

British Geological Survey

# World Mineral Statistics 1995-99

dti Minerals Programme





BRITISH GEOLOGICAL SURVEY

# WORLD MINERAL STATISTICS 1995–99

Production: Exports: Imports

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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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## PREFACE

This volume is the twenty-third in the series *World Mineral Statistics*, published by the British Geological Survey. The series that preceded it, *Statistical Summary of the Minerals Industry*, records data from 1913.

The publication is compiled from a comprehensive database, maintained by the British Geological Survey, that can also provide 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. Individual commodity tables can now also be downloaded from the Survey's Internet Shop at <http://www.british-geological-survey.co.uk>.

In 1999, base metals production continued to show upward trends. This continued to be particularly marked in the cases of copper, due to the strong growth in output and consumption of electronic goods, and zinc, due largely to the increasing use in coating steel. Lead, although replaced in many uses for environmental reasons, maintained its output level due chiefly to the continued use of lead-acid storage batteries. Output of aluminium and magnesium also increased partly because manufacturers sought to use these light metals to offset the increasing weight of ancillary electronic and other equipment, especially in vehicles. Steel demand, and thus iron ore production, tended to fall in most countries, with the notable exception of China, and this has impacted on the output of almost all steel-alloying metals. Natural gas output continued to rise and petroleum was steady. Coal appears to have fallen but this was almost entirely the consequence of the apparent fall in output from China, the largest producer. Statistics are susceptible to this kind of sharp change, whether real or not, when a large share of world production of any material has become concentrated into a small number of countries.

As usual, a selected number of minerals and metals are the subject of world maps and line-charts of production that follow the statistical tables. Both the graphs and the tables illustrate a number of general features of mineral production that are worth comment: individual materials do not show remorseless rises in production from decade to decade and if their output declines it is not necessarily because resources are running out. It is ironic to reflect, now, that mercury was one of the materials identified in 1972 by the 'Club of Rome' as being in danger of depletion whereas its annual production has declined by more than 80 per cent since then, for environmental reasons. Other materials that have a declining use in some applications may find new, unforeseen, uses in new technology. Marked disparity between mine production and refined production in the cases of several metals usually indicates the extent of the contribution of recycled material to annual consumption. In the recent example of cobalt, it shows the extent to which waste material from former mining activity is now being processed to metal, many years after it was originally taken out of the ground.

Trade information for the latest year covered by this volume is necessarily incomplete since the tables are prepared before many countries have produced their annual trade statistics. 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, thus 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.

The British Geological Survey aims to provide a reliable, comprehensive and continuous set of data covering most of the minerals that enter international trade. We achieve this with the support of the Department of Trade and Industry, whose role in helping to fund the compilation of the World Mineral Statistics Database, as part of the BGS Minerals Programme, is acknowledged.

I would welcome any criticisms and suggestions that might help us to meet your changing needs, particularly with respect to the coverage of the statistics and the format in which they are made available.

*David A. Falvey, PhD*  
*Director*

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*22 January 2001*

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### *Maps of world mine production*

Bauxite	Manganese ore
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### *Graphs of world mine production 1980-99*

Asbestos	Mercury
Barytes & fluorspar	Natural gas
Bauxite	Nickel
Chromium	Petroleum
Coal	Phosphate rock
Copper	Salt, gypsum & potash
Diamond	Silver
Gold	Tin
Iron ore	Uranium
Manganese ore	Zinc & lead

## 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
- 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.

### *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 for 1995-96 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. Import statistics for 1997 to 1999 are for South Africa only.

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.

Export statistics may 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.

Particular acknowledgement is made to the Mines Departments and other government agencies of many 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 other members of the International Consultative Group on Non-Ferrous Metal Statistics 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*; *Mining Journal, Mining Annual Review*; Enirisorse, *Metalli Non Ferrosi*; World Bureau of Metal Statistics, *World Metal Statistics*; World Bureau of Metal Statistics, UBS Warburg and Enron Metals Limited, *Metallstatistik*; publications of the Interstate Statistical Committee of the CIS, the United States Geological Survey, and the United Nations Statistics Division and UN 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	1995	1996	1997	1998	1999
Albania	1 548	3 380	4 453	4 128	4 624
Bosnia & Herzegovina	*75 000	*75 000	*75 000	*75 000	*75 000
France	131 000	165 000	164 000	80 000	70 000
Greece	2 200 215	2 451 734	1 876 983	1 714 023	1 882 505
Hungary	1 017 600	1 055 777	742 675	908 862	935 189
Italy	11 200	-----	-----	-----	-----
Romania	175 000	175 200	127 450	161 865	-----
Russia	3 706 000	3 928 000	3 991 000	3 488 400	*3 500 000
Turkey	232 278	544 513	369 482	458 028	207 743
Yugoslavia, Federal Republic of	60 000	323 000	470 000	226 000	500 000
Ghana	512 900	473 200	519 200	442 500	353 100
Guinea	17 733 452	18 492 600	16 510 000	17 300 000	17 320 000
Mozambique	10 663	11 459	8 218	6 103	7 883
Jamaica	10 857 492	11 828 634	11 987 304	12 646 439	11 688 481
USA (b) (d)	258 000	233 000	197 981	225 288	*270 000
Brazil (c)	11 616 402	12 587 234	*13 000 000	*14 000 000	*14 000 000
Guyana	2 028 080	2 475 459	2 470 895	2 267 368	2 359 272
Suriname	3 530 210	3 702 527	3 877 183	3 931 108	3 714 595
Venezuela	5 020 440	4 834 052	4 966 794	4 825 647	4 166 450
China	8 255 500	8 878 800	*9 000 000	*9 000 000	*9 500 000
India (f)	5 564 775	6 035 579	6 112 131	6 609 525	6 854 425
Indonesia	899 035	841 976	808 749	1 055 647	1 116 323
Iran (a)	192 790	230 420	244 999	...	...
Kazakhstan	3 318 500	3 345 900	3 416 000	3 436 800	3 606 500
Malaysia	184 433	218 680	279 066	160 271	222 724
Pakistan (e)	5 898	3 590	4 934	4 953	11 216
Vietnam	-----	*30 000	*30 000	*30 000	*30 000
Australia	42 655 000	43 063 000	44 465 000	44 653 000	48 493 000
World Total	120 000 000	126 000 000	126 000 000	128 000 000	131 000 000

## Note(s):-

(1) This table includes production of refractory bauxite

- (a) Years ended 20 March following that stated
- (b) Data for Alabama only
- (c) Including beneficiated and direct shipping ore
- (d) Years ended 30 September of that stated
- (e) Years ended 30 June of that stated
- (f) Years ended 31 March following that stated

## Production of Alumina

tonnes (Al<sub>2</sub>O<sub>3</sub> content)

Country	1995	1996	1997	1998	1999
Azerbaijan	26 100	*5 000	12 900	6 600	*10 000
France	425 300	440 000	454 000	444 000	*400 000
Germany	750 044	755 333	737 815	*600 000	583 000
Greece	597 620	601 580	584 000	622 000	621 700
Hungary	184 000	208 061	76 370	138 000	295 000
Irish Republic	1 185 600	1 233 500	1 272 941	1 322 536	1 395 735
Italy	560 100	575 800	597 000	608 000	636 000
Romania	322 774	261 000	279 537	250 266	277 388
Russia	2 254 300	2 148 000	2 379 800	2 465 400	2 657 100
Slovakia	65 000	56 000	46 812	26 507	...
Spain	699 700	715 600	725 700	725 500	726 800
Turkey	171 978	159 298	164 333	156 825	159 122
Ukraine	1 198 000	1 159 460	1 074 500	1 290 720	1 230 200
United Kingdom	108 000	99 000	100 000	96 000	*100 000
Yugoslavia, Federal Republic of	35 312	105 000	159 450	152 619	156 012
Guinea	616 028	640 000	519 647	499 630	568 479
Canada	1 064 000	1 060 000	1 165 000	1 229 000	1 233 000
Jamaica	3 030 167	3 199 513	3 394 177	3 440 167	3 569 633
USA	*4 533 000	*4 700 000	*5 093 000	*5 592 000	*4 928 000
Brazil	2 142 900	2 759 000	3 088 000	3 322 100	3 515 100
Suriname	1 588 827	1 642 942	1 725 857	1 771 889	1 853 053
Venezuela	1 660 789	1 701 675	1 730 368	1 553 445	1 335 000
China	2 222 700	2 493 500	2 936 100	3 340 000	3 837 400
India	1 672 000	1 706 000	1 940 000	1 855 000	1 930 000
Japan	485 800	469 900	475 800	482 100	481 400
Kazakhstan	1 022 000	1 083 400	1 094 200	1 084 943	1 157 312
Australia	13 161 000	13 348 000	13 384 000	13 853 000	14 532 000
World Total	41 800 000	43 300 000	45 200 000	46 900 000	48 200 000

Note(s):-

(1) Where possible figures in this table show the alumina equivalent (Al<sub>2</sub>O<sub>3</sub>) of total hydrate produced, whether or not calcined

**Production of Primary Aluminium**

tonnes

Country	1995	1996	1997	1998	1999
Azerbaijan	*11 000	----	----	----	----
Bosnia & Herzegovina	----	----	8 000	30 000	70 000
France	364 500	380 100	399 400	423 600	455 100
Germany	575 200	576 492	571 941	612 381	633 803
Greece	144 430	141 295	132 600	146 100	159 900
Hungary	34 900	33 500	32 500	33 700	33 600
Iceland	100 101	102 096	123 356	183 400	221 434
Italy	177 800	184 400	187 700	187 000	187 200
Netherlands	216 000	227 000	231 800	263 700	290 000
Norway (a)	846 794	863 327	918 511	994 195	1 007 989
Poland	50 800	51 500	51 500	51 500	46 700
Romania	140 500	140 872	161 907	174 040	174 452
Russia	2 789 800	2 871 600	2 906 000	3 004 700	3 146 400
Slovakia	60 600	115 600	110 190	108 000	109 200
Slovenia	70 200	65 800	74 400	70 800	77 200
Spain	361 882	361 828	360 061	360 400	375 500
Sweden	92 797	98 974	98 798	96 098	99 340
Switzerland	20 726	26 594	27 339	32 106	34 439
Turkey	61 513	62 100	62 020	61 803	61 705
Ukraine	95 100	89 875	100 547	106 678	115 425
United Kingdom	237 899	239 963	247 675	258 397	272 211
Yugoslavia, Federal Republic of	26 000	51 100	80 600	76 700	80 900
Cameroon	79 300	82 300	90 900	81 600	91 900
Egypt (c)	*180 000	179 774	178 507	180 701	*187 000
Ghana	135 400	137 000	151 600	56 100	114 200
Nigeria	----	----	2 500	25 500	15 900
South Africa	195 292	569 607	673 043	676 999	686 900
Canada	2 171 992	2 283 212	2 327 188	2 374 118	2 389 834
Mexico	10 413	61 458	66 356	61 848	62 736
USA	3 375 100	3 577 200	3 603 400	3 712 700	3 778 600
Argentina	183 113	183 942	186 330	186 605	206 394
Brazil	1 188 100	1 197 400	1 189 100	1 208 000	1 249 600
Suriname	26 667	26 036	23 128	27 416	6 638
Venezuela	629 827	634 900	642 000	586 499	570 321
Bahrain	453 883	461 245	489 915	501 308	502 663
China	1 869 700	1 896 200	2 178 600	2 435 300	2 808 900
Dubai	247 400	258 500	377 700	386 648	441 000
India (b)	517 806	497 540	553 255	543 451	612 968
Indonesia	228 100	223 100	217 400	219 400	111 700
Iran (d)	114 879	77 535	95 521	123 758	*130 000
Japan	18 034	16 959	16 694	16 302	10 904
Tajikistan	237 000	198 300	188 900	195 630	229 100
Australia	1 297 000	1 372 000	1 495 000	1 627 000	1 719 000
New Zealand	273 296	283 329	310 324	318 000	327 000
<b>World Total</b>	<b>19 900 000</b>	<b>20 900 000</b>	<b>21 900 000</b>	<b>22 800 000</b>	<b>23 900 000</b>

## Note(s):-

- (a) May include some super purity aluminium  
(b) Years ended 31 March following that stated  
(c) Years ended 30 June of that stated  
(d) Years ended 20 March following that stated

## Exports of Bauxite, Alumina and Aluminium

Country	1995	1996	1997	1998	1999
Armenia					
Scrap	*10 000	*10 000	13 740	*14 000	...
Austria					
Unwrought	7 446	5 609	4 800	14 444	8 317
Unwrought alloys	67 230	69 802	62 467	72 884	77 157
Scrap	31 550	42 049	40 028	44 360	55 512
Azerbaijan					
Alumina	...	...	...	...	75 559
Belarus					
Unwrought (a) (f)	*50 700	*13 100	*1 500	*3 000	*2 200
Scrap	(f) *4 900	(f) *6 900	(f) *1 300	4 008	4 056
Belgium-Luxembourg					
Bauxite	240	317	1 734	28 452	9 093
Alumina	3 436	3 106	1 817	2 381	3 203
Unwrought	5 059	1 135	2 644	53 783	35 818
Unwrought alloys	109 116	82 497	72 557	57 272	30 923
Scrap	106 312	115 070	147 630	135 234	132 901
Bosnia & Herzegovina					
Unwrought (a) (f)	...	...	*4 300	*12 800	*58 700
Scrap (f)	*500	*2 600	*6 000	*700	*4 100
Bulgaria					
Unwrought (a)	10 103	8 842	12 765	(f) *2 800	(f) *3 100
Scrap	(f) *600	(f) *1 200	2 738	(f) *2 000	(f) *5 800
Croatia					
Bauxite	4 917	1 916	12 800	5 849	29 491
Unwrought (a)	730	2 880	2 477	1 554	1 194
Scrap	300	900	2 100	3 554	5 575
Czech Republic					
Unwrought (a)	22 900	24 600	37 126	42 726	62 394
Scrap	13 600	11 900	15 148	21 233	26 118
Denmark					
Unwrought alloys	23 739	20 594	29 623	28 778	25 732
Scrap	36 403	32 107	36 642	30 029	31 489
Estonia					
Unwrought	(a) (f) *4 400	(a) (f) *2 300	9 245	(a) (f) *5 900	37 870
Scrap	7 413	4 125	5 549	6 996	7 770
Finland					
Unwrought (a)	29 500	29 937	33 577	37 072	39 631
Scrap	10 107	4 227	3 339	4 046	6 242
France					
Bauxite	18 534	11 744	2 504	29 577	20 650
Alumina	170 358	114 149	106 756	117 898	123 213
Alumina hydrate	97 127	99 735	112 946	71 739	55 438
Unwrought	94 366	185 445	91 490	78 955	78 335
Unwrought alloys	109 903	97 180	135 365	99 711	74 915
Scrap	103 694	113 282	160 329	165 766	198 915
Georgia					
Scrap (f)	...	...	*4 900	*7 600	...
Germany					
Bauxite	30 232	26 552	27 655	35 759	32 399
Alumina	188 481	214 801	268 415	233 561	198 433
Alumina hydrate	344 761	325 010	368 389	433 391	452 136
Unwrought	52 307	18 859	34 928	25 612	33 335
Unwrought alloys	247 081	241 472	194 687	211 075	266 917
Scrap	458 092	414 210	545 771	528 396	549 248
Greece					
Bauxite	777 455	819 411	537 011	477 582	391 130
Alumina	344 875	344 821	297 238	313 398	285 459
Alumina hydrate	33 360	24 952	34 070	13 595	12 063
Unwrought	47 954	37 663	30 429	42 384	54 366
Unwrought alloys	1 357	6 726	16 440	18 923	5 850
Scrap	5 082	5 429	14 532	5 460	10 865
Hungary					
Bauxite	20 000	10 000	59 280	4 612	5 158
Alumina	246 590	302 069	207 067	254 550	227 970
Unwrought (a)	48 617	19 227	19 163	21 733	12 653
Scrap	16 331	15 121	16 717	18 113	17 536

## Exports of Bauxite, Alumina and Aluminium

tonnes

Country	1995	1996	1997	1998	1999
Iceland					
Unwrought (a)	99 657	101 117	119 794	162 035	221 400
Scrap	2 300	4 800	4 200	4 844	...
Irish Republic					
Bauxite	54 276	-----	27	10	12 616
Alumina	1 197 651	1 346 339	1 407 607	1 505 074	1 443 841
Alumina hydrate	16 100	12 882	29 860	21 238	2 556
Unwrought alloys	5 731	5 078	5 839	5 476	5 993
Scrap	10 715	9 871	9 750	8 821	10 883
Italy					
Bauxite	2 798	17 528	2 623	4 312	107 978
Alumina	468 909	404 148	471 281	487 700	538 556
Alumina hydrate	14 835	6 650	5 868	12 493	21 793
Unwrought	2 595	5 267	5 077	11 751	9 293
Unwrought alloys	34 035	34 095	32 181	23 952	20 324
Scrap	11 402	11 800	18 640	12 469	11 224
Latvia					
Unwrought	788	1 094	1 891	6 958	16 337
Scrap	7 948	4 636	6 671	7 318	6 340
Lithuania					
Unwrought	3 234	1 413	898	252	497
Scrap	11 000	6 700	12 350	18 308	18 416
Macedonia					
Unwrought (a)	(f) *5 600	(f) *9 900	(f) *1 600	579	(f) *300
Moldova					
Scrap	7 700	1 143	2 017	4 577	19 242
Netherlands					
Bauxite	55 669	38 979	30 675	50 656	50 869
Alumina	482 921	116 849	214 325	241 320	172 798
Alumina hydrate	47 616	45 365	20 135	51 157	55 960
Unwrought	300 327	221 196	204 479	209 059	192 342
Unwrought alloys	342 881	262 576	250 015	259 682	288 157
Scrap	170 453	240 552	191 254	166 635	184 500
Norway					
Unwrought	215 748	210 191	192 313	126 168	119 024
Unwrought alloys	594 825	665 488	723 003	862 949	868 931
Scrap	21 011	19 443	20 516	20 362	19 259
Poland					
Unwrought (a)	28 029	25 600	27 800	48 300	37 094
Scrap	1 370	3 972	8 698	11 700	...
Portugal					
Unwrought (a)	1 400	2 512	3 480	34 213	69 426
Scrap	8 100	9 771	11 760	12 349	14 087
Romania					
Alumina	13 402	8 826	53 218	11 692	56 510
Unwrought	106 243	105 345	107 483	102 200	77 573
Scrap	...	...	...	4 242	19 946
Russia					
Bauxite	648 447	194 957	992 945	999 322	260 493
Alumina	25 650	74 677	274 110	349 195	142 605
Alumina hydrate	5 712	10 495	8 751	6 347	3 953
Unwrought	(a) 2 251 174	2 440 538	2 455 249	2 519 619	2 638 907
Unwrought alloys	...	177 904	253 574	270 783	476 770
Scrap (f)	*146 600	*177 800	*336 900	*399 800	*467 000
Slovakia					
Unwrought	25 287	97 882	110 155	117 123	370 000
Scrap	6 700	3 700	(f) *2 300	5 596	5 077
Slovenia					
Alumina	7 100	6 448	11 362	10 171	4 481
Unwrought (a)	42 100	47 750	55 970	51 054	56 505
Scrap	1 500	3 900	4 700	5 700	6 016
Spain					
Alumina	219 463	191 242	194 869	160 074	259 073
Alumina hydrate	234 116	248 779	243 999	240 130	306 990
Unwrought	2 623	9 316	7 812	20 419	1 968
Unwrought alloys	111 852	127 963	122 911	87 324	78 382
Scrap	6 987	5 130	10 971	9 449	19 921

## Exports of Bauxite, Alumina and Aluminium

Country	1995	1996	1997	1998	1999
Sweden					
Alumina	4 200	457	454	300	264
Unwrought	1 605	993	1 309	800	1 286
Unwrought alloys	55 280	69 671	65 134	46 831	63 531
Scrap	44 211	53 979	44 156	49 202	42 182
Switzerland					
Unwrought (a)	7 462	8 473	8 945	8 388	11 581
Scrap	60 994	69 525	75 180	78 889	86 476
Turkey					
Bauxite	15 350	21 000	110	226	130
Alumina	43 503	36 986	41 706	27 187	22 903
Unwrought (a)	12 113	15 357	1 433	24 308	24 525
Scrap	5 849	6 245	10 339	8 593	10 504
Ukraine					
Alumina	*800 000	*800 000	*800 000	*900 000	*800 000
Unwrought (a)	101 065	102 561	134 698	187 739	318 178
Scrap	1 223	3 073	35 272	47 633	36 229
United Kingdom					
Alumina	(b) 36 304	(b) 28 437	(b) 27 653	18 640	(b) 16 682
Unwrought	132 349	35 582	129 429	32 067	11 229
Unwrought alloys	178 840	171 401	241 147	193 134	222 361
Scrap	106 581	102 086	104 231	122 591	102 121
Yugoslavia, Federal Republic of					
Bauxite	...	32 000	4 655	549	48 398
Unwrought	21 000	34 600	(a) 62 526	(a) 61 394	66 420
Unwrought alloys	*5 000	4 500	...	...	3 097
Scrap	...	700	387	6 907	2 975
Algeria					
Scrap	3 300	5 039	9 488	8 359	...
Cameroon					
Unwrought (a)	59 032	64 500	65 600	57 400	----
Egypt					
Unwrought (a)	81 900	96 880	89 400	63 778	69 868
Ghana					
Bauxite	526 335	383 370	...	...	247 249
Unwrought (a)	120 000	120 900	130 000	55 000	39 372
Guinea					
Bauxite	13 649 599	13 996 000	13 625 000	14 168 000	13 606 000
Alumina	616 026	619 258	506 990	521 199	560 000
Morocco					
Scrap	4 300	3 000	6 314	7 000	...
Mozambique					
Bauxite	10 663	8 380	8 218	6 103	7 883
Sierra Leone					
Bauxite	----	32 846	99 547	----	----
South Africa					
Unwrought (a)	85 000	541 352	580 025	556 985	630 634
Scrap	(f) *6 700	(f) *11 900	15 825	22 121	17 052
Canada					
Alumina	91 483	118 264	113 385	111 949	114 260
Unwrought	911 512	921 214	891 017	870 427	804 930
Unwrought alloys	807 208	899 444	995 840	986 011	1 056 980
Scrap	237 355	242 145	271 338	281 348	296 423
Cuba					
Scrap	(e) 1 198	(f) *4 900	(f) *2 300	(f) *2 400	(f) *2 300
Jamaica					
Bauxite	3 546 893	3 917 478	3 641 131	4 052 087	2 795 368
Alumina	3 061 646	3 270 982	3 446 373	3 496 027	3 607 196
Mexico					
Scrap	103 423	70 604	94 271	77 159	91 126
Panama					
Scrap	4 387	5 956	6 161	7 202	6 895

## Exports of Bauxite, Alumina and Aluminium

tonnes

Country	1995	1996	1997	1998	1999
USA					
Bauxite	121 140	150 550	92 146	110 181	161 260
of which, re-exports	11 103	11 247	7 552	10 551	12 253
Alumina	1 051 455	925 413	1 230 903	1 258 515	1 144 458
Alumina hydrate	64 452	68 831	83 249	70 871	67 486
Unwrought	185 692	217 371	128 505	98 766	123 843
Unwrought alloys	189 056	208 604	239 759	172 802	199 415
Scrap	431 291	326 197	343 322	452 586	449 843
Argentina					
Unwrought	78 837	75 213	58 580	23 437	47 038
Unwrought alloys	21 929	18 639	54 939	64 293	76 700
Brazil					
Bauxite	5 045 710	4 569 442	4 373 463	4 315 642	4 511 896
Alumina	258 596	443 438	616 284	853 541	1 078 126
Unwrought	681 725	689 326	682 320	631 332	658 994
Unwrought alloys	21 284	19 647	33 854	61 110	129 588
Scrap	1 119	1 044	4 848	11 713	13 375
Colombia					
Scrap	7 803	6 366	6 614	8 285	12 270
Guyana					
Bauxite	1 971 063	2 100 568	2 200 300	2 346 113	2 389 003
Suriname					
Alumina	1 586 251	1 607 621	1 647 279	1 732 921	1 857 667
Unwrought	26 335	26 578	27 532	26 843	6 788
Venezuela					
Alumina	409 782	165 822	387 652	299 000	309 914
Unwrought	390 488	296 975	276 517	274 000	323 014
Unwrought alloys	34 056	55 249	78 642	74 800	91 762
Scrap	24 194	23 645	14 427	16 000	20 088
Bahrain					
Unwrought (a)	363 600	330 646	352 900	227 900	223 700
China					
Bauxite	449 543	201 126	160 645	84 258	847
Alumina	9 984	6 072	12 773	32 613	14 406
Alumina hydrate	43 606	39 958	44 617	40 552	35 225
Unwrought	158 212	72 137	163 151	237 756	99 540
Unwrought alloys	33 098	37 915	85 311	89 142	107 062
Scrap	17 549	6 162	4 294	4 995	6 910
Dubai					
Unwrought (a)	247 023	264 241	378 488	374 696	...
Hong Kong					
Alumina (g)	12 251	6 160	4 010	3 737	2 160
Unwrought	234 053	286 897	219 451	190 570	162 817
of which, re-exports	234 030	286 298	219 309	190 371	162 685
Unwrought alloys (g)	19 286	29 379	33 220	59 076	52 138
Scrap	174 913	131 968	126 052	96 147	86 067
of which, re-exports	109 190	84 020	91 350	75 534	65 593
India					
Bauxite (c)	149 968	103 925	86 876	98 942	...
Alumina (c)	447 988	560 615	427 183	216 879	...
Alumina hydrate (c)	18 855	21 420	18 695	29 927	...
Unwrought (c)	31 053	79 680	69 110	29 227	...
Unwrought alloys (c)	10 244	6 491	5 858	4 618	...
Indonesia					
Bauxite	798 812	702 160	715 010	740 199	...
Unwrought	183 353	173 776	158 325	133 306	(a) 79 900
Unwrought alloys	4 633	6 555	7 869	14 749	...
Scrap	303	2 609	3 001	4 662	...
Iran					
Unwrought (a) (f)	*21 200	*6 200	*2 400	*13 600	*23 000
Israel					
Unwrought (a)	(f) *2 200	*5 200	*5 500	2 166	...
Scrap (f)	*9 200	*10 800	*15 700	*13 200	*14 300

