000
Egypt (d)	16 386	39 745	40 621	*40 000	*40 000
Kenya	*1 200	*1 200	*500	*100	*100
Morocco	...	...	17 233	12 659	15 110
Nigeria	169	—	...	...	...
South Africa	43 400	37 156	47 962	53 644	60 112
Zimbabwe	1 553	1 617	3 920	3 248	2 254
Guatemala	7 041	8 886	7 673	11 061	...
Mexico	123 512	133 441	121 779	139 972	155 760
USA	770 000	765 000	880 000	890 000	*900 000
Argentina	55 764	42 516	37 095	72 539	*80 000
Brazil (e)	205 000	205 000	200 116	*200 000	*200 000
Chile	4 149	9 967	7 293	3 702	3 808
Colombia	60 458	76 188	58 100	78 093	66 845
Ecuador	10 966	5 692	10 297	10 321	...
Peru	11 385	14 808	8 336	5 918	...
Uruguay	3 569	2 870	5 099	2 006	3 229
Venezuela	187 000	136 507	170 404	204 735	171 145
India	66 792	64 693	99 618	85 213	*90 000
Indonesia	27 835	40 483	49 415	*50 000	...
Iran (b)	76 873	109 005	132 457	122 343	...
Japan (f)	1 122 000	1 193 000	1 169 000	1 163 000	*1 050 000
Jordan	*2 500	*2 500	*2 500	*2 500	...
Korea, Republic of	539 169	319 658	367 578	319 112	341 018
Myanmar (a)	5 728	5 605	8 749	*9 000	*8 000
Pakistan	17 034	15 335	21 163	32 572	*30 000
Philippines	44 600	*30 000	*30 000	*40 000	*40 000
Sri Lanka	*8 800	6 300	7 500	11 200	14 950
Taiwan	1 716	778	—	20	—
Thailand	600 835	554 227	677 852	684 983	*700 000
Uzbekistan	*70 000	*70 000	*70 000	*70 000	*70 000
Australia	18 748	36 169	66 610	57 241	65 818
World Total	7 700 000	7 870 000	9 270 000	9 600 000	9 730 000

Note(s):-

(1) In addition to the countries listed, China and Namibia are believed to produce feldspar

- (a) Years ended 31 March following that stated
- (b) Years ended 20 March following that stated
- (c) China stone
- (d) Years ended 30 June of that stated
- (e) Including beneficiated and directly shipped material
- (f) Revised to include weathered granite feldspar

Exports of Feldspar

tonnes

Country	1993	1994	1995	1996	1997
Austria	3	...	24 915	22 180	20 668
Czech Republic	63 687	66 583	74 181	67 515	55 011
Finland	30 867	28 693	27 264	25 972	23 048
France	74 433	53 560	67 169	92 883	122 119
Germany	72 495	128 745	81 210	61 033	60 999
Italy	22 723	22 593	30 727	37 349	42 687
Netherlands	—	1 786	1 567	23 276	2 990
Norway	63 552	61 648	67 340	69 578	67 741
Portugal	462	...	...	1 850	2 069
Spain	14 022	14 202	25 476	29 809	22 653
Sweden	21 133	30 625	25 448	24 731	16 385
Turkey (a)	320 819	469 371	651 800	738 156	950 140
United Kingdom	442	470	317	237	853
South Africa	2 965	2 394	1 700	4 062	2 618
Guatemala	5 284	5 006	4 400	3 648	...
Mexico	7 782	7 115	8 502	8 323	...
USA	17 669	17 255	15 058	10 169	7 224
Brazil	2 551	1 102	374	...	...
China	728 447	831 000	703 315	567 741	591 265
Hong Kong (a) (c)	311 010	220 867	201 362	139 415	164 965
India (b)	29 448	49 307	84 622	94 716	...
Japan	36 232	27 630	30 176	33 324	13 062
Korea, Republic of	23 631	15 817	14 027	37 509	34 248
Philippines	44 600	45 600	23 205	—	...
Thailand	436 954	233 784	300 517	284 768	...
Australia	...	36 929	61 870	47 053	...

Note(s):-

(a) May include some leucite, nepheline and nepheline syenite

(b) Years ended 31 March following that stated

(c) Re-exports

Imports of Feldspar

tonnes

Country	1993	1994	1995	1996	1997
Austria	5 970	4 813	5 387	4 010	4 377
Belgium-Luxembourg	17 801	35 850	20 696	73 309	24 836
Croatia	6 122	...	2 237	2 883	2 521
Denmark	2 991	3 073	4 208	3 373	3 300
France	15 554	20 765	31 169	27 069	46 110
Germany	70 493	70 493	68 591	66 209	41 670
Greece	(a) 3 361	5 885	8 834	8 049	1 302
Hungary	41 185	20 636	...	...	...
Irish Republic	501	(a) 1 374	(a) 191	(a) 1 577	(a) 628
Italy	247 275	359 608	537 518	602 980	714 234
Lithuania	...	...	4 521	5 479	11 625
Netherlands	15 027	10 386	19 879	50 098	14 118
Norway	243	523	839	889	841
Poland	25 268	24 916	30 762	34 900	...
Portugal	15 985	...	(a) (c) 29 709	20 357	34 456
Spain	96 672	119 485	168 658	215 198	229 481
Sweden	5 316	5 041	7 092	10 017	6 820
Switzerland	10 026	13 714	11 543	9 101	6 248
Turkey (a)	31	135	10 133	10 107	7 546
Ukraine (b)	*28 000	*28 500	...	...	...
United Kingdom	30 850	38 209	36 537	28 314	24 051
Tunisia	...	2 723	2 190	4 719	...
Canada	1 422	1 630	1 803	1 291	1 612
Costa Rica	5 178	4 292	5 426	4 908	...
Mexico	7 158	20 765	17 048	5 789	...
Panama (a) (c)	2 400	129	...	...	...
USA	7 054	7 355	8 978	7 154	8 578
Chile	962	1 274	1 051	2 913	2 202
Venezuela	1 032	990	514	440	...
China	1 131	810	537	3 919	11 121
Hong Kong (a)	344 551	209 312	105 036	59 094	31 140
Indonesia	37 307	47 684	59 210	85 469	80 514
Israel (a) (b)	*4 800	*4 000	*4 000	...	...
Japan	7 583	6 705	9 280	10 864	13 004
Jordan	(a) (c) 305	185	142	533	...
Korea, Republic of	8 560	4 288	8 024	1 288	1 024
Malaysia	125 539	127 947	177 338	...	...
Philippines	4 984	6 220	5 761	10 884	...
Saudi Arabia	540	1 141	1 671	877	...
Singapore	(a) 29 579	(a) 27 929	(a) 21 655	(a) 30 806	10 979
Syria (a) (c)	1 046	2 255	1 041	2 230	...
Taiwan	1 006 412	1 175 321	965 531	745 009	755 071
Thailand	3 877	12 624	15 978	23 062	...
New Zealand (d)	304	617	200	...	336

Note(s):-

- (a) May include some leucite, nepheline and nepheline syenite
(b) BGS estimates, based on known exports from certain countries
(c) Including some fluorspar
(d) Years ended 30 June of that stated

Production of Fluorspar

tonnes

Country	1993	1994	1995	1996	1997
Czech Republic	22 000	10 000	—	—	—
France	123 900	130 300	130 000	110 800	110 000
Germany	39 997	35 641	39 081	32 448	23 868
Italy	71 684	77 946	124 749	126 671	*130 000
Romania	*15 000	*15 000	*15 000	*15 000	...
Russia	236 300	250 000	*250 000	*250 000	*250 000
Spain	92 505	113 588	118 411	116 526	124 986
Turkey	*4 000	6 671	8 873	4 828	3 678
United Kingdom	70 285	*58 000	*55 000	*65 000	*64 000
Egypt (c)	773	514	551	*700	*700
Kenya	78 725	89 155	74 230	83 000	68 700
Morocco	70 000	85 000	105 800	95 900	103 800
Namibia	43 466	52 226	33 559	31 457	23 160
South Africa	217 778	174 258	195 794	202 018	206 713
Tunisia	1 399	400	1 856	720	1 426
Mexico	282 988	327 378	522 658	523 971	552 840
USA	*56 000	*49 000	*51 000	*8 200	(d) —
Argentina	4 611	3 585	5 105	5 666	*5 000
Brazil (a)	115 972	91 658	89 258	58 774	78 400
China	*1 950 000	*1 950 000	*1 850 000	*1 900 000	*2 000 000
India	22 773	22 591	24 246	19 378	*19 100
Iran (b)	*10 000	22 204	20 163	18 929	...
Korea, Dem. P.R. of	*41 000	*40 000	*40 000	*39 000	*39 000
Mongolia	77 200	88 000	122 500	127 600	135 100
Pakistan	*5 100	13 351	2 573	363	*500
Tajikistan	8 000	10 000	*9 000	*9 000	*9 000
Thailand	48 387	23 705	24 114	17 247	7 826
Uzbekistan	*90 000	*80 000	*90 000	*90 000	*90 000
World Total	3 800 000	3 800 000	4 000 000	4 000 000	4 000 000

Note(s):-

(1) In addition to the countries listed, Bulgaria is believed to produce fluorspar

(a) Including beneficiated and directly shipped material

(b) Years ended 20 March following that stated

(c) Years ended 30 June of that stated

(d) The USA produced 121 000 t of fluorspar equivalent in fluorosilicic acid derived from processing phosphate rock in 1997

Exports of Fluorspar

tonnes

Country	1993	1994	1995	1996	1997
Belgium-Luxembourg	—	255	147	1 270	821
Czech Republic	14 144	20 667	26 011	17 172	22 690
France	20 528	15 763	26 190	31 408	35 748
Germany	22 770	16 678	26 667	15 631	20 206
Italy	940	518	96	2 114	557
Netherlands	982	1 352	100	806	2 404
Spain	18 845	21 182	33 853	19 897	24 998
Sweden	1 493	1 687	991	2 320	2 102
United Kingdom	6 001	5 796	6 935	7 129	5 215
Kenya	71 095	62 202	56 202	59 175	72 300
Morocco	60 000	102 365	107 846	94 156	112 042
Namibia	33 487	49 852	27 400	32 624	18 307
South Africa	224 278	244 190	166 864	165 453	182 716
Canada	483	50	1 750	363	530
Mexico	111 687	147 502	291 905	252 809	...
USA	13 227	24 261	47 120	83 482	64 870
China	1 375 277	1 218 645	1 229 145	1 124 685	1 293 672
Japan	644	904	748	1 173	1 013
Mongolia	*180 000	*170 000	*270 000	159 400	...
Thailand	46 041	18 428	19 315	17 432	...
Uzbekistan	*10 000	*10 000	*11 000	*13 000	...

Imports of Fluorspar

tonnes

Country	1993	1994	1995	1996	1997
Austria	6 169	5 213	6 565	7 114	7 529
Belgium-Luxembourg	11 021	8 401	11 910	4 696	9 774
Czech Republic	19 616	26 642	67 720	42 437	51 532
Denmark	11 931	11 066	341	568	4 926
Finland	6 334	12 388	12 577	12 564	11 317
France	15 321	7 427	6 971	4 629	6 267
Germany	210 214	268 974	221 860	238 905	263 201
Greece	13 116	4 719	7 969	13 608	14 313
Hungary	2 061	5 177	3 900	1 700	...
Italy	93 661	91 428	94 803	95 823	111 666
Netherlands	30 732	19 234	6 810	10 965	12 561
Norway	36 548	44 865	46 231	43 358	...
Poland	4 363	7 236	8 324	9 800	...
Portugal	1 469	1 300	1 300	1 057	971
Romania	16 129	10 852	15 106	22 970	19 271
Russia	88 968	174 300	167 200	225 700	...
Slovakia	*7 000	7 900	8 900	7 300	...
Spain	6 792	9 495	13 056	8 762	11 347
Sweden	13 467	11 733	7 977	16 082	7 968
Switzerland	409	351	73	222	325
Turkey	1 892	1 515	6 772	7 025	12 219
Ukraine (b)	*17 400	*100	*9 500	*21 200	*38 200
United Kingdom (b)	*24 000	*18 000	*41 000	*34 000	*35 000
Yugoslavia, Federal Republic of	...	...	...	...	4 016
Egypt (a) (c)	8 183	500	500	1 654	...
Tunisia	47 200	47 253	35 921	47 737	...
Canada	80 728	87 370	108 968	142 632	157 661
Mexico	43 625	31 457	32 867	95 418	...
Panama (a) (c)	2 400	129	...	...	...
USA	408 985	439 147	575 817	384 889	822 211
Brazil	4 272	11	18 767	7 864	...
Chile	543	391	524	479	1 103
Peru	275	1 128	483	366	...
Venezuela	739	704	1 311	756	...
Hong Kong	...	—	—	600	1 025
India (d)	38 537	61 781	53 627	54 666	...
Indonesia	1 391	1 006	959	973	706
Japan	551 184	544 943	593 723	549 239	573 738
Jordan	(a) (c) 305	63	162	151	...
Korea, Republic of	80 987	93 198	107 551	82 804	87 918
Malaysia	4 034	2 694	4 700	6 600	...
Pakistan	5 317	23	1 750	3 000	...
Philippines	529	1 737	3 137	1 435	...
Taiwan	27 937	47 447	52 614	41 151	46 999
Australia	2 000	18 000	9 200	7 698	...

Note(s):-

- (a) May include some leucite, nepheline and nepheline syenite
(b) BGS estimates, based on known exports from certain countries
(c) Including some feldspar
(d) Years ended 31 March following that stated

Mine Production of Gold

kilograms (metal content)

Country	1993	1994	1995	1996	1997
Armenia	*500	*500	514	244	*500
Bulgaria	—	299	1 307	1 776	1 713
Czech Republic	512	75	—	—	—
Finland	304	963	1 050	1 670	1 900
France	3 034	5 078	4 615	4 590	4 500
Georgia	*100	*100	*100	*100	*100
Hungary	*500	*200	—	—	—
Poland	...	628	510	598	*600
Romania	4 000	*4 000	*4 000	*4 000	*4 000
Russia	149 464	142 578	131 938	123 347	122 903
Spain	8 500	7 800	4 131	4 241	*4 200
Sweden	6 548	6 364	6 528	6 145	6 777
Turkey	1 110	996	*1 000	*1 000	...
Yugoslavia, Federal Republic of (d)	3 504	2 437	2 856	3 250	3 014
Botswana	192	234	86	5	28
Burkina Faso (e)	...	1 624	1 664	1 312	*1 200
Burundi	*20	*1 000	*2 000	*2 200	*1 500
Cameroon	*10	*10	560	*600	*500
Central African Republic	171	138	98	38	35
Congo, Democratic Republic	1 502	780	1 180	1 252	394
Ethiopia (b)	3 387	2 370	4 500	*2 500	*2 500
Gabon	120	72	70	*70	*70
Ghana	38 603	43 348	51 330	49 307	54 446
Guinea	3 864	5 617	7 862	6 838	7 000
Ivory Coast	1 500	1 860	1 940	1 883	2 419
Kenya	154	155	170	*300	*300
Liberia	*700	—	—	—	*100
Mali	5 900	5 700	6 300	7 000	16 300
Mauritania	1 266	1 738	1 800	1 890	*1 900
Mozambique	149	336	236	67	—
Namibia	1 953	2 394	2 099	2 145	2 417
Rwanda	*1 000	*100	—	—	—
Sierra Leone	157	111	4	16	...
South Africa	619 325	579 909	523 815	496 846	491 813
Sudan	1 600	2 500	*3 700	*4 500	*5 000
Tanzania	3 370	2 549	44	301	201
Uganda (e)	104	216	3 094	5 067	6 819
Zambia (c)	267	165	79	106	184
Zimbabwe	18 565	20 512	23 959	24 699	24 156
Canada	153 299	146 891	152 032	166 378	168 061
Costa Rica	260	370	400	*400	*400
Dominican Republic	247	1 538	3 288	3 659	2 349
Honduras	111	106	111	142	*150
Mexico	11 121	14 642	20 902	24 083	26 031
Nicaragua	1 241	1 045	1 200	1 400	*2 500
Panama	266	272	283	834	1 202
USA	331 013	326 553	316 913	321 456	356 800
Argentina	937	937	837	723	2 446
Bolivia	10 423	12 790	14 405	12 634	13 292
Brazil	74 219	70 535	62 424	55 041	58 000
Chile	33 638	38 786	44 585	53 174	49 459
Colombia	27 469	20 760	21 165	22 073	18 811
Ecuador	12 500	13 000	15 520	17 700	*17 000
French Guiana	2 805	2 260	2 470	2 637	*3 000
Guyana	9 635	11 683	9 005	12 007	13 521
Peru	30 318	47 800	57 743	64 885	76 822
Venezuela	8 985	10 094	7 259	11 719	19 661
China	*160 000	*160 000	127 611	145 333	156 800
India	2 075	2 372	2 203	2 442	2 700
Indonesia	41 576	42 605	62 818	83 660	82 700
Iran	417	723	370	242	281
Japan	9 352	9 551	9 185	8 627	8 384
Kazakhstan	13 700	14 483	10 921	10 300	9 659
Korea, Dem. P.R. of	*5 000	*5 000	*5 000	*5 000	*5 000

Gold

Mine Production of Gold

kilograms (metal content)

Country	1993	1994	1995	1996	1997
Korea, Republic of (d)	1 438	1 374	1 265	1 061	632
Kyrgyzstan	1 400	2 100	4 100	4 100	17 400
Malaysia	4 463	4 085	3 162	2 829	4 487
Mongolia	*1 200	1 742	4 080	6 976	8 451
Myanmar (a)	51	164	145	171	150
Oman	431	122	532	592	577
Philippines	24 917	27 059	26 889	29 958	32 494
Saudi Arabia	7 525	7 630	8 080	7 530	7 260
Tajikistan	1 100	1 500	1 700	1 460	2 550
Uzbekistan	66 600	64 400	63 600	78 300	81 700
Australia	247 433	254 874	253 084	289 519	313 450
Fiji	3 815	4 111	3 476	4 550	4 671
New Zealand	11 161	10 118	12 132	11 571	11 359
Papua New Guinea	60 587	58 654	51 701	51 573	48 482
World Total	2 250 000	2 240 000	2 178 000	2 277 000	2 400 000

Note(s):-

- (1) In several countries substantial amounts of gold produced in small operations are not recorded in the official statistics used when compiling this table
- (2) In addition to the countries listed, Eritrea, Laos and Madagascar produce less than 100 kg gold per year according to official statistics
- (3) Greece, Morocco, Norway and Thailand are believed to produce gold

- (a) Years ended 31 March following that stated
- (b) Years ended 6 July of that stated
- (c) Contained in blister copper, refinery muds and electrolytic copper
- (d) Metal production
- (e) Exports

Exports of Gold

kilograms

Country	1993	1994	1995	1996	1997
Armenia					
Metal (c)	...	*390	...	*50	...
Waste & scrap (c)	...	*930	*1 600	...	...
Austria					
Metal	15 272	1 227	1 748	3 111	1 900
Waste & scrap	520	747	200	56 000	6 000
Belarus					
Waste & scrap (c)	*900	*3 100	...	...	...
Belgium-Luxembourg					
Metal	26 089	22 006	25 188	27 892	29 500
Waste & scrap	£513 000	£35 000	£344 000	£1 647 000	£2 124 000
Bulgaria					
Waste & scrap (c)	*6 000	*50	*1 300	*4 800	...
Croatia					
Metal	1 000	...	1 000	...	24
Czech Republic					
Metal	8 605	1 671	2 329	4 693	3 408
Denmark					
Metal	502	410	893	1 332	2 861
Waste & scrap	4 157	4 111	8 442	5 851	2 690
Estonia					
Waste & scrap (c)	*16 300	*15 700	...	...	*6 700
Finland					
Metal	1 032	808	2 000	3 834	4 947
Waste & scrap	2	153	41 000	106 000	51 273
France					
Metal	44 429	37 578	39 858	50 812	42 600
Waste & scrap	731 232	1 262 100	146 892	148 831	66 900
Germany					
Metal	62 317	74 341	89 575	94 451	73 400
Waste & scrap	26 078	1 210	23 603	29 214	228 700
Hungary					
Metal	...	...	...	441	740
Irish Republic					
Metal	£113 000	£532 000	£14 000	£3 000	£4 000
Waste & scrap	£6 000	£12 000	£6 000	£2 000	£196 000
Italy					
Metal	15 248	12 672	13 032	27 432	13 734
Latvia					
Waste & scrap (c)	*4 100	*6 300	*200	*1 000	...
Lithuania					
Waste & scrap	(c) (g) *2 700	(c) (g) *2 200	—	...	...
Netherlands					
Metal	6 772	11 479	12 972	15 286	...
Waste & scrap	20 000	29 000	56 000	193 370	...
Norway					
Metal	1 197	1 599	2 151	1 643	1 714
Waste & scrap	181	328	966	2 083	1 280
Poland					
Metal	55	249	330	132	...
Russia					
Metal	(c) *14 100	(c) *36 400	73 900	3 600	...
Waste & scrap (c)	*11 400	*7 500	*33 400	*6 500	...
Spain					
Metal	4 776	14 401	15 888	15 201	36 177
Sweden					
Metal	9 000	8 000	...	12 724	4 000
Waste & scrap	46 000	28 000	108 989	3 519	1 000
Switzerland					
Metal	999 059	909 456	1 193 530	1 191 879	1 677 130
Waste & scrap	78 216	8 080	16 758	52 375	44 849
Ukraine					
Waste & scrap (c)	*74 400	*9 900	...	*1 500	*20 500
United Kingdom					
Metal	683 719	436 674	702 386	595 097	1 151 116
Waste & scrap	2 638	1 450	11 533	79 727	54 013
Yugoslavia, Federal Republic of					
Metal	...	...	...	...	1 000

Gold

Exports of Gold

kilograms

Country	1993	1994	1995	1996	1997
Burkina Faso					
Metal	...	1 624	1 664	1 312	*1 200
Central African Republic					
Metal	153	78	62	24	18
Guinea					
Metal	3 864	5 600	7 863	6 838	...
Mozambique					
Metal	113	262	228	53	...
Namibia					
Metal	2 011	2 319	2 056	2 177	2 427
Sierra Leone					
Metal	157	111	4	...	16
South Africa					
Metal	£4 741 000 000	£4 591 000 000	£4 010 000 000	£3 944 000 000	£3 266 000 000
Uganda					
Metal	104	216	3 094	5 067	6 819
Zimbabwe					
Metal	21 262	18 908	20 880	...	...
Canada					
Ores & concentrates (d)	3 869	3 511	7 066	5 465	6 010
Metal	204 332	210 597	170 975	197 287	218 346
Dominican Republic					
Metal	247	1 538	3 288	3 659	2 349
USA					
Metal, unrefined	64 474	60 415	69 990	71 073	87 550
Metal, refined	660 572	337 514	278 492	405 332	390 528
Metal, other	13 031	12 909	9 372	6 803	10 561
Waste & scrap	68 847	81 407	81 430	91 297	62 019
Bolivia					
Metal	6 414	9 633	10 593	9 561	10 288
Brazil					
Metal	1 935	16 459	34 777	46 970	48 236
Chile					
Metal	20 422	22 502	29 032	32 203	...
Colombia					
Ore	364 974	594 268	551 970	518 427	...
Guyana					
Metal	8 667	11 161	8 563	9 020	...
Peru					
Metal	19 782	27 549	37 223	45 978	46 271
China					
Metal (c)	*1 500	*1 300	*600	*1 600	*1 700
Hong Kong					
Metal (a)	9 519	4 493	6 729	9 980	6 890
Waste & scrap (a)	3 259	2 966	3 968	5 545	8 043
Indonesia					
Metal	16 136	11 577	3 825	806	10 020
Japan					
Metal	33 878	23 949	36 490	39 087	51 881
Waste & scrap	2 241	1 418	1 277	2 311	11 254
Jordan					
Metal (a)	4 106	1 579	0	242	...
Kazakhstan					
Metal	...	...	—	—	8 489
Korea, Dem. P.R. of					
Metal (c)	*3 600	*600	*900	*2 900	...
Korea, Republic of					
Ores & concentrates	1 895 200	1 881 600	...	—	...
Metal	25 079	48 350	197 668	427 533	577 064
Malaysia					
Metal	3 443	3 927	8 214	...	...
Waste & scrap	...	221	767	365	...
Philippines					
Ores & concentrates (b)	5 694	6 659	6 382	7 636	...
Metal	49 845	76 328	63 646	60 163	...

Exports of Gold

kilograms

Country	1993	1994	1995	1996	1997
Singapore					
Metal	13 042	12 191	14 305	23 700	42 243
of which, re-exports	2 697	1 323	2 097	13 031	26 994
Waste & scrap	1 106	777	1 312	4 044	8 481
Taiwan					
Metal	268	898	2 409	3 258	3 056
Waste & scrap	15 134	70 730	908	1 385	6 113
Thailand					
Metal	1 051	64 821	6 579	44 277	...
Waste & scrap	26 538	99 907	36 856	6 493	...
Uzbekistan					
Metal (c)	*20 000	*14 000	*15 300	*10 400	...
Australia					
Ores & concentrates (b)	*2 500	*1 600	*2 500	*1 700	...
Metal	275 000	276 700	316 100	325 700	340 500
New Zealand					
Metal (e)	22 082	36 588	37 624	44 377	38 702
Papua New Guinea					
Metal (f)	60 587	58 654	51 701	51 573	48 482

Note(s):-

(1) In this table the term 'metal' includes both unwrought and partly worked gold and alloys but excludes gold coin

- (a) Re-exports
- (b) Au content
- (c) BGS estimates, based on known imports into certain countries
- (d) Au content of all ores and concentrates
- (e) Years ended 30 June of that stated
- (f) Au content of concentrates and unrefined metal
- (g) Is likely to include re-exports

Gold

Imports of Gold

kilograms

Country	1993	1994	1995	1996	1997
Armenia					
Metal (d)	...	*300	*700	*100	*50
Austria					
Metal	2 766	2 680	53 559	18 365	41 500
Belarus					
Metal (d)	...	*300	*100	*300	*300
Belgium-Luxembourg					
Metal	22 425	13 815	17 102	8 830	10 700
Waste & scrap	£1 294 000	£3 339 109	£623 000	£22 584 000	£21 216 000
Czech Republic					
Metal	10 979	2 312	2 463	3 388	3 386
Denmark					
Metal	1 072	1 362	1 518	1 664	17 933
Waste & scrap	499	1 384	802	470	321
Finland					
Metal	786	896	13 000	828	1 060
France					
Metal	101 405	89 999	139 599	84 814	54 200
Waste & scrap	415 838	427 300	306 256	35 199	16 600
Germany					
Metal	119 230	96 141	102 149	96 541	91 500
Waste & scrap	137 355	203 012	118 332	178 025	202 000
Greece					
Metal	—	11 671	14 349	14 947	1 883
Hungary					
Metal	£427 000	£267 000	£1 124 000	£1 405 000	...
Irish Republic					
Metal	£6 121 000	£7 312 000	£9 600 000	£8 558 000	£7 360 000
Italy					
Metal	342 928	337 324	346 071	331 746	407 273
Waste & scrap	900	2 300	2 612	1 027	408
Malta					
Metal	1 186	1 903	1 022	2 222	...
Netherlands					
Metal	8 908	19 017	19 503	16 990	...
Waste & scrap	...	3 000	...	...	...
Norway					
Metal	1 652	1 183	1 358	1 418	1 750
Waste & scrap	277	489	707	416	525
Portugal					
Metal	12 803	127 560	...	1 001	9 736
Slovakia					
Metal (d)	*50	*4 300	*3 000	*800	*50
Slovenia					
Metal	(d) *1 200	2 981	...	(d) *100	(d) *200
Spain					
Metal	12 252	20 893	29 837	28 213	139 445
Sweden					
Metal	£11 329 000	£12 310 000	£11 384 000	£10 503 000	£6 525 000
Waste & scrap	£354 000	£39 000	£94 000	£22 000	£30 000
Switzerland					
Metal	1 273 872	1 042 987	1 205 818	1 285 661	1 592 971
Waste & scrap	43 970	48 594	56 883	101 740	117 973
Ukraine					
Metal (d)	*200	*400	*100	*200	*900
United Kingdom					
Ores & concentrates	20 292	79 815	3 451	...	...
Metal	870 000	437 225	404 356	744 997	506 211
Waste & scrap	89 020	114 466	232 584	205 740	152 707
South Africa					
Metal	537	460	...	1 432	2 170
Tunisia					
Metal	767	1 166	1 406	1 560	...

Imports of Gold

kilograms

Country	1993	1994	1995	1996	1997
Canada					
Ores & concentrates (a)	10 590	1 897	2 648	3 137	3 336
Metal	55 360	36 487	23 773	54 237	83 373
USA					
Ore (c)	2 667	4 045	6 148	4 989	3 445
Metal, unrefined	12 534	15 088	9 877	11 760	13 730
Metal, refined	130 001	96 360	111 163	143 263	192 299
Metal, other	27 794	37 677	45 874	59 650	70 310
Waste & scrap	25 434	21 818	14 432	12 995	14 055
Brazil					
Metal	1 329	2 931	147	...	...
China					
Metal (d)	*7 400	*2 400	*1 800	*1 700	*1 300
Cyprus					
Metal	2 229	2 696	2 430	3 381	4 169
Hong Kong					
Metal	234 056	326 104	265 657	217 535	432 931
Waste & scrap	648	1 055	2 907	2 701	4 678
India					
Metal	19 668	39 037	45 677	52 425	...
Israel					
Metal	£107 171 000	£92 962 000	£97 624 000	£97 400 000	...
Japan					
Metal	176 351	197 349	263 216	135 667	119 473
Waste & scrap	3 223	3 815	6 798	137 245	138 396
Jordan					
Metal	502	1 174	2 550	2 143	...
Korea, Republic of					
Metal	34 436	58 336	217 102	424 381	604 881
Macao					
Metal	1 157	1 117	420	...	...
Malaysia					
Metal	81 578	121 857	159 826	...	...
Oman					
Metal	...	11 229	...	...	...
Pakistan					
Metal	271	188	12 843	28 450	...
Philippines					
Metal	87	11 862	7 524	879	...
Saudi Arabia					
Metal	62 932	59 426	151 905	88 626	...
Singapore					
Metal	19 883	23 199	26 401	31 380	71 860
Waste & scrap	432	257	296	625	2 394
Sri Lanka					
Metal	1 412	1 387	971	17 988	27 394
Taiwan					
Metal	134 096	123 233	108 316	93 139	103 053
Thailand					
Metal	187 663	...	1 305 866	47 911	...
Australia					
Metal	£453 000 000	£369 000 000	£341 000 000	£320 000 000	£361 000 000
New Zealand					
Metal (b)	637	638	584	...	1 234

Note(s):-

(1) In this table the term 'metal' includes both unwrought and partly worked gold but excludes gold coin

(a) Au content of all ores and concentrates

(b) Years ended 30 June of that stated

(c) Au content

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

Graphite

Production of Graphite

tonnes

Country	1993	1994	1995	1996	1997
Austria (a)	4 146	12 324	12 019	33 122	12 582
Czech Republic	27 000	25 000	27 000	30 000	25 000
Germany	4 437	4 369	5 214	2 603	*1 500
Norway	6 500	5 566	2 558	7 100	7 700
Romania	3 162	2 335	2 179	2 931	*2 500
Russia	*10 000	*8 000	*8 000	*6 000	*6 000
Turkey	*20 000	*20 000	*20 000	*21 000	*21 000
Ukraine	6 000	6 000	8 757	5 367	4 289
Madagascar	13 118	14 593	16 119	*16 000	*16 000
Mozambique	10	430	3 019	3 283	5 125
Tanzania	—	—	100	6 776	*6 800
Zimbabwe	7 142	7 890	11 381	7 691	12 779
Canada	22 808	*23 000	*25 000	*25 000	*25 000
Mexico	48 532	30 863	34 388	40 412	47 982
Brazil (b)	34 800	41 003	33 590	*40 000	*40 000
China	653 800	943 200	2 215 100	1 950 000	...
India	82 398	93 597	129 368	115 233	*120 000
Korea, Dem. P.R. of	*38 000	*38 000	*40 000	*40 000	*40 000
Korea, Republic of	5 910	4 300	1 938	1 113	*1 000
Sri Lanka	3 033	2 500	8 000	5 618	5 127
World Total	990 000	1 280 000	2 600 000	2 360 000	2 350 000

Note(s):-

- (1) This table includes all forms of amorphous and crystalline graphite but excludes synthetic material
(2) In addition to the countries listed, Egypt, Namibia and the USA are believed to produce graphite

- (a) Crude
(b) Including beneficiated and directly shipped material

Exports of Graphite

tonnes

Country	1993	1994	1995	1996	1997
Austria	4 165	5 103	5 094	5 344	4 063
Czech Republic	2 120	2 294	2 691	2 722	2 831
France	281	735	4 286	977	801
Germany	7 267	8 471	11 191	9 494	9 108
Italy	461	164	302	210	129
Latvia (a)	*1 300	*2 500	...	...	...
Netherlands	471	1 128	476	574	536
Norway	5 131	35	29 440	29 340	...
Poland	902	174	12	59	...
Russia	(a) *3 000	(a) *4 800	(a) *5 700	1 111	...
Spain	768	775	478	126	59
Sweden	180	3 234	1 421	103	515
Ukraine	(a) *1 000	(a) *700	3 756	4 663	2 328
United Kingdom	2 133	2 455	1 693	2 152	1 871
Madagascar	11 182	12 715	16 522	...	...
Mozambique	...	337	2 818	2 447	4 730
South Africa (a)	*500	*400	*1 300	*1 900	*1 700
Zimbabwe	8 078	9 077	49 204	10 943	10 997
Canada	21 501	21 755	...	20 823	26 148
Mexico	13 901	15 916	15 108	14 992	...
USA	17 548	20 853	38 217	27 158	41 404
Brazil	9 961	9 668	11 899	11 478	12 614
China	145 426	181 767	193 648	158 368	170 022
Hong Kong (c)	2 111	930	175	219	108
India (b)	698	674	659	248	...
Japan	2 047	3 052	3 436	3 055	3 027
Korea, Dem. P.R. of (a)	*2 500	*6 300	*3 100	*3 000	*5 600
Korea, Republic of	7 748	5 623	3 551	2 371	2 019
Sri Lanka	3 560	4 089	4 816	503	6 094

Note(s):-

(1) This table excludes synthetic graphite

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

(b) Years ended 31 March following that stated

(c) Re-exports

Imports of Graphite

tonnes

Country	1993	1994	1995	1996	1997
Austria	4 302	5 524	7 486	7 038	9 616
Belgium-Luxembourg	1 516	3 229	1 582	1 826	2 428
Czech Republic	654	737	977	1 176	688
Denmark	1 104	602	432	405	452
Finland	66	345	389	360	344
France	3 342	19 370	3 221	3 934	3 756
Germany	22 969	28 671	36 110	41 345	39 272
Greece	128	87	499	521	674
Hungary	501	520	721	813	544
Irish Republic	46	55	240	215	705
Italy	7 793	10 626	10 261	10 029	9 606
Netherlands	4 830	3 457	21 269	8 604	6 566
Norway	176	340	831	212	54
Poland	3 364	1 433	1 948	2 360	...
Portugal	227	400	400	400	229
Spain	5 642	5 833	8 137	4 728	7 005
Sweden	819	1 052	595	496	578
Switzerland	174	370	476	440	674
Turkey	3 433	6 869	5 712	5 093	4 709
United Kingdom	24 678	27 983	30 244	25 349	23 740
Yugoslavia, Federal Republic of	...	...	...	...	639
Egypt	290	700	200	912	...
South Africa	6 240	4 123	2 963	2 364	2 172
Canada	6 539	6 426	6 691	6 836	8 489
Mexico	2 364	2 142	3 022	2 922	...
USA	52 171	53 133	61 520	53 394	58 111
Argentina	852	1 420	747	1 155	864
Venezuela	772	1 058	1 056	1 118	...
China	604	322	763	368	801
Hong Kong	9 492	732	449	298	117
India (c)	592	959	773	824	...
Indonesia	923	1 101	2 206	1 851	1 832
Iran (a)	945	2 133	1 171	...	...
Japan	66 135	84 797	96 366	87 029	85 249
Korea, Republic of	37 086	37 676	27 732	65 959	46 887
Malaysia	1 157	1 004	1 300	2 300	...
Pakistan (b)	10 205	1 936	2 225	2 392	2 942
Philippines	354	406	269	233	...
Singapore	1 069	943	1 132	594	1 358
Taiwan	8 008	6 998	11 538	11 648	8 744
Thailand	1 537	1 350	1 160	*1 200	...
Australia	2 100	3 700	2 000	2 736	...

Note(s):-

(1) This table excludes synthetic graphite

(a) Years ended 20 March following that stated

(b) Years ended 30 June of that stated

(c) Years ended 31 March following that stated

Production of Gypsum

tonnes

Country	1993	1994	1995	1996	1997
Austria					
Gypsum	788 865	970 170	873 404	887 730	894 398
Anhydrite	87 476	100 139	85 026	97 167	81 340
Azerbaijan	*75 000	*60 000	*50 000	*55 000	*60 000
Bosnia & Herzegovina	*30 000	*30 000	*30 000	*30 000	*30 000
Bulgaria (a)	143 000	...	163 000	168 900	*150 000
Croatia	*27 000	...	96 590	86 060	102 470
Czech Republic (a)	560 000	591 000	542 000	443 000	241 000
France	*5 000 000	*5 000 000	4 800 000	4 550 000	*5 000 000
Germany (a)	2 678 000	2 830 000	2 662 000	2 315 000	2 548 000
Greece	445 600	453 722	485 353	546 344	*500 000
Hungary (a)	125 000	150 000	198 000	190 000	190 000
Irish Republic	317 600	367 300	406 000	422 800	477 000
Italy	1 383 383	1 370 281	1 492 594	1 274 672	*1 300 000
Latvia	60 500	61 026	78 800	63 888	116 916
Macedonia	35 702	33 449	*30 000	*30 000	*30 000
Moldova	*25 000	14 600	13 600	12 700	14 400
Poland					
Gypsum	727 900	944 100	866 300	879 800	899 958
Anhydrite	103 700	111 400	156 900	148 400	...
Portugal	497 831	521 384	537 621	520 722	*520 000
Romania	*100 000	123 575	110 758	91 000	79 000
Russia	*1 500 000	*1 200 000	*1 200 000	*850 000	*800 000
Slovakia (a)	75 000	122 000	131 000	*110 000	116 000
Spain	6 466 700	8 800 000	9 000 000	*9 000 000	*9 000 000
Switzerland	299 000	298 000	*300 000	*300 000	*300 000
Turkey	541 000	486 704	670 208	754 277	784 662
United Kingdom	*2 500 000	*2 000 000	*2 000 000	*2 000 000	*2 000 000
Yugoslavia, Federal Republic of	*45 000	40 411	40 342	44 257	32 124
Algeria	230 000	*230 000	*250 000	*250 000	*275 000
Angola	*50 000	*50 000	*50 000	*50 000	*50 000
Egypt (b)	1 199 068	1 481 000	2 361 000	575 908	960 733
Ethiopia (d)	*2 500	30 700	124 000	124 000	*124 000
Kenya	*36 000	*30 000	*28 000	*28 000	*28 000
Libya	*160 000	*180 000	*180 000	*180 000	*180 000
Mauritania	3 240	4 230	10 100	12 500	...
Morocco	*450 000	*450 000	*450 000	*450 000	*450 000
Nigeria	...	...	150 000	383 250	*400 000
South Africa	284 389	304 377	288 178	340 688	365 279
Sudan	*10 000	*10 000	*10 000	*5 000	*5 000
Tanzania	1 205	7 536	1 052	4 629	5
Tunisia	*100 000	*100 000	*100 000	*100 000	*100 000
Zambia	*14 000	*11 000	*11 000	*11 000	*11 000
Canada					
Gypsum	7 710 000	9 010 000	8 253 000	8 289 000	8 481 000
Anhydrite	168 200	174 800	210 300	188 000	180 000
Cuba	*125 000	*125 000	*130 000	*130 000	*130 000
Dominican Republic	86 000	93 000	95 000	86 000	113 000
El Salvador	*5 000	*5 300	*5 400	*5 000	*6 000
Guatemala	77 035	42 019	...	27 761	...
Honduras	*26 000	*26 000	*26 000	*26 000	*28 000
Jamaica	152 185	203 700	208 017	338 875	263 662
Mexico	5 339 746	5 040 400	4 854 339	6 064 682	5 869 175
Nicaragua	10 300	27 800	*12 500	*12 500	...
USA	15 812 000	17 200 000	16 600 000	17 500 000	18 600 000
Argentina	519 181	549 759	590 055	633 121	*680 000
Brazil (e)	748 369	792 174	817 290	*900 000	*1 000 000
Chile	510 515	551 821	464 060	520 089	398 354
Colombia	439 467	*450 000	*450 000	522 236	564 681
Ecuador	104 900	108 200	*110 000	*100 000	*100 000
Paraguay	*4 500	*4 500	*4 500	*4 500	*4 000
Peru	38 047	15 161	20 526	49 245	...
Uruguay	217 474	90 367	...	...	...
Venezuela	210 000	134 787	135 000	56 537	97 457

Production of Gypsum

tonnes

Country	1993	1994	1995	1996	1997
Afghanistan	*3 000	*3 000	*3 000	*3 000	*3 000
Bhutan	*20 000	45 097	52 102	55 000	*50 000
China	10 600 000	6 820 000	7 340 000	7 780 000	*7 800 000
Cyprus	90 000	90 000	150 000	150 000	222 000
India	1 728 928	1 729 775	1 744 000	2 442 000	*2 500 000
Iran (c)	7 799 443	7 948 387	8 085 263	7 696 252	...
Iraq	*300 000	*300 000	*300 000	*300 000	*300 000
Israel	*48 000	*48 000	*50 000	*50 000	*50 000
Jordan	194 981	193 000	*190 000	*190 000	*200 000
Laos	129 757	103 000	110 000	113 000	145 000
Lebanon	*2 000	*2 000	*2 000	*3 000	*3 000
Mongolia	*25 000	*25 000	*25 000	54 661	58 000
Myanmar (f)	30 494	36 053	37 011	38 100	34 546
Oman	112 882	121 446	104 490	130 900	113 600
Pakistan (b)	931 624	636 872	474 162	434 438	464 342
Saudi Arabia	326 661	338 147	332 483	356 378	*360 000
Syria	303 000	304 000	335 683	325 000	*325 000
Taiwan	3 182	2 876	3 135	2 603	2 613
Tajikistan	*400 000	*300 000	*200 000	*150 000	*100 000
Thailand	7 454 806	8 139 817	8 533 225	8 934 492	8 557 000
Turkmenistan	*200 000	*150 000	216 427	169 577	85 000
Vietnam	*30 000	*30 000	*30 000	*30 000	*30 000
Yemen, Republic of	102 000	99 000	95 700	103 000	...
Australia (b)	1 486 000	*1 600 000	1 818 500	*1 800 000	*1 800 000
World Total	92 000 000	93 600 000	94 400 000	95 200 000	97 100 000

Note(s):-

(1) Some countries produce large quantities of synthetic gypsum. Where possible, this output is excluded from the table.

- (a) Including anhydrite
- (b) Years ended 30 June of that stated
- (c) Years ended 20 March following that stated
- (d) Years ended 7 July of that stated
- (e) Including beneficiated and directly shipped material
- (f) Years ended 31 March following that stated

Exports of Gypsum

tonnes

Country	1993	1994	1995	1996	1997
Austria					
Crude	58 522	69 861	...	...	57 692
Calcined	101 615	131 354	...	...	90 321
Belgium-Luxembourg					
Crude	20 325	22 951	59 370	24 144	43 879
Calcined	152 728	213 409	3 157	3 048	6 751
Czech Republic	112 755	122 847	101 016	86 176	65 570
Denmark					
Crude & calcined	29 791	50 520	15 263	59 378	172 142
France					
Crude	528 752	524 429	472 467	441 695	459 164
Calcined	241 248	336 091	491 318	407 573	422 105
Germany					
Crude	240 766	244 740	241 464	222 957	172 589
Calcined	756 330	798 789	806 568	888 118	680 859
Greece	30 100	21 749	22 958	22 062	23 565
Irish Republic					
Crude	41 305	80 359	508	546	528
Calcined	39 618	39 494	36 129	25 620	38 925
Italy					
Crude	44 715	38 821	47 114	63 190	60 425
Calcined	15 623	28 442	25 812	26 609	23 548
Latvia	62 688	49 045	64 090	40 052	103 751
Netherlands					
Crude	103 362	158 277	56 772	38 187	29 677
Calcined	14 790	10 494	5 994	2 955	2 363
Poland					
Crude & calcined	6 851	20 891	32 607	41 600	...
Romania	2 659	2 610	8 780	6 738	6 565
Spain					
Crude	2 179 893	2 121 212	2 589 985	2 265 735	2 920 179
Calcined	114 455	12 058	153 541	203 801	309 283
Sweden					
Crude & calcined	4 144	445	684	376	563
Switzerland					
Crude & calcined	13 272	15 409	14 437	19 842	18 897
Turkey					
Crude & calcined	6 554	11 109	13 036	18 090	32 755
United Kingdom					
Crude	5 556	4 289	2 884	2 059	10 239
Calcined	16 108	19 260	23 362	22 113	25 113
Morocco					
Crude	...	...	268 600	216 613	...
Calcined	...	...	977	14 794	...
South Africa	2 932	—	—	—	—
Tunisia					
Crude & calcined	...	6 508	8 355	15 069	...
Canada					
Crude	5 345 399	5 972 862	5 579 127	5 604 532	6 053 283
Calcined	22 997	2 041	2 871	2 910	1 350
Guatemala	12 658	20 949	22 038	14 387	...
Jamaica	168 034	246 036	191 417	192 178	160 000
Mexico	2 868 913	3 286 416	3 491 049	3 615 400	...
USA					
Crude	192 426	167 536	109 726	233 443	251 780
Calcined	156 769	153 870	161 535	142 593	237 885
Argentina	8 136	21 061	41 231	32 098	30 796
Colombia	23 240	...	11 426	6 347	...
Venezuela	42 151	28 602	16 106	4 553	4 542
Abu Dhabi					
Crude & calcined	1 197	...	...	...	5
China					
Crude	75 326	41 790	66 568	70 692	120 608
Calcined	6 706	6 385	13 718	8 626	7 898

Gypsum

Exports of Gypsum

tonnes

Country	1993	1994	1995	1996	1997
Cyprus					
Crude & calcined	7 138	130 103	126 448	196 622	215 634
Hong Kong (c)	26 366	230 214	458 066	213 163	47 654
India					
Crude & calcined (b)	14 394	28 428	43 770	67 105	...
Indonesia					
Crude	15 750	5 500	0	1	—
Iran (d)	32 073	32 115	96 740	...	...
Japan					
Crude	2 291	2 601	1 844	1 712	1 727
Calcined	5 334	6 413	5 160	4 679	3 794
Korea, Republic of					
Crude	1 138	687	43	39	1 353
Calcined	2 142	5 237	5 890	6 560	6 083
Laos	132 290	97 860	124 000	110 740	146 230
Philippines					
Crude	15 118	52 253	14 959	21 034	...
Saudi Arabia					
Crude & calcined	...	43 250	...	...	...
Singapore					
Crude & calcined	7 394	11 930	11 558	20 355	12 740
of which, re-exports	4 896	6 807	5 321	2 881	2 475
Syria	91 924	44 071	53 893	40 836	...
Taiwan	13 950	24 824	18 688	12 480	10 388
Thailand					
Crude	6 336 123	6 492 562	6 511 788	6 425 567	...
Calcined	52 347	63 201	73 450	80 942	...
Australia					
Crude & calcined (a)	161 600	151 700	231 100	85 600	116 900

Note(s):-

(1) In this table the term 'crude' may include some anhydrite

- (a) Years ended 30 June of that stated
- (b) Years ended 31 March following that stated
- (c) Re-exports
- (d) Years ended 20 March following that stated

Imports of Gypsum

tonnes

Country	1993	1994	1995	1996	1997
Austria					
Crude	8 999	14 923	...	...	22 130
Calcined	9 225	21 391	...	...	48 817
Belgium-Luxembourg					
Crude	733 561	665 494	644 976	610 516	588 067
Calcined	263 036	336 546	396 698	356 036	365 400
Croatia					
Crude & calcined	—	...	18 287	25 918	35 642
Czech Republic	46	1 813	7 622	22 088	53 078
Denmark					
Crude	361 410	242 511	350 172	339 249	241 900
Calcined	10 329	17 591	27 285	6 787	6 567
Finland					
Crude	137 283	145 131	117 377	145 974	210 869
Calcined	8 912	5 349	6 133	6 614	7 898
France					
Crude	222 227	200 473	190 787	198 820	177 004
Calcined	37 332	47 012	18 695	26 220	29 439
Germany					
Crude	230 686	285 461	190 479	177 105	159 545
Calcined	182 611	238 835	142 560	99 327	73 950
Greece					
Crude	244	86	5 729	2 958	10 033
Calcined	2 379	1 396	2 506	2 089	1 736
Hungary					
Crude	74 133	56 822	...	48 792	62 476
Calcined	2 698	4 298	...	...	...
Iceland	3 599	4 558	4 617	4 033	6 155
Irish Republic					
Crude	1 095	1 201	2 820	1 307	6 892
Calcined	3 962	3 258	4 263	3 793	3 886
Italy					
Crude	1 493	5 763	7 196	5 636	546
Calcined	22 323	19 386	19 470	18 992	19 402
Lithuania	...	...	43 400	13 750	40 939
Netherlands					
Crude	209 292	199 304	222 976	284 693	230 907
Calcined	171 134	109 948	317 815	344 334	328 365
Norway					
Crude	51 953	88 788	66 096	43 157	29 482
Calcined	194 845	208 560	244 012	262 186	332 441
Poland					
Crude	8 435	4 080	7 127	4 700	...
Calcined	16 528	18 201	19 148	...	...
Portugal					
Crude	23 181	...	...	25 784	39 636
Calcined	74 441	(d) 129 224	(d) 143 378	134 296	169 780
Russia	(a) *2 800	(a) *8 100	(a) *37 600	2 099	...
Slovakia					
Crude & calcined	127 171	...	...	109 608	108 726
Slovenia	(a) *42 000	(a) *46 000	(a) *36 000	68 146	69 099
Spain					
Crude	25 846	490	117	2 273	...
Calcined	21 865	16 388	30 134	24 968	46 213
Sweden					
Crude	304 448	277 190	192 763	213 335	185 952
Calcined	5 627	6 165	20 962	109 118	92 476
Switzerland					
Crude	49 642	46 986	48 151	46 420	57 448
Calcined	61 878	73 616	66 464	62 421	67 896
Turkey	27 107	5 935	47 859	8 059	39 120
United Kingdom					
Crude	496 278	412 538	*800 000	586 999	521 455
Calcined	37 486	42 960	55 364	43 466	42 859
Burkina Faso	...	...	4 000	4 278	4 127
South Africa					
Crude & calcined	7 224	7 762	8 276	9 468	8 767

Gypsum

Imports of Gypsum

tonnes

Country	1993	1994	1995	1996	1997
Tunisia					
Crude & calcined	...	673	1 076	1 015	...
Canada					
Crude	280 581	292 156	177 326	237 158	207 538
Calcined	34 965	37 185	35 375	33 077	31 775
Costa Rica					
Crude & calcined	27 604	39 434	18 879	59 510	...
El Salvador					
Crude & calcined	12 435	49 373	28 475	17 327	16 381
Guadeloupe	...	...	7 980	...	...
Martinique	11 068	...	4 370	...	...
Mexico					
Crude	3 529	890	1 469	3 376	...
Calcined	16 929	21 487	21 134	20 791	...
Panama	15 442	37 585	21 124	14 505	...
Trinidad & Tobago					
Crude & calcined	28 099	50 675	12 843	...	...
USA					
Crude	7 392 972	8 469 787	8 158 996	8 050 996	8 414 117
Ground & calcined	22 526	4 112	8 486	10 766	9 523
Colombia	118 711	103 554	154 714	119 818	...
Ecuador	4 233	35 210	44 852	33 079	...
Paraguay					
Crude & calcined	6 240	10 923	15 131	24 299	...
Uruguay					
Crude & ground	1 953	13 229	24 847	20 607	...
Venezuela	141 715	156 934	247 377	207 775	...
Abu Dhabi	19 301	24 606	29 530	52 272	45 311
Bahrain	13 498	20 338	9 205	20 242	5 924
China					
Crude	27 477	4 517	3 978	3 870	4 416
Calcined	6 904	10 507	15 542	15 561	16 299
Hong Kong	115 534	124 788	95 384	79 069	90 504
India					
Crude & calcined (c)	8 556	13 132	23 185	10 145	...
Indonesia	193 077	283 423	230 302	366 076	543 832
Israel (a)	*4 000	*4 100	*6 500	...	...
Japan					
Crude	3 729 621	4 120 149	3 982 086	4 090 538	4 814 767
Calcined	6 467	7 076	3 337	3 400	8 195
Jordan	7 826	10 234	9 649	9 248	...
Korea, Dem. P.R. of (a)	*94 100	*42 500	*23 200	...	...
Korea, Republic of	492 833	646 764	783 772	834 899	933 922
Kuwait					
Crude	99 405	151 461	217 856	186 903	189 795
Macao	...	34 831	36 016	...	...
Malaysia					
Crude & calcined	297 325	476 708	550 430	770 000	...
Oman	4 996	...	...	...	...
Philippines					
Crude	123 314	144 975	198 723	211 206	...
Calcined	10 415	13 217	12 298	10 201	...
Qatar	9 491	...	...	...	...
Saudi Arabia	48 247	20 190	35 721	36 214	...
Singapore					
Crude & calcined	104 341	125 306	137 797	175 992	110 256
Sri Lanka	30 219	36 435	45 529	46 080	52 318
Taiwan					
Crude	836 887	735 191	783 557	684 889	810 556
Calcined	4 349	6 010	6 162	4 199	6 606
Thailand					
Crude	100 260	238	660	2 126	...
Calcined	6 863	7 953	6 883	4 414	...

Imports of Gypsum

tonnes

Country	1993	1994	1995	1996	1997
Australia	117 300	113 900	101 600	95 700	...
New Caledonia					
Crude & calcined	8 117	5 873	6 410	5 361	6 245
New Zealand					
Crude & calcined (b)	95 746	126 817	164 011	...	132 783

Note(s):-

(1) In this table the term 'crude' may include some anhydrite

- (a) BGS estimates, based on known exports from certain countries
- (b) Years ended 30 June of that stated
- (c) Years ended 31 March following that stated
- (d) Including 'crude'

Iodine

Production of Iodine

kilograms

Country	1993	1994	1995	1996	1997
Azerbaijan	*500 000	*400 000	*350 000	*300 000	...
Russia	*180 000	*160 000	*160 000	*150 000	...
USA	1 935 000	1 628 000	1 220 000	1 270 000	1 320 000
Chile (a)	4 458 700	4 883 225	6 400 616	6 332 255	8 832 344
China	*500 000	*500 000	*500 000	*500 000	...
Indonesia	14 180	89 098	76 824	*75 000	...
Japan	6 489 000	5 592 000	5 492 000	*5 500 000	...
Turkmenistan	*600 000	*251 000	136 700	255 000	...
World Total	14 700 000	13 500 000	14 300 000	14 400 000	16 900 000

Note(s):-

(a) Exports

Exports of Iodine

kilograms

Country	1993	1994	1995	1996	1997
Belgium-Luxembourg	564 500	478 600	112 000	1 000 000	1 558 600
France	66 000	35 700	53 000	74 000	73 900
Germany	282 000	521 800	584 400	432 700	324 200
Italy	2 100	2 900	...	...	45 884
Spain	8 000	4 000	8 000	...	19 037
Switzerland	1 539	979	666	1 008	482
United Kingdom	239 219	167 212	314 960	224 034	184 176
Canada	8 580	17 396	47 167	36 755	56 717
USA	1 120 156	1 191 438	1 666 488	2 576 096	3 257 253
Brazil	1 000	18 325	10 657	67 250	34 555
Chile	4 458 700	4 883 225	6 400 616	6 332 255	8 832 344
Indonesia	11 066	71 000	75 000	58 000	33 459
Japan	4 868 253	6 225 195	5 337 758	5 572 130	5 602 646

Imports of Iodine

kilograms

Country	1993	1994	1995	1996	1997
Austria	11 600	12 700	17 500	42 000	87 100
Belgium-Luxembourg	249 400	21 000	27 000	44 000	1 427 000
Denmark	300	3 500	26 200	20 300	24 219
Finland	5 000	...	53 000	15 000	2 496
France	1 278 000	1 489 100	1 397 000	1 739 000	1 880 600
Germany	1 000 300	943 900	1 217 200	1 232 500	1 229 900
Greece	1 000	...	...	...	23 000
Hungary	15 100	6 400	...	...	...
Italy	718 200	656 800	...	...	944 562
Netherlands	679 000	954 000	952 000	...	1 373 000
Norway	311 000	539 000	591 000	439 000	549 692
Poland	73 000	67 000	44 000	33 000	...
Portugal	12 100	...	...	15 600	86 325
Spain	678 000	140 000	674 000	...	589 862
Sweden	4 000	2 000	...	...	2 000
Switzerland	79 292	84 383	74 981	65 784	62 428
Ukraine	...	...	14 752	1 613	12 486
United Kingdom	1 661 559	1 654 445	1 854 757	3 350 534	1 353 469
Yugoslavia, Federal Republic of	...	...	...	...	24 000
South Africa	...	...	10 968	16 098	19 184
Tunisia	...	266	...	1 553	...
Canada	219 120	343 094	393 931	426 522	641 446
Mexico	764 920	1 108 598	1 685 447	1 490 841	...
USA	3 548 544	4 218 987	3 840 470	4 649 705	6 016 775
Brazil	367 000	409 000	411 000	...	...
Uruguay	1 300	1 700	1 500	...	1 600
Venezuela	8 045	2 956	17 049	2 622	...
China	9 924	20 727	143 292	41 258	346 284
India (a)	664 316	819 232	601 579	483 150	...
Indonesia	7 730	...	...	8 241	170 905
Japan	115 900	229 100	334 400	142 800	205 206
Korea, Republic of	8 225	21 102	31 520	24 191	35 465
Pakistan (b)	38 391	19 670	...	...	...
Sri Lanka	20 053	44	741	1 136	422
Taiwan	18 961	23 815	34 112	32 720	28 709
Thailand	10 423	11 879	11 497	7 259	...
Australia (b)	27 552	...	...	...	...
New Zealand (b)	14 296	26 221	28 257	...	35 699

Note(s):-

(a) Years ended 31 March following that stated

(b) Years ended 30 June of that stated

Production of Iron Ore

tonnes

Country	1993	1994	1995	1996	1997
Austria	1 427 000	1 644 000	2 107 000	1 860 300	1 794 129
Azerbaijan	*300 000	*200 000	*150 000	...	...
Bosnia & Herzegovina	*250 000	*200 000	*150 000	*100 000	...
Bulgaria	452 000	466 000	468 600	770 000	858 000
Finland	17 000	11 000	—	—	—
France	3 550 000	2 418 000	1 497 000	1 460 000	528 000
Germany (f)	145 640	145 760	68 720	120 334	200 900
Macedonia	*20 000	*20 000	*20 000	*20 000	...
Norway	2 284 626	2 459 955	2 168 381	1 554 599	710 000
Portugal (f)	16 175	14 330	14 535	18 620	18 905
Romania	856 000	950 800	865 000	174 000	150 000
Russia	76 100 000	73 300 000	78 300 000	72 100 000	*75 000 000
Slovakia	1 092 000	1 021 000	1 046 000	1 000 000	970 000
Spain	2 505 934	2 082 276	2 307 000	1 263 318	58 000
Sweden	18 728 000	19 909 000	21 662 000	21 288 000	21 893 000
Turkey	5 070 000	5 772 046	4 931 176	6 279 951	6 137 942
Ukraine	141 200 000	109 800 000	111 700 000	104 000 000	116 100 000
United Kingdom	1 068	1 271	1 051	1 190	*1 210
Yugoslavia, Federal Republic of	25 690	9 320	5 520	5 200	7 230
Algeria	2 311 500	2 014 000	2 192 000	2 244 000	1 637 000
Egypt (d)	2 229 000	2 703 000	2 433 000	2 429 901	2 662 447
Mauritania	9 362 000	11 400 000	11 300 000	11 400 000	11 700 000
Morocco	66 318	65 233	47 192	11 842	11 965
Nigeria	—	—	—	31 912	...
South Africa (c)	29 385 168	32 321 215	31 945 511	30 829 900	33 225 130
Tunisia	354 000	288 000	225 000	238 800	252 100
Zimbabwe	374 493	3 500	311 352	323 942	479 032
Canada (b)	30 505 000	36 566 000	37 288 000	35 689 000	37 313 000
Mexico	8 480 000	8 358 000	8 523 000	9 257 000	9 515 000
USA	55 661 000	58 382 000	62 489 000	62 073 000	62 750 000
Argentina	3 267	67 000	1 000	...	...
Bolivia	32 108	—	—	—	—
Brazil (a)	154 220 354	177 366 940	184 540 460	191 000 000	196 000 000
Chile	7 379 016	8 340 505	8 431 647	9 081 661	8 738 191
Colombia	544 775	609 915	734 000	637 720	754 772
Peru	5 203 991	6 943 437	5 975 967	4 369 383	4 428 146
Venezuela	16 871 071	18 318 464	18 954 920	18 479 927	18 360 000
China	225 990 700	250 560 000	262 099 600	252 282 700	249 000 000
India	57 375 000	60 473 000	66 751 000	67 000 000	*67 000 000
Indonesia	341 335	334 895	348 371	425 101	487 444
Iran (e)	8 652 900	6 244 735	6 463 440	7 426 606	...
Japan	10 621	3 058	2 959	3 563	3 595
Kazakhstan	13 128 900	20 093 800	29 108 400	25 954 400	26 309 400
Korea, Dem. P.R. of	*9 500 000	*9 000 000	*8 000 000	*2 000 000	*2 000 000
Korea, Republic of	218 663	191 313	184 443	221 163	295 960
Malaysia (b)	245 849	243 182	202 322	325 114	269 087
Thailand	208 939	142 795	34 480	85 880	44 000
Australia	120 534 000	128 493 000	142 936 000	147 141 000	157 766 000
New Zealand	2 388 783	2 080 115	2 362 197	2 333 715	2 477 728
World Total	1 016 000 000	1 062 000 000	1 121 000 000	1 095 000 000	1 126 000 000

Note(s):-

(1) In addition to the countries listed, Vietnam is believed to produce iron ore

(a) Including beneficiated and direct shipping ore

(b) Including by-product iron ore

(c) Including by-product magnetite

(d) Years ended 30 June of that stated

(e) Years ended 20 March following that stated

(f) Including manganeseiferous iron ore

Exports of Iron Ore

tonnes

Country	1993	1994	1995	1996	1997
Belgium-Luxembourg					
Iron ore	9 162	64 866	35 404	67 208	12 616
Burnt pyrites	5 766	1 572	—	—	—
France	2 795 566	2 441 929	1 639 443	1 293 802	584 665
Germany					
Iron ore	100 275	85 756	65 232	34 034	14 176
Burnt pyrites	11 104	35 919	16 165	12 886	94 633
Italy					
Iron ore	5 991	154	94	231	26
Burnt pyrites	10 171	50 628	8 511	18 957	17 296
Netherlands	1 412 748	29 837	166 013	308 980	107 663
Norway					
Iron ore	2 505 979	2 092 396	1 018 254	610 787	270 815
Burnt pyrites	153 133	172 612	153 439	155 982	87 562
Poland	118 980	54 435	130 480	30 396	2 000
Russia	10 570 000	9 800 000	11 400 000	7 800 000	...
Slovakia	52 000	58 000	80 000	95 000	79 500
Slovenia					
Burnt pyrites	(b) *4 100	(b) *4 000	...	20	47
Spain					
Iron ore	1 505 107	1 516 162	1 479 841	975 353	43 224
Burnt pyrites	131 186	137 508	139 156	198 896	138 015
Sweden					
Iron ore	16 418 000	15 394 000	16 917 210	15 172 628	17 571 842
Burnt pyrites	23 000	...	767	...	...
Ukraine	...	21 100 000	19 138 510	19 108 682	20 083 455
United Kingdom	5 854	1 847	838	688	397
Algeria	29 000	36 000	12 000	...	...
Liberia	332 000	...	180 000	...	...
Mauritania	9 655 000	10 342 000	11 514 000	11 158 000	11 700 000
Morocco					
Iron ore	1 977	2 761	1 531	...	...
Burnt pyrites	48 380	29 500	26 891	13 140	...
South Africa	19 024 024	19 605 138	21 847 012	19 328 139	20 729 659
Tunisia	8 831	8 228	11 337	14 658	...
Canada	26 199 550	29 993 393	28 840 291	28 880 500	33 142 058
USA (a)	5 068 726	4 930 993	5 227 162	6 244 606	6 392 675
Bolivia	39 003	2 500	—	—	—
Brazil	114 375 430	123 062 432	130 178 346	128 989 790	134 092 571
Chile	5 809 386	6 938 960	6 161 316	6 982 429	6 726 425
Peru	4 714 934	6 063 064	6 100 000	4 100 000	3 800 000
Venezuela	10 659 000	10 711 000	10 612 000	9 528 000	9 322 000
India	26 856 590	24 004 646	31 719 565	17 627 888	...
Kazakhstan	95 000	109 000	138 000	337 700	354 000
Korea, Dem. P.R. of	490 000	300 000	231 000	177 400	167 700
Malaysia	29 868	1 707	2 973	12 012	...
Philippines					
Iron ore	4 100 000	4 708 759	4 744 000	4 546 000	4 500 000
Burnt pyrites	17 506	11 353	...	...	...
Australia	111 527 000	119 093 000	130 369 000	128 274 000	146 757 000
New Zealand	1 234 766	1 232 504	1 231 527	1 229 742	891 786

Note(s):-

(a) Including burnt pyrites

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

Imports of Iron Ore

tonnes

Country	1993	1994	1995	1996	1997
Austria					
Iron ore	3 590 300	3 921 881	4 636 000	4 335 000	5 101 249
Burnt pyrites	6 003	18 257	2 427	1 065	1 487
Belgium-Luxembourg					
Iron ore	15 766 015	17 008 208	15 330 478	12 862 634	11 158 528
Burnt pyrites	27	2 673	245	44	2 759
Bulgaria	878 500	819 500	1 484 326	1 143 871	1 992 564
Czech Republic	7 551 506	7 368 775	9 141 000	8 255 000	7 383 349
Denmark					
Iron ore	8 294	33 586	11 406	4 565	5 570
Burnt pyrites	39 871	37 825	56 850	48 625	21 828
Finland	3 360 628	3 617 463	2 964 991	3 305 768	3 731 829
France					
Iron ore	16 598 871	20 098 179	20 204 325	18 244 000	20 212 123
Burnt pyrites	26 624	8 604	17 196	17 819	13 329
Germany					
Iron ore	35 264 036	42 693 538	43 219 670	39 303 336	41 686 890
Burnt pyrites	240 681	79 313	96 560	71 484	94 633
Greece					
Burnt pyrites	38 537	45 405	65 276	91 592	61 204
Hungary	818 932	2 179 368	2 090 682	2 315 584	1 467 892
Iceland	22 000	17 000	20 000	22 736	24 560
Italy (a)	16 740 560	16 402 741	18 306 000	16 047 940	16 663 374
Lithuania					
Burnt pyrites	...	7 654	6 755	4 367	1 951
Netherlands (a)	8 560 427	8 568 657	8 748 707	8 558 056	8 653 358
Norway	(a) 619 405	6 836	68 461	470 188	561 474
Poland					
Iron ore	8 776 162	8 413 598	10 529 085	(a) 9 803 503	(a) 11 800 000
Burnt pyrites	—	3 413	346 360	...	...
Portugal	486 602	593 827	689 164	454 811	558 546
Romania	3 573 503	5 452 091	6 278 469	5 843 451	6 625 253
Russia	...	5 701 000	8 250 000	8 729 000	8 700 000
Slovakia	5 298 060	4 865 000	4 888 000	4 180 000	4 307 000
Spain	6 664 477	7 584 042	7 190 450	6 105 975	5 858 327
Sweden					
Iron ore	587 000	382 000	183 000	144 669	102 638
Burnt pyrites	...	...	784	5 651	10 694
Switzerland (a)	15 434	23 030	21 341	18 579	14 720
Turkey	1 684 986	1 951 329	3 221 358	2 991 253	2 900 453
Ukraine	...	578 000	3 003 000	3 457 000	3 500 000
United Kingdom					
Iron ore	15 924 591	19 466 890	20 705 671	20 304 347	21 032 971
Burnt pyrites	2 360	5	8 188	3 555	18 409
Yugoslavia Federal Republic of	750 000	400 000	250 000	987 662	1 067 222
Egypt	1 180 000	599 049	...	881 266	...
Libya	1 302 000	1 300 000	1 300 000	1 500 000	1 400 000
Nigeria	100 000	100 000	80 000	50 000	50 000
Tunisia	80 974	81 399	34 894	73 231	...
Canada	5 436 091	5 235 832	5 968 843	6 873 506	7 081 265
Mexico	23 460	34 573	824 207	1 310 474	...
Trinidad & Tobago	199 417	1 450 526	1 531 650	1 183 178	...
USA (a)	14 059 221	17 649 717	17 395 498	18 396 735	18 595 659
Argentina	3 204 605	3 819 661	4 361 701	4 947 040	5 054 185
Paraguay					
Iron ore	8 238	47 403	97 148	43 147	...
Burnt pyrites	116 563	47 008	6 615	...	...
Abu Dhabi	60 262	39 881	66 652	33	40 428
China					
Iron ore	32 675 989	37 231 349	41 057 844	43 873 023	55 067 487
Burnt pyrites	370 830	111 557	96 011	937	38 346
India (d)	163 828	1 522 903	879 131	851 790	...