## Exports of Bauxite, Alumina and Aluminium

Country	1995	1996	1997	1998	1999
Japan					
Alumina	73 320	77 419	97 231	94 028	107 971
Alumina hydrate	161 148	157 624	125 913	151 147	199 347
Unwrought (a)	12 839	12 012	10 259	7 147	10 513
Scrap	13 016	12 273	21 433	26 695	27 636
Jordan					
Alumina hydrate	...	...	2 514	5 178	...
Scrap	4 813	4 309	4 475	4 567	...
Kazakhstan					
Alumina	976 233	977 390	1 201 868	1 002 376	1 159 644
Unwrought (a)	(f) *5 700	8 054	19 221	49 635	(f) *49 000
Scrap	(f) *28 400	(f) *28 800	31 880	42 920	(f) *54 600
Korea, Dem. P.R. of					
Unwrought (a) (f)	*3 000	*2 700	*3 100	*3 400	*9 000
Korea, Republic of					
Unwrought	89 372	38 977	81 090	55 454	26 651
Unwrought alloys	2 925	3 961	16 252	14 916	5 167
Scrap	2 942	2 451	8 368	3 348	1 799
Kyrgyzstan					
Scrap	12 460	3 832	5 800	11 600	40 300
Malaysia					
Bauxite	168 674	166 782	177 000	46 000	...
Scrap	7 900	6 000	13 400	8 800	...
Oman					
Scrap	4 420	4 491	3 900	1 379	2 087
Philippines					
Scrap	1 031	1 739	9 620	19 383	...
Saudi Arabia					
Scrap	...	11 294	39 148	18 765	25 474
Singapore					
Alumina	2 978	901	17 585	11 981	9 057
of which, re-exports	2 859	887	16 880	11 796	8 941
Unwrought	119 956	139 363	92 024	58 345	77 812
of which, re-exports	117 750	137 160	...	57 175	77 102
Scrap	29 797	33 852	39 758	44 750	40 803
Taiwan					
Unwrought	10 393	(a) 125 983	10 548	3 025	11 540
Unwrought alloys	116 812	...	127 203	145 859	82 818
Scrap	24 165	14 135	13 744	14 311	28 032
Tajikistan					
Unwrought	201 970	193 698	183 031	186 778	...
Thailand					
Unwrought	686	646	5 253	7 925	4 631
Scrap	3 791	7 028	15 566	17 686	11 065
Australia					
Bauxite	*5 000 000	*5 000 000	*5 500 000	*5 500 000	*6 000 000
Alumina	10 268 693	10 367 230	10 531 994	10 460 475	10 737 791
Alumina hydrate	458 195	368 791	370 116	343 273	392 753
Unwrought	777 450	864 102	969 816	1 153 723	1 187 874
Unwrought alloys	179 243	204 056	186 149	160 982	201 941
Scrap	50 653	55 537	57 455	66 654	80 043
New Zealand					
Unwrought (a) (d)	236 687	250 909	273 212	282 890	...
Scrap (d)	11 152	9 667	8 252	10 504	...

## 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) Including some bauxite
- (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



## Imports of Bauxite, Alumina and Aluminium

tonnes

Country	1995	1996	1997	1998	1999
<b>Austria</b>					
Bauxite	10 000	23 000	27 949	26 811	26 336
Alumina	24 867	43 932	47 437	29 867	41 975
Alumina hydrate	5 225	5 069	5 175	5 888	3 252
Unwrought	76 220	95 343	104 678	134 156	110 380
Unwrought alloys	83 337	100 137	138 453	119 015	115 108
Scrap	80 406	81 446	110 492	118 056	...
<b>Azerbaijan</b>					
Bauxite	*100 000	*50 000	*50 000	*50 000	...
<b>Belarus</b>					
Alumina	*1 500	*3 500	*6 000	8 227	12 938
Unwrought	...	(b) 5 905	(b) 7 393	9 164	9 331
<b>Belgium-Luxembourg</b>					
Bauxite	39 861	15 968	13 107	43 411	87 263
Alumina	10 833	10 022	9 951	11 825	10 029
Alumina hydrate	34 426	37 339	52 207	51 887	42 151
Unwrought	242 095	245 386	256 907	350 391	253 655
Unwrought alloys	122 113	120 039	131 427	146 289	159 506
Scrap	155 009	133 784	126 851	178 243	155 114
<b>Bulgaria</b>					
Unwrought (a)	14 990	9 218	13 960	*15 000	...
<b>Croatia</b>					
Bauxite	38 909	47 163	63 101	57 069	81 288
Unwrought (a)	25 129	23 557	23 784	25 593	36 061
<b>Cyprus</b>					
Unwrought alloys	5 389	5 280	5 299	6 004	5 283
<b>Czech Republic</b>					
Bauxite	9 000	8 000	10 646	13 632	14 323
Alumina	15 700	13 900	14 289	17 825	14 761
Alumina hydrate	11 800	11 500	11 307	11 832	10 727
Unwrought	47 100	46 300	44 777	57 281	48 057
Unwrought alloys	35 600	30 100	36 302	48 415	56 214
Scrap	19 400	12 900	25 500	34 197	35 897
<b>Denmark</b>					
Bauxite	3 458	3 589	8 783	8 627	7 328
Alumina	6 573	13 572	16 182	12 444	16 856
Unwrought (a)	35 396	33 594	41 018	45 623	43 640
Scrap	20 295	18 515	22 118	22 982	20 922
<b>Estonia</b>					
Alumina	1 688	4 100	1 912	2 965	346
Unwrought	2 100	2 400	9 175	62	39 382
<b>Finland</b>					
Bauxite	8 269	8 017	9 431	21 079	8 275
Alumina	1 669	3 366	2 353	2 006	2 564
Alumina hydrate	29 507	35 320	38 834	43 101	33 673
Unwrought	11 776	19 660	17 882	17 192	20 702
Unwrought alloys	11 247	13 377	15 647	20 648	22 513
Scrap	43 074	50 794	54 430	46 938	48 048
<b>France</b>					
Bauxite	1 516 018	1 696 143	1 457 723	1 578 486	1 472 094
Alumina	474 112	536 034	438 896	507 418	578 950
Alumina hydrate	49 884	31 908	40 599	111 903	97 541
Unwrought	284 776	276 778	230 911	191 512	144 583
Unwrought alloys	187 076	216 169	266 763	284 396	320 070
Scrap	160 128	134 542	160 004	192 112	159 335
<b>Germany</b>					
Bauxite	2 011 489	1 354 738	2 181 018	1 531 027	2 200 973
Alumina	520 287	620 149	785 291	832 168	770 127
Alumina hydrate	300 092	309 106	293 677	290 460	326 953
Unwrought	705 619	564 377	698 561	637 505	525 335
Unwrought alloys	635 236	544 379	701 649	834 429	807 818
Scrap	249 206	259 670	440 194	479 496	446 510
<b>Greece</b>					
Bauxite	268	415	3	27 456	40 852
Alumina	428	2 092	995	6 334	2 399
Unwrought	63 946	53 971	87 660	85 870	73 680
Unwrought alloys	15 722	17 486	31 790	37 410	39 524
Scrap	3 302	2 620	6 476	4 306	7 989

## Imports of Bauxite, Alumina and Aluminium

Country	1995	1996	1997	1998	1999
Hungary					
Bauxite	30 589	66 195	1 664	1 897	21 334
Unwrought (a)	134 309	134 248	170 157	156 988	154 127
Scrap	...	676	11 714	9 760	9 566
Iceland					
Alumina	229 470	203 152	155 801	377 078	...
Irish Republic					
Bauxite	2 720 864	2 882 167	2 881 584	3 299 255	3 248 871
Alumina	3 769	3 855	7 753	10 500	5 490
Unwrought (a)	5 362	7 270	11 028	10 316	10 182
Scrap	1 400	2 200	5 100	2 058	2 040
Italy					
Bauxite	1 816 302	2 079 363	1 949 915	2 132 204	2 324 818
Alumina	169 452	190 608	195 571	200 800	209 097
Alumina hydrate	85 267	119 762	124 986	106 053	101 023
Unwrought	276 341	236 144	266 744	270 690	297 565
Unwrought alloys	298 136	248 755	308 337	337 340	355 201
Scrap	244 116	266 187	352 300	360 129	358 044
Latvia					
Scrap	...	...	...	3 900	8 812
Lithuania					
Alumina hydrate	4 200	6 800	7 833	8 456	14 231
Unwrought	5 100	1 500	900	844	653
Scrap	10 400	5 500	5 677	5 833	4 819
Macedonia					
Unwrought	...	3 949	3 330	7 232	...
Netherlands					
Bauxite	164 210	81 771	38 981	57 122	39 105
Alumina	746 542	727 089	708 510	832 751	695 599
Alumina hydrate	123 197	87 336	118 140	129 002	138 863
Unwrought	547 874	347 845	444 457	430 688	447 344
Unwrought alloys	130 324	116 454	92 056	92 214	136 768
Scrap	213 318	187 604	225 060	224 627	215 563
Norway					
Bauxite	32 747	22 549	31 402	14 261	31 007
Alumina	1 576 786	1 693 565	1 733 334	1 899 852	1 920 834
Alumina hydrate	35 638	37 136	41 186	38 386	39 732
Unwrought	104 380	122 265	155 421	83 382	168 755
Unwrought alloys	47 923	27 275	40 842	64 552	17 256
Scrap	60 576	63 038	68 723	76 079	87 744
Poland					
Bauxite	37 994	35 800	37 300	30 100	29 447
Alumina	159 200	138 100	144 500	142 800	138 584
Unwrought (a)	45 141	49 529	64 200	87 500	212 555
Portugal					
Alumina	*3 900	5 324	8 427	8 687	8 668
Unwrought	16 700	9 335	4 305	7 160	10 110
Unwrought alloys	56 600	58 341	75 464	102 015	149 605
Romania					
Bauxite	660 493	546 446	666 583	303 426	612 281
Alumina	13 900	98 300	151 931	140 689	146 877
Russia					
Bauxite	2 848 476	1 249 488	1 020 999	...	1 479 905
Alumina	1 882 500	3 434 909	4 181 960	3 658 027	3 815 878
Alumina hydrate	22 500	48 654	7 255	10 504	29 948
Unwrought	240	23 804	32 362	33 947	98 502
Scrap	252	3 365	6 279	6 362	595
Slovakia					
Bauxite	138 000	132 000	85 000	531	2 759
Alumina	103 624	222 508	215 852	210 200	206 947
Alumina hydrate	...	100	1 499	40 800	53
Unwrought (a)	19 658	14 876	23 443	24 839	30 968
Scrap	100	300	800	1 100	4 193
Slovenia					
Bauxite	15 000	14 933	45 887	51 137	50 237
Alumina	145 100	159 993	184 114	177 720	181 496
Unwrought	25 200	29 570	41 750	64 059	64 779
Scrap	4 200	4 100	3 900	3 400	6 366

## Imports of Bauxite, Alumina and Aluminium

tonnes

Country	1995	1996	1997	1998	1999
Spain					
Bauxite	2 252 329	2 457 173	2 392 221	2 578 888	2 414 176
Alumina	29 550	27 234	33 325	37 213	39 821
Alumina hydrate	18 333	12 678	18 318	18 704	16 295
Unwrought	78 681	82 781	125 442	88 719	79 073
Unwrought alloys	47 192	44 813	62 882	88 263	141 633
Scrap	37 628	41 781	45 697	52 081	54 864
Sweden					
Bauxite	327 613	46 890	32 526	28 222	27 707
Alumina	170 100	178 839	184 706	128 180	89 286
Alumina hydrate	*59 000	*50 000	*50 000	...	46 797
Unwrought	36 624	44 818	54 652	66 469	32 565
Unwrought alloys	53 069	60 705	62 415	71 998	72 028
Scrap	7 823	6 167	6 721	7 525	10 782
Switzerland					
Alumina	41 941	53 661	50 046	65 504	68 026
Alumina hydrate	13 790	15 431	16 757	18 600	19 868
Unwrought	102 184	87 994	108 871	94 919	76 248
Unwrought alloys	28 649	29 412	34 683	46 314	47 401
Scrap	8 359	11 434	13 034	17 098	14 142
Turkey					
Bauxite	28 723	34 837	25 680	24 844	25 247
Alumina	13 631	9 952	13 906	9 425	11 517
Unwrought	59 930	47 017	60 568	69 474	61 775
Unwrought alloys	41 646	53 979	81 767	73 704	71 072
Scrap	2 822	10 430	34 681	24 398	22 517
Ukraine					
Bauxite	2 678 119	3 097 062	2 045 854	3 075 299	2 880 090
Alumina	*50 000	5 000	20 237	1 903	100
Unwrought (a)	2 240	3 018	1 147	888	971
United Kingdom					
Bauxite	412 320	(e) 317 885	(e) 322 215	(e) 278 737	(e) 217 322
Alumina	435 065	525 758	505 974	381 804	498 756
Alumina hydrate	64 263	80 501	77 572	79 427	101 969
Unwrought	281 063	539 672	310 882	310 767	307 472
Unwrought alloys	106 343	130 334	132 373	184 942	136 306
Scrap	70 788	83 913	107 567	138 125	132 799
Yugoslavia, Federal Republic of					
Alumina	*3 000	4 700	1 310	566	6 588
Unwrought (a)	6 500	1 300	4 170	3 831	1 688
Algeria					
Unwrought (a)	*6 000	5 573	1 654	4 970	...
Cameroon					
Alumina	196 411	128 667	*185 000	*170 000	...
Egypt					
Bauxite	241 000	400 670	322 724	381 795	389 068
Alumina	*360 000	*360 000	*360 000	*360 000	...
Ghana					
Alumina	*240 000	*260 000	*300 000	*100 000	...
Kenya					
Alumina	2 781	2 601	3 893	...	...
Unwrought (a)	2 686	4 855	4 005	3 700	...
Morocco					
Bauxite	18 164	19 944	44 910	40 000	...
Alumina	5 260	5 612	5 390	5 500	...
Unwrought (a)	3 234	1 599	2 439	600	...
Nigeria					
Bauxite	...	6 118	24 848	5 398	11 130
Unwrought (a)	...	11 658	32 055	63 096	3 335
South Africa					
Bauxite	10 966	13 403	13 414	11 663	9 307
Alumina	606 335	1 099 359	1 241 568	1 240 430	1 281 124
Alumina hydrate	13 373	15 458	14 316	12 339	11 236
Unwrought (a)	662	1 695	3 750	6 675	50 526
Scrap	2 259	2 188	1 719	1 969	1 374

## Imports of Bauxite, Alumina and Aluminium

Country	1995	1996	1997	1998	1999
Tunisia					
Alumina hydrate	31 122	33 837	35 248	36 943	43 041
Unwrought (a)	4 378	4 217	2 289	4 586	2 671
Canada					
Bauxite	2 623 621	2 574 206	3 134 947	3 888 711	3 064 154
Alumina	3 172 083	3 586 895	3 226 775	3 198 867	3 396 761
Unwrought	25 880	23 563	21 084	32 639	50 001
Unwrought alloys	108 017	115 973	154 537	169 029	196 476
Scrap	55 885	67 405	90 599	107 425	123 068
Costa Rica					
Unwrought (a)	7 891	7 566	11 986	6 224	5 936
El Salvador					
Unwrought (a)	2 824	4 169	4 783	3 956	4 257
Mexico					
Bauxite	41 768	24 621	53 899	42 315	33 162
Alumina	78 851	156 119	162 457	165 091	149 864
Alumina hydrate	57 260	63 696	65 119	62 498	61 141
Unwrought	31 432	39 109	40 109	63 514	73 325
Unwrought alloys	46 027	34 761	88 488	111 981	131 106
Scrap	20 415	25 647	41 305	47 649	88 697
Panama					
Unwrought (a)	1 627	1 690	1 646	1 459	1 779
USA					
Bauxite, crude dried	10 000 000	9 930 000	10 200 000	10 800 000	8 900 000
Bauxite, calcined	482 000	352 000	369 000	393 000	299 000
Alumina	4 050 263	4 380 845	4 042 664	4 151 311	3 896 251
Unwrought	1 158 007	1 057 773	1 153 740	1 355 321	1 359 698
Unwrought alloys	800 039	869 164	928 970	1 094 085	1 368 630
Scrap	419 211	401 579	453 568	500 938	614 356
Argentina					
Bauxite	42 980	36 162	34 292	34 169	27 721
Alumina	367 947	371 768	371 254	288 504	425 212
Alumina hydrate	6 424	17 556	18 836	23 423	22 035
Brazil					
Bauxite	225	1 140	39 810	11 643	5 882
Alumina	444 301	91 173	6 946	20 442	23 105
Unwrought	9 958	4 983	3 164	3 400	1 056
Unwrought alloys	5 291	3 610	2 544	2 421	1 051
Scrap	2 431	2 630	1 328	4 126	4 400
Chile					
Bauxite	17 000	5 403	2 174	10 852	...
Alumina	6 508	4 027	5 516	7 545	...
Unwrought	15 651	13 891	15 529	14 597	...
Colombia					
Bauxite	5 584	9 987	13 860	14 630	17 008
Alumina	6 471	5 764	8 104	8 694	6 675
Unwrought	18 208	17 144	24 958	20 864	20 673
Unwrought alloys	16 127	18 149	17 822	15 486	7 267
Ecuador					
Bauxite	6 378	8 033	12 756	12 610	7 124
Unwrought (a)	9 513	6 675	8 388	8 304	5 452
Peru					
Bauxite	3 025	4 468	2 235	4 674	1 170
Alumina	2 933	2 738	2 623	3 795	2 457
Unwrought (a)	4 555	3 578	2 756	2 840	1 190
Uruguay					
Bauxite	4 048	5 438	7 796	9 148	6 403
Alumina	1 540	1 061	1 565	1 533	1 501
Unwrought	2 152	2 209	3 351	3 270	2 802
Venezuela					
Bauxite	233 018	14 168	20 775	...	18 982
Alumina	9 138	8 089	6 633	11 520	4 467
Alumina hydrate	404	326	611	533	1 248
Unwrought (a)	699	283	2 885	700	422

## Imports of Bauxite, Alumina and Aluminium

tonnes

Country	1995	1996	1997	1998	1999
Abu Dhabi					
Scrap	5 380	4 947	5 729	5 093	9 447
Bahrain					
Alumina	899 849	844 625	914 610	968 830	785 522
China					
Bauxite	92 265	213 090	137 131	148 533	243 489
Alumina	1 193 967	1 155 545	1 096 375	1 577 260	1 632 791
Unwrought	309 727	294 103	230 229	203 208	380 626
Unwrought alloys	78 198	72 630	58 662	103 780	153 378
Scrap	357 198	299 914	335 898	277 168	399 268
Dubai					
Bauxite	...	44 001	20 818	28 526	...
Alumina	*500 000	530 819	774 452	726 399	...
Unwrought	...	25 148	32 961	6 625	...
Scrap	...	3 240	6 316	8 213	...
Hong Kong					
Bauxite	240	10 282	15 856	320	----
Alumina	23 341	9 882	4 112	3 307	2 258
Unwrought	338 619	434 806	443 478	350 211	207 391
Unwrought alloys	23 435	30 804	35 982	51 123	55 056
Scrap	202 480	138 277	103 941	81 810	66 524
India					
Bauxite (c)	71 590	27 178	32 245	59 027	...
Alumina (c)	11 756	10 606	14 256	11 499	...
Unwrought (c)	74 959	101 785	52 857	53 523	...
Unwrought alloys (c)	17 501	32 818	18 819	22 803	...
Scrap (c)	23 332	24 006	18 948	67 125	...
Indonesia					
Alumina	437 127	356 545	391 517	218 030	...
Alumina hydrate	69 786	57 401	68 233	96 288	...
Unwrought	96 261	75 813	84 402	63 380	(a) 106 900
Unwrought alloys	42 120	42 685	65 388	26 759	...
Scrap	1 050	1 267	5 300	1 534	...
Iran					
Alumina	*230 000	*150 000	*180 000	*220 000	...
Unwrought (g)	1 097	...	8 254	7 102	...
Israel					
Unwrought (a)	40 000	42 300	44 698	48 045	46 053
Japan					
Bauxite	1 939 656	2 080 086	1 995 236	1 977 481	1 953 644
Alumina	31 571	39 380	36 543	32 285	36 418
Alumina hydrate	82 811	74 310	69 871	68 931	49 682
Unwrought	2 046 422	2 066 178	2 163 622	1 859 817	1 833 005
Unwrought alloys	756 359	692 675	863 913	691 995	826 226
Scrap	175 997	149 442	158 893	152 998	160 654
Jordan					
Alumina	12 736	18 646	25 298	12 042	...
Unwrought (a)	6 250	3 958	6 741	6 884	...
Korea, Dem. P.R. of					
Alumina (f)	*9 400	...	...	...	...
Korea, Republic of					
Bauxite	124 384	181 352	180 978	162 983	168 254
Alumina	51 964	70 004	63 390	60 110	67 007
Alumina hydrate	173 975	138 967	99 874	102 003	135 399
Unwrought	610 691	551 730	605 021	497 457	730 031
Unwrought alloys	172 731	168 149	166 314	86 646	150 356
Scrap	52 362	66 575	80 760	54 968	105 963
Malaysia					
Alumina	45 632	32 700	*31 500	*40 100	...
Unwrought	140 500	105 800	107 700	71 600	...
Unwrought alloys	61 700	71 300	75 200	34 800	...
Scrap	39 282	29 000	24 700	26 900	...
Oman					
Bauxite	9 905	50	13 926	5 873	17 472
Pakistan					
Alumina (d)	...	6 194	6 508	6 267	6 144
Unwrought (a) (d)	...	20 105	10 161	4 764	3 554
Scrap (d)	68 851	58 890	53 020	56 786	56 512

## Imports of Bauxite, Alumina and Aluminium

Country	1995	1996	1997	1998	1999
Philippines					
Bauxite	568	4 618	6 077	680	...
Alumina	6 960	6 520	10 431	10 228	...
Unwrought (a)	33 591	12 279	33 887	24 308	...
Scrap	53	161	3 200	108	...
Saudi Arabia					
Bauxite	259 510	298 071	267 590	148 263	166 125
Alumina	3 998	7 500	6 514	*6 500	202 008
Unwrought (a)	1 220	5 024	4 378	3 821	3 081
Singapore					
Alumina	1 852	3 157	4 177	2 061	2 131
Alumina hydrate	67 903	38 052	28 789	26 162	5 938
Unwrought	198 713	99 334	102 586	82 097	76 658
Scrap	2 583	2 618	5 445	4 791	3 030
Syria					
Scrap	6 238	7 715	...	9 781	...
Taiwan					
Bauxite	83 727	70 906	79 577	71 931	57 556
Alumina	34 411	30 548	31 455	33 754	32 739
Alumina hydrate	45 648	54 596	42 949	53 791	51 739
Unwrought	339 043	301 137	355 481	314 429	387 253
Unwrought alloys	148 859	135 166	156 604	135 131	171 226
Scrap	137 859	132 510	212 883	167 070	139 504
Tajikistan					
Bauxite	...	...	320 336	352 571	...
Alumina	...	...	*230 000	*220 000	...
Thailand					
Bauxite	51 044	35 030	35 055	26 678	39 081
Alumina	10 682	12 525	13 492	10 043	13 086
Alumina hydrate	41 169	49 174	43 308	48 549	58 665
Unwrought	128 759	120 364	111 500	89 268	82 393
Unwrought alloys	125 399	100 444	126 599	106 866	77 242
Scrap	1 491	3 492	5 447	3 123	7 156
Australia					
Bauxite	16 853	6 241	13 935	12 602	6 562
Alumina	11 104	9 859	37 337	11 291	9 273
Unwrought (a)	6 901	13 086	4 161	5 900	5 259
Scrap	5 267	3 838	6 641	6 474	7 429
New Zealand					
Alumina (d)	533 648	...	537 032	648 551	...
Unwrought (a) (d)	12 291	*12 000	14 232	8 390	...
Scrap (d)	1 995	...	3 658	5 161	...