Iron Ore

Imports of Iron Ore

tonnes

Country	1993	1994	1995	1996	1997
Indonesia					
Iron ore	730 574	373 679	495 225	464 874	1 472 099
Burnt pyrites	1 393 536	1 232 721	2 011 921	2 047 762	398 536
Iran					
Iron ore	(b) *2 291 000	(b) *2 752 000	2 360 104	(b) *1 311 000	...
Burnt pyrites (e)	37 224	60 030	1 737 793	...	...
Japan	114 483 512	116 089 531	120 434 681	119 204 779	126 600 755
Korea, Republic of					
Iron ore	35 533 540	34 200 227	35 046 110	22 568 274	38 592 030
Burnt pyrites	15 265	49 767	29 181	—	...
Malaysia	1 404 236	1 247 012	1 757 773	1 769 231	2 100 000
Oman	4 039	*4 000	1 000	1 000	...
Pakistan (c)	2 012 000	4 562 000	1 632 000	1 935 000	1 228 000
Philippines	4 500 000	4 500 000	5 000 000	4 800 000	4 800 000
Qatar	683 000	896 000	918 000	977 000	1 000 000
Saudi Arabia	2 760 377	3 268 188	2 863 970	2 552 569	...
Taiwan	9 019 275	8 341 715	9 192 402	10 074 552	14 042 963
Australia	3 487 000	4 001 000	4 197 000	4 081 000	5 560 000

Note(s):-

- (a) Including burnt pyrites
- (b) BGS estimates, based on known exports from certain countries
- (c) Years ended 30 June of that stated
- (d) Years ended 31 March following that stated
- (e) Years ended 20 March following that stated

Production of Pig Iron

tonnes

Country	1993	1994	1995	1996	1997
Austria	3 070 343	3 319 884	3 878 212	3 429 208	*3 500 000
Belgium	8 178 891	8 979 387	9 198 831	8 626 651	8 076 475
Bosnia & Herzegovina	*100 000	*100 000	*100 000	*100 000	...
Bulgaria	998 000	1 441 000	1 606 700	1 513 000	1 643 000
Czech Republic	4 668 000	5 280 000	5 274 000	4 898 000	5 276 000
Finland	2 535 000	2 597 000	2 242 000	2 457 000	2 786 000
France	12 334 697	12 917 087	12 760 233	11 999 457	*13 000 000
Georgia	4 300	—	1 700	2 200	1 100
Germany	27 150 000	30 203 000	30 238 000	30 382 000	31 319 000
Hungary	1 407 000	1 589 910	1 514 597	1 496 370	1 140 000
Italy	11 187 000	11 159 000	11 664 000	10 347 000	11 348 000
Luxembourg	2 412 000	1 926 890	1 028 230	829 010	438 030
Netherlands	5 404 500	5 443 400	5 530 100	5 543 900	5 805 000
Poland	6 105 500	6 865 600	7 373 300	6 540 100	7 295 637
Portugal	398 000	415 000	415 000	423 000	431 000
Romania	3 189 000	3 495 600	4 203 100	4 024 600	4 538 000
Russia	40 900 000	36 500 000	39 800 000	35 963 000	*36 000 000
Slovakia	3 205 000	3 330 000	3 207 000	2 928 000	3 072 000
Spain	5 388 000	5 447 000	5 128 000	4 215 000	3 926 000
Sweden	2 845 000	3 037 000	3 020 000	3 130 000	3 060 000
Switzerland	82 000	88 000	97 000	*100 000	*100 000
Turkey	4 489 000	4 604 000	4 403 000	5 280 000	5 040 000
Ukraine	27 100 000	20 200 000	18 000 000	17 800 000	20 600 000
United Kingdom	11 534 000	11 942 800	12 235 800	12 830 200	13 057 000
Yugoslavia, Federal Republic of	62 000	16 763	107 836	535 213	906 704
Algeria	925 000	918 700	962 200	850 500	526 000
Egypt	2 145 000	1 933 000	1 914 000	2 054 000	2 437 000
Libya	942 000	852 000	963 000	862 000	1 007 000
Morocco	*15 000	*15 000	*15 000	*15 000	*15 000
Nigeria	39 000	40 000	36 000	12 000	...
South Africa	6 978 000	7 022 000	7 173 000	6 911 000	7 307 000
Tunisia	154 300	144 500	151 700	145 000	150 000
Zimbabwe	211 000	150 000	205 000	219 000	216 000
Canada	8 633 301	8 106 006	8 464 191	8 638 007	8 669 788
Mexico	6 160 137	6 717 163	7 842 100	8 023 369	8 890 000
Trinidad & Tobago	714 500	946 700	1 039 900	954 500	*1 000 000
USA	48 595 000	49 900 000	51 400 000	49 900 000	50 100 000
Argentina	2 140 226	2 658 223	2 896 058	3 388 003	3 576 039
Brazil	24 150 000	25 310 000	25 309 000	24 313 000	25 285 600
Chile	916 655	885 900	854 563	995 920	943 000
Colombia	238 177	244 518	312 841	286 275	325 000
Paraguay	81 233	90 018	103 130	103 562	82 000
Peru	201 332	217 348	250 239	294 840	334 000
Venezuela	4 431 730	4 802 745	5 099 302	5 379 852	5 258 000
China	87 388 900	97 410 000	105 292 700	107 225 000	115 000 000
India	15 674 000	17 808 000	19 025 000	19 864 000	19 898 000
Indonesia	1 496 000	1 618 000	1 709 000	1 723 000	1 535 000
Iran	1 963 000	1 883 000	1 532 000	1 867 000	2 150 000
Japan	73 041 000	73 776 217	74 904 502	74 596 833	78 519 469
Kazakhstan	3 551 700	2 432 000	2 489 000	2 536 000	3 089 000
Korea, Dem. P.R. of	*2 000 000	*1 500 000	*500 000	*500 000	*500 000
Korea, Republic of	21 869 566	21 169 261	22 343 857	23 009 717	22 712 000
Malaysia	867 000	1 149 000	1 228 000	1 172 000	1 486 000
Myanmar	16 000	13 000	20 000	40 000	40 000
Pakistan (a)	1 267 670	1 044 710	1 100 000	1 500 000	...
Taiwan	6 116 000	5 968 000	6 056 000	6 213 000	8 870 000
Australia	7 284 000	7 855 000	7 861 000	7 774 000	7 884 000
World Total	515 000 000	525 500 000	542 100 000	536 800 000	562 000 000

Note(s):-

(1) The data in this table include sponge iron and direct reduced iron (DRI), where these have been separately identified

(a) Years ended 30 June of that stated

Production of Steel Ingots and Castings

tonnes

Country	1993	1994	1995	1996	1997
Albania	19 000	19 000	22 000	23 000	24 000
Austria	4 148 865	4 398 887	4 919 840	4 442 000	5 180 000
Azerbaijan	236 000	40 000	20 000	18 000	24 000
Belarus	946 000	880 000	744 000	795 000	1 110 000
Belgium	10 118 616	11 265 234	11 539 883	10 751 711	10 717 603
Bosnia & Herzegovina	*115 000	*115 000	*115 000	68 000	72 000
Bulgaria	1 941 000	2 491 000	2 723 500	2 457 000	2 628 000
Croatia	73 815	63 352	45 373	45 752	70 660
Czech Republic	6 769 000	7 085 000	6 746 000	6 257 000	6 495 000
Denmark	603 000	722 000	653 000	737 000	787 000
Estonia	...	3 000	3 000	3 000	4 000
Finland	3 256 000	3 420 000	3 176 000	3 301 000	3 734 000
France	17 106 405	18 030 510	18 100 061	17 632 984	19 764 000
Georgia	221 677	121 218	88 400	82 681	103 152
Germany	37 625 000	40 837 000	42 051 000	39 793 000	45 005 000
Greece	979 551	847 612	939 170	846 885	1 016 000
Hungary	1 753 000	1 937 000	1 864 657	2 059 942	1 818 523
Irish Republic	293 000	316 000	309 900	341 000	337 000
Italy	25 721 000	26 151 000	27 766 000	23 911 000	25 801 000
Latvia	300 393	331 955	279 326	293 166	461 691
Lithuania	2 100	1 000	700	400	...
Luxembourg	3 292 942	3 073 268	2 613 137	2 501 828	2 580 219
Macedonia	123 000	92 000	33 000	2 000	...
Moldova	604 000	633 000	663 000	646 000	811 000
Netherlands	6 000 100	6 171 200	6 409 100	6 325 200	6 641 000
Norway	505 318	455 922	503 278	510 850	578 000
Poland	9 938 800	11 113 300	11 890 400	10 432 300	11 307 169
Portugal	775 000	748 000	829 000	875 000	899 000
Romania	5 446 000	5 800 000	6 556 900	6 083 000	6 674 000
Russia	58 300 000	48 800 000	51 600 000	48 964 000	48 442 000
Slovakia	3 922 000	3 974 000	3 958 000	3 458 000	3 842 000
Slovenia	355 000	424 000	407 000	328 000	373 000
Spain	12 960 000	13 445 000	13 802 000	12 161 000	13 770 000
Sweden	4 591 000	4 967 000	4 953 000	4 910 000	5 147 000
Switzerland	1 254 000	1 098 000	739 000	700 000	789 000
Turkey	11 519 000	12 624 000	13 183 000	13 382 221	13 644 093
Ukraine	31 500 000	23 500 000	21 856 800	21 948 800	25 285 700
United Kingdom	16 624 700	17 285 800	17 603 600	17 991 700	18 528 000
Yugoslavia, Federal Republic of	183 383	137 000	180 000	678 749	978 960
Algeria	798 400	771 700	780 500	590 400	*350 000
Angola	*10 000	*10 000	—	...	...
Congo, Democratic Republic	*30 000	*30 000	*30 000	*30 000	*30 000
Egypt	2 811 000	2 622 000	2 642 000	2 618 000	2 717 000
Ghana	19 000	20 000	25 000	26 000	*25 000
Kenya	20 000	20 000	20 000	20 000	*20 000
Libya	920 000	874 000	909 000	863 000	897 000
Mauritania	7 000	7 000	5 000	5 000	*5 000
Morocco	7 000	7 000	5 000	5 000	*5 000
Nigeria	191 000	58 000	36 000	12 000	...
South Africa	8 726 000	8 525 000	8 741 000	7 999 000	8 311 000
Tunisia	181 900	182 800	200 700	187 000	195 000
Uganda	*30 000	*30 000	*30 000	*30 000	*30 000
Zimbabwe	221 000	154 000	220 000	212 000	214 000
Canada	14 387 400	13 896 953	13 996 155	14 637 476	15 458 635
Cuba	90 514	130 912	207 259	230 988	339 000
Dominican Republic	...	...	...	42 261	84 000
Mexico	9 198 784	10 260 109	12 147 446	13 171 832	14 254 000
Trinidad & Tobago	492 100	630 300	676 100	643 600	*700 000
USA	88 793 000	91 200 000	95 172 000	95 500 000	98 500 000
Argentina	2 885 904	3 289 000	3 568 800	4 064 600	4 168 500
Brazil	25 207 000	25 746 800	25 076 400	25 237 000	26 152 900
Chile	1 068 828	1 039 658	1 014 116	1 178 266	1 168 000
Colombia	687 432	693 498	713 648	694 741	716 000
Paraguay	76 507	87 055	94 927	95 543	67 000
Peru	417 136	509 145	511 789	578 382	605 000

Production of Steel Ingots and Castings

tonnes

Country	1993	1994	1995	1996	1997
Uruguay	35 933	36 110	39 857	33 555	41 000
Venezuela	3 391 812	3 524 153	3 567 520	3 941 330	4 019 000
Bangladesh (b)	7 043	6 054	25 346	20 594	16 271
China	89 556 400	92 620 000	95 359 900	101 240 600	108 911 000
Hong Kong	*150 000	*150 000	*150 000	*100 000	...
India	18 155 000	19 282 000	22 003 000	23 753 000	24 579 000
Indonesia	1 947 511	3 220 000	4 130 000	4 109 000	3 816 000
Iran (c)	4 095 744	4 746 755	4 639 873	5 895 965	*6 300 000
Israel	120 000	180 000	220 000	265 000	*270 000
Japan	99 623 000	98 294 563	101 639 573	98 800 671	104 554 086
Jordan	*30 000	*30 000	*30 000	*30 000	*30 000
Kazakhstan	4 279 000	2 968 544	3 026 592	3 216 596	3 880 248
Korea, Dem. P.R. of	3 500 000	1 600 000	600 000	600 000	*600 000
Korea, Republic of	33 468 044	34 370 181	37 500 138	39 642 629	42 554 000
Malaysia	1 807 000	2 046 000	2 450 000	3 216 000	*2 962 000
Myanmar (d)	11 400	16 500	23 500	25 000	*25 000
Pakistan	992 000	344 000	409 000	416 000	...
Philippines	623 000	473 000	923 000	920 000	980 000
Qatar	620 000	572 000	606 000	616 000	608 000
Saudi Arabia	2 318 000	2 411 000	2 451 000	2 683 000	2 539 000
Singapore	520 000	530 000	521 000	531 000	383 000
Sri Lanka	*30 000	*30 000	*30 000	*30 000	*30 000
Syria	*70 000	*70 000	*70 000	*70 000	*70 000
Taiwan	11 975 000	11 590 000	11 605 000	12 655 000	15 478 000
Thailand	954 000	1 461 000	2 134 000	2 143 000	2 101 000
United Arab Emirates	45 000	45 000	60 000	90 000	*90 000
Uzbekistan	573 000	364 000	352 000	444 000	365 000
Vietnam	270 000	301 000	271 000	311 000	314 000
Australia (a)	7 837 000	8 455 000	8 447 000	8 295 000	8 769 000
New Zealand	670 104	772 296	865 155	774 736	768 631
World Total	725 000 000	725 000 000	751 000 000	749 000 000	796 000 000

Note(s):-

(1) The figures in this table refer to crude steel and cast semi-manufactures are not included

(a) Including recovery from scrap

(b) Years ended 30 June of that stated

(c) Years ended 20 March following that stated

(d) Years ended 31 March following that stated

Production of Ferro-Alloys

tonnes

Country	1993	1994	1995	1996	1997
Albania					
Ferro-chrome	34 626	33 764	42 986	31 200	31 500
Austria					
Ferro-molybdenum	5 400	5 600	5 600	4 300	4 600
Ferro-nickel	5 000	5 000	4 300	3 900	3 700
Ferro-vanadium	5 700	5 300	5 400	5 600	5 900
Belgium					
Ferro-manganese	41 665	63 513	61 777	...	...
Bosnia & Herzegovina					
Ferro-silicon	*1 000	*1 000	*1 000	*1 000	...
Silicon metal	*200	*200	*200	*100	...
Bulgaria					
Ferro-silicon	*18 000	*18 000	7 550	8 300	...
Other ferro-alloys	*2 000	*2 000	8 000	...	...
Croatia					
Ferro-chrome	27 336	31 704	26 081	10 559	24 231
Ferro-manganese	*10 000	562	—	—	...
Ferro-silico-manganese	*40 000	22 071	—	—	...
Finland					
Ferro-chrome & ferro-silico-chrome	195 063	253 450	243 845	225 155	236 652
France					
Ferro-silico-manganese	76 138	66 230	71 300	61 000	...
Ferro-manganese & spiegeleisen	329 774	384 105	393 968	402 170	*400 000
Ferro-silicon	83 663	111 590	108 000	130 000	...
Fe-Ti Fe-W, Fe-Mo, Fe-V (a)	1 462	—	—	—	...
Other ferro-alloys	29 000	19 500	55 000	72 000	...
Silicon metal	58 950	66 000	71 450	73 800	...
Georgia					
Ferro-manganese	10 147	5 797	12 564	7 612	3 991
Ferro-silico-manganese	17 006	10 958	7 588	6 995	16 616
Other ferro-alloys	6 893	2 444	64	1 014	39
Germany					
Ferro-chrome	16 402	17 283	21 665	25 303	25 856
Ferro-manganese	(h) *100 000	*10 000	*10 000	*10 000	...
Ferro-silicon	*20 000	*20 000	*20 000	*20 000	...
Other ferro-alloys	*30 000	*30 000	*30 000	*30 000	...
Greece					
Ferro-nickel	43 700	64 728	68 620	71 204	*70 000
Hungary					
Ferro-alloys	*8 500	*8 000	*8 000	*8 000	...
Iceland					
Ferro-silicon	65 719	65 054	70 316	70 520	...
Italy					
Ferro-chrome	53 504	22 650	51 017	29 915	11 295
Ferro-manganese	24 573	45 085	40 848	42 727	...
Ferro-silico-manganese	96 743	79 068	103 961	100 353	...
Ferro-silicon	2 089	2 347	—	11 741	...
Silicon metal	8 000	10 000	15 000	14 433	12 619
Macedonia					
Ferro-alloys	78 357	62 937	61 400	*62 000	...
Norway					
Ferro-chrome	80 000	120 000	148 000	108 900	145 124
Ferro-manganese	*200 000	249 000	213 000	215 000	...
Ferro-silico-manganese	*210 000	197 000	*200 000	*200 000	...
Ferro-silicon	400 769	452 984	474 875	463 423	...
Other ferro-alloys	*14 000	14 000	*15 000	*15 000	...
Silicon metal	81 259	91 714	100 767	*110 000	...
Poland					
Ferro-chrome	38 449	8 700	18 300	1 100	6 249
Ferro-manganese	57 500	66 300	46 300	59 900	46 597
Ferro-silico-manganese	27 000	31 800	20 500	25 000	(c) ...
Ferro-silicon	43 100	54 200	70 400	71 800	77 258
Other ferro-alloys	3 000	2 700	3 000	5 800	28 471

Production of Ferro-Alloys

tonnes

Country	1993	1994	1995	1996	1997
Romania					
Ferro-chrome	3 907	3 885	15 053	9 650	950
Ferro-manganese	16 390	31 295	28 410	20 150	...
Ferro-silico-manganese	22 040	35 800	57 149	78 590	...
Ferro-silicon	23 560	28 385	19 320	23 827	...
Silicon metal	*400	*300	*300	*300	...
Russia					
Spiegeleisen	*8 000	*7 000	*7 000	...	...
Ferro-chrome	255 900	265 525	*290 000	135 000	247 000
Ferro-silico-chrome	*40 000	*40 000	*30 000	...	...
Ferro-manganese	*150 000	*55 000	*55 000	...	...
Ferro-nickel	*47 000	*59 000	*77 000	...	...
Ferro-phosphorus	*25 000	*20 000	*20 000	...	...
Ferro-silicon	*400 000	*350 000	*350 000	...	...
Other ferro-alloys	*50 000	*40 000	*40 000	...	...
Silicon metal	*50 000	*40 000	*40 000	...	...
Slovakia					
Ferro-chrome	50 600	48 555	65 260	19 900	11 394
Ferro-silicon	*22 000	*30 000	*30 000	*30 000	...
Slovenia					
Ferro-chrome	8 812	13 412	23 247	22 819	9 232
Ferro-silicon	*12 000	*12 000	*12 000	*10 000	*10 000
Spain					
Ferro-chrome	2 390	*2 300	1 320	805	490
Ferro-manganese	*40 000	*35 000	*25 000	*25 000	...
Ferro-silico-manganese	*35 000	*35 000	*50 000	*50 000	...
Ferro-silicon	*30 000	*25 000	*30 000	*30 000	...
Other ferro-alloys	*5 000	*4 000	*5 000	*5 000	...
Silicon metal	*5 000	*3 000	*5 000	*5 000	...
Sweden					
Ferro-chrome	127 543	134 076	130 170	129 189	92 466
Ferro-silicon	18 073	18 584	21 970	21 287	22 419
Switzerland					
Ferro-silicon	*3 000	*3 000	*3 000	*3 000	...
Silicon metal	*2 000	*2 000	*2 000	*2 000	...
Turkey					
Ferro-chrome	90 030	97 540	88 561	101 450	108 320
Ferro-silicon	4 680	4 930	11 900	4 460	4 730
Ukraine					
Spiegeleisen	5 000	7 000	2 500	800	—
Ferro-manganese	216 000	250 000	279 300	263 500	307 700
Ferro-silico-manganese	800 000	700 000	624 700	601 400	559 700
Ferro-nickel	60 000	38 800	—	—	—
Ferro-silicon	400 000	277 400	321 200	254 400	288 200
Other ferro-alloys	*30 000	*25 000	*25 000	*25 000	...
Silicon metal	*1 300	1 400	*1 400	*1 000	...
United Kingdom					
Ferro-manganese	45 100	—	—	—	—
Yugoslavia, Federal Republic of					
Ferro-nickel	1 283	1 763	2 414	6 501	6 209
Egypt					
Ferro-silicon (g)	7 247	6 955	4 284	17 430	54 080
Other ferro-alloys (g)	40 122	44 393	45 024	26 630	26 220
South Africa					
Ferro-chrome (d)	833 555	1 103 612	1 435 514	1 383 135	1 925 000
Ferro-manganese	393 372	590 535	480 162	(f) 842 493	...
Ferro-silico-manganese	268 000	290 400	*280 000	...	...
Ferro-silicon	98 843	94 547	92 667	115 518	...
Other ferro-alloys	*1 000	*1 000	*1 000	*1 000	...
Silicon metal	38 279	36 169	30 082	28 495	...
Zimbabwe					
Ferro-chrome	(d) *130 000	182 852	254 142	261 918	*230 000
Ferro-silico-chrome	...	36 351	46 667	33 175	...
Ferro-manganese	2 150	—	—	...	...

Production of Ferro-Alloys

tonnes

Country	1993	1994	1995	1996	1997
Canada					
Ferro-niobium	—	96	3 300	3 400	3 400
Ferro-silicon	*80 000	*80 000	*80 000	*80 000	*80 000
Silicon metal	*30 000	*30 000	*30 000	*30 000	*30 000
Dominican Republic					
Ferro-nickel	60 774	80 193	80 710	78 488	85 450
Mexico					
Ferro-manganese	119 016	117 062	108 903	126 494	132 481
Ferro-silico-manganese	62 828	72 094	76 948	105 114	116 636
USA					
Ferro-chrome (d) (e)	63 018	67 361	72 469	36 789	60 700
Ferro-nickel	9 926	—	16 800	30 500	...
Ferro-phosphorus	17 795	(c) ...	(c) ...	(c) ...	...
Ferro-silicon	323 351	359 000	358 000	362 000	*370 000
Other ferro-alloys	142 772	200 000	188 000	99 000	...
Silicon metal	158 570	158 000	158 000	171 000	187 000
Argentina					
Ferro-manganese	5 446	8 117	6 500	7 115	7 672
Ferro-silico-manganese	18 455	29 358	33 507	24 313	22 463
Ferro-silicon	10 627	12 653	9 830	23 258	19 265
Other ferro-alloys	6 847	11 817	11 971	21 858	20 400
Silicon metal	*10 000	*5 000	...	...	...
Brazil					
Ferro-calcium-silicon	28 355	23 976	27 192	...	...
Ferro-chrome	83 892	77 163	95 840	72 609	67 429
Ferro-silico-chrome	4 128	7 735	5 129	4 622	7 056
Ferro-silico-magnesium	10 185	8 412	12 894	13 399	14 076
Ferro-manganese	201 518	199 667	130 207	215 260	152 530
Ferro-silico-manganese	284 147	248 158	167 162	232 218	175 919
Ferro-nickel	36 350	34 157	30 591	29 582	32 015
Ferro-niobium	13 488	17 901	23 185	21 522	25 475
Ferro-phosphorus	250	707	695	—	—
Ferro-silicon	238 864	198 505	243 824	236 838	212 183
Other ferro-alloys	1 941	1 341	669	—	1 046
Silicon metal	90 379	90 017	115 756	150 054	136 884
Chile					
Ferro-chrome	680	1 579	2 730	2 079	...
Ferro-manganese	8 854	9 620	7 987	8 498	...
Ferro-silico-manganese	1 231	997	1 618	1 831	...
Ferro-molybdenum	2 202	3 082	3 241	4 222	...
Ferro-silicon	7 550	5 504	4 279	4 650	...
Colombia					
Ferro-nickel	48 232	49 372	56 972	53 549	58 500
Venezuela					
Ferro-silico-manganese	42 237	46 841	52 007	53 034	...
Ferro-silicon	47 522	41 032	50 389	63 131	...
Bhutan					
Ferro-silicon	—	*2 000	*12 000	*13 000	*13 000
China					
Ferro-chrome	*372 000	*370 000	500 000	423 000	387 000
Ferro-manganese	*740 000	*760 000	(c) ...	(c) ...	...
Ferro-silico-manganese	*525 000	*550 000	(c) ...	(c) ...	...
Ferro-silicon	1 040 000	1 100 000	(c) ...	(c) ...	...
Other ferro-alloys	*258 000	*320 000	3 150 000	*3 757 000	...
India					
Ferro-chrome (b)	*258 000	244 688	351 908	245 383	...
Ferro-silico-chrome (b)	3 969	4 074	880	6 427	...
Ferro-manganese (b)	*158 000	202 893	179 815	187 941	...
Ferro-silico-manganese (b)	*113 000	172 306	188 252	174 964	...
Ferro-silicon (b)	*80 000	92 043	74 305	78 326	...
Other ferro-alloys	*8 600	*8 500	*8 500	*8 500	...
Silicon metal (b)	671	—	...	...	...
Indonesia					
Ferro-nickel	*27 000	*27 000	*27 000	*27 000	...
Iran					
Ferro-chrome	—	7 150	11 900	10 500	11 450

Production of Ferro-Alloys

tonnes

Country	1993	1994	1995	1996	1997
Japan					
Ferro-chrome	211 102	204 181	221 425	200 365	209 492
Ferro-manganese	382 912	345 153	346 977	343 104	376 663
Ferro-silico-manganese	64 758	69 183	64 870	75 802	...
Ferro-molybdenum	3 656	3 930	4 109	4 420	4 328
Ferro-nickel	257 316	242 447	351 337	328 699	352 840
Ferro-niobium	1 086	868	37	—	—
Ferro-silicon	29 084	12 208	3 650	3 075	...
Ferro-tungsten	80	68	120	64	62
Ferro-vanadium	3 670	3 418	3 618	3 902	...
Other ferro-alloys	5 174	6 363	4 669	4 820	5 221
Kazakhstan					
Ferro-chrome	317 984	326 228	494 277	345 857	605 125
Ferro-silico-chrome	36 235	*20 000	*25 000	...	...
Ferro-silicon	418 188	207 700	256 000	119 000	...
Korea, Dem. P.R. of					
Ferro-alloys	*120 000	*120 000	*120 000	*120 000	...
Korea, Republic of					
Ferro-manganese	100 630	120 020	118 798	126 135	158 755
Ferro-silico-manganese	81 996	89 023	97 785	83 375	77 078
Other ferro-alloys	2 803	3 084	3 264	4 687	2 174
Philippines					
Ferro-chrome	11 900	16 186	50 450	6 736	—
Ferro-manganese	*5 000	*5 000	*5 000	—	...
Ferro-silicon	*10 000	*10 000	*10 000	—	...
Taiwan					
Ferro-manganese	*11 000	*5 000	*9 000	*14 000	*13 000
Thailand					
Ferro-silico-manganese	1 503	689	—	—	...
Australia					
Ferro-manganese	*75 000	*100 000	*110 000	*110 000	*110 000
Ferro-silico-manganese	*75 000	*100 000	*100 000	*95 000	*95 000
Silicon metal	*30 000	*30 000	*30 000	*30 000	*30 000
New Caledonia					
Ferro-nickel	128 202	136 053	152 068	150 375	159 019

Note(s):-

- (a) Ti, W, Mo, V content of ferro-titanium, ferro-tungsten, ferro-molybdenum and ferro-vanadium
- (b) Years ended 31 March following that stated
- (c) Included with 'other ferro-alloys'
- (d) Including ferro-silico-chrome
- (e) Including other chromium alloys and chromium metal
- (f) Including ferro-silico-manganese
- (g) Years ended 30 June of that stated
- (h) Including spiegeleisen

Exports of Iron, Steel and Ferro-Alloys

tonnes

Country	1993	1994	1995	1996	1997
Albania					
Ferro-chrome	15 000	34 700	29 200	(f) *32 400	...
Austria					
Pig iron	6 952	181	52	1 980	679
Ferro-alloys	20 084	19 080	30 457	20 802	5 889
Ingots, blooms, billets	51 225	97 357	263 011	163 078	236 630
Scrap	460 329	467 015	489 390	582 403	653 254
Azerbaijan					
Scrap	5 000	11 000	12 000	12 000	15 000
Belarus					
Ingots, blooms, billets	(f) *93 400	(f) *69 800	...	341 203	450 346
Scrap	288 000	190 000	...	177 776	190 330
Belgium-Luxembourg					
Pig iron	62 075	178 319	90 389	87 928	91 244
Sponge & powder	1 458	1 334	1 784	1 688	1 760
Ferro-chrome	16 903	6 862	15 963	16 647	21 109
Ferro-manganese	12 400	12 855	22 606	17 788	26 424
Ferro-silico-manganese	12 688	7 657	15 201	12 493	11 175
Ferro-nickel	459	980	326	584	199
Ferro-silicon	7 183	4 849	16 365	12 166	9 238
Ferro-titanium & Fe-Si-Ti	47	284	168	69	389
Other ferro-alloys	701	1 165	661	471	623
Ingots, blooms, billets	1 230 798	1 199 758	1 009 540	1 117 542	955 607
Scrap	1 581 155	1 588 046	1 976 236	1 741 314	1 673 084
Bulgaria					
Pig iron	9 800	1 000	4 156	775	1 571
Ferro-alloys	3 100	(f) *3 300	3 215	3 205	2 902
Ingots, blooms, billets	334 600	283 000	250 405	213 000	246 000
Scrap	(f) *164 900	(f) *19 500	12 271	43 888	156 678
Croatia					
Ferro-chrome	21 395	24 300	25 242	12 605	23 943
Ferro-silico-manganese	9 315	...	2 413	...	63
Scrap	45 354	59 584	100 219	106 092	124 561
Czech Republic					
Ferro-chrome	(f) *25 300	(f) *3 600	(f) *1 500	(f) *4 000	2 523
Ingots, blooms, billets	605 000	624 000	302 000	324 000	431 037
Scrap	1 086 000	986 000	789 000	905 000	977 588
Denmark					
Ingots, blooms, billets	20 818	17 168	23 490	36 042	71 590
Scrap	425 808	330 389	437 205	470 670	580 347
Estonia					
Pig iron (b) (f)	...	*37 100	*45 700	*35 800	...
Ferro-chrome (b) (f)	*1 000	*4 800	*68 100	*29 000	...
Scrap (b)	203 000	191 000	256 000	221 000	400 000
Finland					
Ferro-chrome & ferro-silico-chrome	93 799	125 538	111 977	106 675	105 472
Ingots, blooms, billets	136 265	166 542	171 793	259 768	280 214
Scrap	46 281	108 295	179 782	228 366	365 761
France					
Pig iron	2 426	1 545	15 041	4 421	48 199
Spiegeleisen	64	265	530	...	...
Sponge & powder	195	1 207	3 169	1 833	3 593
Ferro-chrome	346	315	2 208	538	702
Ferro-silico-magnesium	6 725	9 716	9 714	8 811	9 615
Ferro-manganese	70 686	58 461	42 043	35 561	54 584
Ferro-silico-manganese	62 225	71 915	58 750	41 422	61 372
Ferro-molybdenum	877	158	103	92	101
Ferro-nickel	8	38	32	25 407	25 813
Ferro-niobium	236	331	439	387	628
Ferro-silicon	26 736	26 867	29 328	30 433	33 873
Ferro-titanium & Fe-Si-Ti	733	1 171	1 408	1 379	1 082
Ferro-vanadium	16	53	151	7	32
Other ferro-alloys	23 792	29 036	29 903	29 336	33 062
Ingots, blooms, billets	1 648 365	1 561 706	1 284 831	1 328 288	1 692 045
Scrap	4 063 637	3 772 256	3 661 579	3 682 041	3 640 248

Exports of Iron, Steel and Ferro-Alloys

tonnes

Country	1993	1994	1995	1996	1997
Georgia					
Pig iron	...	10 469	397	976	3 943
Ferro-alloys	...	66 272	67 869	35 109	26 923
Ingots, blooms, billets	(f) *25 300	18 674	43 809	14 423	59 407
Scrap	(f) *30 700	25 561	55 127	—	—
Germany					
Pig iron	221 155	161 619	118 391	91 977	127 095
Sponge & powder	20 316	19 348	27 923	20 831	29 485
Ferro-chrome	58 847	45 115	50 458	45 426	51 436
Ferro-silico-chrome	1 106	599	1 997	3 719	3 512
Ferro-silico-magnesium	5 450	5 732	6 036	5 543	6 470
Ferro-manganese	22 955	15 370	9 338	12 434	12 236
Ferro-silico-manganese	4 754	6 630	12 438	9 892	7 853
Ferro-molybdenum	494	623	1 330	1 309	855
Ferro-nickel	3 146	1 672	577	1 001	174
Ferro-niobium	855	832	272	925	590
Ferro-phosphorus	1 573	1 455	2 943	2 394	1 567
Ferro-silicon	44 917	40 966	38 637	31 849	35 707
Ferro-titanium & Fe-Si-Ti	2 135	3 493	4 318	2 476	2 106
Ferro-tungsten & Fe-Si-W	38	46	192	83	76
Ferro-vanadium	1 851	1 120	1 148	420	459
Other ferro-alloys	10 849	13 426	13 535	13 696	16 921
Silicon metal	6 319	7 609	8 787	8 796	9 477
Ingots, blooms, billets	1 927 875	1 678 697	1 860 775	2 254 291	2 240 378
Scrap	8 519 683	8 718 742	8 148 071	6 684 361	6 930 512
Greece					
Ferro-chrome	2 285	1 276	7 917	1 759	544
Ferro-nickel	—	8 616	8 500	...	...
Ingots, blooms, billets	65 223	14 780	19 993	60 036	6 145
Hungary					
Ferro-alloys	4 222	5 081	2 995	4 358	1 555
Ingots, blooms, billets	21 131	15 717	15 016	26 991	14 806
Scrap	552 541	652 817	774 095	614 916	658 339
Iceland					
Ferro-silicon	64 457	70 798	71 453	68 192	74 993
Scrap	15 624	22 689	17 538	11 263	25 832
Irish Republic					
Scrap	54 157	66 976	32 842	19 036	35 084
Italy					
Pig iron	16 763	2 658	4 617	8 353	34 762
Sponge & powder	10 919	13 737	13 952	15 343	17 802
Ferro-chrome	7 253	1 922	2 011	2 005	4 781
Ferro-silico-chrome	9	1	11	7	547
Ferro-silico-magnesium	62	—	(c) ...	(c) ...	103
Ferro-manganese	6 788	8 234	4 015	7 256	8 184
Ferro-silico-manganese	16 113	2 978	7 119	2 881	10 789
Ferro-silicon	3 550	2 044	1 965	7 956	1 930
Other ferro-alloys	408	2 012	545	735	899
Silicon metal	1 893	34 687	2 133	2 850	5 225
Ingots, blooms, billets	1 391 115	636 138	825 367	656 997	231 924
Scrap	14 124	12 795	33 048	20 012	35 682
Latvia					
Pig iron (a) (f)	*134 700	*111 200	*2 000	*138 200	*92 900
Ferro-chrome (a) (f)	*600	*14 200	*82 400	*11 000	...
Other ferro-alloys (a) (f)	*5 700	*4 100	*4 200	*4 600	...
Ingots, blooms, billets (f)	*15 400	*55 900	...	*12 800	*19 800
Scrap	8 000	19 172	35 700	56 500	(f) *64 300
Lithuania					
Pig iron	(a) *10 000	(a) *64 600	281	14	...
Scrap	(f) *185 000	505 000	586 100	449 516	467 659
Macedonia					
Ferro-silicon	(f) *38 500	46 941	(f) *29 500	(f) *38 100	...
Other ferro-alloys	...	62 000	...	(f) *13 700	...
Silicon metal (f)	*5 100	*6 800	*5 200
Malta					
Scrap	...	5 000	99 267	10 780	...

Exports of Iron, Steel and Ferro-Alloys

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Country	1993	1994	1995	1996	1997
Moldova					
Ingots, blooms, billets	...	2 000	1 782
Scrap	...	(f) *7 500	9 843	3 000	1 000
Netherlands					
Pig iron	53 150	39 039	22 160	19 260	11 658
Sponge & powder	916	356	165	69	140
Ferro-chrome	39 785	56 037	73 516	61 689	75 798
Ferro-silico-chrome	1 118	1 699	1 931	1 460	566
Ferro-manganese	4 356	17 694	8 902	5 716	11 512
Ferro-silico-manganese	3 549	29 431	37 717	27 780	17 215
Ferro-molybdenum	1 258	2 093	2 260	(c) ...	4 579
Ferro-nickel	188	2 644	2 088	459	(c) ...
Ferro-silicon	44 493	27 916	15 574	13 538	13 270
Ferro-titanium & Fe-Si-Ti	256	455	605	(c) ...	1 695
Ferro-vanadium	356	227	1 397	(c) ...	3 133
Other ferro-alloys	723	2 498	1 134	8 141	8 428
Silicon metal	8 314	15 871	7 237	4 963	4 984
Ingots, blooms, billets	1 571 517	1 504 908	1 208 725	1 511 682	1 343 578
Scrap	5 532 317	3 812 657	3 999 131	3 047 287	3 363 946
Norway					
Pig iron	65 000	83 000	...	(f) *31 600	...
Ferro-chrome (f)	*70 300	*52 000	*127 700	*119 100	...
Ferro-manganese (f)	*154 700	*170 000	*125 000	*200 000	...
Ferro-silico-manganese	196 062	165 544	176 406	187 244	206 103
Ferro-silicon	377 035	404 071	404 497	400 900	412 873
Other ferro-alloys	12 684	23 574	29 051	50 097	34 247
Silicon metal	76 530	91 793	98 323	97 136	109 435
Ingots, blooms, billets	68 937	39 140	191	155 184	131 337
Scrap	10 360	63 189	96 875	145 241	156 118
Poland					
Pig iron	17 395	85 063	115 270	74 000	159 000
Ferro-chrome	38 222	6 297	14 788	2 263	...
Ferro-manganese & Fe-Si-Mn	810	739	4 769	2 039	...
Ferro-silicon	11 053	17 935	31 077	41 872	...
Other ferro-alloys	—	396	545	954	...
Ingots, blooms, billets	1 080 000	1 492 000	688 000	1 076 000	1 198 000
Scrap	1 011 735	448 498	438 188	415 600	518 000
Portugal					
Scrap	58 003	114 000	62 000	56 384	127 179
Romania					
Ingots, blooms, billets	371	1 217	294	192	4 354
Scrap	17 385	4 656	8 087	29 584	237 991
Russia					
Pig iron	2 268 400	3 344 000	2 889 000	2 112 000	...
Ferro-alloys	294 946	548 259	494 017	357 260	342 459
Silicon metal	(f) *37 500	77 900	75 727	64 754	73 924
Ingots, blooms, billets	6 830 049	9 534 000	9 997 000	11 058 000	...
Scrap	484 862	1 316 000	1 742 000	2 838 000	...
Slovakia					
Pig iron	127 000	167 000	...	11 000	20 000
Ferro-silicon	(f) *8 900	48 653	35 679	66 475	(f) *45 100
Other ferro-alloys	(f) *12 700	120 287	103 382	46 696	(f) *78 200
Ingots, blooms, billets	266 000	259 000	340 000	128 000	120 000
Scrap	233 000	262 600	197 836	212 688	213 000
Slovenia					
Scrap	50 064	34 143	49 000	55 125	102 973
Spain					
Pig iron	56 764	608	127	1 124	1 098
Ferro-chrome	153	186	230	717	1 028
Ferro-manganese	7 084	21 505	28 068	22 174	36 711
Ferro-silico-manganese	18 301	29 312	38 048	54 685	59 398
Ferro-silicon	5 786	3 008	2 815	3 278	5 711
Other ferro-alloys	278	264	420	603	561
Silicon metal	1 225	2 929	6 647	10 781	11 118
Ingots, blooms, billets	226 016	110 249	104 918	245 137	316 018
Scrap	18 530	16 206	19 134	21 381	43 285

Exports of Iron, Steel and Ferro-Alloys

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Country	1993	1994	1995	1996	1997
Sweden					
Pig iron	44 664	30 250	12 965	64 296	29 850
Sponge & powder	129 516	151 537	3 323	1 432	14 626
Ferro-chrome	76 272	99 937	80 000	32 000	...
Ferro-manganese	1 406	2 737	2 120	2 013	2 165
Ferro-silico-manganese	257	154	2 143	272	60
Ferro-molybdenum	65	106	(c) ...	(c) ...	103
Ferro-niobium	141	26	(c) ...	(c) ...	7
Ferro-silicon	14 780	15 191	(c) ...	1 914	1 602
Ferro-titanium & Fe-Si-Ti	76	220	(c) ...	(c) ...	24
Ferro-vanadium	35	149	(c) ...	(c) ...	157
Other ferro-alloys	901	889	2 288	1 486	1 222
Silicon metal	800	(f) *100	(f) *200	...	...
Ingots, blooms, billets	288 278	158 499	89 354	105 434	149 382
Scrap	231 083	349 850	280 364	283 990	323 068
Switzerland					
Sponge & powder	425	470	396	470	470
Ferro-alloys	605	614	5 088	81	243
Silicon metal	—	1	1	1 114	14 206
Ingots, blooms, billets	39 746	10 632	2 265	1 677	1 572
Scrap	67 592	86 515	312 184	341 784	432 876
Turkey					
Pig iron	83 913	92 249	...	89 767	148 786
Ferro-chrome	92 301	102 678	72 112	93 852	94 360
Ingots, blooms, billets	1 765 330	2 144 591	1 746 491	1 094 825	1 382 239
Scrap	15 436	36 226	13 448	21 048	22 309
Ukraine					
Pig iron	2 701 000	1 924 000	991 000	622 000	...
Ferro-chrome & ferro-silico-chrome	(f) *20 400	(f) *12 100	...	—	—
Ferro-manganese (f)	(g) *178 500	*25 500	...	*4 000	*16 700
Ferro-silico-manganese	...	(f) *150 900	397 222	379 185	446 991
Ferro-nickel	...	...	9 142	14 303	2 396
Ferro-silicon (f)	*35 600	*6 200	*6 500	*20 100	*15 100
Other ferro-alloys (f)	*46 900	*104 000	14 586	11 169	16 312
Ingots, blooms, billets	(f) *1 858 200	(f) *2 647 000	3 016 119	2 843 280	4 196 639
Scrap	266 000	403 000	370 000	700 000	...
United Kingdom					
Pig iron	11 024	1 974	6 913	4 616	4 411
Sponge & powder	2 670	3 109	1 954	2 745	1 584
Ferro-chrome & ferro-silico-chrome	2 965	6 135	1 703	2 950	2 641
Ferro-manganese	20 031	1 451	433	2 796	1 578
Ferro-silico-manganese	624	73	1 484	230	532
Ferro-molybdenum	4 173	6 396	8 253	9 888	9 029
Ferro-nickel	21	0	1	218	4 363
Ferro-niobium	291	30	21	22	32
Ferro-phosphorus	520	2 447	76	248	126
Ferro-silicon	9 436	6 764	5 825	4 615	4 026
Ferro-titanium & Fe-Si-Ti	13 419	13 132	13 596	13 467	18 823
Ferro-vanadium	102	47	25	61	201
Other ferro-alloys	6 217	5 951	5 280	6 634	5 917
Ingots, blooms, billets	1 252 797	1 246 913	1 155 488	1 193 795	954 817
Scrap	3 857 809	3 587 513	3 446 618	3 435 328	3 561 352
Yugoslavia, Federal Republic of					
Ferro-alloys	...	...	...	7 000	7 182
Scrap	*15 000	*10 000	*5 000	3 000	3 370
Algeria					
Pig iron	136 000	105 474	...	298 285	...
Scrap	11 500	15 159	36 200	60 178	...
Central African Republic					
Ferro-silicon	9 506	...	...	...	...
Egypt					
Ferro-alloys	34 164	30 532	42 000	32 898	...
Morocco					
Scrap	153 150	108 104	120 747	52 753	...

Exports of Iron, Steel and Ferro-Alloys

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Country	1993	1994	1995	1996	1997
South Africa					
Pig iron (f)	*374 900	*192 200	*271 000	*394 100	...
Ferro-chrome	589 547	947 637	1 257 849	1 321 713	...
Ferro-manganese & Fe-Si-Mn	641 584	918 919	797 381	661 490	...
Ferro-silicon	31 921	35 412	51 122	30 308	...
Silicon metal	38 849	37 788	25 663	24 503	...
Ingots, blooms, billets (f)	*691 300	*416 000	*408 000	*622 100	...
Scrap (f)	*170 300	*156 900	*226 000	*397 800	*440 000
Tunisia					
Scrap	225	321	2 464	2 110	...
Zimbabwe					
Ferro-chrome	152 804	196 535	258 638	247 563	277 915
Ferro-silico-chrome	19 691	13 365	20 698	25 117	24 334
Ingots, blooms, billets	107 031	27 965	22 799	26 074	23 806
Scrap	81 550	77 960	61 716	6 260	2 203
Canada					
Pig iron	61 920	64 125	129 001	111 419	137 651
Sponge & powder	57 347	71 057	72 803	77 721	93 024
Ferro-chrome	188	768	986	1 011	860
Ferro-manganese	665	274	1 440	578	100
Ferro-silico-manganese	187	385	127	18	561
Ferro-niobium	8	4	1 234	2 062	2 387
Ferro-silicon	29 353	32 975	28 880	24 471	15 933
Other ferro-alloys	1 106	1 349	2 430	1 619	2 080
Silicon metal	22 747	24 600	25 250	29 408	38 840
Ingots, blooms, billets	330 370	298 051	419 412	355 645	376 157
Scrap	1 294 127	1 634 788	2 128 784	2 113 897	2 330 983
Dominican Republic					
Ferro-nickel	65 313	81 675	73 777	75 981	85 525
Mexico					
Ferro-manganese	38 880	36 772	27 641	28 406	...
Ferro-silico-manganese	24 816	18 508	25 586	26 299	...
Other ferro-alloys	108	159	195	553	...
Ingots, blooms, billets	1 156 407	1 263 857	2 004 358	2 019 755	...
Scrap	131 866	180 204	248 711	198 137	...
Nicaragua					
Scrap	29 433	24 613	17 599	26 168	...
Trinidad & Tobago					
Sponge	155 533	232 395	325 163	163 508	...
Ingots, blooms, billets	14 669	...	18 964	...	...
USA					
Pig iron	28 948	64 618	57 782	72 427	100 199
Sponge & powder	42 988	48 833	48 179	40 088	60 954
Ferro-chrome & ferro-silico-chrome	21 611	18 662	20 193	27 454	16 809
Ferro-manganese	20 282	14 243	13 597	14 063	19 428
Ferro-silico-manganese	13 856	10 678	11 790	9 327	10 879
Ferro-molybdenum	518	916	1 450	1 199	1 573
Ferro-nickel	1 019	69	2 179	5 652	12 110
Ferro-niobium	855	246	565	365	59
Ferro-phosphorus	1 856	29 340	7 063	4 950	3 208
Ferro-silicon	42 617	40 400	52 255	59 070	56 685
Ferro-vanadium	303	541	476	648	619
Other ferro-alloys	2 968	4 395	4 992	4 721	5 625
Silicon metal	11 592	13 007	27 214	18 999	24 878
Ingots, blooms, billets	515 344	170 274	435 606	274 006	246 190
Scrap	9 780 100	8 909 254	10 459 116	8 431 156	8 942 513
Argentina					
Ferro-silico-manganese	181	4 514	12 451	5 306	...
Ferro-silicon	2 835	5 512	9 579	12 700	...
Other ferro-alloys	2 024	4 039	11 038	14 624	...
Ingots, blooms, billets	15 203	300	502	6 682	...

Exports of Iron, Steel and Ferro-Alloys

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Country	1993	1994	1995	1996	1997
Brazil					
Pig iron	1 858 952	2 631 114	2 670 405	2 538 099	2 563 147
Ferro-chrome	11 803	7 133	24 343	11 102	16 374
Ferro-manganese	64 778	79 611	30 192	105 184	70 068
Ferro-nickel	17 226	12 969	12 696	15 205	18 483
Ferro-niobium	13 643	17 606	19 514	17 602	23 823
Fe-silico-spiegeleisen & Si-Mn	162 266	81 977	38 953	73 729	76 608
Ferro-silicon	228 539	183 907	181 093	185 793	159 796
Other ferro-alloys	28 676	27 640	32 315	33 168	37 469
Silicon metal	84 709	85 158	115 287	121 011	127 014
Ingots, blooms, billets	5 309 251	4 827 147	5 130 334	5 684 461	5 523 451
Chile					
Ferro-alloys	5 177	6 045	6 797	6 988	4 912
Ingots, blooms, billets	32 381	27 545	25 203	24 945	...
Scrap	11 401	27 160	1 390	2 578	13 494
Colombia					
Ferro-nickel	49 379	51 455	56 497	55 374	*60 000
Ecuador					
Scrap	11 684	28 475	32 045	25 129	...
Venezuela					
Sponge & powder	1 023 694	1 032 767	1 187 489	1 053 899	1 143 657
Ferro-silico-manganese	26 164	15 237	30 805	24 786	37 293
Ferro-silicon	35 445	36 325	48 695	35 058	69 078
Ingots, blooms, billets	978 975	1 025 547	763 849	1 067 911	957 372
Scrap	128 291	98 745	98 506	99 097	138 122
Bahrain					
Scrap	44 910	44 057	43 488	33 168	27 082
China					
Pig iron	336 436	1 541 334	5 388 683	3 553 051	5 535 634
Sponge & powder	3 151	5 041	6 887	9 428	13 217
Ferro-chrome	129 721	127 001	320 950	130 847	98 069
Ferro-silico-chrome	7 370	30 752	46 610	31 079	31 296
Ferro-manganese	99 265	99 268	177 093	171 907	145 847
Ferro-silico-manganese	253 913	292 326	447 222	363 007	428 956
Ferro-molybdenum	11 966	18 031	12 650	12 188	24 458
Ferro-silicon	335 308	302 808	391 952	254 619	208 067
Ferro-titanium & Fe-Si-Ti	16	135	193	393	421
Ferro-tungsten & Fe-Si-W	3 974	4 333	2 079	666	2 210
Ferro-vanadium	150	218	1 909	1 446	1 949
Other ferro-alloys	32 198	47 845	74 772	65 129	121 614
Silicon metal	171 210	3 261	274 731	276 365	290 586
Ingots, blooms, billets	136 084	698 251	4 607 491	2 767 342	4 146 220
Scrap	48 750	22 084	97 814	54 711	68 251
Cyprus					
Scrap (b)	18 980	22 165	25 902	34 373	21 344
Hong Kong					
Pig iron (b)	9 108	921	5 678	1 027	628
Ferro-manganese (b)	7 805	9 857	1 690	7 633	1 821
Ferro-silico-manganese (b)	28 635	17 849	6 490	4 284	3 371
Ferro-silicon (b)	29 142	21 307	23 700	28 333	18 816
Other ferro-alloys (b)	2 246	1 766	2 324	1 243	861
Ingots, blooms, billets (b)	6 100	10 363	6 923	227	40 630
Scrap	631 293	640 834	711 492	587 052	700 173
of which, re-exports	154 048	157 697	218 273	196 506	181 877
India					
Pig iron (d)	689 435	601 811	511 849	345 481	...
Sponge & powder (d)	1 065	66 471	174 885	42 328	...
Ferro-chrome (d)	128 681	149 016	152 551	146 890	...
Ferro-manganese (d)	752	4 306	4 645	2 856	...
Ferro-silico-manganese (d)	29 077	35 281	54 042	28 405	...
Other ferro-alloys (d)	20 396	4 808	11 278	4 193	...
Ingots, blooms, billets (d)	473 691	160 646	231 992	285 334	...
Scrap (d)	25 494	757	398	41 948	...

Exports of Iron, Steel and Ferro-Alloys

tonnes

Country	1993	1994	1995	1996	1997
Indonesia					
Sponge & powder	65 928	27 838	62 327	75 065	92 631
Ferro-nickel	24 311	25 219	48 672	48 639	41 222
Ingots, blooms, billets	118 337	19 239	22 932	3 409	82 988
Scrap	9 323	12 609	14 985	11 604	10 729
Iran					
Ferro-alloys (f)	...	...	*9 000	*16 900	...
Ingots, blooms, billets (f)	*634 400	*551 300	*524 000	*286 200	...
Scrap (f)	*97 600	*110 800	*55 700	*200 400	...
Israel					
Scrap (f)	*1 500	*3 100	*5 600	*3 500	*5 900
Japan					
Pig iron	283 694	1 201 402	499 752	953 841	250 256
Sponge & powder	14 769	18 291	23 200	22 196	22 973
Ferro-chrome	1 227	1 168	1 347	1 191	915
Ferro-manganese	11 458	23 634	45 375	37 503	45 557
Ferro-silico-manganese	73	110	230	163	122
Ferro-nickel	9	1 448	9 938	35 505	69 663
Ferro-silicon	6 140	7 754	9 589	9 619	5 305
Other ferro-alloys	4 364	4 366	3 997	4 186	3 418
Silicon metal	824	1 651	1 757	1 855	2 284
Ingots, blooms, billets	367 612	1 559 436	633 476	428 106	574 508
Scrap	1 177 570	967 160	915 217	1 992 562	2 313 259
Kazakhstan					
Ferro-chrome	...	...	417 269	282 229	444 072
Ferro-silico-chrome	...	...	14 954	51 733	27 451
Ferro-manganese	...	...	3 646	119	7 749
Ferro-silico-manganese	...	...	6 535	47 239	49 394
Ferro-phosphorus (f)	*2 500	*2 900	*2 900	...	...
Ferro-silicon	(f) *67 900	(f) *31 100	158 328	84 856	78 487
Scrap (f)	*17 900	*7 100	*51 000	*25 200	*91 600
Korea, Dem. P.R. of					
Pig iron (f)	*22 600	*71 000	*48 900	*41 000	*60 100
Ferro-alloys (f)	*7 400	*4 000	*2 000	*5 200	*8 900
Ingots, blooms, billets (f)	*82 500	*31 900	*28 500	*24 800	*63 300
Scrap (f)	*57 700	*63 800	*126 300	*58 400	*162 800
Korea, Republic of					
Pig iron	360	157	158	200	81
Ferro-silico-manganese	12	—	970	5 117	19 802
Other ferro-alloys	179	157	1 680	4 394	10 465
Ingots, blooms, billets	278 360	185 539	461 305	434 240	714 951
Scrap	10 184	10 780	22 289	12 159	38 734
Kuwait					
Scrap	302 156	291 483	213 158	184 434	34 072
Macao					
Scrap	...	9 139	9 364	...	...
Malaysia					
Sponge & powder	655 860	801 000	952 000	1 057 000	825 000
Ingots, blooms, billets	260 512	48 644	22 951	23 000	36 000
Scrap	33 303	81 433	10 400	7 500	...
Philippines					
Ferro-chrome	23 175	23 487	24 819	16 725	...
Other ferro-alloys	...	—	3 620	...	...
Scrap	11 852	24 983	13 674	8 372	...
Saudi Arabia					
Scrap	3 000	4 440	6 200	*6 000	...
Singapore					
Pig iron	4 322	1 849	1 462	331	325
of which, re-exports	4 284	1 846	1 415	330	325
Ferro-alloys	10 477	3 913	2 726	2 896	1 919
of which, re-exports	8 538	3 729	2 666	2 819	1 797
Ingots, blooms, billets	11 384	3 190	5 998	3 425	1 996
of which, re-exports	1 588	1 189	1 710	1 121	374
Scrap	172 023	248 089	259 269	245 019	331 733
Sri Lanka					
Scrap	39 826	47 857	47 426	47 370	52 141

Exports of Iron, Steel and Ferro-Alloys

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Country	1993	1994	1995	1996	1997
Taiwan					
Pig iron	6 425	6 502	3 106	1 313	1 776
Ferro-chrome	138	65	82	59	51
Ferro-silicon	2 171	2 331	1 677	1 380	1 155
Other ferro-alloys	1 534	1 277	1 099	880	1 221
Ingots, blooms, billets	3 025	10 982	9 951	13 808	15 255
Scrap	107 098	89 087	175 730	92 318	123 154
Thailand					
Scrap	33 174	45 625	50 999	33 357	33 000
Australia					
Ferro-manganese	59 000	(c) ...	(c) ...	(c) ...	(c) ...
Other ferro-alloys	77 000	158 000	173 000	151 000	127 000
Ingots, blooms, billets	975 000	1 412 932	1 147 532	1 245 338	1 458 000
Scrap	759 000	398 000	306 000	679 000	764 000
New Caledonia					
Ferro-nickel	127 200	*140 000	148 649	151 612	158 200
New Zealand					
Ingots, blooms, billets (e)	16 703	142	83	85	12 867
Scrap (e)	40 539	28 676	28 646	21 487	23 395

Note(s):-

(1) In this table the term 'ingots, blooms, billets' corresponds to items 672.4, 6, 7 and 8 of the Standard International Trade Classification (Revision 3) which includes those of alloy and high carbon steel

- (a) Includes re-exports
- (b) Re-exports
- (c) Included with 'other ferro-alloys'
- (d) Years ended 31 March following that stated
- (e) Years ended 30 June of that stated
- (f) BGS estimates, based on known imports into certain countries
- (g) Including ferro-silico- manganese

Imports of Iron, Steel and Ferro-Alloys

tonnes

Country	1993	1994	1995	1996	1997
Austria					
Pig iron	26 026	24 045	24 764	18 614	17 428
Sponge & powder	4 759	7 421	6 487	8 001	10 066
Ferro-chrome	14 553	22 695	19 760	22 895	26 550
Ferro-silico-chrome	311	421	479	639	748
Ferro-manganese	15 567	19 260	14 753	15 596	20 357
Ferro-silico-manganese	12 010	13 493	10 318	16 051	16 505
Ferro-molybdenum	529	610	705	1 000	1 068
Ferro-nickel	89	85	103	230	—
Ferro-niobium & ferro-niobium-tantalum	151	197	229	305	369
Ferro-silicon	12 356	26 859	11 942	12 317	16 575
Ferro-titanium & ferro-silico-titanium	277	478	237	492	684
Ferro-tungsten & ferro-silico-tungsten	293	528	583	443	422
Ferro-vanadium	173	372	438	536	612
Other ferro-alloys	2 111	2 671	2 824	2 922	2 972
Silicon metal	3 890	13 271	2 878	6 771	16 749
Ingots, blooms, billets	110 106	123 303	183 140	121 689	110 803
Scrap	417 507	408 011	529 245	400 628	682 250
Belarus					
Scrap	32 000	11 000	262 000	400 804	724 923
Belgium-Luxembourg					
Pig iron	125 737	250 676	101 121	70 264	91 304
Sponge & powder	3 254	65 496	59 795	3 951	30 765
Ferro-chrome	355 814	115 712	126 545	89 675	113 044
Ferro-silico-chrome	2 150	1 646	3 280	2 306	3 335
Ferro-manganese	57 239	54 021	65 080	46 796	43 122
Ferro-silico-manganese	49 027	47 909	53 724	51 538	36 909
Ferro-molybdenum	1 560	1 991	2 215	(d) ...	2 264
Ferro-nickel	26 733	33 151	22 507	17 142	24 508
Ferro-niobium	10 437	13 978	601	(d) ...	656
Ferro-phosphorus	153	19 636	526	(d) ...	246
Ferro-silicon	40 908	36 302	54 053	46 615	44 760
Ferro-titanium & ferro-silico-titanium	193	606	697	(d) ...	1 019
Ferro-vanadium	890	738	493	(d) ...	236
Other ferro-alloys	2 374	2 304	2 199	6 939	2 208
Ingots, blooms, billets	822 788	1 485 125	1 688 815	1 688 927	2 881 218
Scrap	2 429 355	2 992 215	3 744 666	3 811 162	4 024 388
Bulgaria					
Pig iron	11 900	10 300	14 420	16 016	16 577
Ferro-manganese	3 700	1 100	2 530	3 596	5 744
Other ferro-alloys	6 900	13 600	12 024	8 708	10 916
Ingots, blooms, billets	107 200	88 700	63 398	7 693	65 045
Scrap	...	...	1 415	18 564	66 152
Croatia					
Pig iron	8 346	125 000	13 332	13 306	13 371
Ferro-alloys	1 470	...	97 401	26 329	2 935
Ingots, blooms, billets	95 319	65 800	51 757	29 979	20 128
Scrap	5 589	1 000	1 635	2 102	5 554
Czech Republic					
Pig iron	187 000	162 000	...	...	30 632
Ferro-alloys	93 000	98 404	117 000	105 000	108 957
Scrap	223 000	158 019	89 000	84 000	39 923
Denmark					
Pig iron	85 511	90 163	85 193	100 754	97 192
Sponge & powder	1 810	2 871	2 145	1 994	3 942
Ferro-chrome & ferro-silico-chrome	87	111	222	174	129
Ferro-manganese	2 362	3 766	2 028	2 420	3 117
Ferro-silico-manganese	4 534	4 781	3 910	4 475	5 177
Ferro-silicon	2 443	2 880	2 962	2 593	3 520
Other ferro-alloys	1 220	1 592	1 685	1 478	1 791
Ingots, blooms, billets	4 027	20 080	112 835	22 380	43 609
Scrap	147 270	140 683	168 942	330 509	357 694

Imports of Iron, Steel and Ferro-Alloys

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Country	1993	1994	1995	1996	1997
Finland					
Pig iron	19 292	29 495	74 625	67 924	31 744
Sponge & powder	120	176	935	2 624	14 003
Ferro-chrome & ferro-silico-chrome	3 110	5 404	3 072	4 838	5 055
Ferro-manganese	6 722	9 920	10 398	8 875	10 837
Ferro-silico-manganese	23 523	23 937	25 953	26 929	26 197
Ferro-molybdenum	956	1 373	1 184	1 539	1 581
Ferro-nickel	60 255	64 429	70 338	53 096	53 783
Ferro-silicon	14 235	22 294	13 833	17 537	18 024
Ferro-titanium & ferro-silico-titanium	373	562	530	671	536
Ferro-vanadium	254	241	244	263	141
Other ferro-alloys	1 903	2 088	3 110	3 390	3 925
Ingots, blooms, billets	149 636	227 998	561 763	461 912	224 157
Scrap	139 680	338 483	297 460	226 200	348 080
France					
Pig iron	155 126	186 339	200 945	185 124	189 127
Sponge & powder	10 452	13 838	13 719	15 325	18 734
Ferro-chrome	139 303	236 227	260 050	206 897	266 349
Ferro-silico-chrome	202	354	148	182	143
Ferro-silico-magnesium	2 248	2 848	2 526	2 817	3 084
Ferro-manganese	40 192	38 803	42 817	51 833	49 156
Ferro-silico-manganese	31 380	33 717	45 074	46 725	57 786
Ferro-molybdenum	2 240	4 228	4 871	4 595	5 098
Ferro-nickel	30 105	36 972	42 696	63 162	57 202
Ferro-niobium	972	1 291	1 356	1 586	1 745
Ferro-phosphorus	1 876	2 321	3 101	2 801	2 431
Ferro-silicon	61 009	60 893	55 536	49 630	47 952
Ferro-titanium & ferro-silico-titanium	3 568	4 810	4 759	4 925	4 459
Ferro-tungsten & ferro-silico-tungsten	227	217	672	411	568
Ferro-vanadium	746	1 134	993	858	909
Other ferro-alloys	17 580	7 389	8 088	8 653	10 133
Silicon metal	10 903	14 778	15 670	18 894	20 136
Ingots, blooms, billets	534 352	929 868	1 041 393	801 104	890 109
Scrap	1 110 854	1 395 930	1 705 635	1 632 170	2 402 691
Germany					
Pig iron	233 589	387 261	414 887	242 049	296 685
Sponge & powder	24 145	36 089	54 970	46 172	58 410
Ferro-chrome	278 633	354 662	444 412	339 641	396 657
Ferro-silico-chrome	9 591	19 245	28 616	18 711	22 121
Ferro-silico-magnesium	2 415	3 574	4 687	4 600	4 066
Ferro-manganese	112 232	163 597	198 334	152 092	175 233
Ferro-silico-manganese	112 302	133 487	135 336	121 775	144 301
Ferro-molybdenum	5 728	7 493	7 842	6 757	8 449
Ferro-nickel	51 792	118 902	11 954	77 681	88 858
Ferro-niobium	2 271	2 478	2 221	3 395	3 664
Ferro-phosphorus	10 542	24 306	26 550	7 266	5 540
Ferro-silicon	176 965	160 868	184 678	179 525	173 056
Ferro-titanium & ferro-silico-titanium	4 783	10 138	8 357	7 586	7 056
Ferro-tungsten & ferro-silico-tungsten	445	517	901	529	455
Ferro-vanadium	1 994	5 915	3 895	3 861	5 423
Other ferro-alloys	11 717	12 723	18 276	21 224	20 138
Silicon metal	71 922	94 388	100 688	95 897	121 559
Ingots, blooms, billets	805 198	1 377 426	1 767 641	998 882	1 141 721
Scrap	910 196	1 017 302	1 253 512	1 334 691	1 862 205
Greece					
Pig iron	27 180	35 098	16 864	14 439	13 132
Ferro-manganese	5 354	3 478	4 083	2 667	2 349
Ferro-silico-manganese	2 083	2 546	4 945	8 503	8 738
Ferro-silicon	2 292	4 407	2 193	2 427	5 754
Other ferro-alloys	434	480	381	353	489
Ingots, blooms, billets	415 841	549 866	626 795	455 454	464 809
Scrap	366 337	346 957	460 576	543 799	762 235