## 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) Imports from CIS only
- (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	1995	1996	1997	1998	1999
Russia	3 000	2 500	*2 500	*2 000	*2 000
Turkey	291	175	19	*20	*20
Morocco	198	152	160	160	150
South Africa	5 537	5 137	3 415	4 243	*4 500
Zimbabwe	20	-----	-----	-----	-----
Canada	684	1 773	630	428	566
Guatemala	674	1 066	752	420	-----
Mexico	1 783	983	1 909	1 301	273
USA	262	242	356	498	449
Bolivia	6 426	6 488	5 999	4 735	2 790
Peru (a)	230	305	242	364	255
China	125 000	128 900	131 100	97 400	89 600
Kyrgyzstan	4 778	6 002	3 062	1 298	1 320
Tajikistan	*1 000	*1 000	*1 200	*1 500	*1 800
Thailand	300	90	80	260	70
Australia (b)	*1 700	*2 000	*2 500	*2 400	*2 500
World Total	152 000	157 000	154 000	117 000	106 000

## 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) Years ended 30 June of that stated

## Exports of Antimony

Country	1995	1996	1997	1998	1999
Austria					
Metal	52	43	59	47	8
Belgium-Luxembourg					
Oxide (a)	*3 200	*4 100	*6 700	*6 400	*8 200
Estonia					
Metal	...	...	63	126	...
Oxide	...	...	155	258	...
France					
Ores & concentrates	...	...	...	26	12 203
Metal	709	387	74	132	13
Oxide	4 199	4 893	5 270	5 292	4 371
Germany					
Metal	58	84	32	38	48
Oxide	1 044	791	957	1 061	1 141
Italy					
Metal	73	10	9	3	36
Netherlands					
Metal	424	303	434	914	206
Oxide	1 252	...	962	1 027	792
Russia					
Ore	...	...	1 272	1 484	1 000
Metal	(a) *600	239	277	660	57
Oxide	39	216	1 824	715	97
Spain					
Metal	36	44	85	6	11
Oxide	906	...	370	829	819
Sweden					
Metal	4	10	2	25	...
Turkey					
Metal	146	4	2	540	412
United Kingdom					
Metal	116	146	116	100	78
Oxide	(a) *4 700	(a) *3 800	(a) *5 600	5 139	(a) *4 000
South Africa					
Ore (c)	----	1	1 585	3 655	...
Oxide	(a) *3 400	(a) *3 700	5 127	4 609	5 501
Canada					
Ores & concentrates	1 547	1 305	195	519	...
Mexico					
Ores & concentrates	224	...	20	...	...
Metal	1 934	906	441	331	365
Oxide	2 160	3 945	3 350	2 901	5 012
USA					
Ores & concentrates	2 834	2 350	3 798	3 997	2 506
Metal	1 715	583	774	1 015	642
Oxide	7 721	4 832	4 033	3 953	3 866
Bolivia					
Ore	3 068	1 859	1 385	1 310	806
Metal	374	165	159	42	105
Oxide	5 609	5 504	5 968	4 508	2 657
Peru					
Metal	222	213	340	352	332
China					
Ores & concentrates	1 917	2 257	3 859	2 375	20
Metal	40 909	34 539	31 034	22 365	45 339
Oxide	20 668	20 040	28 329	28 062	36 704
Sulphide	6 101	6 769	13 850	5 636	...
Dubai					
Metal	...	...	66	20	...
Hong Kong					
Metal (b)	14 103	17 856	16 672	15 290	10 705
India					
Metal (d)	158	0	12	1	...



**Exports of Antimony**

tonnes

Country	1995	1996	1997	1998	1999
Japan					
Metal	144	214	79	343	187
Oxide	2 123	2 016	2 157	1 925	2 339
Kazakhstan					
Metal	...	(a) *200	(a) *100	217	----
Korea, Republic of					
Metal	74	20	145	26	43
Oxide	1 073	1 154	1 335	604	308
Kyrgyzstan					
Metal	6 283	4 700	3 628	1 043	748
Oxide	(a) *400	(a) *400	(a) *1 400	919	995
Singapore					
Metal	240	217	181	11	246
Oxide	...	...	514	471	555
of which, re-exports	...	...	376	369	508
Taiwan					
Metal	26	57	655	379	411
Oxide	1 144	1 170	1 161	1 240	1 144
Thailand					
Metal	934	1 061	705	163	47
Oxide	220	222	1 082	787	3
Australia					
Ores & concentrates	1 958	2 493	2 704	2 863	2 971

Note(s):-

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

## Imports of Antimony

Country	1995	1996	1997	1998	1999
Austria					
Metal	227	93	192	221	131
Oxide	148	202	176	226	262
Belgium-Luxembourg					
Ore	2 631	1 614	1 876	1 703	238
Metal	4 663	4 826	6 277	8 321	6 828
Oxide	687	675	772	1 016	888
Bulgaria					
Metal	60	98	103	...	...
Czech Republic					
Metal	107	49	19	67	12
Oxide	...	...	...	289	394
Estonia					
Metal	...	...	63	125	...
Oxide	...	...	219	195	1
Finland					
Oxide	215	254	236	177	164
France					
Ore	1 619	298	32	128	7
Metal	6 446	5 720	8 569	8 316	7 564
Oxide	821	832	1 008	1 218	1 283
Germany					
Metal	1 154	568	620	746	1 231
Oxide	5 428	5 352	5 064	5 170	4 850
Greece					
Metal	7	39	...	58	98
Italy					
Ore	...	...	417	453	272
Metal	1 170	686	626	956	1 882
Oxide	...	...	4 078	4 543	4 374
Netherlands					
Metal	860	818	724	1 748	1 414
Oxide	2 696	...	2 510	2 675	2 539
Norway					
Metal	10	1	29	10	5
Oxide	175	152	347	353	227
Poland					
Metal	267	258	86	50	36
Portugal					
Metal	75	17	8	24	7
Romania					
Metal	(b) *700	(b) *60	71	87	45
Oxide	...	...	117	85	45
Russia					
Metal	(b) *11 000	881	967	834	1 230
Oxide	...	...	644	204	374
Spain					
Metal	1 940	1 179	1 130	1 510	1 143
Oxide	382	...	902	1 004	1 041
Sweden					
Metal	36	19	75	81	60
Oxide	...	...	543	409	453
Switzerland					
Ores & concentrates	10 820	3 092	1 416	283	22
Metal	29	35	0	27	52
Oxide	536	414	677	681	786
Turkey					
Metal	128	90	120	55	30
Ukraine					
Metal	...	14	25	24	21
United Kingdom					
Metal	3 358	2 171	2 808	950	119
Oxide	1 764	1 629	1 883	2 105	1 623
Yugoslavia, Federal Republic of					
Metal	...	91	100	61	65

**Imports of Antimony**

tonnes

Country	1995	1996	1997	1998	1999
Algeria					
Metal	505	100	121	72	...
Egypt					
Oxide	...	...	19	61	289
South Africa					
Metal	292	317	162	204	221
Oxide	...	...	185	149	166
Tunisia					
Metal	60	76	30	45	45
Canada					
Metal	424	381	433	391	384
Oxide	1 728	1 952	1 965	2 138	2 174
Mexico					
Ores & concentrates	1 991	2 635	2 977	4 198	3 148
Metal	218	493	579	761	1 341
Oxide	2 711	1 014	1 333	1 440	1 907
USA					
Ore	6 136	1 630	1 513	2 644	3 606
Metal	17 015	18 293	14 975	13 298	14 753
Oxide	18 568	22 098	27 906	23 106	23 010
Argentina					
Metal	35	157	200	275	197
Brazil					
Ores & concentrates	461	397	202	9	25
Metal	573	736	920	1 136	1 062
Oxide	530	259	208	204	158
Sulphide	39	53	...	...	...
Colombia					
Metal	80	43	65	92	73
Venezuela					
Metal	19	37	25	77	25
China					
Ores & concentrates	7 840	7 691	9 010	3 681	144
Metal	3 699	3 020	2 675	2 782	1 246
Oxide	859	544	502	1 038	1 312
Dubai					
Metal	...	174	173	24	...
Hong Kong					
Metal	13 813	15 088	11 948	5 613	3 486
Oxide	...	...	2 874	2 459	2 040
India					
Metal (a)	1 020	1 487	1 414	1 406	...
Oxide (a)	133	115	108	214	...
Indonesia					
Metal	304	422	279	192	...
Oxide	371	337	392	365	...
Japan					
Ores & concentrates	4 135	2 593	1 077	698	96
Metal	6 799	6 796	8 796	8 513	8 576
Oxide	10 875	10 276	11 162	8 887	8 270
Sulphide	472	310	283	243	250
Kazakhstan					
Metal	...	...	20	55	62
Korea, Republic of					
Metal	9 181	8 783	10 456	8 920	12 515
Oxide	529	1 053	690	1 149	3 974
Malaysia					
Metal	370	620	381	1 367	...
Pakistan					
Metal (c)	...	117	130	99	127
Philippines					
Metal	65	61	45	10	...
Oxide	...	...	72	114	...

**Imports of Antimony**

Country	1995	1996	1997	1998	1999
Singapore					
Metal	248	412	50	19	458
Oxide	...	...	2 093	1 366	1 798
Taiwan					
Metal	3 094	4 607	4 644	2 962	5 008
Oxide	3 118	3 465	5 516	5 530	7 159
Thailand					
Ores & concentrates	179	875	274	138	553
Metal	934	1 001	1 314	847	562
Oxide	486	638	650	521	829
Australia					
Metal	188	203	197	139	203
Oxide	444	555	523	622	559

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	1995	1996	1997	1998	1999
Belgium	*2 000	*2 000	*2 000	*1 500	*1 500
France	*5 000	*3 000	*2 500	*2 000	*1 000
Georgia	*400	*400	*400	*400	*400
Germany	*250	*250	*250	*200	*200
Russia	*1 500	*1 500	*1 500	*1 500	*1 500
Ghana	4 409	5 443	4 577	*5 000	*5 000
Namibia (a)	1 661	1 302	1 297	233	----
Canada	*250	*250	*250	*250	*250
Mexico	4 778	3 883	3 959	3 396	3 193
Bolivia	362	255	282	284	437
Chile (b)	2 977	9 368	11 159	11 690	...
Peru	4 616	4 969	*3 500	...	...
China	*21 000	*15 000	*15 000	*15 500	*16 000
Iran	*500	*500	*500	*500	*500
Japan	*40	*40	*40	*40	*40
Kazakhstan	1 568	*1 500	*1 500	*1 500	*1 500

## 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, Morocco, Spain, United Kingdom and former Yugoslavia are believed to produce arsenic

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

**Exports of Arsenic**

Country	1995	1996	1997	1998	1999
Denmark					
Metallic arsenic	...	...	1 156	1 301	----
France					
Metallic arsenic	142	19	7	8	5
Germany					
Metallic arsenic	19	19	13	17	22
Italy					
Metallic arsenic	...	...	0	14	5
Netherlands					
Metallic arsenic	41	...	26	41	31
United Kingdom					
Metallic arsenic	12	5	3	22	45
Namibia					
White arsenic	2 133	1 550	1 044	314	----
USA					
Metallic arsenic	482	81	81	534	1 408
Bolivia					
White arsenic	362	255	282	284	438
Chile					
White arsenic	2 977	9 368	11 159	11 690	...
China					
White arsenic (a)	*16 000	*11 200	*16 600	*23 900	*16 500
Metallic arsenic	2 262	1 368	1 901	2 184	2 497
Japan					
Metallic arsenic	10	11	13	17	28
Korea, Republic of					
White arsenic	34	----	----	----	----
Australia					
Metallic arsenic	69	242	50	127	70

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	1995	1996	1997	1998	1999
Austria					
Metallic arsenic	20	18	18	22	1
Belgium-Luxembourg					
Metallic arsenic	...	32	20	40	46
Denmark					
Metallic arsenic	...	...	829	920	----
France					
Metallic arsenic	259	79	76	72	68
Germany					
Metallic arsenic	----	42	19	32	25
Greece					
Metallic arsenic	...	...	...	21	26
Irish Republic					
Metallic arsenic	...	...	20	19	20
Italy					
Metallic arsenic	...	...	76	102	77
Netherlands					
Metallic arsenic	93	...	...	75	92
Norway					
Metallic arsenic	553	36	36	36	61
Poland					
Metallic arsenic	70	35	42	40	25
Spain					
Metallic arsenic	124	...	73	93	112
Sweden					
Metallic arsenic	...	...	13	15	20
Switzerland					
Metallic arsenic	3	6	2	8	3
Turkey					
White arsenic	52	79	403	...	1
United Kingdom					
Metallic arsenic	62	83	122	81	108
South Africa					
White arsenic	...	...	...	1 256	2 849
Canada					
Metallic arsenic	76	193	138	668	1 711
USA					
White arsenic	29 037	27 969	29 996	38 636	29 131
Metallic arsenic	576	252	909	1 000	1 298
Brazil					
White arsenic	472	317	...	...	...
Hong Kong					
Metallic arsenic	...	...	69	71	58
India					
White arsenic (b)	917	1 162	1 328	2 170	...
Metallic arsenic (b)	192	48	109	183	...
Indonesia					
White arsenic	140	98	----	----	...
Japan					
Metallic arsenic	35	0	78	----	103
Korea, Republic of					
Metallic arsenic	99	34	103	48	85
Taiwan					
White arsenic	0	40	0	159	99
Thailand					
Metallic arsenic	34	10	36	24	56

**Imports of Arsenic**

Country	1995	1996	1997	1998	1999
Australia					
White arsenic	1 316	1 188	1 234	2 122	...
Metallic arsenic	22	79	124	148	61
New Zealand					
Metallic arsenic (a)	28	...	11	30	...

## 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



**Production of Asbestos**

tonnes

Country	1995	1996	1997	1998	1999
Bulgaria	100	400	300	672	354
Greece	75 003	80 213	63 294	35 068	32 000
Russia	685 000	629 863	723 973	601 859	683 174
Slovakia	...	36 000	30 000	19 000	...
Yugoslavia, Federal Republic of	497	509	765	1 457	361
Egypt (b)	392	552	776	147	...
South Africa					
Crocidolite	7 396	5 100	232	-----	-----
Chrysotile	81 246	56 700	49 754	27 752	18 707
Swaziland					
Chrysotile	28 574	26 014	25 888	27 693	22 912
Zimbabwe					
Chrysotile	169 487	165 494	144 959	123 295	87 872
Canada					
Chrysotile	524 392	475 130	454 991	302 000	311 000
USA (a)	9 290	9 550	6 890	5 760	7 190
Argentina	300	446	301	309	*300
Brazil	210 352	213 213	208 447	198 332	188 386
Colombia (c)	122 717	137 277	136 700	...	...
China	447 000	440 500	437 000	314 000	329 000
India					
Amphibole (e)	23 844	27 180	25 537	20 111	18 304
Iran (d)	...	2 127	10 373	...	...
Japan					
Chrysotile	2 399	2 269	2 254	1 389	1 052
Kazakhstan	160 829	134 484	181 818	155 400	139 300
World Total	2 600 000	2 400 000	2 500 000	2 000 000	2 000 000

## Note(s):-

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

(a) Sold or used by producers

(b) Years ended 30 June of that stated

(c) Crude

(d) Years ended 20 March following that stated

(e) Years ended 31 March following that stated

**Exports of Unmanufactured Asbestos**

Country	1995	1996	1997	1998	1999
Belarus	*2 000	*3 000	*3 000	3 604	4 334
Belgium-Luxembourg	94	11	263	685	1
Czech Republic	100	27 100	----	51	1
Estonia	9 037	300	4	...	578
France	224	14 053	164	----	...
Greece	67 991	74 043	51 720	35 185	28 360
Italy	22	51	42	7	...
Lithuania	5 173	4 656	7 113	2 982	3 967
Poland	948	200	300	300	...
Russia	76 820	33 411	98 832	241 681	261 138
Slovakia	100	201	328	...	...
Spain	142	625	19	15	5
United Kingdom	14	967	16	45	49
South Africa	92 100	60 829	38 209	24 875	20 174
Swaziland	*19 000	*20 000	*20 000	*19 000	...
Zimbabwe	174 558	152 091	143 169	113 008	204 575
Canada	509 575	504 069	430 288	319 430	332 406
USA	16 556	24 231	23 061	18 896	21 997
Brazil	71 747	78 294	63 165	51 239	49 419
China	3 465	9 392	13 553	18 591	10 720
India (a)	14	275	282	348	...
Japan	74	133	160	32	20
Kazakhstan	115 400	139 100	60 429	123 906	107 428
Kyrgyzstan	793	...	...	69	13
Saudi Arabia	8 400	11 530	6 440	8 607	17 970

Note(s):-

(a) Years ended 31 March following that stated

## Imports of Unmanufactured Asbestos

tonnes

Country	1995	1996	1997	1998	1999
Albania	*1 000	9	----	----	...
Azerbaijan	...	...	...	...	2 976
Belarus	*20 000	*20 000	*20 000	21 518	25 639
Belgium-Luxembourg	10 462	5 681	2 366	2	25
Croatia	3 045	2 363	3 033	2 746	1 704
Czech Republic	4 500	1 400	1 315	1 684	1 441
Denmark	345	225	125	----	----
Estonia	7 976	800	800	253	833
France	48 205	20 576	55	979	15
Germany	98	119	143	191	214
Greece	272	252	239	244	72
Hungary	3 356	5 249	5 759	7 452	1 486
Irish Republic	6 355	4 638	2 468	891	8
Italy	126	127	----	192	305
Latvia	2 228	1 212	1 828	1 385	1 042
Lithuania	5 600	6 343	10 819	5 877	4 102
Macedonia	2 800	2 999	1 998	...	...
Moldova	2 800	1 537	3 189	357	300
Poland	31 315	15 700	23 000	9 700	...
Portugal	9 163	6 442	7 324	6 302	8 949
Romania	27 425	39 130	6 807	18 705	13 986
Russia	41 400	31 366	17 128	30 157	23 853
Slovakia	2 300	3 322	1 215	...	...
Slovenia	4 900	5 000	1 800	1 716	1 487
Spain	26 852	27 030	21 192	21 349	17 847
Sweden	298	158	----	----	----
Turkey	25 471	26 863	33 725	22 674	15 494
United Kingdom	10 157	7 099	4 820	1 840	789
Yugoslavia, Federal Republic of	...	...	1 365	1 427	592
Algeria	*10 000	7 102	9 997	8 017	...
Egypt	7 600	29 849	10 100	7 850	3 347
Morocco	5 023	5 643	4 376	4 500	...
Nigeria	*15 000	15 841	7 799	12 515	79 108
Senegal	*300	*300	*300	...	1 542
South Africa	7 891	9 133	9 571	7 013	10 262
Tunisia	7 297	6 081	3 573	4 907	1 700
Zambia	*3 000	*3 000	*3 000	*3 000	...
Zimbabwe	*1 500	*1 500	*1 000	*1 000	...
Canada	297	353	128	138	203
Cuba (d)	*3 000	*7 100	*6 600	*4 400	...
El Salvador	398	398	999	1 266	1 688
Mexico	19 154	29 097	28 886	29 102	22 755
Panama	844	650	1 171	600	140
USA	21 941	30 449	20 922	15 823	15 808
Argentina	5 788	5 791	6 549	4 847	2 634
Bolivia	1 575	1 567	1 818	1 664	1 212
Brazil	43 524	31 765	38 941	39 597	24 049
Chile	11 666	9 349	9 198	5 125	...
Colombia	19 925	20 548	16 650	14 554	11 569
Ecuador	805	1 278	1 348	2 253	4 044
Peru	4 947	4 098	4 078	2 944	1 188
Uruguay	903	895	1 511	1 432	1 187
Venezuela	5 012	1 561	2 214	1 782	1 991
China	68 300	77 959	103 265	71 694	69 391
Dubai	...	6 100	7 660	5 291	...
India (c)	91 909	84 378	83 356	106 249	...
Indonesia	50 231	48 331	41 845	21 079	...
Iran (a)	54 933	...	75 587	40 505	...
Israel	*2 200	*1 500	----	----	...
Japan	191 475	177 869	176 021	120 813	117 143
Kazakhstan	...	...	...	116	537
Korea, Republic of	88 722	77 145	44 985	29 619	32 519
Kyrgyzstan	11 445	12 542	22 200	18 800	18 900
Malaysia	28 200	19 600	21 700	8 400	...

**Imports of Unmanufactured Asbestos**

Country	1995	1996	1997	1998	1999
Oman	181	2 061	1 331	1 231	3 636
Pakistan (b)	...	9 216	989	4 583	2 865
Philippines	2 904	1 770	2 206	1 500	...
Saudi Arabia	306	*500	-----	-----	-----
Singapore	475	429	243	18	91
Sri Lanka	35	4 818	18	1 744	...
Syria	1 222	2 672	3 068	1 488	...
Taiwan	5 582	6 164	5 773	5 682	6 572
Thailand	181 692	190 205	177 124	60 093	100 423
United Arab Emirates	*6 000	*6 000	*6 000	*5 000	...
Australia	1 488	1 366	1 556	1 471	1 316

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

## Production of Barytes

tonnes

Country	1995	1996	1997	1998	1999
Belgium	*30 000	*30 000	*30 000	*40 000	*30 000
Bosnia & Herzegovina	*1 000	*500	*2 000	*2 000	*2 000
Bulgaria	*150 000	*120 000	*120 000	124 000	111 000
France	75 400	81 200	77 000	75 400	75 700
Georgia	11 589	1 473	2 782	390	----
Germany	122 268	121 476	118 698	123 272	118 489
Greece	668	671	842	*800	*800
Italy	44 393	42 795	26 694	31 792	*25 000
Poland	6 100	6 200	3 400	----	----
Romania	18 169	12 541	*12 000	10 327	4 641
Russia	60 000	55 000	*60 000	*60 000	*60 000
Slovakia	41 600	44 930	62 102	14 877	15 900
Spain	30 103	81 621	102 411	79 820	*70 000
Turkey	100 751	104 872	226 594	160 042	150 058
United Kingdom	*85 000	93 000	*74 000	64 000	59 000
Algeria	29 838	31 348	39 140	37 006	50 510
Egypt (e)	2	48	320	600	...
Morocco	289 451	282 537	343 314	353 206	320 456
Nigeria	75 000	131 620	147 645	245 554	...
South Africa	6 048	7 428	2 071	610	2 844
Tunisia	8 100	15 360	12 847	8 011	*7 000
Zimbabwe	----	1 150	1 217	1 844	3 140
Canada	67 000	58 000	77 000	90 000	126 000
Guatemala	570	2 776	3 000	----	75
Mexico	248 367	470 028	236 606	161 555	134 074
USA (b)	543 000	662 000	692 000	476 000	434 000
Argentina	28 907	14 038	13 121	1 833	*1 300
Bolivia	10 845	4 745	4 402	2 500	6 005
Brazil (d)	48 550	56 149	51 961	46 632	44 906
Chile	3 080	2 559	2 654	1 430	1 520
Colombia	1 500	6 800	900	*900	*900
Peru	37 476	37 103	63 600	7 506	...
Afghanistan (c)	*2 000	*2 000	*2 000	*2 000	*2 000
China	*1 300 000	1 950 000	4 462 400	2 941 200	1 715 740
India (a)	442 733	381 832	453 073	660 854	204 569
Iran (c)	161 401	158 844	150 241	*180 000	*205 000
Kazakhstan	85 000	95 000	*25 000	12 700	10 000
Korea, Dem. P.R. of	*120 000	*110 000	*120 000	*100 000	*70 000
Korea, Republic of	90	80	105	...	100
Laos	2 740	5 200	3 000	9 050	39 000
Malaysia	16 966	17 458	2 608	1 580	13 506
Myanmar (a)	30 641	22 073	20 467	18 562	27 679
Pakistan (e)	8 254	9 645	23 390	20 657	16 845
Saudi Arabia	6 000	8 000	*8 000	*8 000	*7 000
Thailand	35 883	48 074	54 817	105 221	76 092
Australia	*13 000	*12 000	*17 000	*15 000	*18 000
World Total	4 400 000	5 400 000	8 000 000	6 300 000	4 500 000

## 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) Years ended 30 June of that stated

## Exports of Barytes

Country	1995	1996	1997	1998	1999
Belgium-Luxembourg	45 101	40 181	15 802	17 222	11 198
Bulgaria	68 366	82 855	116 505	(b) *75 100	(b) *106 800
France	63 000	...	...	...	...
Georgia	...	...	617	470	2
Germany	15 256	17 470	18 552	14 779	14 978
Italy	1 422	1 082	427	1 876	432
Netherlands	74 571	59 982	34 350	54 463	54 129
Norway	1 811	6 945	16 207	11 514	4 630
Russia	4 900	3 596	1 693	(b) *500	(b) *1 200
Slovakia	35 300	38 400	15 580	16 010	15 494
Spain	29 392	64 381	80 981	70 264	18 054
Turkey	103 176	121 124	125 412	123 974	57 558
United Kingdom	9 237	5 483	9 475	6 590	8 232
Morocco	350 682	297 932	320 454	354 800	...
Tunisia	5 787	5 483	291	1 002	4 622
Canada	12 267	15 391	21 075	25 426	15 931
Mexico	129 536	125 008	65 325	18 145	15 349
USA	15 919	31 547	23 245	16 910	24 419
Bolivia	10 845	4 745	4 402	2 500	5 960
Peru	34 987	23 341	64 697	8 353	3 502
Venezuela	1 182	1 988	...	3 650	2 595
China	1 197 597	1 860 388	2 927 095	1 774 337	1 286 855
Hong Kong (c)	4 288	1 942	120	115	1 301
India (a)	751 486	140 023	24 372	106 232	...
Indonesia	1 847	2 384	4 031	3 161	...
Kazakhstan	115 177	98 089	30 135	6 749	28 434
Korea, Dem. P.R. of (b)	...	...	...	*2 800	*3 300
Laos	3 330	2 740	3 000	9 050	6 600
Oman	328	486	4 200	441	4 073
Singapore	16 054	10 936	8 072	7 405	5 537
of which, re-exports	10 815	6 413	4 664	4 028	5 352
Thailand	47 085	43 000	31 250	57 652	58 914
Australia	3 154	2 259	2 737	2 055	688

## 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	1995	1996	1997	1998	1999
Albania	...	3 810	1 701	22	23
Austria	1 451	2 992	2 924	2 488	2 382
Azerbaijan	...	...	...	...	14 765
Belarus	2 000	2 000	2 000	2 038	2 748
Belgium-Luxembourg	14 075	17 163	12 384	11 741	15 253
Croatia	72	243	560	105	356
Czech Republic	39 964	14 692	10 828	8 004	9 652
Denmark	1 553	5 023	15 988	24 606	27 101
Finland	1 748	1 745	2 134	2 223	2 120
France	25 989	17 667	24 860	25 271	22 576
Germany	223 031	203 474	230 696	255 201	202 026
Greece	1 295	4 373	1 951	1 278	858
Hungary	*3 000	*3 000	2 725	2 799	1 095
Irish Republic	548	574	676	114	230
Italy	52 925	67 046	74 827	70 887	66 177
Netherlands	109 287	136 882	136 604	114 635	73 579
Norway	108 669	142 150	158 036	145 616	134 596
Poland	3 200	5 416	4 800	6 700	8 225
Portugal	1 100	5 060	1 176	3 656	2 065
Romania	21 750	18 419	18 984	88 130	15 128
Russia	*60 000	19 372	24 422	27 025	34 847
Slovakia	...	264	575	456	...
Spain	19 054	10 429	23 686	25 696	30 691
Sweden	3 125	2 668	4 155	4 212	2 433
Switzerland	2 263	1 961	3 663	4 520	2 051
Turkey	299	457	912	2 069	515
United Kingdom	110 700	85 018	139 065	98 506	65 856
Algeria	18 100	*10 000	37 769	39 041	...
Cameroon	3 200	4 400	*3 000	*3 000	...
Congo	*3 000	*3 000	*3 000	*3 000	...
Gabon	1 700	1 300	*1 300	*1 300	...
Ghana	*3 000	*3 000	*3 000	*3 000	...
South Africa	2 198	1 886	1 980	1 421	1 716
Tunisia	1 100	3 800	949	350	2 687
Canada	16 667	15 631	21 860	13 642	56 003
Mexico	7 593	10 615	68 360	30 385	3 589
Trinidad & Tobago	20 655	30 051	33 914	33 500	...
USA	1 043 138	1 538 056	2 244 245	1 874 616	858 094
Argentina	10 321	4 269	8 762	2 982	5 922
Colombia	55 283	46 159	47 109	20 391	48 356
Ecuador	1 168	5 311	3 357	572	2 073
Venezuela	163 138	117 277	149 874	109 890	73 993
Abu Dhabi	31 907	10 494	3 069	297	196
Dubai	...	5 044	1 122	1 906	...
Hong Kong	1 186	259	222	365	947
Indonesia	40 430	70 705	85 550	71 988	...
Japan	130 135	139 559	114 384	90 894	113 018
Kazakhstan	*5 000	*5 000	*5 000	7 290	431
Korea, Republic of	61 045	85 211	63 695	46 240	80 088
Malaysia	11 232	20 400	10 700	8 500	...
Oman	893	144	941	10 584	...
Philippines	1 407	1 700	908	870	...
Saudi Arabia	30 734	972	59 888	3 249	38 618
Singapore	23 932	11 833	7 845	4 951	2 687
Syria	2 078	4 100	13 712	2 668	...
Taiwan	9 847	6 965	5 538	5 011	3 748
Thailand	6 180	*6 000	11 123	9 711	11 167
Australia	15 297	21 210	7 289	19 190	5 401
New Zealand (a)	896	...	750	1 103	...

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

## Production of Bentonite and Fuller's Earth

Country	1995	1996	1997	1998	1999
Armenia					
Bentonite	5 000	5 000	*3 000	*3 000	3 493
Azerbaijan					
Bentonite	60 000	65 000	70 000	...	...
Bosnia & Herzegovina					
Bentonite	*800	*800	*800	*800	...
Bulgaria					
Bentonite	125 800	202 000	170 700	176 110	242 725
Croatia					
Bentonite	7 327	9 728	7 331	7 581	8 441
Cyprus					
Bentonite	51 200	70 927	101 000	140 000	176 000
Czech Republic					
Bentonite	54 000	59 000	110 000	125 000	160 000
Denmark					
Bentonite	6 695	8 050	*3 000	*9 000	...
Georgia					
Bentonite	15 000	13 000	12 000	*11 000	...
Germany					
Bentonite	529 446	491 346	511 190	508 738	476 580
Fuller's earth	*500 000	*500 000	*500 000	*500 000	...
Greece					
Bentonite	1 115 119	973 517	942 555	1 148 408	1 049 657
Hungary					
Bentonite	15 000	15 376	14 848	20 122	9 301
Italy					
Bentonite	590 845	471 535	511 760	580 209	...
Fuller's earth	33 600	26 455	22 025	29 470	...
Macedonia					
Bentonite	*30 000	*30 000	*30 000	*30 000	...
Poland					
Bentonite	1 500	1 800	----	24 000	96 000
Fuller's earth	4 800	6 200	6 100	5 400	...
Romania					
Bentonite	42 277	43 543	27 133	25 434	19 609
Russia					
Bentonite	635 000	660 000	*655 000	...	...
Slovakia					
Bentonite	74 960	74 013	79 760	81 010	64 390
Spain					
Bentonite	172 265	151 045	196 661	46 241	...
Attapulgit	94 266	130 140	133 035	113 330	...
Sepiolite	531 192	565 636	554 268	553 584	...
Turkey					
Bentonite	605 499	482 057	521 158	565 708	899 614
Sepiolite	...	4 051	11 277	7 213	19 945
Ukraine					
Bentonite	30 000	35 000	*25 000	...	...
United Kingdom					
Fuller's earth (a)	132 300	142 600	134 800	94 400	74 500
Algeria					
Bentonite	17 088	16 723	17 657	15 655	15 491
Fuller's earth	4 061	2 803	3 960	3 942	2 489
Egypt					
Bentonite (e)	4 625	2 210	1 267	1 545	...
Morocco					
Bentonite	29 308	39 680	49 633	33 311	36 528
Fuller's earth (f)	15 027	17 223	24 465	30 650	21 956
Mozambique					
Bentonite	6 566	11 867	13 782	11 133	11 187
Senegal					
Attapulgit	81 100	79 200	82 607	110 400	118 200
South Africa					
Bentonite	70 927	48 076	75 538	48 382	44 462
Attapulgit	8 049	14 318	9 421	7 830	7 067



**Production of Bentonite and Fuller's Earth**

tonnes

Country	1995	1996	1997	1998	1999
Canada					
Bentonite (b)	12 400	15 300	18 900	...	...
Guatemala					
Bentonite	5 839	3 755	4 000	2 278	4 301
Mexico					
Bentonite	72 599	69 810	111 503	185 729	208 611
Fuller's earth	15 755	41 800	51 430	48 016	47 522
Nicaragua					
Bentonite	621	1 361	1 724	1 406	1 760
USA					
Bentonite (c)	3 820 000	3 740 000	4 020 000	3 820 000	*3 850 000
Fuller's earth (c)	2 640 000	2 600 000	2 370 000	2 350 000	*2 350 000
Argentina					
Bentonite	111 011	134 588	113 572	131 320	152 300
Fuller's earth	*1 600	*1 500	*1 500	*1 500	...
Brazil					
Bentonite	166 675	168 633	106 592	264 303	296 489
Colombia					
Bentonite	9 000	...	8 640	...	...
Peru					
Bentonite	26 961	18 592	22 285	19 563	...
China					
Bentonite	...	...	...	1 334 900	766 860
India					
Bentonite (d)	430 000	439 000	446 000	446 000	457 927
Fuller's earth (d)	109 000	29 000	27 000	27 000	87 953
Indonesia					
Bentonite	26 057	*26 000	*25 000	*25 000	...
Iran					
Bentonite (g)	54 798	84 404	109 520	*115 000	*155 000
Japan					
Bentonite	478 056	468 728	495 646	443 566	426 455
Fuller's earth	86 864	89 885	...	...	...
Korea, Republic of					
Bentonite	66 157	93 864	142 027	59 765	112 258
Fuller's earth	27 563	21 820	24 829	28 805	35 246
Myanmar					
Bentonite (d)	4 769	4 908	610	*1 000	...
Pakistan					
Bentonite (e)	7 802	8 769	10 169	15 000	15 349
Fuller's earth (e)	14 844	11 864	12 307	14 659	15 565
Philippines					
Bentonite	7 836	3 486	...	3 900	1 844
Thailand					
Bentonite	8 285	11 260	3 200	...	...
Turkmenistan					
Bentonite	10 000	5 000	5 000	...	...
Uzbekistan					
Bentonite	15 000	15 000	15 000	...	...
Australia					
Bentonite (e)	239 231	79 157	73 148	104 458	179 804
Fuller's earth	18 159	17 173	28 262	15 670	5 639
New Zealand					
Bentonite	3 699	13 734	12 802	15 465	12 258

tonnes

**Production of Bentonite and Fuller's Earth**

Country	1995	1996	1997	1998	1999
World Total Bentonite	11 200 000	10 700 000	11 200 000	11 400 000	11 500 000
World Total Fuller's Earth (h)	4 300 000	4 300 000	4 100 000	4 000 000	4 100 000

## 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 attapulgite, a mineralogically distinct clay mineral but exhibiting similar properties
  - (4) In addition to the countries listed, Austria, Tanzania and Zimbabwe are believed to produce bentonite. France and Iran may produce fuller's earth
- (a) Saleable production based on data from producing companies
  - (b) Data for Saskatchewan only
  - (c) Sold or used by producers
  - (d) Years ended 31 March following that stated
  - (e) Years ended 30 June of that stated
  - (f) Smectite
  - (g) Years ended 20 March following that stated
  - (h) Including attapulgite and sepiolite

**Exports of Bentonite and Fuller's Earth**

tonnes

Country	1995	1996	1997	1998	1999
Armenia					
Bentonite	...	...	3 333	(c) *700	(c) *2 600
Austria					
Bentonite	...	...	6 757	7 281	1 239
Azerbaijan					
Bentonite	62 000	65 300	(c) *85 600	(c) *32 600	(c) *6 700
Belgium-Luxembourg					
Bentonite	418	1 566	1 447	2 207	3 933
Bosnia & Herzegovina					
Bentonite (c)	...	...	*4 900	*10 200	*11 100
Bulgaria					
Bentonite (c)	*70 000	*74 300	*102 600	*104 000	*144 800
Croatia					
Bentonite	1 018	1 294	436	342	365
Cyprus					
Bentonite	14 127	31 397	51 912	54 475	82 084
Czech Republic					
Bentonite	18 048	21 633	20 608	23 306	26 099
Denmark					
Bentonite	243	2 770	2 199	3 650	4 309
Finland					
Bentonite	233	192	11 301	24 867	29 875
France					
Bentonite	24 412	22 569	25 523	27 795	30 189
Fuller's earth	2 164	2 689	2 975	2 431	2 312
Georgia					
Bentonite (c)	...	...	*8 400	*11 500	*6 900
Germany					
Bentonite	42 259	26 021	72 839	54 018	64 993
Greece					
Bentonite	130 824	65 071	12 002	126 698	39 742
Hungary					
Bentonite	696	620	501	873	1 673
Italy					
Bentonite	182 918	172 627	182 225	200 241	182 417
Macedonia					
Bentonite	...	5 025	8 287	10 546	...
Netherlands					
Bentonite	79 790	71 432	85 313	126 243	142 947
Fuller's earth	15 891	...	6 205	17 696	10 421
Romania					
Bentonite	...	...	927	409	6 893
Russia					
Bentonite	4 000	2 636	3 491	3 659	1 351
Slovakia					
Bentonite	(c) *39 300	58 042	66 771	45 766	55 948
Fuller's earth (c)	*400	*800	*900	*500	*1 400
Spain					
Bentonite	12 046	12 446	13 398	62 307	61 964
Sepiolite	582 387	640 128	614 698	585 893	612 533
Fuller's earth	10 347	...	7 490	20 736	11 999
Sweden					
Bentonite	5 326	5 522	4 459	4 706	5 482
Turkey					
Bentonite	50 935	68 124	61 999	90 182	104 425
Ukraine					
Bentonite (c)	...	*12 300	*16 400	*9 200	*17 200
United Kingdom					
Bentonite	73 210	84 357	96 781	108 868	72 593
Fuller's earth	20 821	32 730	61 077	739	554
Algeria	...	...	7 469	1 195	...
Egypt	...	2 017	2 092	2 040	3 635
Morocco					
Bentonite	28 174	27 775	40 238	...	...
Fuller's earth	12 450	1 192	892	...	...

tonnes

**Exports of Bentonite and Fuller's Earth**

Country	1995	1996	1997	1998	1999
Mozambique					
Bentonite	4 962	6 600	6 660	6 192	4 160
Senegal					
Fuller's earth (b)	46 322	...	...	106 965	139 117
Canada					
Bentonite	1 605	3 241	1 397	2 306	1 912
Guatemala					
Bentonite	3 110	2 153	2 543	2 076	2 693
Mexico					
Bentonite	6 518	13 074	15 713	38 665	59 107
USA					
Bentonite	735 077	796 289	860 077	812 364	743 711
Fuller's earth	62 618	111 820	146 667	119 205	152 708
Argentina					
Bentonite	24 008	29 671	35 102	32 916	32 592
Colombia					
Bentonite	841	642	1 170	970	320
China					
Bentonite	67 997	73 169	65 248	55 072	83 105
Fuller's earth	1 289	1 182	5 967	3 910	7 116
India					
Bentonite (d)	147 856	174 117	183 616	210 975	...
Indonesia					
Bentonite	10 947	5 208	6 196	3 813	...
Fuller's earth	3 295	4 510	3 079	3 262	...
Iran					
Fuller's earth (a)	7 042	...	497	...	...
Israel					
Bentonite (c)	...	*100	*700	*1 100	*1 000
Japan					
Bentonite	1 986	2 038	2 245	1 518	2 372
Korea, Republic of					
Bentonite	12 696	11 221	6 102	3 240	4 538
Singapore					
Bentonite	18 148	15 703	14 900	11 150	5 435
of which, re-exports	10 803	8 635	10 262	7 452	4 330
Thailand					
Bentonite	67	...	529	1 303	1 172
Australia					
Bentonite	15 477	21 616	17 869	13 126	13 348
Fuller's earth	16	1 685	2 303	2 570	2 160

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

**Imports of Bentonite and Fuller's Earth**

tonnes

Country	1995	1996	1997	1998	1999
Austria					
Bentonite	...	...	45 596	50 393	40 604
Belarus	...	...	...	7 222	6 910
Belgium-Luxembourg					
Bentonite	12 687	15 245	16 800	17 118	18 362
Fuller's earth	1 122	1 398	2 991	2 041	2 387
Croatia					
Bentonite	1 116	295	5 171	17 074	11 556
Czech Republic					
Bentonite	3 065	5 394	7 162	9 271	11 753
Denmark					
Bentonite	19 077	23 589	19 689	24 482	28 849
Fuller's earth	551	502	589	904	572
Finland					
Bentonite	18 688	22 722	48 473	56 864	53 935
Fuller's earth	620	689	366	1 791	51
France					
Bentonite	110 679	87 451	135 717	160 789	170 190
Fuller's earth	6 184	2 668	3 345	2 174	722
Germany					
Bentonite	246 047	164 551	207 106	243 554	281 618
Fuller's earth	30 365	21 878	9 538	9 207	7 045
Greece					
Bentonite	1 200	301	3 298	9 659	5 740
Hungary	...	4 396	6 348	3 363	4 243
Irish Republic					
Bentonite	1 510	931	2 195	2 125	775
Italy					
Bentonite	64 483	57 941	67 677	79 538	77 957
Fuller's earth	...	...	11 396	12 575	13 346
Lithuania					
Bentonite	1 018	894	1 302	1 779	1 387
Netherlands					
Bentonite	172 660	185 906	177 283	244 576	309 914
Fuller's earth	18 806	...	31 364	20 800	21 124
Norway					
Bentonite	28 440	24 533	17 242	17 518	16 191
Poland					
Bentonite	55 464	71 300	76 900	71 800	60 333
Fuller's earth	1 000	900	1 000	1 100	1 236
Portugal					
Bentonite	...	12 844	13 941	18 847	12 681
Romania	...	...	2 459	2 640	1 895
Russia					
Bentonite	124 800	146 584	186 178	131 473	176 089
Slovakia					
Bentonite	...	7 205	3 749	8 118	6 614
Spain					
Bentonite	46 796	38 940	54 551	51 248	54 139
Sweden					
Bentonite	122 765	110 649	90 429	146 144	118 387
Switzerland					
Bentonite	20 971	20 541	21 245	22 075	25 054
Fuller's earth	1 812	2 328	2 187	1 737	2 121
United Kingdom					
Bentonite	201 555	166 278	162 819	331 453	238 789
Fuller's earth	6 144	1 720	...	51 398	16 327
Egypt	...	2 535	5 315	4 335	7 339
Nigeria	...	...	2 758	11 837	7 561
South Africa					
Bentonite	6 841	3 753	1 984	2 701	2 551
Tunisia					
Bentonite	6 176	3 566	5 543	4 865	3 708
Canada					
Bentonite	343 826	381 042	371 660	324 995	336 280
Fuller's earth	10 169	9 009	7 873	22 817	16 522

**Imports of Bentonite and Fuller's Earth**

Country	1995	1996	1997	1998	1999
Mexico					
Bentonite	7 993	11 173	34 205	45 057	41 356
USA					
Bentonite	3 114	7 514	7 562	7 772	8 909
Fuller's earth	100	368	3 533	288	398
Brazil					
Bentonite	34 486	36 717	35 029	60 814	66 898
Chile					
Bentonite	6 587	6 224	7 762	6 040	...
Colombia					
Bentonite	3 403	17 082	9 629	10 258	4 812
Peru					
Bentonite	1 526	2 957	3 624	3 434	2 689
Uruguay					
Bentonite	478	363	101	414	506
Venezuela					
Bentonite	98 770	52 729	71 291	62 763	12 057
China					
Bentonite	2 000	2 007	1 679	2 083	5 583
Fuller's earth	2 009	2 272	1 160	1 152	457
Hong Kong					
Bentonite	17 784	16 181	8 408	3 880	7 024
Indonesia					
Bentonite	9 941	36 019	24 476	12 206	...
Japan					
Bentonite	254 970	218 252	227 816	157 386	173 122
Fuller's earth	7 015	7 479	8 350	8 125	8 239
Korea, Republic of					
Bentonite	11 494	18 857	26 724	17 067	60 067
Fuller's earth	334	937	1 861	3 038	4 282
Kuwait					
Bentonite	14 019	29 889	5 461	...	...
Malaysia					
Bentonite	63 441	132 553	146 872	73 012	...
Fuller's earth	10 211	8 338	9 065	34 007	...
Pakistan					
Bentonite (a)	...	1 230	1 860	1 045	1 355
Philippines					
Bentonite	13 537	6 375	8 446	3 429	...
Fuller's earth	6 376	6 984	6 119	6 634	...
Saudi Arabia					
Bentonite	13 522	18 099	17 493	26 727	20 435
Singapore					
Bentonite	17 395	26 401	24 554	21 211	10 812
Fuller's earth	232	47	26	134	104
Taiwan					
Bentonite	36 741	33 839	34 838	30 692	33 992
Fuller's earth	743	1 247	2 173	2 527	3 111
Thailand					
Bentonite	42 479	...	33 685	17 961	33 955
Australia					
Bentonite	20 537	4 534	10 370	12 190	13 052
New Zealand (a)	2 597	...	2 746	3 367	...

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	1995	1996	1997	1998	1999
Bulgaria	*40	*40	*40	*40	*40
Romania	*40	*40	*40	*40	*40
Russia	23	10	10	*10	*10
Canada	187	176	230	219	311
Mexico	995	1 070	1 642	1 204	560
USA	*100	*100	*50	...	...
Peru (a)	*900	*1 000	*1 000	*1 000	*1 000
China (c)	739	360	757	818	855
Japan (b)	591	562	550	479	479
Kazakhstan	33	15	13	...	...
Tajikistan	*11	*5	*5	*5	*5
Australia	*100	*100	*100	*100	*100
World Total	3 800	3 500	4 400	4 000	3 500

## 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  
(b) Metal production  
(c) Exports of metal have always been higher than mine production in recent years

## Exports of Bismuth

Country	1995	1996	1997	1998	1999
Belgium-Luxembourg					
Compounds	519	454	842	1 172	1 373
Finland					
Metal	----	----	...	17	27
France					
Compounds	44	40	81	14	10
Metal	93	77	47	44	11
Germany					
Compounds	50	79	336	27	28
Metal	267	133	75	102	51
Italy					
Metal	10	...	...	3	2
Netherlands					
Metal	16	170	48	300	29
Russia					
Metal	...	10	35	269	11
Spain					
Compounds	77	...	...	40	52
Metal	5	27	12	12	7
Sweden					
Metal	...	...	6	----	24
United Kingdom					
Metal	743	859	2 038	1 973	2 369
Canada					
Metal	220	141	150	176	190
Mexico					
Metal	865	914	1 731	2 526	775
USA					
Compounds	174	64	135	340	196
Metal	269	161	243	266	302
Peru					
Metal	521	660	1 204	880	660
China					
Metal	3 511	1 199	1 603	1 344	2 694
Hong Kong					
Metal (a)	187	117	9	----	52
Japan					
Metal	36	5	11	5	9
Kazakhstan					
Metal	...	10	11	2	54
Korea, Republic of					
Metal	97	75	107	94	53

Note(s):-

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

(a) Re-exports



**Imports of Bismuth**

tonnes

Country	1995	1996	1997	1998	1999
Austria					
Metal	7	21	...	6	17
Belgium-Luxembourg					
Metal	7	36	...	3	24
Czech Republic					
Metal	...	...	32	21	31
Denmark					
Metal	1	1	...	5	6
France					
Compounds	47	75	163	130	123
Metal	335	312	283	300	291
Germany					
Compounds	626	471	426	710	861
Metal	647	421	940	1 314	1 597
Greece					
Metal	...	2	6	2	10
Irish Republic					
Metal	----	27	60	42	42
Italy					
Metal	166	96	165	150	145
Netherlands					
Compounds	256	...	393	597	292
Metal	44	170	188	263	130
Poland					
Metal	6	16	12	9	...
Russia					
Metal	...	11	13	6	36
Spain					
Metal	107	191	135	250	119
Sweden					
Metal	22	11	34	11	39
Switzerland					
Metal	15	10	10	13	10
United Kingdom					
Metal	451	795	1 256	1 382	1 260
South Africa					
Compounds	...	...	...	411	1 696
Canada					
Metal	69	75	161	131	114
USA					
Metal	2 201	1 502	2 183	2 766	2 082
Brazil					
Metal	68	90	112	111	84
China					
Metal	134	0	51	4	95
Hong Kong					
Metal	390	381	46	2	9
India					
Metal (a)	34	84	20	49	...
Indonesia					
Compounds	1	12	1 207	216	...
Japan					
Metal	190	181	380	373	242
Korea, Republic of					
Metal	18	52	...	8	27
Taiwan					
Compounds	28	29	26	25	20
Metal	28	4	33	37	37
Australia					
Metal	13	7	7	15	3

Note(s) :-

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

(a) Years ended 31 March following that stated

**Production of Bromine**

Country	1995	1996	1997	1998	1999
France	2 260 000	(b) 7 400 000	8 800 000	8 600 000	...
Germany	*750 000	*750 000	*700 000	...	...
Italy	*300 000	*300 000	*300 000	*300 000	*300 000
Russia	120 000	70 000	*60 000	...	...
Spain	*200 000	*100 000	*100 000	*100 000	*100 000
Ukraine	1 743 000	1 642 000	956 000	1 866 000	*2 500 000
United Kingdom	26 200 000	30 600 000	35 600 000	35 900 000	24 800 000
USA (a)	218 000 000	227 000 000	247 000 000	230 000 000	239 000 000
China	32 700 000	41 400 000	50 100 000	40 000 000	45 000 000
India	1 800 240	2 524 430	2 509 190	1 477 000	866 700
Israel	151 000 000	154 000 000	184 000 000	185 000 000	*185 000 000
Japan	*15 000 000	*15 000 000	*20 000 000	*20 000 000	*20 000 000
World Total	450 000 000	481 000 000	550 000 000	524 000 000	527 000 000