Imports of Iron, Steel and Ferro-Alloys

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Country	1993	1994	1995	1996	1997
Hungary					
Pig iron	22 406	21 481	24 535	31 727	32 281
Ferro-chrome	918	2 279	(d) ...	(d) ...	(d) ...
Ferro-manganese	2 394	8 058	8 575	7 262	9 316
Ferro-silicon	6 090	6 516	7 716	6 710	6 570
Other ferro-alloys	2 318	4 051	7 822	7 882	5 230
Ingots, blooms, billets	133 266	147 869	327 726	166 791	234 122
Scrap	3 731	5 739	9 325	1 829	13 575
Irish Republic					
Pig iron	376	629	10 257	320	2 964
Ferro-alloys	3 790	2 598	1 654	2 256	1 117
Ingots, blooms, billets	3 110	8 025	6 755	3 315	1 775
Scrap	347 429	166 585	153 246	51 870	5 000
Italy					
Pig iron	813 570	1 202 212	1 636 859	1 351 649	1 310 196
Sponge & powder	113 243	186 373	21 717	18 581	48 362
Ferro-chrome	112 558	185 648	225 766	184 552	230 009
Ferro-silico-chrome	151	214	165	293	532
Ferro-silico-magnesium	4 726	—	(d) ...	(d) ...	5 537
Ferro-manganese	66 293	68 252	69 017	55 184	68 961
Ferro-silico-manganese	76 591	89 874	75 494	70 452	71 842
Ferro-molybdenum	3 626	4 505	(d) ...	(d) ...	4 397
Ferro-nickel	25 138	25 824	20 852	37 603	39 560
Ferro-niobium	948	1 135	(d) ...	(d) ...	1 407
Ferro-silicon	104 394	93 639	112 967	100 594	112 822
Ferro-titanium & ferro-silico-titanium	2 908	3 418	(d) ...	(d) ...	3 651
Ferro-tungsten & ferro-silico-tungsten	154	202	(d) ...	(d) ...	168
Ferro-vanadium	1 335	1 721	(d) ...	(d) ...	1 493
Other ferro-alloys	6 081	10 308	28 086	23 803	10 038
Silicon metal	17 691	48 902	17 599	19 889	32 053
Ingots, blooms, billets	705 471	1 338 121	2 036 702	1 155 267	1 649 167
Scrap	5 931 527	6 389 402	6 337 321	4 935 364	4 303 774
Latvia					
Pig iron	14 000	29 848	5 000	1 000	3 000
Scrap	29 600	6 532	6 000	66 000	281 000
Lithuania					
Pig iron	...	2 140	1 762	1 000	198
Scrap	...	...	6 801	49 217	82 817
Netherlands					
Pig iron	122 577	198 425	199 003	156 013	176 940
Sponge & powder	6 011	7 790	8 141	1 722	2 280
Ferro-chrome	72 792	64 126	200 212	194 728	150 790
Ferro-silico-chrome	1 520	3 884	2 753	148	5 408
Ferro-silico-magnesium	1 025	1 484	1 823	(d) ...	(d) ...
Ferro-manganese	24 596	16 691	34 042	23 416	39 020
Ferro-silico-manganese	25 392	61 566	46 497	50 575	37 709
Ferro-molybdenum	2 074	2 795	2 633	(d) ...	6 971
Ferro-nickel	2 366	15 456	8 370	3 428	2 977
Ferro-niobium	1 124	176	681	(d) ...	466
Ferro-phosphorus	1 940	6 580	759	(d) ...	(d) ...
Ferro-silicon	92 707	10 581	42 428	38 326	63 684
Ferro-titanium & ferro-silico-titanium	184	551	1 287	(d) ...	3 217
Ferro-tungsten & ferro-silico-tungsten	273	132	606	(d) ...	711
Ferro-vanadium	360	202	725	(d) ...	2 380
Other ferro-alloys	764	1 157	1 671	13 144	5 377
Silicon metal	15 618	12 687	13 532	13 410	23 258
Ingots, blooms, billets	97 675	65 280	56 957	32 245	71 199
Scrap	3 744 856	2 938 297	3 281 654	2 816 539	2 073 111

Imports of Iron, Steel and Ferro-Alloys

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Country	1993	1994	1995	1996	1997
Norway					
Pig iron	6 275	8 323	10 405	9 227	8 179
Sponge & powder	30 818	9 161	4 049	967	37 973
Ferro-chrome	518	655	864	660	688
Ferro-manganese	1 490	7 323	15 449	6 079	15 181
Ferro-silico-manganese	1 166	562	5 645	49	3 933
Ferro-silicon	3 833	7 512	6 152	5 207	9 161
Other ferro-alloys	592	509	4 613	728	975
Silicon metal	3 732	8 962	8 704	5 360	13 203
Ingots, blooms, billets	131 923	166 937	196 095	124 334	166 505
Scrap	222 712	200 118	230 461	215 747	290 278
Poland					
Pig iron	107 567	68 388	44 537	39 500	...
Sponge & powder	946	2 070	2 513	...	...
Ferro-chrome	4 622	5 062	11 961	9 362	...
Ferro-silico-magnesium	838	994	1 897	(d) ...	...
Ferro-manganese	12 976	5 707	9 013	4 546	...
Ferro-silico-manganese	3 930	5 354	7 682	16 181	...
Ferro-molybdenum	382	438	744	584	...
Ferro-phosphorus	947	1 088	980	(d) ...	...
Ferro-silicon	7 297	13 227	8 837	11 567	...
Ferro-vanadium	191	318	405	280	...
Other ferro-alloys	383	399	968	4 179	...
Silicon metal	2 904	4 098	4 070	4 583	...
Ingots, blooms, billets	84 267	150 008	53 000	146 000	133 000
Scrap	254	185	238	400	15 000
Portugal					
Pig iron	4 753	14 442	...	20 671	23 285
Ferro-manganese	1 965	1 724	(d) ...	1 239	1 108
Ferro-silico-manganese	5 496	(d) ...	(d) ...	7 177	7 553
Ferro-silicon	3 192	(d) ...	(d) ...	4 087	4 658
Other ferro-alloys	942	11 502	13 000	1 619	2 626
Ingots, blooms, billets	2 496	27 077	...	3 277	14 126
Scrap	22 645	35 490	62 000	34 555	39 749
Romania					
Pig iron	18 892	3 441	6 594	6 673	2
Ferro-alloys	37 880	54 728	61 531	47 740	80 566
Ingots, blooms, billets	19 125	18 991	88 410	97 269	70 097
Slovakia					
Pig iron	35 000	22 000	21 000	27 000	18 000
Sponge & powder (b)	*200	*8 400	*600	...	...
Ferro-alloys	24 000	33 000	21 000	13 000	13 000
Ingots, blooms, billets	50 000	20 000	11 000	11 000	11 000
Scrap	85 000	133 000	236 000	158 000	160 000
Slovenia					
Pig iron	11 169	9 243	11 000	14 615	9 847
Ferro-alloys	10 660	11 186	15 000	13 671	22 176
Ingots, blooms, billets	20 448	9 848	3 000	2 103	2 533
Scrap	196 268	278 290	260 000	142 673	203 099
Spain					
Pig iron	145 605	232 426	321 804	373 164	255 342
Sponge & powder	145 862	221 970	229 007	225 759	342 934
Ferro-chrome	101 559	151 321	150 798	146 344	188 775
Ferro-silico-chrome	3 841	5 543	5 258	5 718	5 949
Ferro-manganese	23 277	29 244	28 929	18 364	13 967
Ferro-silico-manganese	35 353	36 414	29 012	21 563	24 976
Ferro-molybdenum	1 431	2 175	2 396	(d) ...	3 260
Ferro-nickel	21 920	29 345	25 027	28 043	25 806
Ferro-niobium	257	302	265	(d) ...	368
Ferro-phosphorus	1 027	1 741	1 291	(d) ...	1 968
Ferro-silicon	23 314	33 593	21 439	33 346	42 561
Ferro-titanium & ferro-silico-titanium	178	304	242	(d) ...	488
Ferro-tungsten & ferro-silico-tungsten	37	17	31	(d) ...	57
Ferro-vanadium	364	634	583	(d) ...	531
Other ferro-alloys	3 176	5 790	8 562	12 661	7 962
Silicon metal	4 478	3 766	3 126	3 649	3 655
Ingots, blooms, billets	51 366	65 078	335 428	412 996	474 682
Scrap	4 064 935	4 534 213	4 799 745	4 479 581	5 249 904

Imports of Iron, Steel and Ferro-Alloys

tonnes

Country	1993	1994	1995	1996	1997
Sweden					
Pig iron	24 953	47 068	42 187	39 062	31 011
Sponge & powder	2 253	4 847	4 393	4 239	5 357
Ferro-chrome	49 356	66 757	79 408	64 878	71 078
Ferro-silico-chrome	1 845	2 152	2 568	2 397	2 334
Ferro-manganese	22 852	24 235	29 828	24 501	22 952
Ferro-silico-manganese	13 120	17 313	21 328	18 163	16 127
Ferro-molybdenum	2 824	3 803	(d) ...	(d) ...	2 508
Ferro-nickel	15 581	21 398	20 440	16 657	17 979
Ferro-niobium	431	454	(d) ...	(d) ...	376
Ferro-silicon	20 702	33 460	25 080	30 978	31 064
Ferro-titanium & ferro-silico-titanium	1 713	2 119	(d) ...	(d) ...	1 813
Ferro-tungsten & ferro-silico-tungsten	242	1 684	(d) ...	(d) ...	722
Ferro-vanadium	1 266	1 909	(d) ...	(d) ...	1 070
Other ferro-alloys	5 084	3 362	11 480	9 555	3 676
Silicon metal	1 948	2 641	1 795	2 487	2 101
Ingots, blooms, billets	96 623	340 318	247 078	335 334	393 046
Scrap	467 967	663 765	362 905	333 059	492 324
Switzerland					
Pig iron	25 830	25 825	44 518	30 921	22 268
Sponge & powder	4 099	4 964	5 549	4 855	6 381
Ferro-aluminium	670	999	1 055	1 860	333
Ferro-chrome	1 280	692	805	522	732
Ferro-manganese	3 044	1 989	2 757	3 617	5 518
Ferro-silico-manganese	9 047	8 204	4 396	3 830	4 413
Ferro-silicon	5 412	5 090	5 171	4 702	5 850
Other ferro-alloys	928	772	748	947	1 185
Silicon metal	760	1 505	1 589	1 397	16 579
Ingots, blooms, billets	93 408	172 287	132 120	59 664	93 321
Scrap	434 960	110 249	90 186	76 086	165 862
Turkey					
Pig iron	697 594	563 512	580 624	393 343	244 247
Sponge & powder	4 952	1 106	1 962	2 363	3 221
Ferro-manganese	24 988	37 455	...	33 940	32 459
Ferro-silico-manganese	72 943	89 472	103 832	93 835	102 756
Ferro-silicon	37 387	33 107	...	45 023	41 466
Other ferro-alloys	6 037	3 509	3 594	4 715	5 232
Ingots, blooms, billets	2 518 255	1 620 437	1 009 767	1 311 824	1 390 031
Scrap	6 372 843	5 917 326	6 613 223	7 085 308	7 747 674
Ukraine					
Scrap	158 600	113 400	181 000	80 000	...
United Kingdom					
Pig iron	131 869	228 259	234 061	240 886	210 112
Sponge & powder	16 957	18 992	20 487	21 414	25 691
Ferro-chrome & ferro-silico-chrome	93 596	128 507	135 108	133 540	118 915
Ferro-silico-magnesium	6 498	9 080	10 961	11 508	11 374
Ferro-manganese	93 758	119 463	135 494	131 528	135 902
Ferro-silico-manganese	35 046	31 897	40 453	35 098	38 261
Ferro-molybdenum	920	1 103	1 375	392	773
Ferro-nickel	18 018	40 540	39 115	35 416	20 251
Ferro-niobium	543	852	767	921	856
Ferro-phosphorus	3 004	2 791	3 021	3 227	3 025
Ferro-silicon	76 333	80 254	92 069	96 025	96 005
Ferro-titanium & ferro-silico-titanium	6 203	7 419	7 761	7 591	5 161
Ferro-tungsten & ferro-silico-tungsten	95	59	98	44	112
Ferro-vanadium	493	500	450	291	378
Other ferro-alloys	2 829	2 391	3 448	1 806	3 108
Silicon metal	38 693	42 294	44 041	45 831	46 675
Ingots, blooms, billets	230 260	282 652	794 305	373 414	458 875
Scrap	22 594	88 913	177 248	242 588	211 827
Yugoslavia, Federal Republic of					
Ferro-chrome	*500	*1 000	*1 000	1 900	2 100
Ferro-silico-chrome	...	...	...	...	11 351
Ingots, blooms, billets	...	...	...	92 000	124 152
Scrap	*70 000	*50 000	*50 000	78 000	37 577

Imports of Iron, Steel and Ferro-Alloys

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Country	1993	1994	1995	1996	1997
Algeria					
Ferro-manganese	1 500	1 992	1 000	402	...
Other ferro-alloys	...	2 089	...	262	...
Ingots, blooms, billets	28 000	...	...	1 701	...
Egypt					
Pig iron	107 810	204 495	...	881 266	...
Ferro-alloys	24 152	18 635	...	25 792	...
Ingots, blooms, billets	231 239	338 445	282 518	642 562	...
Scrap	120 000	105 666	97 400	121 382	...
Kenya					
Ingots, blooms, billets	1 703	3 232	1 000	2 810	495
Morocco					
Pig iron	3 507	3 564	3 409	2 600	...
Ferro-alloys	272	386	403	339	...
Ingots, blooms, billets	315 451	411 442	536 555	523 064	...
Scrap	5 835	...	3	1 524	...
Nigeria					
Ferro-manganese	*1 500	*100	*100	...	...
South Africa					
Ferro-chrome	1 953	2 090	1 371	626	465
Ferro-silico-magnesium	946	977	1 477	814	220
Ferro-silico-manganese	...	72	243	253	196
Ferro-molybdenum	633	949	1 048	1 104	1 258
Ferro-nickel	...	1 804	1 866	5 251	2 164
Ferro-niobium	74	101	172	91	89
Ferro-phosphorus	...	826	1 067	...	...
Ferro-silicon	2 478	2 821	38 217	16 617	9 934
Ferro-titanium & ferro-silico-titanium	314	359	709	925	417
Other ferro-alloys	274	296	700	1 137	222
Silicon metal	1 319	747	422	1 658	2 895
Scrap	30 884	80 423	155 300	67 077	60 119
Tunisia					
Pig iron	2 634	1 422	1 939	1 589	...
Ferro-alloys	1 864	2 305	1 631	2 564	...
Ingots, blooms, billets	62 894	80 281	29 421	68 343	...
Scrap	1 100	379	737	900	...
Zimbabwe					
Ferro-manganese	1 589	1 532	1 710	10 091	304
Ferro-silicon	1 024	1 626	1 269	49 475	45 341
Canada					
Pig iron	30 328	59 368	18 533	32 245	130 002
Sponge & powder	26 403	10 443	76 822	32 498	52 411
Ferro-calcium-silicon	2 039	1 900	2 111	1 785	2 042
Ferro-chrome	45 268	55 144	62 706	64 545	58 333
Ferro-silico-chrome	1 020	1 473	885	665	594
Ferro-manganese	61 322	67 500	52 877	83 002	70 568
Ferro-silico-manganese	38 905	34 005	41 494	54 426	43 979
Ferro-molybdenum	699	886	1 414	1 283	1 664
Ferro-nickel	606	9	631	64	—
Ferro-niobium	1 570	1 594	1 646	1 266	1 683
Ferro-phosphorus	980	1 151	1 394	1 067	1 247
Ferro-silicon	24 848	25 264	26 699	42 477	43 877
Ferro-titanium & ferro-silico-titanium	361	855	759	902	1 134
Ferro-vanadium	336	631	598	576	793
Other ferro-alloys	1 744	1 963	1 776	1 869	2 536
Silicon metal	8 490	12 429	17 451	25 465	20 106
Ingots, blooms, billets	1 271 687	1 064 085	1 481 839	1 053 550	821 685
Scrap	1 456 809	1 725 588	1 632 583	1 264 712	1 531 652
Costa Rica					
Ingots, blooms, billets	58 257	75 676	50 944	53 311	...
El Salvador					
Ingots, blooms, billets	15 905	31 975	9 449	17 101	38 595
Scrap	...	42 152	18 827	47 725	17 774
Guatemala					
Ingots, blooms, billets	105 344	71 238	37 058	40 677	...

Imports of Iron, Steel and Ferro-Alloys

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Country	1993	1994	1995	1996	1997
Mexico					
Pig iron	18 459	49 767	77 964
Sponge & powder	759 637	1 055 256	1 399 089	1 233 530	...
Ferro-chrome	4 501	4 344	5 863	7 519	...
Ferro-manganese	13 867	16 116	17 372	23 164	...
Ferro-silico-manganese	3 261	15 008	8 504	14 849	...
Ferro-silicon	16 430	22 920	18 449	23 104	...
Other ferro-alloys	2 379	2 805	3 921	4 291	...
Ingots, blooms, billets	187 357	241 881	137 371	389 983	...
Scrap	852 185	832 667	874 406	1 294 771	...
Panama					
Ingots, blooms, billets	35 356	36 713	34 584	27 008	...
USA					
Pig iron	828 405	2 503 709	2 383 358	2 657 503	3 153 082
Sponge & powder	1 033 367	1 099 175	1 323 901	1 181 377	1 223 391
Ferro-chrome	383 314	320 045	499 236	419 647	388 858
Ferro-silico-chrome	8 648	15 068	49 667	49 396	36 502
Ferro-manganese	345 366	335 779	321 744	375 368	302 996
Ferro-silico-manganese	323 519	276 648	304 706	324 957	303 109
Ferro-molybdenum	4 615	6 583	6 721	7 929	5 891
Ferro-nickel	37 281	42 350	45 890	43 405	38 218
Ferro-niobium	3 367	4 004	5 685	4 801	6 957
Ferro-phosphorus	8 434	15 244	7 592	10 556	11 457
Ferro-silicon	212 467	203 876	220 645	210 937	195 209
Ferro-titanium & ferro-silico-titanium	4 843	6 337	5 646	7 758	6 233
Ferro-tungsten & ferro-silico-tungsten	811	687	874	702	1 087
Ferro-vanadium	2 806	3 101	3 026	2 481	2 535
Other ferro-alloys	16 489	23 489	31 442	37 778	40 090
Silicon metal	73 295	103 307	97 310	83 936	125 087
Ingots, blooms, billets	4 536 323	7 207 916	4 695 297	6 848 093	5 771 636
Scrap	1 505 150	1 766 740	2 021 268	2 560 814	2 833 522
Argentina					
Pig iron	11 970	9 036	2 650	2 900	...
Ferro-chrome	2 702	2 872	3 026	3 339	3 164
Ferro-manganese	2 230	3 344	5 448	5 571	...
Ferro-silicon	237	1 977	2 356	161	...
Other ferro-alloys	1 116	985	1 537	8 421	...
Ingots, blooms, billets	181 100	499 392	396 876	270 655	...
Scrap	7 524	4 590	6 491	12 831	...
Brazil					
Sponge & powder	3 556	3 928	9 760	...	...
Ferro-chrome	11 336	15 568	6 096	6 890	6 842
Other ferro-alloys	2 573	6 453	18 213	17 501	16 830
Scrap	114 759	148 666	...	...	...
Colombia					
Ferro-chrome	809	758	533	623	...
Ferro-manganese	5 130	5 699	5 621	4 515	...
Ferro-silico-manganese	2 528	2 530	4 035	3 104	...
Ferro-silicon	2 251	3 130	2 554	2 627	...
Other ferro-alloys	701	943	1 020	687	...
Ingots, blooms, billets	120 518	213 737	147 588	115 889	...
Scrap	205 091	197 076	220 266	116 036	...
Ecuador					
Ingots, blooms, billets	98 115	95 991	206 414	191 701	...
Peru					
Sponge	26 971	69 232	73 881	62 830	...
Ferro-chrome	286	478	697	438	...
Ferro-manganese	2 845	3 004	3 160	2 156	...
Ferro-silico-manganese	...	3 991	4 237	4 262	...
Ferro-silicon	1 250	1 583	1 165	1 776	...
Scrap	49 926	40 718	...	...	...
Uruguay					
Ferro-alloys	624	850	746	1 107	778
Ingots, blooms, billets	5 925	3 021	243	509	200

Imports of Iron, Steel and Ferro-Alloys

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Country	1993	1994	1995	1996	1997
Venezuela					
Sponge & powder	3 223	3 519	21 739	3 363	...
Ferro-chrome	745	76	263	281	...
Ferro-manganese	18 538	26 209	23 256	15 794	...
Other ferro-alloys	1 812	680	1 477	1 480	...
Silicon metal	1 222	1 055	2 350	1 031	...
Ingots, blooms, billets	891	2 453	68 947	4 670	...
Scrap	73 072	144 868	173 612	250 110	...
Abu Dhabi					
Scrap	10 861	12 937	...	7 046	3 366
Bahrain					
Ingots, blooms, billets	74 586	...	...	...	...
Bangladesh					
Pig iron (a)	24 022	...	...	...	...
Ferro-alloys (a)	902	...	...	...	...
Scrap (a)	9 483	...	...	...	...
China					
Pig iron	810 367	311 938	80 084	42 491	24 013
Sponge & powder	152 703	32 564	48 751	6 989	31 181
Ferro-alloys	36 077	31 339	6 901	6 234	28 999
Ingots, blooms, billets	6 379 277	2 633 002	645 232	398 005	394 774
Scrap	2 980 288	2 121 759	1 334 519	1 283 322	1 828 759
Cyprus					
Pig iron	1 091	—	—	741	...
Hong Kong					
Pig iron	6 728	9 142	2 938	1 118	164
Ferro-manganese	13 318	9 935	2 737	9 073	2 353
Ferro-silico-manganese	32 992	15 587	3 821	2 008	5 034
Ferro-silicon	25 253	18 112	22 208	21 445	12 566
Other ferro-alloys	2 686	1 484	3 586	4 941	633
Silicon metal	16 924	10 848	8 856	7 145	3 856
Ingots, blooms, billets	192 185	245 467	273 909	319 684	143 730
Scrap	366 032	202 770	257 917	243 392	255 113
India					
Pig iron (e)	3 681	48 571	29 798	17 809	...
Sponge & powder (e)	1 551	2 997	3 583	3 258	...
Ferro-chrome & ferro-silico-chrome (e)	1 375	5 835	13 456	8 131	...
Ferro-manganese & Ferro-molybdenum (e)	31	755	2 738	20 546	...
Ferro-nickel (e)	815	336	358	217	...
Ferro-silicon (e)	13 482	16 661	12 193	8 635	...
Other ferro-alloys (e)	1 550	9 828	22 510	17 901	...
Silicon metal (e)	520	1 264	1 650	2 879	...
Ingots, blooms, billets (e)	7 069	11 347	10 951	15 195	...
Scrap (e)	134 613	237 189	324 176	392 234	...
Scrap (e)	1 178 643	2 212 536	1 964 571	1 975 667	...
Indonesia					
Pig iron	233 678	339 928	557 878	372 572	220 848
Sponge & powder	22 630	214 019	495 842	203 761	228 625
Ferro-manganese	8 951	5 311	22 336	11 964	36 009
Ferro-silico-manganese	33 547	24 625	35 405	30 103	32 545
Ferro-silicon	8 126	8 315	11 768	9 800	9 158
Other ferro-alloys	1 417	1 724	2 164	1 507	2 407
Ingots, blooms, billets	790 960	925 233	1 388 605	1 376 411	1 718 583
Scrap	1 886 823	1 024 178	1 462 333	788 561	869 730
Iran					
Ingots, blooms, billets (c)	160 506	31 454	27 894	...	...
Israel					
Ingots, blooms, billets	130 000	111 000	170 000	211 000	...

Imports of Iron, Steel and Ferro-Alloys

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Country	1993	1994	1995	1996	1997
Japan					
Pig iron	1 385 930	1 600 992	2 613 359	791 976	1 052 218
Sponge & powder	227 704	197 327	154 732	156 601	227 821
Ferro-chrome	548 581	610 163	825 718	718 567	811 555
Ferro-silico-chrome	5 652	11 165	13 208	10 142	4 729
Ferro-manganese	55 377	85 703	123 917	110 917	95 240
Ferro-silico-manganese	210 900	204 342	240 510	233 277	257 536
Ferro-molybdenum	1 818	2 298	2 122	2 585	3 167
Ferro-nickel	44 342	48 394	66 772	58 460	49 752
Ferro-niobium	4 361	3 642	5 051	4 758	4 977
Ferro-phosphorus	5 863	6 709	12 947	5 881	7 639
Ferro-silicon	542 110	484 591	557 155	517 618	556 735
Ferro-titanium & ferro-silico-titanium	4 527	5 487	5 620	3 122	6 276
Ferro-tungsten & ferro-silico-tungsten	565	750	672	415	775
Ferro-vanadium	1 132	1 021	1 336	1 281	1 770
Other ferro-alloys	12 420	10 121	14 448	10 409	14 099
Silicon metal	151 970	151 956	181 696	191 494	166 312
Ingots, blooms, billets	322 477	310 368	567 734	299 397	274 082
Scrap	912 703	1 067 871	1 208 644	375 078	414 555
Jordan					
Ingots, blooms, billets	164 178	168 837	210 762	350 369	...
Scrap	8 803	2 822	704	3 003	...
Korea, Dem. P.R. of					
Ferro-manganese (b)	*14 600	*4 900	*6 600	*2 700	*1 800
Other ferro-alloys (b)	*15 200	*4 600	*4 300	*7 200	*2 000
Korea, Republic of					
Pig iron	1 482 457	1 764 211	2 141 583	2 426 685	3 691 551
Sponge & powder	449 892	562 002	690 492	850 124	911 933
Ferro-chrome	167 396	175 056	187 302	204 707	299 313
Ferro-silico-chrome	5 400	10 305	16 108	15 198	12 311
Ferro-manganese	32 595	23 747	37 962	43 650	41 085
Ferro-silico-manganese	39 099	60 511	76 301	99 513	120 438
Ferro-molybdenum	893	1 328	1 592	1 018	1 785
Ferro-nickel	38 848	41 701	41 680	62 551	85 172
Ferro-phosphorus	3 190	3 791	5 184	3 340	3 392
Ferro-silicon	102 763	105 908	125 369	118 423	128 241
Ferro-vanadium	539	905	1 519	863	728
Other ferro-alloys	3 139	3 877	3 294	3 676	1 472
Silicon metal	11 511	15 365	16 775	19 516	19 325
Ingots, blooms, billets	2 347 533	3 032 724	3 246 945	4 176 046	3 631 133
Scrap	4 916 003	4 970 144	5 003 359	5 054 668	6 532 716
Malaysia					
Pig iron	108 537	134 258	182 097	169 910	...
Spiegeleisen	8 029	12 311	...	...	...
Sponge & powder	5 624	8 843	...	...	...
Ferro-manganese	12 645	7 256	16 000	22 000	...
Ferro-silico-manganese	12 113	6 374	...	...	...
Ferro-silicon	11 692	13 228	...	...	...
Ferro-vanadium	303	512	...	...	...
Other ferro-alloys	3 115	3 343	...	...	...
Ingots, blooms, billets	688 500	717 087	580 958	944 411	...
Scrap	1 417 533	869 896	1 064 500	1 089 543	991 000
Pakistan					
Pig iron (a)	4 417	2 900	2 820	...	5 651
Ferro-chrome	1 031	643	1 659	1 125	...
Ferro-manganese	13 409	12 410	9 995	18 323	...
Ferro-silico-manganese	74	5 003	85	78	...
Ferro-silicon	10 426	7 796	7 245	12 702	...
Other ferro-alloys	227	375	1 093	211	...
Ingots, blooms, billets	19 985	17 549	40 090	60 791	...
Scrap	354 141	185 234	120 606	257 965	...

Imports of Iron, Steel and Ferro-Alloys

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Country	1993	1994	1995	1996	1997
Philippines					
Pig iron	91 340	91 124	59 112	69 145	11 000
Ferro-manganese	4 531	2 697	3 080	5 190	...
Ferro-silico-manganese	674	1 281	2 077	1 234	...
Ferro-silicon	4 468	3 864	5 431	4 908	...
Other ferro-alloys	459	370	485	265	...
Ingots, blooms, billets	1 229 865	1 618 352	2 234 573	1 951 019	1 079 000
Scrap	53 470	27 923	53 281	109 516	103 000
Qatar					
Scrap	12 995	100	...	...	...
Saudi Arabia					
Pig iron	43 770	39 290	27 626	44 848	...
Ferro-alloys	26 378	3 881	4 102	4 282	...
Ingots, blooms, billets	851 527	178 860	289 889	196 330	...
Scrap	54 670	37 055	...	...	...
Singapore					
Pig iron	133 443	87 009	78 599	75 870	21 500
Sponge & powder	63	260	21	29	1 714
Ferro-manganese	1 878	513	763	962	904
Ferro-silicon	15 225	5 353	7 788	12 439	1 901
Other ferro-alloys	1 073	496	629	1 704	3 568
Ingots, blooms, billets	380 207	333 535	226 880	275 172	422 065
Scrap	147 894	123 609	158 143	83 557	63 521
Sri Lanka					
Ingots, blooms, billets	294 118	87 370	69 203	99 609	121 798
Syria					
Ingots, blooms, billets	20 377	21 385	26 329	25 296	...
Scrap	29 758	12 900	11 748	9 119	...
Taiwan					
Pig iron	958 372	1 197 794	1 090 114	850 315	1 112 462
Sponge & powder	19 871	38 979	55 824	24 373	24 957
Ferro-chrome	58 947	93 548	192 574	196 389	285 664
Ferro-manganese	47 169	37 306	39 274	38 225	51 793
Ferro-silico-manganese	42 802	43 564	64 962	51 311	77 702
Ferro-molybdenum	679	750	1 096	1 920	2 234
Ferro-nickel	123	2 989	16 820	56 118	81 818
Ferro-niobium	149	187	203	245	164
Ferro-silicon	52 096	46 028	62 098	58 713	63 313
Ferro-vanadium	383	523	16 610	453	490
Other ferro-alloys	1 653	2 127	2 650	3 205	6 680
Silicon metal	19 356	17 809	21 673	20 163	25 275
Ingots, blooms, billets	7 508 179	7 680 156	7 426 257	5 941 500	7 013 973
Scrap	1 736 356	1 069 912	673 190	1 048 932	1 960 652
Thailand					
Pig iron	113 322	182 447	281 689	227 771	...
Sponge & powder	9 330	10 300	6 506	1 557	...
Ferro-chrome	661	1 286	2 607	3 117	...
Ferro-manganese	9 944	14 079	13 972	8 457	...
Ferro-silico-manganese	3 308	5 506	16 912	29 218	...
Ferro-silicon	16 532	27 741	19 016	16 751	...
Other ferro-alloys	909	5 875	615	915	...
Ingots, blooms, billets	1 167 081	3 209 335	3 428 112	3 995 668	3 256 000
Scrap	1 457 660	1 158 764	1 035 693	899 238	728 000
Australia					
Pig iron	4 000	13 000	52 000	6 000	13 500
Sponge & powder (a)	3 682	...	...	...	...
Ferro-chrome (a)	7 280	(d) ...	(d) ...	(d) ...	(d) ...
Ferro-manganese (a)	12 268	(d) ...	(d) ...	(d) ...	(d) ...
Ferro-silico-manganese (a)	932	510	377	288	297
Ferro-molybdenum (a)	157	(d) ...	(d) ...	(d) ...	(d) ...
Ferro-silicon (a)	24 738	35 732	32 593	34 506	52 952
Other ferro-alloys (a)	5 057	21 000	30 000	40 000	10 000
Silicon metal (a)	3 611	3 025	2 863	4 899	3 226
Ingots, blooms, billets	6 000	97 000	19 000	34 438	124 000
Scrap	2 000	49 000	2 700	28 108	2 000

Imports of Iron, Steel and Ferro-Alloys

tonnes

Country	1993	1994	1995	1996	1997
New Zealand					
Ferro-manganese (a)	2 279	2 330	1 999	...	2 446
Ferro-silicon (a)	2 828	2 295	2 330	...	2 820
Other ferro-alloys (a)	2 355	2 989	2 522	...	1 577

Note(s):-

(1) In this table the term 'ingots, blooms, billets' corresponds to items 672.4, 6, 7 and 8 of the Standard International Trade Classification (Revision 3) which includes those of alloy and high carbon steel

- (a) Years ended 30 June of that stated
- (b) BGS estimates, based on known exports from certain countries
- (c) Years ended 20 March following that stated
- (d) Included with 'other ferro-alloys'
- (e) Years ended 31 March following that stated

Production of Kaolin

tonnes

Country	1993	1994	1995	1996	1997
Austria	64 381	65 837	56 789	31 833	*40 000
Belgium	*300 000	*300 000	*300 000	*300 000	*300 000
Bosnia & Herzegovina	*3 000	*3 000	*3 000	*3 000	*3 000
Bulgaria	111 000	115 000	*115 000	*115 000	*115 000
Czech Republic (h)	702 000	651 790	757 949	724 053	822 459
Denmark	*3 500	*3 500	*3 500	*3 000	*3 000
Finland	8 156	8 165	12 392	14 204	...
France	295 000	330 000	345 000	326 000	*330 000
Germany (g)	544 000	600 000	570 000	550 000	...
Greece	89 473	117 254	66 682	60 453	*65 000
Hungary (c)	15 000	12 000	5 000	*5 000	*5 000
Italy	76 000	74 608	87 920	126 000	...
Poland	47 900	52 600	52 965	71 665	83 638
Portugal	178 285	181 933	212 065	177 423	*180 000
Romania	*200 000	200 000	150 000	150 000	...
Slovakia	15 600	24 100	13 300	23 240	22 720
Spain (k)	284 382	337 339	399 248	317 918	330 000
Turkey	138 989	179 775	489 635	449 559	477 383
Ukraine	621 300	282 000	286 900	249 300	237 900
United Kingdom (a) (l)	2 460 632	2 530 277	2 585 881	2 281 438	2 359 676
Yugoslavia, Federal Republic of	37 627	69 927	56 926	68 460	65 724
Algeria	12 600	16 900	24 068	23 332	18 533
Burundi	5 318	2 331	4 766	*4 500	...
Egypt (d)	78 107	54 175	70 597	115 409	112 657
Eritrea	—	5 231	*3 200	2 620	*2 500
Madagascar	*1 000	*1 200	1 545	*1 500	*1 500
Nigeria	719	242	11 950	102 078	*110 000
South Africa	147 349	131 863	146 857	146 496	124 763
Tanzania	477	541	596	1 332	...
Mexico	215 510	193 034	221 685	253 602	235 278
USA (e)	8 830 000	8 770 000	9 480 000	9 180 000	9 410 000
Argentina	42 052	50 471	39 860	64 241	*65 000
Brazil (b)	1 174 151	1 323 443	1 269 468	*1 300 000	*1 500 000
Chile	66 939	73 081	10 845	13 452	14 238
Colombia (j)	*900 000	...	...	...	...
Ecuador	4 230	6 623	*8 000	*7 000	7 345
Paraguay	*74 000	*74 000	66 300	*74 000	*65 000
Peru	4 778	7 908	8 233	14 295	*14 300
Venezuela	32 000	10 345	3 000	7 542	8 225
Bangladesh (d)	1 637	2 753	6 597	*7 000	*7 200
China	800 000	850 000	900 000	950 000	...
India (i)	129 271	134 002	160 689	183 268	*190 000
Indonesia	42 365	53 236	14 373	*15 000	*16 000
Iran (n)	254 413	227 650	265 591	364 506	...
Israel	40 000	*40 000	*40 000	*40 000	*40 000
Japan	110 318	138 412	182 122	141 230	110 915
Jordan	47 174	*47 200	65 998	...	...
Korea, Republic of (m)	919 387	887 752	897 360	852 457	898 347
Malaysia	254 345	312 628	404 336	324 578	...
Pakistan (d)	69 510	47 503	33 039	45 446	66 235
Sri Lanka	16 000	7 800	16 000	7 700	19 900
Taiwan	126 752	102 822	20 406	25 083	...
Thailand (h)	404 029	425 567	460 629	553 770	367 000

Kaolin

Production of Kaolin

tonnes

Country	1993	1994	1995	1996	1997
Australia (f)	*180 000	*200 000	*210 000	*210 000	*220 000
New Zealand	26 543	40 720	13 662	26 325	21 874
World Total	21 200 000	21 300 000	22 500 000	22 100 000	22 600 000

Note(s):-

(1) In addition to the countries listed, Lebanon, Uzbekistan and Vietnam are believed to produce kaolin

(a) Sales

(b) Including beneficiated and directly shipped material

(c) Including beneficiated material

(d) Years ended 30 June of that stated

(e) Sold or used by producers

(f) Including ball clay

(g) Washed and dried

(h) Beneficiated

(i) Beneficiated; excludes directly used natural kaolin

(j) Crude

(k) Washed

(l) Dry weight

(m) Revised series includes kaolin and halloysite. Lower quality kaolinite was also included previously

(n) Years ended 20 March following that stated

Exports of Kaolin

tonnes

Country	1993	1994	1995	1996	1997
Albania (a)	...	...	*6 000	*16 100	...
Austria	15 716	9 353	*10 800	...	5 037
Belgium-Luxembourg	165 759	100 191	197 923	250 146	308 573
Bulgaria	(a) *29 500	(a) *40 000	76 132	97 024	110 954
Czech Republic	426 488	345 423	383 498	361 858	398 257
Denmark	337	421	598	517	912
Finland	74	780	1 892	1 829	2 333
France	244 852	273 975	281 358	260 426	260 812
Germany	267 435	496 760	354 103	196 066	178 366
Greece	9 402	21 095	12 941	26 464	15 733
Hungary	4 398	4 059	5 529	4 403	1 866
Italy	61 064	37 567	34 831	30 811	42 537
Netherlands	158 258	227 888	157 631	102 372	85 534
Poland	1 834	9 900	10 900	100	...
Russia	(a) *3 700	...	62	3 003	...
Slovakia	*100	100	100	1 694	819
Slovenia	4 400	1 900	1 000	1 160	198
Spain	94 163	117 571	138 647	137 994	144 343
Sweden	904	4 088	10 600	13 753	25 476
Switzerland	10 895	7 089	143	286	190
Turkey	84 666	189 425	256 907	190 761	158 642
Ukraine	...	...	206 402	236 053	291 161
United Kingdom (d)	2 125 129	2 173 888	2 222 316	1 957 761	2 052 914
USA	2 990 206	3 189 995	3 246 515	3 246 749	3 395 222
Brazil	601 337	524 877	579 810	602 150	764 743
China	419 552	485 721	439 439	882 146	820 520
Hong Kong (e)	533 300	479 702	457 193	261 578	396 008
India (b)	9 142	8 658	6 242	10 469	...
Indonesia	126 146	157 866	192 983	148 380	126 462
Israel	5 307	(a) *5 200	...	(a) *7 500	...
Japan	10 252	12 769	10 860	8 108	9 139
Jordan	522	1 078	793	744	...
Korea, Dem. P.R. of (a)	*2 900	*1 900	*3 800	*2 600	*6 000
Korea, Republic of	65 476	123 510	108 337	53 579	23 623
Malaysia	161 296	110 784	98 874	98 949	...
Taiwan	7 263	6 997	7 486	12 044	21 344
Thailand	38 098	26 793	27 281	20 624	...
Australia	157 000	146 553	132 114	153 675	...
New Zealand (c)	18 206	19 306	17 787	15 047	18 147

Note(s):-

- (a) BGS estimates, based on known imports into certain countries
- (b) Years ended 31 March following that stated
- (c) Years ended 30 June of that stated
- (d) Dry weight
- (e) Re-exports

Imports of Kaolin

tonnes

Country	1993	1994	1995	1996	1997
Austria	202 896	222 474	*249 000	...	227 663
Belgium-Luxembourg	499 788	714 738	644 275	646 593	690 593
Croatia	13 992	9 400	16 213	14 193	21 410
Czech Republic	1 353	3 963	3 825	5 846	10 085
Denmark	9 776	9 987	14 587	16 037	28 862
Finland	1 175 689	1 328 205	1 378 081	1 198 212	1 402 209
France	399 983	438 057	444 127	396 785	439 674
Germany	830 079	741 120	717 388	633 467	729 379
Greece	25 114	32 681	57 137	73 542	57 688
Hungary	30 027	22 554	26 145	34 027	38 726
Irish Republic	10 125	10 689	14 837	13 978	11 774
Italy	751 278	855 168	886 062	868 006	834 122
Macedonia	7 900	7 500	*8 000	*8 000	...
Netherlands	568 795	596 674	523 965	509 753	360 327
Norway	145 805	180 269	252 658	224 811	241 707
Poland	75 495	91 997	91 409	45 400	...
Portugal	41 455	54 935	76 766	95 805	109 909
Romania	38 733	47 699	41 602	54 330	58 851
Slovenia	22 800	21 900	19 600	20 800	...
Spain	330 858	368 212	453 490	434 099	470 225
Sweden	360 063	340 208	400 921	342 964	386 758
Switzerland	75 852	75 601	78 243	74 682	56 975
Turkey	43 044	61 194	84 717	85 789	116 727
United Kingdom	23 273	21 693	17 377	39 194	88 946
Yugoslavia, Federal Republic of	*10 000	*10 000	*8 000	8 000	7 702
South Africa	22 969	36 985	35 081	17 360	22 065
Tunisia	38 700	46 590	44 860	51 575	...
Zimbabwe (d)	513	568	926	24 166	1 747
Canada	531 079	626 718	621 166	599 842	717 103
Guatemala	6 115	5 642	6 227	6 175	...
Mexico	128 117	172 002	151 604	221 292	...
USA	7 626	10 786	12 017	13 728	30 384
Argentina	28 692	24 992	30 924	26 528	21 548
Brazil	1 628	2 044	2 372	7 001	...
Chile	10 255	15 462	22 152	16 463	24 196
Colombia	9 732	11 944	7 899	10 486	...
Ecuador	1 937	7 729	7 946	3 447	...
Peru	1 395	2 234	2 369	2 998	...
Uruguay	5 481	6 436	5 492	7 331	10 334
Venezuela	33 413	27 240	32 873	31 729	...
Bangladesh (b)	9 594	...	...	...	...
China	16 844	25 639	30 805	37 211	54 295
Cyprus	9 926	16 126	8 393	16 361	421
Hong Kong	556 138	548 899	405 245	175 803	172 105
Indonesia	74 638	75 597	132 108	125 343	144 964
Iran (a)	17 175	19 214	10 899	...	...
Israel (c)	*6 900	*10 000	*8 800	...	...
Japan	1 189 611	1 283 769	1 265 419	1 399 224	1 333 036
Jordan	1 975	4 253	5 582	4 337	...
Korea, Republic of	225 961	249 641	274 433	264 587	274 430
Malaysia	29 270	34 455	44 231	42 000	...
Pakistan (b)	13 734	5 362	6 540	8 940	8 252
Philippines	39 967	33 804	34 307	45 854	...
Saudi Arabia	4 453	9 749	6 908	5 563	...
Taiwan	1 361 737	1 722 616	1 468 705	1 141 070	1 146 106
Thailand	121 972	41 751	45 990	...	...
Australia (b)	11 965	12 476	17 686	17 167	19 535
New Zealand (b)	8 133	8 657	10 360	...	6 641

Note(s):-

(a) Years ended 20 March following that stated
(b) Years ended 30 June of that stated

(c) BGS estimates, based on known exports from certain countries

(d) Including fuller's earth

Mine Production of Lead

tonnes (metal content)

Country	1993	1994	1995	1996	1997
Austria	2 047	—	—	—	—
Bosnia & Herzegovina	*200	*200	*200	*200	*200
Bulgaria	34 400	32 000	32 500	28 500	*28 000
Finland	—	—	—	1 200	2 200
Georgia	*500	*400	*300	*200	*200
Greece	26 400	19 740	14 283	8 021	18 100
Irish Republic	48 300	53 700	46 100	45 300	45 000
Italy	7 404	13 902	15 400	13 900	11 800
Macedonia	32 700	28 600	24 700	26 900	35 100
Norway	2 245	3 160	1 452	2 083	1 900
Poland	49 100	51 600	58 100	58 700	54 729
Romania	16 929	23 838	23 194	21 356	17 083
Russia	44 400	25 000	22 800	18 000	16 000
Slovakia	1 800	—	—	—	—
Slovenia	1 000	—	—	—	—
Spain	25 503	23 867	30 346	23 732	23 248
Sweden	111 709	112 787	100 070	98 812	108 624
Turkey	11 000	9 800	10 376	11 736	10 000
United Kingdom	*1 000	2 000	*1 600	*1 800	*2 000
Yugoslavia, Federal Republic of	9 229	6 651	11 689	22 327	20 625
Algeria	900	700	800	600	*600
Kenya	396	350	4	—	—
Morocco	81 680	73 160	68 870	75 253	78 228
Namibia	18 000	21 100	22 100	20 300	18 300
South Africa	100 171	95 824	88 501	88 613	83 114
Tunisia	540	2 900	6 600	4 765	1 424
Zambia	7 600	600	—	—	—
Canada	183 155	170 909	210 286	257 253	186 180
Honduras	3 838	2 777	2 461	4 669	5 930
Mexico	181 741	163 836	179 772	167 115	180 350
USA	362 400	370 200	393 600	435 945	458 500
Argentina	11 826	9 981	10 521	11 272	13 401
Bolivia	21 220	19 678	20 387	16 538	18 608
Brazil	117	806	5 689	*6 600	8 700
Chile	344	1 008	944	1 374	1 264
Peru (a)	218 507	235 042	237 597	248 929	258 189
China	346 300	461 900	514 200	643 400	700 000
India	26 000	23 900	34 000	35 000	32 900
Iran (b)	14 700	18 300	15 900	15 700	18 200
Japan	16 470	9 946	9 659	7 753	5 227
Kazakhstan	183 837	69 000	53 324	28 804	30 346
Korea, Dem. P.R. of	*70 000	*55 000	*50 000	*40 000	*35 000
Korea, Republic of	7 409	2 173	4 064	5 131	3 632
Myanmar	1 900	2 300	4 800	2 400	2 300
Tajikistan	*1 600	*1 200	*1 000	*3 000	*2 000
Thailand	5 700	7 500	9 100	17 000	5 600
Uzbekistan	*30 200	*19 000	*15 000	*10 000	*1 800
Australia	510 000	505 000	455 000	527 000	531 000
World Total	2 800 000	2 800 000	2 800 000	3 100 000	3 100 000

Note(s):-

(a) Recoverable

(b) Years ended 20 March following that stated

Production of Refined Lead

tonnes

Country	1993	1994	1995	1996	1997
Austria	22 636	17 583	21 919	23 900	22 000
Belgium (a)	131 117	148 247	144 069	142 178	142 901
Bulgaria	56 994	64 012	60 149	74 700	72 600
Czech Republic	23 200	25 000	22 000	21 800	21 800
France	267 000	260 500	297 100	301 100	283 400
Germany	334 100	331 720	313 910	238 100	329 300
Greece	—	—	3 800	*5 000	*6 000
Irish Republic	9 400	10 000	11 200	11 900	12 600
Italy	197 800	222 600	189 400	209 800	211 600
Macedonia	21 881	20 965	22 500	23 700	26 046
Netherlands	24 000	24 500	21 500	22 000	19 500
Poland	62 305	61 248	66 421	65 983	64 732
Portugal	8 300	13 000	7 700	5 900	*6 000
Romania	18 100	20 300	23 000	19 400	17 700
Russia	26 000	34 300	30 300	30 000	52 000
Slovenia	12 000	15 000	14 000	13 000	15 000
Spain	62 400	70 400	81 500	90 960	88 000
Sweden	84 429	81 909	83 088	84 494	89 350
Switzerland	5 900	6 100	7 000	7 600	9 900
Turkey	4 500	10 000	2 500	12 000	9 000
Ukraine	*20 000	9 000	14 000	21 000	18 000
United Kingdom	363 753	352 466	320 704	351 351	384 112
Yugoslavia, Federal Republic of	6 393	4 458	11 468	30 317	23 632
Algeria	8 600	*10 000	*10 000	7 500	*8 000
Kenya	2 500	1 600	2 000	*2 200	*1 000
Morocco	69 116	60 740	62 363	61 749	64 202
Namibia	31 235	23 813	26 752	18 845	1 530
Nigeria	4 500	3 900	*7 500	*5 000	*5 000
South Africa	31 800	31 600	32 100	32 200	41 500
Zambia	3 100	500	500	400	*500
Zimbabwe	*2 000	*3 000	*3 000	3 400	*2 000
Canada	217 014	251 640	281 391	310 791	270 007
Mexico	239 300	220 700	225 900	210 400	228 200
Trinidad & Tobago	*1 000	*1 600	*1 500	*2 000	*1 000
USA (b)	1 195 500	1 249 000	1 357 900	1 372 000	1 417 100
Argentina	*28 500	*25 400	28 728	28 101	32 116
Brazil (c)	66 700	64 000	79 000	45 000	44 500
Colombia	*3 200	*7 000	*8 000	*10 000	*10 000
Peru	87 198	87 440	89 577	94 324	86 015
Venezuela	15 000	16 000	15 000	16 000	15 600
China	410 300	467 900	607 900	715 500	707 000
India	50 700	60 300	66 000	67 000	59 900
Indonesia	35 000	30 000	*30 000	*30 000	*30 000
Iran	45 000	46 000	45 000	*30 000	*30 000
Israel	7 000	8 000	8 200	8 000	*8 000
Japan	309 452	292 219	287 578	287 373	296 759
Kazakhstan	255 000	150 300	47 024	67 259	81 975
Korea, Dem. P.R. of	*65 000	*50 000	*45 000	*40 000	*30 000
Korea, Republic of	128 000	129 800	180 700	140 800	182 000
Malaysia	29 000	28 800	33 600	36 600	35 900
Myanmar (d)	1 600	1 800	1 862	2 017	782
Pakistan	*3 000	*3 000	*3 000	*3 000	*3 000
Philippines	24 300	17 200	17 200	*18 000	22 000
Saudi Arabia	—	—	6 000	15 500	17 000
Sri Lanka	1 000	1 000	1 000	—	—
Taiwan	15 000	15 000	36 000	40 500	*40 000
Thailand	17 060	16 904	19 070	17 711	20 100
United Arab Emirates	*3 500	4 100	*4 000	4 100	4 000

Production of Refined Lead

Lead

tonnes

Country	1993	1994	1995	1996	1997
Australia	243 000	237 000	241 000	228 000	238 000
New Zealand	3 000	6 000	6 000	6 000	6 000
World Total	5 400 000	5 400 000	5 700 000	5 800 000	6 000 000

Note(s):-

(1) Figures relate to both primary and secondary refined lead and include the lead content of antimonial lead. Metal recovered from materials by remelting alone is excluded

- (a) Including alloys
- (b) Excluding Pb content of primary antimonial lead
- (c) Including scrap for direct use
- (d) Years ended 31 March following that stated

Lead

Exports of Lead

tonnes

Country	1993	1994	1995	1996	1997
Austria					
Unwrought (a)	3 033	4 609	4 597	5 999	5 434
Scrap	1 200	278	260	49	12
Belgium-Luxembourg					
Unwrought	59 605	85 192	71 364	71 416	75 154
Unwrought alloys	13 108	17 480	18 100	33 919	22 434
Scrap	40 103	38 380	44 241	10 284	7 127
Bulgaria					
Unwrought (a)	(f) *15 000	(f) *14 100	59 537	60 324	...
Scrap (f)	*2 800	*2 000	*2 300	*200	*300
Croatia					
Scrap	5 151	...	9 381	4 420	315
Czech Republic					
Unwrought (a)	(f) *7 600	6 260	7 400	10 600	4 858
Denmark					
Unwrought (a)	393	1 138	439	1 203	658
Scrap	14 473	18 316	19 691	2 612	2 009
Finland					
Unwrought	82	15	4	499	2 707
Scrap	10 598	11 357	8 939	11 485	5 735
France					
Unwrought	41 511	61 247	58 341	74 256	58 592
Unwrought alloys	25 809	21 869	29 236	31 479	28 907
Scrap	4 590	5 536	5 437	12 392	6 357
Germany					
Unwrought	40 246	61 375	39 278	31 059	43 068
Unwrought alloys	30 911	25 428	23 007	22 726	29 750
Scrap	22 695	26 809	27 221	13 598	13 866
Greece					
Unwrought (a)	3 915	233	1 554	4 761	2 924
Hungary					
Scrap	11 395	15 774	21 130	18 742	2 215
Irish Republic					
Ores & concentrates	48 622	150 239	93 141	73 440	50 561
Scrap	1 160	2 639	1 709	1 404	123
Italy					
Ore	3 419	4 784	11 014	11 856	9 000
Unwrought	24 096	30 559	10 458	12 768	55 597
Unwrought alloys	3 964	4 703	1 848	3 126	2 737
Scrap	7 050	9 877	3 232	2 268	191
Latvia					
Scrap	1 000	1 400	1 300	(f) *600	(f) *100
Macedonia					
Ores & concentrates	24 094	...	...	...	...
Unwrought (a) (f)	...	*2 600	*3 200	*10 000	*5 300
Netherlands					
Unwrought	8 180	6 098	6 091	10 087	10 708
Unwrought alloys	3 303	629	592	934	62
Scrap	28 458	17 914	28 061	14 621	21 557
Norway					
Ore	109	1 500	—	2 140	6 400
Scrap	9 740	13 207	12 140	10 075	8 122
Poland					
Ores & concentrates	40 510	96 629	47 556	61 305	59 436
Unwrought	13 078	16 486	12 255	18 338	25 603
Unwrought alloys	2 186	3 503	8 138	9 995	...
Scrap	2 286	403	382	222	...
Portugal					
Unwrought (a)	75	...	1 100	2 936	1 279
Scrap	189	3 300	2 700	1 692	714
Russia					
Ores & concentrates	...	23 895	31 447	23 613	32 598
Unwrought (a)	866	1 614	6 636	6 079	5 780
Slovenia					
Unwrought (a)	7 861	7 805	6 400	6 706	9 200

Exports of Lead

Lead

tonnes

Country	1993	1994	1995	1996	1997
Spain					
Ore	42 908	40 589	57 871	41 501	24 727
Unwrought (a)	3 445	5 105	4 489	5 055	767
Scrap	2 054	2 273	3 577	1 734	823
Sweden					
Ore	130 693	107 759	75 946	79 738	75 552
Unwrought	54 083	46 019	40 790	43 932	45 002
Unwrought alloys	8 269	9 291	8 876	7 960	6 225
Scrap	726	1 632	184	420	151
Switzerland					
Unwrought (a)	4 168	3 217	3 860	5 344	6 100
Scrap	16 074	18 586	16 756	9 400	7 002
Turkey					
Ore (e)	1 001	5 317	891	7 220	9 856
United Kingdom					
Unwrought	109 802	96 557	90 685	65 697	85 007
Unwrought alloys	34 333	34 249	43 642	36 958	31 909
Scrap	14 530	11 153	10 878	10 068	10 618
Yugoslavia, Federal Republic of					
Unwrought (a)	...	5 400	(f) *3 300	25 600	18 646
Morocco					
Ore	32 543	55 423	36 905	45 720	...
Unwrought	74 900	56 779	49 787	54 057	51 766
Namibia					
Unwrought	27 956	26 431	22 177	24 416	1 354
South Africa					
Concentrates (b)	87 777	93 716	89 163	86 229	85 836
Unwrought (f)	*2 800	—	—	*600	*500
Tunisia					
Ore	...	2 070	9 928	8 674	...
Scrap	...	499	1 107	2 954	...
Zambia					
Unwrought	200	200	—	...	...
Canada					
Ores & concentrates (b) (g)	93 549	52 514	90 024	179 433	111 703
Unwrought	161 561	177 894	208 977	214 356	208 319
Scrap	3 354	6 361	7 871	9 692	12 973
Honduras					
Ores & concentrates (b)	3 838	2 777	2 461	4 669	5 930
Mexico					
Ores & concentrates	247	—	17 985	16 430	...
Unwrought	103 977	61 435	105 320	82 384	99 700
Scrap	133	113	2 440	3 560	...
USA					
Ores & concentrates (b)	84 266	37 437	88 544	129 789	82 190
of which, re-exports	42 156	—	28 779	69 780	39 721
Unwrought	47 771	45 747	48 540	82 265	70 429
Unwrought alloys	4 881	2 539	2 297	5 647	5 635
Scrap	51 340	81 806	104 352	85 376	89 417
Argentina					
Ores & concentrates	224	7 676	8 468	13 420	15 413
Bolivia					
Ore	38 366	38 220	35 076	31 255	33 388
Peru					
Ores & concentrates	224 313	203 325	232 398	210 149	218 882
Unwrought (a)	73 700	75 700	79 762	84 138	91 286
China					
Ore	28 172	62 910	53 629	14 572	25 681
Unwrought (a)	90 777	191 175	185 284	260 515	184 569
Hong Kong					
Unwrought (a)	2 194	4 487	6 855	7 799	10 848
of which, re-exports	2 194	4 307	6 715	7 415	10 626
Scrap	2 269	706	762	285	93

Lead

Exports of Lead

tonnes

Country	1993	1994	1995	1996	1997
Indonesia					
Unwrought	4 407	(a) 14 400	2 060	1 729	4 832
Unwrought alloys	12 387	...	7 200	13 405	3 340
Iran					
Ore (c)	25 010	153 069	134 050	...	...
Japan					
Unwrought (a)	8 764	1 423	3 492	7 279	5 980
Scrap	8 162	304	1 195	9 562	15 614
Kazakhstan					
Unwrought	31 000	...	58 326	60 979	77 823
Scrap	30 000	...	115	1 650	852
Korea, Dem. P.R. of					
Unwrought (a) (f)	*2 500	*6 100	*6 800	*9 000	*8 100
Korea, Republic of					
Unwrought (a)	20 670	17 013	20 494	10 018	25 563
Malaysia					
Unwrought (a)	3 664	4 858	6 900	2 300	...
Scrap	2 271	2 565	900	700	...
Saudi Arabia					
Scrap	10 900	4 325	11 900	...	...
Singapore					
Unwrought (a)	22 443	29 968	15 305	13 913	23 610
of which, re-exports	21 394	29 738	15 137	13 794	23 610
Scrap	9 719	10 562	10 479	3 787	2 234
of which, re-exports	2 320	598	1 743	151	2 234
Taiwan					
Unwrought	1 260	646	224	1 913	783
Unwrought alloys	340	2 710	7 803	13 600	11 832
Thailand					
Ore	6 800	8 751	17 270	10 000	...
Australia					
Ores & concentrates	192 000	151 000	146 000	165 000	195 000
Unwrought, base bullion (h)	203 000	178 000	167 000	168 000	171 000
Unwrought, refined (a)	166 840	177 000	189 000	169 000	169 000
Scrap	16 100	8 961	20 596	13 457	...
New Zealand					
Unwrought (d)	1 721	1 721	7 070	8 937	9 550
Scrap (d)	698	63	861	456	217

Note(s):-

(1) In this table the term 'unwrought' lead corresponds to item 685.1 of the Standard International Trade Classification (Revision 3) and comprises base bullion, pigs, unwrought bars, etc.

- (a) Including alloys
- (b) Pb content
- (c) Years ended 20 March following that stated
- (d) Years ended 30 June of that stated
- (e) Complex lead-zinc ore
- (f) BGS estimates, based on known imports into certain countries
- (g) Including Pb content of zinc concentrates
- (h) Includes a substantial precious metal content, mainly silver

Imports of Lead

Lead
tonnes

Country	1993	1994	1995	1996	1997
Austria					
Unwrought (a)	40 468	46 791	46 271	40 425	44 295
Scrap	4 937	1 073	7 462	6 395	4 469
Belgium-Luxembourg					
Ore	92 378	114 705	86 998	100 448	62 349
Unwrought	20 353	17 592	20 066	8 803	34 272
Unwrought alloys	8 750	8 463	11 605	20 488	10 669
Scrap	55 958	60 841	53 974	30 432	20 882
Bulgaria					
Ore	...	...	56 462	56 404	60 739
Croatia					
Unwrought (a)	3 561	1 500	2 817	3 391	4 054
Denmark					
Unwrought	2 944	2 368	2 946	3 218	2 692
Unwrought alloys	4 455	4 008	1 270	2 924	2 541
Scrap	1 686	2 748	1 743	1 148	2 620
Estonia					
Ore (f)	*2 800	*5 100	...	...	...
Finland					
Unwrought	3 373	4 169	2 012	1 008	1 286
Unwrought alloys	1 375	1 161	1 570	348	765
France					
Ore	159 369	154 303	195 812	205 016	205 411
Unwrought	26 781	48 736	42 102	47 987	40 095
Unwrought alloys	4 835	5 148	7 295	9 117	11 990
Scrap	81 675	87 501	90 042	35 139	37 609
Germany					
Ore	191 500	123 467	103 231	48 673	60 804
Unwrought	100 711	115 235	133 920	106 964	103 565
Unwrought alloys	15 386	16 799	14 347	19 618	15 482
Scrap	14 194	21 868	14 356	8 707	14 500
Greece					
Unwrought (a)	8 317	6 305	6 669	5 426	6 214
Hungary					
Unwrought & semi-manufactures	14 252	12 839	12 261	13 799	13 876
Irish Republic					
Unwrought (a)	12 833	17 410	17 859	25 502	21 325
Scrap	8 391	9 240	7 978	9 977	6 684
Italy					
Ore	73 509	65 317	66 128	104 483	92 300
Unwrought	51 436	46 103	78 282	75 146	83 682
Unwrought alloys	18 406	16 987	26 884	28 980	21 775
Scrap	764	955	4 467	8 449	7 369
Netherlands					
Unwrought	25 183	34 704	46 536	39 990	44 108
Unwrought alloys	8 556	6 447	10 321	8 253	5 659
Scrap	19 396	13 345	13 251	10 095	10 302
Norway					
Unwrought (a)	3 155	4 569	5 087	4 304	3 146
Poland					
Unwrought (a)	9 253	9 627	5 501	5 536	5 489
Portugal					
Unwrought (a)	19 034	21 465	20 300	18 596	22 934
Russia					
Ore	(f) *34 100	(f) *20 300	...	17 489	...
Slovakia					
Unwrought (a)	1 869	(f) *1 600	(f) *2 000	(f) *800	(f) *800
Slovenia					
Unwrought (a)	10 941	8 107	6 300	8 300	...
Scrap	8 736	11 900	17 500	2 700	...
Spain					
Unwrought	32 846	36 078	43 820	(a) 63 436	67 745
Unwrought alloys	4 801	1 995	985	...	13 315
Scrap	2 960	3 768	5 072	3 532	9 635
Sweden					
Unwrought	4 589	4 862	1 060	7 522	686
Unwrought alloys	979	593	1 327	1 846	1 747
Scrap	32 405	33 800	28 209	11 153	4 717

Lead

Imports of Lead

tonnes

Country	1993	1994	1995	1996	1997
Switzerland					
Unwrought (a)	4 811	5 895	6 077	5 726	6 966
Turkey					
Unwrought (a)	31 517	26 183	35 834	39 058	41 324
Scrap	4 478	523	956	—	18
United Kingdom					
Ores & concentrates (b)	39 764	31 297	45 503	44 654	40 569
Unwrought	221 346	183 631	164 680	183 408	210 837
Unwrought alloys	4 036	2 497	2 218	2 893	1 448
Scrap	10 795	26 889	19 720	8 882	5 120
Algeria					
Unwrought	9 000	6 379	4 000	7 235	...
Egypt					
Unwrought	12 000	6 202	5 800	8 318	...
Morocco					
Ore	12 220	16 369	23 665	29 476	...
Unwrought alloys	494	1 030	1 740	133	...
Namibia					
Concentrates (b)	18 443	5 588	6 872	7 662	—
Nigeria					
Unwrought (a)	*500	*500	*500	*500	...
South Africa					
Ore	5 308	—	5 531	23	37
Unwrought (a)	2 211	4 585	8 330	10 397	20 576
Scrap	...	...	878	1 901	4 688
Tunisia					
Unwrought (a)	2 881	4 113	4 441	5 094	...
Canada					
Ores & concentrates (b) (g)	26 736	40 449	66 996	89 498	53 194
Unwrought	10 890	6 377	4 869	28 151	36 424
Scrap	38 716	67 931	95 705	76 992	85 293
Cuba					
Unwrought	(h) 2 133	*2 700	*2 200	*2 000	...
Mexico					
Ores & concentrates	47 045	20 783	22 922	29 164	...
USA					
Ores & concentrates (b)	72 037	14 702	124 032	369 179	130 667
Unwrought	173 614	208 512	233 026	238 389	237 107
Unwrought alloys	19 632	24 996	33 234	30 217	29 305
Scrap	4 024	7 391	10 343	17 543	16 453
Brazil					
Ore	44 599	26 784	9 498	...	...
Unwrought (a)	47 401	45 033	47 707	33 346	...
Scrap	11 527	3 925	*5 000	*5 000	...
Chile					
Unwrought (a)	3 162	3 189	7 289	6 119	8 666
Colombia					
Unwrought (a)	7 093	4 521	3 481	2 993	...
Scrap	3 770	1 025	1 651	403	...
Uruguay					
Unwrought	665	361	262	269	120
Venezuela					
Unwrought (a)	12 592	7 990	8 778	5 935	...
Scrap	166	16	1 883	2 031	...
China					
Ores & concentrates	6 080	7 990	31 817	69 958	118 330
Unwrought (a)	2 261	5 503	4 583	7 038	6 985
Scrap	7 322	5 793	5 690	820	204
Cyprus					
Unwrought (a)	689	1 145	1 587	2 463	3 002
Hong Kong					
Unwrought (a)	4 190	6 710	8 284	8 459	8 287
Scrap	1 206	172	822	727	77

Imports of Lead

Lead
tonnes

Country	1993	1994	1995	1996	1997
India					
Ore (c)	24 404	32 269	14 625	52 428	...
Unwrought (c)	21 766	28 963	20 837	31 831	...
Unwrought alloys (c)	39	3 096	1 132	1 711	...
Scrap (c)	27 227	48 874	40 882	9 654	...
Indonesia					
Unwrought	34 188	46 010	54 857	59 602	87 847
Unwrought alloys	13 251	16 420	16 100	14 427	3 606
Scrap	19 756	19 975	989	2 507	968
Iran					
Unwrought (d)	8 000	...	...	...	...
Israel					
Unwrought	1 216	(f) *1 000	(f) *1 400	(f) *1 600	(f) *1 600
Japan					
Ore	290 706	234 085	164 819	151 797	154 470
Unwrought	49 901	55 709	79 563	40 066	44 236
Unwrought alloys	15 736	17 219	12 189	11 753	9 210
Kazakhstan					
Ore (b)	183 837	69 000	53 324	28 804	30 348
Korea, Dem. P.R. of					
Unwrought (f)	*60	...	...	*100	*1 000
Korea, Republic of					
Ores & concentrates	67 338	121 078	140 653	96 026	104 468
Unwrought	89 082	105 843	84 001	151 348	137 411
Unwrought alloys	16 389	30 132	64 139	25 952	32 945
Scrap	1 467	1 047	3 194	4 779	4 168
Malaysia					
Unwrought (a)	35 797	45 678	56 900	60 000	...
Scrap	1 580	2 238	800	200	...
Pakistan					
Unwrought (a)	8 388	8 227	6 405	6 589	...
Philippines					
Unwrought (a)	8 922	9 494	2 256	...	...
Scrap	292	95	250	93	...
Singapore					
Unwrought (a)	39 670	25 434	16 616	44 063	27 291
Scrap	4 794	4 778	7 865	3 041	2 047
Taiwan					
Unwrought	86 494	90 493	110 511	105 354	105 778
Unwrought alloys	8 268	6 578	3 393	4 215	8 399
Thailand					
Unwrought	32 724	28 901	30 464	42 961	...
Unwrought alloys	9 081	16 087	13 320	19 015	...
Scrap	5 296	551	680	628	...
Australia					
Ores & concentrates (e)	33 080	...	...	...	...
New Zealand					
Unwrought (a) (e)	2 128	1 640	1 734	...	2 092

Note(s):-

(1) In this table the term 'unwrought' lead corresponds to item 685.1 of the Standard International Trade Classification (Revision 3) 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) BGS estimates, based on known exports from certain countries

(g) Including Pb content of zinc concentrates

(h) Exports from Mexico

Lithium

Production of Lithium Minerals

tonnes

Country	1993	1994	1995	1996	1997
Portugal					
Lepidolite	13 289	11 352	8 740	7 626	6 838
Namibia	739	1 362	2 611	1 971	632
Zimbabwe	18 064	25 279	33 498	30 929	49 833
Canada	*18 900	*20 000	*21 000	*22 000	*22 000
USA (a) (b)	*3 500	*3 500	*3 500	*4 000	*4 000
Argentina	*300	*400	*400	*400	*400
Brazil					
Amblygonite	18	12	29	...	...
Petalite	180	70	137	(d) 556	...
Spodumene	5 293	7 315	7 005	6 369	...
Chile (c)	10 369	10 439	12 943	14 180	24 246
China	44 444	41 511	49 897	40 640	...
Australia					
Spodumene	33 353	61 708	80 135	139 287	56 567
World Total (Li content)	*7 700	*8 200	*9 200	*10 400	*11 700

Note(s):-

(1) In addition to the countries listed, Russia also produces lithium minerals

- (a) Li content
- (b) Mostly spodumene
- (c) Carbonate
- (d) Including amblygonite

Exports of Lithium

tonnes

Country	1993	1994	1995	1996	1997
France					
Carbonate	7	6	532	1 772	2 163
Germany					
Oxides	334	384	554	802	819
Carbonate	993	1 464	2 278	2 978	1 439
Netherlands					
Oxides	200	240	351	...	493
Carbonate	729	705	572	...	634
Russia					
Oxides	331	(a) *800	1 471	710	(a) *780
Carbonate	1 452	(a) *1 800	317	76	(a) *20
Spain					
Lithium minerals	58 745	32 024	—	...	...
Carbonate	1 568	4 755	18	...	231
United Kingdom					
Oxides	160	188	202	171	103
Carbonate	520	361	536	638	342
Namibia					
Lithium minerals	465	1 269	599	323	381
Zimbabwe					
Lithium minerals	15 832	6 458	17 867	30 315	11 223
USA					
Oxides	3 059	3 599	4 105	4 432	5 739
Carbonate	6 274	5 279	6 567	7 883	5 119
Chile					
Carbonate	10 590	10 755	13 089	13 694	21 597
China					
Oxides	1 682	1 474	3 251	1 131	992
Carbonate	1 680	2 193	3 613	3 102	937
Australia					
Lithium minerals (b)	38 144	...	...	...	...

Note(s):-

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

(b) Years ended 30 June of that stated

Lithium

Imports of Lithium

tonnes

Country	1993	1994	1995	1996	1997
Belgium-Luxembourg					
Oxides	230	199	332	154	325
Carbonate	423	519	554	860	2 241
Finland					
Carbonate	21	41	41	68	62
France					
Oxides	276	376	830	512	346
Carbonate	857	978	1 069	1 050	1 026
Germany					
Oxides	1 878	2 334	3 931	4 051	4 975
Carbonate	5 459	6 342	5 120	5 891	7 286
Italy					
Oxides	205	185	...	...	167
Carbonate	1 206	1 062	...	...	1 720
Netherlands					
Oxides	298	255	430	...	171
Carbonate	1 226	923	1 314	...	711
Spain					
Lithium minerals	44	13	—	...	...
Oxides	65	146	183	...	188
Carbonate	270	491	568	...	546
Sweden					
Carbonate	114	98	...	...	280
United Kingdom					
Oxides	1 289	852	645	763	602
Carbonate	1 605	1 410	1 328	1 963	2 070
South Africa					
Oxides	2 227	6 363	6 875	6 094	228
Canada					
Carbonate	1 193	1 201	1 050	1 419	1 109
USA					
Carbonate	4 289	4 499	5 969	4 587	5 090
Venezuela					
Carbonate	678	640	510	...	...
China					
Carbonate	—	0	—	68	1 397
India					
Oxides (b)	530	438	678	672	...
Carbonate (b)	63	122	202	192	...
Japan					
Oxides	997	1 133	1 183	1 538	1 360
Carbonate	3 858	4 466	4 598	5 584	5 927
Korea, Republic of					
Oxides	138	331	276	376	...
Carbonate	798	805	1 044	1 232	1 031
Taiwan					
Carbonate	98	106	119	129	127
Australia					
Oxides (a)	117	...	...	...	...
Carbonate (a)	97	...	...	...	...

Note(s):-

(a) Years ended 30 June of that stated

(b) Years ended 31 March following that stated

Production of Magnesite

tonnes

Country	1993	1994	1995	1996	1997
Austria	648 864	681 335	783 479	710 620	790 297
Bosnia & Herzegovina	*2 000	*2 000	*2 000	*2 000	...
Greece	479 999	575 472	565 720	682 346	*650 000
Poland	13 000	16 400	21 523	19 257	6 403
Russia	*800 000	*700 000	*700 000	*600 000	*600 000
Slovakia	693 200	616 900	814 000	824 800	863 000
Spain	594 460	495 221	635 000	*640 000	...
Turkey	629 000	1 365 527	1 928 064	2 341 922	1 119 103
Yugoslavia, Federal Republic of	55 000	67 635	75 000	88 696	98 384
Egypt (d)	590	282	11 258	12 627	7 536
South Africa	67 403	71 726	84 639	71 358	*76 000
Zimbabwe	6 276	1 588	5 597	10 659	13 050
Canada (b)	164 922	*165 000	*165 000	*165 000	*165 000
Brazil (c)	243 809	293 678	334 000	300 446	290 400
Colombia	9 816	10 747	*10 000	*10 000	*10 000
China	1 229 200	943 200	605 900	1 041 400	...
India	408 971	336 735	334 710	373 000	375 000
Iran (a)	49 424	46 782	78 654	110 554	...
Korea, Dem. P.R. of	*1 600 000	*1 600 000	*1 600 000	*1 600 000	*1 600 000
Pakistan (d)	4 997	6 005	4 733	13 876	4 057
Philippines	*700	*700	*700	*700	*700
Australia	263 907	288 501	262 932	237 707	245 127
World Total	8 000 000	8 300 000	9 000 000	9 900 000	8 700 000

Note(s):-

(1) In addition to the countries listed, Bulgaria, Kenya, New Caledonia and USA are believed to produce magnesite

- (a) Years ended 20 March following that stated
(b) Officially described as magnesitic dolomite and brucite
(c) Including beneficiated and directly shipped material
(d) Years ended 30 June of that stated

Exports of Magnesite and Magnesias

tonnes

Country	1993	1994	1995	1996	1997
Austria					
Magnesite	98	287	*300	...	89
Magnesia	99 519	101 319	105 596	94 754	132 283
Belgium-Luxembourg					
Magnesite	2 100	585	472	486	212
Magnesia	41 570	40 361	40 026	41 797	64 508
Czech Republic (a)	*6 000	*3 200	*2 000	*4 000	*2 200
France					
Magnesite	6 035	51	152	84	73
Magnesia	9 929	16 991	14 964	22 316	20 926
Germany					
Magnesite	1 261	2 172	2 049	3 391	1 211
Magnesia	53 080	58 996	73 859	69 347	70 206
Greece					
Magnesite	1 261	18 718	19 241	21 023	13 728
Magnesia	150 503	177 422	186 731	158 423	168 398
Irish Republic	59 907	26 011	722	584	3 696
Italy					
Magnesite	6 465	3 442	3 757	4 836	12 653
Magnesia	68 680	58 661	87 003	71 531	37 841
Netherlands					
Magnesite	1 660	744	4 779	10 980	10 413
Magnesia	27 871	51 801	79 542	80 215	319 723
Norway					
Magnesite	8	3	575	3	...
Magnesia	3 099	3 377	3 701	3 501	...
Russia					
Magnesite	*250 000	278 000	319 900	267 300	...
Slovakia					
Magnesite	...	500	700	...	...
Magnesia	*80 000	157 800	249 500	249 100	236 700
Spain					
Magnesite	235	2 705	36 600	1 385	...
Magnesia	79 165	110 793	133 644	132 013	136 560
Sweden					
Magnesite	94	103	752	12	7
Magnesia	71	154	3 438	320	152
Turkey					
Magnesite	31 213	53 460	75 748	37 206	27 115
Magnesia	113 996	138 838	144 083	124 944	165 794
United Kingdom					
Magnesite	120	119	311	340	175
Magnesia	70 465	42 923	63 083	64 564	58 774
Yugoslavia, Federal Republic of					
Magnesia	*3 000	*5 000	*7 000	9 600	6 428
South Africa	(a) *1 000	(a) *300	140	411	...
Zimbabwe	3 723	605	7 816	6 389	501
Canada					
Magnesia	59 862	56 714	61 586	54 250	54 167
Mexico					
Magnesia	58 681	53 655	49 683	39 422	...
USA					
Magnesite	7 409	9 259	31 901	33 192	51 797
Magnesia	89 337	78 831	96 769	111 038	102 628
Brazil					
Magnesia	76 683	93 041	141 515	93 781	92 062
China					
Magnesite	33 283	123 042	124 173	206 576	166 536
Magnesia	2 127 287	1 935 301	2 185 767	1 724 195	2 122 125
Hong Kong (c)	9 331	10 212	15 444	13 076	8 495
India					
Magnesite (b)	501	460	201	830	...
Magnesia (b)	2 488	2 342	665	1 397	...

Exports of Magnesite and Magnesia

tonnes

Country	1993	1994	1995	1996	1997
Israel					
Magnesia	33 643	26 594	*11 000	(a) *14 300	...
Japan					
Magnesite	469	397	358	393	418
Magnesia	75 349	60 069	64 366	59 725	55 350
Korea, Dem. P.R. of (a)	*126 900	*90 300	*106 000	*94 500	*102 000
Singapore	2 903	2 516	873	655	987
of which, re-exports	785	271	219	130	183
Taiwan					
Magnesia	329	1 270	2 215	2 600	2 553
Australia					
Magnesite (d)	480	...	666	155	650
Magnesia (d)	78 431	74 608	94 911	73 540	75 426

Note(s):-

(1) The term 'magnesia', as used here, includes dead-burned, sintered and caustic-burned (caustic calcined) material

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

(b) Years ended 31 March following that stated

(c) Re-exports

(d) Years ended 30 June of that stated

Imports of Magnesite and Magnesite

tonnes

Country	1993	1994	1995	1996	1997
Austria					
Magnesite	261	686	199 100	132 700	176 566
Magnesia	149 103	174 538	41 300	29 900	49 691
Belgium-Luxembourg					
Magnesite	804	6 368	1 557	1 111	1 274
Magnesia	108 866	84 886	68 293	74 701	68 013
Bulgaria	(b) *3 200	...	9 332	11 313	8 753
Croatia	940	*1 000	802	688	677
Czech Republic					
Magnesite	12 800	8 500	7 500	2 300	972
Magnesia	50 100	47 700	48 500	40 200	41 237
Denmark					
Magnesite	5 213	5 807	4 101	1 074	1 143
Magnesia	15 206	11 022	7 842	4 809	7 045
Finland					
Magnesite	4 144	4 255	71	12	18
Magnesia	3 575	4 966	3 973	12 653	8 032
France					
Magnesite	633	3 121	2 671	4 080	7 544
Magnesia	145 343	193 556	217 764	192 423	186 512
Germany					
Magnesite	6 721	10 434	16 838	26 105	10 547
Magnesia	469 428	519 967	568 632	523 866	496 025
Greece					
Magnesite	15 252	32 473	18 529	11 032	1 508
Magnesia	951	1 284	273	1 420	381
Hungary					
Magnesia	2 254	546	314	338	168
Irish Republic					
Magnesite	117	226	240	337	232
Magnesia	25 623	37 335	44 762	47 152	42 419
Italy					
Magnesite	31 113	23 128	28 933	27 136	21 130
Magnesia	101 189	105 643	121 808	103 752	121 772
Macedonia					
Magnesia (b)	*300	*7 300	*1 600	...	...
Netherlands					
Magnesite	2 573	2 732	2 890	5 136	1 823
Magnesia	121 489	61 452	67 811	129 955	67 510
Norway					
Magnesite	1 541	678	1 700	243	187
Magnesia	4 123	6 710	3 815	4 833	5 833
Poland					
Magnesite	78 100	89 700	103 200	95 100	...
Magnesia	15 743	10 865	15 826	...	...
Portugal					
Magnesite	1 001	1 500	1 800	1 590	2 530
Magnesia	3 598	3 000	3 500	2 850	2 699
Romania	32 041	20 069	29 264	37 842	28 322
Russia	35 493	(b) *48 300	322 408	267 275	...
Slovakia	(b) *13 300	22 000	15 600	20 500	...
Spain					
Magnesite	739	960	1 974	3 098	7 683
Magnesia	120 386	203 489	96 302	82 845	89 628
Sweden					
Magnesite	17 483	18 907	394	145	52
Magnesia	20 170	20 242	36 013	32 622	24 478
Switzerland					
Magnesite	382	682	346	619	289
Magnesia	4 954	4 922	4 762	3 606	4 001
Turkey					
Magnesia	7 794	11 965	21 984	15 654	19 627
Ukraine (b)	*331 600	*52 900	*38 900	*70 500	*170 800
United Kingdom					
Magnesite	25 425	38 364	21 849	17 600	11 190
Magnesia	117 895	146 001	155 566	155 458	153 388

Imports of Magnesite and Magnesite

tonnes

Country	1993	1994	1995	1996	1997
Yugoslavia, Federal Republic of					
Magnesite	*5 000	*3 000	*4 000	6 500	5 468
Magnesia	*2 000	*1 000	*1 000	5 300	...
Egypt	14 785	45 800	29 700	27 774	...
South Africa					
Magnesite	6 456	2 546	6 800	6 737	1 971
Magnesia	128 130	130 819	125 853	85 974	70 118
Tunisia					
Magnesia	700	439	412	321	...
Canada					
Magnesite	67 689	80 202	158 313	220 375	190 355
Magnesia	86 315	95 180	102 553	130 375	84 378
Mexico					
Magnesite	2 229	1 547	712	1 177	...
Magnesia	32 875	30 917	33 600	50 613	...
USA					
Magnesite	332	326	13 605	9 185	10 863
Magnesia	424 209	474 976	543 971	397 203	446 748
Argentina					
Magnesia	19 075	27 606	25 141	21 015	...
Brazil					
Magnesia	3 453	16 550	7 048	12 766	...
Chile					
Magnesia	10 624	12 979	11 481	15 235	13 201
Colombia	3 469	10 701	6 675	7 032	...
Peru					
Magnesia	1 871	4 522	4 633	4 181	...
Venezuela					
Magnesite	26 714	28 445	26 617	18 525	...
Magnesia	30 059	30 524	30 284	26 717	...
Hong Kong	14 946	21 747	9 807	7 092	3 329
India					
Magnesite (c)	2 290	6 199	2 876	2 070	...
Magnesia (c)	72 503	189 786	115 097	64 883	...
Indonesia					
Magnesite	3 002	3 642	312	567	313
Magnesia	30 380	33 354	52 491	34 138	30 012
Israel (b)	*2 200	*1 400	*1 900	...	...
Japan					
Magnesite	8 544	12 400	14 469	6 129	2 738
Magnesia	466 224	532 354	593 617	506 740	577 942
Korea, Republic of					
Magnesite	491	312	1 900	466	5 088
Magnesia	137 353	147 354	174 478	182 780	186 167
Malaysia					
Magnesite	26 949	12 279	12 300	12 000	...
Pakistan					
Magnesite	59	65	139	110	...
Magnesia	945	810	939	661	...
Philippines					
Magnesite	10 721	5 733	10 721	6 033	...
Magnesia	5 808	8 400	4 288	8 583	...
Singapore	30 405	14 442	13 068	12 006	13 649
Taiwan					
Magnesite	154	363	681	6 584	703
Magnesia	99 164	96 048	158 116	146 904	194 721
Thailand					
Magnesite	23 297	21 763	32 140	24 156	...
Magnesia	5 639	5 843	6 601	5 175	...

Imports of Magnesite and Magnesite

tonnes

Country	1993	1994	1995	1996	1997
Australia					
Magnesite (a)	9 973	5 185	2 105	1 150	970
Magnesia (a)	7 395	3 942	3 876	8 502	7 448
New Zealand					
Magnesite (a)	443	1 049	1 265	...	2 089
Magnesia (a)	23 117	26 244	28 168	...	25 928

Note(s):-

(1) The term 'magnesite', as used here, includes dead-burned, sintered and caustic-burned (caustic calcined) material

(a) Years ended 30 June of that stated

(b) BGS estimates, based on known exports from certain countries

(c) Years ended 31 March following that stated

Production of Manganese Ore

tonnes

Country	1993	1994	1995	1996	1997
Austria (a)	26 890	31 288	42 463	26 000	...
Bosnia & Herzegovina	*2 000	*2 000	*2 000	*2 000	...
Bulgaria	15 500	*11 500	19 000	44 270	47 430
Georgia (f)	36 800	29 300	41 900	101 900	14 200
Greece	2 082	1 960	2 130	2 572	...
Hungary	59 000	67 230	56 360	65 016	57 000
Italy	8 176	7 472	6 448	6 523	...
Romania	125 000	137 000	130 000	*150 000	...
Turkey	37 491	34 500	37 000	37 500	37 500
Ukraine	10 200 000	7 800 000	7 500 000	7 400 000	7 400 000
Gabon	1 264 000	1 435 000	1 930 000	1 983 000	*1 900 000
Ghana	361 700	269 200	205 200	447 900	332 443
Morocco	42 585	31 452	31 263	29 466	28 845
Namibia	—	30 000	100 000	92 647	39 671
South Africa					
Metallurgical	2 439 501	2 825 082	3 150 688	3 240 069	3 087 775
Chemical	67 188	50 216	47 881	(e) ...	32 886
Mexico	305 300	240 200	370 200	456 300	507 400
Brazil (b)	2 012 144	2 440 991	2 613 477	*2 400 000	*2 200 000
Chile	62 989	62 870	70 449	62 887	63 673
China	7 301 000	5 787 000	8 010 700	7 663 300	*7 000 000
India (c)	1 655 000	1 632 000	1 764 000	1 797 000	*1 800 000
Indonesia	*14 000	*14 000	*19 000	*19 000	...
Iran (d)	75 987	96 115	99 332	82 694	...
Kazakhstan	...	452 000	492 000	472 900	426 100
Malaysia	—	—	27 000	13 000	...
Thailand	6 455	6 452	3 478	3 095	...
Australia	2 092 000	1 985 000	2 177 000	2 109 000	2 136 000
World Total	28 700 000	25 500 000	28 900 000	28 700 000	27 400 000

Note(s):-

(1) In addition to the countries listed, Colombia, Cuba and Vietnam are believed to produce manganese ore

(a) Mn content of domestic iron ore

(b) Including beneficiated and direct shipping ore

(c) Including ore grading 54% to less than 35% Mn

(d) Years ended 20 March following that stated

(e) Included with metallurgical grade ore

(f) Marketable

Manganese

Exports of Manganese

tonnes

Country	1993	1994	1995	1996	1997
Belgium-Luxembourg					
Ore	7 924	8 304	14 298	20 196	20 899
Metal	2 021	2 372	2 075	2 217	2 489
Bulgaria					
Ore	18 300	...	35 306	39 508	29 034
France					
Ore (a)	96 428	138 497	133 661	160 742	107 499
Metal	8 060	1 773	1 159	777	811
Germany					
Ore (a)	36 531	12 587	202	430	738
Metal	3 520	5 666	8 488	6 798	8 859
Netherlands					
Ore	37 710	28 901	14 455	19 065	14 660
Metal	8 139	7 842	8 906	5 543	3 560
Norway					
Ore	5 795	—	—	—	3
Metal	68	653	949	116	68
Russia					
Metal (e)	*1 300	*1 400	*600	*1 600	*800
Spain					
Metal	37	31	339	1 563	2 347
Sweden					
Metal	59	304	237	...	145
Turkey					
Ore	—	3 004	32	12	181
Ukraine					
Ore	...	(e) *122 700	183 956	201 621	232 767
Metal (e)	*2 200	*3 400	*6 800	*5 800	*4 700
United Kingdom					
Metal	*2 400	*2 300	*2 500	*2 400	*3 400
Gabon					
Ore	1 665 000	1 690 000	1 852 000	1 977 000	...
Ghana					
Ore	309 122	245 256	193 096	266 440	...
Morocco					
Ore	35 129	30 433	27 916	28 770	32 458
Namibia					
Ore	—	—	83 913	92 647	34 400
South Africa					
Ore	1 243 817	1 290 870	1 589 226	1 648 053	1 772 801
Metal (e)	...	*18 700	*34 900	*23 300	*19 300
Mexico					
Ore	66 490	31 580	144 361	57 629	...
USA					
Ore	15 202	13 862	17 808	32 324	84 294
Metal	4 066	5 024	5 805	5 843	8 005
Brazil					
Ore	750 785	906 503	1 245 054	987 877	981 810
China					
Ore	5 373	3 801	3 292	4 191	579
Metal	34 517	54 461	57 293	49 934	63 471
Hong Kong					
Metal (c)	2 422	967	339	279	121
India					
Ore (b) (d)	286 450	276 598	236 529	309 846	...
Indonesia					
Ore (a)	—	0	—	13 043	8 500
Japan					
Metal	...	148	176	532	485
Singapore					
Ore	8 742	13 100	13 863	6 422	17 218
of which, re-exports	1 126	2 084	3 856	4 972	3 952

Exports of Manganese

tonnes

Country	1993	1994	1995	1996	1997
Australia Ore	*1 720 000	*1 550 000	*1 704 000	*1 740 000	*1 541 000

Note(s):-

(1) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

- (a) Including manganiferous iron ore
- (b) Including ferruginous manganese ore
- (c) Re-exports
- (d) Years ended 31 March following that stated
- (e) BGS estimates, based on known imports into certain countries

Manganese

Imports of Manganese

tonnes

Country	1993	1994	1995	1996	1997
Austria					
Metal	239	841	1 395	1 706	1 882
Belgium-Luxembourg					
Ore	106 689	138 836	94 326	164 657	139 130
Metal	3 982	3 065	3 896	4 014	4 076
Bulgaria					
Ore	3 700	...	1 055	967	1 918
Croatia					
Ore	29 766	3 933	...	21	2
Metal	264	...	65	72	54
Czech Republic					
Ore	13 000	13 000	47 000	19 000	18 231
Denmark					
Ore	107	168	132	218	500
Metal	38	107	61	55	31
Finland					
Ore	25 626	19 603	15 873	9 424	24 339
Metal	142	146	157	98	140
France					
Ore (b)	816 364	946 617	1 274 390	1 111 060	998 570
Metal	4 518	6 764	6 712	5 897	6 352
Germany					
Ore (b)	101 070	10 926	11 355	12 717	26 234
Metal	13 215	16 764	24 898	18 666	18 324
Greece					
Ore	80	11 085	23 720	12 720	27 130
Metal	914	2 224	378	392	399
Irish Republic					
Ore (b)	35 381	31 206	25 443	39 259	47 339
Italy					
Ore (b)	165 897	202 210	327 145	201 200	166 266
Metal	2 729	3 202	3 941	3 445	2 665
Macedonia					
Ore	(b) 43 808	45 000	*45 000	*45 000	...
Netherlands					
Ore	25 638	17 729	29 708	25 792	18 057
Metal	3 688	9 115	10 693	9 232	6 128
Norway					
Ore	652 774	674 952	734 973	676 573	730 758
Metal	1 242	1 363	1 949	1 540	1 648
Poland					
Ore	201 909	267 556	166 359	200 200	...
Portugal					
Ore (c)	3 225	647	500	345	768
Romania					
Ore	5 759	126 370	189 671	197 862	98 943
Slovakia					
Ore	103 856	195 929	80 197	120 870	113 852
Spain					
Ore	221 544	347 650	318 091	402 092	275 957
Metal	1 058	1 848	1 932	2 054	4 101
Sweden					
Ore	8 544	1 267	4 459	172	93
Metal	2 285	2 883	2 305	2 299	2 669
Switzerland					
Metal	391	466	539	633	627
Turkey					
Ore	721	558	137	77	10
United Kingdom					
Ore (b)	49 073	8 037	91 991	40 306	71 233
Metal	4 346	5 730	6 365	7 477	7 225
Cameroon					
Ore	*1 000	*900	1 500	1 900	...
Egypt					
Ore	13 000	817	1 000	12 617	...
Kenya					
Ore (b)	1 184	1 651	2 709	414	1 660

Imports of Manganese

tonnes

Country	1993	1994	1995	1996	1997
South Africa					
Ore	6 523	6 780	5 900	5 180	14 797
Canada					
Ore (a)	7 609	6 285	9 603	6 736	3 974
Metal	4 140	5 889	4 932	4 853	5 087
Mexico					
Ore	45 409	47 555	76 727	62 773	...
USA					
Ore	228 308	330 527	394 048	461 525	356 903
Metal	15 192	20 339	11 048	11 750	15 062
Argentina					
Ore	38 543	67 352	77 225	63 615	74 093
Brazil					
Metal	2 269	2 864	3 008	*3 200	...
Colombia					
Ore	17 242	10 161	1 683	12 492	...
Venezuela					
Ore	64 076	87 719	112 520	109 000	...
China					
Ore	568 029	962 215	1 289 870	1 585 287	1 316 784
Metal	212	63	337	278	532
Hong Kong					
Ore	1 178	460	430	34	170
Metal	2 708	1 004	514	399	319
India					
Ore (e)	2 241	3 607	3 689	2 760	...
Metal (e)	1 500	2 119	1 380	1 333	...
Indonesia					
Ore (b)	5 009	14 756	31 752	13 052	15 488
Israel					
Ore (d)	*2 500	*1 400	*1 300	...	...
Japan					
Ore (b)	1 350 768	1 199 398	1 272 977	1 261 623	1 363 516
Metal	24 512	28 012	33 827	36 846	40 565
Korea, Dem. P.R. of					
Ore (d)	*30 500	*700	*400	...	...
Korea, Republic of					
Ore	406 125	457 636	500 999	392 179	482 797
Metal	1 830	1 929	3 243	2 650	3 337
Malaysia					
Ore	1 209	861	900	700	...
Pakistan					
Ore	20	22 331	21 996	28 390	...
Philippines					
Ore (b)	4 335	5 029	4 617	15 362	...
Saudi Arabia					
Ore	4 526	24 139	25 955	48 586	...
Singapore					
Ore	26 620	53 823	50 676	37 861	...
Taiwan					
Ore	62 469	52 734	72 570	62 305	65 971
Metal	496	591	548	440	590
Australia					
Metal	2 000	1 900	2 400	1 200	...

Note(s):-

(1) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

(a) Mn content

(b) Including manganiferous iron ore

(c) Including ferruginous manganese ore

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

(e) Years ended 31 March following that stated

Mercury

Production of Mercury

kilograms

Country	1993	1994	1995	1996	1997
Finland	100 824	83 065	90 245	88 120	63 000
Spain	660 882	392 265	1 504 821	861 825	413 000
Ukraine	*40 000	*50 000	*40 000	*30 000	—
Algeria	459 195	448 569	295 148	368 081	447 258
Mexico	12 000	11 000	*15 000	*15 000	*15 000
USA	*29 000	*15 000	*15 000	*15 000	*15 000
Chile (a) (b)	127 000	70 000	9 000	5 000	4 000
China	554 000	467 000	779 000	508 000	*600 000
Kyrgyzstan	*350 000	379 000	380 000	584 000	611 000
Tajikistan	*80 000	*55 000	*50 000	*45 000	*45 000
World Total	2 400 000	2 000 000	3 200 000	2 500 000	2 200 000

Note(s):-

(1) Several countries are believed to have unrecorded production of mercury from copper electrowinning processes

(a) From copper solvent extraction and electrowinning processes

(b) Exports

Exports of Mercury

kilograms

Country	1993	1994	1995	1996	1997
Austria	500	1 400	800	1 000	8 400
Belgium-Luxembourg	3 400	9 400	13 000	34 000	10 400
Denmark	2 500	200	4 700	100	4 414
Finland	228 000	171 000	141 000	85 000	138 780
France	38 000	19 800	11 000	114 000	15 900
Germany	66 700	133 500	116 300	99 500	95 600
Irish Republic	8 400	200	—	—	222
Italy	150 000	29 400	29 000	58 000	43 773
Netherlands	96 000	69 000	256 000	250 000	580 000
Norway	5 000	2 000	...	...	52 647
Poland	26 000	0	8 000	4 000	...
Russia (a)	*25 800	*163 900	*926 000	*345 900	...
Slovenia	1 000	...	...	6 289	673
Spain	1 170 000	531 000	677 000	549 000	594 295
Sweden	2 000	26 000	1 000	1 000	...
Switzerland	4 767	15 096	18 783	3 507	6 908
Ukraine (a)	...	*41 400	*23 000	...	...
United Kingdom	199 166	246 069	224 168	109 770	16 628
Canada	35 614	5 162	107 394	137 065	4 264
USA	887 744	354 702	178 905	64 097	133 794
Chile	126 953	70 077	9 075	4 761	4 244
China	53 423	47 690	32 889	16 579	15 749
Hong Kong (b)	309 048	1 012 158	1 577 054	389 353	710 230
Japan	6 482	18 576	1 638	44 606	6 213
Kyrgyzstan	(a) *2 000	(a) *105 900	261 000	628 000	(a) *359 000
Singapore	39 041	3 471	2 467	1 147	1 752
of which, re-exports	39 041	3 210	2 467	1 147	1 677
Taiwan	21 555	36 858	18 231	9 599	36 381

Note(s):-

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

(b) Re-exports

Mercury

Imports of Mercury

kilograms

Country	1993	1994	1995	1996	1997
Austria	800	2 400	3 000	1 100	9 900
Belgium-Luxembourg	50 300	74 600	37 000	52 000	70 000
Denmark	3 800	5 100	1 900	1 100	1 405
France	183 000	53 400	96 000	65 000	23 100
Germany	96 500	73 400	133 500	90 000	77 700
Greece	2 000	3 000	3 000	4 000	5 000
Hungary	17 000	7 000	4 000	5 000	...
Irish Republic	30 590	30 800	5 300	1 600	122
Italy	11 100	6 400	52 000	19 000	29 194
Netherlands	191 000	381 000	465 000	1 041 000	495 000
Norway	21 000	3 000	7 000	3 000	304
Poland	5 000	...	12 000	4 000	...
Portugal	1 400	...	...	—	8 126
Romania	153 000	121 000	147 000	98 000	1 000
Slovenia	2 000	2 026	...	146	—
Spain	356 000	249 000	11 000	299 000	148 980
Sweden	5 000	5 000	5 000	26 000	38 000
Switzerland	11 952	8 366	19 810	13 185	28 231
Turkey	3 631	22 105	15 764	31 638	41 853
United Kingdom	14 995	5 140	4 950	4 046	44 387
Yugoslavia, Federal Republic of	...	...	...	...	12 000
South Africa	37 406	53 342	63 573	...	...
Canada	8 751	5 625	6 179	5 429	7 116
Mexico	46 731	37 430	9 852	7 726	...
USA	39 943	128 678	377 053	339 814	163 535
Argentina	...	116 000	52 000	15 000	...
Brazil	158 000	76 000	55 000	...	...
Chile	5 646	14 430	8 778	9 788	5 064
Colombia	12 000	44 000	52 000	88 000	...
Ecuador	7 000	14 000	8 000	18 000	...
Peru	28 000	73 000	31 000	26 000	...
Uruguay	—	3 500	3 200	1 000	—
Venezuela	20 872	1 707	8 607	924	...
Bangladesh (c)	8 000	...	...	...	...
China	344 178	909 156	799 940	29 061	481 285
Hong Kong	472 246	1 385 149	1 976 586	434 299	772 866
India (b)	305 039	292 295	428 473	253 738	...
Indonesia	218 699	8 056	12 811	5 151	26 771
Israel (a)	*1 000	...	*3 000	...	...
Japan	12 169	6 257	13 847	8 639	13 812
Korea, Dem. P.R. of (a)	*2 000	...	...	...	...
Korea, Republic of	33 414	34 368	26 000	39 996	36 808
Malaysia	10 340	8 140	...	...	...
Pakistan	37 000	30 000	55 000	57 000	...
Philippines	67 681	157 354	203 503	118 107	...
Singapore	49 710	104 546	45 426	62 458	93 142
Sri Lanka	173 269	5 037	183	1 435	22 148
Taiwan	3 789	15 625	6 002	9 384	9 528
Thailand	87 497	62 565	13 145	30 405	...
Australia (c)	59 183	...	...	...	...

Note(s):-

(a) BGS estimates, based on known exports from certain countries

(b) Years ended 31 March following that stated

(c) Years ended 30 June of that stated

Production of Mica

tonnes

Country	1993	1994	1995	1996	1997
France (e)	*12 000	*10 000	*10 000	*10 000	*10 000
Norway (b)	*4 300	*4 400	*5 000	*3 600	*3 900
Russia	129 000	*100 000	*100 000	*100 000	*100 000
Spain (e)	1 840	10 500	12 623	10 747	...
Yugoslavia, Federal Republic of	68	—	—	16 596	...
Madagascar	880	356	431	*450	*450
South Africa	1 991	1 959	2 137	1 515	1 423
Zimbabwe	510	213	1 040	42	30
Canada	*22 000	*25 000	*23 000	*23 000	*23 000
Mexico	6 437	5 753	5 028	4 273	975
USA (d) (e)	87 931	109 000	108 000	96 600	114 000
Argentina	1 946	1 824	5 041	2 137	*2 200
Brazil	*7 000	*6 700	*5 200	*7 000	*7 000
China (c)	*25 500	*33 000	*44 200	*42 200	...
India	3 269	2 774	2 741	3 307	*3 400
Iran (f)	1 224	1 360	3 894	5 444	...
Korea, Republic of (a)	*7 500	37 470	43 709	35 923	34 489
Malaysia (g)	4 659	4 993	5 848	5 501	5 708
Sri Lanka	...	3 000	6 350	2 400	3 500
Taiwan	9 751	5 220	9 792	8 511	7 806
Australia	1 014	1 032	...	1 015	...
World Total	329 000	400 000	400 000	400 000	400 000

Note(s):-

(1) In addition to the countries listed, Namibia, Pakistan and Romania are believed to produce mica

(a) Includes sericite

(b) Crude only

(c) Conservative BGS estimates, based on exports

(d) Sold or used by producers

(e) Including mica recovered from mica schists and/or kaolin beneficiation

(f) Years ended 20 March following that stated

(g) Sericite

Mica

Exports of Mica

tonnes

Country	1993	1994	1995	1996	1997
Austria	1 326	3 807	2 919	2 500	2 870
Belgium-Luxembourg	185	3 249	87	—	—
Finland	3 971	5 135	4 381	4 328	4 576
France	8 768	9 166	10 063	9 383	10 593
Germany	1 864	1 927	2 189	1 855	1 972
Italy	205	191	1 395	158	316
Netherlands	1 749	2 206	1 632	807	1 527
Norway	2 165	2 213	2 486	1 795	1 942
Spain	1 481	1 316	1 141	1 218	1 028
Sweden	76	730	443	112	113
Turkey	138	129	83	95	365
United Kingdom					
Unmanufactured	167	40	5	1 568	78
Ground	8 389	6 507	5 560	5 001	5 056
Waste	44	126	88	209	270
Madagascar	*900	*350	*430	*450	...
South Africa	852	918	852	488	387
Zimbabwe	1 835	531	979	787	723
Canada	15 745	19 081	16 804	17 297	15 560
USA					
Unmanufactured	628	924	1 170	2 160	2 404
Ground	4 715	6 058	6 689	6 368	6 476
Brazil	3 236	4 162	1 683	...	...
China	25 405	32 753	44 196	42 222	47 542
Hong Kong (a)	768	569	1 070	583	116
India					
Block (b)	245	324	233	648	...
Splittings (b)	1 318	1 005	1 000	1 290	...
Condenser films (b)	17	21	65	3 365	...
Ground (b)	27 393	25 317	27 387	19 687	...
Waste (b)	4 430	2 816	4 686	3 604	...
Japan	730	785	829	910	915
Malaysia	5 008	6 120	5 745	5 785	...
Singapore	505	466	1 472	1 400	501
of which, re-exports	388	448	1 439	1 372	471
Sri Lanka	1 698	1 468	1 760	2 569	3 051
Taiwan	159	132	261	914	636

Note(s):-

(1) This table shows unmanufactured mica and includes sheet, block, splittings, ground and waste, unless these are separately specified.
Mica powder is included under the term 'ground'

(a) Re-exports

(b) Years ended 31 March following that stated

Imports of Mica

Mica

tonnes

Country	1993	1994	1995	1996	1997
Austria	242	293	356	282	597
Belgium-Luxembourg					
Ground	2 004	2 302	1 374	—	...
Denmark	95	152	137	251	353
Finland	1 022	769	703	675	1 002
France					
Ground	1 602	(c) 2 798	(c) 1 811	(c) 1 190	(c) 1 161
Waste	3 300	2 388	2 851	3 305	3 044
Germany					
Unmanufactured	2 278	3 243	1 289	904	868
Ground	12 550	13 606	22 387	23 447	22 661
Greece	374	172	226	110	129
Irish Republic	212	335	397	6 808	864
Italy					
Unmanufactured	159	97	(a) 11 117	...	290
Ground	1 434	2 051	...	2 201	2 259
Netherlands	2 510	2 092	1 943	4 284	3 199
Norway					
Unmanufactured	173	2 425	949	175	256
Waste	1 420	22	1 299	2 378	3 019
Poland	1 266	655	665	741	...
Portugal	79	...	...	129	45
Spain	1 863	2 214	2 421	1 880	2 314
Sweden	548	1 022	910	723	862
Switzerland	275	364	447	286	307
Turkey	81	86	341	408	129
United Kingdom					
Unmanufactured	129	117	200	179	12
Ground	4 308	3 918	5 905	6 367	9 036
Waste	12 844	11 175	10 716	9 532	8 342
South Africa	1 513	994	759	611	...
Canada	2 196	3 095	3 750	4 188	4 058
Jamaica	178	208	233	224	...
Mexico	1 046	1 696	1 200	984	...
USA					
Block	184	78	129	102	47
Splittings	2 625	962	3 064	4 998	3 967
Ground	13 147	16 318	14 175	13 563	12 959
Other unmanufactured	4 911	6 442	7 616	4 979	10 380
Colombia	152	261	207	177	...
Venezuela	286	238	396	939	...
Hong Kong	517	633	109	2 164	131
Indonesia	613	882	730	1 446	1 367
Iran (d)	40	470	388	...	...
Japan					
Unmanufactured	10 316	11 570	7 296	5 882	6 529
Ground	19 609	23 771	32 708	39 097	40 481
Waste	4 646	1 546	3 903	4 819	2 695
Korea, Republic of	3 036	4 216	6 535	6 166	7 675
Malaysia	536	435	585	1 690	...
Philippines	335	253	168	310	...
Saudi Arabia	1 051	1 035	209	1 075	...
Singapore	1 491	1 542	1 402	1 574	1 684
Taiwan					
Unmanufactured	238	211	214	414	448
Ground	946	1 128	1 457	1 414	1 901
Thailand	641	819	894	1 053	...

Mica

Imports of Mica

tonnes

Country	1993	1994	1995	1996	1997
Australia (b)	1 377	...	...	...	...
New Zealand (b)	£199 000	£252 000	£181 000	...	£209 000

Note(s):-

(1) This table shows unmanufactured mica and includes sheet, block, splittings, ground and waste, unless these are separately specified.
Mica powder is included under the term 'ground'

- (a) Including ground
- (b) Years ended 30 June of that stated
- (c) Including unmanufactured
- (d) Years ended 20 March following that stated

Mine Production of Molybdenum

tonnes (metal content)

Country	1993	1994	1995	1996	1997
Armenia	*500	*500	*500	*500	*500
Bulgaria	*200	*200	*400	*400	*400
Russia	5 700	4 300	4 400	4 800	4 800
Turkey	*1 300	1 300	400	1 200	1 500
Niger	*10	—	—	—	—
Canada	9 699	9 188	9 522	8 097	7 990
Mexico	1 705	2 613	3 883	4 211	4 842
USA	36 803	46 800	60 900	54 900	60 900
Chile	14 899	16 028	17 889	17 415	21 339
Peru	2 866	2 778	3 637	3 968	4 266
China	18 300	21 400	33 000	29 600	*29 000
Iran (a)	*1 200	2 636	1 430	*2 112	...
Kazakhstan	*600	218	156	44	81
Mongolia	1 600	*2 000	1 823	2 201	1 992
World Total	95 000	110 000	138 000	129 000	140 000

Note(s):-

(1) In addition to the countries listed, Australia, Georgia, India, Democratic P.R. of Korea, Romania, Tajikistan and Uzbekistan are believed to produce molybdenum

(a) Years ended 20 March following that stated

Exports of Molybdenum

tonnes

Country	1993	1994	1995	1996	1997
Austria					
Metal	1 492	1 398	1 571	1 651	1 747
Belgium-Luxembourg					
Ores & concentrates	11 352	12 552	12 777	11 548	13 466
Metal	89	257	376	196	296
Oxides	96	123	48	52	150
France					
Ores & concentrates	79	0	19	49	873
Metal	203	162	244	83	61
Germany					
Ores & concentrates	151	149	108	365	111
Metal	933	1 346	1 497	1 042	1 368
Oxides	1 003	1 016	918	885	731
Italy					
Metal	2	29	194	32	65
Netherlands					
Ores & concentrates	6 035	7 919	7 460	4 347	5 662
Metal	285	294	407	299	...
Oxides	822	1 037	339	...	161
Russia					
Ores & concentrates	3 964	4 900	1 013	54	...
Metal	(b) *300	(b) *1 100	(b) *3 800	467	(b) *600
Sweden					
Ores & concentrates	2 046	38	...	...	...
United Kingdom					
Ores & concentrates	603	1 230	2 234	2 003	3 717
Metal	1 354	666	528	247	143
Oxides	83	200	14	20	30
Canada					
Ores & concentrates (a)	9 928	8 858	8 998	8 512	11 235
Mexico					
Ores & concentrates	1 839	5 003	9 634	10 496	...
USA					
Ores & concentrates (a)	28 178	33 786	45 231	45 166	58 531
Metal	813	1 108	1 569	1 412	916
Oxides	1 042	2 342	2 949	1 830	1 262
Chile					
Ores & concentrates	30 584	29 922	33 347	29 302	36 266
Oxides	1 210	1 620	2 666	3 164	2 947
Peru					
Ores & concentrates	5 859	5 001	7 369	7 782	8 452
China					
Ores & concentrates	2 369	1 030	639	1 441	2 819
Metal	772	967	790	453	531
Oxides	15 723	14 099	15 167	13 933	21 983
Japan					
Metal	102	122	102	264	110
Mongolia					
Ores & concentrates	2 900	5 530	3 336	2 523	...

Note(s):-

(1) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

(a) Mo content

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

Imports of Molybdenum

tonnes

Country	1993	1994	1995	1996	1997
Austria					
Ores & concentrates	6 873	8 308	6 246	3 665	5 566
Metal	170	234	265	182	255
Oxides	1 975	2 512	2 886	2 681	2 378
Belgium-Luxembourg					
Ores & concentrates	30 925	30 380	28 674	19 412	22 075
Metal	181	170	490	141	207
Oxides	306	622	283	702	969
Czech Republic					
Metal	20	14	27	43	448
Finland					
Ores & concentrates	1 949	2 562	3 135	2 596	3 172
France					
Ores & concentrates	2 710	2 948	3 523	2 378	2 539
Metal	582	558	570	429	627
Oxides	575	512	378	148	96
Germany					
Ores & concentrates	7 416	10 413	13 573	9 167	8 437
Metal	1 406	1 473	1 270	1 492	1 465
Oxides	650	702	855	1 197	1 085
Italy					
Ores & concentrates	2 730	3 117	3 069	2 864	3 725
Metal	394	167	142	300	164
Oxides	77	27	...	...	248
Netherlands					
Ores & concentrates	12 205	15 442	*40 000	17 247	17 660
Metal	175	95	136	337	691
Oxides	172	271	622	...	1 004
Russia					
Metal	*20	*20	*50	71	...
Spain					
Ores & concentrates	1 777	4 994	2 429	2 489	3 238
Metal	45	128	66	52	119
Sweden					
Ores & concentrates	2 945	4 106	6 178	5 504	7 451
Metal	229	774	459	121	1 168
Oxides	932	855	...	...	371
Switzerland					
Metal	25	27	29	52	28
United Kingdom					
Ores & concentrates	11 961	27 984	15 509	16 899	18 898
Metal	375	563	985	861	859
Oxides	41	264	309	237	89
South Africa					
Metal	1	4	11	4	13
Oxides	562	814	250	121	619
Canada					
Metal	65	68	105	94	80
Oxides	200	503	1 176	884	648
USA					
Ores & concentrates	6 107	3 829	8 965	8 105	10 513
Metal	661	1 070	826	1 011	1 040
Oxides	635	664	900	1 161	1 420
Brazil					
Ores & concentrates	4 670	5 750	13 283	...	...
Metal	83	183	300	373	...
Oxides	208	109	...	...	...
Chile					
Ores & concentrates	10 545	15 063	17 593	12 253	11 794

Molybdenum

Imports of Molybdenum

tonnes

Country	1993	1994	1995	1996	1997
India					
Ores & concentrates (b)	858	3 022	2 845	2 264	...
Metal (b)	82	89	97	80	...
Japan					
Ores & concentrates	23 629	24 120	26 230	26 061	31 262
Metal	371	707	1 072	699	713
Oxides	1 160	1 041	1 732	1 342	1 698
Korea, Republic of					
Ores & concentrates	2 038	2 498	3 211	4 658	4 072
Metal	94	163	147	131	120
Malaysia					
Metal	165	606	...	...	...
Philippines					
Metal	9	15	3	24	...
Singapore					
Metal	13	12	13	57	8
Taiwan					
Metal	121	165	179	208	211
Australia					
Metal	59	31	36	158	...
Oxides (c)	178	...	...	...	...

Note(s):-

(1) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

(b) Years ended 31 March following that stated

(c) Years ended 30 June of that stated

Mine Production of Nickel

tonnes (metal content)

Country	1993	1994	1995	1996	1997
Finland	8 862	7 652	4 382	3 872	3 252
Greece	12 940	18 821	19 947	21 600	18 400
Macedonia	5 300	4 600	*2 000	*3 000	5 300
Norway	3 462	3 328	3 389	3 500	*3 000
Russia	209 000	212 000	224 000	230 000	232 000
Ukraine	3 500	2 500	*2 200	1 700	—
Yugoslavia, Federal Republic of	—	—	300	3 000	2 700
Botswana	21 621	19 041	18 088	22 095	20 157
South Africa (a)	29 868	30 135	29 803	33 861	34 849
Zimbabwe	12 800	13 800	11 700	11 600	11 200
Canada	188 080	149 886	181 820	192 649	190 529
Cuba	29 166	25 956	41 105	51 600	59 400
Dominican Republic	36 487	50 146	46 523	45 168	49 152
USA	2 464	—	1 560	1 330	—
Brazil	32 154	32 663	29 124	25 245	*27 000
Colombia	23 474	28 144	29 806	27 154	*29 000
China	30 800	36 900	41 800	43 800	*40 000
Indonesia	65 757	81 175	86 600	87 900	72 200
Kazakhstan	*1 000	*1 000	*1 000	*1 000	*1 000
Philippines	10 000	14 600	14 700	14 500	18 100
Australia	65 400	75 900	104 000	113 000	124 000
New Caledonia	97 092	97 261	119 905	122 486	136 459
World Total	890 000	910 000	1 010 000	1 060 000	1 080 000

Note(s):-

(a) Refined nickel and nickel in matte

Nickel

Smelter/Refinery Production of Nickel

tonnes

Country	1993	1994	1995	1996	1997
Austria	3 200	2 100	2 000	2 000	2 000
Finland	14 577	16 902	16 025	29 141	35 300
France	10 400	10 000	10 300	11 200	10 700
Greece	10 931	16 182	17 155	17 801	17 610
Macedonia	4 500	4 100	*2 000	*3 000	5 300
Norway	56 818	67 955	53 237	61 582	62 700
Russia	187 800	190 700	201 900	190 500	234 200
Ukraine	*3 500	*2 500	*2 200	*900	—
United Kingdom	27 000	28 400	35 100	42 000	36 586
Yugoslavia, Federal Republic of	443	663	962	2 556	2 440
South Africa	29 868	30 135	29 803	33 861	34 800
Zimbabwe	18 200	19 600	16 500	17 100	19 100
Canada	123 139	105 144	125 311	130 136	131 639
Cuba	16 193	14 099	21 648	27 024	33 992
Dominican Republic	23 863	30 757	30 897	30 388	32 556
USA	4 878	—	8 290	15 100	15 996
Brazil	15 705	16 610	15 676	16 432	18 199
Colombia	20 182	20 834	24 565	22 933	25 170
China	30 500	31 300	38 900	44 600	*39 900
Indonesia	5 266	5 745	10 735	9 600	9 999
Japan	102 900	112 600	135 000	130 500	128 400
Australia	61 400	66 500	76 900	74 000	74 000
New Caledonia	36 850	39 488	42 200	42 174	44 312
World Total	810 000	830 000	920 000	950 000	1 010 000

Note(s):-

(1) Data relate to refined nickel plus the nickel content of ferro-nickel and nickel oxide

Exports of Nickel

tonnes

Country	1993	1994	1995	1996	1997
Austria					
Unwrought (a)	306	176	314	339	1 069
Scrap	266	448	381	166	398
Belgium-Luxembourg					
Mattes, sinters etc.	2 978	—	4	56	1
Unwrought	2 416	6 213	8 794	11 047	16 519
Unwrought alloys	734	1 162	1 682	1 530	1 796
Scrap	325	745	850	789	1 245
Czech Republic					
Unwrought (a)	100	200	1 800	500	1 776
Denmark					
Scrap	247	233	219	338	367
Estonia					
Unwrought (a) (b)	*2 000	*1 600	*400	*100	*200
Scrap (b)	*4 500	*2 000	*300	*300	...
Finland					
Ores & concentrates	2 888	36 017	49 186	36 675	53 974
Unwrought	12 849	12 532	12 847	21 474	23 650
Scrap	1 846	656	272	133	26
Oxides	557	599	827	884	1 163
France					
Unwrought	6 104	5 029	6 145	6 736	7 842
Unwrought alloys	55	76	119	735	907
Scrap	3 367	3 107	3 663	4 457	4 499
Germany					
Unwrought	11 196	8 098	13 330	7 184	8 545
Unwrought alloys	2 785	3 040	3 299	4 315	3 572
Scrap	11 770	12 996	9 823	7 203	9 236
Oxides	164	188	114	122	141
Irish Republic					
Scrap	277	398	428	515	512
Italy					
Unwrought (a)	397	1 097	438	4 650	2 217
Scrap	368	469	644	617	395
Latvia					
Unwrought (a) (b)	*2 300	*1 100	*400	...	...
Scrap (b)	*1 400	*500	*400	*300	*300
Lithuania					
Unwrought (a)	(b) *1 200	(b) *1 300	64	16	1
Scrap	(b) *3 700	(b) *400	690	580	241
Netherlands					
Mattes, sinters etc.	(b) *1 600	(b) *1 600	(b) *2 900	(b) *10 600	6 530
Unwrought (a)	3 145	2 835	3 903	5 287	37 258
Scrap	9 087	9 154	7 376	3 051	2 810
Oxides	(b) *350	(b) *300	(b) *500	(b) *200	1 437
Norway					
Ore	30 870	45 854	33 253	34 880	30 512
Unwrought (a)	59 860	67 187	52 644	61 030	62 295
Scrap	289	360	479	294	145
Russia					
Mattes, sinters etc.	12 627	3 500	—	393	...
Unwrought (a)	87 175	114 215	152 829	167 202	221 857
Scrap (b)	*20 300	*11 000	*10 400	*15 000	...
Oxides	1 009	(b) *500	4 462	610	544
Spain					
Scrap	697	1 181	589	302	512
Sweden					
Unwrought (a)	81	722	157	245	93
Scrap	984	962	503	248	198
Switzerland					
Unwrought (a)	127	249	227	128	120
Scrap	387	240	176	356	661
Ukraine					
Unwrought (b)	*100	*9 100	...	...	...
Scrap (b)	*400	*100	*300	*300	*1 700

Exports of Nickel

tonnes

Country	1993	1994	1995	1996	1997
United Kingdom					
Mattes, sinters etc.	1 413	1 472	392	218	146
Unwrought	16 664	15 298	20 277	22 761	18 887
Unwrought alloys	2 978	2 565	2 901	3 290	3 558
Scrap	5 888	5 816	4 960	4 361	4 367
Botswana					
Mattes, sinters etc.	51 600	44 000	39 000	54 024	...
South Africa					
Unwrought (g)	16 442	14 300	16 704	21 352	20 383
Scrap (b)	*1 800	*1 500	*700	*2 600	*3 100
Zimbabwe					
Unwrought (a)	11 004	17 100	12 697	11 950	13 609
Canada					
Mattes, sinters etc.	59 440	71 778	78 706	96 242	86 696
Unwrought (a)	99 813	82 578	86 234	97 155	101 075
Scrap	2 443	2 257	3 294	2 595	4 159
Cuba					
Oxide, sinter & sulphide (e)	*29 000	*29 200	*38 200	*55 500	*59 900
USA					
Mattes, sinters etc.	4 944	4 762	4 568	5 479	3 104
Unwrought (a)	3 734	5 657	6 144	6 677	5 754
Scrap	16 191	24 302	28 447	21 790	25 056
Brazil					
Unwrought	4 556	4 716	4 378	5 582	5 907
China					
Unwrought (a)	3	5 544	1 480	309	4 748
Scrap	135	205	445	77	905
Oxides	75	225	277	146	830
Hong Kong					
Unwrought (a) (f)	9 591	6 557	5 576	5 605	5 177
Scrap	3 135	234	215	179	62
Indonesia					
Ore	1 545 562	1 497 861	1 733 154	1 791 190	1 899 153
Mattes, sinters etc.	46 609	61 766	54 824	45 373	41 164
Israel					
Scrap (b)	*300	*400	*500	*1 700	*1 600
Japan					
Mattes, sinters etc.	3 291	9 916	6 498	5 182	1 468
Unwrought (a)	89	134	475	897	1 385
Scrap	320	562	749	2 557	8 563
Oxides	347	613	2 097	1 025	3 026
Korea, Republic of					
Unwrought (a)	122	1 876	3 205	21	935
Scrap	2 587	1 340	1 573	1 054	1 813
Philippines					
Ores & concentrates	580 248	646 461	890 818	1 249 197	...
Singapore					
Unwrought (f)	1 647	2 898	3 770	4 327	7 250
Scrap	124	317	510	1 069	1 517
Taiwan					
Scrap	1 642	1 924	1 665	1 553	1 366

Exports of Nickel

tonnes

Country	1993	1994	1995	1996	1997
Australia (d)	96 000	112 000	123 000	127 000	137 000
New Caledonia					
Ores	3 353 879	*3 500 000	4 588 952	4 773 883	5 391 000
Mattes, sinters etc.	14 700	...	14 529	15 354	14 900
New Zealand					
Scrap (c)	515	260	143	6	...

Note(s):-

- (1) In this table the term 'unwrought' nickel corresponds to item 683.1 of the Standard International trade Classification (Revision 3) which excludes all electro-plating anodes
- (2) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys
- (a) Including alloys
- (b) BGS estimates, based on known imports into certain countries
- (c) Years ended 30 June of that stated
- (d) Unwrought metal and Ni content of ores, concentrates and intermediate products
- (e) Ni-Co content (mainly nickel)
- (f) Re-exports
- (g) Includes metal and metal content of sulphate

Imports of Nickel

tonnes

Country	1993	1994	1995	1996	1997
Austria					
Mattes, sinters etc.	149	169	167	126	164
Unwrought (a)	2 519	2 822	3 337	3 419	3 503
Scrap	1 617	1 005	859	754	176
Oxides	270	496	19	18	49
Belgium-Luxembourg					
Ore	123	1 004	23	14	45
Mattes, sinters etc.	2 144	395	522	179	313
Unwrought	13 831	20 409	31 960	29 119	32 253
Unwrought alloys	104	43	120	121	1 721
Scrap	1 967	528	1 499	2 524	3 277
Oxides	153	148	193	187	145
Czech Republic					
Ores & concentrates	5 749	7 222	34	30	7
Unwrought (a)	1 100	1 100	2 100	1 300	934
Denmark					
Unwrought (a)	139	157	142	113	131
Finland					
Ore	85 360	111 084	134 831	200 610	163 962
Mattes, sinters etc.	360	2 937	4 088	9 843	7 314
Unwrought (a)	5 932	5 590	9 530	6 316	9 511
Scrap	11 916	8 514	7 017	821	247
Oxides	2 566	1 727	2 996	292	346
France					
Mattes, sinters etc.	16 363	16 440	17 255	16 365	16 744
Unwrought	19 994	27 257	30 558	26 480	32 807
Unwrought alloys	4 521	5 189	6 011	4 851	6 740
Scrap	1 331	2 247	3 083	1 507	1 379
Oxides	220	310	310	222	216
Germany					
Mattes, sinters etc.	17 233	9 057	5 096	9 317	8 629
Unwrought (a)	52 398	58 026	78 254	61 423	64 240
Scrap	30 348	16 982	12 911	10 474	11 723
Oxides	509	460	411	343	411
Irish Republic					
Unwrought (a)	700	991	1 137	1 141	1 129
Italy					
Mattes, sinters etc.	7 479	6 070	5 545	3 022	2
Unwrought	23 440	31 642	40 553	30 370	41 065
Unwrought alloys	1 336	1 273	920	1 718	940
Scrap	119	209	121	70	1 415
Oxides	137	139	...	...	82
Netherlands					
Mattes, sinters etc.	(e) *15 000	(e) *11 800	...	...	36 543
Unwrought	4 233	3 999	7 841	5 924	15 384
Unwrought alloys	422	132	215	92	63
Scrap	2 855	4 882	4 472	4 642	3 307
Oxides	756	1 213	1 211	...	825
Norway					
Mattes, sinters etc.	141 931	146 274	109 317	141 942	132 146
Unwrought (a)	75	275	151	204	79
Poland					
Unwrought	313	914	1 820	1 666	...
Portugal					
Unwrought (a)	211	258	200	281	290
Russia					
Ore	—	200	81 457	84 552	64
Scrap	...	6	5 066	3 292	2 903
Slovakia					
Unwrought (a)	1 139	...	...	...	...
Slovenia					
Unwrought (a)	956	1 053	1 600	1 942	4 375
Spain					
Mattes, sinters etc.	400	222	91	86	584
Unwrought (a)	9 335	19 035	20 785	10 796	21 567

Imports of Nickel

tonnes

Country	1993	1994	1995	1996	1997
Sweden					
Mattes, sinters etc.	3 400	3 017	2 355	5 442	4 372
Unwrought	14 862	18 736	16 720	14 387	14 113
Unwrought alloys	382	733	1 441	749	661
Scrap	13 029	14 407	17 096	24 811	21 064
Switzerland					
Unwrought (a)	883	702	801	1 055	964
Scrap	141	190	223	403	401
Turkey					
Unwrought (a)	1 076	836	1 432	1 453	1 677
United Kingdom					
Mattes, sinters etc.	43 275	40 827	53 820	63 833	54 534
Unwrought	12 408	17 188	20 931	17 469	17 706
Unwrought alloys	2 767	4 805	3 796	1 248	3 424
Scrap	6 264	7 873	8 406	14 631	13 181
Oxides	110	104	375	149	155
South Africa					
Unwrought (a)	155	201	16 355	3 943	5 320
Canada					
Ores & concentrates (b)	589	896	2 474	2 118	7 423
Mattes, sinters etc.	33 974	34 476	49 437	56 741	49 902
Unwrought (a)	10 778	11 063	7 308	6 448	2 599
Scrap	18 308	20 950	21 919	16 051	16 572
Mexico					
Unwrought (a)	1 482	1 520	1 098	1 533	...
USA					
Ores & concentrates (b)	1 692	101	9 150	21 505	43 029
Slurry, mattes, sinters etc.	5 088	3 469	725	693	2 480
Unwrought (a)	99 443	99 081	121 439	116 028	122 832
Scrap	6 038	5 752	9 478	8 545	12 397
Oxides	922	1 052	1 164	1 318	1 532
Argentina					
Unwrought	319	361	316	281	...
Brazil					
Unwrought (a)	4 751	5 809	7 639	8 002	7 105
Colombia					
Unwrought	395	439	545	185	...
Venezuela					
Unwrought (a)	144	164	131	110	...
China					
Unwrought (a)	2 573	98	570	916	1 117
Hong Kong					
Unwrought (a)	12 334	9 648	11 427	10 937	8 977
India					
Mattes, sinters etc. (c)	1 827	2 075	1 982	1 417	...
Unwrought (a) (c)	7 146	10 251	11 855	9 123	...
Scrap (c)	168	139	259	1 049	...
Japan					
Ore	3 043 604	2 901 560	3 821 354	4 061 516	4 362 374
Mattes, sinters etc.	66 018	84 498	90 993	83 632	76 715
Unwrought	33 322	47 560	61 698	46 501	57 096
Unwrought alloys	224	266	889	500	747
Scrap	4 984	6 305	6 444	7 711	12 836
Oxides	236	126	172	80	221
Korea, Dem. P.R. of					
Unwrought (a) (e)	*200	*100	*50	...	...
Korea, Republic of					
Mattes, sinters etc.	16 495	20 305	18 760	14 818	20 772
Unwrought (a)	8 671	12 750	19 104	14 667	19 069
Scrap	2 025	1 690	2 065	2 786	12 509
Malaysia					
Unwrought (a)	202	357	400	...	...
Pakistan					
Unwrought (a)	333	486	335	512	...

Nickel

Imports of Nickel

tonnes

Country	1993	1994	1995	1996	1997
Singapore					
Mattes, sinters etc.	517	841	845	344	13
Unwrought	1 751	3 182	5 389	4 351	9 026
Scrap	366	302	544	389	329
Taiwan					
Mattes, sinters etc.	3 168	2 763	7 352	7 679	4 797
Unwrought (a)	15 372	20 737	39 747	33 358	41 888
Scrap	124	135	448	286	232
Oxides	541	693	1 938	837	1 265
Thailand					
Unwrought (a)	956	1 175	1 717	1 664	...
Australia					
Unwrought (d)	271	(a) *800	(a) *700	(a) *800	...
Unwrought alloys (d)	184	...	...	...	...
Scrap	200	300	500	1 023	...