Note(s):-

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

(b) Revised series includes bromine from seawater

**Exports of Bromine**

kilograms

Country	1995	1996	1997	1998	1999
Belgium-Luxembourg	881 000	1 784 000	1 663 800	27 007 000	32 234 800
Germany	4 500	3 700	12 300	38 400	17 700
Italy	...	...	4 532	1 000	6
Russia (a)	*48 800	*59 400	...	...	...
Ukraine	(a) *336 800	(a) *535 900	...	1 314 924	589 900
United Kingdom	4 536 061	5 345 184	5 025 081	7 011 058	3 403 532
Yugoslavia, Federal Republic of	...	...	17 000	...	51 000
USA	3 236 285	2 924 481	2 465 395	1 666 235	2 180 599
China	82 500	41 772	58 716	58 144	...
Israel	(a) *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

## Imports of Bromine

Country	1995	1996	1997	1998	1999
Austria	76 200	97 600	104 900	164 200	83 000
Belgium-Luxembourg	1 896 000	1 234 000	1 162 100	28 104 000	32 810 600
Denmark	400	6 000	118	2 000	39 000
Finland	...	...	1 000	70 000	63 346
France	8 797 000	9 072 000	7 888 000	9 295 000	10 769 000
Germany	3 328 200	3 148 000	3 092 100	2 667 000	2 281 100
Irish Republic	----	----	33 992	51 000	17 877
Italy	...	...	239 468	241 000	212 828
Netherlands	10 984 000	...	...	...	...
Poland	61 000	28 000	80 000	63 000	37 000
Spain	119 000	...	194 767	150 000	199 494
United Kingdom	5 184 957	7 045 247	5 213 006	8 001 874	6 927 708
Canada	1 426 681	1 230 197	1 326 667	1 090 190	1 193 598
Mexico (c)	189 796	199 213	221 000	350 000	283 000
USA	2 221 619	421 580	1 648 027	1 196 316	2 354 535
Brazil	71 000	34 000	...	...	...
China	233 238	137 446	1 892 148	1 919 719	...
India (a)	2 553 629	1 755 579	1 460 040	2 368 783	...
Korea, Republic of	957 867	1 091 227	974 234	923 099	...
Pakistan (b)	...	1 300	7 838	----	660
Taiwan	141 840	111 500	...	28 227	75 153

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) May include some fluorine

**Production of Cadmium**

tonnes

Country	1995	1996	1997	1998	1999
Belgium	1 710	1 579	1 420	1 318	1 235
Bulgaria	305	341	274	195	*300
Finland	534	648	494	520	700
France	-----	92	309	223	195
Germany (a)	1 145	1 145	1 140	1 020	1 145
Italy	308	296	287	470	359
Macedonia	70	12	*10	*10	*10
Netherlands	704	603	718	739	731
Norway	317	274	305	276	244
Poland	-----	-----	22	-----	-----
Romania	5	-----	-----	-----	-----
Russia	670	716	*750	*750	*750
Spain	397	307	334	196	...
Turkey	36	42	89	69	64
Ukraine	15	-----	-----	-----	-----
United Kingdom	549	537	455	440	547
Yugoslavia, Federal Republic of	11	79	45	17	-----
Algeria	50	44	36	13	-----
Namibia	15	7	2	-----	-----
Canada (a)	2 349	2 433	2 260	2 090	2 091
Mexico	689	784	1 223	1 275	1 275
USA (a)	1 266	1 525	2 059	1 240	1 185
Argentina	43	40	45	34	-----
Brazil	144	132	*130	*130	*130
Peru	423	405	359	405	465
China	1 533	1 567	1 982	2 125	2 154
India (b)	259	277	257	295	278
Japan	2 652	2 344	2 473	2 337	2 567
Kazakhstan	794	567	745	1 463	1 061
Korea, Dem. P.R. of	*200	*200	*200	*200	*200
Korea, Republic of	1 665	501	570	884	*900
Thailand	365	385	238	240	*300
Uzbekistan	*100	*100	*100	*100	*100
Australia	838	639	632	585	462
World Total	20 100	18 600	20 000	19 700	19 600

Note(s):-

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

(a) Including cadmium sponge and/or secondary metal

(b) Years ended 31 March following that stated

## Exports of Cadmium

Country	1995	1996	1997	1998	1999
Austria					
Metal	13	1	0	----	----
Belgium-Luxembourg					
Metal	2 206	1 591	1 816	2 172	1 089
Sulphide	44	31	14	22	15
Bulgaria					
Metal	277	(b) *50	248	(b) *280	(b) *280
Finland					
Metal	496	496	476	415	762
France					
Metal	4 155	879	1 493	1 155	1 252
Germany					
Metal	766	595	1 179	758	382
Italy					
Metal	220	221	301	212	363
Sulphide	...	...	29	35	23
Macedonia					
Metal	...	42	36	134	(b) *20
Netherlands					
Metal	544	711	858	1 108	1 206
Norway					
Metal	169	172	321	454	280
Russia					
Metal	(b) *950	(b) *850	(b) *1 070	(b) *650	170
Spain					
Metal	335	380	263	20	41
Sweden					
Oxide	...	...	...	15	87
United Kingdom					
Metal	299	174	18	28	215
Namibia					
Metal	33	9	2	----	----
South Africa					
Metal	207	(b) *100	2	0	0
Canada					
Metal	2 463	1 694	2 539	2 050	2 170
Mexico					
Metal	693	661	1 284	1 215	1 560
USA					
Metal	1 094	204	558	606	104
Sulphide	506	797	399	29	107
Peru					
Metal	305	315	494	347	479
China					
Metal	1 449	241	372	225	12
Hong Kong					
Metal (a)	691	452	231	66	----
Japan					
Metal	19	31	98	17	4
Sulphide	8	14	9	11	9
Kazakhstan					
Metal	739	794	866	1 216	...
Korea, Republic of					
Metal	1 274	773	1 576	799	2 120
Thailand					
Metal	2 390	420	303	39	1
Uzbekistan					
Metal (b)	...	10	*170	*150	...
Australia					
Metal	750	782	449	700	448

Note(s):-

(a) Re-exports

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

**Imports of Cadmium**

tonnes

Country	1995	1996	1997	1998	1999
Austria					
Metal	11	...	1	1	7
Oxide	30	85	64	56	40
Belgium-Luxembourg					
Metal	5 009	4 168	3 289	7 802	5 332
Sulphide	33	119	----	----	9
Finland					
Metal	0	24	...	----	1
France					
Metal	1 312	820	823	990	930
Oxide	318	385	...	...	923
Sulphide	342	296	2	5	----
Germany					
Metal	267	178	26	34	7
Oxide	96	60	144	165	165
Sulphide	4	2	7	5	7
Italy					
Metal	63	51	43	20	37
Sulphide	...	...	1	8	2
Netherlands					
Metal	575	286	267	426	149
Poland					
Metal	26	20	128	20	7
Russia					
Metal	...	15	672	1 614	...
Spain					
Metal	105	13	129	91	126
Sweden					
Metal	393	263	265	248	284
Switzerland					
Metal	8	9	13	8	8
Turkey					
Metal	2	2	8	20	5
United Kingdom					
Metal	131	345	854	632	454
Canada					
Sulphide	299	667	412	3	11
USA					
Metal	817	843	790	620	490
Oxide	747	650	645	605	475
Brazil					
Oxide	181	177	...	...	...
China					
Metal	607	1 151	1 323	854	869
Hong Kong					
Metal	433	624	234	38	19
India					
Metal (a)	418	2 214	1 766	1 238	...
Indonesia					
Sulphide	52	----	----	60	...
Japan					
Metal	6 046	4 442	4 772	3 562	3 351
Korea, Republic of					
Metal	35	11	47	6	5
Singapore					
Metal	...	...	...	7	331
Taiwan					
Oxide	325	343	323	376	387
Sulphide	16	11	5	14	8

Note(s) :-

(a) Years ended 31 March following that stated

**Production of Chromium Ores and Concentrates**

Country	1995	1996	1997	1998	1999
Albania	242 998	236 358	157 203	124 000	130 000
Finland (b)	597 674	573 909	588 856	498 075	597 400
Macedonia	*5 000	*5 000	*5 000	-----	-----
Russia	165 000	112 000	77 900	69 500	93 000
Turkey (a)	1 932 000	1 250 000	*1 100 000	...	...
Madagascar	105 745	139 272	133 960	166 096	-----
South Africa	5 086 053	5 078 000	6 162 000	6 479 582	6 817 050
Sudan	44 988	*12 000	*30 500	*30 500	*10 000
Zimbabwe	707 433	658 416	669 757	605 405	653 479
Cuba	30 693	37 300	44 100	46 000	52 000
Brazil (a)	446 893	386 659	285 500	440 450	435 066
China	198 000	130 200	176 800	20 940	220 540
India (e)	1 699 534	1 455 849	1 515 286	1 418 119	1 696 040
Indonesia	10 000	13 300	2 156	4 700	6 355
Iran (b) (c)	363 610	322 367	324 253	*330 000	*330 000
Kazakhstan	2 871 000	1 190 000	1 798 300	1 602 700	2 405 500
Myanmar (e)	...	3 299	4 059	2 447	...
Oman	5 298	15 252	17 985	29 756	26 010
Pakistan (d)	9 560	26 961	23 763	8 885	16 279
Philippines (b)	102 684	118 622	98 115	42 228	17 531
United Arab Emirates	37 000	56 000	61 000	76 886	60 000
Vietnam	24 000	...	58 000	71 000	...
Australia	-----	*5 500	18 756	72 496	71 886
World Total	14 700 000	11 800 000	13 400 000	13 200 000	14 800 000

## 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
- (d) Years ended 30 June of that stated
- (e) Years ended 31 March following that stated



**Exports of Chromium**

tonnes

Country	1995	1996	1997	1998	1999
Albania					
Ores & concentrates	89 600	89 200	55 600	52 058	13 399
Austria					
Ores & concentrates	----	500	203	526	709
Metal	130	180	1 057	2 956	3 015
Belgium-Luxembourg					
Ores & concentrates	21 694	22 155	17 266	6 046	18 695
Metal	87	105	702	233	227
Czech Republic					
Metal	131	189	102	49	13
Denmark					
Metal	3	256	390	468	257
Estonia					
Metal	23	...	213	6	88
Finland					
Ores & concentrates	951	1 005	675	255	31
Metal	1	----	36	408	...
France					
Ores & concentrates	768	671	2 060	2 467	2 823
Metal	3 083	3 101	4 128	4 783	4 697
Germany					
Ores & concentrates	8 041	7 130	9 372	16 478	16 098
Metal	652	499	1 878	1 037	726
Greece					
Ores & concentrates	18 872	3 920	----	----	...
Irish Republic					
Metal	5	8	9	7	43
Italy					
Ores & concentrates	2 083	2 330	16 551	2 228	1 234
Metal	17	51	25	260	416
Lithuania					
Metal	528	169	22	3	129
Netherlands					
Ores & concentrates	35 087	37 520	47 461	65 029	51 965
Metal	592	382	847	1 365	1 387
Poland					
Ores & concentrates	9 382	14 900	5 700	...	966
Metal	348	437	231	143	...
Russia					
Ores & concentrates	5 800	8 074	4 508	3 019	972
Metal	4 192	5 098	7 774	5 251	6 060
Slovakia					
Metal	154	1 583	1 821	1 707	1 983
Spain					
Ores & concentrates	776	1 126	1 754	1 268	2 057
Metal	400	584	803	503	1 569
Switzerland					
Metal	52	21	41	34	298
Turkey					
Ores & concentrates	1 032 803	374 213	623 914	537 652	569 083
Metal	1	73	34	36	50
Ukraine					
Metal	79	170	180	----	61
United Kingdom					
Ores & concentrates	947	881	886	707	844
Metal	2 859	3 204	5 732	5 803	5 559
Madagascar					
Ores & concentrates	128 543	157 157	117 760	147 700	57 500
South Africa					
Ores & concentrates	1 147 940	1 353 000	1 288 000	858 618	840 580
Sudan					
Ores & concentrates	22 168	39	12 725	----	23 868
Zimbabwe					
Ores & concentrates	5 410	32 862	38	11 406	...

**Exports of Chromium**

Country	1995	1996	1997	1998	1999
USA					
Ores & concentrates	19 531	70 728	25 882	129 335	115 509
Metal	763	1 432	2 466	1 185	2 408
Brazil					
Ores & concentrates	33 121	103 680	87 029	154 521	194 368
China					
Ores & concentrates	3 975	4 712	12 817	3 990	3 612
Metal	10 577	2 952	3 736	3 418	5 240
India					
Ores & concentrates (a)	347 705	565 825	438 948	492 540	...
Indonesia					
Ores & concentrates	1 118	6 074	5 500	399	...
Iran					
Ores & concentrates (b)	*357 500	*147 900	*164 600	*125 400	*186 700
Japan					
Ores & concentrates	...	390	8 649	116	95
Metal	912	544	327	173	346
Kazakhstan					
Ores & concentrates	1 029 601	262 709	579 647	388 448	528 272
Metal	195	117	120	----	----
Korea, Republic of					
Metal	186	51	7	4	64
Oman					
Ores & concentrates	6 920	8 230	7 787	3 624	...
Pakistan					
Ores & concentrates (c)	...	47 452	77 915	71 511	33 904
Philippines					
Ores & concentrates	98 992	73 589	131 130	54 111	...
Taiwan					
Ores & concentrates	2 254	1 417	1 264	953	803
Metal	186	329	390	398	201
United Arab Emirates					
Ores & concentrates	37 000	*35 000	20 000	140 000	...
Vietnam					
Ores & concentrates	24 000	...	58 000	71 000	...
Australia					
Ores & concentrates	----	----	15 753	71	42 229

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) Years ended 30 June of that stated

## Imports of Chromium

tonnes

Country	1995	1996	1997	1998	1999
Austria					
Ores & concentrates	36 400	48 157	55 345	34 793	34 979
Metal	196	147	611	452	771
Belgium-Luxembourg					
Ores & concentrates	28 527	22 127	25 082	25 877	23 869
Metal	435	555	947	565	540
Croatia					
Ores & concentrates	27	14 796	69 168	32 010	2 161
Czech Republic					
Ores & concentrates	6 600	10 700	3 737	8 782	10 325
Metal	45	136	41	8	10
Denmark					
Ores & concentrates	724	506	666	904	775
Metal	160	31	46	46	27
Estonia					
Metal	...	...	175	1	136
Finland					
Ores & concentrates	436	2 631	3 224	5 174	6 647
Metal	51	12	22	110	54
France					
Ores & concentrates	29 701	29 538	27 620	29 023	27 752
Metal	1 240	586	917	923	711
Germany					
Ores & concentrates	159 793	177 909	180 312	201 728	101 700
Metal	1 819	1 479	1 950	1 888	1 777
Greece					
Ores & concentrates	58	1 638	3 007	2 170	2 162
Hungary					
Ores & concentrates	1 200	1 008	700	700	...
Metal	34	44	110	68	...
Irish Republic					
Metal	13	67	9	42	75
Italy					
Ores & concentrates	204 345	123 272	105 047	83 863	41 184
Metal	435	419	626	617	711
Lithuania					
Metal	529	158	----	----	110
Moldova					
Metal	53	----	----	----	...
Netherlands					
Ores & concentrates	47 695	69 338	57 589	61 785	38 827
Metal	584	1 039	1 318	2 230	2 170
Norway					
Ores & concentrates	347 000	308 000	371 000	340 165	401 000
Metal	53	54	115	102	80
Poland					
Ores & concentrates	84 138	55 200	31 900	30 400	32 658
Metal	17	10	32	27	26
Portugal					
Ores & concentrates	2 100	2 755	1 603	1 947	1 886
Romania					
Ores & concentrates	67 262	43 200	15 348	13 479	2 966
Metal	70	219	6	47	337
Russia					
Ores & concentrates	722 800	360 637	627 345	466 565	625 538
Metal	*500	559	256	40	286
Slovakia					
Ores & concentrates	100 800	66 500	39 413	45 121	31 312
Metal	186	2	5	1	60
Slovenia					
Ores & concentrates	71 775	58 400	23 900	30 000	647
Metal	15	13	17	16	18
Spain					
Ores & concentrates	5 047	8 696	4 459	3 673	4 750
Metal	257	299	200	335	219
Sweden					
Ores & concentrates	294 600	295 500	290 000	319 000	...
Metal	575	486	557	629	1 459

## Imports of Chromium

Country	1995	1996	1997	1998	1999
Switzerland					
Ores & concentrates	1 057	1 165	1 117	1 233	1 380
Metal	240	113	155	127	123
Turkey					
Ores & concentrates	6 380	5 080	819	19 497	48 285
United Kingdom					
Ores & concentrates	166 633	176 199	157 914	120 967	84 149
Metal	1 403	1 181	1 554	1 787	1 575
Yugoslavia, Federal Republic of					
Ores & concentrates	*2 000	3 600	3 128	2 441	2 757
Metal	*25	43	2	-----	-----
South Africa					
Metal	51	127	103	121	48
Canada					
Ores & concentrates	36 992	39 757	33 690	34 042	42 803
Metal	365	413	436	455	632
Mexico					
Ores & concentrates	6 357	7 700	6 691	5 526	5 721
USA					
Ores & concentrates	251 359	251 160	303 598	380 788	228 958
Metal	7 242	8 266	10 037	9 512	9 171
Argentina					
Ores & concentrates	43 730	37 695	39 392	42 409	53 615
Brazil					
Ores & concentrates	48 046	5 352	14 199	9 777	8 482
Chile					
Ores & concentrates	20 052	10 592	9 809	16 028	...
Peru					
Ores & concentrates	2 832	1 609	1 904	4 202	1 876
Venezuela					
Ores & concentrates	2 408	2 233	2 502	2 355	790
China					
Ores & concentrates	1 380 935	764 377	894 001	711 544	816 230
Metal	449	1 327	1 815	598	969
Hong Kong					
Metal	103	13	7	31	2
India					
Ores & concentrates (a)	7 271	820	1 724	686	...
Metal (a)	226	170	193	126	...
Indonesia					
Ores & concentrates	496	698	200	63	...
Japan					
Ores & concentrates	607 268	686 451	577 402	416 665	380 115
Metal	2 123	1 953	1 973	2 365	2 343
Korea, Republic of					
Ores & concentrates	478	539	385	209	35
Metal	517	675	748	948	1 492
Philippines					
Ores & concentrates	9 761	211	1 280	23	...
Singapore					
Ores & concentrates	1 245	508	494	294	522
Metal	60	18	23	40	26
Taiwan					
Ores & concentrates	9 993	8 179	8 852	9 809	9 160
Metal	126	258	166	172	195
Thailand					
Ores & concentrates	1 778	6 478	5 406	999	5 016
Metal	5	8	11	11	8
Australia					
Ores & concentrates	12 615	12 253	9 214	8 661	10 912
Metal	144	163	256	250	206

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	1995	1996	1997	1998	1999
Albania					
Lignite	105 000	90 000	40 000	48 706	32 595
Armenia	25 000	6 000	5 000	----	----
Austria					
Brown coal & lignite	1 249 308	1 108 058	1 130 339	1 140 151	1 137 388
Bosnia & Herzegovina					
Brown coal & lignite	1 640 000	1 690 000	1 740 000	1 790 000	*1 850 000
Bulgaria					
Anthracite & bituminous	194 000	138 000	102 000	120 406	107 080
Brown coal & lignite	30 636 000	31 164 000	29 606 000	30 841 236	31 674 566
Croatia					
Bituminous	75 208	64 369	48 535	50 839	15 311
Czech Republic					
Bituminous	21 309 000	21 784 000	20 847 000	19 521 000	17 227 000
Lignite	775 000	902 000	747 000	652 000	512 000
Brown coal	57 954 000	59 539 000	57 395 000	51 283 000	44 858 000
France					
Anthracite & bituminous	7 014 000	7 312 000	5 779 000	4 864 000	4 533 000
Lignite	1 401 000	798 000	1 030 000	735 000	558 000
Georgia	42 600	22 500	4 600	14 700	12 000
Germany					
Anthracite & bituminous	53 563 599	48 196 515	46 789 987	41 639 952	40 258 004
Brown coal	192 758 592	187 246 925	177 159 541	166 036 413	161 282 000
Greece					
Lignite	56 553 231	54 732 680	58 939 419	60 910 433	61 861 049
Hungary					
Bituminous	843 747	961 925	923 914	877 028	737 589
Lignite	7 150 518	7 575 255	8 088 893	7 609 715	7 695 674
Brown coal	6 457 659	6 538 456	6 552 186	6 003 829	6 007 698
Italy					
Bituminous	----	41 000	...	...	...
Lignite	365 800	223 400	203 061	83 700	80 000
Macedonia					
Lignite	7 249 000	7 145 000	6 700 000	8 180 000	...
Norway					
Bituminous (d)	292 094	229 636	386 440	328 170	404 000
Poland					
Anthracite	211 000	234 000	157 000	65 000	...
Bituminous	136 955 000	137 753 000	137 636 000	115 661 000	(g) 111 894 136
Lignite	63 547 100	63 845 400	63 169 437	62 820 314	60 838 707
Romania					
Anthracite & bituminous	6 356 000	6 965 000	5 642 000	4 331 000	...
Brown coal & lignite	37 632 000	37 809 000	30 604 000	23 774 000	(i) 24 485 000
Russia	262 000 000	254 800 000	245 000 000	231 919 000	249 521 000
Slovakia					
Brown coal	4 140 150	3 829 605	3 914 600	3 966 000	3 745 000
Slovenia					
Brown coal & lignite	4 874 000	4 778 000	4 954 000	4 927 000	*4 600 000
Spain					
Anthracite	6 274 965	6 498 980	6 666 820	5 682 568	5 436 000
Bituminous	7 387 139	7 195 634	7 200 513	6 717 821	6 295 000
Sub-bituminous	4 037 408	4 071 521	4 124 414	3 925 498	3 704 000
Lignite	10 775 614	9 585 773	8 462 519	9 749 739	8 831 000
Turkey					
Anthracite	3 377 334	3 581 788	3 645 896	3 336 021	3 024 295
Bituminous	147 154	126 751	117 310	157 334	93 310
Lignite	56 031 099	57 532 425	56 779 793	66 583 499	66 716 568
Ukraine					
Bituminous	87 841 000	75 719 000	76 947 000	77 176 000	81 674 000
Lignite	2 292 000	1 587 000	1 433 000	1 409 000	1 182 000
United Kingdom					
Bituminous (g)	53 037 000	50 197 000	48 495 000	41 177 000	37 077 000
Yugoslavia, Federal Republic of					
Bituminous	56 678	62 754	91 540	104 596	49 481
Lignite	39 939 297	37 827 576	42 312 896	43 577 410	30 037 930
Brown coal	559 778	538 759	512 228	389 996	413 289

## Production of Coal

Country	1995	1996	1997	1998	1999
Botswana	898 383	763 240	776 917	928 100	945 316
Congo, Democratic Republic					
Bituminous	93 000	95 000	95 000	...	...
Egypt	...	350 000	350 000	200 000	*250 000
Malawi	15 000	69 930	63 210	54 200	43 800
Morocco					
Anthracite	649 600	505 600	376 300	269 100	129 200
Niger	170 971	182 022	162 840	181 213	168 466
Nigeria					
Sub-bituminous	19 505	7 800	9 830	11 801	...
South Africa					
Anthracite	2 137 368	2 465 611	1 997 314	2 041 000	1 919 244
Bituminous	204 104 596	203 803 459	216 620 006	222 800 000	221 594 925
Swaziland					
Bituminous	171 666	128 973	203 115	410 021	426 299
Tanzania					
Bituminous	43 200	52 000	28 448	...	...
Zambia					
Bituminous	141 282	128 063	164 443	185 717	127 854
Zimbabwe					
Bituminous	5 537 579	5 174 685	5 300 749	5 467 100	4 977 355
Canada					
Bituminous	38 605 686	40 026 879	41 216 344	38 284 407	36 513 393
Sub-bituminous	25 621 599	24 985 963	25 782 503	25 285 315	24 299 674
Lignite	10 739 710	10 838 575	11 652 553	11 790 106	11 659 351
Mexico					
Bituminous	11 800 258	13 746 817	12 707 443	12 378 788	13 302 345
USA					
Anthracite	4 274 000	4 325 000	4 257 000	4 800 000	4 700 000
Bituminous	556 798 000	572 199 000	593 143 000	573 100 000	563 600 000
Sub-bituminous	297 555 000	308 707 000	313 043 000	358 200 000	352 300 000
Lignite	78 471 000	79 883 000	78 327 000	77 800 000	76 600 000
Argentina					
Bituminous	304 485	328 762	250 136	218 270	337 000
Brazil					
Bituminous & lignite (e)	5 524 961	4 787 615	5 542 000	5 485 000	5 618 000
Chile					
Bituminous	361 554	233 600	134 435	116 611	...
Lignite	1 123 313	1 210 483	1 278 862	*1 300 000	...
Colombia					
Bituminous	25 869 000	29 695 000	32 797 000	33 751 000	32 754 000
Peru					
Anthracite	17 416	20 699	21 694	7 384	...
Bituminous	*45 000	*45 000	*45 000	*45 000	...
Venezuela					
Bituminous	4 346 131	4 180 641	5 291 908	6 458 324	6 592 904
Afghanistan					
Bituminous	140 000	200 000	220 000	230 000	...
Bhutan	71 112	68 000	*70 000	...	...
China					
Anthracite	304 486 800	314 766 800	293 608 300	228 650 000	181 811 500
Bituminous	996 584 200	1 015 383 900	1 003 636 000	953 090 000	816 257 400
Lignite	59 660 500	66 548 700	75 575 800	50 770 000	45 566 300
India					
Bituminous (h)	273 415 000	286 080 000	296 656 000	292 270 000	299 996 000
Lignite (h)	22 144 000	22 540 000	23 052 000	23 419 000	21 847 000
Indonesia					
Anthracite & bituminous	41 421 700	50 332 000	54 608 400	60 320 949	72 690 914
Iran					
Bituminous (c)	1 847 994	1 726 297	1 598 529	*1 810 000	*1 820 000
Japan					
Bituminous	6 260 000	6 480 000	4 270 000	3 660 000	3 910 000
Kazakhstan					
Bituminous	79 651 000	73 240 000	70 174 000	68 057 900	56 436 000
Lignite	3 740 000	3 591 000	2 473 000	1 714 700	1 763 200