Note(s):-

- (1) In this table the term 'unwrought' nickel corresponds to item 683.1 of the Standard International trade Classification (Revision 3) which excludes all electro-plating anodes
- (2) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

(a) Including alloys

(b) Ni content

(c) Years ended 31 March following that stated

(d) Years ended 30 June of that stated

(e) BGS estimates, based on known exports from certain countries

Production of Crude Petroleum

tonnes

Country	1993	1994	1995	1996	1997
Albania	568 045	535 345	520 866	247 035	194 729
Austria	1 155 224	1 099 994	1 034 868	992 398	*1 000 000
Azerbaijan	10 262 000	9 339 000	9 161 300	9 100 300	9 000 000
Belarus	2 005 300	2 000 200	1 932 100	1 860 300	1 822 000
Bulgaria	43 000	36 000	43 000	33 900	27 750
Croatia	1 729 110	1 576 579	1 500 269	1 469 052	1 496 223
Czech Republic	107 000	131 000	149 000	155 000	159 000
Denmark (d)	8 298 537	9 161 162	9 171 481	10 118 000	11 666 000
France	2 752 530	2 768 794	2 486 039	2 107 486	1 779 728
Georgia	88 200	66 900	42 700	127 900	133 800
Germany	3 052 642	2 946 288	2 959 580	2 848 341	2 820 000
Greece	568 306	543 584	457 602	520 818	471 000
Hungary	1 709 000	1 631 000	1 669 000	1 476 801	1 360 325
Italy	4 634 364	4 927 898	5 207 980	5 368 971	5 926 000
Lithuania	72 000	82 000	127 000	180 000	160 000
Netherlands	2 672 170	3 437 432	2 721 492	2 221 028	2 068 906
Norway	114 184 000	129 239 000	139 358 000	156 788 000	156 215 000
Poland	235 300	284 300	292 500	317 304	289 139
Romania	6 713 000	6 737 000	6 717 000	6 626 000	*6 500 000
Russia	354 870 000	317 580 000	307 000 000	300 400 000	306 900 000
Slovakia	66 523	67 210	74 247	71 290	63 000
Slovenia	...	...	1 858	*1 900	*1 900
Spain	874 651	806 749	652 156	513 451	380 000
Turkey	4 025 000	4 038 000	3 500 495	3 499 635	*3 400 000
Ukraine	4 263 000	3 942 000	4 089 900	4 097 800	4 128 100
United Kingdom	93 950 000	119 032 000	121 794 000	121 930 000	120 116 000
Yugoslavia, Federal Republic of	1 148 000	1 078 000	1 066 227	1 030 441	978 081
Algeria	52 082 000	51 530 000	51 852 000	54 401 000	*56 000 000
Angola	24 980 000	26 142 000	30 400 000	34 100 000	36 000 000
Benin	194 000	192 000	124 000	*82 000	*62 000
Cameroon	6 978 000	6 343 000	5 400 000	5 600 000	6 300 000
Congo,	9 428 200	9 032 000	9 264 000	10 800 000	12 500 000
Congo, Democratic Republic	1 172 000	1 241 000	1 516 000	1 500 000	1 400 000
Egypt (b)	44 967 000	45 186 000	44 000 000	44 119 000	42 100 000
Equatorial Guinea	234 000	270 000	345 000	1 000 000	*2 000 000
Eritrea	—	...	632 220	685 234	...
Gabon	14 898 000	14 982 000	15 876 000	18 100 000	18 500 000
Ivory Coast	—	...	489 000	1 400 000	*1 500 000
Libya	73 266 000	67 874 000	68 620 000	69 100 000	70 200 000
Nigeria	98 276 876	99 972 600	101 671 000	105 800 000	112 800 000
Tunisia	4 650 000	4 378 000	4 251 000	4 200 000	4 300 000
Barbados	63 471	63 190	62 750	49 810	44 991
Canada	88 765 300	92 781 400	96 135 300	98 290 500	102 607 600
Cuba	1 131 000	1 209 000	1 285 000	1 350 000	*1 400 000
Guatemala	347 800	367 100	474 700	733 000	1 100 000
Mexico	143 570 000	144 139 000	140 727 000	153 083 000	*160 000 000
Trinidad & Tobago	6 380 900	6 750 000	6 732 200	6 658 800	6 400 000
USA	340 809 000	331 601 000	326 524 000	321 795 000	321 148 000
Argentina	31 519 250	35 363 766	38 171 053	41 575 500	44 174 800
Bolivia	1 071 000	1 190 390	1 312 945	*1 300 000	*1 400 000
Brazil	34 570 042	35 839 524	37 046 259	41 851 471	44 546 000
Chile	752 660	651 409	552 019	485 950	446 117
Colombia	23 358 814	23 405 400	30 155 238	32 286 570	33 622 738
Ecuador	17 497 489	19 262 390	19 689 627	19 594 002	*19 700 000
Peru	6 222 761	6 273 505	6 000 172	5 928 066	5 826 583
Suriname	312 947	365 731	352 000	385 000	*400 000
Venezuela	130 200 000	137 000 000	150 000 000	160 000 000	*170 000 000
Abu Dhabi	92 700 000	88 100 000	87 200 000	90 000 000	88 400 000
Bahrain	2 032 000	2 008 000	1 975 000	1 930 000	*2 443 000
Brunei	8 702 000	8 851 000	8 702 000	8 484 000	8 052 000
China (a)	145 237 400	146 082 000	150 049 400	157 333 900	160 100 000
Dubai	15 632 000	15 143 000	13 928 000	13 133 000	12 153 000
India	27 864 000	30 864 000	34 620 000	32 268 000	*33 000 000
Indonesia	74 735 000	74 842 000	74 317 000	75 261 000	74 635 000

Production of Crude Petroleum

tonnes

Country	1993	1994	1995	1996	1997
Iran	183 677 000	180 891 000	180 911 000	183 900 000	184 200 000
Iraq	23 548 000	27 752 000	31 833 000	29 700 000	58 300 000
Japan	774 000	789 000	736 000	*738 000	*777 000
Kazakhstan	19 572 200	18 544 100	17 931 900	21 049 700	25 800 000
Kuwait (c)	96 000 000	104 000 000	104 400 000	103 800 000	104 100 000
Kyrgyzstan	120 000	80 000	90 000	80 000	*40 000
Malaysia	30 600 000	31 100 000	34 000 000	34 400 000	33 800 000
Myanmar	735 000	732 000	620 000	551 000	635 000
Oman	38 571 000	40 521 000	42 400 000	44 100 000	45 100 000
Pakistan	2 909 000	2 774 000	2 677 000	2 808 000	2 900 000
Philippines	466 000	246 000	170 000	160 000	*160 000
Qatar	21 300 000	20 800 000	21 300 000	26 400 000	32 500 000
Saudi Arabia (c)	407 555 000	402 770 000	402 831 000	406 200 000	415 900 000
Sharjah & Ras al Khaimah	244 000	244 000	228 300	236 100	223 500
Syria	29 200 000	29 200 000	31 589 000	30 700 000	29 700 000
Taiwan	61 000	61 000	59 000	53 000	53 000
Tajikistan	39 000	30 000	26 000	*20 000	*20 000
Thailand	2 319 000	2 309 000	2 619 000	4 200 000	4 300 000
Turkmenistan	3 920 000	3 870 000	3 910 000	5 300 000	5 300 000
Uzbekistan	4 000 000	5 470 000	8 000 000	9 910 000	10 200 000
Vietnam	6 257 000	7 002 000	7 700 000	8 900 000	9 800 000
Yemen, Republic of	10 166 000	16 981 000	17 218 000	17 426 000	18 100 000
Australia	26 300 345	28 505 191	27 031 036	28 406 671	30 000 000
New Zealand	1 842 200	1 772 000	1 474 600	1 950 100	2 587 900
Papua New Guinea	5 748 000	5 522 000	4 679 000	5 000 000	3 600 000
World Total	3 061 000 000	3 085 000 000	3 129 000 000	3 215 000 000	3 312 000 000

Note(s):-

(1) The figures shown in this table exclude natural gasoline

- (a) Including oil from shale and coal
- (b) Years ended 30 June of that stated
- (c) Including shares of production from the Neutral Zone
- (d) Sales

Production of Natural Gas

million m³

Country	1993	1994	1995	1996	1997
Albania	82	52	28	11	9
Austria	1 488	1 355	1 482	1 492	1 428
Azerbaijan	6 340	6 380	6 644	6 305	5 960
Belarus	280	294	266	249	246
Bulgaria	67	68	52	37	38
Croatia	2 068	1 792	1 966	1 786	1 717
Czech Republic	106	154	165	146	118
Denmark (b)	4 266	4 622	4 983	6 061	7 442
France	3 563	3 540	3 356	2 901	2 586
Germany	18 700	19 590	20 210	21 890	21 520
Greece	70	120	35	38	43
Hungary	5 011	5 564	5 404	4 872	4 271
Irish Republic	2 690	2 710	2 830	2 740	2 400
Italy	19 438	20 341	20 383	20 048	19 462
Netherlands	83 652	79 376	80 164	90 630	80 282
Norway	28 867	30 927	31 449	41 289	47 053
Poland	4 949	4 635	4 803	4 754	4 836
Romania	21 318	19 598	19 016	18 162	17 060
Russia	617 600	606 800	594 900	598 500	569 200
Slovakia	264	288	349	307	286
Spain	644	207	385	467	178
Turkey	210	200	182	204	200
Ukraine	19 221	18 316	18 161	18 401	18 131
United Kingdom	65 336	69 584	75 480	89 949	91 778
Yugoslavia, Federal Republic of	962	824	906	671	688
Algeria	53 872	50 300	58 100	62 130	70 900
Angola	560	560	521	560	570
Egypt	11 300	12 000	12 430	13 400	11 800
Gabon	100	90	100	100	100
Libya	6 360	6 220	6 200	6 200	6 300
Morocco	...	...	...	20	52
Nigeria	5 150	4 599	4 885	4 600	4 700
South Africa	1 860	1 960	...	...	...
Tunisia	366	354	340	340	340
Canada	155 033	166 533	176 364	182 211	184 170
Mexico	25 440	25 850	26 610	29 300	30 180
Trinidad & Tobago	5 871	6 573	6 635	7 100	7 100
USA (e)	512 400	533 000	526 700	532 200	536 200
Argentina	22 619	23 404	25 941	28 473	30 323
Bolivia	3 100	3 288	3 294	3 200	3 200
Brazil	4 500	4 500	4 800	5 400	5 900
Chile	1 951	2 185	2 104	*2 100	*2 200
Colombia	4 700	4 600	4 400	4 700	6 000
Peru	960	1 003	1 001	*1 000	*1 000
Venezuela	23 329	24 675	29 973	29 731	30 900
Abu Dhabi	18 873	21 209	21 633	24 831	37 209
Afghanistan (c)	2 300	2 300	2 200	*2 300	...
Bahrain	7 646	9 996	10 054	7 702	8 030
Bangladesh (d)	5 973	6 338	7 006	7 520	7 359
Brunei	8 280	8 420	9 350	9 370	11 600
China	16 765	17 563	17 947	20 114	*23 000
Dubai	1 700	*1 500	...	...	...
India	15 100	16 810	17 770	19 720	21 400
Indonesia	75 390	83 297	84 929	89 669	90 293
Iran	27 100	31 800	35 300	40 210	43 000
Iraq	2 550	3 000	3 400	3 500	4 300
Japan	2 170	2 274	2 209	2 230	2 279
Kazakhstan	5 416	4 488	5 916	6 524	8 115
Kuwait (a)	4 470	4 660	4 660	6 000	5 930
Kyrgyzstan	*5	5	40	40	40
Malaysia	24 900	26 130	28 880	36 680	39 380
Myanmar	1 031	1 301	1 477	1 625	*1 700
Oman	6 815	7 121	6 860	7 274	10 294
Pakistan (d)	16 526	17 679	17 791	18 878	19 761

Production of Natural Gasmillion m³

Country	1993	1994	1995	1996	1997
Qatar	13 500	13 500	13 500	13 700	13 900
Saudi Arabia (a)	35 900	37 700	38 040	41 340	43 900
Sharjah	6 890	...	...	...	...
Syria	3 700	4 160	4 410	4 400	4 370
Taiwan	826	867	889	874	849
Tajikistan	*90	*5	100	30	*30
Thailand	8 790	9 680	10 410	12 130	12 700
Turkmenistan	60 910	35 800	32 300	35 180	17 300
Uzbekistan	41 980	47 200	48 000	48 200	45 900
Australia	24 457	28 147	29 761	29 799	29 950
New Zealand	5 187	4 768	4 497	5 089	5 416
Papua New Guinea	80	100	100	140	125
World Total	2 192 000	2 223 000	2 254 000	2 350 000	2 350 000

Note(s):-

(1) So far as possible the figures in this table exclude flared or reinjected gas

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

(b) Sales

(c) Years ended 20 March following that stated

(d) Years ended 30 June of that stated

(e) Dry gas

Exports of Crude Petroleum

tonnes

Country	1993	1994	1995	1996	1997
Azerbaijan (a)	...	...	...	*10 700	*55 100
Belarus	(a) *25 000	(a) *106 500	200 000	300 000	400 000
Belgium-Luxembourg	348 829	128 546	68 607	71 493	55 597
Croatia	85 709	46 761	123 038	117 526	296 338
Denmark	3 161 834	2 897 144	5 130 017	4 616 379	6 507 328
France	362	40 191	55 769	24 597	41 785
Georgia	(a) *181 600	(a) *49 600	29 333	70 352	137 810
Germany	36 914	1 075 571	488 495	1 089 862	1 008 553
Greece	536 000	269 997	517 877	894 507	700 026
Italy	576 865	46 011	380 643	317 706	321 595
Latvia (a) (b)	*1 029 200	*2 372 000	*1 357 000	*2 582 000	...
Lithuania	(a) (d) *106 800	(a) (d) *137 800	7 722	122 963	201 316
Netherlands	872 990	1 386 614	1 010 158	693 411	229 487
Norway	99 581 969	111 335 668	121 860 012	136 799 832	136 909 684
Poland	39 958	53	331	1 000	...
Russia	79 940 000	124 700 000	122 336 000	125 578 000	...
Slovenia	1 818 955	94 211	179	127 834	163 870
Ukraine	...	...	13 639	—	5 139
United Kingdom	59 668 482	77 870 558	81 221 560	77 654 502	71 795 525
Algeria	39 108 000	31 492 000	32 287 000	33 934 000	...
Angola	*23 700 000	*23 600 000	...	...	...
Benin	*194 000	*192 000	*124 000	*82 000	...
Cameroon	*5 113 000	*4 382 000	3 727 760	4 982 805	...
Congo,	9 001 933	8 621 539	...	...	...
Congo, Democratic Republic	*1 012 000	*1 077 000	...	...	...
Egypt	13 006 000	7 867 128	7 242 853	6 684 826	...
Gabon	14 258 000	15 834 000	...	18 571 000	...
Libya	*53 403 000	*54 116 000	...	...	...
Nigeria	77 850 000	79 500 000	...	...	...
Tunisia	3 282 100	3 233 453	3 289 700	3 147 701	...
Canada	47 725 710	52 035 024	60 013 946	60 373 811	64 915 842
Guatemala	200 727	185 592	126 816	530 434	...
Mexico	71 232 243	69 210 685	68 493 006	79 658 127	88 975 000
Netherlands Antilles	854 000	684 000	...	...	...
Trinidad & Tobago	2 760 088	2 788 688	2 986 937	2 657 375	2 900 000
USA	359 978	390 951	89 329	3 427 197	7 327 812
Argentina	4 523 323	10 526 000	14 010 000	17 229 682	17 632 300
Colombia	9 691 614	9 141 459	14 219 000	16 633 000	17 769 000
Ecuador	11 100 000	12 100 000	13 100 000	11 800 000	12 700 000
Peru	—	—	1 436 600	1 800 000	2 200 000
Venezuela	80 625 000	88 635 000	95 232 000	103 503 000	115 800 000
Brunei	8 489 000	*8 600 000	7 705 978	7 420 268	7 091 923
China	19 434 492	18 552 436	18 826 988	20 402 546	19 828 882
Indonesia	36 712 313	44 098 164	37 086 773	38 841 706	39 363 253
Iran (a)	*109 682 000	*102 413 000	*103 072 000	*105 000 000	...
Iraq	*2 899 000	*2 938 000	...	...	...
Kazakhstan	883 000	(a) *458 000	11 306 977	14 502 982	14 888 287
Kuwait	89 902 000	94 785 000	...	...	57 299 847
Malaysia	21 588 758	19 371 039	19 247 000	...	...
Oman	36 092 000	34 192 000	35 734 000	40 498 000	...
Pakistan	379 218	534 442	308 217	347 075	...
Philippines	40 190 000	24 225 000	13 209 000	...	...
Qatar	17 341 251	16 666 000	...	...	...
Saudi Arabia	313 661 000	310 706 000	...	...	...
Singapore	159	60 215	60 844	63 180	15 360
of which, re-exports	83	60 207	60 844	—	1 482
Syria	16 904 593	17 012 000	18 370 830	17 443 170	...
Turkmenistan (a)	*206 800	*24 800	...	...	*42 300
United Arab Emirates	90 374 000	93 936 000	...	...	...

Exports of Crude Petroleum

tonnes

Country	1993	1994	1995	1996	1997
Australia	8 802 100	10 308 100	10 165 800	10 361 000	12 925 000
New Zealand (c)	859 876	1 103 798	987 552	1 072 040	1 590 266
Papua New Guinea	6 187 316	...	...	...	...

Note(s):-

- (a) BGS estimates, based on known imports into certain countries
- (b) Re-exports
- (c) Years ended 30 June of that stated
- (d) Is likely to include re-export

Imports of Crude Petroleum

tonnes

Country	1993	1994	1995	1996	1997
Austria	7 453 315	7 789 848	...	...	8 467 771
Azerbaijan	1 188 000	...	...	...	...
Belarus	...	...	11 457 143	10 644 670	...
Belgium-Luxembourg	27 064 460	27 232 711	25 797 016	27 320 000	32 327 044
Bulgaria	8 900 000	5 900 000	7 390 443	6 893 796	5 832 748
Croatia	1 890 190	...	4 929 170	4 098 141	4 008 271
Czech Republic	5 610 000	6 493 000	7 052 000	7 671 000	7 023 306
Denmark	5 006 197	4 986 799	5 236 573	5 174 129	4 768 350
Finland	8 217 932	9 836 607	8 394 854	9 498 391	9 476 213
France	75 202 249	75 359 934	75 789 890	83 237 071	86 964 817
Germany	99 997 742	107 578 872	100 548 800	103 541 602	100 737 953
Greece	12 687 000	13 375 000	11 356 000	17 850 000	10 753 000
Hungary	6 207 092	5 821 385	5 872 242	5 512 325	5 480 450
Irish Republic	1 861 189	2 305 205	...	2 076 881	2 887 604
Italy	75 566 362	75 625 622	73 062 000	74 542 000	78 030 889
Lithuania	5 160 700	906 700	3 014 500	3 672 207	5 033 453
Macedonia	933 301	112 000	159 190	...	(c) *407 000
Netherlands	55 322 944	56 574 805	59 992 028	61 489 000	61 200 000
Norway	1 332 434	1 054 754	1 406 524	1 332 752	1 559 657
Poland	13 674 325	1 272 043	13 036 603	13 350 838	...
Portugal	11 321 572	13 436 000	13 237 000	11 131 892	12 701 350
Romania	7 580 718	8 122 294	8 657 249	7 155 735	6 244 782
Slovakia	4 231 000	4 825 407	5 301 328	5 443 068	...
Slovenia	1 997 591	410 871	515 575	2 673 170	2 715 086
Spain	50 565 416	53 567 000	52 299 461	51 955 000	53 471 773
Sweden	18 119 914	17 954 000	16 599 000	21 342 000	21 005 871
Switzerland	4 499 304	4 766 577	4 544 005	5 290 311	4 832 714
Turkey	21 970 000	21 181 000	23 605 000	22 767 000	...
United Kingdom	48 992 898	42 717 365	40 358 431	41 265 377	41 382 610
Yugoslavia, Federal Republic of	...	...	...	1 321 098	...
Cameroon	...	...	...	895 366	...
Congo, Democratic Republic	*110 000	*112 000	...	...	...
Ethiopia	584 714	...	...	...	...
Ghana	*1 015 000	*1 023 000	...	...	...
Ivory Coast	*3 042 000	*3 045 000	...	...	...
Kenya	2 118 158	2 173 155	1 356 907	1 412 947	1 833 744
Madagascar	468 281	235 208	435 754	...	...
Morocco	6 122 630	6 855 120	6 751 486	5 743 316	...
Senegal	545 702	302 782	650 686	...	...
Sierra Leone	...	...	85 188	98 898	69 670
South Africa	...	...	8 915 695	6 807 470	3 864 487
Sudan	*1 035 000	*1 037 000	...	...	...
Tanzania	*580 000	*585 000	...	...	...
Tunisia	295 400	608 253	907 100	757 987	...
Zambia	*550 000	*550 000	...	...	...
Barbados	123 829	113 420	194 400	...	...
Canada	30 064 238	33 056 827	36 366 949	39 442 330	47 298 401
Costa Rica	569 026	553 852	706 133	675 988	...
Cuba	4 452 000	4 927 000	5 136 000	5 000 000	5 200 000
Dominican Republic	1 915 000	1 991 000	2 033 000	...	...
El Salvador	938 165	658 134	745 266	720 862	789 345
Guatemala	694 897	788 478	781 135	738 980	...
Jamaica	887 552	801 244	788 077	649 083	*650 000
Martinique	684 297	772 200	712 768	...	...
Netherlands Antilles	11 523 000	9 439 000	*10 000 000	*10 000 000	*10 000 000
Nicaragua	646 677	720 045	762 808	...	...
Panama	1 735 158	1 188 791	1 222 756	2 040 500	...
Trinidad & Tobago	2 345 857	1 500 000	1 800 000	2 100 000	...
USA	346 839 482	368 770 696	368 919 493	394 606 231	418 577 612
Argentina	147 814	493 402	699 756	780 149	963 931
Brazil	22 551 119	23 349 981	22 605 389	24 986 296	24 433 160
Chile	6 583 670	6 956 520	7 922 607	8 437 850	8 554 579
Paraguay	219 913	237 950	228 423	149 128	...
Peru	833 510	965 667	2 463 147	2 909 915	...
Uruguay	168 581	181 957	1 454 800	1 505 118	1 503 635

Imports of Crude Petroleum

tonnes

Country	1993	1994	1995	1996	1997
Bahrain	10 850 000	...	...	...	...
Bangladesh (a)	1 221 286	...	...	...	...
China	15 671 205	12 345 913	17 089 939	22 616 949	35 469 702
Cyprus	706 267	875 423	808 725	748 947	1 039 834
India (b)	30 822 000	27 349 052	27 357 268	33 710 000	...
Indonesia	6 957 757	9 473 000	9 290 566	9 424 156	9 508 614
Israel	12 092 000	11 210 000	...	10 257 000	...
Japan	226 544 346	240 110 138	260 224 328	219 942 965	226 878 133
Jordan	2 899 533	2 977 092	3 162 859	3 272 680	...
Kazakhstan	8 684 000	1 845 000	...	...	...
Korea, Dem. P.R. of (c)	*1 095 000	*833 000	*1 022 000	*936 000	*506 000
Korea, Republic of	74 153 065	77 692 874	84 282 365	81 333 520	116 681 048
Lebanon	1 708 000	...	...	...	...
Malaysia	1 672 456	1 540 049	1 276 588	...	...
Pakistan	4 188 895	3 907 964	4 174 043	3 858 984	...
Philippines	11 250 522	11 647 341	15 973 931	17 065 409	...
Singapore	52 874 372	51 240 009	51 502 955	55 473 463	55 507 008
Sri Lanka	1 614 821	1 806 309	1 735 212	1 870 000	1 600 174
Taiwan	24 513 928	24 164 307	29 750 116	33 396 747	34 477 160
Thailand	16 283 062	17 241 502	21 273 355	29 209 836	...
Yemen, Republic of	3 350 000	*100 000	...	...	...
Australia	18 872 000	17 631 500	20 274 200	22 231 800	23 179 000
New Zealand (a)	3 214 826	3 682 547	3 864 183	*358 000 000	3 567 723

Note(s):-

- (a) Years ended 30 June of that stated
(b) Years ended 31 March following that stated
(c) BGS estimates, based on known exports from certain countries

Production of Phosphate Rock

tonnes

Country	1993	1994	1995	1996	1997
Finland	627 570	656 645	680 415	651 463	689 100
Russia	10 380 900	8 021 000	9 068 000	8 679 800	9 918 800
Turkey	38 384	—	—	—	—
Algeria	716 700	713 500	758 000	1 051 000	1 063 000
Egypt (e)	267 298	268 020	378 756	210 882	201 000
Morocco	18 307 000	20 335 000	20 314 000	20 792 000	23 084 000
Senegal					
Phosphate rock	1 663 100	1 585 850	1 524 700	1 376 807	1 589 167
Aluminium phosphate (a)	32 789	23 400	40 100	77 508	8 680
South Africa	2 465 800	2 545 200	2 790 000	2 655 200	2 717 400
Tanzania	2 219	—	6 686	717	...
Togo	1 794 300	2 149 200	2 569 000	2 730 700	2 631 400
Tunisia	5 476 000	5 565 000	6 302 000	7 167 600	6 940 700
Zimbabwe	153 471	150 560	154 482	122 631	93 849
Mexico	501 254	546 857	622 354	682 079	713 662
Netherlands Antilles (b)	28 782	22 972	...	...	...
USA	35 494 000	41 047 000	43 500 000	45 400 000	43 300 000
Brazil (d)	3 466 125	3 945 266	3 896 012	3 823 200	4 270 000
Chile	14 560	9 975	12 164	17 356	12 605
Colombia	44 960	48 107	*50 000	40 484	44 517
Peru	92 674	86 075	29 682	103 353	*100 000
Venezuela	...	99 000	85 510	147 850	318 587
China	21 158 700	26 890 000	31 200 800	31 040 200	30 365 000
Christmas Island (b) (c) (e)	263 946	296 709	421 590	542 800	567 860
India	969 400	1 236 600	1 335 100	1 379 800	946 300
Indonesia	*7 000	*7 000	*8 000	*8 000	*8 000
Iraq	*800 000	*1 000 000	*1 000 000	*1 000 000	*1 000 000
Israel	2 662 000	2 779 000	2 642 000	2 450 000	...
Jordan	4 282 600	4 216 500	4 983 900	5 421 500	5 895 600
Kazakhstan	4 100 000	2 080 000	2 221 000	*1 500 000	*1 500 000
Korea, Dem. P.R. of	*500 000	*500 000	*500 000	*500 000	*500 000
Pakistan	13 822	15 042	10 460	—	—
Philippines					
Phosphate rock	91 779	*20 000	*20 000	*20 000	*20 000
Guano	859	*5 000	*5 000	*5 000	...
Sri Lanka	28 795	32 300	29 500	34 000	29 600
Syria	930 000	1 202 000	1 598 000	2 189 000	2 392 000
Thailand	10 764	7 739	9 301	3 528	...
Vietnam	362 500	469 800	470 000	475 000	581 500
Australia	1 700	21 000	4 600	600	400
Nauru (b) (e)	792 536	583 835	527 073	551 320	541 050
World Total	119 000 000	129 000 000	140 000 000	143 000 000	142 000 000

Note(s):-

(a) Including lime phosphates

(b) Exports

(c) Including phosphate dust

(d) Including beneficiated and directly shipped material

(e) Years ended 30 June of that stated

Exports of Phosphate Rock

tonnes

Country	1993	1994	1995	1996	1997
Belgium-Luxembourg	2 613	18 811	21 332	7 784	12 675
Finland	3 946	7	81	—	140
France	2 650	2 270	3 063	7 001	1 149
Germany	1 938	3 336	325	217	81
Netherlands	169 574	162 031	115 164	128 266	99 188
Poland	54	21 382	39 288	45 000	...
Russia	1 023 437	2 756 600	3 098 300	3 571 900	...
Ukraine (b)	*100	*94 700	...	...	...
United Kingdom	956	5 057	884	2 441	425
Algeria	450 000	576 000	670 700	992 800	1 103 400
Egypt	134 400	113 800	48 000	64 800	180 700
Morocco	8 398 400	9 526 800	9 420 400	10 139 919	11 700 000
Senegal	1 090 650	539 989	846 468	725 096	616 700
South Africa	1 196 900	1 273 000	1 408 300	973 600	902 600
Togo	1 567 400	2 233 800	2 652 100	2 685 500	2 686 600
Tunisia	1 121 800	1 296 100	1 308 203	1 205 749	1 171 900
Netherlands Antilles	28 782	22 972	...	...	...
USA	3 575 000	3 310 000	2 990 000	1 570 000	335 000
China	641 486	742 872	948 933	1 368 667	1 660 379
Christmas Island (a) (c)	296 709	260 200	421 590	542 800	567 860
Israel	1 900 000	2 383 000	1 963 800	2 007 900	1 472 500
Jordan	3 564 950	3 829 600	3 878 500	4 307 726	4 367 200
Kazakhstan	1 872	...	1 670	195	183 955
Malaysia	2 544	1 410	...	...	...
Singapore	843	166	5 029	23	...
of which, re-exports	826	128	5 029	3	...
Syria	821 423	881 756	1 374 236	1 361 405	*1 600 000
Nauru	397 902	187 768	178 415	190 100	*180 000

Note(s):-

(a) Including phosphate dust

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

(c) Years ended 30 June of that stated

Imports of Phosphate Rock

tonnes

Country	1993	1994	1995	1996	1997
Albania	...	...	5 800	13 300	10 700
Austria	240 883	224 906	161 600	207 200	238 676
Belgium-Luxembourg	1 555 443	1 609 008	1 475 929	1 628 924	1 866 679
Bulgaria	237 900	275 200	267 513	437 052	521 792
Croatia	240 482	242 381	259 286	239 512	279 807
Czech Republic	87 100	76 128	96 600	74 300	78 835
Denmark	167 400	66 200	139 400	83 900	...
Finland	*60 000	57 044	91 286	112 500	59 444
France	1 455 594	1 559 872	1 652 197	1 706 019	1 557 341
Germany	425 712	301 796	288 878	257 521	284 812
Greece	260 532	287 806	479 920	626 328	525 614
Hungary	2 698	30 923	45 692	36 393	21 704
Irish Republic	2 941	7 794	7 632	12 191	7 214
Italy	224 524	255 300	271 384	231 734	142 211
Lithuania	...	...	412 200	468 682	539 771
Macedonia	89 200	61 400	*62 000	*60 000	...
Netherlands	1 781 633	1 563 220	2 094 664	1 998 529	1 944 971
Norway	687 926	625 090	605 079	680 521	667 801
Poland	953 375	1 425 901	1 706 712	1 792 500	...
Portugal	98 482	148 010	147 412	132 483	137 590
Romania	989 684	830 765	733 321	683 211	480 297
Russia	*100 000	134 400	107 300	37 800	...
Slovenia	42 281	17 160	700	1 792	1 732
Spain	1 340 545	191 008	1 812 391	2 107 936	2 207 570
Sweden	61 001	103 792	102 265	61 024	55 138
Turkey	736 475	615 573	620 663	604 869	1 117 910
Ukraine	*700 000	*800 000	*890 000	*900 000	...
United Kingdom	42 187	74 791	52 218	27 455	38 103
Yugoslavia, Federal Republic of	356 000	...	...	...	200 312
Egypt	...	...	...	29 100	74 000
Ivory Coast	1 200	...	1 000	...	1 600
Mauritius					
Guano	899	514	1 500	1 286	...
South Africa	319 951	625 010	482 000	495 625	556 106
Canada	1 207 346	1 168 324	1 182 871	1 006 913	1 083 389
Cuba	*5 000	*5 000	*5 000	*5 000	...
Mexico	544 946	1 177 706	1 377 624	1 757 003	1 891 800
USA	532 453	631 200	710 530	575 588	904 221
Brazil	396 887	562 953	531 716	653 787	676 077
Chile	25 339	36 827	53 794	34 319	19 791
Colombia	72 859	56 873	87 548	50 478	...
Uruguay	12 175	36 707	11 000	30 850	17 955
Venezuela	49 775	58 951	67 440	44 025	...
Bangladesh (b)	88 400	162 600	139 900	*37 500	...
China	112 300	137 597	135	419	476
India (c)	1 922 739	2 540 138	2 443 753	2 038 253	*2 700 000
Indonesia	133 344	489 150	591 129	955 842	680 023
Iran (a)	195 451	332 605	422 728	*387 000	...
Japan	1 395 178	1 194 059	1 332 573	1 178 028	1 030 763
Korea, Dem. P.R. of	59 600	40 900	700	5 500	9 300
Korea, Republic of	1 646 266	1 681 299	1 658 750	1 630 534	1 640 561
Lebanon	230 000	267 000	361 000	375 000	406 000
Malaysia					
Phosphate rock	351 032	465 538	538 928	586 900	602 900
Guano	5 995	5 760	5 317	5 118	...
Pakistan (b)	213 525	280 927	253 280	240 487	154 000
Philippines	418 611	519 135	742 364	707 262	...
Saudi Arabia	4 012	3 435	4 612	6 077	...
Sri Lanka	—	1 000	2 281	1 122	1 380
Taiwan	325 253	352 998	373 927	313 517	265 234

Phosphates

Imports of Phosphate Rock

tonnes

Country	1993	1994	1995	1996	1997
Australia (b)	849 000	775 700	1 066 900	910 800	906 200
New Zealand (b)	814 004	891 331	795 631	*791 000	845 585

Note(s):-

- (a) Years ended 20 March following that stated
- (b) Years ended 30 June of that stated
- (c) Years ended 31 March following that stated

Mine Production of Platinum Group Metals

kilograms (metal content)

Country	1993	1994	1995	1996	1997
Russia					
Platinum	*20 000	*15 000	*18 000	*17 000	*17 000
Palladium	*50 000	*40 000	*48 000	*47 000	*47 000
Other platinum metals	*4 000	*3 000	*3 600	*3 500	*3 500
South Africa (a)	176 167	183 925	183 097	188 636	196 466
Zimbabwe					
Platinum	4	7	6	*7	245
Palladium	11	17	16	*12	345
Other platinum metals	...	...	...	—	27
Canada					
Platinum	5 000	5 700	...	...	...
Palladium	6 000	6 700	(b) 16 963	(b) 14 668	(b) 13 694
Other platinum metals	1 440	1 910	...	...	...
USA					
Platinum	*2 050	*1 960	*1 590	*1 840	*2 610
Palladium	*6 780	*6 440	*5 260	*6 100	*8 400
Colombia	1 722	1 084	973	669	406
Australia					
Platinum	79	113	74	119	315
Palladium	405	450	528	559	429
World Total	274 000	266 000	278 000	280 000	290 000

Note(s):-

- (1) Wherever possible, figures relate to quantities of platinum group metals thought to be recovered from ores originating in the country stated
 - (2) Figures for metal production are only given for countries where recovery is thought to be based predominantly on domestic materials or on imported materials which have not been recorded as mine production elsewhere in the table
 - (3) In addition to the countries listed, Bulgaria, China, Ethiopia, Indonesia, Papua New Guinea and Philippines are believed to produce platinum group metals
- (a) Metal production
(b) Platinum group metals; all forms

Exports of Platinum Group Metals

kilograms

Country	1993	1994	1995	1996	1997
Austria					
Platinum & platinum metals	811	1 100	1 191	1 741	600
Belgium-Luxembourg					
Platinum	4 115	5 903	8 047	9 612	12 087
Platinum metals	23 897	16 182	14 487	41 061	34 533
Waste & scrap	£14 190 000	£7 539 000	£1 139 000	£1 995 000	£1 502 000
Bulgaria					
Waste & scrap (a)	*400	*100	*1 300	*600	*400
Croatia					
Platinum & platinum metals	£241 000	£70 000	£325 000	£638 000	£499 000
Czech Republic					
Waste & scrap	(a) *900	(a) *4 500	(a) *3 900	(a) *500	275
Denmark					
Platinum & platinum metals	124	183	11	142	134
Waste & scrap	11	10	14	4	262
Estonia					
Waste & scrap (a)	*100	*1 100	*4 500	*14 300	*18 700
France					
Platinum	4 309	5 677	8 251	8 888	5 900
Platinum metals	5 881	7 182	7 736	11 180	11 180
Waste & scrap	3 255	16 700	27 878	2 816	15 900
Germany					
Platinum	14 874	13 814	18 228	17 347	20 300
Palladium	16 145	16 977	18 249	16 105	17 800
Other platinum metals	2 259	2 887	3 854	3 593	1 600
Waste & scrap	38 117	314 153	132 032	31 588	329 400
Italy					
Platinum	2 141	2 481	...	...	1 113
Platinum metals	1 182	1 142	...	...	2 522
Latvia					
Waste & scrap (a) (d)	*200	*100	*200	*6 200	*4 800
Lithuania					
Waste & scrap	(a) (d) *700	(a) (d) *6 500	—	...	91
Netherlands					
Platinum	2 446	2 739	2 726	...	...
Platinum metals	631	761	1 069	...	...
Waste & scrap	20 000	2 000	4 000	...	...
Norway					
Platinum & platinum metals	3 909	5 682	7 931	4 823	5 943
Poland					
Platinum & platinum metals	490	152	61	...	...
Portugal					
Platinum & platinum metals	237	...	...	...	...
Russia					
Platinum & platinum metals (a)	*117 800	*127 100	*80 000	*71 800	*99 500
Waste & scrap (a)	*6 700	*600	*500	*92 000	*335 600
Spain					
Platinum & platinum metals	2 099	1 233	3 282	...	1 447
Sweden					
Platinum & platinum metals	£555 000	£848 000	£642 000	£644 000	...
Switzerland					
Platinum & platinum metals	77 121	71 808	60 998	65 630	146 349
Waste & scrap	5 443	6 318	2 649	5 408	32 302
Ukraine					
Waste & scrap (a)	...	*550	*800	*10 300	*37 400
United Kingdom					
Platinum	28 188	21 845	27 258	29 155	66 576
Palladium	28 216	29 629	27 654	25 248	21 113
Other platinum metals	4 679	4 449	5 622	7 018	16 170
Waste & scrap	5 203	2 520	4 478	58 505	203 889
South Africa					
Platinum & platinum metals	153 711	161 694	175 158	183 962	189 853
Waste & scrap (a)	*900	*1 300	*5 400	*118 900	*105 700
Canada					
Ores & concentrates (b)	10 157	7 325	10 320	8 686	8 934
Platinum metals	7 503	6 604	5 249	5 050	6 927

Exports of Platinum Group Metals

kilograms

Country	1993	1994	1995	1996	1997
USA					
Ores & concentrates (b)	1 060	202	598	486	710
Platinum	18 548	20 665	21 470	20 648	31 511
of which, re-exports	2 434	5 089	6 518	7 937	8 510
Palladium	27 294	32 217	33 907	33 605	61 127
of which, re-exports	1 165	2 542	7 891	6 906	18 632
Other platinum metals	1 845	1 113	1 348	407	1 403
of which, re-exports	440	258	523	96	547
Waste & scrap	31 982	42 104	8 153	8 640	13 251
China					
Platinum & platinum metals	407	2 463	3 094	1 775	3 363
Hong Kong					
Platinum & platinum metals (c)	1 808	1 439	1 071	1 554	1 946
Israel					
Platinum & platinum metals	£308 000	£90 000	£400 000	£97 000	...
Waste & scrap (a)	*900	*600	*1 100	*3 300	*10 300
Japan					
Platinum	3 800	4 539	5 715	6 808	9 002
Platinum metals	4 189	7 399	9 462	28 043	20 472
Waste & scrap	278	665	1 276	4 382	13 822
Korea, Republic of					
Platinum & platinum metals	88	449	441	4 050	13 639
Waste & scrap	2 960	—	92	—	8 597
Malaysia					
Waste & scrap	96 000	—	...	...	...
Pakistan					
Platinum	20 754	...	...	...	...
Singapore					
Platinum & platinum metals (c)	169	715	231	1 495	9 130
Taiwan					
Platinum & platinum metals	4 094	6 842	4 633	276	307
Waste & scrap	76 699	83 063	85 229	1 500	18 619
Australia					
Platinum & platinum metals	£800 000	£1 888 000	£2 532 000	£1 192 000	...

Note(s):-

(1) In this table the term 'Platinum' and/or 'Platinum metals' includes unwrought, partly worked and alloys

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

(b) Platinum metals content

(c) Re-exports

(d) Is likely to include re-exports

Imports of Platinum Group Metals

kilograms

Country	1993	1994	1995	1996	1997
Austria					
Platinum & platinum metals	2 959	3 918	4 725	5 506	7 100
Belarus					
Platinum & platinum metals (d)	...	*100	*600	*200	*50
Belgium-Luxembourg					
Platinum	1 252	1 430	2 760	4 587	4 900
Platinum metals	1 951	597	5 894	24 094	108 900
Waste & scrap	£748 000	£686 000	...	£1 003 000	£9 466 000
Bulgaria					
Platinum & platinum metals (d)	*100	*50	*50	...	...
Croatia					
Platinum & platinum metals	£190 000	£130 000	£189 000	£291 000	£383 000
Czech Republic					
Platinum & platinum metals (d)	*400	*500	*400	*1 200	*400
Denmark					
Platinum & platinum metals	561	567	658	559	1 612
Finland					
Platinum & platinum metals	111	328	1 000	451	99
France					
Platinum	5 561	9 677	13 992	13 868	16 900
Platinum metals	6 866	7 671	9 273	12 535	19 400
Waste & scrap	1 338	4 400	2 178	19 706	2 100
Germany					
Platinum	13 844	19 185	23 764	22 775	26 900
Palladium	20 915	25 056	27 169	24 790	31 700
Other platinum metals	3 061	3 842	5 576	6 791	4 300
Waste & scrap	11 504	32 439	85 132	1 347 887	2 238 400
Greece					
Platinum & platinum metals	2 000	...	...	...	...
Hungary					
Platinum & platinum metals	(d) *150	(d) *50	(d) *100	104	123
Irish Republic					
Platinum & platinum metals	31 148	38 538	113 996	27 729	83 046
Italy					
Platinum	6 628	5 063	...	...	5 772
Platinum metals	37 665	19 808	...	...	26 070
Waste & scrap	4 500	2 600	337	530	980
Netherlands					
Platinum	867	497	1 550	...	...
Platinum metals	3 863	2 496	1 809	...	...
Waste & scrap	1 000	—	...	574	...
Norway					
Platinum & platinum metals	1 756	918	388	622	633
Poland					
Platinum & platinum metals	95	382	144	2 086	...
Portugal					
Platinum & platinum metals	200	...	...	...	82
Romania					
Platinum & platinum metals	12 613	20 335	30 606	...	...
Spain					
Platinum & platinum metals	1 754	2 190	2 389	...	15 629
Waste & scrap	5 000	—	—	130	104
Sweden					
Platinum & platinum metals	£16 433 000	£14 032 000	£9 177 000	£6 864 000	£5 094 000
Switzerland					
Platinum & platinum metals	66 353	76 655	55 911	66 569	122 233
Waste & scrap	8 101	5 575	14 651	2 815	5 957
Turkey					
Platinum & platinum metals	5 034	1 607	5 666	17 257	399
Ukraine					
Platinum & platinum metals (d)	*100	*500	*650	*1 000	*600
United Kingdom					
Ores & concentrates	43 037	32 324	68 325	...	...
Platinum	22 847	19 595	19 136	16 432	15 809
Palladium	14 974	28 344	25 584	40 909	25 190
Other platinum metals	5 966	4 193	4 036	4 808	6 967
Waste & scrap	33 780	52 824	110 072	651 881	705 721

Imports of Platinum Group Metals

kilograms

Country	1993	1994	1995	1996	1997
South Africa					
Platinum & platinum metals	7 154	9 941	85 545	...	8 374
Waste & scrap	324 059	95 732	17 252	2 878	2 721
Canada					
Platinum & platinum metals (c)	6 991	11 271	11 388	12 196	12 670
USA					
Platinum	55 883	54 363	71 460	76 097	76 300
Palladium	79 160	92 649	121 472	145 982	148 377
Rhodium	7 171	7 854	9 650	9 602	14 643
Other platinum metals	5 513	10 903	9 081	17 750	13 492
Waste & scrap	4 219	2 757	6 310	5 065	5 382
Brazil					
Platinum	408	622	563	902	...
Palladium	1 210	804	1 539	2 231	...
Venezuela					
Platinum & platinum metals	991	1 010	1 259	390	...
China					
Platinum & platinum metals	945	950	1 800	3 455	4 117
Cyprus					
Platinum & platinum metals	75	73	91	4 492	1 447
Hong Kong					
Platinum & platinum metals	5 878	8 313	11 324	18 379	20 650
India					
Platinum & platinum metals (a)	251	221	231	436	...
Indonesia					
Platinum & platinum metals	21 279	6 333	79	20 026	...
Israel					
Platinum & platinum metals	£1 472 000	£1 808 000	£1 500 000	£800 000	...
Japan					
Platinum	65 927	74 762	73 199	72 806	66 187
Platinum metals	77 058	85 937	106 216	85 727	112 279
Waste & scrap	93 473	2 890	1 013	25 152	256 613
Korea, Republic of					
Platinum & platinum metals	4 316	5 638	7 353	51 890	20 824
Malaysia					
Platinum & platinum metals	12 071	22 915	...	...	...
Singapore					
Platinum & platinum metals	13 117	17 924	23 466	11 044	16 932
Taiwan					
Platinum & platinum metals	3 741	6 563	15 378	11 672	10 171
Thailand					
Platinum & platinum metals	76 915	101 926	51 373	4 891	...
Australia					
Platinum metals (b)	3 556	...	...	...	...

Note(s):-

(1) In this table the term 'Platinum' and/or 'Platinum metals' includes unwrought, partly worked and alloys

(a) Years ended 31 March following that stated

(b) Years ended 30 June of that stated

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

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

Potash

Production of Potashtonnes (K₂O content)

Country	1993	1994	1995	1996	1997
Azerbaijan	*10 000	*5 000	*5 000	*5 000	*5 000
Belarus	1 947 000	2 515 000	2 795 000	2 716 000	3 247 000
France					
Potassic salts	890 000	869 600	801 600	751 000	665 300
Germany					
Potassic salts	2 860 000	3 286 600	3 278 400	3 331 790	3 422 900
Russia	2 597 000	2 479 000	2 814 000	2 618 000	3 403 000
Spain					
Chloride	660 856	679 954	635 615	680 472	605 000
Ukraine	88 000	77 700	55 100	55 200	52 200
United Kingdom					
Chloride	555 000	580 000	582 000	618 000	564 500
Canada					
Chloride	6 835 865	8 181 946	9 065 604	7 992 034	9 036 461
USA					
Potassic salts	1 506 000	1 400 000	1 480 000	1 390 000	1 400 000
Brazil					
Chloride	167 589	234 265	215 411	235 000	271 000
Chile					
Chloride	*34 500	*47 300	*60 000	*230 000	*260 000
Nitrate	*46 000	*46 000	*48 000	*43 000	*45 000
China	117 200	327 200	263 200	218 200	...
Israel					
Chloride	1 309 000	1 259 300	1 326 000	1 500 000	1 488 000
Jordan	822 100	930 200	1 068 000	1 059 200	849 400
World Total	20 400 000	22 900 000	24 500 000	23 400 000	25 500 000

Exports of Potash

Potash

tonnes

Country	1993	1994	1995	1996	1997
Belarus					
Chloride (a)	...	...	...	2 244 737	1 818 596
Other potassic fertilisers (b)	...	*589 000	...	*616 000	...
Belgium-Luxembourg					
Fertiliser salts (a)	60	1	450	*3 000	*1 500
Sulphate (b)	*326 001	*290 000	*315 000	*282 000	*293 000
Chloride (a)	95 789	151 785	104 283	*95 000	*110 000
Other potassic fertilisers (a)	10 199	1 638	1 304	*2 000	*2 500
Finland					
Sulphate (b)	*32 800	...	*41 000	*46 000	...
France					
Sulphate	1 321	1 059	...	4 624	1 806
Chloride	336 839	323 202	299 522	283 693	261 541
Other potassic fertilisers	165	223	...	387	1 583
Germany					
Fertiliser salts (a)	(e) 3 760 739	(e) 2 816 908	(e) 2 471 985	(f) 2 648 218	(f) 2 873 050
Other potassic fertilisers (a)	104 673	36 356	39 917	...	...
Italy					
Sulphate	27 222	49	51	671	1 796
Other potassic fertilisers	3 695	3 234	627	263	7 586
Latvia					
Chloride (b) (c)	*198 300	*460 800	*120 000	*144 100	...
Lithuania					
Potassic fertilisers	...	(b) (d) *30 300	1 530	16 175	15 855
Netherlands					
Sulphate (a)	1 754	1 125	484	*3 000	*1 000
Chloride (a)	70 364	64 812	50 704	*35 000	*45 000
Poland					
Potassic fertilisers	37 433	3 024	1 166	3 800	...
Russia					
Fertiliser salts	*400	1 300	20 000	17 000	...
Chloride	2 725 000	3 652 475	(b) *3 565 000	(b) *3 203 000	4 909 164
Other potassic fertilisers	...	(b) *515 700	(b) *201 000	(b) *447 000	...
Spain					
Sulphate	29 111	47 313	46 071	72 249	63 136
Chloride	734 273	582 009	730 080	643 490	667 967
Sweden					
Sulphate	102 563	125 054	129 694	137 876	110 894
Ukraine					
Chloride (b)	*154 000	*126 000	*340 000	*47 500	*80 300
Other potassic fertilisers (b)	*108 000	*121 000	*2 900	*31 200	...
United Kingdom					
Chloride	*530 000	*550 000	*550 000	*540 000	*540 000
Other potassic fertilisers	722	426	601	2 505	4 164
Canada					
Chloride	10 146 972	13 000 043	13 795 493	12 922 578	14 545 380
Other potassic fertilisers	24 124	25 844	7 681	14 737	20 260
USA					
Sulphate	556 035	563 000	629 000	694 000	692 000
Chloride	361 193	419 000	297 000	393 000	365 000
Chile					
Fertiliser salts	132 304	169 931	147 294	147 829	164 257
China					
Fertiliser salts	3	320	1 932	132 440	—
Chloride	7 004	3 208	196 564	525 701	587 010
Israel					
Chloride (b)	*1 399 000	*1 363 600	*1 232 000	*1 227 000	...
Other potassic fertilisers	24 232	(b) *37 600	(b) *52 900	(b) *48 300	...
Japan					
Potassic fertilisers	1 324	1 407	487	786	687
Jordan					
Fertiliser salts (a)	886 000	910 000	1 058 100	1 052 200	851 600
Korea, Republic of					
Sulphate	16 000	46 851	27 500	105 363	92 878

Potash

Exports of Potash

tonnes

Country	1993	1994	1995	1996	1997
Singapore					
Sulphate (c)	8 342	6 191	2 074	139	42
Chloride (c)	60 719	58 888	39 327	29 438	35 282
Other potassic fertilisers	2 512	7 147	989	5 853	6 751
of which, re-exports	2 033	7 136	989	5 850	6 750
Taiwan					
Potassic fertilisers	59 457	108 419	75 781	86 604	104 201

Note(s):-

- (a) K₂O content
- (b) BGS estimates, based on known imports into certain countries
- (c) Re-exports
- (d) Is likely to include re-exports
- (e) Including sulphate and chloride
- (f) Including sulphate, chloride and other potassic fertilisers

Imports of Potash

Potash

tonnes

Country	1993	1994	1995	1996	1997
Austria					
Fertiliser salts	3 017	13 324	11 485	2 049	16 071
Sulphate	14 353	9 055	7 130	5 688	*8 000
Chloride	161 606	181 328	27 279	141 533	*110 000
Other potassic fertilisers	4 761	5 369	502	726	4 019
Belgium-Luxembourg					
Fertiliser salts (a)	4 277	3 805	4 364	*4 000	*5 000
Sulphate (a)	60 399	58 550	48 468	*69 000	*77 000
Chloride (a)	1 095 340	686 756	725 721	*695 000	*776 000
Other potassic fertilisers (a)	606	1 607	5 177	*7 000	*6 000
Bulgaria					
Fertiliser salts (a)	3 000	3 000	12 000	27 000	...
Croatia					
Chloride	145 890	...	178 418	163 127	182 206
Czech Republic					
Potassic fertilisers	65 900	82 500	116 900	109 600	106 364
Denmark					
Sulphate	22 165	24 953	29 494	7 190	30 816
Chloride	223 001	251 523	244 743	125 870	154 139
Other potassic fertilisers	7 869	6 733	10 588	14 967	9 881
Finland					
Chloride	(c) *278 400	(c) *161 800	(c) *184 000	*160 000	*160 000
Other potassic fertilisers	1 962	436	6 892	2 234	444
France					
Fertiliser salts	241	9 514	37 829	40 346	12 715
Sulphate	97 702	86 436	95 573	101 484	101 910
Chloride	889 439	1 296 250	1 391 722	1 485 627	1 686 159
Other potassic fertilisers	24 138	31 344	28 405	34 777	33 015
Germany					
Chloride (a)	136 681	51 186	54 696	64 319	112 012
Greece					
Sulphate	48 350	77 411	110 351	144 232	164 451
Chloride	20 354	21 558	37 397	27 312	12 472
Other potassic fertilisers	2 899	8 196	8 954	7 916	8 400
Hungary					
Potassic fertilisers	77 041	95 227	107 255	112 821	116 522
Iceland					
Sulphate	1 019	1 260	1 030	21	701
Chloride	5 446	5 188	5 386	7 881	2 707
Irish Republic					
Sulphate	5 975	5 517	5 634	1 911	629
Chloride	243 336	233 221	225 024	311 191	258 116
Other potassic fertilisers	3 016	21 692	—	—	2 877
Italy					
Sulphate	99 844	124 782	90 861	98 508	79 936
Chloride	551 121	493 798	485 201	405 292	524 284
Other potassic fertilisers	19 123	24 545	23 623	16 080	23 545
Latvia					
Potassic fertilisers	*2 500	2 600	11 700	24 700	...
Lithuania					
Chloride	...	...	77 500	67 343	71 555
Macedonia					
Potassic fertilisers	10 700	13 800	*14 000	*14 000	...
Netherlands					
Sulphate (a)	18 820	17 227	22 884	*25 000	*32 000
Chloride (a)	208 624	299 537	312 389	*250 000	*240 000
Other potassic fertilisers (a)	6 516	12 737	9 063	*12 000	*8 000
Norway					
Sulphate	130 881	159 036	177 640	169 303	187 970
Chloride	381 300	361 047	359 922	372 793	342 143
Other potassic fertilisers	447	458	367	524	658
Poland					
Fertiliser salts	115 804	11 901	11 476	(e) (f) 826 100	...
Sulphate	6 193	6 331	12 010	...	...
Chloride	310 690	656 959	732 981	(e) 802 700	...
Portugal					
Sulphate	...	...	...	1 198	2 370
Chloride	...	...	...	79 072	87 941

Potash

Imports of Potash

tonnes

Country	1993	1994	1995	1996	1997
Romania					
Fertiliser salts (a)	42 845	90 105	96 577	84 858	83 760
Slovakia					
Potassic fertilisers	34 274	88 700	93 900	112 700	...
Spain					
Sulphate	7 260	6 254	16 323	8 146	14 812
Chloride	71 233	111 092	256 636	348 434	337 638
Other potassic fertilisers	30 548	385	849	762	1 329
Sweden					
Fertiliser salts	2 705	4 029	2 480	25	100
Sulphate	6 428	10 269	...	...	...
Chloride	137 468	250 792	...	7 479	11 808
Other potassic fertilisers	3 149	2 743	4 981	4 589	4 747
Switzerland					
Sulphate	3 795	2 800	2 937	3 152	2 365
Chloride	35 448	31 400	25 821	19 193	18 607
Other potassic fertilisers	3 820	5 191	4 578	4 997	5 052
Turkey					
Sulphate	29 624	26 966	11 336	21 385	19 554
Other potassic fertilisers	131 910	128 697	136 492	115 974	103 676
Ukraine					
Potassic fertilisers	*200 000	*200 000	*180 000	*180 000	...
United Kingdom					
Fertiliser salts	18 464	22 427	26 965	26 017	25 038
Chloride	332 807	463 715	441 494	462 630	331 300
Other potassic fertilisers	7 267	10 266	6 011	9 129	12 066
Yugoslavia, Federal Republic of					
Sulphate	...	...	...	...	55 570
Algeria					
Potassic fertilisers	53 000	33 500	66 700	*70 000	...
Cameroon					
Potassic fertilisers (a)	1 100	5 700	100	...	...
Egypt					
Potassic fertilisers (a)	36 800	7 100	8 800	12 600	10 500
Kenya					
Potassic fertilisers	33 316	2 884	3 026	1 362	3 368
Madagascar					
Potassic fertilisers (a)	2 234	*3 000	*2 000	...	...
Mauritius					
Potassic fertilisers	27 778	29 320	27 588	28 801	...
Morocco					
Sulphate	(f) 35 978	...	31 977	37 172	...
Chloride	...	...	51 058	...	...
Nigeria					
Potassic fertilisers (a)	23 100	18 400	—	6 000	300
Reunion					
Potassic fertilisers (a)	2 270	3 523	900	1 800	...
Senegal					
Potassic fertilisers (a)	17 200	10 500	18 000	12 000	29 200
South Africa					
Sulphate	12 187	11 667	31 997	25 293	33 734
Chloride	282 844	254 847	202 073	282 244	228 643
Tunisia					
Potassic fertilisers	9 569	11 579	12 962	16 571	...
Zimbabwe					
Sulphate	65 163	68 731	22 538	18 534	38 925
Chloride	37 162	41 541	12 281	35 689	59 018
Belize					
Potassic fertilisers	3 531	4 659	3 052	978	346
Canada					
Sulphate	107 434	69 789	61 825	73 518	75 733
Chloride	4 576	4 950	5 651	12 318	4 851
Other potassic fertilisers	1 537	1 216	1 452	2 291	5 711
Costa Rica					
Potassic fertilisers	86 360	98 111	85 827	90 611	...

Imports of Potash

tonnes

Country	1993	1994	1995	1996	1997
Cuba					
Chloride	*50 000	*65 000	*175 000	*170 000	*120 000
Dominican Republic					
Potassic fertilisers	10 100	26 000	18 600	30 300	32 800
El Salvador					
Potassic fertilisers	7 675	5 610	10 863	16 350	12 461
Guatemala					
Potassic fertilisers	37 723	46 549	55 071	54 753	...
Honduras					
Potassic fertilisers	38 873	28 442	18 156	8 029	...
Jamaica					
Potassic fertilisers	341	...	13 027	12 744	...
Martinique					
Potassic fertilisers	5 302	15 153	15 472	*15 000	...
Mexico					
Sulphate	36 037	31 211	24 822	34 475	...
Chloride	171 262	128 842	96 386	194 579	(e) *270 000
Nicaragua					
Potassic fertilisers	...	3 847	5 621	3 303	*3 000
Panama					
Potassic fertilisers	12 136	29 132	18 882	18 906	...
USA					
Fertiliser salts	6 827	3 676	3 242	33 331	30 516
Sulphate	87 328	70 886	51 777	60 370	56 235
Chloride	7 058 085	7 863 391	7 912 547	8 127 007	9 037 671
Other potassic fertilisers	46 016	59 980	29 957	41 698	33 751
Argentina					
Sulphate	9 126	1 885	7 116	17 942	...
Chloride	18 929	21 723	36 700	37 879	*40 000
Brazil					
Sulphate	46 543	39 889	50 005	...	...
Chloride	2 516 340	2 748 461	2 484 865	3 015 165	3 555 672
Chile					
Sulphate	11 711	9 318	6 953	12 472	7 309
Chloride	42 205	46 450	59 383	74 732	63 086
Other potassic fertilisers	9 563	13 417	25 169	33 488	22 349
Colombia					
Sulphate	14 136	7 230	12 707	16 542	...
Chloride	217 679	298 059	252 310	247 888	*285 000
Ecuador					
Fertiliser salts	12 000	5 999	6 045	...	...
Chloride	25 829	39 377	65 827	59 490	...
Other potassic fertilisers	1 503	6 734	3 555	5 511	...
Peru					
Chloride	30 106	55 136	8 445	17 812	...
Other potassic fertilisers	8 183	5 529	12 745	21 904	...
Uruguay					
Potassic fertilisers	9 663	4 906	5 349	13 331	18 930
Venezuela					
Sulphate	2 909	23 104	16 796	25 846	...
Chloride	86 028	57 830	74 043	64 538	...
Bangladesh					
Potassic fertilisers (d)	2 048	...	...	...	...
China					
Fertiliser salts	3	320	40 063	172 548	...
Sulphate	566 335	570 972	439 884	416 504	628 128
Chloride	1 727 246	2 846 045	3 858 241	3 438 962	4 625 909
Other potassic fertilisers	386	85 259	98 172	...	20 039
Cyprus					
Potassic fertilisers	428	3 034	583	462	600
India					
Chloride (b)	1 086 248	1 703 423	1 885 667	830 649	...
Other potassic fertilisers (b)	31 376	43 848	140 992	27 393	...
Indonesia					
Sulphate	5 083	19 514	12 929	6 330	7 471
Chloride	505 630	347 500	522 035	478 840	610 172

Potash

Imports of Potash

tonnes

Country	1993	1994	1995	1996	1997
Japan					
Sulphate	186 213	197 924	22 582	238 567	195 075
Chloride	993 180	1 002 914	968 381	909 857	926 442
Other potassic fertilisers	84 203	82 979	223 886	83 752	78 079
Korea, Republic of					
Chloride	618 319	671 066	...	712 505	688 715
Malaysia					
Sulphate	15 357	18 268	...	...	...
Chloride	148 786	...	...	...	...
Other potassic fertilisers	756 957	700 748	...	...	...
Philippines					
Sulphate	24 250	39	185	1 107	...
Chloride	172 753	201 664	208 515	285 291	...
Saudi Arabia					
Sulphate	33 463	1 468	20 565	12 424	...
Other potassic fertilisers	6 618	2 667	2 967	11 231	...
Singapore					
Sulphate	8 100	4 764	28	161	48
Chloride	32 887	35 166	41 974	27 704	27 868
Other potassic fertilisers	41 993	27 874	14 778	5 068	6 045
Sri Lanka					
Chloride	34 576	52 673	28 428	40 801	46 525
Other potassic fertilisers	48 551	53 746	49 964	75 256	31 445
Syria					
Potassic fertilisers	3 000	11 125	8 225	17 852	...
Taiwan					
Chloride	320 177	282 513	344 918	287 285	328 237
Thailand					
Sulphate	25 090	15 332	15 715	11 738	...
Chloride	111 129	120 728	182 770	206 032	...
Australia					
Potassic fertilisers (d)	256 600	298 600	366 100	364 400	328 300
New Zealand					
Sulphate (d)	4 624	7 760	684	...	8 196
Chloride (d)	209 624	236 004	216 494	...	208 055

Note(s):-

- (a) K₂O content
- (b) Years ended 31 March following that stated
- (c) BGS estimates, based on known exports from certain countries
- (d) Years ended 30 June of that stated
- (e) Including sulphate
- (f) Including chloride

Production of Rare Earth Minerals

tonnes

Country	1993	1994	1995	1996	1997
Congo, Democratic Republic					
Monazite	*20	*20	*20	*10	...
Madagascar					
Bastnaesite	*5	*5	*5	*5	...
Monazite	*100	*100	*100	*100	...
South Africa					
Monazite	*430	131	—	—	—
USA					
Bastnaesite (a)	17 754	20 664	22 200	20 400	*20 000
China (a)	*22 100	*23 000	*30 700	*33 000	...
India					
Monazite (b)	*4 600	*4 600	*5 000	*5 000	*5 000
Malaysia					
Monazite	407	425	814	618	688
Xenotime	22	1	8	—	79
Sri Lanka					
Monazite	*200	*200	*200	*200	*200
Thailand					
Monazite	220	57	—	—	—
Australia					
Monazite	6 500	2 300	200	—	—

Note(s):-

(1) With the exception of the data for USA and China, figures in this table refer to gross tonnage of concentrates

(2) Rare earth minerals are believed to be produced in Brazil, Kyrgystan, Russia, Indonesia, Democratic P.R. of Korea, and Mozambique

(a) REO content. Assumed to be 60% of concentrates produced

(b) Years ended 31 March following that stated

Rare Earths

Exports of Rare Earths

tonnes

Country	1993	1994	1995	1996	1997
Austria					
Cerium compounds	687	789	975	553	485
Other rare earth compounds	2 809	3 234	2 167	1 651	1 260
Metals	358	376	285	278	...
Estonia					
Rare earth compounds (b)	*600	*2 900	*3 200	*3 100	*800
France					
Rare earth compounds	19 525	16 207	9 766	3 430	1 252
Ferro-cerium & other pyrophoric alloys	121	127	155	258	192
Metals	70	41	73	184	163
Germany					
Rare earth compounds	120	117	147	16	144
Ferro-cerium & other pyrophoric alloys	16	7	9	9	6
Italy					
Metals	33	47	...	...	12
Russia					
Rare earth compounds	(b) *1 200	(b) *700	(b) *300	2 879	...
Switzerland					
Ferro-cerium & other pyrophoric alloys	1 565	1 572	1 664	1 607	1 767
United Kingdom					
Cerium compounds	219	408	568	473	407
Other rare earth compounds	380	658	772	933	595
Ferro-cerium & other pyrophoric alloys	93	20	29	11	11
Metals	106	107	416	44	70
South Africa					
Rare earth compounds (a)	...	...	4 492	4 536	5 388
USA					
Cerium compounds	1 629	4 453	5 127	6 148	6 010
Other rare earth compounds	1 070	2 416	1 546	2 221	1 660
Metals	166	275	370	211	826
Brazil					
Metals	153	67	11	...	...
China					
Ores & concentrates	1 307	1 729	676	1 405	300
Cerium compounds	1 444	4 411	7 877	9 994	13 826
Other rare earth compounds	13 525	16 171	27 608	33 522	31 275
Ferro-cerium & other pyrophoric alloys	221	142	130	288	294
Metals	2 747	4 639	6 870	5 055	8 207
Japan					
Cerium compounds	537	597	541	658	849
Other rare earth compounds	199	204	395	417	532
Metals	1	4	804	408	403
Kazakhstan					
Metals (b)	*50	*50	*150	*50	*100
Malaysia					
Ores & concentrates	30	178	1 080	1 033	...
Taiwan					
Rare earth compounds	247	547	813	172	430
Metals	24	27	12	24	103
Thailand					
Ores & concentrates	—	—	—	100	...
Ferro-cerium & other pyrophoric alloys	349	205	37	50	...
Australia					
Ores & concentrates	6 500	2 700	—	—	—

Note(s):-

(1) Rare earths are here taken to include yttrium and scandium

(a) Values shown are for the common customs area

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

Imports of Rare Earths

tonnes

Country	1993	1994	1995	1996	1997
Austria					
Cerium compounds	574	451	433	484	780
Other rare earth compounds	492	406	541	810	715
Metals	622	377	829	276	673
Belgium-Luxembourg					
Cerium compounds	617	426	390	419	424
Other rare earth compounds	122	162	193	24	64
Ferro-cerium & other pyrophoric alloys	51	50	18	12	17
Metals	44	38	22	207	376
France					
Cerium compounds	584	564	1 311	6 658	11 028
Other rare earth compounds	8 073	13 570	13 027	15 752	906
Ferro-cerium & other pyrophoric alloys	87	77	65	37	61
Metals	237	294	305	406	412
Germany					
Cerium compounds	932	998	1 114	1 704	2 178
Other rare earth compounds	2 471	2 639	1 408	1 027	726
Ferro-cerium & other pyrophoric alloys	32	20	1	4	4
Metals	276	257	447	500	530
Italy					
Ferro-cerium & other pyrophoric alloys	25	19	...	...	3
Metals	49	6	...	...	19
Netherlands					
Cerium compounds	52	92	47	...	...
Other rare earth compounds	3 358	2 542	1 164	...	...
Ferro-cerium & other pyrophoric alloys	32	73	44	...	...
Metals	22	12	25	...	68
Norway					
Rare earth compounds	12	258	23	97	46
Metals	181	326	320	367	414
Poland					
Metals	15	53	129	124	...
Spain					
Rare earth compounds	194	66	288	...	370
Ferro-cerium & other pyrophoric alloys	31	84	152	...	59
Metals	20	12	13	...	14
Switzerland					
Ferro-cerium & other pyrophoric alloys	1 567	1 396	1 400	1 582	1 718
Turkey					
Rare earth compounds	128	126	132	140	289
United Kingdom					
Cerium compounds	319	555	592	1 233	1 916
Other rare earth compounds	321	555	641	683	398
Ferro-cerium & other pyrophoric alloys	13	18	11	9	3
Metals	114	237	197	168	323
South Africa					
Rare earth compounds	—	24	207	270	263
Canada					
Cerium compounds	394	510	515	563	553
Other rare earth compounds	108	154	231	381	191
USA					
Cerium compounds	1 268	1 891	4 097	4 816	2 768
Other rare earth compounds	7 607	7 880	12 068	18 538	13 493
Ferro-cerium & other pyrophoric alloys	118	77	89	119	136
Metals	196	299	791	368	426
Brazil					
Cerium compounds	253	274	464	371	...
Other rare earth compounds	1 634	1 280	1 166	...	...
Metals	242	268	357	...	...
China					
Ores & concentrates	1 153	60	1 606	10 673	22
Rare earth compounds	343	331	380	780	855
Ferro-cerium & other pyrophoric alloys	88	37	50	281	97
Metals	8	234	357	24	226

Rare Earths

Imports of Rare Earths

tonnes

Country	1993	1994	1995	1996	1997
Hong Kong					
Rare earth compounds	419	804	830	601	540
Indonesia					
Ferro-cerium & other pyrophoric alloys	31	—	0	16	1
Japan					
Cerium compounds	3 325	6 734	7 973	7 756	8 405
Other rare earth compounds	5 308	7 641	9 913	8 997	10 215
Metals	1 079	1 851	2 838	2 395	2 696
Korea, Republic of					
Cerium compounds	256	253	278	697	749
Other rare earth compounds	88	431	1 394	1 500	336
Metals	8	13	25	67	72
Taiwan					
Ores & concentrates	392	367	129	147	72
Rare earth compounds	917	2 086	2 616	3 197	2 808
Ferro-cerium & other pyrophoric alloys	18	50	36	19	71
Metals	152	97	155	80	764
Thailand					
Ferro-cerium & other pyrophoric alloys	100	79	69	84	...