**Production of Coal**

tonnes

Country	1995	1996	1997	1998	1999
Korea, Dem. P.R. of					
Anthracite	40 000 000	30 300 000	70 000 000	60 000 000	62 000 000
Lignite	...	13 000 000	21 000 000	15 000 000	23 000 000
Korea, Republic of					
Anthracite	5 719 637	4 950 780	4 514 000	4 361 000	4 197 000
Kyrgyzstan	463 200	409 900	521 500	445 700	415 200
Laos	35 490	75 214	108 013	86 081	202 006
Malaysia	114 100	73 747	105 231	349 849	308 502
Mongolia					
Anthracite & bituminous	1 445 000	1 256 700	303 300	...	1 423 500
Brown coal & lignite	3 558 000	3 853 900	4 620 700	(i) 5 057 000	3 528 500
Myanmar (h)	34 708	30 700	29 849	31 025	42 773
Pakistan (a) (j)	2 894 056	3 253 903	3 133 393	3 164 226	3 461 270
Philippines					
Bituminous	1 265 726	955 631	1 078 654	1 157 304	1 204 979
Taiwan					
Bituminous	234 965	147 497	98 203	79 310	91 673
Tajikistan	30 000	20 000	20 000	20 000	20 000
Thailand					
Anthracite	5 000	3 000	-----	-----	-----
Lignite	18 418 738	21 685 894	23 443 475	20 161 721	18 266 308
Uzbekistan					
Bituminous	74 000	74 000	59 000	68 000	...
Lignite	2 980 000	2 763 000	2 888 000	2 855 000	(b) 3 000 000
Vietnam					
Anthracite	7 200 000	9 823 000	11 444 000	13 000 000	...
Australia					
Bituminous (f)	193 534 000	198 638 000	216 690 000	222 040 000	234 710 000
Brown coal (j)	50 751 000	53 604 000	58 160 000	65 600 000	65 820 000
New Zealand					
Bituminous	1 570 220	1 671 730	1 500 145	1 626 000	2 152 000
Sub-bituminous	1 631 936	1 588 840	1 950 548	1 527 000	1 410 000
Lignite	242 882	248 764	213 341	166 000	149 000
<b>World Total</b>	<b>4 646 000 000</b>	<b>4 700 000 000</b>	<b>4 772 000 000</b>	<b>4 593 000 000</b>	<b>4 390 000 000</b>

## 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

Country	1995	1996	1997	1998	1999
Belgium-Luxembourg					
Anthracite	254 998	293 244	289 285	874 527	781 378
Other coal	1 271 207	1 304 878	1 652 469	1 372 040	1 700 894
Briquettes	28 139	30 025	31 303	14 350	39 215
Czech Republic					
Hard coal (b)	7 015 000	6 738 000	6 647 799	6 726 000	6 123 838
Lignite	6 898 000	6 173 000	4 664 842	3 687 730	3 216 502
Briquettes	...	...	366 442	242 501	183 687
Denmark (b)	59 572	115 130	106 416	139 321	201 571
Estonia					
Hard coal	42 301	...	71 496	7 501	941
France					
Anthracite	19 046	27 368	15 107	3 033	4 074
Other coal	424 847	262 423	204 038	64 546	74 877
Briquettes	13 956	32 049	43 570	20 048	12 996
Germany					
Hard coal (b)	1 736 383	1 037 327	513 327	322 353	200 506
Brown coal	674 751	544 460	339 407	251 869	200 744
Briquettes	157 713	132 804	427 260	232 346	207 775
Italy (b)	35 262	7 947	3 709	7 650	23 011
Netherlands					
Anthracite	71 206	86 315	112 565	143 879	93 150
Other coal	2 768 777	2 236 539	2 824 677	4 124 961	4 744 469
Briquettes	82 864	23 590	32 210	20 760	9 463
Norway (b)	180 276	156 071	...	...	...
Poland					
Anthracite	73 892	...	...	...	26 802
Other coal	31 794 304	(b) 28 925 379	(b) 29 474 000	(b) 28 078 000	24 076 802
Lignite	367 600	44 900	37 000	23 500	13 400
Russia					
Anthracite	...	3 597 167	2 128 855	1 751 578	1 585 933
Other coal	(b) 30 360 000	21 744 000	20 695 000	21 609 000	25 661 298
Lignite	1 911 031	2 007 429	813 206	309 131	126 815
Briquettes	...	51 041	29 778	11 838	12 068
Spain					
Anthracite	27	180	5 367	13 214	7 191
Ukraine	1 686 031	2 288 843	2 374 743	1 882 275	2 138 128
United Kingdom					
Anthracite	351 552	420 230	393 772	282 025	327 292
Other coal	572 411	553 789	666 119	688 621	433 726
Briquettes	123 502	117 070	98 171	57 410	54 734
Mozambique	...	...	17 839	17 903	20 502
South Africa					
Anthracite	2 016 844	2 203 555	1 648 594	1 376 000	1 080 136
Other coal	57 659 214	57 965 702	57 333 704	65 900 000	64 632 932
Zimbabwe (b)	63 537	36 356	45 882	42 810	32 536
Canada					
Hard coal (b)	34 068 703	34 748 142	35 613 722	32 907 404	33 920 300
Lignite	35 461	11 589	72 788	46 403	30 040
USA					
Anthracite	734 999	700 105	580 216	612 548	438 326
Other coal	79 680 628	82 076 000	75 667 653	69 626 919	53 050 767
Lignite	83 808	235 283	455 778	290 176	44 964
Briquettes	34 473	12 852	29 832	45 116	45 475
Colombia	18 274 000	24 780 000	27 580 000	30 061 000	29 932 000
Venezuela	3 802 598	3 874 294	4 927 922	5 920 000	6 753 276
China					
Anthracite	2 528 687	1 729 132	2 115 741	2 786 821	3 145 563
Other coal	26 087 483	27 267 751	28 606 785	29 503 933	34 261 511
India (a)	651 734	478 229	540 722	822 968	...
Indonesia					
Anthracite	1 825 065	1 368 830	1 091 542	1 318 772	...
Other coal	29 745 435	30 586 265	41 038 390	46 931 707	...
Briquettes	382 104	78 500	168 000	94 750	...



**Exports of Coal**

tonnes

Country	1995	1996	1997	1998	1999
Kazakhstan					
Hard coal	20 767 491	20 839 652	24 857 303	23 578 438	16 175 232
Lignite	202 290	232 381	219 849	110 474	68 595
Korea, Dem. P.R. of	(c) *432 000	...	...	...	...
Kyrgyzstan					
Hard coal	170 638	100 400	78 000	23 000	10 800
Laos					
Lignite	10 000	43 000	68 075	68 884	175 259
Malaysia	77 421	15 330	...	...	...
Vietnam	2 500 000	3 647 000	3 449 400	3 163 000	...
Australia					
Anthracite	333 450	349 957	485 664	703 037	711 437
Other coal	136 064 226	140 435 752	157 253 593	166 339 204	170 695 035
Lignite	68 689	53 110	31	13	250
Briquettes	-----	60 339	62 894	122	133
New Zealand (d)	1 125 970	1 440 253	1 305 664	1 190 264	...

## 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

## Imports of Coal

Country	1995	1996	1997	1998	1999
Austria					
Hard coal (c)	...	...	3 796 610	3 577 943	3 355 572
Brown coal	...	...	18 863	10 899	20 345
Briquettes	...	...	139 250	105 177	109 408
Belarus	1 241 500	997 100	786 400	716 370	642 847
Belgium-Luxembourg					
Anthracite	1 023 094	949 594	856 978	981 210	953 736
Other coal	12 036 234	11 370 988	11 862 591	11 358 312	9 806 997
Brown coal	177 159	159 220	158 490	213 354	161 605
Briquettes	96 524	49 488	38 967	26 611	38 522
Bulgaria					
Anthracite	630 900	2 026 300	1 883 600	2 146 700	1 106 600
Briquettes	1 231 600	1 368 000	1 421 900	1 199 200	...
Croatia					
Hard coal	89 387	61 407	62 452	167 867	261 671
Lignite	154 471	146 924	133 684	98 170	82 830
Cyprus	169 182	158 828	122 626	22 083	29 157
Czech Republic	2 676 000	3 211 000	2 274 356	1 578 070	1 029 446
Denmark					
Anthracite	37 841	31 860	71 644	78 571	75 855
Other coal	12 901 607	12 430 959	14 003 715	8 284 775	7 057 146
Estonia					
Hard coal	137 103	...	118 648	87 466	87 072
Finland					
Hard coal (c)	5 887 234	6 178 787	7 439 189	4 613 280	3 596 331
France					
Anthracite	1 687 257	1 390 400	1 904 691	1 655 772	1 777 657
Other coal	11 629 364	14 365 536	11 661 093	12 303 542	13 516 239
Lignite	53 125	41 251	37 919	31 437	21 085
Briquettes	95 041	111 050	139 330	112 082	82 872
Germany					
Anthracite	363 811	258 966	348 536	387 288	352 617
Other coal	14 710 286	16 089 372	19 511 920	21 801 982	21 733 088
Brown coal	2 642 506	2 558 933	2 150 892	1 943 544	2 089 587
Briquettes	63 636	111 376	530 856	370 663	232 540
Greece (c)	1 412 867	1 572 505	1 230 221	1 175 265	1 126 351
Hungary					
Hard coal (c)	1 761 496	1 893 219	1 742 672	...	1 567 991
Brown coal	386 006	549 196	456 029	265 559	...
Briquettes	26 779	18 847	14 725	10 449	...
Iceland	64 927	65 569	58 255	57 905	...
Irish Republic					
Anthracite	106 983	111 763	109 108	120 081	156 350
Other coal	2 401 743	2 486 235	3 053 424	2 728 413	1 621 849
Briquettes	31 716	33 907	40 867	43 912	45 771
Italy					
Anthracite	351 196	391 852	658 500	197 665	214 079
Other coal	18 267 000	16 331 639	15 249 673	15 474 813	17 155 041
Briquettes	16 740	18 446	16 523	12 408	13 782
Latvia	159 560	207 251	143 194	123 669	123 619
Lithuania					
Hard coal (c)	234 600	387 454	323 538	269 298	144 540
Lignite	24 473	26 584	3 421	1 910	...
Macedonia					
Hard coal	...	90 564	82 533	82 500	...
Brown coal	...	90 510	119 116	98 682	...
Briquettes	...	92 997	85 038	97 256	...
Malta	37 733	1 036	...	729	...
Moldova					
Anthracite	...	509 838	135 703	93 354	70 631
Other coal	(c) 1 314 799	559 974	236 489	410 031	115 784
Netherlands					
Anthracite	126 045	299 485	156 257	952 934	1 187 521
Other coal	17 437 949	17 528 000	18 998 000	20 352 039	17 140 488
Brown coal	42 893	43 698	43 828	19 477	30 060
Briquettes	17 703	12 419	42 113	45 423	17 205

## Imports of Coal

tonnes

Country	1995	1996	1997	1998	1999
Norway					
Anthracite (a)	106 412	83 151	106 361	152 694	88 456
Other coal (a)	788 440	706 033	725 246	766 142	734 845
Lignite (a)	32 845	40 755	28 809	48 049	90 777
Poland					
Hard coal (c)	1 498 131	1 976 700	3 244 000	4 198 000	2 374 285
Portugal					
Anthracite	...	322 221	447 943	336 726	180 884
Other coal	(c) 5 661 794	4 776 330	5 160 295	4 653 374	5 867 892
Romania (c)	4 732 778	4 728 117	5 248 649	3 866 796	2 412 701
Russia					
Anthracite	...	2 396 401	5 376 810	4 465 260	1 129 790
Other coal	(c) (e) *18 300 000	17 545 000	9 721 829	10 480 000	14 912 207
Brown coal	...	213 712	82 223	21 809	2 996
Slovakia					
Hard coal (c)	4 842 520	4 994 457	4 837 174	4 439 131	4 370 495
Lignite	3 695 506	3 391 000	2 195 000	(g) 1 418 000	1 135 575
Slovenia					
Lignite	...	412 979	341 558	151 918	81 155
Spain					
Anthracite	199 141	282 449	159 315	281 363	1 185 524
Other coal	13 777 894	11 845 564	11 180 489	14 264 919	18 925 349
Sweden					
Anthracite	61 770	95 962	42 372	25 942	12 775
Other coal	3 437 536	3 139 894	2 972 087	3 012 878	2 919 133
Switzerland					
Anthracite	8 119	8 132	7 342	10 199	13 139
Other coal	206 039	122 822	73 154	58 467	48 021
Turkey					
Hard coal (c)	4 340 199	7 853 373	9 600 283	8 447 808	6 515 726
Ukraine					
Hard coal	...	10 818 084	8 368 976	8 390 047	...
Lignite	...	1 352 273	482 514	20 789	21 941
United Kingdom					
Anthracite	1 785 611	1 127 416	1 247 553	501 809	598 441
Other coal	14 135 749	16 512 925	18 581 823	20 742 610	20 164 505
Briquettes	55 665	56 279	29 631	13 556	5 481
Yugoslavia, Federal Republic of					
Hard coal	(e) *269 000	(e) *49 000	112 418	32 128	111 007
Lignite	...	...	...	66 841	87 793
Algeria	710 364	318 097	380 362	619 932	...
Egypt					
Hard coal	...	1 875 508	1 626 164	1 483 924	1 320 394
Kenya					
Anthracite	1 752	9 651	12 363	6 698	7 131
Other coal	84 251	66 100	31 975	33 083	165
Madagascar	...	...	13 688	7 686	3 029
Malawi	135 238	...	...	...	...
Mauritius	66 366	38 482	27 783	86 344	128 879
Morocco	(c) 1 882 417	(c) 2 208 734	(c) 2 195 410	...	...
South Africa	805 160	1 218 664	1 159 917	1 532 284	1 024 068
Zimbabwe	38 612	----	...	...	...
Canada					
Anthracite	427 044	527 520	523 133	713 282	518 410
Other coal	9 317 111	11 123 242	14 181 304	19 136 149	119 450 505
Cuba	157 000	163 000	...	...	...
Mexico					
Hard coal (c)	1 255 697	1 540 509	2 157 455	2 301 340	2 428 819
Lignite	1 654	1 721	1 830	1 816	4 852
Panama	66 766	66 968	114 148	55 734	69 650
USA					
Anthracite	34 974	107 954	25 194	5 121	33 957
Other coal	6 512 516	6 343 234	6 715 663	7 821 385	8 170 338
Lignite	35 505	11 625	72 788	46 403	31 420
Briquettes	443	28 212	----	2	10 101

## Imports of Coal

Country	1995	1996	1997	1998	1999
Argentina	1 155 449	1 029 290	1 051 391	988 459	926 300
Brazil					
Anthracite	459 549	728 735	648 730	604 071	487 980
Other coal	12 082 413	12 117 960	11 650 363	10 050 963	12 941 936
Chile	2 871 638	4 673 570	4 638 125	4 605 359	...
Peru	287 007	360 236	486 441	386 995	379 386
Venezuela	29 114	20 532	102 188	28 557	54 390
China					
Anthracite	523 170	380 941	85 724	43 736	143 044
Other coal	1 085 376	2 823 516	1 912 883	1 538 397	1 528 002
Lignite	26 615	12 240	4 997	27	1 776
Hong Kong	9 107 453	6 768 343	5 575 100	7 100 704	6 391 157
India (c) (d)	12 512 088	3 174 902	16 439 621	16 536 179	...
Indonesia (c)	644 321	411 046	384 852	59 475	...
Iran (b)	411 744	...	412 025	299 065	...
Israel	...	...	8 671 000	9 637 000	9 598 458
Japan					
Anthracite	2 780 788	3 233 592	3 474 785	3 261 130	2 781 904
Other coal	123 398 387	126 182 656	129 453 043	128 337 217	134 417 103
Lignite	19 943	20 371	13 382	14 483	13 642
Kazakhstan					
Hard coal	...	1 059 800	975 300	1 211 147	1 121 398
Korea, Dem. P.R. of (e)	*1 106 000	*324 000	*268 000	*186 000	*596 000
Korea, Republic of					
Anthracite	722 839	874 640	721 918	788 973	1 138 826
Other coal	43 113 442	44 932 078	48 860 765	51 416 850	52 314 965
Kyrgyzstan	499 700	844 500	281 207	800 979	1 075 300
Malaysia					
Anthracite	14 541	39 400	...	...	...
Other coal	1 809 461	2 905 820	...	...	...
Pakistan (f)	1 018 000	944 000	909 638	1 012 326	912 451
Philippines (c)	1 645 511	1 659 482	3 750 874	4 244 518	...
Saudi Arabia					
Hard coal (c)	...	...	34 645	30 612	24 338
Taiwan					
Anthracite	78 253	59 645	50 605	50 516	43 405
Other coal	29 160 642	30 747 694	36 646 759	37 292 319	40 923 370
Briquettes	52 250	15 335	----	----	72
Thailand (c)	2 322 192	3 795 532	...	1 544 511	3 142 138
Australia					
Anthracite	32	7 262	10 065	247	9 723
Other coal	28 980	148 183	79 037	174 501	110 233
New Caledonia	184 914	227 995	258 341	298 736	...

## 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	1995	1996	1997	1998	1999
Russia	*4 200	*4 200	*4 100	*4 000	*4 500
Botswana	271	406	334	335	332
Congo, Democratic Republic	3 967	4 041	3 153	3 871	3 200
Morocco	548	540	780	287	881
South Africa	190	244	316	296	306
Zambia (a)	5 908	6 959	6 037	*7 000	*7 000
Zimbabwe	109	106	126	100	129
Canada	5 339	5 714	5 709	5 861	5 324
Cuba	1 854	2 300	2 500	2 700	2 600
Brazil	1 100	1 000	1 500	2 500	2 900
China	986	192	466	409	303
Indonesia	814	*800	*650	*650	*650
Australia (b)	2 100	1 609	1 996	2 138	1 802
New Caledonia	2 601	2 356	2 964	3 036	2 383
World Total	30 000	30 500	30 600	33 200	32 300

## 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, Canada and New Caledonia, the figures for which relate to cobalt in ore raised

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

**Production of Cobalt Metal**

Country	1995	1996	1997	1998	1999
Belgium	*1 200	*1 200	*1 200	*1 200	*950
Finland	1 709	2 110	...	...	...
Norway	2 804	3 097	3 417	3 850	4 000
Russia	4 036	3 916	*4 000	*4 000	*4 000
Congo, Democratic Republic (c)	3 422	3 540	2 808	4 490	*4 600
Morocco	-----	80	226	242	472
South Africa (b)	189	244	316	296	306
Uganda	-----	-----	-----	-----	77
Zambia	2 934	4 799	3 949	5 011	3 946
Canada (a)	3 259	3 601	3 792	4 415	4 187
Brazil	166	193	266	364	630
China	900	1 200	*1 200	*1 200	*1 200
Japan	222	228	264	329	221
World Total	20 800	24 200	23 400	27 500	26 700

## 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

(a) Including oxides

(b) Includes metal and metal contained in sulphate

(c) Excludes white alloy and matte which are believed to be further processed in Belgium and elsewhere

## Exports of Cobalt

tonnes

Country	1995	1996	1997	1998	1999
Austria					
Metal	2 125	63	75	126	80
Belgium-Luxembourg					
Ore	...	----	67	630	280
Metal	(a) *2 200	(a) *2 200	(a) *2 300	(a) *2 300	2 640
Oxides	(a) *1 900	(a) *2 100	(a) *3 000	(a) *2 400	4 263
Estonia					
Metal	327	...	20	16	58
Oxides	53	131	111	100	12
Finland					
Metal	1 558	1 776	2 074	1 633	2 733
Oxides	1 416	1 876	2 264	2 565	2 812
France					
Metal	607	468	573	786	507
Oxides	219	19	60	76	131
Germany					
Metal	1 543	1 255	1 387	1 103	1 396
Oxides	78	51	197	121	136
Irish Republic					
Oxides	193	173	104	136	110
Italy					
Metal	125	76	71	75	45
Oxides	78	30	56	77	155
Netherlands					
Metal	978	3 614	1 354	989	1 363
Oxides	119	137	85	148	198
Norway					
Metal	2 830	3 149	3 461	3 666	4 055
Poland					
Metal	11	1	1	32	...
Russia					
Ore	...	115	1 564	6 215	895
Metal	2 207	2 554	4 572	3 023	9 136
Oxides	277	142	261	267	1 031
Spain					
Metal	16	49	50	1	13
Oxides	14	24	17	34	109
Sweden					
Metal	170	181	103	144	260
Oxides	898	396	251	314	295
Switzerland					
Metal	128	124	183	118	94
United Kingdom					
Metal	2 338	2 362	1 858	2 001	1 767
Oxides	2 163	1 233	1 229	1 323	1 005
Congo, Democratic Republic					
Metal	*3 400	*3 500	*2 800	*4 500	*4 600
Morocco					
Ore	4 591	4 893	----	...	...
Metal	...	100	218	200	...
South Africa					
Metal (e)	152	194	256	266	263
Zambia					
Metal	*2 900	*4 800	*3 900	*5 000	4 036
Canada					
Metal	4 697	4 821	6 002	6 751	6 317
Oxides	----	632	549	476	278
Cuba					
Oxide, sinter & sulphide (b)	*1 700	*2 300	*2 400	*2 800	*2 700
USA					
Metal	1 624	2 028	1 902	2 024	1 710
Oxides	336	408	676	582	603
Brazil					
Metal	107	190	211	241	549

**Exports of Cobalt**

Country	1995	1996	1997	1998	1999
China					
Metal	135	171	216	222	123
Oxides	235	114	204	287	238
Hong Kong					
Metal (c)	910	850	1 154	704	1 600
Oxides (c)	1 010	1 989	1 819	216	59
India					
Metal (d)	74	44	27	17	...
Japan					
Metal	448	788	900	119	751
Oxides	73	65	88	134	193
Korea, Republic of					
Metal	10	5	39	34	96
Singapore					
Metal	201	313	454	678	1 113
of which, re-exports	200	292	453	627	825
Oxide	75	87	104	120	239
of which, re-exports	70	82	86	118	236
Taiwan					
Metal	29	202	445	445	112
Australia					
Metal	1	298	875	2 306	3 100
Oxides	57	132	289	32	1

## 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) Years ended 31 March following that stated
- (e) Includes metal and metal contained in sulphate



## Imports of Cobalt

tonnes

Country	1995	1996	1997	1998	1999
Austria					
Metal	353	283	439	340	332
Belgium-Luxembourg					
Metal (b)	*1 000	*1 000	*1 500	*1 900	*2 000
Oxides	475	263	340	358	436
Czech Republic					
Metal	...	...	48	81	55
Denmark					
Metal	24	123	8	6	2
Estonia					
Metal	...	...	2	36	29
Finland					
Oxides	23	15	----	68	2
France					
Ore	49	30	76	1 639	80
Metal	1 643	1 256	2 023	1 768	1 428
Oxides	602	539	649	568	534
Germany					
Metal	2 360	2 508	2 127	2 481	2 094
Oxides	479	346	339	477	488
Greece					
Metal	32	39	...	57	44
Irish Republic					
Metal	140	149	191	265	151
Oxides	25	12	35	21	70
Italy					
Metal	629	682	691	595	564
Oxides	734	669	735	914	874
Netherlands					
Metal	615	577	456	679	1 394
Oxides	257	244	452	337	228
Norway					
Metal	1 637	1 754	1 100	1 661	1 371
Oxides	1 018	696	408	631	645
Russia					
Metal	(b) *500	107	1	72	17
Oxide	...	16	56	27	72
Spain					
Metal	144	190	163	146	204
Oxides	437	540	783	901	1 071
Sweden					
Metal	1 085	816	669	1 004	680
Switzerland					
Metal	335	275	353	353	316
Turkey					
Metal	...	83	70	60	58
Oxides	39	46	80	53	59
United Kingdom					
Metal	3 458	3 875	3 980	3 950	4 424
Oxides	604	713	799	672	465
South Africa					
Ore	...	...	0	327	2 862
Metal	580	195	629	840	822
Oxides	12	2	7	44	67
Canada					
Metal	1 246	856	1 224	1 325	862
Mexico					
Metal	36	52	97	158	101
Oxides	125	176	250	267	205
USA					
Metal	6 682	6 651	7 858	8 036	7 584
Oxide	808	892	1 149	1 205	1 264

## Imports of Cobalt

Country	1995	1996	1997	1998	1999
Brazil					
Metal	358	306	1 002	297	184
Oxide	94	246	243	208	149
Venezuela					
Oxides	104	*100	29	13	36
China					
Ore	4 691	4 913	494	2 787	7 573
Metal	1 052	428	572	600	1 348
Oxides	197	108	150	52	98
Dubai					
Metal	...	11	272	434	...
Hong Kong					
Ore	21	204	273	----	...
Metal	1 171	1 342	1 626	890	1 481
Oxide	309	153	333	161	230
India					
Ore (a)	12	251	607	2 465	...
Metal (a)	330	361	408	384	...
Indonesia					
Metal	44	29	42	163	...
Oxides	48	69	...	79	...
Japan					
Metal	5 548	6 662	7 016	6 789	7 476
Oxide	808	1 119	1 753	1 752	2 800
Korea, Republic of					
Metal	796	573	626	561	820
Oxides	140	172	147	126	218
Malaysia					
Metal	300	300	100	200	...
Oxides	64	83	44	64	...
Saudi Arabia					
Oxides	537	142	192	74	1 666
Singapore					
Metal	257	355	619	780	852
Oxide	...	290	207	137	279
Taiwan					
Metal	517	790	879	1 010	859
Oxides	244	232	197	164	182
Thailand					
Metal	12	48	119	109	131
Oxide	48	52	55	32	84
Australia					
Metal	27	44	73	125	78
Oxide	71	75	96	79	113

Note(s) :-

(a) Years ended 31 March following that stated

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

## Mine Production of Copper

tonnes (metal content)

Country	1995	1996	1997	1998	1999
Albania	3 650	2 630	324	2 300	900
Armenia	8 080	9 088	6 770	9 158	9 611
Bulgaria	77 400	84 800	75 500	75 500	76 000
Cyprus	-----	1 700	3 900	4 900	5 000
Finland	9 049	9 261	8 500	9 500	10 500
Georgia	5 800	6 900	6 000	3 500	1 000
Macedonia	*10 000	*13 500	*13 000	9 100	10 200
Norway	6 799	7 394	6 671	2 699	-----
Poland	384 200	421 900	414 737	436 156	463 604
Portugal	129 726	107 774	106 580	114 515	99 472
Romania	24 520	24 434	22 638	19 065	16 807
Russia	525 900	523 000	505 000	*500 000	*510 000
Spain	24 519	38 398	38 887	39 438	3 500
Sweden	83 603	71 659	86 610	73 685	71 160
Turkey	44 500	52 200	64 600	73 900	74 700
Yugoslavia, Federal Republic of	74 619	69 467	87 404	84 627	62 777
Botswana	20 461	23 299	19 820	22 124	20 960
Congo, Democratic Republic	34 958	40 165	39 651	38 236	33 000
Morocco	13 600	15 100	15 400	10 700	10 200
Namibia	22 530	14 904	17 879	6 500	-----
South Africa	182 000	188 000	185 000	187 800	162 900
Zambia	341 938	339 744	331 235	378 798	270 995
Zimbabwe	8 045	9 028	6 832	5 952	4 977
Canada	726 293	688 426	659 500	705 766	614 210
Cuba	1 858	2 362	2 208	1 351	1 090
Mexico	333 565	340 710	390 536	384 641	381 184
USA	1 849 100	1 918 300	1 939 600	1 859 300	1 602 500
Argentina	...	...	30 421	170 273	210 126
Brazil	48 933	46 203	39 952	34 446	31 371
Chile	2 488 600	3 115 800	3 392 000	3 686 900	4 382 600
Colombia	2 747	2 222	1 145	*1 800	*2 100
Peru	409 693	485 595	506 498	483 338	536 277
China	441 900	436 400	495 500	486 800	520 100
India	46 600	47 800	37 200	48 000	34 100
Indonesia	618 000	525 900	548 300	809 100	790 300
Iran	102 200	107 600	118 700	128 300	130 000
Japan	2 376	1 145	932	1 070	1 038
Kazakhstan	228 500	237 500	316 166	338 600	373 500
Korea, Dem. P.R. of	*10 000	*10 000	*10 000	*10 000	*10 000
Malaysia	20 751	20 219	18 821	13 907	4 600
Mongolia	121 900	121 000	130 000	127 784	128 210
Myanmar	5 282	4 841	2 977	3 200	26 700
Pakistan	4 400	*3 000	-----	-----	-----
Philippines	102 637	62 297	48 637	45 381	37 631
Saudi Arabia	1 000	786	703	782	821
Uzbekistan	40 000	64 000	74 400	74 400	66 000
Australia	379 000	548 000	558 000	607 000	711 000
Papua New Guinea	212 737	186 665	111 515	152 200	187 921
World Total	10 200 000	11 000 000	11 500 000	12 300 000	12 700 000

**Smelter Production of Copper**

Country	1995	1996	1997	1998	1999
Belgium	151 900	157 300	142 500	138 400	142 800
Bulgaria	97 700	98 000	98 000	114 500	95 000
Finland	113 803	178 675	*180 000	...	...
Germany	308 100	385 400	349 100	320 000	*330 000
Norway	31 146	31 248	32 900	31 700	33 300
Poland	389 700	393 900	432 000	422 700	466 225
Romania	23 355	32 565	25 024	18 709	24 010
Russia	525 000	549 600	535 000	510 000	600 000
Slovakia	9 600	14 000	*10 000	*10 000	----
Spain	139 900	248 500	288 900	291 000	293 000
Sweden	83 289	92 600	93 493	81 642	76 023
Turkey	19 700	21 100	23 100	24 400	27 000
Yugoslavia, Federal Republic of	72 800	106 600	105 500	107 700	53 800
Congo, Democratic Republic (a)	28 800	42 200	39 600	35 000	29 000
Namibia	29 799	20 705	23 802	8 739	----
South Africa	154 400	148 400	163 600	153 200	149 300
Zambia (a)	299 900	324 100	315 800	255 100	258 900
Zimbabwe	17 500	*18 000	*18 000	18 000	14 500
Canada	522 761	529 346	529 525	553 148	542 439
Mexico	327 563	311 264	332 999	334 714	314 430
USA	1 250 000	1 300 000	1 440 000	1 490 000	1 090 000
Brazil	164 996	172 075	177 060	167 205	193 014
Chile	1 291 000	1 355 600	1 389 600	1 403 100	1 473 900
Peru	345 119	323 797	323 382	356 189	350 377
China	538 000	615 600	789 000	838 600	837 000
India	40 300	45 300	51 400	107 600	224 000
Indonesia	----	----	----	----	126 700
Iran (b)	92 613	102 038	106 287	129 020	*125 000
Japan	1 043 275	1 122 571	1 214 172	1 171 657	1 256 276
Kazakhstan	265 000	250 195	315 960	351 336	384 234
Korea, Dem. P.R. of	*10 000	*10 000	*10 000	*10 000	*10 000
Korea, Republic of	136 000	130 000	146 000	284 000	350 000
Oman	34 200	23 300	22 800	24 400	17 100
Philippines	198 500	185 000	173 200	161 600	162 000
Uzbekistan	90 000	95 000	110 600	84 900	55 000
Australia	140 000	186 000	208 000	236 000	334 000
<b>World Total</b>	<b>9 000 000</b>	<b>9 600 000</b>	<b>10 200 000</b>	<b>10 400 000</b>	<b>10 600 000</b>

## Note(s):-

(1) This table shows primary metal in the form of blister and anode produced from concentrates, and may include copper produced from scrap but this is excluded when it can be separately identified

(a) Including leach cathodes

(b) Years ended 20 March following that stated

**Production of Refined Copper**

tonnes

Country	1995	1996	1997	1998	1999
Austria	53 408	69 120	74 093	74 786	77 600
Belgium	376 000	386 000	373 000	368 000	388 000
Bulgaria	25 468	22 300	34 500	32 100	20 000
Cyprus	-----	1 688	4 045	4 920	15 260
Finland	73 665	110 715	116 328	122 894	114 700
France	42 500	39 100	35 600	22 400	6 500
Germany	616 390	670 800	673 712	695 869	695 625
Italy	98 000	85 800	85 700	29 100	28 500
Norway	34 332	33 937	32 900	31 700	33 300
Poland	405 700	424 708	440 644	446 837	470 494
Romania	22 013	28 323	22 912	21 008	20 294
Russia	*550 000	*600 000	*600 000	656 000	750 100
Slovakia	21 400	28 100	30 300	19 900	2 000
Spain	164 213	263 989	292 000	304 300	305 000
Sweden	110 939	126 379	128 414	125 355	113 960
Turkey	100 300	100 712	114 600	91 900	60 500
United Kingdom	51 867	56 615	60 402	53 774	50 334
Yugoslavia, Federal Republic of	78 451	104 000	113 534	94 396	49 902
Congo, Democratic Republic	33 088	42 200	37 600	35 000	29 000
South Africa	131 700	116 000	126 500	123 100	116 400
Zambia	307 181	313 650	308 888	249 030	295 030
Zimbabwe	24 000	22 000	16 100	10 000	14 500
Canada	572 616	559 200	560 582	562 261	540 446
Mexico	258 200	240 500	280 500	336 800	324 200
USA	2 279 900	2 352 400	2 445 400	2 489 300	2 131 900
Argentina	*16 000	*16 000	*16 000	*16 000	*16 000
Brazil	164 996	172 075	177 060	167 205	193 014
Chile	1 491 500	1 748 200	2 116 600	2 334 900	2 665 700
Peru	295 143	338 061	384 085	411 431	433 831
China	1 079 700	1 120 500	1 179 400	1 211 300	1 174 200
India	39 569	39 303	65 900	134 000	208 100
Indonesia	-----	-----	-----	-----	90 800
Iran (a)	121 631	135 340	138 406	150 048	*160 000
Japan	1 187 959	1 251 373	1 278 699	1 277 352	1 341 549
Kazakhstan	255 559	267 144	301 056	324 763	361 889
Korea, Dem. P.R. of	*10 000	*10 000	*10 000	*10 000	*10 000
Korea, Republic of	233 171	244 434	263 000	371 000	448 000
Myanmar (b)	-----	-----	-----	9 730	27 853
Oman	21 300	20 400	23 664	23 994	17 100
Philippines	158 109	155 800	146 600	152 400	148 000
Uzbekistan	95 000	100 000	115 000	89 900	72 000
Australia	290 000	335 000	295 000	309 000	443 000
World Total	11 900 000	12 800 000	13 500 000	14 000 000	14 500 000

## 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 and Egypt produce refined copper

- (a) Years ended 20 March following that stated  
(b) Years ended 31 March following that stated

## Exports of Copper

Country	1995	1996	1997	1998	1999
Albania					
Scrap (f)	*300	*1 700	*4 800	*200	*700
Armenia					
Scrap	(f) *500	(f) *500	(f) *200	(f) *1 100	4 172
Austria					
Unwrought	77 921	73 521	97 477	104 976	90 720
Unwrought alloys	5 464	6 312	2 330	1 746	624
Scrap	18 150	27 171	23 045	23 901	19 450
Belarus					
Unwrought	(f) *2 000	(f) *500	(f) *500	315	243
Scrap	(f) *2 700	(f) *500	(f) *3 100	4 975	6 126
Belgium-Luxembourg					
Ore	138	3	1	7 290	1 098
Matte & cement	200	56	156	4 770	5 518
Unwrought, unrefined	29 613	18 352	2 943	1 583	12 017
Unwrought, refined	171 864	129 340	146 106	144 764	171 924
Unwrought alloys	9 443	8 139	7 972	12 518	15 914
Scrap	56 744	60 467	92 842	69 907	96 893
Bosnia & Herzegovina					
Scrap (f)	*800	*4 000	*3 600	*2 000	*2 200
Bulgaria					
Ore	72 103	86 996	97 100	71 100	...
Unwrought	79 221	...	109 782	(f) *120 000	(f) *104 600
Scrap	781	2 047	1 838	(f) *3 500	(f) *3 200
Croatia					
Scrap	5 505	5 298	5 810	5 622	6 860
Cyprus					
Unwrought	----	1 491	4 048	4 938	5 260
Scrap	33 336	20 366	2 046	3 824	43 931
of which, re-exports	19 916	20 366	1 059	3 788	43 911
Czech Republic					
Unwrought	4 900	4 600	4 586	3 188	2 051
Scrap	29 200	26 600	26 574	28 055	32 461
Denmark					
Scrap	52 169	31 610	30 743	31 986	35 184
Estonia					
Unwrought	1 267	(f) *1 400	168	201	60
Scrap	5 227	4 436	4 869	4 253	5 720
Finland					
Unwrought, unrefined	13 458	35 102	39 275	32 951	32 347
Unwrought, refined	24 873	40 703	49 261	39 185	30 845
Unwrought alloys	678	960	1 388	1 004	838
Scrap	22 951	28 611	37 445	20 932	16 955
France					
Ore	2 194	1 429	1 673	223	675
Matte & cement	4 762	226	555	1 023	190
Unwrought, unrefined	3 216	505	97	31	233
Unwrought, refined	12 640	16 065	19 931	38 379	21 748
Unwrought alloys	11 222	7 283	10 169	12 754	13 329
Scrap	141 999	126 414	132 939	122 322	199 970
Georgia					
Scrap (f)	*500	*600	*1 700	*2 800	...
Germany					
Ore	22 031	14 898	24 727	11 896	14 898
Matte & cement	957	776	1 087	19	848
Unwrought, unrefined	556	532	4 171	236	118
Unwrought, refined	135 134	246 759	146 752	109 741	140 165
Unwrought alloys	23 410	21 905	25 952	26 457	27 496
Scrap	263 687	248 568	335 664	306 024	272 055
Greece					
Scrap	7 512	6 372	10 859	4 655	2 902
Hungary					
Unwrought	500	305	1 502	485	...
Scrap	22 125	13 305	13 268	14 183	13 742
Iceland					
Scrap	600	400	300	341	...
Irish Republic					
Scrap	9 795	9 202	11 043	9 715	9 227

## Exports of Copper

tonnes

Country	1995	1996	1997	1998	1999
Italy					
Matte & cement	2 073	1 794	59	1 114	6 219
Unwrought	12 668	9 676	5 215	3 438	4 888
Unwrought alloys	10 100	9 275	13 125	14 436	18 192
Scrap	43 829	46 468	57 488	50 519	54 144
Latvia					
Scrap (c) (f)	*18 000	*22 600	*17 200	*9 100	...
Lithuania					
Scrap	----	18 177	12 301	9 741	8 361
Macedonia					
Ore	...	54 115	19 754	38 170	...
Unwrought	(f) *14 600	1 271	4 937	447	(f) *1 500
Moldova					
Scrap	11 515	2 575	1 820	2 382	4 937
Netherlands					
Matte & cement	668	399	476	2 142	1 456
Unwrought	15 344	12 938	11 173	9 757	9 261
Scrap	135 850	104 176	106 125	74 457	87 502
Norway					
Ore	32 970	35 024	32 485	14 825	...
Unwrought	33 567	33 261	33 273	30 642	33 898
Unwrought alloys	1 930	1 922	1 808	1 589	1 971
Scrap	12 535	10 998	13 034	9 229	12 737
Poland					
Ores & concentrates	3	8	15 808	23 966	494
Unwrought	193 926	200 005	209 000	182 386	220 950
Unwrought alloys	7 763	7 978	11 452	10 778	8 794
Scrap	548	602	3 257	8 675	10 139
Portugal					
Ore	517 892	492 279	465 368	447 370	441 029
Unwrought	...	...	6	1 035	1 098
Scrap	9 300	9 222	9 044	9 892	12 337
Romania					
Ore	...	...	...	14 362	28 499
Matte & cement	...	...	2 434	2 015	...
Unwrought	6 504	13 254	15 141	8 394	9 990
Scrap	16	107	206	17 856	34 668
Russia					
Ore	141 196	56 779	34 693	39 797	26 182
Unwrought	471 061	562 772	571 451	550 900	640 150
Scrap	(f) *207 400	(f) *242 700	355 359	356 479	201 255
Slovakia					
Ores & concentrates	...	3 500	10 300	----	7 989
Unwrought	5 700	1 700	900	1 180	2 071
Scrap	(f) *3 000	(f) *2 600	(f) *4 500	4 544	8 345
Slovenia					
Scrap	2 800	3 500	5 200	6 300	6 372
Spain					
Ore	43 185	81 981	54 205	59 880	83 383
Unwrought, unrefined	27 569	27 228	33 514	27 464	25 461
Unwrought, refined	15 484	86 371	106 791	103 469	93 098
Unwrought alloys	4 474	3 238	4 714	4 706	7 955
Scrap	37 148	39 750	46 328	31 089	48 860
Sweden					
Ore	58 040	42 150	60 147	15 783	29 437
Unwrought, unrefined	6 084	----	----	----	1
Unwrought, refined	9 750	26 625	18 637	19 739	13 290
Unwrought alloys	4 910	5 951	11 375	8 841	7 924
Scrap	18 033	17 996	18 112	14 254	18 448
Switzerland					
Unwrought	4 492	4 846	6 242	6 556	5 791
Scrap	42 761	43 626	53 012	42 885	50 650
Turkey					
Ore	83 834	121 985	180 669	154 149	194 300
Matte & cement	...	...	...	4 569	7 179
Unwrought	3 797	10 018	8 139	7 630	17 704

## Exports of Copper

Country	1995	1996	1997	1998	1999
Ukraine					
Unwrought	(f) *5 200	7 778	5 271	11 140	51 156
Scrap	(f) *13 700	(f) *25 700	97 662	91 794	*90 000
United Kingdom					
Ore & matte	726	1 072	10 163	8 559	9 667
Unwrought	5 848	6 767	5 852	9 776	8 904
Unwrought alloys	25 617	25 384	24 053	28 796	34 798
Scrap	113 567	115 731	111 722	108 407	106 359
Yugoslavia, Federal Republic of					
Unwrought	...	66 808	72 710	97 915	30 579
Algeria					
Scrap	*1 500	9 337	9 338	5 772	...
Botswana					
Matte & cement (b)	17 900	23 400	18 100	22 000	...
Congo, Democratic Republic					
Unwrought, unrefined (e)	*20 000	*20 000	*31 000	*30 000	...
Unwrought, refined	23 700	15 900	*10 000	*10 000	...
Egypt					
Scrap	----	127	2 143	116	1 037
Ghana					
Scrap	*1 100	*1 100	*1 100	*1 100	1 709
Morocco					
Ore	40 080	40 650	40 827	...	...
Matte & cement	1 561	1 894	2 744	...	...
Scrap	7 158	5 527	7 062	5 000	...
Namibia					
Unwrought	25 074	18 306	21 360	7 750	----
Senegal					
Scrap	1 276	...	...	...	674
South Africa					
Ores & concentrates (b)	7 627	...	8 617	5 613	6 454
Unwrought	71 598	69 478	68 669	80 877	70 683
Scrap	(f) *26 400	(f) *42 400	26 398	47 645	76 085
Tunisia					
Scrap	4 013	2 168	3 919	1 142	3 208
Uganda					
Unwrought	1 286	----	140	220	...
Scrap	...	2 222	224	118	...
Zambia					
Unwrought, refined	291 869	276 079	303 784	227 980	232 723
Zimbabwe					
Unwrought	7 498	10 538	7 999	11 023	25 361
Canada					
Ores & concentrates (b)	260 977	386 200	492 534	347 636	262 039
Matte & cement (b)	13 480	18 315	17 181	19 505	20 037
Unwrought	471 897	466 096	457 437	440 497	376 831
Scrap	120 509	113 559	126 177	101 346	65 153
Cuba					
Concentrates (f)	...	*8 300	*12 500	*9 400	*4 900
Scrap (f)	*4 400	*4 900	*3 200	*4 500	*4 000
Mexico					
Concentrates	31 653	49 685	44 534	68 722	76 846
Matte & cement	5 238	2 936	2 475	15 663	6 361
Unwrought	186 731	153 704	196 678	237 005	132 914
Scrap	82 363	73 756	96 387	58 423	130 740
USA					
Ores & concentrates (b)	228 092	185 219	124 186	36 497	75 698
Matte & cement	6 972	14 999	32 075	10 556	12 717
Unwrought, unrefined	29 521	22 973	31 643	28 812	32 786
Unwrought, refined	217 419	178 167	93 342	85 618	25 602
Unwrought alloys	16 246	19 017	24 725	20 064	19 409
Scrap	552 985	400 413	386 286	310 763	316 777
Argentina					
Ores & concentrates	...	...	80 443	574 981	718 762
Scrap	6 224	8 555	3 640	2 583	5 882



## Exports of Copper

tonnes

Country	1995	1996	1997	1998	1999
Brazil					
Unwrought, refined	58 423	41 819	35 987	7 003	21 172
Chile					
Ores & concentrates (b)	815 200	1 123 400	1 107 100	1 169 400	1 531 800
Unwrought, unrefined	178 200	226 900	158 400	157 400	157 100
Unwrought, refined	1 400 600	1 603 600	2 031 700	2 248 200	2 547 900
Scrap	1 600	2 308	2 489	2 751	...
Colombia					
Ore	5 355	13 762	9 786	16 671	8 699
Scrap	6 949	6 142	5 906	7 278	10 468
Ecuador					
Scrap	1 428	1 898	2 760	2 717	2 317
Peru					
Ore	187 477	201 684	295 679	250 747	192 814
Unwrought, unrefined	89 390	83 247	56 790	44 674	30 678
Unwrought, refined	251 857	320 102	361 477	347 575	415 849
Scrap	3 076	2 839	3 515	3 066	2 108
Venezuela					
Scrap	15 484	12 696	8 638	7 200	9 952
China					
Unwrought, unrefined	3 746	11 600	5 661	12 972	3 495
Unwrought, refined	34 229	39 791	77 869	106 108	94 586
Unwrought alloys	5 072	1 612	735	2 336	4 956
Scrap	19 032	8 024	11 934	9 584	11 162
Hong Kong					
Unwrought	32 786	54 598	59 835	76 815	44 418
of which, re-exports	32 642	54 296	59 694	76 675	43 610
Scrap	306 390	293 945	313 847	211 752	153 146
of which, re-exports	205 673	200 620	242 233	145 158	98 419
India					
Ores & concentrates (g)	3 475	----	----	10	...
Indonesia					
Ores & concentrates	1 412 057	1 860 070	1 716 828	2 014 754	1 939 989
Unwrought	3 162	1 656	5 519	5 286	...
Scrap	1 573	2 504	4 329	9 772	...
Iran					
Ores & concentrates	(a) 11 200	(f) *100	(f) *1 000	(f) *15 000	(f) *28 500
Unwrought (f)	*4 700	*4 000	*8 400	*23 200	*28 600
Scrap	(a) 5 967	(f) *3 500	(f) *2 600	(f) *300	...
Israel					
Scrap	(f) *10 600	(f) *11 700	11 547	10 937	9 884
Japan					
Unwrought, unrefined	4 495	11 267	23 951	34 448	38 542
Unwrought, refined	158 727	164 606	157 696	292 907	318 854
Unwrought alloys	7 605	*9 000	11 413	18 215	16 471
Scrap	51 887	60 136	79 940	75 492	83 904
Jordan					
Scrap	2 906	3 440	2 804	2 166	...
Kazakhstan					
Ores & concentrates	2 391	20 339	11 097	0	10 326
Unwrought	216 603	266 626	306 033	339 205	355 931
Scrap	(f) *37 400	(f) *33 200	(f) *32 500	24 097	43 256
Korea, Republic of					
Matte & cement	470	1 778	1 997	945	871
Unwrought	4 592	8 643	41 183	298 918	154 154
Scrap	14 369	13 210	27 761	24 905	16 049
Kuwait					
Scrap	36 300	...	...	...	33 923
Kyrgyzstan					
Unwrought (f)	*5 600	*5 300	*5 500	*4 300	*500
Scrap	17 485	9 262	11 157	5 467	6 200
Malaysia					
Ore	88 201	86 969	...	...	...
Scrap	38 696	36 600	53 700	42 100	...
Mongolia					
Ores & concentrates	446 200	473 600	479 700	485 700	492 700
Scrap	620	442	508	139	168

## Exports of Copper

Country	1995	1996	1997	1998	1999
Oman					
Unwrought	26 000	39 700	23 100	18 619	20 733
Scrap	95 681	104 404	58 623	39 240	34 420
Pakistan					
Scrap (d)	...	1 544	23 192	2 028	3 265
Philippines					
Ores & concentrates	314 088	178 678	120 811	116 721	...
Unwrought	140 330	143 330	118 925	101 661	...
Scrap	16 076	21 766	32 782	26 070	...
Saudi Arabia					
Matte & cement	...	...	...	1 186	1 318
Unwrought	2 200	980	...	8 504	10 809
Scrap	...	3 976	16 694	12 971	11 908
Singapore					
Unwrought	199 112	197 161	201 835	105 611	137 197
of which, re-exports	197 224	195 067	200 556	104 910	136 292
Scrap	59 111	65 453	64 963	70 668	57 685
Taiwan					
Matte & cement	4 734	...	2 261	2 005	3 649
Unwrought	6 870	5 137	5 494	5 073	5 191
Scrap	30 202	21 888	33 146	26 531	41 781
Thailand					
Unwrought	468	41	381	1 098	899
Scrap	7 959	5 669	18 688	18 926	15 536
Uzbekistan					
Unwrought (f)	*6 000	*27 400	*25 000	*8 900	*14 100
Australia					
Ores & concentrates	390 606	788 040	979 965	1 234 500	1 072 651
Unwrought, unrefined	17	40	54	225	...
Unwrought, refined	106 045	117 285	116 050	126 804	253 919
Unwrought alloys	1 490	977	834	1 493	1 057
Scrap	34 066	26 448	30 708	29 157	26 673
New Zealand					
Scrap (d)	2 482	2 415	2 165	1 581	...
Papua New Guinea					
Ores & concentrates (b)	227 856	170 216	86 791	187 249	...