Note(s):-

(1) Rare earths are here taken to include yttrium and scandium

Production of Salt

Salt

tonnes

Country	1993	1994	1995	1996	1997
Albania					
Sea salt	...	...	...	7 000	22 732
Armenia	*30 000	*30 000	32 800	26 400	*26 000
Austria					
Rock salt	1 183	1 197	1 056	923	1 103
Salt in brine	253 951	224 898	263 292	...	...
Evaporated salt	439 455	516 455	523 044	(e) 755 000	(e) 704 000
Azerbaijan	*40 000	*30 000	*20 000	*15 000	*15 000
Belarus	273 951	262 893	218 776	230 474	297 138
Bosnia & Herzegovina	*50 000	*50 000	*50 000	*50 000	*50 000
Bulgaria	650 000	1 300 000	1 500 000	1 600 000	*1 500 000
Croatia	29 643	21 655	21 784	18 820	16 620
Czech Republic	*180 000	*180 000	—	—	—
Denmark (h)	591 055	633 592	603 362	*600 000	*600 000
Finland	7 112	7 447	6 653	4 311	...
France					
Rock salt	116 000	151 000	165 000	370 000	372 000
Salt in brine	4 355 000	4 608 000	4 410 000	4 273 000	4 051 000
Sea salt	*1 200 000	950 000	1 473 000	970 000	1 464 000
Germany					
Rock salt	4 883 000	4 725 000	6 414 000	7 837 000	6 306 000
Brine salt	813 000	801 000	967 000	999 000	1 128 000
Salt in brine	4 889 018	5 006 000	5 050 000	5 015 000	5 420 000
Greece	175 159	192 000	143 351	138 239	*140 000
Italy					
Rock salt & brine salt	3 021 427	3 396 155	3 430 374	3 528 120	3 507 000
Sea salt	700 000	700 000	700 000	700 000	...
Netherlands	*3 500 000	*3 500 000	4 976 000	5 530 000	*5 000 000
Poland					
Rock salt	717 700	750 300	812 100	922 700	880 000
Brine salt	2 369 600	2 575 200	2 603 200	2 449 200	2 334 000
Other salt	15 500	12 200	...	...	...
Portugal					
Rock salt	524 540	519 432	587 288	604 396	595 997
Sea salt	88 177	100 690	...	...	...
Romania	2 189 000	2 201 161	2 489 300	2 688 900	*2 650 000
Russia	2 200 000	2 200 000	3 100 000	1 900 000	...
Slovakia	98 400	99 600	99 750	106 800	100 500
Slovenia	12 300	11 230	2 738	*5 000	*5 000
Spain					
Rock salt	1 700 743	1 971 728	2 214 680	2 216 482	(k) 3 650 000
Sea salt	1 075 944	1 421 514	1 376 154	1 119 796	...
Other salt	65 225	117 175	94 499	100 369	...
Switzerland	220 901	259 205	465 000	530 000	410 000
Turkey					
Rock salt	153 854	79 509	75 671	55 924	...
Sea salt	539 603	531 639	464 089	519 866	...
Other salt	832 484	742 158	902 290	1 403 624	...
Ukraine	3 900 000	3 300 000	2 867 100	2 847 800	2 622 900
United Kingdom					
Rock salt	*1 200 000	*1 700 000	*1 800 000	*2 200 000	*1 800 000
Brine salt	*1 300 000	*1 300 000	*1 300 000	*1 300 000	*1 300 000
Salt in brine (a)	4 075 543	4 009 000	3 548 000	3 512 000	3 561 000
Yugoslavia, Federal Republic of					
Sea salt	38 867	32 086	13 500	21 646	28 000
Algeria					
Brine salt & sea salt	189 000	176 000	143 745	154 094	138 000
Angola	*30 000	*30 000	*30 000	*30 000	*30 000
Botswana	98 000	185 986	208 126	93 886	184 533
Cape Verde Islands	1 718	3 056	...	1 710	1 466
Egypt (j)	1 118 820	1 007 495	1 193 000	1 148 200	1 232 000
Eritrea	—	207 836	254 701	200 412	*200 000
Ethiopia (d)	*130 000	*5 000	*5 000	*5 000	*1 000
Ghana	*50 000	*50 000	*50 000	*50 000	*50 000
Kenya	74 669	75 757	73 484	41 000	*40 000
Libya	*15 000	*15 000	*30 000	*30 000	*30 000
Madagascar	63 899	75 783	51 307	*50 000	*50 000

Production of Salt

tonnes

Country	1993	1994	1995	1996	1997
Mali	*5 000	*5 000	*5 000	*6 000	*5 000
Mauritania	*5 500	*5 500	*5 500	*5 500	*5 500
Mauritius (c)	7 000	7 000	7 000	6 500	*6 000
Morocco	150 961	176 442	173 049	165 393	257 500
Mozambique	*40 000	*40 000	*40 000	*60 000	*60 000
Namibia	132 585	356 965	429 779	356 868	492 780
Senegal					
Sea salt	37 352	105 897	25 085	113 434	121 959
Sierra Leone	...	...	4 839	5 519	1 345
Somalia	*1 000	*1 000	*1 000	*2 000	*1 000
South Africa	612 629	414 463	311 388	248 110	320 000
Sudan	*75 000	*75 000	*75 000	*50 000	*50 000
Tanzania	83 400	84 289	105 006	86 700	*90 000
Tunisia (c)	435 000	528 000	319 000	477 600	393 200
Uganda	*10 000	*10 000	*10 000	*10 000	*10 000
Bahamas (i)	*1 000 000	*1 000 000	1 038 768	*1 000 000	*1 000 000
Canada					
Rock salt	8 025 899	9 452 946	8 004 482	9 550 261	10 819 032
Other salt (e)	2 899 767	2 815 914	2 870 497	2 745 328	2 592 238
Costa Rica	31 100	31 700	32 200	37 000	*37 000
Cuba	*185 000	*175 000	*180 000	*180 000	*180 000
Dominican Republic					
Rock salt	8 000	10 000	11 000	11 000	*12 000
Sea salt	53 000	47 000	42 000	50 000	*50 000
El Salvador (c)	40 352	48 726	*50 000	*50 000	*50 000
Guatemala (c)	47 800	49 600	50 800	*50 000	*50 000
Honduras	*30 000	*25 000	*25 000	*25 000	*25 000
Mexico	7 490 820	7 458 414	7 669 549	8 508 148	7 932 772
Netherlands Antilles (i)	337 176	475 544	424 065	366 265	432 225
Nicaragua (c)	*15 000	*15 000	*15 000	*15 000	*15 000
Panama (c)	18 560	24 977	20 398	21 425	*22 000
USA					
Rock salt (f)	13 401 000	14 900 000	13 000 000	14 500 000	12 200 000
Salt in brine (f)	18 100 000	18 000 000	20 500 000	21 500 000	21 400 000
Evaporated salt (f)	6 670 000	6 820 000	7 230 000	6 870 000	6 960 000
Argentina	1 033 804	837 129	1 009 697	1 096 321	*1 100 000
Brazil					
Rock salt	1 399 962	1 372 780	1 340 000	1 514 000	*1 520 000
Sea salt	4 780 000	4 670 000	4 460 000	3 870 000	*4 000 000
Chile	1 443 250	3 177 898	3 494 451	4 042 796	5 488 135
Colombia					
Rock salt	230 685	93 639	119 092	152 642	141 921
Sea salt	169 370	116 361	162 315	423 513	232 686
Peru	125 277	141 253	140 200	235 536	*240 000
Venezuela (c)	*370 000	*400 000	*350 000	*350 000	*350 000
Afghanistan (g)	*13 000	*13 000	*13 000	*13 000	*13 000
Bangladesh (j)	331 000	695 000	952 000	...	...
Cambodia	*40 000	*40 000	*40 000	*40 000	*40 000
China	29 426 400	29 960 000	29 777 200	29 035 700	29 280 000
India					
Rock salt	*2 000	*3 000	*3 000	*3 000	*3 000
Sea salt	*9 500 000	*9 500 000	*9 500 000	*9 500 000	*9 500 000
Indonesia	*650 000	*650 000	*670 000	*670 000	*680 000
Iran (g)	988 695	865 927	721 110	1 410 644	...
Iraq	*300 000	*300 000	*250 000	*250 000	*250 000
Israel	1 122 000	*1 120 000	*900 000	*800 000	*800 000
Japan	1 378 000	1 387 000	1 351 000	1 390 000	*1 400 000
Jordan (b)	10 000	19 000	57 000	50 000	24 000
Korea, Dem. P.R. of	*590 000	*600 000	*600 000	*590 000	*590 000
Korea, Republic of	*750 000	*760 000	*770 000	*770 000	*770 000
Kuwait	40 863	37 000	33 767	33 537	...
Lebanon	*3 000	*3 000	*3 000	*4 000	*4 000
Mongolia	603	200	497	429	...
Myanmar (b) (c)	*30 000	*30 000	*35 000	*35 000	*35 000
Oman	10 086	13 098	14 317	12 429	...

Production of Salt

tonnes

Country	1993	1994	1995	1996	1997
Pakistan					
Rock salt (j)	894 998	1 041 551	887 991	933 768	1 010 605
Sea salt (j)	24 503	17 591	12 171	20 901	19 821
Philippines	535 481	492 100	*500 000	*510 000	...
Sri Lanka	60 513	55 700	—	—	...
Syria	113 000	100 000	111 000	112 000	...
Taiwan	176 298	185 987	220 531	233 321	62 484
Thailand					
Rock salt	261 612	287 806	380 511	529 674	555 000
Other salt	*100 000	*100 000	*100 000	*100 000	*100 000
Turkmenistan	*300 000	*300 000	276 912	255 788	216 500
Vietnam	*350 000	*375 000	*375 000	*375 000	...
Yemen, Republic of	123 000	118 000	71 000	86 000	...
Australia (l)	7 553 000	7 792 000	8 298 000	7 993 000	8 749 000
New Zealand	*80 000	*80 000	*50 000	*67 000	*67 000
World Total	176 500 000	184 000 000	188 600 000	193 700 000	191 200 000

Note(s):-

- (1) This table does not include production of refined salt
(2) Salt is known to be produced in many countries for which statistics are not available. Among these are Martinique and Nigeria

- (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) Sales
(i) Exports
(j) Years ended 30 June of that stated
(k) Salt; all forms
(l) Excluding Victoria and the Northern Territory

Exports of Salt

tonnes

Country	1993	1994	1995	1996	1997
Belarus	...	...	882 363	913 313	1 203 162
Belgium-Luxembourg	212 140	232 766	193 167	230 819	420 425
Bosnia & Herzegovina (a)	*3 100	*1 400	...	*6 700	*10 100
Bulgaria	173 600	118 700	112 200	*120 000	...
Croatia	2 950	3 000	2 674	3 326	9 141
Czech Republic	14 300	11 800	13 900	17 800	17 046
Denmark	332 818	345 531	325 569	335 686	327 368
France	462 232	598 955	605 536	796 564	673 761
Germany	2 373 780	2 839 848	2 698 101	2 852 410	2 576 659
Greece	17 139	8 391	17 049	25 683	21 649
Hungary	4 100	3 000	2 100	3 100	...
Iceland	819	791	521	3 985	3 314
Italy	244 275	333 685	314 116	292 480	186 050
Netherlands	2 330 797	2 501 219	3 714 195	3 340 723	3 059 922
Norway	3 439	4 357	3 397	5 511	5 118
Poland	451 031	469 405	530 577	513 300	...
Portugal	8 258	10 966	5 700	16 085	25 600
Romania	247 099	299 024	397 903	565 510	585 665
Slovakia	*30 000	41 500	*42 000	51 173	50 938
Spain	309 852	592 762	729 857	896 043	714 877
Sweden	4 133	2 301	54 306	1 774	1 884
Switzerland	10 932	22 969	86 792	73 243	38 160
Turkey	6 079	4 409	10 084	10 706	13 061
Ukraine	...	1 100 000	1 464 187	1 424 393	1 367 601
United Kingdom	296 689	210 004	455 119	447 154	284 571
Egypt	280 431	446 877	266 400	298 527	...
Kenya	60 287	83 374	100 335	109 474	109 373
Madagascar	7 985	13 666	10 814	*11 000	...
Morocco	25 500	54 158	54 796	64 601	14 201
Namibia	60 680	61 932	78 960	38 454	37 276
Senegal	139 779	167 427	188 271	155 543	...
South Africa	19 262	5 086	2 157	1 294	2 639
Tunisia	286 250	357 524	403 433	428 104	...
Bahamas	*1 000 000	*1 000 000	1 038 768	*1 000 000	*1 000 000
Canada	3 100 577	3 639 220	2 987 612	3 818 652	3 635 862
Jamaica	3 879	3 843	4 048	3 930	...
Mexico	6 075 014	7 130 497	7 179 256	7 609 782	...
Netherlands Antilles	337 176	475 544	424 065	366 265	432 225
USA	729 970	713 129	670 906	898 502	771 095
Argentina	61 072	43 855	47 060	44 226	50 455
Brazil	187 401	223 615	130 267	163 766	270 000
Chile	1 168 034	2 985 664	1 214 742	3 922 438	3 037 461
Colombia	2 480	1 006	22 011	25 000	...
Peru	7 890	20 290	17 397	*40 000	...
Abu Dhabi	3 062	0	180	150	8
China	200 580	234 214	336 650	365 417	235 058
Hong Kong (c)	6 216	8 702	5 488	4 306	13 311
India (b)	481 949	437 959	259 282	392 421	...
Indonesia	1 425	1 680	20 475	28 673	15 081
Iran (e)	83 994	76 623	112 423	...	...
Israel (a)	*130 400	*132 300	*53 000	*55 900	*83 200
Japan	1 463	1 503	1 634	2 225	2 046
Jordan	908	793	1 475	2 064	...
Korea, Republic of	240	931	10 094	29 448	34 734
Kuwait	...	...	198	1 490	3 182
Malaysia	5 586	15 858	2 800	5 200	...
Pakistan (d)	...	17 637	10 675	22 265	26 552
Saudi Arabia	3 100	3 629	10 700	*10 700	...
Singapore	11 304	12 112	7 538	6 217	5 990
of which, re-exports	10 691	10 662	6 900	5 842	5 572
Taiwan	134	86	508	825	546
Thailand	91 014	85 800	70 522	63 806	...
Yemen, Republic of	*20 000	*20 000	*20 000	*20 000	...

Exports of Salt

tonnes

Country	1993	1994	1995	1996	1997
Australia	6 982 000	7 259 000	7 649 000	7 651 000	8 187 000
New Zealand (d)	9 699	13 299	14 917	13 088	16 467

Note(s):-

- (a) BGS estimates, based on known imports into certain countries
- (b) Years ended 31 March following that stated
- (c) Re-exports
- (d) Years ended 30 June of that stated
- (e) Years ended 20 March following that stated

Imports of Salt

tonnes

Country	1993	1994	1995	1996	1997
Belarus	...	...	50 695	63 671	...
Belgium-Luxembourg	1 032 334	1 393 656	1 490 943	1 862 162	3 614 738
Bulgaria	173 600	118 700	118 473	120 119	105 128
Croatia	64 693	*60 000	67 427	102 138	110 510
Czech Republic	567 000	518 764	585 100	724 600	628 270
Denmark	213 545	382 222	349 251	444 177	273 186
Estonia	*60 000	*60 000	59 900	65 000	...
Faeroe Islands	10 644	17 758	20 000	...	...
Finland	377 057	425 493	422 518	342 313	413 004
France	207 434	308 881	363 293	462 937	599 152
Germany	1 041 907	1 142 224	1 813 085	1 673 685	1 792 547
Greece	91 063	99 978	92 130	140 162	144 966
Greenland	2 889	2 672	2 679	2 422	...
Hungary	431 306	464 159	434 814	627 424	551 789
Iceland	57 010	89 068	95 194	90 996	87 194
Irish Republic	63 989	61 828	76 576	96 700	100 635
Italy	539 686	729 946	564 006	648 456	673 571
Latvia	*55 000	66 700	56 400	76 000	...
Lithuania	*60 000	120 500	106 600	139 579	167 029
Macedonia	31 700	49 500	*50 000	*50 000	...
Malta	2 036	2 760	1 305	1 810	...
Moldova	*30 000	31 372	39 502	*40 000	...
Netherlands	268 878	430 097	282 981	499 651	452 393
Norway	618 282	735 202	692 406	675 715	683 521
Poland	12 507	19 210	31 273	81 800	...
Portugal	58 447	111 258	73 000	40 819	90 057
Russia	*600 000	*800 000	*900 000	903 100	...
Slovakia	*150 000	182 000	180 600	199 100	...
Slovenia	53 100	58 008	78 400	129 811	120 618
Spain	23 403	20 708	20 841	21 906	25 460
Sweden	1 018 041	1 171 627	1 059 590	1 095 521	808 890
Switzerland	2 941	3 037	1 267	4 000	4 685
Turkey	24 709	17 690	7 454	3 504	4 660
United Kingdom	181 388	225 757	238 599	316 796	242 368
Yugoslavia, Federal Republic of	...	(a) *94 700	...	200 191	268 677
Benin	*3 000	*3 000	*3 000	*3 000	...
Burkina Faso	26 000	27 000	28 000	28 133	35 776
Burundi	8 344	*10 000	*10 000	*10 000	...
Cameroon	...	...	47 767	38 756	...
Central African Republic	3 009	5 083	4 764	3 288	...
Congo,	7 621	7 300	5 300	...	...
Malawi	...	24 744	25 392	...	...
Mauritius	1 000	900	1 100	1 700	...
Morocco	600	638	666	778	...
Reunion	2 811	2 501	2 900	2 900	...
South Africa	193 000	108 461	153 413	170 360	89 505
Uganda	*55 000	*55 000	*55 000	*55 000	...
Zimbabwe	61 043	59 893	67 181	69 662	80 155
Barbados	1 942	2 225	1 918	2 053	2 180
Belize	699	811	868	921	1 030
Canada	1 010 444	940 130	1 294 921	1 137 699	1 269 550
Costa Rica	7 117	7 237	6 397	...	...
Dominica	381	486	332	224	...
El Salvador	1 269	2 124	1 982	6 591	4 984
Guadeloupe	2 112	2 476	2 196	*2 200	...
Guatemala	383	262	738	3 970	...
Jamaica	22 168	11 659	16 919	28 351	...
Martinique	2 578	2 494	2 394	*2 400	...
Mexico	94 110	78 060	55 449	46 280	...
Netherlands Antilles	370	540	*500	*500	...
Panama	1 081	2 619	806	1 753	...
St. Lucia	624	617	800	*800	...
St. Pierre & Miquelon	1 183	661	1 512	542	1 183
Trinidad & Tobago	9 646	5 800	17 664	7 400	...
USA	5 867 995	9 582 734	7 095 451	10 625 971	9 166 803

Imports of Salt

tonnes

Country	1993	1994	1995	1996	1997
Brazil	83 089	12 228	79 890	63 000	...
Colombia	79 621	86 634	37 930	85 495	...
French Guiana	436	532	511	474	571
Paraguay	4 150	7 637	2 922	1 723	...
Suriname	2 362	2 014	*2 000	*2 000	...
Uruguay	87 288	61 432	45 051	92 117	85 565
Venezuela	285 832	111 595	144 792	148 938	...
Abu Dhabi	3 392	1 727	2 196	2 604	3 211
Bahrain	3 284	3 500	*3 500	*3 500	...
Bangladesh (b)	42 592	*50 000	*50 000	*50 000	...
China	4 984	5 390	8 243	3 671	6 299
Cyprus	8 844	7 687	7 462	8 099	6 699
Hong Kong	126 520	126 745	82 535	81 282	64 086
India (c)	18 518	16 335	20 654	22 051	...
Indonesia	488 246	587 829	590 504	633 984	748 440
Japan	7 344 495	7 457 918	8 063 196	7 725 601	7 909 159
Korea, Dem. P.R. of (a)	*90 000	*8 000	*128 000	*136 000	*61 000
Korea, Republic of	1 504 489	1 493 466	1 644 014	1 841 069	1 874 890
Kuwait	8 499	9 659	7 182	10 502	10 482
Laos	...	...	28 770	*30 000	*30 000
Macao	2 700	2 379	2 207	2 200	...
Malaysia	191 812	226 699	267 800	270 000	...
Oman	6 815	3 392	3 800	9 300	...
Philippines	67 824	257 398	186 514	336 027	...
Qatar	5 529	5 600	5 600	*5 600	...
Saudi Arabia	11 284	10 917	10 657	10 620	...
Singapore	73 852	74 129	72 877	65 382	139 094
Taiwan	887 048	788 231	893 861	851 495	991 491
Thailand	686	35 808	1 065	33 587	...
Australia	9 034	9 400	10 300	10 936	...
Fiji	2 700	7 600	5 000	4 000	...
New Caledonia	795	849	840	877	1 199
New Zealand (b)	52 038	76 433	108 173	...	65 728
Solomon Islands	926	1 517	...	...	...

Note(s):-

(a) BGS estimates, based on known exports from certain countries

(b) Years ended 30 June of that stated

(c) Years ended 31 March following that stated

Sillimanite

Production of Sillimanite Minerals

tonnes

Country	1993	1994	1995	1996	1997
France					
Andalusite	*45 000	*45 000	*45 000	*45 000	*45 000
Spain					
Andalusite	*1 000	*1 000	*1 000	*1 000	*1 000
South Africa					
Andalusite	187 708	206 291	206 378	233 728	236 829
Sillimanite	569	525	317	497	—
Zimbabwe					
Kyanite	875	567	875	140	1 113
USA					
Kyanite (b)	*85 000	*90 000	*90 000	*90 000	*90 000
Brazil					
Kyanite (d)	640	664	758	*800	...
China (a)	7 564	7 036	2 183	8 513	...
India					
Kyanite	11 359	6 265	6 705	*7 000	...
Sillimanite	14 895	10 378	9 705	*10 000	...
Australia					
Kyanite	*800	*800	*800	*800	*800
Sillimanite (c)	*100	*100	*100	*100	*100

Note(s):-

- (1) A number of other countries produce sillimanite minerals but details of output are not reported
(2) In addition to the countries listed above as producing sillimanite minerals, synthetic mullite is known to be produced in Denmark, France, Hungary, Japan, former Yugoslavia, United Kingdom and the USA

- (a) Exports
(b) Including related minerals
(c) Excluding sillimanite clay
(d) Including beneficiated and directly shipped material

Exports of Sillimanite Minerals

tonnes

Country	1993	1994	1995	1996	1997
Belgium-Luxembourg	118	284	30	402	941
Denmark	160	41	20	—	1
France	30 105	47 887	54 301	62 842	56 347
Germany	8 800	8 307	7 987	6 492	7 440
Italy	722	322	...	...	352
Netherlands	4 059	3 575	5 649	...	2 669
Sweden	82	—	...	...	0
United Kingdom	8 655	5 057	7 858	8 356	7 442
South Africa					
Andalusite	127 299	139 844	157 794	158 520	138 083
Sillimanite	560	678	182	34	0
USA					
Sillimanite	73 613	38 656	36 022	35 003	36 234
Mullite	9 026	6 633	11 565	20 465	20 100
China	7 564	7 036	2 183	8 513	9 675
Japan	6 757	5 255	10 112	6 529	4 577

Note(s):-

(1) In this table 'Sillimanite minerals' is understood to include any or all of andalusite, kyanite, sillimanite and mullite

Sillimanite

Imports of Sillimanite Minerals

tonnes

Country	1993	1994	1995	1996	1997
Austria	2 409	3 346	3 486	3 256	2 414
Belgium-Luxembourg	8 003	7 439	7 915	8 211	6 430
Denmark	2 351	1 234	2 497	1 235	1 658
Finland	2 081	1 134	826	165	108
France	2 902	7 161	7 950	5 141	3 286
Germany	72 224	89 765	80 570	47 939	43 196
Irish Republic	3 426	2 504	7 414	6 622	1 800
Italy	21 728	20 631	...	...	50 912
Netherlands	6 632	17 542	7 625	...	7 622
Norway	2 849	2 660	3 359	3 598	3 017
Poland	10 485	14 004	20 581	16 461	...
Slovakia (b)	*500	*400	*900	...	...
Spain	19 170	17 115	15 224	...	14 865
Sweden	2 806	2 713	...	...	7 557
Switzerland	475	363	359	452	352
Turkey	5 426	7 101	8 161	2 063	3 523
United Kingdom					
Sillimanite minerals	38 050	39 487	56 289	52 229	53 877
Mullite	15 943	22 133	28 921	17 765	12 922
Canada	9 014	8 809	12 180	15 103	*20 000
Mexico					
Sillimanite minerals	2 825	2 396	2 356	2 962	...
Mullite	2 569	2 521	2 433	2 666	...
USA	12 992	7 872	8 298	18 682	14 006
Hong Kong	97 381	28 151	65 704	20 918	27 304
Japan					
Sillimanite minerals	26 606	27 067	21 765	25 316	27 722
Mullite	6 304	6 148	2 746	4 049	6 464
Korea, Republic of					
Sillimanite minerals	9 120	10 582	13 611	11 646	12 160
Mullite	6 720	4 895	10 664	7 098	5 462
Taiwan					
Sillimanite minerals	5 077	6 580	5 613	7 539	8 400
Mullite	2 232	1 071	1 021	684	547
Australia (a)	26 226	...	...	...	...

Note(s):-

(1) In this table 'Sillimanite minerals' is understood to include any or all of andalusite, kyanite, sillimanite and mullite

(a) Years ended 30 June of that stated

(b) BGS estimates, based on known exports from certain countries

Mine Production of Silver

kilograms (metal content)

Country	1993	1994	1995	1996	1997
Bulgaria	*30 000	*29 000	*30 000	48 770	31 530
France	11 700	2 800	3 500	2 700	*2 500
Germany	1 800	1 800	—	—	—
Greece	53 500	44 900	*33 000	16 700	37 300
Irish Republic	13 000	17 400	13 700	14 700	13 300
Italy	5 000	13 700	13 900	9 100	4 400
Macedonia	8 650	12 978	*10 000	*10 000	*10 000
Poland (a)	767 000	1 064 000	1 001 000	935 000	1 030 000
Portugal	36 000	31 800	38 600	33 700	33 900
Romania	*18 000	*18 000	*18 000	*18 000	*18 000
Russia	496 600	490 000	480 000	*500 000	*500 000
Spain	392 300	304 700	175 730	204 015	...
Sweden	298 772	275 224	268 200	271 866	304 048
Turkey	64 000	*60 000	53 000	71 000	*60 000
Yugoslavia, Federal Republic of (a)	25 144	18 298	31 054	68 805	42 640
Algeria	*3 000	*3 000	2 000	1 600	*1 500
Congo, Democratic Republic	*10 000	*1 000	—	—	—
Ghana	1 200	1 200	1 200	*1 200	*1 300
Morocco	309 155	325 500	223 700	199 000	261 000
Namibia	71 671	62 224	65 847	42 300	41 000
South Africa	192 418	197 767	174 316	168 689	144 035
Tunisia	*1 000	*1 000	2 500	1 500	100
Zambia	18 123	12 166	7 875	9 600	6 900
Zimbabwe	12 004	10 942	15 640	9 982	5 923
Canada	895 837	767 842	1 284 757	1 308 758	1 222 367
Dominican Republic	1 201	9 209	21 066	17 080	12 400
Honduras	24 171	27 634	30 202	36 378	42 900
Mexico	2 415 805	2 334 181	2 502 705	2 536 465	2 701 329
Nicaragua	2 358	2 628	*2 600	*2 500	5 600
USA	1 645 000	1 490 000	1 565 000	1 567 800	2 148 500
Argentina	42 744	38 032	47 783	50 399	54 413
Bolivia	332 768	352 083	425 053	384 384	387 200
Brazil	20 650	14 760	13 000	9 990	...
Chile	970 068	983 005	1 041 098	1 147 002	1 091 311
Colombia	7 328	5 898	5 915	6 407	3 515
Peru (b)	1 587 274	1 654 829	1 816 160	1 976 536	2 076 536
China	840 000	810 000	910 000	1 140 000	1 300 000
India (a)	51 000	50 200	38 100	35 600	48 100
Indonesia	90 285	107 026	265 212	254 893	270 392
Iran	*50 000	*60 000	*60 000	*46 000	*50 000
Japan	136 886	133 713	100 078	85 115	87 180
Kazakhstan	450 000	408 400	371 000	414 310	389 576
Korea, Dem. P.R. of	*250 000	*200 000	*200 000	*200 000	*200 000
Korea, Republic of	4 712	8 600	179	—	42
Malaysia	14 008	13 342	11 080	9 720	9 647
Mongolia	*20 000	*21 000	*21 000	*21 000	*25 000
Myanmar (a) (c)	3 661	5 114	4 425	6 786	9 331
Oman	2 900	4 700	97	—	—
Philippines	28 043	29 562	26 483	24 304	20 496
Saudi Arabia	18 000	17 000	16 900	16 600	16 300
Thailand	*11 000	*10 000	—	—	—
Uzbekistan	68 000	60 000	50 000	*50 000	*50 000
Australia	1 152 000	1 045 000	939 000	1 013 000	1 106 000
Fiji	1 112	1 406	1 574	1 984	2 654
New Zealand	25 797	27 589	27 794	29 340	31 684
Papua New Guinea	96 095	65 695	65 153	59 036	49 165
World Total	14 099 000	13 758 000	14 526 000	15 090 000	16 180 000

Note(s):-

(1) Countries producing less than 1000 kg per year include Croatia, for the period 1993-95, and the Czech Republic and Finland in 1993 and 1994.

(a) Smelter and/or refinery production

(b) Recoverable

(c) Years ended 31 March following that stated

Silver

Exports of Silver

kilograms

Country	1993	1994	1995	1996	1997
Austria					
Metal	47 698	45 608	41 576	52 016	54 900
Belgium-Luxembourg					
Metal	923 450	1 160 816	1 403 148	1 313 552	1 229 800
Bulgaria					
Metal (d)	*83 600	*35 500	*21 300	*19 400	*14 300
Denmark					
Metal	19 712	13 565	13 133	56 957	60 194
Estonia					
Waste & scrap (d)	...	*78 200	...	...	...
Finland					
Metal	45 000	26 000	18 000	24 000	25 785
France					
Metal	736 993	916 209	1 143 329	1 072 677	908 700
Waste & scrap	...	...	369 949	827 476	1 098 369
Germany					
Metal	1 258 687	1 223 059	1 375 651	1 020 727	1 168 100
Italy					
Metal	257 121	285 194	...	...	453 461
Latvia					
Metal (d)	*2 600	*1 200	*500	*100	...
Macedonia					
Metal (d)	*24 900	*5 600	*1 000	*10 100	*11 000
Netherlands					
Metal	79 976	84 515	59 438	...	...
Norway					
Metal	55 992	77 286	77 178	106 519	102 917
Poland					
Ores & concentrates	392 000	85 000	—	...	...
Metal	661 000	979 000	903 000	891 000	...
Portugal					
Metal	2 397	...	...	86	4 687
Russia					
Metal	...	...	558 300	547 600	...
Waste & scrap	...	(d) *77 400	254 800	69 400	...
Spain					
Metal	275 601	263 790	264 996	...	360 915
Sweden					
Metal	313 000	309 000	...	...	260 000
Switzerland					
Metal	2 512 270	2 382 396	2 528 421	3 025 378	2 440 242
United Kingdom					
Metal	2 205 005	2 125 135	2 156 844	3 155 901	3 187 801
Yugoslavia, Federal Republic of					
Metal	...	...	...	...	36 000
Morocco					
Metal	...	237 000	242 000	205 000	258 000
Namibia					
Metal	72 000	62 000	66 848	42 704	40 188
South Africa					
Metal	166 019	178 525	148 477	137 558	179 321
Canada					
Ores & concentrates (e)	226 773	142 129	229 119	224 056	216 990
Metal	1 084 423	1 097 464	1 209 950	1 450 625	1 262 953
Dominican Republic					
Metal	1 201	9 209	21 066	17 080	12 400
Honduras					
Concentrates (e)	24 171	27 634	30 202	36 378	42 900
Mexico					
Ores & concentrates	1 917 997	104 514	370 650	774 000	...
Metal	1 293 864	1 262 115	...	1 800 451	...
USA					
Ores & concentrates (b)	2 269	196	741	1 544	35 003
Metal	1 320 188	1 558 883	3 703 425	3 534 291	4 044 085
Waste & scrap	850 899	1 151 138	1 573 549	1 273 699	1 021 496

Exports of Silver

kilograms

Country	1993	1994	1995	1996	1997
Bolivia					
Ores & concentrates	2 744 608	2 204 297	2 627 661	*2 394 000	*2 375 000
Metal	97 637	86 536	80 974	69 882	72 310
Brazil					
Metal	40 564	91 479	114 752	57 024	58 534
Chile					
Metal	602 047	624 149	640 119	729 475	731 261
Peru					
Metal	575 400	584 800	658 083	710 930	677 417
Venezuela					
Metal	57 296	80 839	29 911	...	...
China					
Metal	12 692	22 327	15 970	6 418	26 688
Hong Kong					
Metal	70 372	86 187	60 118	43 121	50 419
of which, re-exports	69 918	85 999	59 617	42 781	50 359
Indonesia					
Metal	12 235	196 019	73 719	38 065	13 255
Israel					
Metal (d)	*200	*600	...	*2 200	*1 400
Japan					
Metal	214 059	222 401	206 058	217 256	316 901
Waste & scrap	19 418	12 274	14 158	110	164 140
Kazakhstan					
Metal	(d) *606 500	(d) *507 900	90 694	132 154	254 209
Korea, Dem. P.R. of					
Metal (d)	*1 000	*600	*3 200	...	...
Korea, Republic of					
Metal	108 033	151 937	239 444	389 495	249 024
Malaysia					
Metal	13 354	18 010	2 480	407	...
Philippines					
Ores & concentrates (b)	17 850	20 210	20 948	9 821	...
Metal	1 519	1 304	6 887	2 541	...
Singapore					
Metal	258 208	566 727	1 503 166	1 790 424	1 290 904
of which, re-exports	247 152	553 077	1 448 844	1 705 454	1 257 720
Taiwan					
Metal	3 664	4 979	12 088	8 540	12 206
Thailand					
Metal	107 595	13 646	4 645	5 667	...
Australia					
Metal (c)	224 000	189 000	192 000	316 000	215 000
New Zealand					
Metal (a)	762	3 727	931	1 413	3 563
Papua New Guinea					
Metal	96 095	65 695	65 153	59 036	49 165

Note(s):-

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

(a) Years ended 30 June of that stated

(a) Ag content

(c) Refined bullion only

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

(e) Ag content of all ores and concentrates

Silver

Imports of Silver

kilograms

Country	1993	1994	1995	1996	1997
Austria					
Metal	103 657	153 157	93 864	80 321	88 100
Belgium-Luxembourg					
Ores & concentrates	490 100	272 100	354 000	...	13 800
Metal	1 442 804	1 734 875	2 718 609	2 717 000	2 544 300
Bulgaria					
Metal (c)	*10 500	*600	—	*300	*100
Croatia					
Metal	£358 000	...	£312 000	£200 000	£501 000
Czech Republic					
Metal (c)	*5 300	...	*17 200	*23 000	*48 200
Denmark					
Metal	110 757	113 409	148 611	135 017	143 604
Estonia					
Metal (c)	*23 000	...	*1 400	*5 100	*10 400
Finland					
Metal	89 000	91 000	66 000	113 000	91 170
France					
Metal	1 216 241	1 175 202	1 724 937	1 933 921	1 786 800
Waste & scrap	...	...	200 600	482 889	241 900
Germany					
Metal	903 944	1 015 686	1 267 012	1 074 428	1 233 100
Greece					
Metal	86 000	...	...	...	...
Iceland					
Metal	392	471	497	633	600
Italy					
Ores & concentrates	374 600	460 800	239 274	26 845	...
Metal	881 936	801 245	...	...	1 245 426
Lithuania					
Metal	...	...	1 415	2 300	...
Malta					
Metal	1 805	3 208	2 637	2 242	...
Netherlands					
Metal	106 248	157 459	139 482	...	...
Norway					
Metal	80 638	95 821	125 114	119 114	104 085
Portugal					
Metal	77 631	...	...	1 497	98 115
Slovakia					
Metal (c)	*1 000	*1 400	*2 600	*5 700	*8 000
Slovenia					
Metal	(c) *3 600	...	(c) *6 400	9 152	11 325
Spain					
Ores & concentrates	371 000	18 000	21 000	28 512	28 165
Metal	302 491	750 466	567 432	...	702 290
Sweden					
Metal	175 000	213 000	...	...	145 000
Switzerland					
Metal	1 958 699	2 133 101	1 330 260	3 714 520	1 836 921
Turkey					
Metal (b)	13 660	12 317	47 473	43 586	38 757
Ukraine					
Metal (c)	*1 000	*60 000	*700	*1 300	*500
United Kingdom					
Metal	1 344 357	1 587 047	4 327 315	2 876 985	3 310 292
South Africa					
Metal	18 673	16 783	15 810	25 995	20 289
Tunisia					
Metal	...	8 579	...	11 262	...
Canada					
Ores & concentrates (d)	173 255	158 980	297 796	393 683	276 680
Metal	258 453	175 330	152 857	97 148	302 593
Costa Rica					
Metal	1 298	327	283	445	...

Imports of Silver

kilograms

Country	1993	1994	1995	1996	1997
Jamaica					
Metal	129	375	920	1 263	...
Panama					
Metal	2 396	3 807	2 316	3 235	...
USA					
Ores & concentrates (d)	455 871	494 901	580 821	517 637	413 663
Metal	2 553 922	2 564 378	3 176 769	3 011 695	2 702 658
Waste & scrap	1 271 918	1 072 717	2 144 722	1 808 928	1 528 969
Argentina					
Metal	5 035	24 568	...	...	...
Brazil					
Metal	161 530	198 272	246 677	198 508	226 606
Chile					
Metal	1 713	758	590	826	1 130
Venezuela					
Metal	20 055	7 219	13 643	12 245	...
Abu Dhabi					
Metal	2 673	5 275	4 236	5 306	283
China					
Metal	46 271	47 891	59 250	87 086	125 421
Cyprus					
Metal	9 287	11 478	12 287	13 640	10 512
Hong Kong					
Metal	300 495	157 682	208 350	190 362	250 072
India					
Metal (a)	53 550	1 419 048	1 900 582	1 888 255	...
Indonesia					
Metal	1 098	11 399	850	3 190	8 752
Israel					
Metal (c)	*52 800	*48 700	*35 000	*87 500	*93 700
Japan					
Ores & concentrates	—	5 116 000	10 301 000	14 918 000	21 143 000
Metal	664 953	1 153 245	1 360 605	1 493 522	1 787 141
Waste & scrap	504 810	685 257	764 498	...	...
Jordan					
Metal	23	27	311	17	...
Korea, Republic of					
Metal	236 023	302 527	439 064	451 261	340 196
Malaysia					
Metal	51 084	59 296	...	...	...
Pakistan					
Metal	£2 000	£12 000	£6 132 000	£7 097 000	...
Philippines					
Metal	3 044	—	6 778	10 684	...
Saudi Arabia					
Metal	4 637	3 117	4 362	19 505	...
Singapore					
Metal	1 976 291	902 527	882 055	938 284	728 498
Taiwan					
Metal	163 450	214 059	271 686	256 352	481 051
Thailand					
Metal	1 479 155	7 460 876	874 972	459 887	...
Australia					
Metal	£27 000 000	£19 000 000	£7 000 000	£6 000 000	£4 000 000
New Zealand					
Metal (e)	41 850	51 946	46 072	...	39 927

Note(s):-

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

- (a) Years ended 31 March following that stated
(b) Including gilt
(c) BGS estimates, based on known exports from certain countries
(d) Ag content of all ores and concentrates
(e) Years ended 30 June of that stated

Production of Sulphur and Pyrites

tonnes (sulphur content)

Country	1993	1994	1995	1996	1997
Albania					
Pyrites	2 920	1 323	1 059	...	...
Austria					
Recovered (c) (d)	16 952	15 766	11 804	*5 000	...
Belgium					
Recovered (c) (d)	303 000	302 000	347 000	406 000	430 000
Bulgaria					
Pyrites	*50 000	*50 000	*50 000	...	...
Recovered	*50 000	*50 000	*50 000	...	...
Croatia					
Recovered (c) (d)	*2 000	—	—	—	...
Czech Republic					
Recovered	*20 000	*20 000	*20 000	*20 000	...
Denmark					
Recovered (d)	10 357	7 131	8 050	7 461	3 875
Finland					
Pyrites	292 644	369 504	385 104	357 646	325 000
Recovered (c)	217 000	216 000	215 000	291 000	307 000
Recovered (d)	32 162	41 109	36 908	48 675	50 000
France					
Recovered (d)	1 105 000	1 084 000	1 065 000	989 700	958 800
Recovered (e)	*150 000	*100 000	106 000	99 000	*100 000
Germany					
Recovered (c)	33 450	*35 000	*30 000	*30 000	35 000
Recovered (d)	1 137 150	*1 200 000	*1 200 000	1 000 700	1 085 300
Recovered (e)	*90 000	*90 000	*90 000	*90 000	*90 000
Greece					
Pyrites	10 076	11 987	8 432	4 437	...
Recovered (d)	109 000	109 000	109 000	127 000	145 000
Hungary					
Pyrites	*800	—	—	—	...
Recovered	28 552	30 890	28 799	*28 000	...
Italy					
Pyrites	147 000	108 600	—	—	—
Recovered (d)	*300 000	*300 000	*300 000	*300 000	*300 000
Macedonia					
Recovered	*6 000	*6 000	*6 000	*6 000	...
Netherlands					
Recovered (c)	*125 000	*125 000	*125 000	*125 000	*125 000
Recovered (d)	*290 000	*290 000	*300 000	*300 000	*300 000
Norway					
Pyrites	43 779	*400	—	—	—
Recovered (c) (d)	*90 000	*90 000	*100 000	*100 000	*100 000
Poland					
Frasch (g)	1 861 400	2 128 700	2 391 700	1 732 500	1 695 000
Recovered (c)	*200 000	*200 000	*200 000	*200 000	*100 000
Recovered (d)	28 500	34 000	33 100	37 400	36 000
Portugal					
Pyrites	*5 000	*5 000	*5 000	*5 000	...
Recovered	*4 000	*4 000	*4 000	*4 000	...
Romania					
Pyrites	225 000	147 985	96 652	49 116	52 000
Recovered	*200 000	*200 000	*200 000	*200 000	...
Russia					
Pyrites	*640 000	*700 000	*450 000	*400 000	*400 000
Recovered (d)	*2 680 000	*2 550 000	*2 970 000	*3 000 000	*2 950 000
Recovered (e)	*300 000	*320 000	*335 000	*325 000	*350 000
Sulphur ore	*100 000	*80 000	*80 000	*70 000	*50 000
Spain					
Pyrites	411 593	342 163	405 673	479 063	457 000
Recovered (c)	275 555	268 691	282 111	*280 000	...
Recovered (d)	85 000	160 000	160 000	*160 000	...
Sweden					
Recovered (c) (d)	*165 000	*165 000	*165 000	*165 000	...
Sulphur ore	53 729	44 551	48 819	49 982	64 000

Production of Sulphur and Pyrites

tonnes (sulphur content)

Country	1993	1994	1995	1996	1997
Turkey					
Pyrites	26 758	*27 000	27 000	35 000	...
Recovered (d) (e)	26 000	*30 000	*31 000	*30 000	...
Sulphur ore	17 400	16 673	—	—	...
Ukraine					
Sulphur ore	400 000	300 000	237 600	168 100	99 700
United Kingdom					
Recovered (c)	61 900	72 000	62 300	44 700	39 200
Recovered (d)	202 000	162 000	140 000	132 000	137 000
Yugoslavia, Federal Republic of					
Pyrites	1 000	1 000	1 000	1 000	...
Recovered (c) (d)	*110 000	*110 000	*110 000	*110 000	...
Algeria					
Recovered (d)	19 000	*20 000	*20 000	*20 000	*20 000
Congo, Democratic Republic					
Recovered (c)	*2 000	—	—	—	...
Egypt					
Recovered (d)	4 900	4 200	*4 000	4 000	3 000
Libya					
Recovered (d)	*14 000	*14 000	*14 000	*14 000	...
Namibia					
Pyrites	56 852	60 817	51 330	45 338	47 300
South Africa					
Pyrites	322 714	252 000	158 000	184 000	167 253
Recovered (b) (c) (d)	252 754	327 000	348 000	342 000	351 000
Zambia					
Pyrites (f)	33 364	27 648	25 143	33 000	35 000
Recovered (c) (f)	80 800	49 000	61 000	41 000	49 000
Zimbabwe					
Pyrites	30 500	29 800	29 700	25 100	20 200
Recovered	*4 000	*4 500	*4 500	*5 000	...
Canada					
Recovered (c)	897 000	1 048 341	1 083 046	1 043 847	1 032 519
Recovered (d)	7 552 000	7 974 838	7 934 945	8 445 949	8 413 936
Cuba					
Recovered (d)	*5 000	*4 000	*5 000	*5 000	*5 000
Mexico					
Frasch	101 660	...	...	...	...
Recovered (c)	311 000	300 000	359 000	359 000	417 000
Recovered (d)	810 000	876 000	883 000	921 000	923 000
Netherlands Antilles					
Recovered (d)	52 041	23 821	24 410	23 921	*27 600
Trinidad & Tobago					
Recovered (d)	*5 000	*5 000	*5 000	*5 000	...
USA					
Pyrites (a)	3 000	...	...	...	...
Frasch	*2 300 000	2 960 000	*3 150 000	*2 900 000	*2 820 000
Recovered (c)	1 430 000	1 380 000	1 400 000	1 430 000	1 550 000
Recovered (d)	*7 300 000	7 160 000	7 250 000	7 480 000	7 650 000
Argentina					
Recovered (c)	23 000	23 000	23 000	23 000	23 000
Brazil					
Pyrites	23 624	20 861	26 266	29 477	...
Recovered (c)	183 529	182 638	170 942	192 247	...
Recovered (d)	58 582	53 256	41 951	59 267	...
Chile					
Recovered (c)	378 000	523 000	588 000	587 000	768 000
Colombia					
Recovered (d)	8 800	15 182	*15 000	*15 000	*15 000
Sulphur ore	42 596	38 175	60 000	49 425	53 541
Ecuador					
Recovered (d)	*10 000	*10 000	*10 000	*10 000	...
Sulphur ore	*4 000	*4 000	*4 000	*4 000	...

Production of Sulphur and Pyrites

tonnes (sulphur content)

Country	1993	1994	1995	1996	1997
Peru					
Recovered (c)	*60 000	*60 000	*60 000	*60 000	...
Venezuela					
Recovered (d)	135 000	158 000	180 000	250 000	319 000
Abu Dhabi					
Recovered (d)	249 000	250 000	256 500	259 000	...
Bahrain					
Recovered (d)	57 700	55 282	51 300	74 282	66 334
China					
Pyrites	5 329 000	5 181 000	5 933 000	5 995 000	*6 000 000
Recovered	694 000	733 000	930 000	1 215 000	1 046 000
Sulphur ore	261 800	285 000	403 000	239 000	*300 000
India					
Pyrites	36 000	35 000	35 000	35 000	*30 000
Recovered (c)	*123 000	*177 000	*200 000	*200 000	...
Recovered (d)	31 000	*36 000	*35 000	*25 000	...
Indonesia					
Sulphur ore	*3 500	*3 500	*3 500	*3 500	...
Iran					
Recovered (c)	*50 000	*50 000	*50 000	*50 000	*50 000
Recovered (d)	*750 000	*830 000	*840 000	*840 000	*850 000
Iraq					
Frasch	*250 000	*250 000	*250 000	*250 000	*250 000
Recovered (d)	*200 000	*225 000	*225 000	*225 000	*200 000
Israel					
Recovered (d)	*60 000	*60 000	*60 000	*60 000	...
Japan					
Pyrites	29 000	88 000	88 000	45 000	39 000
Recovered (c) (g)	1 380 000	1 392 000	1 434 000	1 409 000	1 424 000
Recovered (d)	1 511 000	1 626 000	1 682 000	1 791 000	2 013 000
Kazakhstan					
Pyrites	*219 000	*200 000	*71 000	*71 000	—
Recovered (c)	*276 000	*261 000	*131 000	*139 000	*139 000
Recovered (d)	*182 000	*219 000	*255 000	*515 000	*806 000
Korea, Dem. P.R. of					
Pyrites	*185 000	*105 000	*105 000	*86 000	*45 000
Recovered (c)	*18 000	*18 000	*18 000	*18 000	*18 000
Korea, Republic of					
Recovered (c)	304 000	295 000	322 000	319 000	338 000
Recovered (d)	214 000	227 000	246 000	415 000	613 000
Kuwait					
Recovered (d)	175 000	200 000	559 000	595 000	664 000
Oman					
Recovered (d)	*40 000	*40 000	*35 000	*30 000	...
Pakistan					
Recovered	*27 000	*27 000	*27 000	*27 000	...
Philippines					
Pyrites	*114 000	*100 000	*100 000	*100 000	...
Recovered (c)	*147 000	*125 000	*125 000	*125 000	...
Qatar					
Recovered (d)	72 000	62 000	48 000	46 000	...
Saudi Arabia					
Recovered (d)	1 550 000	1 630 000	1 650 000	1 750 000	1 750 000
Singapore					
Recovered (d)	*75 000	*100 000	178 000	185 000	220 000
Syria					
Recovered (d)	*30 000	*30 000	30 000	30 000	...
Taiwan					
Recovered	153 076	154 778	167 468	181 600	163 964
Turkmenistan					
Sulphur ore	*50 000	47 599	8 050	8 112	...
Australia					
Recovered (c)	299 000	275 000	263 000	327 000	355 000
Recovered (d)	85 000	115 000	27 000	27 000	22 000

Production of Sulphur and Pyrites

tonnes (sulphur content)

Country	1993	1994	1995	1996	1997
Total Pyrites	8 200 000	7 900 000	8 100 000	8 000 000	7 800 000
Total Frasch	4 500 000	5 400 000	5 900 000	5 000 000	4 900 000
Total Recovered	36 800 000	37 800 000	39 200 000	40 900 000	42 200 000
Total Sulphur Ore	900 000	800 000	800 000	600 000	600 000
World Total	50 400 000	51 900 000	54 000 000	54 500 000	55 500 000

Note(s):-

- (a) Including hydrogen sulphide and liquid sulphur dioxide
- (b) Including production from synthetic fuels
- (c) From smelter gases
- (d) From petroleum refining and/or natural gas
- (e) Other
- (f) Years ended 31 March following that stated
- (g) Including S content of sulphur ore

Exports of Sulphur and Pyrites

tonnes

Country	1993	1994	1995	1996	1997
Austria					
Sulphur, crude	115	227	*200	...	66
Sulphur, sublimed & precipitated	15 441	13 468	13 474	12 679	6 064
Belgium-Luxembourg					
Pyrites	1 080	413	1 989	1 673	1 695
Sulphur, crude	11 929	12 510	12 058	16 689	10 582
Sulphur, sublimed & precipitated	178	2	958	138	103
Czech Republic					
Sulphur	700	2 500	5 900	3 900	2 102
Denmark					
Sulphur	4 958	7 684	762	3 958	4 654
Finland					
Pyrites (b)	*309 200	*483 800	*502 100	*443 800	*413 000
France					
Sulphur, crude	473 714	618 777	595 621	645 790	540 537
Sulphur, refined	3 704	11 499	9 860	7 613	9 199
Sulphur, sublimed & precipitated	961	656	490	814	860
Germany					
Pyrites	2 857	585	739	614	495
Sulphur, crude	787 716	795 331	799 272	969 409	946 717
Sulphur, sublimed & precipitated	1 068	947	366	380	319
Greece					
Sulphur	187	252	28	4 999	331
Hungary					
Sulphur, crude	2 128	...	...	...	...
Sulphur, sublimed & precipitated	13 215	12 957	5 097	9 330	10 975
Italy					
Pyrites	7 160	7 704	7 404	8 361	8 667
Sulphur, crude	56 968	112 083	67 311	64 883	74 497
Sulphur, sublimed & precipitated	2 099	1 375	481	309	230
Netherlands					
Sulphur	165 120	166 723	186 334	230 678	207 261
Norway					
Pyrites	—	—	2 395	—	...
Sulphur, crude	152	4 417	348	49	...
Sulphur, sublimed & precipitated	8 359	2 670	6 216	10 264	12 139
Poland					
Sulphur	2 293 560	1 813 468	1 643 505	1 302 430	...
Portugal					
Sulphur	200	500	6 500	9 300	...
Russia					
Sulphur	...	...	2 130 536	1 008 260	1 723 936
Spain					
Pyrites	37 195	4 841	42 837	26 089	...
Sulphur, crude	12 814	18 734	36 896	29 533	38 072
Sulphur, sublimed & precipitated	1 261	1 054	1 446	652	612
Sweden					
Sulphur, crude	20 442	527	1 436	568	14 857
Sulphur, sublimed & precipitated	150	...	30	...	85
Switzerland					
Sulphur	219	16 571	1 854	1 314	3 860
Ukraine					
Sulphur	...	(b) *40 000	48 491	39 084	24 789
United Kingdom					
Sulphur, crude	2 692	1 968	2 710	1 816	22 423
Sulphur, sublimed & precipitated	2 888	2 568	1 824	3 532	14 624
Yugoslavia, Federal Republic of					
Pyrites	...	...	...	...	16 453
Namibia					
Pyrites	—	4 116	62 158	3 105	956
South Africa					
Sulphur	4 607	2 508	6 739	35 742	...
Canada					
Sulphur	4 193 886	4 983 257	6 077 430	6 026 287	6 465 467
Mexico					
Sulphur	577 956	539 053	531 605	509 274	499 400

Exports of Sulphur and Pyrites

tonnes

Country	1993	1994	1995	1996	1997
Netherlands Antilles					
Sulphur	52 041	23 821	24 410	23 921	*27 600
USA					
Sulphur, crude	506 989	530 770	548 249	496 566	651 088
Sulphur, refined	33 292	114 396	254 050	102 897	131 974
Sulphur, sublimed & precipitated	120 346	236 837	109 725	168 335	45 137
Colombia					
Sulphur	1 680	2 258	1 378	1 414	...
Venezuela					
Sulphur	560	280	111	231	1 747
Bahrain					
Sulphur	25 611	41 500	46 500	79 700	27 000
China					
Pyrites	1 496	23 835	13 243	30 317	20 056
Sulphur, crude	3 459	4 811	7 884	1 380	324
Sulphur, sublimed & precipitated	289	1 319	616	503	807
Iran					
Sulphur (a)	506	95 625	15 814	...	...
Sulphur, sublimed & precipitated	362 832	403 050	15 000	...	...
Japan					
Sulphur, crude	408 502	748 273	645 174	716 155	983 480
Sulphur, sublimed & precipitated	1 899	2 013	1 682	1 232	1 054
Korea, Republic of					
Sulphur, crude	16 225	27 942	55 276	103 412	201 300
Sulphur, sublimed & precipitated	3 028	606	661	6	1 115
Kuwait					
Sulphur	225 095	467 924	553 000	630 739	579 000
Qatar					
Sulphur	63 531	59 000	53 900	48 700	58 300
Saudi Arabia					
Sulphur, crude	862 800	...	1 135 500	...	...
Sulphur, sublimed & precipitated	...	4 558	...	...	...
Singapore					
Sulphur, crude	462 703	34 971	45 329	74 178	57 519
Sulphur, sublimed & precipitated	34 814	27 261	34 145	57 845	79 337
Taiwan					
Sulphur, crude	11 225	15 633	1 906	779	423
Sulphur, sublimed & precipitated	225	372	489	547	562
Thailand					
Sulphur	419	506	583	525	...
Australia					
Sulphur	*3 000	3 950	3 958	3 353	...

Note(s):-

(a) Years ended 20 March following that stated

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

Imports of Sulphur and Pyrites

tonnes

Country	1993	1994	1995	1996	1997
Austria					
Pyrites	625	661	866	570	546
Sulphur, crude	38 565	38 200	39 400	42 000	49 751
Sulphur, sublimed & precipitated	13 458	28 552	33 723	26 989	1 546
Belgium-Luxembourg					
Pyrites	229	16 911	209	107	37
Sulphur, crude	303 109	349 820	431 608	309 658	362 309
Sulphur, sublimed & precipitated	21 286	11 253	5 485	1 956	2 033
Bulgaria					
Sulphur	—	20 000	7 400	3 922	6 165
Croatia					
Sulphur, crude	47 138	52 400	80 825	82 022	71 669
Sulphur, sublimed & precipitated	280	...	167	162	397
Czech Republic					
Sulphur	48 482	87 613	113 400	105 800	91 456
Denmark					
Sulphur, crude	23 181	31 898	38 052	21 834	15 128
Sulphur, sublimed & precipitated	909	30	78	33	12
Finland					
Sulphur	16 152	33 449	17 601	11 662	5 863
France					
Pyrites	712	7 151	7 318	4 891	1 701
Sulphur, crude	197 420	89 672	114 446	104 022	134 934
Sulphur, refined	76 906	281 919	32 921	18 484	39 964
Sulphur, sublimed & precipitated	962	1 065	2 571	17 825	6 072
Germany					
Pyrites	105 380	175 226	153 831	163 293	206 363
Sulphur, crude	39 242	28 696	44 869	29 552	58 912
Sulphur, sublimed & precipitated	462	1 120	1 023	883	1 196
Greece					
Sulphur, crude	96 167	79 682	158 068	163 888	162 421
Sulphur, sublimed & precipitated	156	329	360	445	139
Hungary					
Sulphur	12 397	9 295	20 056	11 526	7 104
Italy					
Pyrites	9 776	11 769	20 934	12 003	13 960
Sulphur, crude	80 257	144 131	293 265	191 228	178 006
Sulphur, sublimed & precipitated	58	100	127	915	217
Lithuania					
Sulphur	...	...	105 300	143 933	132 900
Netherlands					
Pyrites	268	228	314	212	...
Sulphur, crude	72 047	36 605	103 609	94 201	61 199
Sulphur, sublimed & precipitated	374	225	2 195	756	10 120
Norway					
Pyrites	146 451	251 611	253 343	245 043	206 857
Sulphur, crude	1 796	633	862	399	4 353
Sulphur, sublimed & precipitated	127	32	21	8	965
Poland					
Sulphur	28 346	16 406	953	1 274	...
Portugal					
Sulphur	10 900	12 489	11 700	7 322	3 347
Romania					
Sulphur, crude	107 328	45 932	103 627	60 166	41 736
Sulphur, sublimed & precipitated	13 864	568	80	2	25
Russia					
Sulphur	*300 000	*300 000	197 200	164 500	...
Slovakia					
Sulphur	27 977	(a) *17 500	12 700	34 641	34 515
Slovenia					
Sulphur	34 818	45 623	41 400	32 169	44 119
Spain					
Sulphur, crude	97 012	105 977	72 463	62 222	64 412
Sulphur, sublimed & precipitated	1 257	1 600	1 192	271	261
Sweden					
Pyrites	190	342	335	293	346
Sulphur, crude	106 487	106 169	106 403	90 214	96 511
Sulphur, sublimed & precipitated	449	395	383	1 074	2 323

Imports of Sulphur and Pyrites

tonnes

Country	1993	1994	1995	1996	1997
Switzerland					
Pyrites	247	244	240	214	275
Sulphur, crude	27 657	33 681	38 978	38 563	39 107
Sulphur, sublimed & precipitated	14	47	22	75	73
Turkey					
Pyrites	115	64	24 185	26 210	34 644
Sulphur, crude	170 067	136 819	87 321	116 619	170 473
Sulphur, sublimed & precipitated	91	181	106	94	116
Ukraine					
Sulphur	*550 000	*550 000	*570 000	*570 000	...
United Kingdom					
Pyrites	1 295	3 414	1 103	113	24
Sulphur, crude	274 607	322 147	298 913	245 934	371 962
Sulphur, sublimed & precipitated	2 858	999	1 100	549	495
Yugoslavia, Federal Republic of					
Sulphur, crude	*3 000	*2 500	*2 500	1 900	1 808
Algeria					
Sulphur	67 000	61 751	*55 000	652	1 100
Egypt					
Sulphur	81 293	40 214	131 400	322 138	...
Gabon					
Sulphur	2 000	1 000	1 500	2 000	4 000
Kenya					
Sulphur	64	42	4 697	602	900
Morocco					
Sulphur	2 588 000	2 654 000	2 806 820	2 600 662	2 961 300
Niger					
Sulphur	24 000	26 800	18 200	26 800	37 500
Nigeria					
Sulphur	*1 000	*1 000	*1 000	*1 000	...
Senegal					
Sulphur	235 000	261 200	348 300	312 000	324 100
South Africa					
Sulphur, crude	401 084	363 000	601 692	525 579	539 704
Sulphur, sublimed & precipitated	385	750	1 000	658	659
Tunisia					
Sulphur	1 271 000	1 454 782	1 419 169	1 443 453	1 667 600
Zimbabwe					
Sulphur	26 069	23 468	34 845	116 817	10 676
Canada					
Pyrites	9 594	11 339	15 873	14 382	13 870
Sulphur, crude	7 532	3 123	25 593	24 386	46 518
Sulphur, sublimed & precipitated	1 061	1 280	1 756	1 040	485
Cuba					
Sulphur	105 000	75 800	173 300	135 100	184 600
El Salvador					
Sulphur	493	4 711	2 374	5 392	5 389
Guatemala					
Sulphur	1 938	1 113	1 845	3 191	...
Jamaica					
Sulphur	6 055	3 334	9 203	...	...
Mexico					
Sulphur, crude	122 908	201 333	570 287	798 971	...
Sulphur, sublimed & precipitated	376	481	342	310	...
USA					
Sulphur, crude	2 041 704	1 625 028	2 198 669	1 624 295	1 507 026
Sulphur, sublimed & precipitated	377	344	240	252	1 585
Argentina					
Sulphur	68 051	78 914	105 512	96 192	105 193
Brazil					
Sulphur	1 088 919	1 266 475	1 253 748	1 306 963	1 510 002
Chile					
Sulphur	37 019	43 365	25 746	20 375	14 493
Colombia					
Sulphur	45 253	41 013	36 898	68 235	...

Imports of Sulphur and Pyrites

tonnes

Country	1993	1994	1995	1996	1997
Ecuador					
Sulphur	42	3 092	1 604	677	...
Paraguay					
Sulphur	697	1 418	1 500	3 100	...
Peru					
Sulphur	6 687	4 013	3 538	...	...
Suriname					
Sulphur	*1 000	*1 000	*1 000	*1 000	...
Uruguay					
Sulphur	13 773	13 186	4 500	15 896	22 455
Venezuela					
Sulphur	198	113	163	78	...
Bangladesh					
Sulphur (b)	27 007	*27 000	*27 000	*25 000	...
China					
Sulphur, crude	21 373	78 809	53 000	467 293	356 964
Sulphur, sublimed & precipitated	68 341	99 457	138 838	342 994	384 070
Cyprus					
Sulphur	2 384	601 660	1 504	1 491	1 301
Hong Kong					
Sulphur, crude	61 313	22 712	30 531	163	321
Sulphur, sublimed & precipitated	1 350	637	569	561	710
India					
Sulphur, crude (c)	1 264 367	1 600 570	1 543 002	1 543 187	...
Sulphur, sublimed & precipitated (c)	1 427	1 117	1 015	780	...
Indonesia					
Sulphur, crude	193 875	320 566	291 781	389 631	327 545
Sulphur, sublimed & precipitated	32 762	44 793	38 213	392	15 840
Israel					
Sulphur	289 000	301 600	261 000	432 100	467 500
Japan					
Pyrites	164 996	167 395	114 878	48 469	42 019
Sulphur	345	854	610	705	572
Jordan					
Sulphur, crude	182 153	305 911	301 508	337 365	408 400
Sulphur, sublimed & precipitated	40	...	401	348	...
Korea, Republic of					
Sulphur, crude	391 641	439 129	441 343	343 058	226 600
Sulphur, sublimed & precipitated	1 496	207	216	232	207
Malaysia					
Sulphur, crude	28 976	29 088	38 700	38 000	...
Sulphur, sublimed & precipitated	7 059	11 508	...	...	...
Pakistan					
Sulphur (b)	19 768	20 332	19 130	28 347	25 036
Philippines					
Sulphur, crude	17 355	38 977	149 446	176 909	...
Sulphur, sublimed & precipitated	5 716	937	145	147	...
Singapore					
Sulphur, crude	126	117	138	6 582	83
Sulphur, sublimed & precipitated	130	138	66	81	77
Sri Lanka					
Sulphur, crude	17 716	865	1 202	1 091	1 123
Sulphur, sublimed & precipitated	1 323	1 142	1 222	717	54
Taiwan					
Sulphur, crude	30 758	10 935	8 873	531	301
Sulphur, sublimed & precipitated	137 942	169 193	178 335	159 488	182 328
Thailand					
Sulphur, crude	78 769	25 270	4 787	8	...
Sulphur, refined	35 237	47 081	43 727	81 079	...
Sulphur, sublimed & precipitated	187	230	406	222	...

Imports of Sulphur and Pyrites

tonnes

Country	1993	1994	1995	1996	1997
Australia					
Sulphur	72 000	92 000	167 900	118 840	...
New Zealand					
Sulphur, crude	188 781	214 513	219 978	*170 000	174 036
Sulphur, sublimed & precipitated	293	255	70	...	748

Note(s):-

- (a) BGS estimates, based on known exports from certain countries
- (b) Years ended 30 June of that stated
- (c) Years ended 31 March following that stated

Production of Talc

tonnes

Country	1993	1994	1995	1996	1997
Austria	136 640	130 602	131 614	129 748	141 984
Finland	347 859	395 297	405 025	345 282	*400 000
France	299 900	306 400	322 400	349 300	334 800
Germany	21 152	20 223	17 722	10 005	8 819
Greece	1 050	400	*400	—	—
Italy	140 939	138 416	159 106	132 647	141 000
Macedonia	*10 000	*10 000	*10 000	*10 000	*10 000
Norway	*50 000	*28 000	*30 000	28 140	*28 000
Portugal	9 054	8 367	8 706	8 277	7 831
Romania	9 000	8 952	9 976	10 248	*10 000
Russia	131 688	*100 000	*100 000	*100 000	*90 000
Slovakia	...	...	5 000	5 000	6 100
Spain	58 444	80 606	112 341	109 756	*110 000
Sweden	20 000	25 000	25 000	25 000	25 000
Turkey	*4 000	*4 000	*4 000	*4 000	*4 000
United Kingdom	5 317	5 275	4 298	5 338	5 749
Egypt (c)	4 746	4 125	15 356	33 649	30 282
South Africa					
Talc	8 798	8 202	15 841	16 397	21 055
Wonderstone (Pyrophyllite)	4 287	5 507	5 519	2 140	2 129
Zimbabwe	1 349	2 049	2 080	1 076	1 023
Canada	108 000	130 000	104 000	76 000	78 000
Mexico	14 376	14 900	11 134	10 100	13 586
USA	968 000	935 000	1 060 000	994 000	1 050 000
Argentina					
Talc	18 084	16 850	12 474	11 777	*12 000
Pyrophyllite	1 962	1 996	4 189	2 180	...
Brazil (b)					
Talc (b)	345 843	356 828	254 919	*250 000	...
Agalmatolite (b)	115 945	109 029	115 550	*110 000	...
Pyrophyllite (b)	160 000	148 000	150 000	*150 000	...
Chile	5 058	5 351	4 107	4 276	3 986
Colombia	19 550	18 000	19 248	14 800	14 832
Peru	*10 000	19 974	13 818	12 985	...
Uruguay	1 020	913	863	898	1 133
Venezuela	*32 000	*32 000	*32 000	*32 000	...
Bhutan	—	169	3 332	3 500	*3 000
China	*2 700 000	*2 400 000	*2 400 000	*2 400 000	*2 350 000
India					
Pyrophyllite	82 269	85 335	131 137	143 172	*140 000
Steatite	385 121	398 006	439 509	472 001	*470 000
Iran (a)	18 000	29 226	9 052	26 530	...
Japan					
Talc	57 000	56 000	57 000	56 000	*57 000
Pyrophyllite	732 000	660 000	649 000	618 000	620 000
Korea, Dem. P.R. of	*180 000	*180 000	*180 000	*180 000	*180 000
Korea, Republic of					
Talc	53 923	35 340	29 364	19 066	25 751
Pyrophyllite	644 890	707 951	789 994	780 062	994 366
Pakistan (c)	58 574	44 430	34 128	28 265	45 414
Taiwan	5 015	4 290	3 500	1 500	1 331
Thailand					
Talc	7 007	8 950	4 352	7 238	...
Pyrophyllite	43 404	55 326	76 189	64 330	305 000
Australia (c)					
Talc (c)	172 273	*154 000	125 701	*176 000	*190 000
Pyrophyllite (c)	1 175	*1 000	777	595	337
World Total	8 200 000	7 900 000	8 100 000	8 000 000	8 500 000

Note(s):-

(a) Years ended 20 March following that stated

(b) Including beneficiated and directly shipped material

(c) Years ended 30 June of that stated

Exports of Talc

tonnes

Country	1993	1994	1995	1996	1997
Austria	125 146	129 944	142 245	145 925	146 131
Belgium-Luxembourg	51 183	61 973	70 990	62 971	74 238
Finland (a)	*111 700	*174 400	*186 500	*168 000	...
France	128 622	144 106	160 024	176 799	209 299
Germany	5 269	4 860	5 108	6 102	6 041
Greece	23	22	...	54	116
Italy	50 543	61 071	65 867	68 246	78 612
Netherlands	42 134	51 942	56 045	50 889	58 185
Norway	35 132	35 835	36 142	35 800	36 512
Spain	11 891	35 203	40 710	39 583	49 945
Sweden	20 552	21 857	20 396	23 077	24 243
Switzerland	499	403	274	577	870
Turkey	220	277	59	87	165
United Kingdom	3 604	5 596	3 341	3 227	3 100
Canada	29 194	31 694	30 028	26 073	26 276
USA	145 208	165 180	191 585	198 969	188 902
Brazil	2 012	2 534	3 145	2 053	...
Peru	1 539	1 861	2 389	3 493	...
China	1 063 926	1 243 396	1 600 326	1 023 901	1 021 001
Hong Kong (c)	13 803	7 372	12 581	10 238	10 375
India (b)	13 028	27 783	30 410	99 197	...
Japan	4 171	5 210	7 258	7 097	7 755
Korea, Dem. P.R. of (a)	*10 400	...	...	...	...
Korea, Republic of					
Talc	806	1 622	1 782	2 638	2 402
Pyrophyllite	223 593	247 285	254 595	226 170	253 195
Singapore	2 988	4 391	3 399	2 754	1 931
of which, re-exports	2 875	4 356	3 375	2 744	1 922
Taiwan	1 988	1 912	4 084	4 079	4 809
Thailand	3 088	7 324	5 328	3 469	...
Australia (d)	119 830	152 295	133 046	182 597	143 226

Note(s):-

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

(b) Years ended 31 March following that stated

(c) Re-exports

(d) Years ended 30 June of that stated

Imports of Talc

tonnes

Country	1993	1994	1995	1996	1997
Austria	12 599	15 262	15 101	24 123	19 304
Belgium-Luxembourg	113 170	60 385	72 139	73 415	96 181
Croatia	593	...	813	975	1 366
Czech Republic	(a) *4 500	(a) *2 200	(a) *3 000	...	6 669
Denmark	10 973	11 424	8 919	9 208	11 877
Finland	962	272	336	313	866
France	24 337	44 958	35 031	31 038	40 503
Germany	239 743	237 139	241 536	226 138	228 450
Greece	4 106	3 851	5 658	5 381	4 614
Irish Republic	1 037	1 475	3 070	1 354	986
Italy	43 685	55 982	48 625	85 744	92 190
Netherlands	73 020	163 585	141 160	134 954	81 171
Norway	21 023	18 544	15 576	16 478	14 868
Poland	18 595	19 080	22 734	23 100	...
Portugal	9 308	11 178	10 396	12 921	12 511
Russia	(a) *5 100	...	577	1 164	...
Spain	31 381	32 938	35 899	38 162	43 173
Sweden	24 797	24 969	26 598	24 718	25 309
Switzerland	12 458	14 256	12 893	13 263	14 284
Turkey	2 032	1 962	3 237	4 762	6 933
United Kingdom	127 484	69 972	68 839	73 084	83 013
Yugoslavia, Federal Republic of	...	...	(a) *300	...	960
Egypt	2 228	...	...	1 125	...
Morocco	...	...	2 176	2 285	...
South Africa	6 723	5 666	7 365	6 146	6 328
Tunisia	...	2 323	2 582	3 350	...
Canada	47 973	52 925	51 143	58 304	55 281
Costa Rica	1 304	1 400	1 383	1 704	...
El Salvador	373	649	449	550	...
Guatemala	449	220	395	319	...
Honduras	335	87	142	174	...
Jamaica	663	688	548	527	...
Mexico	103 017	118 376	100 216	112 872	...
Panama	789	859	896	884	...
Trinidad & Tobago	757	594	...	553	...
USA	97 535	152 475	142 886	179 738	115 166
Argentina	1 062	1 745	2 670	2 619	4 101
Brazil	1 702	2 722	5 404	8 572	...
Chile	3 851	4 279	4 773	6 620	7 824
Colombia	2 934	3 562	4 042	5 326	...
Ecuador	654	1 356	1 860	1 301	...
Peru	397	1 151	1 058	1 093	...
Venezuela	5 071	9 098	11 271	8 205	...
China	2 189	3 560	5 051	5 362	8 179
Cyprus	207	245	295	227	240
Hong Kong	16 658	12 879	14 481	6 369	5 498
Indonesia	59 610	58 327	88 146	109 550	88 156
Israel (a)	*2 400	*1 200	*1 500	...	...
Japan	588 777	601 793	720 901	567 721	579 930
Jordan	1 731	2 061	2 025	1 603	...
Korea, Republic of	264 258	310 952	390 567	276 323	210 047
Malaysia	25 526	15 289	...	...	...
Pakistan	8 156	29 585	83 292	56 345	...
Philippines	18 971	18 704	20 786	21 008	...
Saudi Arabia	7 965	8 132	4 861	7 100	...
Singapore	11 700	15 662	13 588	11 701	29 604
Sri Lanka	1 836	1 854	1 959	2 269	2 500
Syria	1 004	2 842	16 427	1 615	...
Taiwan	151 026	180 200	165 906	136 799	132 001
Thailand	57 374	49 334	58 078	3 469	...

Imports of Talc

tonnes

Country	1993	1994	1995	1996	1997
Australia (b)	629	534	1 053	1 066	1 262
New Zealand (b)	1 892	1 970	3 354	...	2 023

Note(s):-

(a) BGS estimates, based on known exports from certain countries

(b) Years ended 30 June of that stated

Production of Tantalum and Niobium Minerals

tonnes

Country	1993	1994	1995	1996	1997
Congo, Democratic Republic					
Columbite-tantalite	20	—	—	—	—
Namibia					
Tantalite	0	0	16	—	—
Nigeria					
Columbite	17	17	65	57	*60
Rwanda					
Columbite-tantalite	*100	6	72	99	...
Zimbabwe					
Columbite-tantalite	48	7	0	—	1
Canada					
Pyrochlore	5 700	5 600	5 800	5 700	5 700
Tantalite	103	67	67	187	190
Brazil					
Pyrochlore	34 065	33 545	39 989	39 100	*40 000
Columbite-tantalite	*175	*175	*175	*190	*190
Djalmaite	11	37	21	...	...
Malaysia					
Struverite	1 077	277	127	265	391
Australia					
Tantalite	337	262	365	557	299
World total concentrates	41 600	40 000	46 700	46 200	47 000
Nb content	*16 800	*16 500	*19 400	*19 000	*19 400
Ta content	*350	*210	*240	*360	*290

Note(s):-

- (1) Niobium and tantalum minerals are believed to be produced in Russia and China, and minor quantities in Burundi, French Guiana, and Zambia. Minor quantities are produced in Bolivia.
- (2) The figures in this table refer to gross tonnage of tantalum and niobium concentrates
- (3) Niobium and tantalum are also recovered from tin slags. This source is particularly important in the case of tantalum and in recent years is believed to have accounted for over 60% of all tantalum recovered
- (4) No detailed information on the production of tantalum bearing tin slags is available but the major producers are Thailand and with small amounts from Australia, Brazil, Nigeria, Portugal, Africa and Zaire

Exports of Tantalum and Niobium

tonnes

Country	1993	1994	1995	1996	1997
Austria					
Tantalum	39	29	43	36	43
France					
Tantalum	32	78	108	79	39
Germany					
Niobium & tantalum ores	407	135	39	109	72
Tantalum	131	167	153	141	165
Italy					
Tantalum	6	194	12	12	21
United Kingdom					
Tantalum	122	149	244	314	349
Rwanda					
Columbite & tantalite	171	49	137	138	...
Canada					
Niobium & tantalum ores (a)	3 982	4 399	1 610	40	31
USA					
Tantalum ores & concentrates	12	23	1	53	91
Tantalum	298	290	324	372	455
Brazil					
Columbite-tantalite	116	172	200	106	...
Japan					
Tantalum	90	85	108	173	219
Malaysia					
Columbite & tantalite	40	200	300	238	...
Tin slags	126	3 442	597	...	...
Singapore					
Tin slags	265	136	126	60	...
of which, re-exports	—	40	15	—	...
Taiwan					
Tantalum	3	35	15	19	15
Thailand					
Tantalum ores & concentrates	100	266	824	1 040	...
Australia					
Columbite-tantalite	320	...	...	...	...
Tantalum	*130	195	158	521	...

Note(s):-

(1) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

(a) May include vanadium ores

Imports of Tantalum and Niobium

tonnes

Country	1993	1994	1995	1996	1997
Austria					
Tantalum	33	37	57	49	1
France					
Tantalum	43	81	67	39	17
Germany					
Tantalum	467	213	179	169	235
Italy					
Tantalum	35	1	2	6	2
United Kingdom					
Niobium & tantalum ores	321	0	1	—	0
Tantalum	530	620	908	980	1 463
USA					
Tantalum concentrates	1 324	1 089	1 042	1 109	908
Niobium concentrates	2 348	3 080	1 039	224	131
Tantalum	177	341	529	480	400
Niobium	111	171	259	341	423
China					
Tantalum	65	130	119	138	135
Japan					
Niobium ores & concentrates	2 045	1 480	81	2	29
Tantalum	61	78	129	186	128

Note(s) -

(1) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

Mine Production of Tin

tonnes (metal content)

Country	1993	1994	1995	1996	1997
Portugal	5 334	4 330	4 627	4 637	4 800
Russia	13 100	10 500	9 000	7 500	*6 000
United Kingdom	2 232	1 922	1 972	2 103	2 396
Congo, Democratic Republic	700	1 000	1 000	—	—
Nigeria	*120	*150	*250	*250	...
Rwanda	600	20	198	209	*200
South Africa	452	43	—	—	—
Zimbabwe	657	82	—	—	—
USA	*100	—	—	—	—
Bolivia	18 634	16 027	14 419	14 802	12 898
Brazil	27 000	22 500	20 767	20 568	19 065
Peru (a)	13 687	20 275	22 331	27 004	27 952
China	46 600	54 100	61 900	69 700	*65 000
Indonesia	28 585	31 100	38 378	51 024	55 200
Kazakhstan	*100	14	4	—	—
Laos	660	1 280	1 170	1 510	1 030
Malaysia	10 384	6 458	6 402	5 174	5 065
Mongolia	100	53	59	18	—
Myanmar	689	814	747	459	100
Thailand	4 586	2 830	1 586	1 050	700
Vietnam	3 500	*4 000	4 500	*4 000	*3 000
Australia	8 057	7 400	8 656	8 824	10 168
World Total	186 000	185 000	198 000	219 000	214 000

Note(s):-

(a) Recoverable

Tin

Smelter Production of Tin

tonnes

Country	1993	1994	1995	1996	1997
Portugal	100	100	100	—	—
Russia	14 500	12 200	12 000	12 300	6 100
Spain	2 000	200	—	—	—
Nigeria	169	316	259	56	...
South Africa	500	100	—	—	—
Zimbabwe	658	82	—	—	—
Mexico	1 644	771	415	1 234	1 188
Bolivia (a)	18 551	20 019	17 709	16 733	16 853
Brazil	26 900	20 400	16 789	18 371	17 525
China	51 600	67 800	67 700	71 500	61 000
Indonesia	28 585	30 610	38 378	51 024	55 174
Japan	804	706	630	524	507
Korea, Republic of	400	300	300	*300	*300
Malaysia	40 079	37 990	39 443	38 051	33 289
Myanmar	170	200	*190	—	—
Thailand	8 099	7 759	8 243	10 981	12 200
Vietnam	2 345	2 300	2 300	*2 300	*2 300
Australia	222	320	570	460	605
World Total	197 000	202 000	205 000	224 000	207 000

Note(s):-

(a) Refined, including alloys

Exports of Tin

tonnes

Country	1993	1994	1995	1996	1997
Belgium-Luxembourg					
Unwrought	6 074	5 156	5 541	6 783	7 642
Unwrought alloys	426	569	202	392	211
Scrap	93	23	211	199	479
Czech Republic					
Unwrought (a)	115	33	613	175	219
Scrap	104	65	7	12	5
Denmark					
Scrap	211	175	158	102	137
Finland					
Scrap	163	195	89	22	64
France					
Unwrought	95	27	108	109	160
Unwrought alloys	225	424	463	591	715
Scrap	790	1 298	1 344	1 374	2 805
Germany					
Unwrought	485	389	621	248	426
Unwrought alloys	2 788	1 566	603	483	648
Scrap	323	479	349	467	559
Irish Republic					
Scrap	101	27	103	19	45
Italy					
Unwrought (a)	207	512	137	2 595	152
Scrap	141	200	180	164	185
Netherlands					
Unwrought	349	671	1 181	451	743
Unwrought alloys	1 375	1 077	871	882	691
Scrap	728	551	343	313	265
Portugal					
Concentrates	12 987	9 272	9 696	9 653	6 927
Russia					
Concentrates (c)	182	3 130	5 530	3 421	...
Unwrought (a)	720	7 953	8 884	8 859	7 608
Scrap	588	402	*500	*500	...
Slovenia					
Scrap	102	41	97	21	...
Spain					
Unwrought (a)	358	136	74	95	691
Sweden					
Unwrought (a)	125	149	174	207	260
Switzerland					
Unwrought (a)	143	124	135	153	105
Scrap	100	178	140	69	171
United Kingdom					
Concentrates	4 437	3 525	3 256	3 667	3 646
Unwrought	423	1 123	2 689	568	281
Unwrought alloys	1 763	1 481	1 455	1 767	1 759
Scrap	1 004	1 403	1 389	4 416	875
Congo, Democratic Republic					
Concentrates (c)	*700	*500	*700	—	...
Nigeria					
Unwrought	105	*80	*100	*100	...
Rwanda					
Concentrates	649	247	466	393	...
Zimbabwe					
Unwrought (a)	559	137	—	11	—
Canada					
Unwrought (a)	820	1 161	1 316	1 465	988
Scrap	847	638	...	5 918	740
Jamaica					
Scrap	38	58	104	1 715	...
USA					
Unwrought (a)	4 818	4 916	5 399	6 730	6 043
of which, re-exports	2 250	2 358	2 614	1 950	1 380
Scrap	8 812	8 603	9 135	9 587	7 507

Exports of Tin

tonnes

Country	1993	1994	1995	1996	1997
Bolivia					
Concentrates	2 896	2 533	2 454	3 748	3 554
Unwrought	14 394	15 380	12 915	11 326	12 424
Brazil					
Unwrought (a)	22 106	17 643	9 948	11 787	11 979
Peru					
Concentrates	23 024	44 863	37 099	38 271	*50 000
China					
Concentrates	3 100	615	52	—	—
Unwrought (a)	40 703	37 619	43 307	36 128	41 088
Hong Kong					
Concentrates (b)	4 057	*2 200	769	821	914
Unwrought (a)	17 885	11 448	15 281	10 811	6 078
of which, re-exports	17 694	11 421	15 175	10 702	5 991
Indonesia					
Unwrought (a)	17 875	22 300	39 667	46 312	49 908
Japan					
Unwrought (a)	301	170	69	193	211
Scrap	183	339	357	470	1 161
Korea, Republic of					
Unwrought (a)	46	735	169	298	565
Scrap	466	—	28	90	12
Laos					
Concentrates (c)	246	360	736	1 060	736
Malaysia					
Unwrought (a)	36 920	38 935	35 216	34 342	31 785
Scrap	431	557	661	1 070	...
Singapore					
Concentrates (b)	777	1 757	1 388	1 370	1 617
Unwrought	27 446	31 904	33 740	38 656	43 502
of which, re-exports	24 199	30 378	32 181	36 554	...
Scrap	1 031	1 484	1 698	1 504	1 250
of which, re-exports	101	556	942	318	...
Taiwan					
Scrap	129	202	454	728	760
Thailand					
Unwrought (a)	3 497	2 751	2 676	4 850	8 000
Australia					
Concentrates	14 639	13 363	15 894	15 885	17 066
Unwrought (a)	216	214	534	499	537
Scrap	2 097	2 785	347	282	...

Note(s):-

(1) In this table the term 'unwrought' tin corresponds to item 687.1 of the Standard International Trade Classification (Revision 3) and comprises ingots, pigs, unwrought bars, sticks, etc.

- (a) Including alloys
- (b) Re-exports
- (c) Sn content

Imports of Tin

tonnes

Country	1993	1994	1995	1996	1997
Austria					
Unwrought (a)	945	855	970	822	806
Belgium-Luxembourg					
Unwrought	1 803	1 508	636	1 483	1 833
Unwrought alloys	602	1 067	1 087	864	584
Scrap	1 498	1 604	2 464	1 352	2 259
Croatia					
Unwrought (a)	148	*100	123	117	105
France					
Unwrought	7 697	9 154	8 695	8 191	8 104
Unwrought alloys	506	656	1 059	608	386
Germany					
Unwrought	18 382	19 950	21 343	19 685	20 735
Unwrought alloys	725	808	916	702	782
Scrap	1 213	731	278	248	400
Greece					
Unwrought (a)	249	360	454	491	502
Hungary					
Unwrought & semi-manufactures	176	346	346	464	332
Irish Republic					
Unwrought (a)	197	265	317	343	363
Italy					
Unwrought	5 436	5 143	5 824	6 317	5 206
Unwrought alloys	224	220	196	258	590
Netherlands					
Unwrought	3 908	8 953	8 990	10 180	12 945
Unwrought alloys	1 433	1 039	1 032	1 073	989
Scrap	455	390	230	203	370
Norway					
Unwrought	433	398	541	553	477
Unwrought alloys	81	70	93	90	81
Poland					
Unwrought (a)	869	987	1 338	1 229	...
Portugal					
Unwrought (a)	649	966	600	1 183	1 024
Romania					
Unwrought (a)	615	536	569	511	434
Russia					
Concentrates (f)	182	2 548	2 778	9 239	...
Unwrought (a) (b)	*13 900	*7 500	...	...	...
Slovakia					
Unwrought	478	588	414	607	...
Spain					
Concentrates	2 466	215	25	66	15
Unwrought (a)	6 127	4 933	6 127	25 870	5 148
Sweden					
Unwrought	425	514	489	495	549
Unwrought alloys	161	166	240	62	276
Scrap	82	196	198	93	112
Switzerland					
Unwrought (a)	943	676	779	636	851
Turkey					
Unwrought (a)	898	835	1 095	1 409	1 234
Ukraine					
Unwrought	1 244	1 062	*1 100	*500	...
United Kingdom					
Unwrought	13 004	13 067	9 767	10 010	14 768
Unwrought alloys	1 538	1 635	1 695	1 901	1 303
Scrap	322	1 035	562	557	456
Yugoslavia, Federal Republic of					
Unwrought (a)	*50	*50	*50	107	206
Algeria					
Unwrought (a)	300	41	...	43	...
Egypt					
Unwrought	209	190	209	4 024	...
Morocco					
Unwrought (a)	116	89	159	142	...

Tin

Imports of Tin

tonnes

Country	1993	1994	1995	1996	1997
South Africa					
Unwrought (a)	2 118	2 425	2 219	2 425	2 391
Canada					
Unwrought	4 510	4 677	4 493	4 462	4 659
Mexico					
Concentrates	4 044	1 098	705	1 760	...
Unwrought	540	1 255	1 183	1 537	...
Scrap	61	91	56	31	...
USA					
Unwrought	33 989	32 112	33 347	30 004	40 580
Unwrought alloys	7 072	8 744	11 321	11 828	3 869
Scrap	2 553	1 922	15 928	6 744	1 961
Argentina					
Unwrought	972	1 162	1 042	1 135	...
Bolivia					
Concentrates	5 268	11 340	12 015	7 826	...
Chile					
Unwrought	513	546	591	790	797
Colombia					
Unwrought (a)	366	440	301	293	...
Peru					
Unwrought (a)	162	185	182	128	...
Venezuela					
Unwrought (a)	449	328	875	669	...
Hong Kong					
Concentrates	3 166	969	849	100	1 699
Unwrought (a)	19 008	14 259	15 894	13 893	7 054
India					
Unwrought (a) (e)	2 972	4 224	3 172	5 049	...
Scrap (e)	285	475	1 318	1 779	...
Iran					
Unwrought (d)	247	142	347	...	...
Japan					
Unwrought	27 665	27 577	28 019	25 272	28 133
Unwrought alloys	1 766	3 226	2 958	2 294	2 488
Korea, Republic of					
Unwrought (a)	9 364	10 687	11 519	11 851	12 252
Malaysia					
Concentrates	42 540	59 569	57 754	53 137	...
Unwrought (a)	5 252	5 265	7 210	8 046	...
Pakistan					
Scrap	27	658	1 472	765	...
Philippines					
Unwrought (a)	508	648	794	874	...
Singapore					
Concentrates	1 008	1 551	1 103	820	917
Unwrought	4 006	3 010	3 976	2 108	3 930
Scrap	756	551	856	684	652
Taiwan					
Unwrought (a)	7 683	9 689	9 699	9 935	12 719
Australia					
Unwrought (a) (c)	922	808	819	904	2 476
New Zealand					
Unwrought (a) (c)	78	133	93	*400	83

Note(s):-

(1) In this table the term 'unwrought' tin corresponds to item 687.1 of the Standard International Trade Classification (Revision 3) and comprises ingots, pigs, unwrought bars, sticks, etc.

- (a) Including alloys
 (b) BGS estimates, based on known exports from certain countries
 (c) Years ended 30 June of that stated
 (d) Years ended 20 March following that stated
 (e) Years ended 31 March following that stated
 (f) Sn content

Production of Titanium Minerals

tonnes

Country	1993	1994	1995	1996	1997
Norway					
Ilmenite	713 113	826 391	857 747	758 711	557 000
Russia					
Ilmenite	14 000	7 000	...	...	...
Ukraine					
Ilmenite	*450 000	530 000	359 000	*420 000	...
Rutile	*60 000	80 000	112 000	*180 000	...
Egypt					
Ilmenite (c)	—	—	—	57 000	124 180
Sierra Leone					
Ilmenite	64 400	53 500	—	...	...
Rutile	150 332	144 312	...	5 924	8 000
South Africa					
Ilmenite (b)	*1 516 000	*1 314 000	*1 680 000	*1 700 000	*1 710 000
Rutile	100 000	*90 000	*90 000	*110 000	*120 000
Canada					
Ilmenite (a) (b)	*2 100 000	*2 200 000	*2 200 000	*2 500 000	2 400 000
USA					
Ilmenite	*300 000	*320 000	*320 000	...	...
Rutile	*25 000	*30 000	...	...	...
Brazil					
Ilmenite	101 255	97 439	102 125	97 955	*100 000
Rutile	1 744	1 911	1 985	2 018	*2 000
China					
Ilmenite	226 000	216 500	...	...	...
India					
Ilmenite	*320 000	*290 000	*290 000	*330 000	*305 000
Rutile	*13 900	*14 000	*14 000	*14 000	...
Malaysia					
Ilmenite	278 950	116 696	151 680	244 642	167 504
Sri Lanka					
Ilmenite	71 235	60 465	50 250	62 810	18 970
Rutile	2 643	2 410	2 884	3 532	2 968
Thailand					
Ilmenite	20 715	1 600	—	—	...
Rutile	87	49	—	—	...
Leucosene	106	77	33	—	...
Australia					
Ilmenite	1 795 000	1 777 000	1 980 000	2 028 000	2 233 000
Rutile	187 000	231 000	195 000	180 000	235 000
Leucosene	21 000	33 000	31 000	30 000	32 000
World Total					
Ilmenite (wt of concs)	8 000 000	7 800 000	8 200 000	8 700 000	8 600 000
Rutile (wt of concs)	541 000	594 000	590 000	525 000	592 000
All forms (TiO ₂ content)	*4 203 000	*4 184 000	*4 380 000	*4 583 000	*4 566 000

Note(s):-

- (1) The figures in this table refer to gross tonnage of titanium concentrates
(2) Some ilmenite is converted to synthetic rutile in Australia, India, Japan, Taiwan and USA

- (a) Canada produces some ilmenite which is sold as such and not processed into slag, but tonnages are small
(b) Processed into slag. In 1997 South Africa produced an estimated 1 006 000 tonnes (85% TiO₂) and Canada produced 932 000 tonnes (80% TiO₂)
(c) Years ended 30 June of that stated

Exports of Titanium

tonnes

Country	1993	1994	1995	1996	1997
Austria					
Metal	675	92	116	167	239
Oxides	1 094	1 328	3 317	1 565	2 194
Belgium-Luxembourg					
Metal	290	612	1 057	439	569
Oxides	170 075	190 072	202 601	213 330	243 120
Czech Republic					
Oxides	13 300	23 400	20 100	17 900	21 682
Estonia					
Metal (b)	*100	*250	*150	*100	...
Finland					
Oxides (b)	*61 000	*60 000	*44 200	*32 900	...
France					
Titanium minerals	214	4 877	2 331	2 931	1 443
Metal	1 730	2 169	2 365	2 339	4 470
Oxides	171 450	168 672	176 727	175 744	212 059
Georgia					
Metal	(b) *100	(b) *150	58	—	—
Germany					
Titanium minerals	1 608	1 119	1 141	970	588
Metal	3 551	2 579	3 991	4 092	4 092
Oxides	209 952	239 809	219 166	237 877	277 670
Italy					
Titanium minerals	51	525	121	850	148
Metal	1 461	1 320	2 634	4 534	3 559
Oxides	(b) *33 800	59 335	32 417	25 780	37 264
Netherlands					
Ilmenite	31 763	4 965	833	...	...
Other titanium minerals	11 875	7 740	5 393	(d) 7 992	(d) 8 693
Metal	656	140	828	1 091	1 185
Oxides	(b) *42 400	(b) *48 200	(b) *48 800	(b) *39 100	68 626
Norway					
Titanium minerals	454 122	559 078	461 240	400 932	...
Oxides (b)	*21 900	*18 000	*16 500	*24 500	...
Poland					
Oxides	9 200	16 100	16 000	13 500	...
Russia					
Metal	5 170	20 005	19 504	28 878	33 826
Slovenia					
Oxides	19 800	27 300	27 000	21 688	32 707
Spain					
Oxides	42 774	43 200	37 480	53 695	55 761
Sweden					
Metal	567	837	1 187	998	805
Oxides	2 204	2 191	3 935	7 478	6 013
Switzerland					
Metal	240	258	293	317	233
Oxides	537	647	637	621	567
Ukraine					
Titanium minerals	...	...	126 822	122 590	211 877
Metal (b)	*1 000	*2 200	*700	...	...
Oxides (b)	*600	*2 700	*3 900	*3 300	...
United Kingdom					
Metal	6 002	8 221	10 145	11 028	12 379
Oxides	165 471	176 163	157 124	148 315	158 332
Sierra Leone					
Ilmenite	63 000	59 000	...	...	...
Rutile	143 500	156 600	...	...	...
South Africa					
Titanium minerals (b)	*225 400	*175 900	*207 500	*316 600	...
Titanium slag (b)	*540 900	*564 700	*528 000	*579 500	*525 900
Oxides (b)	*7 200	*9 500	*6 800	*7 200	...
Canada					
Titanium minerals & slag	(b) *911 200	*900 000	*900 000	*1 100 000	*800 000
Metal	335	516	731	666	492
Oxides	51 085	72 272	88 923	70 627	80 855

Exports of Titanium

tonnes

Country	1993	1994	1995	1996	1997
Mexico					
Oxides	42 960	57 436	62 566	64 953	...
USA					
Titanium minerals	15 917	19 823	33 400	15 825	24 359
Metal	8 175	10 134	11 256	13 392	17 175
Oxides	290 892	354 870	344 261	340 137	405 072
Brazil					
Oxides	2 625	4 794	4 503	5 239	...
China					
Titanium minerals	16 707	5 496	5 819	24 912	18 673
Metal	203	767	1 627	1 974	2 108
Oxides	14 928	20 071	27 852	24 223	26 904
Hong Kong					
Oxides (c)	14 822	22 028	24 477	24 826	27 083
India					
Ilmenite (a)	140 050	177 674	207 812	42 961	...
Other titanium minerals (a)	26 705	9 971	11 240	7 399	...
Israel					
Metal (b)	*100	*200	*300	*400	...
Japan					
Titanium minerals	20 006	11 446	9	35	10
Metal	8 910	11 548	12 471	15 855	24 193
Oxides	74 806	...	80 455	77 740	94 876
Kazakhstan					
Metal	(b) *700	(b) *2 200	9 183	12 953	18 493
Korea, Republic of					
Titanium minerals	147 341	108 040	64 400	59 920	36 190
Oxides	7 820	11 878	13 442	17 567	16 375
Kyrgyzstan					
Metal (b)	...	...	*100	*300	*100
Malaysia					
Ilmenite	132 422	157 130	169 001	115 122	...
Oxides	...	34 825	40 872	49 584	...
Singapore					
Oxides	10 761	10 353	20 952	23 939	42 526
of which, re-exports	10 006	7 625	7 019	9 757	7 604
Sri Lanka					
Ilmenite	20 021	55 243	30 042	1 093	30 000
Rutile	22 621	882	4 193	21 282	100
Other titanium minerals	—	160	20 000	...	...
Taiwan					
Oxides	4 665	25 200	58 691	71 916	47 795
Thailand					
Ilmenite	10 130	15 023	23 112	4 178	...
Australia					
Ilmenite	962 000	1 084 000	1 075 000	1 062 000	1 350 000
Rutile	182 000	209 000	221 000	169 000	208 000
Leucoxene	12 000	18 000	18 000	28 000	34 000
Oxides	114 000	117 000	123 000	131 000	132 000

Note(s):-

- (1) So far as possible, the term 'oxides', as used in this table, includes oxides and oxide based pigments classified under Standard International Trade Classification (Revision 3) items 522.56 and 533.1
- (2) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

- (a) Years ended 31 March following that stated
- (b) BGS estimates, based on known imports into certain countries
- (c) Re-exports
- (d) Including ilmenite

Titanium

Imports of Titanium

tonnes

Country	1993	1994	1995	1996	1997
Austria					
Metal	176	208	292	338	510
Oxides	15 330	16 965	17 542	15 896	20 658
Belgium-Luxembourg					
Ilmenite	26 120	23 756	20 901	3 091	262
Other titanium minerals	75 564	64 952	68 581	57 625	50 007
Metal	957	1 973	1 348	1 212	1 030
Oxides	54 612	48 617	53 877	57 475	163 638
Bulgaria					
Titanium minerals	(b) *1 200	(b) *800	1 260	479	670
Croatia					
Oxides	1 684	1 600	2 512	2 648	2 569
Denmark					
Oxides	12 737	16 017	14 917	14 067	17 451
Finland					
Titanium minerals	*90 100	*106 400	*117 000	*105 000	...
Oxides	5 042	2 428	6 848	6 908	8 860
France					
Ilmenite	53 503	53 598	87 049	37 667	52 490
Other titanium minerals	124 166	129 167	150 076	117 162	96 119
Titanium slag	105 607	131 337	...	159 761	92 773
Metal	2 922	3 252	3 846	4 942	7 343
Oxides	80 347	90 329	91 826	115 143	123 629
Germany					
Ilmenite	249 987	404 912	351 729	342 250	236 404
Other titanium minerals	27 428	16 810	58 209	251 050	195 479
Titanium slag	233 409	239 540	255 902	81 392	127 137
Metal	4 871	6 721	7 636	7 973	9 426
Oxides	149 506	154 657	162 088	153 144	153 104
Greece					
Oxides	16 555	18 033	18 842	17 672	20 728
Hungary					
Oxides	4 200	5 200	4 600	5 400	...
Irish Republic					
Oxides	5 240	5 915	5 500	2 094	3 740
Italy					
Ilmenite	75 397	28	...	...	133
Other titanium minerals	2 082	3 619	(e) 2 341	(e) 4 689	1 521
Titanium slag	72 523	79 779	...	...	67 407
Metal	3 379	3 169	4 618	5 845	5 031
Oxides	100 701	120 122	113 655	116 220	138 209
Netherlands					
Ilmenite	42 001	12 538	2 789	...	...
Other titanium minerals	50 642	66 856	54 602	(e) 62 820	(e) 47 130
Metal	1 336	887	1 442	1 561	3 104
Oxides	66 497	66 856	70 005	61 571	69 661
Norway					
Titanium minerals	39 518	38 997	13 444	29 637	352
Oxides	7 195	7 959	8 010	6 986	8 403
Poland					
Titanium minerals	68 972	90 035	70 585	62 500	...
Oxides	3 300	4 800	8 700	8 400	...
Portugal					
Oxides	12 300	15 300	15 800	18 100	17 784
Romania					
Titanium minerals	2 543	904	1 405	2 295	2 219
Oxides	1 350	2 121	3 727	2 034	850
Russia					
Oxides	*25 000	*24 900	30 100	28 500	...
Slovakia					
Oxides	*2 000	2 500	2 800	...	...
Spain					
Ilmenite	110 571	129 633	102 621	138 171	155 093
Other titanium minerals	149	2 109	2 185	...	1 706
Metal	625	1 188	1 523	1 465	1 583
Oxides	51 080	56 600	58 080	63 339	76 095

Imports of Titanium

tonnes

Country	1993	1994	1995	1996	1997
Sweden					
Titanium minerals	850	1 422	1 183	658	422
Metal	1 066	1 588	376	401	367
Oxides	28 192	30 027	33 690	33 705	36 856
Switzerland					
Oxides	18 672	20 399	18 667	18 452	19 861
Turkey					
Titanium minerals	3 261	3 933	3 161	7 343	5 514
Oxides	34 718	30 349	38 767	44 462	60 872
United Kingdom					
Ilmenite	223 757	104 384	128 270	164 050	156 649
Other titanium minerals	83 535	172 846	100 275	75 937	93 122
Titanium slag	63 672	67 668	74 027	91 045	99 308
Metal	12 948	15 758	17 682	18 495	28 117
Oxides	58 960	65 679	76 926	83 245	80 138
South Africa					
Oxides	7 544	10 371	8 584	6 383	7 515
Canada					
Titanium minerals	13 782	34 963	33 596	7 382	8 458
Metal	1 773	1 842	2 037	2 033	1 692
Oxides	69 745	111 299	106 322	84 683	110 686
Mexico					
Ilmenite	92 647	99 524	119 720	143 836	...
Rutile sand	1 622	671	648	813	...
Titanium slag	10 048	22 540	15 002	20 199	...
Oxides	14 675	21 915	16 051	30 991	...
USA					
Ilmenite	388 872	379 478	583 247	608 336	565 461
Rutile (c)	371 493	318 117	310 861	324 482	345 842
Titanium slag	485 517	484 133	404 132	421 140	429 919
Metal	8 746	15 829	23 403	35 709	37 547
Oxides	175 419	175 969	182 863	167 044	194 269
Argentina					
Titanium minerals	1 772	2 204	1 478	2 061	1 948
Oxides	22 968	25 444	22 681	29 337	29 688
Brazil					
Rutile	1 833	827	1 168	863	...
Oxides	35 653	40 542	66 282	61 803	...
Chile					
Oxides	8 053	8 662	8 924	4 957	10 961
Colombia					
Oxides	12 986	16 212	14 274	12 612	...
Uruguay					
Oxides	1 833	2 410	2 593	1 750	2 582
Venezuela					
Oxides	13 521	8 244	14 867	8 508	...
China					
Titanium minerals	2 496	962	21 501	56 622	29 850
Metal	1 869	1 640	1 765	2 684	2 315
Oxides	45 054	59 235	59 966	92 886	100 610
Hong Kong					
Oxides	23 705	32 530	32 600	33 197	38 452
India					
Oxides (d)	13 508	18 094	14 549	31 981	...
Indonesia					
Oxides	34 429	43 499	30 265	14 007	13 240
Israel					
Oxides	12 800	*15 000	*11 000	*10 000	...
Japan					
Titanium minerals	514 931	399 800	437 638	402 325	408 705
Metal	2 316	4 622	6 914	8 828	13 041
Oxides	75 526	90 666	96 152	100 243	102 809
Jordan					
Oxides	2 958	4 082	2 826	...	...

Titanium

Imports of Titanium

tonnes

Country	1993	1994	1995	1996	1997
Korea, Republic of					
Rutile sand	9 246	11 446	—	—	...
Titanium minerals	88 207	76 803	94 905	68 602	177 356
Metal	2 964	2 978	2 980	2 208	3 582
Oxides	63 817	80 540	85 447	78 255	91 455
Malaysia					
Titanium minerals	72 769	71 590	83 000	117 628	...
Oxides	18 631	22 728	13 552	44 161	...
Pakistan					
Oxides	6 715	6 952	7 261	8 483	...
Philippines					
Titanium minerals	1 783	2 637	2 390	2 414	...
Oxides	20 240	25 977	25 452	24 249	...
Saudi Arabia					
Titanium minerals	50 048	60 690	122 414	69 311	...
Oxides	4 707	5 981	2 665	2 579	...
Singapore					
Oxides	27 058	11 662	14 289	25 140	21 163
Taiwan					
Titanium minerals	23 234	47 313	84 493	75 232	117 431
Metal	697	724	1 213	1 950	3 467
Oxides	73 492	89 327	73 784	59 145	45 186
Thailand					
Rutile	3 723	5 127	6 103	5 725	...
Other titanium minerals	3 120	4 083	4 473	4 882	...
Oxides	34 634	41 582	39 920	38 993	...
Australia					
Titanium minerals	500	14 200	1 200	419	...
Oxides	2 600	2 800	2 800	5 981	...
New Zealand					
Oxides (a)	7 873	9 006	9 116	10 300	9 434

Note(s):-

- (1) Significant quantities of titanium slag are traded, but it is not always possible to identify this material in national trade
- (2) So far as possible, the term 'oxides', as used in this table, includes oxides and oxide based pigments classified under Standard International Trade Classification (Revision 3) items 522.56 and 533.1
- (3) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

- (a) Years ended 30 June of that stated
- (b) BGS estimates, based on known exports from certain countries
- (c) Including synthetic rutile
- (d) Years ended 31 March following that stated
- (e) Including ilmenite

Mine Production of Tungsten

tonnes (metal content)

Country	1993	1994	1995	1996	1997
Austria	506	—	568	1 072	1 138
Portugal (c)	767	60	873	776	1 037
Russia (c)	6 639	3 392	4 568	4 500	4 500
Burundi	—	—	*22	*16	*16
Congo, Democratic Republic (b)	*15	*15	...	...	...
Rwanda	*175	—	46	109	110
Uganda	5	12	17	—	*50
Mexico	—	—	287	188	179
USA	*50	*50	*50	...	...
Bolivia	287	462	655	581	513
Brazil (a)	245	155	98	98	*100
Peru	308	205	577	263	221
China	23 000	27 000	26 600	23 300	*24 000
Japan	66	—	—	—	—
Kazakhstan	*150	154	314	96	...
Kyrgyzstan	*100	*100	*100	*100	*100
Mongolia	—	17	62	22	60
Myanmar (b)	524	544	531	334	280
Tajikistan	*150	*100	*75	*50	*50
Thailand (c)	105	115	45	35	*30
Uzbekistan	*300	*300	*300	*300	*250
Vietnam	—	20	50	130	210
Australia (d) (e)	113	21	31	61	2
World Total	33 500	32 700	35 900	32 000	32 900

Note(s):-

(a) Mainly scheelite

(b) Including tungsten content of tin-wolframite concentrates

(c) Wolframite and scheelite

(d) Scheelite

(e) Years ended 30 June of that stated

Exports of Tungsten

tonnes

Country	1993	1994	1995	1996	1997
Austria					
Metal	646	819	1 248	1 265	1 060
Belgium-Luxembourg					
Metal	233	168	146	207	177
France					
Metal	737	508	362	398	518
Carbide	286	237	315	358	350
Germany					
Metal	1 256	1 482	1 245	1 494	1 555
Italy					
Metal	72	271	250	190	373
Netherlands					
Ores & concentrates	1 282	1 289	...	10	20
Metal	346	348	556	414	432
Poland					
Ores & concentrates	148	52	846	...	...
Metal	109	137	98	56	...
Portugal					
Ores & concentrates	2 413	...	...	1 319	1 881
Russia					
Ores & concentrates (b)	...	*5 000	*4 700	...	...
Metal (b)	*250	*250	*450	*930	*450
Sweden					
Metal	10	67	44	31	134
Carbide	456	575	...	...	255
Switzerland					
Metal	119	53	127	54	137
United Kingdom					
Metal	573	649	862	1 074	1 939
Carbide	52	116	781	807	270
Rwanda					
Ores & concentrates	141	—	19	43	...
Uganda					
Ores & concentrates	114	91	156	76	...
Mexico					
Ores & concentrates	69	124	367	234	...
USA					
Metal	1 207	1 839	2 034	1 586	1 832
Ammonium paratungstate (a)	182	250	289	152	121
Carbide	1 266	1 320	1 686	1 316	1 104
Bolivia					
Ores & concentrates	677	836	1 174	1 030	917
Peru					
Ores & concentrates	702	771	1 199	839	...
China					
Ores & concentrates	699	1 133	260	140	751
Metal	254	1 059	1 312	1 262	1 041
Ammonium paratungstate	9 226	12 946	17 731	12 425	16 116
Carbide (b)	*150	*150	*100	...	...
Hong Kong					
Ores & concentrates (c)	379	2 611	157	3 179	362
Israel					
Metal (b)	*200	*340	*160	*260	*280
Japan					
Metal	759	1 348	1 424	1 437	1 300
Korea, Republic of					
Metal	440	352	480	567	608
Carbide	463	727	...	1 086	...
Myanmar					
Ores & concentrates	*300	*300	*300	*300	...
Singapore					
Ores & concentrates (c)	687	850	843	776	464
Metal	193	117	143	151	189

Exports of Tungsten

tonnes

Country	1993	1994	1995	1996	1997
Thailand					
Ores & concentrates	234	227	164	213	...
Australia					
Ores & concentrates	40	116	280	...	...

Note(s):-

- (1) Significant amounts of tungsten are traded in the forms of ammonium paratungstate (APT) and carbide. Though statistics are included where available, most countries do not separately distinguish these forms in their trade accounts
- (2) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys
- (a) W content
 (b) BGS estimates, based on known imports into certain countries
 (c) Re-exports

Imports of Tungsten

tonnes

Country	1993	1994	1995	1996	1997
Austria					
Ores & concentrates	600	3 014	1 000	300	...
Metal	455	563	747	730	355
Belgium-Luxembourg					
Metal	398	330	327	197	382
Ammonium paratungstate	2 898	...	...	...	...
Carbide	139	183	207	137	100
Finland					
Metal	37	36	16	88	86
France					
Metal	322	398	628	...	393
Carbide	147	427	387	329	224
Germany					
Ores & concentrates	107	604	947	378	272
Metal	1 535	2 019	2 331	2 329	2 376
Carbide	692	752	968	667	1 059
Italy					
Metal	274	179	169	135	173
Carbide	282	382	...	...	430
Netherlands					
Ores & concentrates	217	9	...	68	171
Metal	175	287	329	546	*400
Spain					
Metal	75	115	154	99	45
Sweden					
Metal	244	547	304	388	393
Carbide	116	528	...	...	839
Switzerland					
Metal	62	88	88	120	146
United Kingdom					
Metal	962	1 180	1 222	1 614	1 889
Carbide	118	300	1 601	1 041	1 357
South Africa					
Metal	81	43	30	7	24
Carbide	64	210	—	...	...
Canada					
Metal	132	168	221	149	217
Carbide	388	421	402	400	...
Mexico					
Metal	163	189	213	219	...
USA					
Ores & concentrates	3 008	6 616	7 443	7 627	8 616
Metal	1 948	2 945	2 950	2 686	2 462
Ammonium paratungstate (a)	1 176	848	1 290	1 580	2 100
Carbide	326	308	533	491	699
China					
Ores & concentrates	2	909	2 814	2 693	2 564
Hong Kong					
Ores & concentrates	—	1 162	28	614	189
India					
Ores & concentrates (c)	560	839	480	315	...
Metal (c)	136	105	229	123	...
Indonesia					
Metal	96	55	31	41	316
Israel					
Metal (b)	...	*200	*100	...	...
Japan					
Ores & concentrates	459	236	551	478	1 473
Metal	278	807	970	871	895
Korea, Republic of					
Metal	75	141	120	110	124
Malaysia					
Metal	215	341	...	...	...

Imports of Tungsten

tonnes

Country	1993	1994	1995	1996	1997
Singapore					
Ores & concentrates	254	858	913	317	103
Metal	200	176	143	137	167
Taiwan					
Metal	140	136	164	171	197
Australia					
Metal	...	100	100	85	...

Note(s):-

- (1) Significant amounts of tungsten are traded in the forms of ammonium paratungstate (APT) and carbide. Though statistics are included where available, most countries do not separately distinguish these forms in their trade accounts
 - (2) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys
- (a) W content
 (b) BGS estimates, based on known exports from certain countries
 (c) Years ended 31 March following that stated

Vanadium

Mine Production of Vanadium

tonnes (metal content)

Country	1993	1994	1995	1996	1997
Hungary	*200	*200	*200	*200	*200
Russia	*12 800	*11 900	*11 000	*11 000	*11 000
South Africa	10 493	13 054	14 122	14 766	15 590
USA	*1 100	*1 500	*2 700	*900	...
China	*5 000	*5 400	*13 700	*14 000	*8 000
Kazakhstan	800	878	924	*900	*900
World Total	30 400	32 900	42 600	41 800	36 500

Note(s):-

(1) This table includes vanadium in slag products but excludes vanadium recovered as a byproduct of the refining and burning of heavy oils

Exports of Vanadium

tonnes

Country	1993	1994	1995	1996	1997
Austria					
Pentoxide	1 149	163	817	472	...
Belgium-Luxembourg					
Vanadiferous residues	3 649	3 533	779	6 930	4 097
Pentoxide	25	13	176	60	4
Vanadium-titanium pig iron	1	—	...	16	149
Denmark					
Vanadium-titanium pig iron	1	16	39	135	13
France					
Vanadiferous residues	424	49	...	12	11
Pentoxide	0	361	178	17	2
Metal	1	21	3	...	59
Germany					
Vanadiferous residues	2 596	122	360	566	364
Pentoxide	78	99	70	201	296
Vanadium-titanium pig iron	47	—	—	—	—
Metal	254	374	511	320	659
Italy					
Vanadiferous residues	625	123	...	...	55
United Kingdom					
Metal	16	31	1	7	270
South Africa					
Pentoxide (a)	9 688	12 427	12 736	14 443	...
Mexico					
Vanadiferous residues	2 069	3 142	2 039	1 556	...
USA					
Pentoxide	1 058	1 389	1 244	2 974	1 108
China					
Vanadiferous residues	11 123	16 627	...	11 018	18
Pentoxide	6 752	7 421	6 457	4 299	6 465
New Zealand					
Vanadiferous residues	2 403	5 210	4 000	—	...

Note(s):-

- (1) In this table the term 'pentoxide' also includes vanadium oxides and hydroxides, if any
(2) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

(a) Includes vanadium content of pentoxide and vanadiferous residues

Vanadium

Imports of Vanadium

tonnes

Country	1993	1994	1995	1996	1997
Austria					
Vanadiferous residues	*25 000	*25 000	*25 000	*25 000	*25 000
Pentoxide	3 269	1 603	2 324	3 174	3 110
Belgium-Luxembourg					
Pentoxide	2 853	6 295	4 741	3 330	3 342
France					
Pentoxide	130	231	335	246	406
Metal	91	30	36	...	875
Germany					
Vanadiferous residues	80	14	—	133	43
Pentoxide	3 744	1 874	1 496	730	926
Metal	2	7	5	32	24
Italy					
Vanadiferous residues	201	311	...	...	...
Pentoxide	115	124	...	...	373
Slovakia					
Pentoxide (a)	*200	*380	...	...	...
United Kingdom					
Pentoxide	98	139	116	73	161
Metal	253	61	236	368	628
Canada					
Pentoxide	1 325	1 532	2 250	1 986	2 316
USA					
Vanadiferous residues	5 303	4 754	7 713	5 593	9 543
Pentoxide	138	442	1 036	873	1 425
Metal	817	713	847	96	525
Brazil					
Pentoxide	597	602	318	328	...
China					
Vanadiferous residues	13 560	20 434	18 671	2 001	3 001
Metal	—	3 205	—	1 022	30
Japan					
Pentoxide	4 559	4 501	4 920	4 675	5 322
Metal	74	134	166	148	226
Korea, Republic of					
Pentoxide	228	297	714	1 332	2 259

Note(s):-

- (1) In this table the term 'pentoxide' also includes vanadium oxides and hydroxides, if any
(2) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

(a) BGS estimates, based on known exports from certain countries

Mine Production of Zinc

tonnes (metal content)

Country	1993	1994	1995	1996	1997
Austria	20 014	—	—	—	—
Bosnia & Herzegovina	*350	*300	*300	*300	*800
Bulgaria	32 000	30 000	30 000	28 000	29 000
Czech Republic	1 500	100	—	—	—
Finland	22 529	16 900	16 385	26 294	31 200
France	13 800	—	—	—	—
Georgia	*2 000	*2 000	*2 000	*1 000	*1 000
Greece	22 000	17 605	15 083	7 209	17 800
Irish Republic	194 100	194 000	183 500	164 500	193 100
Italy	7 100	22 906	23 100	11 000	8 500
Macedonia	24 100	21 500	20 800	21 400	26 800
Norway	15 093	15 586	11 180	8 990	6 400
Poland	150 900	151 000	154 500	159 000	158 271
Romania	28 017	35 357	36 737	32 082	29 366
Russia	154 000	147 000	131 100	120 000	121 000
Slovakia	2 900	—	—	—	—
Slovenia	2 000	1 000	—	—	—
Spain	169 892	150 579	172 469	145 468	147 100
Sweden	168 617	159 858	167 962	160 133	155 385
Turkey	*32 500	34 000	65 300	70 000	64 000
Yugoslavia, Federal Republic of	9 704	6 794	5 976	21 765	18 866
Algeria	3 600	5 000	4 000	3 100	*4 000
Congo, Democratic Republic	4 100	500	4 518	3 182	1 628
Morocco	65 866	78 561	79 849	81 316	89 141
Namibia	36 355	33 414	30 209	34 377	39 658
South Africa	77 096	76 361	71 118	76 853	71 062
Tunisia	1 320	12 900	44 200	31 920	2 967
Zambia	19 700	1 000	—	—	—
Canada	1 004 367	1 010 712	1 121 172	1 222 386	1 068 968
Honduras	24 276	23 611	27 117	37 037	39 483
Mexico	366 432	358 953	352 930	348 328	377 861
USA	513 075	597 576	643 877	628 063	631 900
Argentina	31 395	26 933	32 104	31 093	29 224
Bolivia	122 638	100 742	146 131	145 092	154 491
Brazil	171 800	177 585	188 472	117 343	152 600
Chile	29 435	31 038	35 403	36 004	33 934
Peru (a)	664 552	690 017	692 290	760 353	865 267
China	729 300	990 300	1 000 600	1 161 000	1 210 000
India	156 300	147 300	154 500	154 000	142 200
Iran	60 800	72 900	145 100	76 300	76 500
Japan	118 599	100 653	95 274	79 709	71 569
Kazakhstan	218 800	148 070	148 068	158 053	224 051
Korea, Dem. P.R. of	*120 000	*90 000	*90 000	*80 000	*70 000
Korea, Republic of	13 808	7 122	7 747	8 384	8 992
Myanmar	850	1 316	721	572	*500
Thailand	69 500	59 400	13 500	18 100	9 500
Uzbekistan	*30 000	*31 000	*24 000	*12 000	*2 000
Vietnam	*12 000	*11 900	*12 000	*16 000	*18 000
Australia	990 000	955 000	937 000	1 076 000	1 035 000
World Total	6 700 000	6 800 000	7 100 000	7 400 000	7 400 000

Note(s):-

(a) Recoverable

Production of Slab Zinc

tonnes

Country	1993	1994	1995	1996	1997
Austria	6 838	—	—	—	—
Belgium	210 100	211 200	211 100	207 400	213 600
Bulgaria	67 000	76 700	79 700	79 800	81 800
Finland	170 299	173 200	176 583	176 222	175 000
France	324 500	304 900	313 900	324 300	317 300
Germany	380 900	359 880	322 460	328 100	317 700
Italy	253 600	255 900	260 200	268 700	268 300
Macedonia	51 931	41 984	40 600	54 700	53 147
Netherlands	206 000	212 600	208 000	207 100	200 500
Norway	134 175	136 761	130 800	135 100	142 200
Poland	149 107	154 400	162 700	163 100	172 585
Portugal	3 500	4 000	4 000	3 600	*3 600
Romania	14 700	21 600	29 300	28 200	30 200
Russia	204 000	138 000	166 400	170 000	190 000
Spain	341 600	298 700	358 200	360 800	370 911
Turkey	18 500	19 600	18 900	23 700	37 458
Ukraine	15 000	14 000	5 000	*2 000	*2 000
United Kingdom	102 391	101 300	105 998	96 867	107 704
Yugoslavia, Federal Republic of	6 985	4 000	5 976	29 954	29 454
Algeria	29 677	24 300	27 200	29 300	*30 000
Congo, Democratic Republic	4 152	600	500	100	—
South Africa	96 200	92 800	98 700	101 100	108 500
Zambia	4 706	141	—	—	—
Canada	659 881	690 965	720 346	716 467	699 816
Mexico	209 931	209 200	222 748	221 736	231 444
USA	381 754	356 000	363 000	366 000	367 000
Argentina	33 570	38 014	38 567	39 292	41 772
Brazil	194 750	194 300	200 976	193 000	193 000
Peru	168 398	181 780	158 987	173 139	166 105
China	891 300	1 077 600	1 076 700	1 163 800	1 434 000
India	141 700	156 400	158 500	149 000	166 000
Iran (a)	...	709	2 437	5 742	*15 000
Japan	695 687	665 502	663 562	599 053	603 112
Kazakhstan	238 500	172 531	169 171	170 081	188 996
Korea, Dem. P.R. of	*120 000	*100 000	*95 000	*90 000	*70 000
Korea, Republic of	276 384	271 875	279 335	286 604	335 488
Thailand	*65 000	58 513	46 398	59 738	84 100
Uzbekistan	*70 000	*40 000	70 000	38 000	32 000
Australia	321 000	328 000	325 000	331 000	312 000
World Total	7 300 000	7 200 000	7 300 000	7 400 000	7 800 000

Note(s):-

(a) Years ended 20 March following that stated

Exports of Zinc

tonnes

Country	1993	1994	1995	1996	1997
Austria					
Ore	26 096	4 040	...	...	...
Unwrought (a)	2 899	3 570	5 038	2 977	13 108
Scrap	2 094	1 922	2 607	2 869	3 079
Belgium-Luxembourg					
Ore	192 055	185 019	388 192	1 095 059	1 130 638
Unwrought	182 655	148 415	166 695	144 912	143 121
Unwrought alloys	114 785	132 272	156 204	147 851	...
Scrap	10 133	16 696	20 395	21 203	36 920
Bulgaria					
Unwrought (a)	61 800	57 800	62 623	72 093	67 196
Denmark					
Scrap	4 730	7 115	6 371	5 744	7 038
Estonia					
Unwrought (b)	...	*1 500	*200	...	...
Scrap (b)	...	...	*1 700	*1 400	*1 300
Finland					
Unwrought	137 582	137 476	125 664	137 317	128 746
Unwrought alloys	3 531	4 218	4 644	2 918	4 842
Scrap	6 127	8 567	9 517	7 700	9 344
France					
Ore	12 555	7 791	33 884	10 146	16 407
Unwrought	182 289	129 894	67 390	226 741	177 074
Unwrought alloys	1 805	3 952	3 940	5 567	7 479
Scrap	19 613	20 669	25 554	28 116	39 161
Germany					
Ore	5 781	29 539	43 318	46 030	41 710
Unwrought	105 168	109 632	63 397	70 130	49 088
Unwrought alloys	15 145	19 331	25 362	27 710	38 446
Scrap	18 568	20 218	24 589	29 044	33 795
Greece					
Ores & concentrates	85 699	26 578	28 778	8 503	32 501
Scrap	545	1 396	1 873	1 198	1 552
Hungary					
Scrap	1 895	2 359	2 047	1 961	2 259
Irish Republic					
Ores & concentrates	408 052	340 281	325 529	282 567	347 300
Italy					
Ore	65	48	103	2 474	18 326
Unwrought	16 425	17 026	13 695	40 392	15 616
Unwrought alloys	8 514	11 218	9 807	13 329	15 425
Scrap	2 587	4 558	9 389	8 773	9 138
Macedonia					
Unwrought (b)	*11 200	*6 900	*13 700	*20 500	...
Netherlands					
Unwrought	131 555	164 897	192 938	166 630	193 761
Unwrought alloys	13 133	26 929	37 414	47 315	40 230
Scrap	17 079	15 812	18 050	20 608	24 966
Norway					
Ore	0	546	—	1 320	1 860
Unwrought	122 293	119 626	111 572	112 980	124 187
Unwrought alloys	4 594	4 882	8 571	8 430	6 651
Scrap	710	646	747	410	464
Poland					
Ore	76 396	46 456	39 120	46 948	39 780
Unwrought	69 466	80 277	68 180	63 378	68 243
Unwrought alloys	2 314	1 531	1 201	2 437	...
Scrap	6 801	188	39	111	...
Portugal					
Unwrought (a)	8 968	100	100	110	170
Russia					
Ores & concentrates	40 300	227 600	95 481	86 651	56 583
Unwrought (a)	48 535	108 898	103 253	119 497	120 577
Slovenia					
Ores & concentrates	3 463	2 083	...	23	—
Spain					
Ore	121 905	89 009	137 214	116 180	136 282
Unwrought (a)	212 073	163 512	178 331	198 139	200 434

Exports of Zinc

tonnes

Country	1993	1994	1995	1996	1997
Sweden					
Ore	361 800	321 097	298 492	315 030	292 797
Unwrought (a)	268	287	105	158	4 193
Scrap	6 150	6 141	7 506	6 524	5 580
Switzerland					
Unwrought (a)	495	639	522	166	513
Scrap	1 531	1 941	1 755	2 127	2 026
Turkey					
Ores & concentrates	12 867	17 332	69 954	85 914	96 167
Ukraine					
Unwrought (a)	(b) *5 000	(b) *6 600	*5 000	*5 000	...
United Kingdom					
Unwrought	19 147	18 247	16 632	10 925	10 309
Unwrought alloys	15 798	22 015	25 070	23 008	24 730
Scrap	30 471	25 445	24 493	26 871	33 723
Yugoslavia, Federal Republic of					
Unwrought (a)	...	...	...	22 300	20 465
Algeria					
Unwrought (a)	5 200	11 915	10 300	26 558	...
Congo, Democratic Republic					
Unwrought	3 700	...	...	...	...
Morocco					
Ore	111 780	151 161	171 466	178 175	...
Namibia					
Concentrates (c)	71 361	24 508	22 997	34 377	34 524
South Africa					
Ores & concentrates (c)	9 770	2 514	—	—	...
Unwrought	7 600	8 000	5 000	8 000	16 700
Tunisia					
Ore	4 566	17 856	87 636	73 938	...
Zambia					
Unwrought	4 156	4 000	—	...	...
Canada					
Ores & concentrates (c)	447 128	382 489	604 408	706 735	489 373
Unwrought	493 264	552 714	536 041	581 609	547 597
Unwrought alloys	4 772	7 504	2 763	204	48
Scrap	40 964	55 454	41 263	28 608	27 304
Honduras					
Ores & concentrates (c)	24 276	23 611	27 117	37 037	39 483
Mexico					
Ores & concentrates	292 310	316 072	254 391	258 125	...
Unwrought	88 699	76 535	86 039	75 859	...
USA					
Ore (c)	380 182	388 625	431 312	470 213	483 511
of which, re-exports	70 435	—	7 483	45 280	24 555
Unwrought (a)	9 092	14 468	15 314	16 222	18 689
Scrap	33 851	39 647	38 020	31 594	34 744
Argentina					
Ores & concentrates	—	25	4 530	7 273	1 447
Unwrought	5 132	9 814	11 659	7 590	...
Bolivia					
Ore	245 539	210 031	292 812	296 440	284 693
Brazil					
Unwrought	70 370	59 548	51 649	49 447	23 200
Chile					
Concentrates	73 548	50 700	90 684	66 258	80 022
Peru					
Concentrates	959 161	976 000	968 517	1 090 687	1 235 089
Unwrought	90 600	97 100	80 731	122 155	107 802
China					
Ores & concentrates	117 489	279 187	154 770	109 391	381 309
Unwrought (a)	205 565	269 704	191 525	226 777	557 008

Exports of Zinc

tonnes

Country	1993	1994	1995	1996	1997
Hong Kong					
Unwrought (a)	92 719	98 357	105 319	100 304	97 120
of which, re-exports	85 104	87 610	105 319	91 264	90 808
Scrap	11 058	23 481	28 744	14 416	15 258
of which, re-exports	10 260	...	24 890	13 268	15 228
Iran					
Ores & concentrates (d)	107 737	28 518	—	...	...
Japan					
Unwrought	32 467	38 635	27 970	28 500	23 531
Unwrought alloys	3 605	2 503	1 962	1 823	1 755
Scrap	7 130	4 702	7 865	6 930	7 093
Kazakhstan					
Ore	10 640	...	10 400	23 075	57 964
Unwrought	84 000	...	147 691	149 549	191 126
Korea, Dem. P.R. of					
Unwrought (a) (b)	*25 400	*19 400	*11 100	*8 100	*6 000
Korea, Republic of					
Unwrought (a)	107 407	84 910	35 550	24 494	91 573
Malaysia					
Scrap	2 819	6 087	5 200	2 500	...
Myanmar					
Concentrates (e)	*2 500	*2 500	*4 000	*2 500	...
Saudi Arabia					
Scrap	1 500	43	...	...	...
Singapore					
Unwrought	12 106	24 700	217 539	34 858	123 959
of which, re-exports	11 601	24 312	216 716	33 608	...
Scrap	628	2 561	2 244	1 049	2 944
Taiwan					
Unwrought (a)	3 762	4 226	7 722	6 968	9 881
Uzbekistan					
Unwrought (b)	*10 400	*10 200	*15 100	*5 500	*5 100
Australia					
Ores & concentrates	1 414 000	1 385 000	1 349 000	1 489 000	1 479 000
Unwrought	259 000	265 000	234 000	257 000	239 000
Scrap	4 400	3 008	1 670	1 599	...
New Zealand					
Scrap	1 333	924	1 152	928	1 054

Note(s):-

(1) In this table the term 'unwrought' zinc corresponds to item 686.1 of the Standard International Trade Classification (Revision 3) and comprises blocks, pigs, slabs, etc.

(a) Including alloys

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

(c) Zn content

(d) Years ended 20 March following that stated

(e) Years ended 31 March following that stated

Imports of Zinc

tonnes

Country	1993	1994	1995	1996	1997
Austria					
Ore	3 559	199	759	276	323
Unwrought	40 924	42 783	37 646	43 104	46 741
Unwrought alloys	6 304	7 667	13 030	14 428	17 913
Scrap	926	1 269	1 129	893	1 310
Belgium-Luxembourg					
Ore	400 268	520 721	553 969	1 393 376	1 605 860
Unwrought (a)	192 253	141 742	158 693	232 852	259 125
Scrap	10 957	13 312	15 819	23 822	48 650
Bulgaria					
Ore	(b) *30 500	(b) *109 800	104 054	116 953	147 283
Croatia					
Unwrought (a)	1 428	1 400	1 754	2 358	2 501
Czech Republic					
Unwrought (a)	13 170	14 884	18 000	17 100	20 101
Denmark					
Unwrought	12 053	11 601	13 483	10 645	10 795
Unwrought alloys	378	926	552	1 389	1 707
Scrap	477	510	148	21	517
Finland					
Ore	274 978	337 384	211 074	288 603	292 378
Unwrought (a)	598	425	7	163	160
France					
Ore	541 624	632 892	622 177	604 490	634 286
Unwrought	87 677	115 493	135 057	108 023	114 185
Unwrought alloys	37 430	50 897	46 027	49 102	43 838
Scrap	3 994	7 068	13 600	11 952	16 031
Germany					
Ore	697 969	612 293	588 845	439 315	323 616
Unwrought	254 482	243 410	229 384	187 880	236 170
Unwrought alloys	19 955	54 727	63 275	52 863	70 458
Scrap	14 081	13 837	12 067	10 021	7 839
Greece					
Unwrought (a)	15 257	17 934	19 002	21 179	25 331
Hungary					
Unwrought (g)	10 772	13 133	11 952	13 660	15 701
Irish Republic					
Unwrought (a)	2 644	2 177	1 083	2 845	3 587
Italy					
Ore	412 192	505 943	457 915	518 843	517 834
Unwrought	88 842	91 256	113 677	101 735	98 129
Unwrought alloys	12 889	19 170	20 658	27 639	33 696
Scrap	13 402	14 684	13 765	21 825	21 981
Netherlands					
Ore	407 843	388 960	371 759	334 142	312 478
Unwrought	153 541	131 890	213 770	115 621	119 536
Unwrought alloys	277	339	1 666	783	375
Scrap	5 391	4 692	4 707	3 882	7 875
Norway					
Ore	170 678	149 168	123 148	124 025	194 381
Unwrought (a)	2 169	2 174	1 835	1 347	2 359
Scrap	2 177	2 703	2 167	2 423	1 371
Poland					
Ore	73 607	74 972	72 910	86 488	75 195
Unwrought (a)	2 136	2 624	2 301	3 745	...
Portugal					
Unwrought (a)	14 532	12 217	19 700	15 407	15 397
Romania					
Unwrought (a)	3 161	1 503	3 159	1 000	654
Russia					
Ore	128 543	69 373	(b) *66 500	140 526	161 193
Unwrought (a)	1 387	4 335	6 212	10 268	5 253
Slovakia					
Unwrought (a)	24 392	24 531	26 062	25 305	...
Slovenia					
Unwrought (a)	6 581	6 651	7 500	14 068	19 696

Imports of Zinc

tonnes

Country	1993	1994	1995	1996	1997
Spain					
Ore	378 437	341 715	427 416	521 113	516 042
Unwrought	1 275	941	2 787	2 366	3 815
Unwrought alloys	5 207	5 797	5 443	9 487	9 688
Scrap	193	87	540	319	2 576
Sweden					
Unwrought	29 136	31 334	23 512	32 029	30 943
Unwrought alloys	7 061	7 823	15 098	7 587	6 440
Switzerland					
Unwrought	17 685	18 655	21 010	17 091	19 098
Unwrought alloys	2 429	2 832	3 062	2 770	2 215
Turkey					
Unwrought (a)	27 506	23 531	38 821	47 442	64 941
Ukraine					
Unwrought	...	8 371	6 340	7 000	...
United Kingdom					
Ores & concentrates	213 502	248 419	214 849	154 230	135 209
Unwrought	118 921	125 040	137 882	133 989	136 217
Unwrought alloys	8 129	5 810	5 716	4 124	12 035
Scrap	4 944	3 796	2 295	2 995	3 238
Yugoslavia, Federal Republic of					
Concentrates	...	...	(b) *2 000	...	29 746
Unwrought	...	...	...	14 700	10 581
Algeria					
Ores & concentrates	*42 000	*6 000	*4 000	1 556	...
Egypt					
Unwrought (a)	8 000	4 902	17 700	9 058	...
Kenya					
Unwrought (a)	8 041	9 471	12 975	13 234	13 989
Morocco					
Unwrought (a)	6 316	6 996	7 733	6 314	...
South Africa					
Unwrought (a)	1 046	348	7 518	1 035	9 772
Scrap	99	195	567	723	141
Tunisia					
Unwrought (a)	2 927	5 197	4 974	5 552	...
Canada					
Ores & concentrates (c)	108 957	152 305	176 628	181 783	187 547
Unwrought	8 699	12 490	11 766	11 651	18 949
Scrap	1 974	1 049	2 128	2 131	2 234
Costa Rica					
Unwrought (a)	6 180	5 306	5 423	4 084	...
El Salvador					
Unwrought (a)	812	178	262	282	774
Guatemala					
Unwrought (a)	1 377	1 323	1 648	1 480	...
Honduras					
Unwrought (a)	1 072	275	593	685	...
USA					
Ore (c)	116 287	29 543	13 032	17 320	51 451
Unwrought (a)	732 901	788 955	848 910	818 870	876 447
Scrap	38 079	51 676	42 260	31 862	29 555
Argentina					
Ores & concentrates	1 008	15 938	16 941	17 144	18 107
Unwrought	8 998	5 553	5 332	8 361	...
Brazil					
Ores & concentrates	118 104	112 795	131 395	213 088	211 610
Unwrought (a)	11 976	11 214	37 470	4 003	3 400
Chile					
Unwrought (a)	7 711	7 621	11 861	9 612	8 339
Colombia					
Unwrought (a)	18 097	16 018	20 867	17 266	...
Ecuador					
Unwrought (a)	2 679	2 728	4 500	3 387	...

Imports of Zinc

tonnes

Country	1993	1994	1995	1996	1997
Uruguay					
Unwrought	1 747	1 622	1 389	1 467	1 170
Venezuela					
Unwrought	11 016	9 313	17 946	8 772	...
Unwrought alloys	8 097	6 375	15 033	6 586	...
Bangladesh					
Unwrought alloys	18 521	...	...	...	...
China					
Ores & concentrates	7 974	30 310	102 454	295 079	166 503
Unwrought (a)	40 100	48 616	66 704	69 511	71 972
Scrap	11 531	22 036	22 491	20 374	23 493
Hong Kong					
Unwrought	39 000	36 338	32 331	29 603	24 977
Unwrought alloys	71 711	76 562	97 609	91 725	83 674
Scrap	10 543	26 344	32 833	16 894	11 089
India					
Ores & concentrates (d)	45 996	49 905	39 516	42 661	...
Unwrought (d)	24 600	30 552	53 900	81 453	...
Unwrought alloys (d)	253	318	1 383	524	...
Scrap (d)	492	1 905	7 202	18 341	...
Indonesia					
Unwrought	68 109	84 255	96 419	88 743	83 747
Unwrought alloys	9 499	7 303	6 069	5 458	5 652
Scrap	867	1 865	813	180	5
Iran					
Unwrought (e)	13 679	20 566	15 095	...	...
Israel					
Unwrought (a)	8 292	(b) *12 200	...	*13 200	*6 900
Japan					
Ore	1 181 060	992 025	1 072 653	922 875	989 373
Unwrought	84 248	64 156	116 986	134 798	179 672
Unwrought alloys	8 822	8 718	9 956	10 027	11 849
Scrap	843	1 472	991	305	339
Jordan					
Unwrought	2 074	1 178	2 205	1 396	...
Kazakhstan					
Ores & concentrates	...	...	3 445	11 628	21 403
Korea, Dem. P.R. of					
Ores & concentrates (b)	*100 200	*64 300	*40 400	*47 300	*32 000
Korea, Republic of					
Ores & concentrates	462 011	576 231	534 362	530 786	661 456
Unwrought (a)	46 501	71 999	52 792	89 553	68 779
Macao					
Unwrought	400	542	798	300	...
Malaysia					
Unwrought	23 905	(a) 36 079	(a) 47 400	(a) 54 800	...
Unwrought alloys	10 932	...	...	...	...
Pakistan					
Unwrought (f)	11 107	15 131	...	8 723	8 830
Philippines					
Unwrought (a)	41 418	44 797	56 973	55 420	...
Saudi Arabia					
Unwrought	11 779	11 253	12 589	11 628	...
Singapore					
Unwrought	134 549	167 146	38 708	45 457	240 041
Scrap	2 567	4 735	3 511	2 424	3 685
Sri Lanka					
Unwrought (a)	1 630	1 678	2 022	1 869	1 558
Taiwan					
Unwrought	170 832	170 234	205 648	196 420	228 896
Unwrought alloys	21 928	22 320	25 227	14 094	13 699
Scrap	79 139	68 872	66 870	62 456	53 718
Thailand					
Ores & concentrates	43 209	52 997	43 831	62 222	...
Unwrought	20 681	28 207	44 461	37 748	...
Unwrought alloys	5 319	4 935	9 517	10 002	...

Imports of Zinc

tonnes

Country	1993	1994	1995	1996	1997
Australia					
Ores & concentrates (f)	23 578	...	...	...	...
Scrap (f)	792	...	...	...	...
New Zealand					
Unwrought (a) (f)	20 926	21 404	19 352	...	16 310

Note(s):-

(1) In this table the term 'unwrought' zinc corresponds to item 686.1 of the Standard International Trade Classification (Revision 3) and comprises blocks, pigs, slabs, etc.

- (a) Including alloys
- (b) BGS estimates, based on known exports from certain countries
- (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

Zirconium

Production of Zirconium Minerals

tonnes

Country	1993	1994	1995	1996	1997
Russia (b)	*2 500	*3 000	*4 000	*4 500	*5 000
Ukraine	*70 000	*65 000	*60 000	*55 000	*65 000
South Africa	240 000	226 000	260 000	260 000	...
USA	111 000	*120 000	*120 000	*120 000	*120 000
Brazil (a)	13 243	17 064	16 343	17 000	*17 000
China	7 111	6 078	14 074	2 293	...
India	*17 000	*18 000	*18 000	*19 000	*19 000
Indonesia	*2 500	*2 500	*2 000	*2 000	*2 000
Malaysia	2 184	1 656	3 790	4 512	4 050
Sri Lanka	15 296	22 310	21 971	15 863	12 451
Thailand	707	326	—	5	...
Australia	413 000	511 000	505 000	466 000	424 000
World Total	895 000	993 000	1 025 000	966 000	930 000

Note(s):-

(1) In this table the term 'zirconium minerals' is understood to mean zircon, unless otherwise stated

(a) Including caldasite rock containing zircon and baddeleyite

(b) Including baddeleyite

Exports of Zirconium

tonnes

Country	1993	1994	1995	1996	1997
Belgium-Luxembourg					
Concentrates	367	159	574	5 269	464
Metal	27	48	153	123	142
France					
Concentrates	692	1 659	1 954	821	685
Germany					
Concentrates	2 379	3 110	3 607	4 354	4 461
Metal	80	173	216	132	152
Italy					
Concentrates	9 858	13 636	20 910	19 435	20 567
Metal	610	1 759	4 421	1 426	368
Netherlands					
Concentrates	10 349	14 544	14 199	16 810	17 331
Norway					
Concentrates	84	1 295	2 041	4 230	1 637
Spain					
Concentrates	265	(b) 1 205	(b) 3 823	3 027	2 033
Zirconium sand	1 574	...	...	...	...
Sweden					
Metal	76	58	42	43	65
Ukraine					
Concentrates	...	...	14 042	15 079	18 722
United Kingdom					
Concentrates	2 429	2 614	2 436	2 819	4 492
Metal	83	99	318	669	281
South Africa					
Concentrates (a)	*178 100	*216 600	*276 600	*292 800	...
USA					
Concentrates	36 002	34 085	42 441	36 546	44 341
Metal	1 493	1 219	1 700	1 089	1 305
Brazil					
Concentrates	1 104	930	818	1 004	...
China					
Concentrates	500	...	3 090	834	1 770
Metal	20	63	57	233	174
Hong Kong					
Concentrates (d)	37 025	55 991	71 027	60 181	25 243
Malaysia					
Concentrates	1 006	1 858	2 560	3 000	...
Taiwan					
Metal	138	275	301	232	430
Australia					
Concentrates	(c) 348 000	504 000	514 000	424 000	342 000

Note(s):-

(1) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

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

(b) Including zirconium sand

(c) Standard grade January-June, all grades thereafter

(d) Re-exports

Zirconium

Imports of Zirconium

tonnes

Country	1993	1994	1995	1996	1997
Austria					
Concentrates	1 003	1 404	1 216	2 177	591
Belgium-Luxembourg					
Concentrates	...	3 679	3 117	2 859	2 782
Metal	209	201	1 082	253	387
Bulgaria					
Concentrates (a)	*500	*400	...	...	...
Finland					
Concentrates	1 111	1 915	76	84	2
France					
Concentrates	38 561	56 158	64 417	63 530	56 561
Metal	497	187	189	146	314
Germany					
Concentrates	2 379	52 286	65 239	64 751	60 265
Metal	309	379	384	318	489
Italy					
Concentrates	98 431	96 848	144 390	115 945	121 271
Metal	59	106	117	229	94
Netherlands					
Concentrates	33 503	28 329	49 893	56 821	28 197
Portugal					
Concentrates	...	...	...	3 004	4 718
Romania					
Metal	120	263	102	0	18
Spain					
Concentrates	52 149	61 115	83 388	83 582	104 929
Metal	42	140	110	133	164
Sweden					
Metal	214	198	180	...	...
Turkey					
Concentrates	305	278	149	382	251
Zirconium sand	11 787	14 340	18 718	9 490	...
United Kingdom					
Concentrates	57 432	39 728	56 128	57 432	57 830
Metal	1 385	359	461	386	534
Canada					
Concentrates	9 521	12 622	17 788	22 512	5 765
Metal	341	337	556	349	358
Mexico					
Zirconium sand	10 174	12 672	13 343	16 606	...
USA					
Concentrates	70 035	80 802	93 601	92 483	62 361
Metal	395	625	736	620	759
Brazil					
Concentrates	9 994	10 316	9 115	7 972	...
China					
Concentrates	98 607	125 770	129 075	118 848	81 988
Metal	484	569	587	535	781
Hong Kong					
Concentrates	42 217	63 313	85 572	63 010	27 662
Indonesia					
Concentrates	3 284	3 692	2 590	1 475	2 066
Japan					
Concentrates	112 916	129 226	129 199	113 203	90 496
Metal	605	610	628	617	714
Korea, Republic of					
Concentrates	9 841	13 109	17 732	12 289	14 259
Metal	77	111	104	138	86
Malaysia					
Concentrates	4 182	3 093	5 070	30 379	...
Philippines					
Zirconium sand	329	176	498	248	...

Imports of Zirconium

tonnes

Country	1993	1994	1995	1996	1997
Taiwan					
Concentrates	11 193	15 971	14 150	12 086	11 815
Zirconium sand	7 314	10 409	8 745	10 124	10 751
Thailand					
Concentrates	1 261	453	106	1 507	...

Note(s):-

(1) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

(a) BGS estimates, based on known exports from certain countries

Production of Beryl

tonnes

Country	1993	1994	1995	1996	1997
Russia	*1 000	*1 000	*1 000	*1 000	*1 000
Madagascar (a)	*3	*3	*32	*32	*30
Namibia	15	—	—	—	—
Zambia	0	1	2	1	1
Zimbabwe	0	4	0	—	—
USA	4 939	4 330	5 040	5 260	5 770
China	*1 400	*1 400	*1 400	*1 400	*1 400
Kazakhstan	*100	*100	*100	*100	*100

Note(s):-

(a) Includes ornamental and industrial products

Production of Borates

tonnes

Country	1993	1994	1995	1996	1997
Germany	*2 000	*2 000	*2 000	*2 000	*2 000
Russia	33 000	13 000	*13 000	*13 000	*13 000
Turkey	1 124 484	1 139 980	1 143 994	1 446 697	*1 400 000
USA (a)	1 055 000	1 110 000	1 190 000	1 150 000	1 190 000
Argentina	146 349	215 021	244 933	342 210	*350 000
Bolivia	11 990	10 433	6 891	9 231	12 469
Chile	117 072	85 935	211 312	149 008	170 605
Peru	36 472	41 987	40 581	38 973	*40 000
China (b)	155 400	188 200	140 000	157 000	*140 000
Iran	*1 000	*1 000	*1 000	*1 000	*1 000
Kazakhstan	*8 000	*7 000	*7 000	*7 000	*7 000

Note(s):-

(a) Sold or used by producers

(b) B₂O₃ equivalent**Production of Germanium Metal**

tonnes

Country	1993	1994	1995	1996	1997
Belgium	...	...	...	22	23
Spain	6	4	4	7	...
Ukraine	*21	*22	*22	*22	...
USA (a)	*10	*10	*10	*18	*20
China	1	1	10	11	...
Japan	3	2	2	2	1

Note(s):-

(1) Significant quantities of germanium are also believed to be recovered from imported or domestic material in Belgium, France, Germany and to a lesser extent in Italy

(a) Including production of secondary metal

Production of Primary Magnesium Metal

tonnes

Country	1993	1994	1995	1996	1997
France	10 980	12 500	14 450	14 000	*14 000
Norway	27 300	27 600	32 000	37 790	34 200
Russia	*30 000	35 400	37 500	35 000	39 500
Ukraine	14 900	12 000	13 000	13 000	*12 000
Yugoslavia, Federal Republic of	—	—	2 560	3 090	3 742
Canada	23 000	*30 000	*46 000	*46 000	*49 000
USA	132 144	128 475	142 100	133 100	124 800
Brazil	9 700	*9 700	*9 700	*9 000	*9 000
China	13 200	24 000	93 600	73 200	92 000
India	...	...	1 000	1 000	1 000
Japan	7 471	3 000	—	—	—
Kazakhstan	*2 000	2 967	8 972	13 431	...

Production of Nepheline Syenite

tonnes

Country	1993	1994	1995	1996	1997
Norway	*350 000	278 646	293 684	299 610	*300 000
South Africa (a)	127 417	131 556	145 459	137 706	114 201
Canada	550 000	601 000	618 000	606 000	621 000

Note(s):-

(a) Mostly used as aggregate

Production of Perlite

tonnes

Country	1993	1994	1995	1996	1997
Armenia	*10 000	*5 000	*6 000	*6 000	*6 000
Greece	548 574	468 699	565 479	598 640	*600 000
Hungary	65 801	72 239	109 913	*110 000	*130 000
Italy	*65 000	*65 000	*60 000	*60 000	*60 000
Slovakia	...	28 270	21 850	25 160	25 000
Turkey	147 864	164 582	171 058	157 580	134 349
Morocco	...	...	...	...	51 195
South Africa	328	914	1 338	682	...
Mexico	34 568	31 918	33 529	37 417	51 758
USA	691 000	664 000	813 000	811 000	656 000
Argentina	9 367	21 201	20 058	21 547	...
China	...	...	*300 000	*350 000	*400 000
Iran (b)	5 000	443	1 300	2 300	...
Japan	*200 000	*200 000	*200 000	*200 000	*200 000
Philippines	19 779	*20 000	*20 000	*20 000	*20 000
Thailand	—	100	1 100	1 200	700
Australia	*5 000	*5 000	*5 000	*5 000	*5 000
New Zealand	814	—	1 800	(a) 1 880	(a) 4 960

Note(s):-

(1) In addition to the countries listed, Algeria, Bulgaria, Canada, Iceland, Mozambique and former Yugoslavia, are believed to produce perlite

(a) Including zeolite

(b) Years ended 20 March following that stated

Production of Selenium Metal

tonnes

Country	1993	1994	1995	1996	1997
Belgium	*250	*250	*250	*250	*250
Finland	32	30	27	43	43
Germany	*120	*120	*115	*120	*120
Poland	20	60	73	73	...
Russia	*40	*40	*40	*40	*40
Sweden	23	20	26	20	*20
Yugoslavia, Federal Republic of	28	27	40	38	45
Zambia (b)	28	23	18	20	19
Canada	542	566	561	694	509
USA	283	360	373	379	353
Chile (a)	69	43	51	73	63
Peru	17	18	15	13	13
China	*63	*65	*65	*65	*65
Japan	541	613	548	588	546
Kazakhstan	*40	*40	*40	*40	*40
Philippines	42	41	42	43	37
Uzbekistan	*20	*20	*20	*20	*20

Note(s):-

(1) In addition to the countries listed, Australia, India and the Republic of Korea, are believed to produce selenium metal

(a) Exports

(b) Years ended 31 March following that stated

Production of Strontium Minerals

tonnes

Country	1993	1994	1995	1996	1997
Spain	*104 000	102 046	105 866	114 829	92 000
Turkey	43 700	*25 000	*25 000	*25 000	...
United Kingdom	2 000	—	—	—	—
Algeria	*5 400	*5 400	*5 400	*5 400	*5 400
Mexico	71 903	111 485	138 342	141 142	134 707
Argentina (a)	4 806	8 484	9 325	3 775	*4 000
Iran (b)	17 082	*20 000	*20 000	*20 000	*20 000
Pakistan (c)	2 417	1 342	1 427	1 221	706
Turkmenistan	...	...	...	*20 000	...

Note(s):-

(1) In addition to the countries listed, China, Germany and Poland are believed to produce strontium minerals

(a) May contain unbeneficiated material

(b) Years ended 20 March following that stated

(c) Years ended 30 June of that stated

Production of Tellerium Metal

tonnes

Country	1993	1994	1995	1996	1997
Canada	27	42	102	59	40
USA	50	50	50	50	50
Peru	17	25	30	25	25
Japan	47	47	43	40	25

Note(s):-

(1) In addition to the countries listed, Australia, Germany and former Soviet Union are believed to produce tellurium metal

Mine Production of Uranium

tonnes (metal content)

Country	1993	1994	1995	1996	1997
Czech Republic	1 018	537	611	589	624
France	1 708	1 027	981	930	*750
Germany	116	395	40	40	23
Hungary	382	415	221	200	200
Portugal	32	24	19	14	*17
Romania	120	120	100	100	100
Russia	2 399	2 968	2 250	2 000	2 000
Spain	183	255	254	254	386
Ukraine	*500	*500	*500	*500	*500
Gabon	509	589	640	560	472
Namibia	1 667	1 901	2 005	2 450	2 903
Niger	2 913	2 964	2 970	3 160	3 497
South Africa	1 703	1 616	1 443	1 447	1 123
Canada	9 154	9 644	10 462	11 689	11 908
USA	1 192	1 289	2 324	2 420	2 170
Argentina	126	80	58	23	35
Brazil	50	50	125	—	—
China	780	780	500	500	500
India	*290	*200	*200	*200	*200
Kazakhstan	2 700	2 240	1 177	1 320	1 000
Pakistan	23	23	23	23	23
Uzbekistan	2 600	2 015	1 800	1 459	1 764
Australia	2 256	2 208	3 712	4 976	5 489
World Total	32 400	31 800	32 400	34 900	35 700
World Total (U ₃ O ₈ equivalent)	38 300	37 600	38 200	41 100	42 100

Production of Vermiculite

tonnes

Country	1993	1994	1995	1996	1997
Russia	*50 000	*40 000	*40 000	*30 000	*25 000
Egypt (c)	457	1 659	...	140	54
Kenya	1 961	1 113	457	734	1 418
South Africa	213 847	223 478	221 748	196 000	211 001
Zimbabwe	5 032	8 184	13 742	10 249	14 841
USA (a)	190 000	177 000	171 000	*170 000	...
Brazil (b)	14 545	17 233	18 806	*20 000	*20 000
India	1 485	1 903	1 696	2 405	*2 400
Japan	*15 000	*15 000	*15 000	*15 000	*15 000
Australia	...	...	...	5 000	16 635

Note(s):-

(1) In addition to the countries listed, Malawi is believed to produce vermiculite

(a) Sold or used by producers

(b) Including beneficiated and directly shipped material

(c) Years ended 30 June of that stated

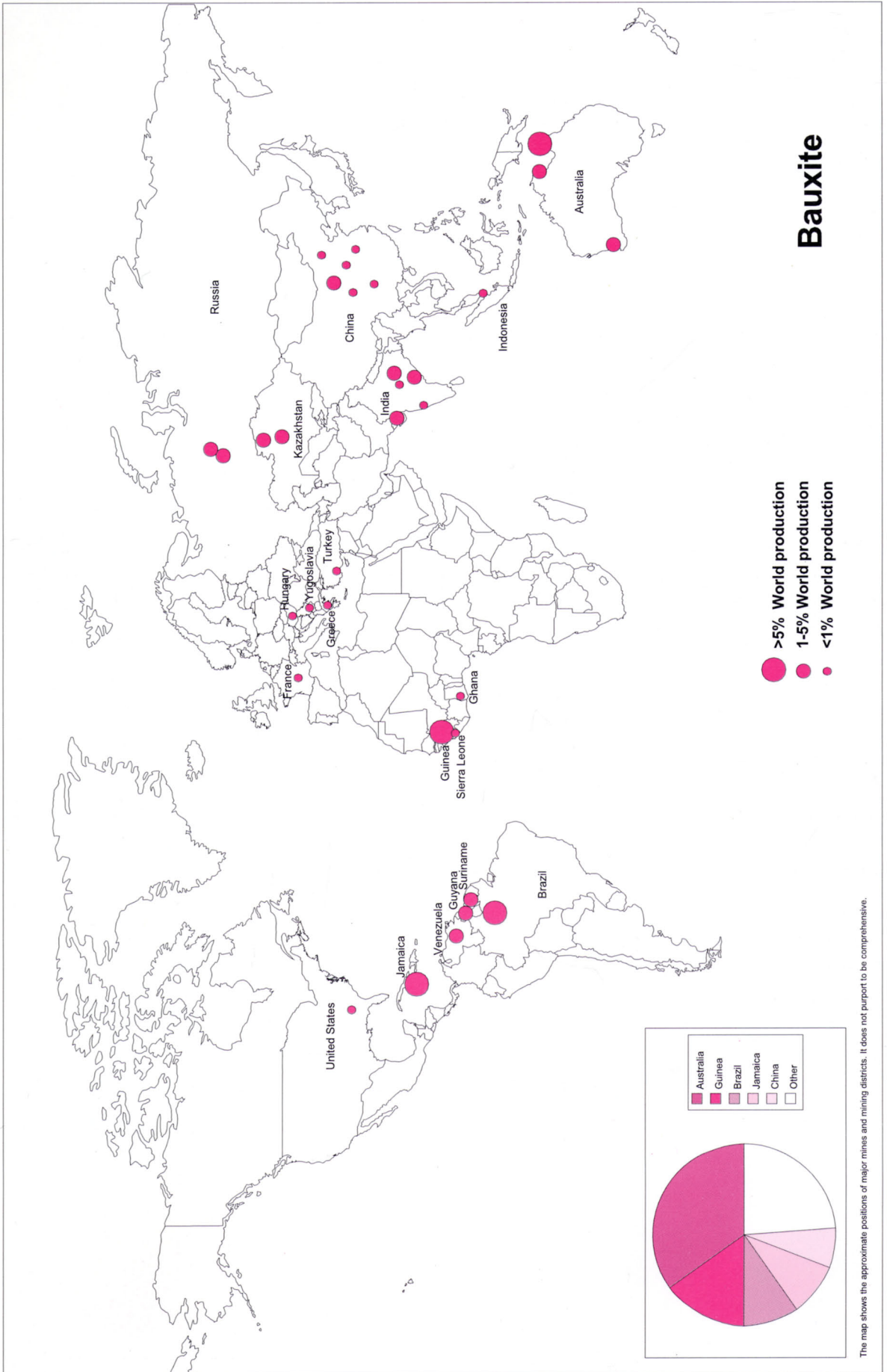
Production of Wollastonite

tonnes

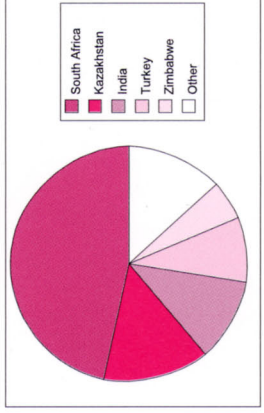
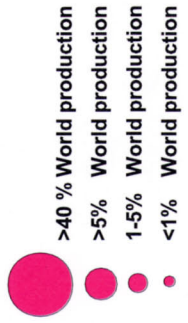
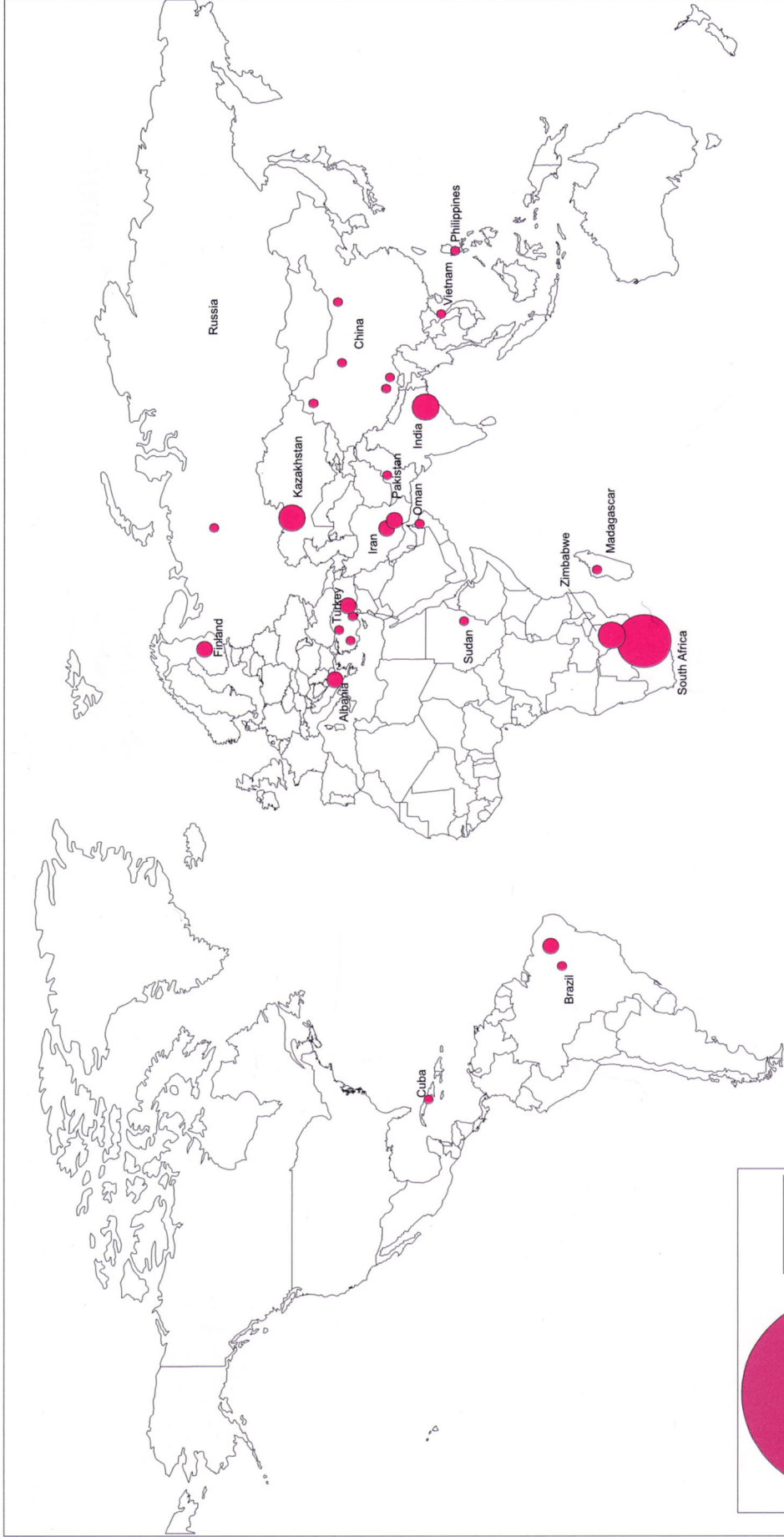
Country	1993	1994	1995	1996	1997
Czech Republic	—	—	800	800	—
Finland	26 656	27 757	29 592	22 304	21 000
Namibia	...	1 309	967	248	194
Mexico	35 800	29 000	20 194	28 365	20 655
USA	*120 000	*130 000	*130 000	*150 000	*150 000
China	*120 000	...	*100 000	*200 000	*200 000
India	80 748	68 269	90 128	*90 000	*80 000

Note(s):-

(1) In addition to the countries listed, Japan, Kazakhstan and Turkey are believed to produce wollastonite

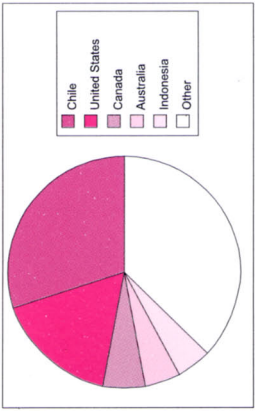


The map shows the approximate positions of major mines and mining districts. It does not purport to be comprehensive.



Chromite

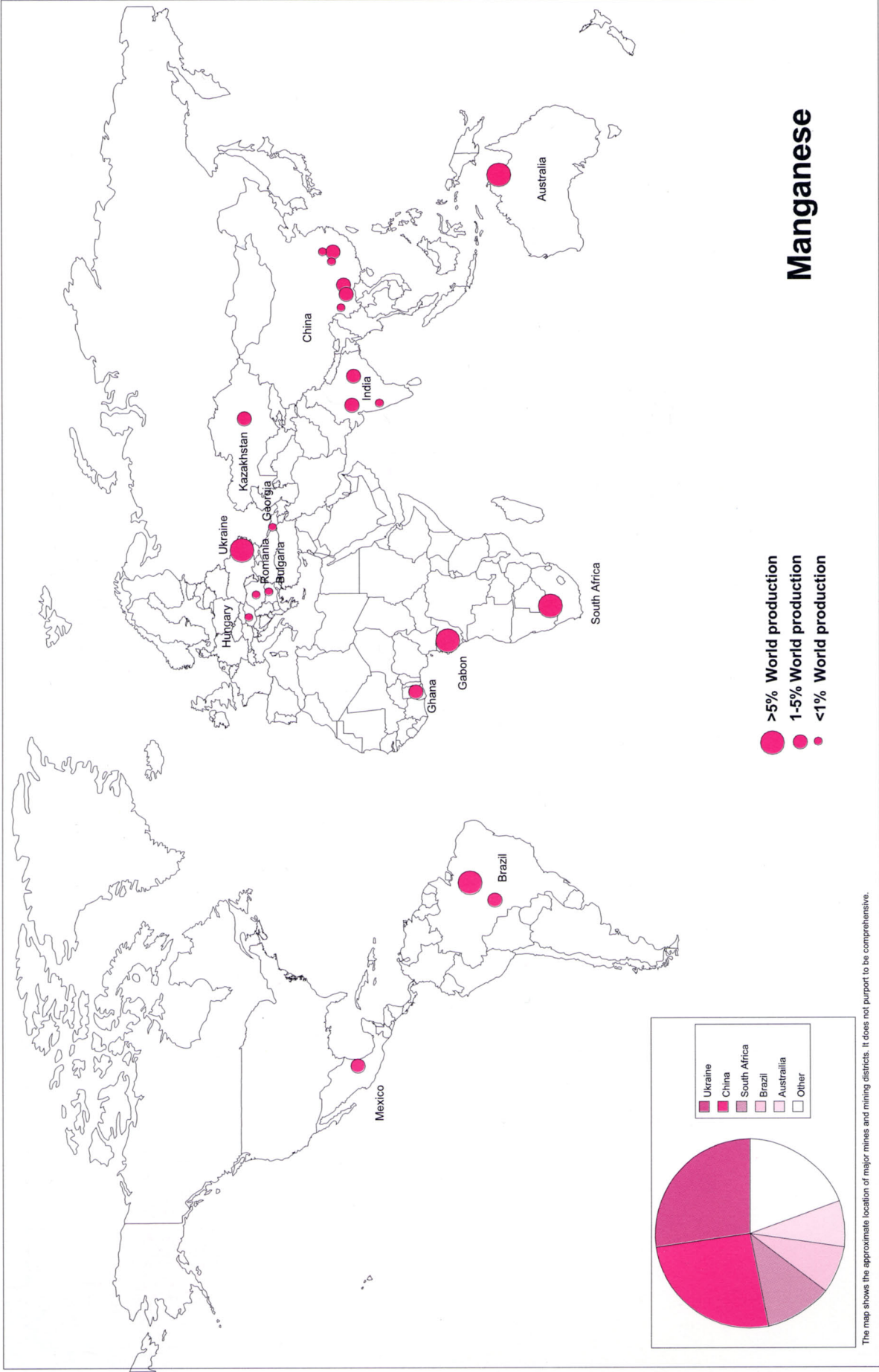
The map shows the approximate position of major mines and mining districts. It does not purport to be comprehensive.



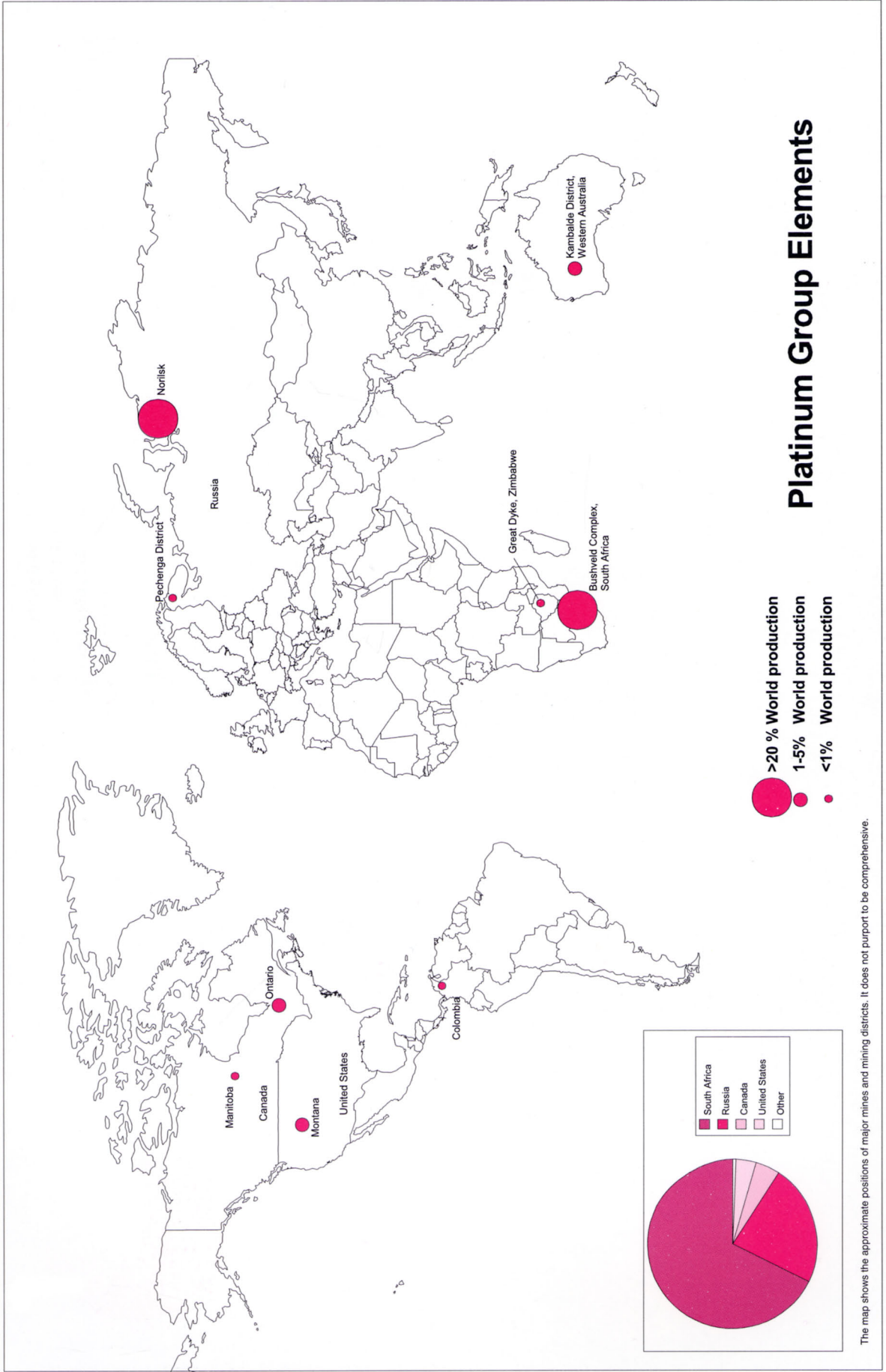
The map shows the approximate position of major mines and mining districts. It does not purport to be comprehensive.



Manganese





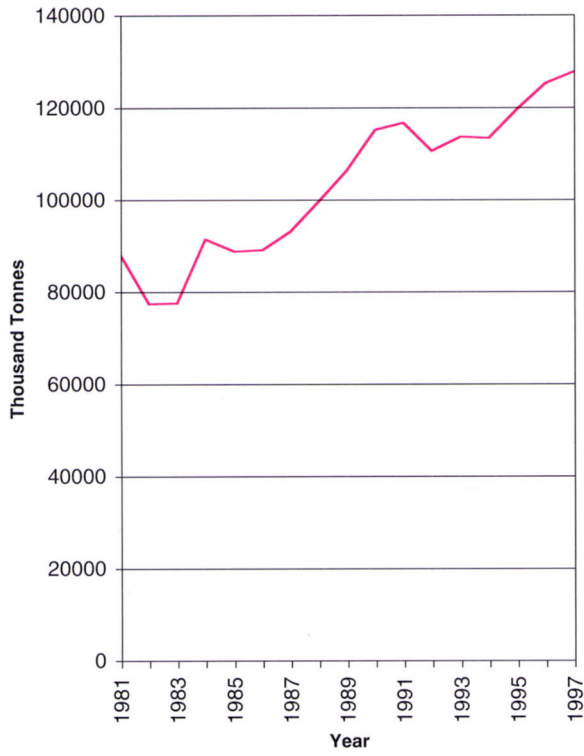


Tin

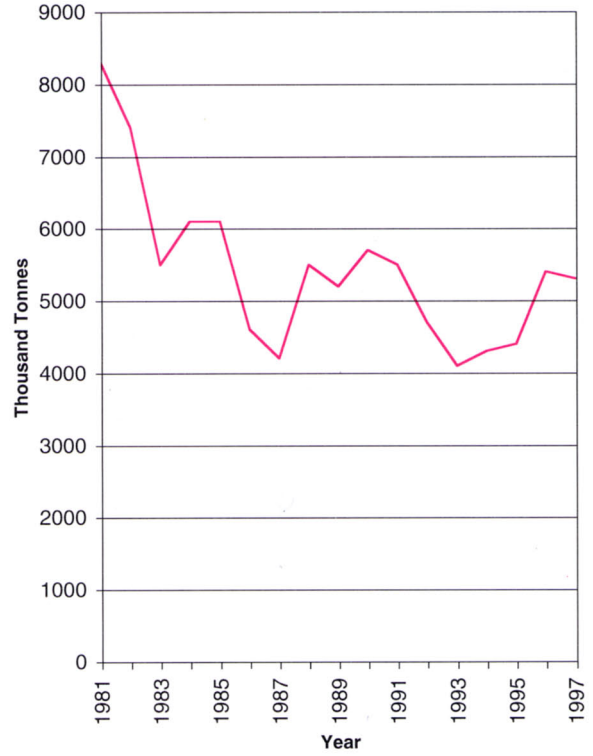


The map shows the approximate positions of major mines and mining districts. It does not purport to be comprehensive.

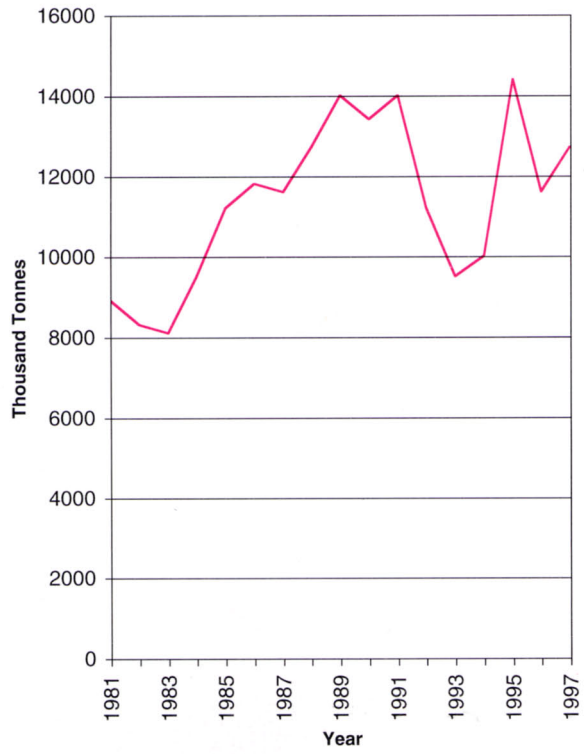
World Production Bauxite 1981-97



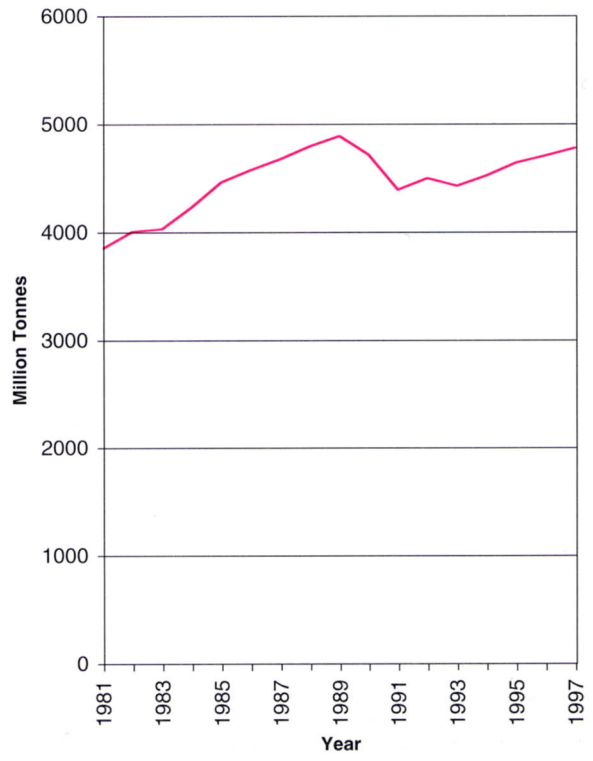
World Production Barytes 1981-97



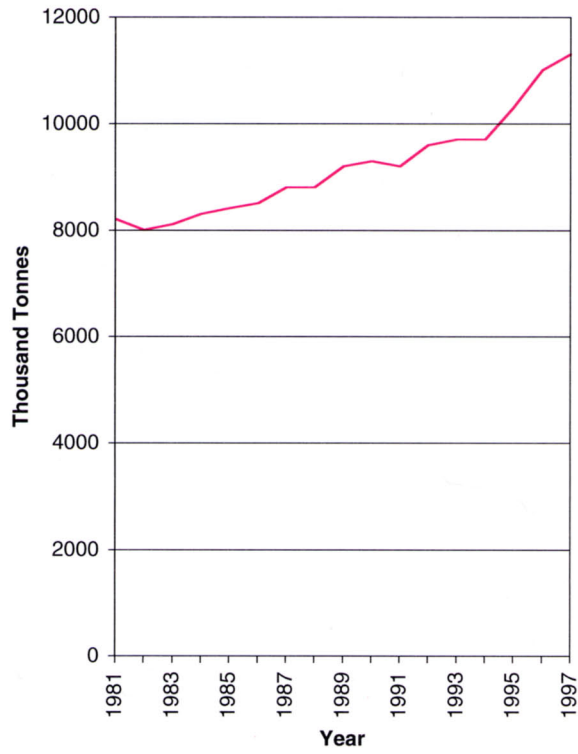
World Production Chromium 1981-97



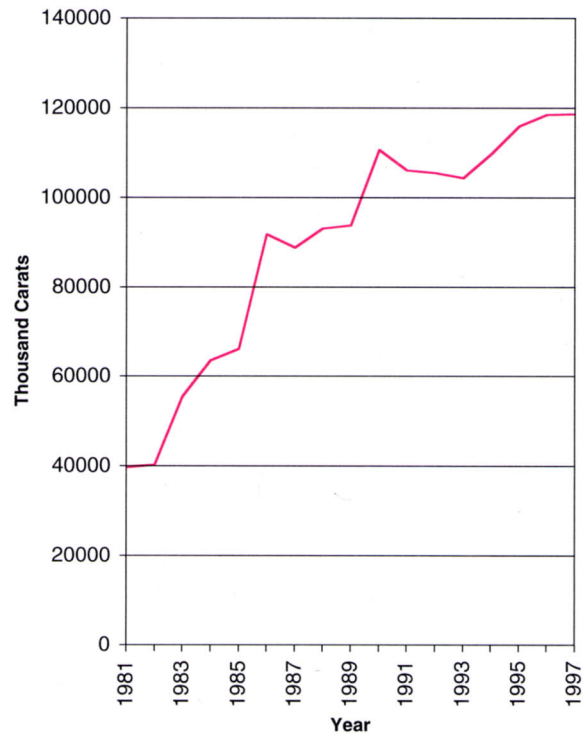
World Production Coal 1981-97



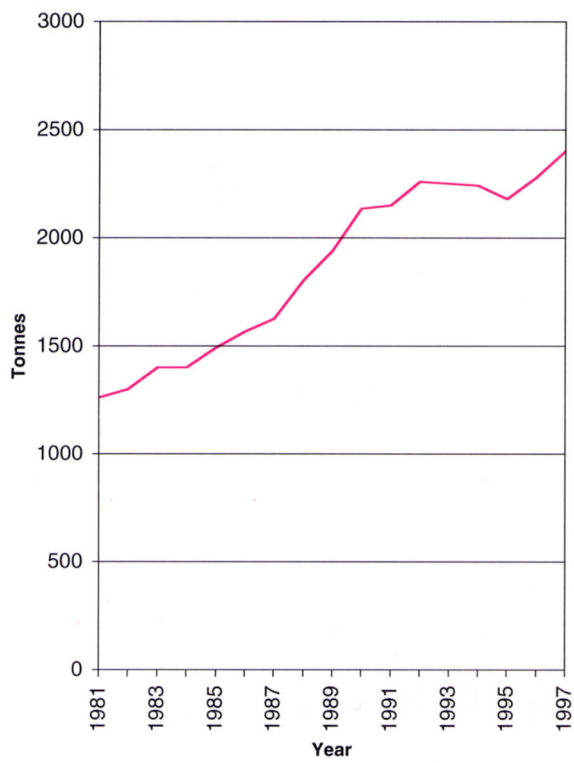
**World Mine Production Copper
1981-97**



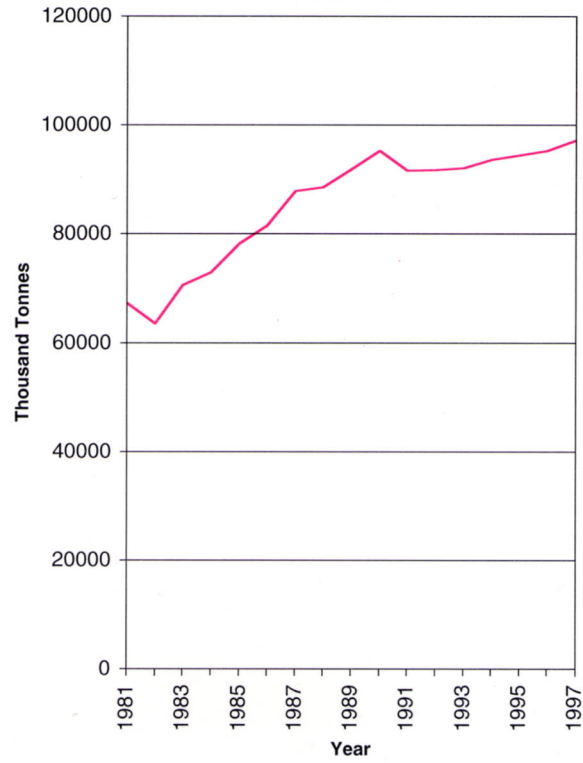
**World Production Diamond
1981-97**



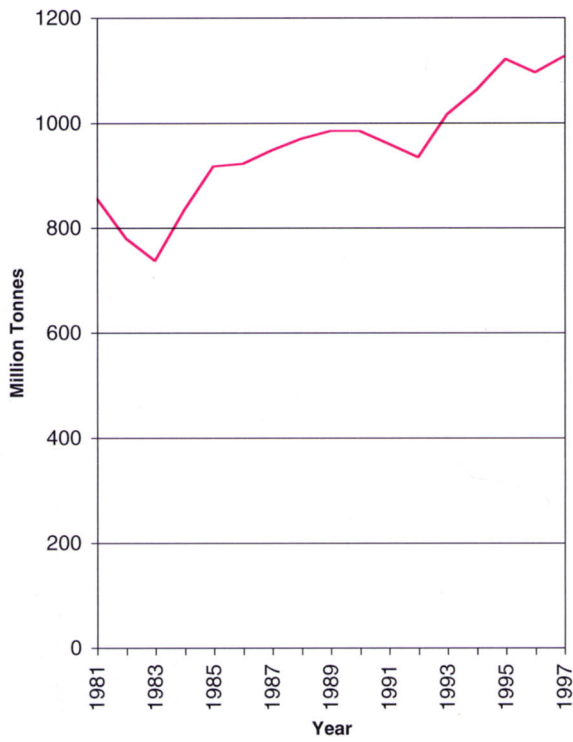
World Production Gold 1981-97



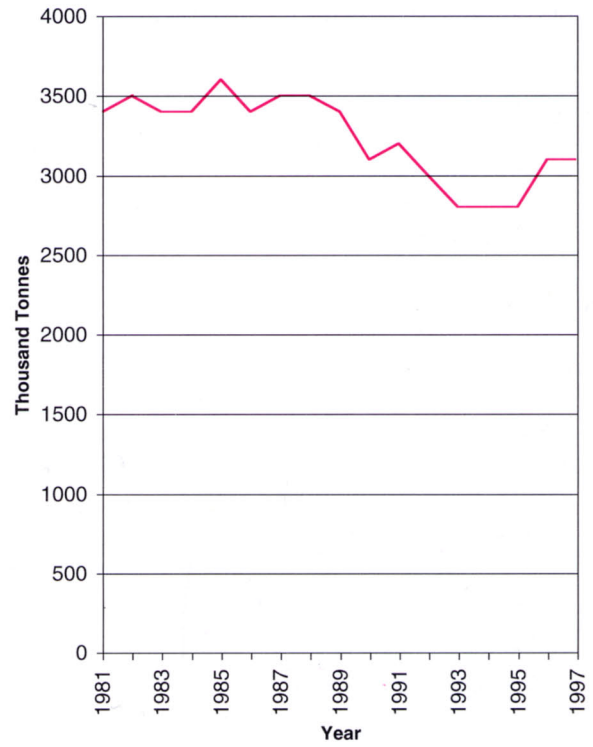
**World Production Gypsum
1981-97**



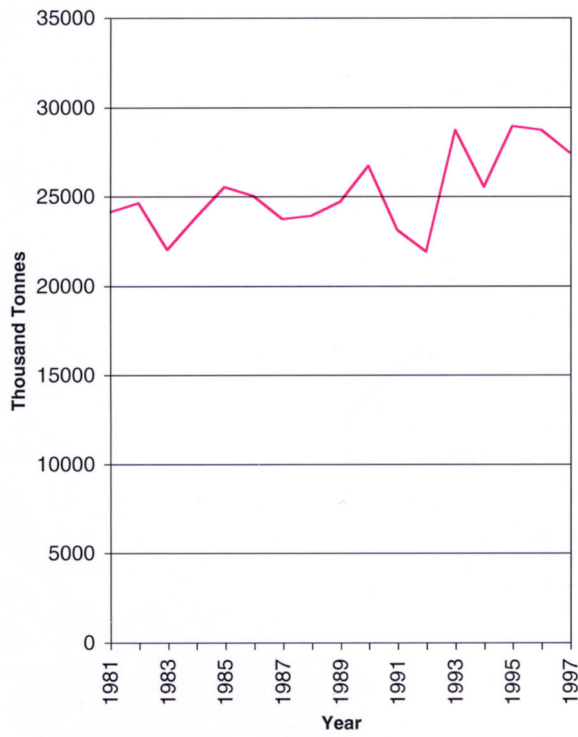
**World Production Iron Ore
1981-97**



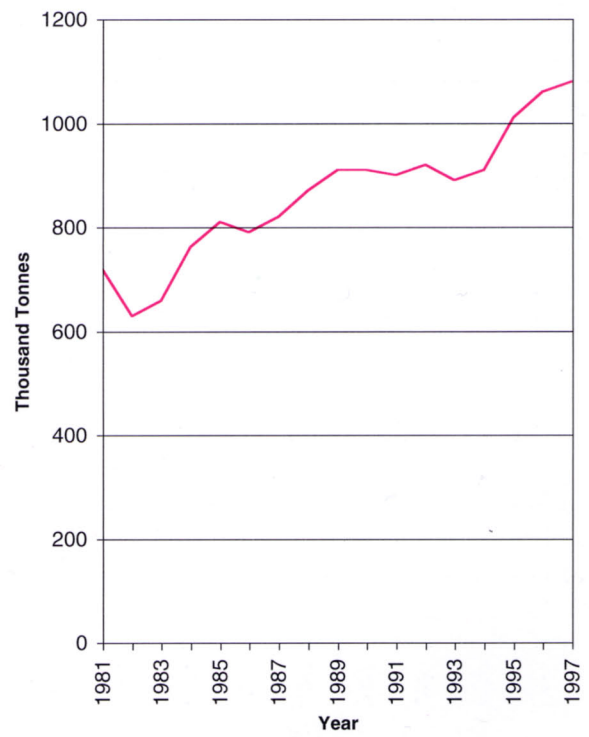
**World Mine Production Lead
1981-97**



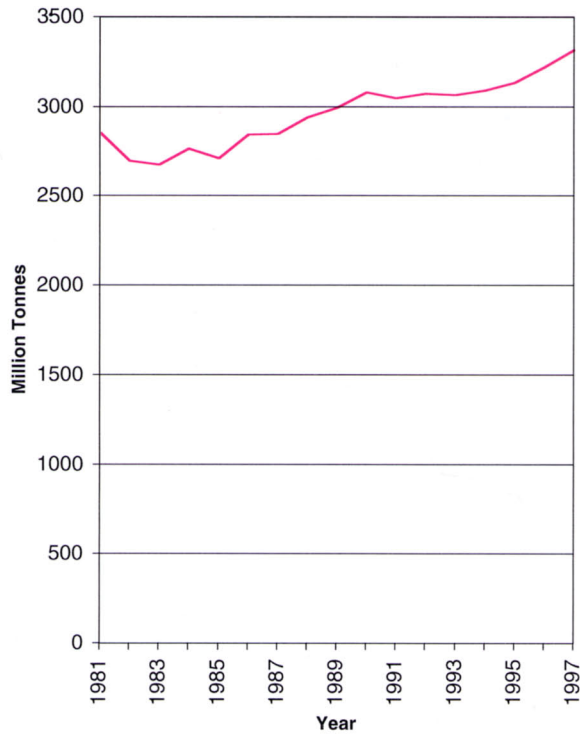
**World Production Manganese
Ore 1981-97**



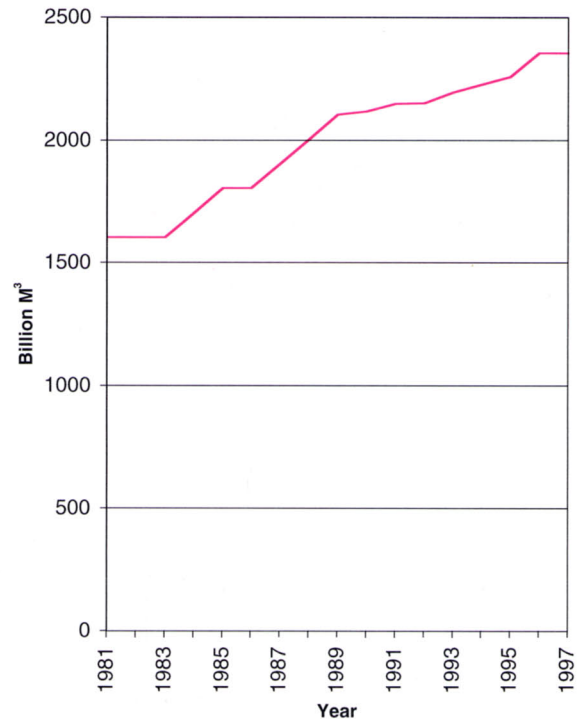
**World Mine Production Nickel
1981-97**



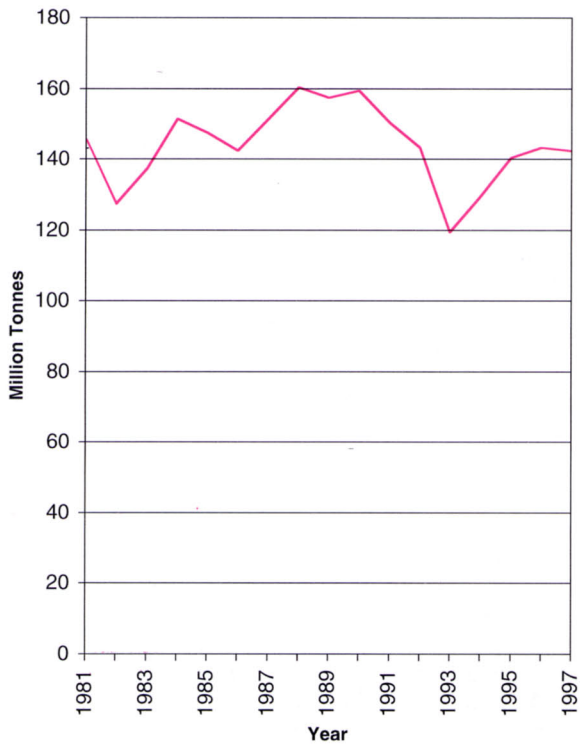
World Production Crude Petroleum 1981-97



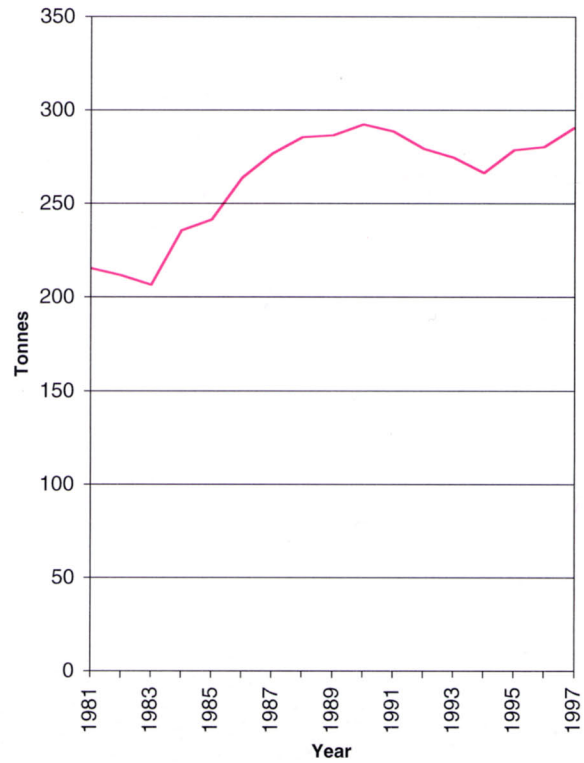
World Production Natural Gas 1981-97



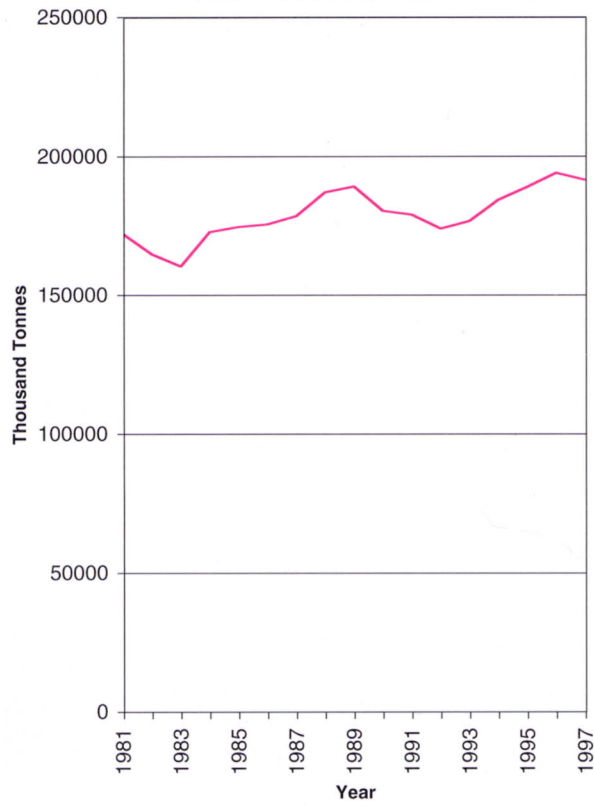
World Production Phosphate Rock 1981-97



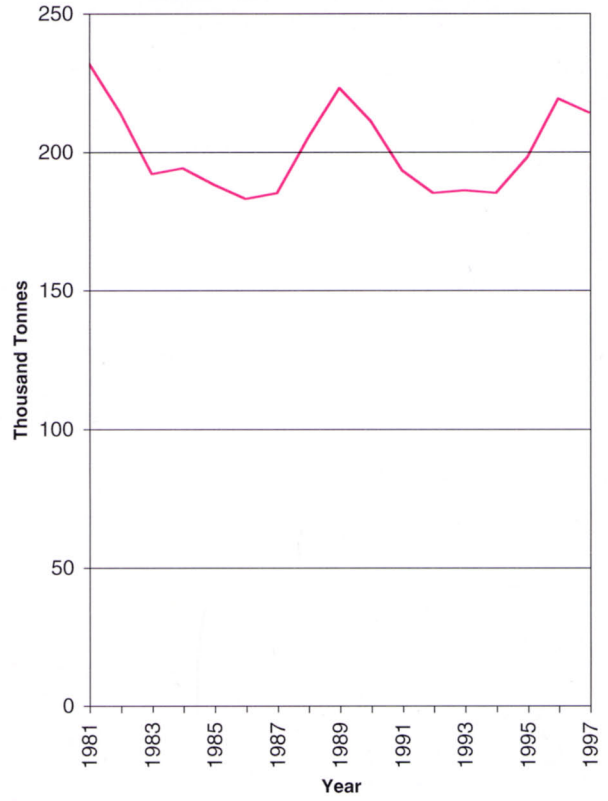
World Production Platinum Group Metals 1981-97



World Production Salt 1981-97



World Production Tin 1981-97



World Production Titanium Minerals 1981-97



World Production Zinc 1981-97