## 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(b)Cu content
- (a) Years ended 20 March following that stated
- (b) Cu content
- (c) Including 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

## Imports of Copper

tonnes

Country	1995	1996	1997	1998	1999
Austria					
Unwrought, unrefined	3 434	7 962	3 468	3 710	...
Unwrought, refined	34 275	34 438	39 497	35 536	26 540
Unwrought alloys	7 336	5 993	3 138	3 873	5 137
Scrap	66 519	55 765	90 668	82 586	88 130
Belarus					
Unwrought	*1 300	*1 300	*1 300	1 978	2 213
Scrap	*1 500	*1 500	*1 500	1 692	2 900
Belgium-Luxembourg					
Ore	10 615	17 421	2 888	20	1
Matte & cement	...	...	332	1 057	1 124
Unwrought, unrefined	130 563	123 023	101 160	94 045	140 069
Unwrought, refined	106 247	77 331	102 245	100 955	71 186
Unwrought alloys	7 070	9 234	4 690	5 979	3 474
Scrap	202 849	183 124	186 786	233 722	220 103
Bulgaria					
Ores & concentrates	83 884	92 674	86 580	...	...
Unwrought	4 000	6 300	8 700	*5 000	...
Czech Republic					
Unwrought	15 137	19 186	12 203	14 352	14 510
Scrap	7 400	2 000	2 711	2 828	1 854
Denmark					
Unwrought	1 892	2 057	2 432	2 403	2 173
Scrap	10 351	8 243	6 509	14 707	8 021
Finland					
Ore	293 676	494 217	464 435	544 111	514 879
Unwrought, refined	39 497	20 503	21 206	14 223	15 229
Unwrought alloys	4 304	4 378	5 546	5 086	4 744
Scrap	20 228	28 461	34 309	15 046	11 317
France					
Matte & cement	2 974	1 101	2 755	1 119	191
Unwrought, unrefined	4 214	9 066	4 785	4 644	670
Unwrought, refined	494 447	455 948	527 980	585 477	550 007
Unwrought alloys	17 607	16 446	20 011	15 416	15 154
Scrap	90 991	90 091	87 556	100 868	93 233
Germany					
Ore	663 299	689 055	640 856	605 691	839 574
Matte & cement	9 571	12 002	20 230	7 915	2 910
Unwrought, unrefined	49 644	81 345	62 636	45 406	36 613
Unwrought, refined	546 899	450 441	526 854	578 913	565 299
Unwrought alloys	45 100	42 407	39 486	41 963	34 552
Scrap	442 442	427 249	568 738	610 197	515 564
Greece					
Unwrought	79 064	89 723	96 933	103 592	114 876
Unwrought alloys	894	464	815	1 691	678
Scrap	1 322	1 631	4 088	651	2 590
Hungary					
Unwrought	14 400	12 400	15 967	17 000	...
Scrap	4 001	2 871	2 754	3 743	4 913
Irish Republic					
Scrap	468	300	1 080	646	353
Italy					
Unwrought, unrefined	14 290	25 113	5 579	4 749	1 900
Unwrought, refined	405 950	437 613	450 196	564 851	625 183
Unwrought alloys	31 374	27 100	20 829	22 320	19 961
Scrap	205 979	228 079	259 546	254 408	195 367
Lithuania					
Scrap	28 100	15 300	6 409	2 499	527
Macedonia					
Unwrought	...	2 376	2 557	156	...
Moldova					
Scrap	2 843	1 318	1 298	1 605	...
Netherlands					
Unwrought	35 788	37 515	44 133	78 016	137 729
Unwrought alloys	1 318	1 547	3 028	3 245	1 216
Scrap	110 571	95 804	101 936	92 486	76 482

## Imports of Copper

Country	1995	1996	1997	1998	1999
Norway					
Matte & cement (a)	*30 000	*23 000	*25 000	*40 000	...
Unwrought	3 265	3 155	4 422	3 713	3 225
Scrap	4 743	5 777	5 892	5 234	6 275
Poland					
Ores & concentrates	14 790	10 807	...	...	...
Unwrought	3 151	1 686	2 251	600	4 151
Scrap	1 162	1 376	1 497	1 136	2 627
Portugal					
Unwrought	200	4 087	3 955	2 532	3 486
Scrap	100	710	902	2 282	1 879
Romania					
Ores & concentrates	18 885	35 902	22 584	10 964	51 193
Unwrought	2 101	4 628	754	...	4 165
Russia					
Ore	202 032	214 673	143 159	62 843	57 754
Unwrought	...	3 375	7 360	6 165	3 439
Scrap	1 500	2 207	3 933	2 347	711
Slovakia					
Ores & concentrates	...	14 000	16 600	24 600	...
Unwrought, refined	5 188	4 788	7 769	7 500	1 264
Unwrought alloys	1 688	1 112	1 319	800	509
Slovenia					
Unwrought	3 600	3 900	4 000	4 800	3 881
Scrap	1 400	1 500	1 700	2 700	2 125
Spain					
Ore	442 689	736 576	888 487	935 942	1 003 472
Unwrought, unrefined	30 916	13 958	2 533	1 511	7 441
Unwrought, refined	26 535	21 226	12 431	29 069	29 186
Unwrought alloys	6 742	6 233	10 274	11 596	10 216
Scrap	58 104	59 273	67 737	72 145	66 828
Sweden					
Ore	72 264	85 258	67 018	53 966	67 539
Unwrought, unrefined	1	1 412	1 428	9 151	8 356
Unwrought, refined	66 143	43 888	47 673	61 531	76 899
Unwrought alloys	3 317	4 914	4 926	4 471	5 443
Scrap	33 879	29 025	32 096	41 339	35 529
Switzerland					
Unwrought	6 418	6 223	7 770	7 902	7 641
Unwrought alloys	2 066	1 112	1 319	1 482	1 980
Scrap	13 243	14 493	19 055	24 314	19 472
Turkey					
Ore	11 072	9 728	35 951	8 219	18 369
Unwrought	63 676	79 546	112 331	135 874	148 212
Scrap	7 539	20 536	17 443	7 358	14 822
United Kingdom					
Unwrought, unrefined	6 469	6 618	2 262	236	636
Unwrought, refined	268 310	328 106	365 895	348 509	303 425
Unwrought alloys	3 106	3 601	3 353	5 423	4 594
Scrap	40 943	47 366	54 856	54 483	36 019
Yugoslavia, Federal Republic of					
Ores & concentrates	...	189 580	184 399	138 527	28 679
Unwrought	*2 600	10 200	6 459	4 627	387
Algeria					
Unwrought	1 300	2 055	55	26	...
Egypt					
Unwrought	...	...	1 041	1 396	406
Namibia					
Ores & concentrates (a)	3 903	1 029	9 628	3 199	...
Nigeria					
Matte & cement	...	6 073	14	27	170
Unwrought	...	60	5 973	124	69
South Africa					
Ores & concentrates	94	22 365	5 255	455	47
Unwrought	4 237	2 281	1 570	2 184	1 531
Scrap	5 600	4 922	4 837	4 796	5 730

## Imports of Copper

tonnes

Country	1995	1996	1997	1998	1999
Tunisia					
Unwrought	2 054	3 062	2 265	2 521	3 069
Scrap	800	200	105	168	1 142
Zambia					
Ores & concentrates (a)	8 882	4 599	4 560	4 600	4 600
Canada					
Ores & concentrates (a)	148 638	134 825	134 121	123 650	137 662
Matte & cement	4 996	11 553	9 211	10 700	22 178
Unwrought	59 402	46 206	49 738	38 214	44 187
Unwrought alloys	8 556	5 364	6 892	7 624	8 276
Scrap	167 236	153 322	172 870	113 032	74 103
Mexico					
Ores & concentrates	22 004	16 167	108 388	100 661	143 352
Unwrought	19 181	47 690	66 387	184 581	191 838
Scrap	15 253	15 157	16 100	22 331	31 653
USA					
Ores & concentrates (a)	129 663	62 718	45 829	217 936	93 261
Matte & cement (a)	907	754	1 111	1 036	1 060
Unwrought, unrefined	152 036	106 661	155 384	180 184	174 758
Unwrought, refined	436 305	621 903	646 058	720 383	930 103
Unwrought alloys	14 575	17 415	22 122	17 510	23 596
Scrap	221 617	212 370	211 621	166 100	135 972
Argentina					
Unwrought, refined	31 668	33 594	36 078	40 682	27 973
Brazil					
Ores & concentrates	394 034	379 668	413 411	421 349	582 535
Unwrought	91 329	102 710	116 777	137 905	115 792
Scrap	21 145	4 984	2 066	1 206	1 129
Colombia					
Unwrought	1 246	603	535	1 033	2 054
Venezuela					
Unwrought, refined	22 849	16 711	17 304	16 900	11 522
Unwrought alloys	488	502	344	100	166
China					
Ores & concentrates	484 280	824 810	937 776	1 182 867	1 250 148
Matte & cement	5 676	4 488	1 020	33	262
Unwrought, unrefined	79 778	133 010	111 070	95 858	129 960
Unwrought, refined	102 056	149 699	88 345	162 650	404 764
Unwrought alloys	5 671	8 232	11 410	9 892	13 012
Scrap	1 188 926	710 983	796 841	956 644	1 701 391
Dubai					
Scrap	...	4 685	2 490	2 209	...
Hong Kong					
Unwrought, unrefined	----	1 317	8 218	3 337	389
Unwrought, refined	50 903	89 005	137 654	267 964	47 589
Unwrought alloys	360	1 224	948	1 573	2 385
Scrap	340 704	355 475	332 420	188 490	112 815
India					
Ore (b)	19 148	60 056	87 890	296 022	...
Unwrought (b)	83 663	157 914	138 025	61 235	...
Scrap (b)	110 931	137 263	145 197	140 030	...
Indonesia					
Unwrought	86 932	105 233	58 997	68 284	44 400
Unwrought alloys	2 026	2 152	1 795	2 744	...
Scrap	2 158	1 188	2 755	1 406	...
Japan					
Ores & concentrates	3 825 212	3 840 935	3 769 017	3 975 398	4 286 193
Matte & cement	3 294	7 065	12 283	1 736	1 449
Unwrought	410 620	366 103	358 711	275 378	265 517
Unwrought alloys	9 195	6 026	6 342	3 237	2 790
Scrap	153 102	145 783	193 549	162 798	174 463
Kazakhstan					
Ores & concentrates	170 729	60 774	12 313	15 024	...
Scrap	*1 000	*1 000	*1 000	1 467	1 582

## Imports of Copper

Country	1995	1996	1997	1998	1999
Korea, Republic of					
Ore	468 714	347 994	518 112	973 450	1 166 630
Unwrought, unrefined	79 748	84 064	108 823	62 649	59 894
Unwrought, refined	326 056	305 141	395 659	487 358	484 686
Unwrought alloys	1 004	1 576	804	811	646
Scrap	151 409	111 575	119 921	88 947	184 778
Kuwait					
Unwrought	9 223	14 651	13 221	...	10 937
Kyrgyzstan					
Scrap	5 079	1 781	3 507	1 716	56
Malaysia					
Unwrought	116 384	145 500	162 800	136 300	*160 000
Oman					
Ores & concentrates	94 909	128 454	177 795	77 013	134 497
Pakistan					
Unwrought	10 657	11 697	10 800	9 600	...
Scrap (c)	1 932	4 722	2 776	99	3 773
Philippines					
Concentrates	499 073	509 068	496 324	435 065	499 323
Unwrought	16 880	18 669	15 798	10 017	...
Scrap	77	479	549	1 697	...
Saudi Arabia					
Unwrought	85 072	67 597	38 679	77 756	49 197
Singapore					
Unwrought	261 525	196 244	213 115	199 662	116 942
Scrap	21 770	27 437	28 221	26 821	18 701
Taiwan					
Unwrought	567 233	546 140	589 980	585 810	656 359
Unwrought alloys	12 400	11 084	10 198	13 902	17 040
Scrap	26 150	35 052	37 498	41 447	50 179
Thailand					
Unwrought	154 091	161 159	157 363	90 599	123 283
Scrap	3 007	3 342	3 686	1 795	2 949
Australia					
Ores & concentrates	10 018	2	62	139	3
Matte & cement	104	21 955	3 196	3 691	5 499
Unwrought	29 370	17 010	7 687	524	2 895
Unwrought alloys	1 772	1 926	18 467	2 606	2 944
Scrap	18 909	2 918	4 022	4 318	6 679
New Zealand					
Unwrought (c)	10 924	...	9 749	8 223	...
Scrap (c)	4 627	...	2 318	2 906	...

## 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) Cu content

(b) Years ended 31 March following that stated

(c) Years ended 30 June of that stated

**Production of Diamond**

carats

Country	1995	1996	1997	1998	1999
Russia	16 900 000	19 200 000	19 400 000	19 800 000	16 200 000
Angola	671 394	917 419	1 314 182	2 764 858	2 132 937
Botswana	16 802 438	17 707 000	20 111 000	19 770 000	21 348 000
Central African Republic	477 698	487 360	486 787	419 967	431 138
Congo, Democratic Republic	22 024 000	22 240 000	20 977 000	21 362 000	22 000 000
Ghana	622 700	714 300	829 524	805 742	684 033
Guinea	364 841	200 664	417 146	392 488	382 743
Ivory Coast	75 300	301 591	306 665	*310 000	*310 000
Liberia	*150 000	*150 000	*200 000	*200 000	*200 000
Namibia	1 381 757	1 402 129	1 419 530	1 465 959	1 632 860
Sierra Leone	213 600	270 092	*400 000	*250 000	*300 000
South Africa	9 682 744	9 954 668	10 085 708	10 705 221	10 019 282
Swaziland	75 000	75 000	-----	-----	...
Tanzania	49 538	126 700	123 100	95 300	232 000
Zimbabwe	204 416	437 266	421 307	28 732	42 578
Canada	-----	-----	-----	300 006	2 500 000
Brazil	676 269	*200 000	*100 000	*100 000	*900 000
Guyana	51 065	46 729	36 573	34 399	46 668
Venezuela	296 116	172 016	284 208	96 811	95 144
China	365 085	118 380	120 385	...	685 000
India (a)	29 931	31 836	30 994	34 580	40 666
Indonesia	*29 000	*29 000	*30 000	35 000	...
Australia	40 692 000	41 993 000	40 175 000	40 843 000	29 784 000
<b>World Total</b>	<b>111 800 000</b>	<b>116 800 000</b>	<b>117 300 000</b>	<b>120 000 000</b>	<b>110 000 000</b>

## Note(s):-

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

(a) Years ended 31 March following that stated

## Exports of Diamond

Country	1995	1996	1997	1998	1999
Austria					
Gem, cut	5 259	40 476	5 614	3 132	...
Industrial	2 097	1 543	2 229	1 308	...
Dust	2 765 000	1 100 000	815 000	746 960	...
Belgium-Luxembourg					
Unsorted	2 000	37 000	369 000	1 000	...
Gem, rough	99 135 000	115 919 000	132 880 000	160 778 000	158 000 000
Gem, cut	7 641 000	7 230 000	7 723 000	7 762 000	...
Industrial	10 677 000	13 915 000	28 104 000	19 000 000	...
Dust	35 000 000	51 615 000	67 265 000	67 300 000	...
France					
Gem, cut	26 288	41 232	54 494	...	...
Industrial	...	3 353	3 277	...	...
Dust	3 883 870	...	3 708 955	...	...
Germany					
Gem, rough	9 588	2 890	181	72	97
Gem, cut	231 181	147 309	108 063	263 058	176 713
Industrial	91 318	63 783	74 078	70 582	28 164
Dust	76 790 000	89 060 000	46 710 000	48 145 000	32 725 000
Irish Republic					
Industrial	5 010 000	11 775 000	59 785 000	23 745 000	52 530 000
Italy					
Unsorted	...	...	£61 000	£60 000	£369 000
Gem, cut	£2 344 000	£5 251 000	£4 946 000	£5 600 000	£9 144 000
Industrial	£950 000	£448 000	£427 000	£400 000	£483 000
Netherlands					
Unsorted	£2 895 000	£2 231 000	£2 555 000	£2 191 000	£3 094 000
Gem, rough	£122 000	£323 000	£6 000	£27 000	...
Gem, cut	£6 514 000	£6 569 000	£6 361 000	£6 443 000	£7 536 000
Industrial	£1 884 000	£2 053 000	£1 273 000	£1 777 000	£1 013 000
Poland					
Industrial	...	...	55 000	5 000	10 000
Portugal					
Gem, rough	£2 344 000	£512 000	£16 487 000	£5 610 000	£430 000
Gem, cut	£38 708 000	£34 258 000	£34 744 000	£15 694 000	£29 996 000
Romania	1 651 790	4 064 080	879 100	...	...
Russia	40 400 000	...	...	...	...
Spain					
Gem, cut	£216 000	£708 000	£874 000	£1 032 000	£1 505 000
Industrial	£13 000	£425 000	£351 000	£777 000	£496 000
Switzerland					
Unsorted	15 000	75 000	60 000	65 000	80 000
Gem, rough	3 570 000	3 555 000	2 440 000	1 005 000	1 860 000
Gem, cut	1 160 000	1 380 000	1 070 000	300 000	400 000
Industrial	185 000	13 000	375 000	1 415 000	815 000
Dust	44 750 000	60 770 000	72 285 000	76 720 000	82 420 000
United Kingdom					
Unsorted	4 963 053	13 236 583	11 117 190	5 794 334	2 786 774
Gem, rough	51 436 741	63 333 558	69 757 480	65 595 954	63 373 209
Gem, cut	212 168	1 441 476	2 667 551	1 729 965	1 379 006
Industrial	12 131 021	25 737 087	25 772 889	35 394 187	28 891 078
Dust	34 254 440	41 146 270	73 505 020	56 682 115	48 161 625
Angola	671 394	917 419	1 314 182	2 764 858	3 570 000
Botswana					
Unsorted	...	...	21 669 025	...	...
Gem, cut	...	...	7 435	...	...
Industrial	...	...	43 850	...	...
Central African Republic					
Gem	352 015	333 782	340 126	278 873	431 138
Industrial	125 683	153 578	146 661	141 094	(e) ...
Guinea	364 841	200 664	392 334	337 448	383 620
Mauritius					
Gem, rough	£760 000	£192 000	£100 000	...	£1 132 000
Gem, cut	£15 584 000	£16 841 000	£16 800 000	£16 400 000	£19 108 000
Industrial	...	...	£2 600 000	£2 800 000	£261 000
Namibia	1 569 228	1 486 457	1 475 871	1 188 616	1 768 329
Sierra Leone	213 600	270 100	70 000	15 800	9 320



## Exports of Diamond

carats

Country	1995	1996	1997	1998	1999
South Africa					
Unsorted, gem & industrial	...	...	£775 033 000	£735 383 000	£967 414 000
Dust	...	...	£12 559 000	£15 396 000	£12 901 000
Tanzania	...	£10 050 000	£10 160 000	£7 310 000	£7 073 000
Tunisia					
Gem, cut	...	...	...	125 000	...
Industrial	...	135 000	120 000	...	...
Canada					
Gem, cut	42 325	47 082	37 751	50 243	...
of which, re-exports	28 331	19 847	27 714	47 744	...
Industrial	41 896	82 104	51 164	21 262	...
of which, re-exports	18 437	21 834	43 183	18 068	...
Dust	545 341	144 333	214 006	105 948	...
of which, re-exports	374 217	36 842	130 296	12 097	...
USA					
Unsorted	190 805	161 880	392 257	235 438	412 683
of which, re-exports	141 369	92 190	324 721	185 942	309 157
Gem, rough	1 045 173	1 032 812	901 327	904 523	723 083
of which, re-exports	925 268	993 896	874 585	879 790	660 830
Gem, cut	2 140 525	1 929 108	2 562 779	3 174 135	5 028 081
of which, re-exports	1 982 098	1 853 409	2 475 724	3 016 585	4 644 266
Industrial	5 794 434	3 927 204	4 003 704	5 007 158	4 217 660
of which, re-exports	5 003 881	2 958 963	3 260 520	3 876 268	3 378 584
Dust	101 384 141	107 751 472	128 697 795	107 973 890	101 218 432
of which, re-exports	2 554 897	3 064 608	2 616 355	3 505 648	2 813 377
Brazil					
Gem, rough	47 431	...	...	...	...
Gem, cut	59 289	...	...	...	...
China					
Unsorted	25 000	5 395	34 445	20 140	205
Gem, rough	180 000	166 760	157 430	181 220	342 900
Gem, cut	320 000	433 395	712 770	741 365	1 252 785
Industrial	5 420 000	3 185 000	13 611 550	8 696 265	6 714 690
Dust	19 990 000	16 459 475	11 032 415	11 590 400	43 798 030
Hong Kong					
Unsorted (b)	1 104 799	1 223 601	2 189 423	681 469	1 332 656
Gem, rough (b)	2 063 682	1 689 051	1 679 345	2 209 337	6 582 249
Gem, cut	2 069 739	2 202 611	2 593 636	2 875 100	3 903 552
of which, re-exports	2 011 831	2 166 337	2 568 985	2 860 234	3 866 240
Industrial (b)	2 438 035	1 322 837	1 375 890	765 292	1 407 546
India					
Gem, rough (a) (b)	585 741	1 272 190	961 399	1 096 363	...
Gem, cut (a)	18 584 357	16 218 345	10 785 173	11 146 970	...
Dust (a)	£6 292 000	£8 628 000	£2 288 000	£1 894 000	...
Israel					
Gem, rough	£493 000 000	£607 964 000	£640 967 000	£519 386 000	£820 167 000
Gem, cut	£3 111 298 000	£3 363 652 000	£3 471 354 000	£3 281 923 000	£3 948 839 000
Industrial	£4 029 000	£3 527 000	£5 653 000	£6 442 000	£31 382 000
Japan					
Industrial	1 646 253	1 932 442	2 018 739	2 519 134	3 095 358
Dust	10 886 046	12 007 423	15 066 371	16 529 190	17 204 192
Korea, Republic of					
Gem, cut	...	14 868	4 283	108 902	...
Industrial	...	570	59	28 905	...
Kuwait					
Gem	80 000	1 215 000	635 000	480 000	535 000
Malaysia					
Unsorted	£2 400 000	£1 900 000	£1 000 000	£700 000	£515 000
Gem, rough	£4 100 000	£1 000 000	...	...	£2 000
Gem, cut	£54 500 000	£53 900 000	£38 700 000	£19 800 000	£15 471 000
Singapore					
Gem	£70 073 000	£143 214 000	£140 313 000	£59 892 000	£69 828 000
of which, re-exports	£67 433 000	£136 831 000	£119 016 000	£57 102 000	£66 262 000
Industrial	£29 232 000	£19 061 000	£12 068 000	£2 571 000	£9 899 000
of which, re-exports	£25 350 000	£18 377 000	£7 626 000	£2 180 000	£9 777 000

## Exports of Diamond

Country	1995	1996	1997	1998	1999
Sri Lanka					
Gem, rough	174 898	207 749	197 132	58 928	...
Gem, cut	315 763	294 569	221 955	141 594	...
Industrial	17 835	421	3 554	4 893	...
Taiwan					
Gem, rough	655 000	-----	...	...	...
Gem, cut	135 000	10 000	...	...	...
Industrial	8 800 000	12 455 000	...	...	...
Dust	8 720 000	19 220 000	...	...	...
Thailand					
Unsorted	157 757	146 760	2 631 379	...	...
Gem, rough	244 624	237 316	141 394	...	...
Gem, cut	1 891 760	2 313 449	5 357 875	...	...
Industrial	39 856	10 321	107 630	...	...
Australia					
Unsorted	*32 245 000	*36 869 000	*29 541 000	*52 218 000	*51 704 000
Gem, rough	372	940	585	1 092	...
Gem, cut	29 215	27 000	32 053	30 777	(c) 22 000
Industrial	64 682	59 949	2 289	681	...
New Zealand					
Gem, cut (b) (d)	£316 000	£308 000	£153 000	£521 000	...

## Note(s):-

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- (2) See explanatory notes at the front of the volume regarding currency conversion
- (3) In this table the term 'Dust' corresponds to item 7501 10 of the Harmonised System and includes both natural and synthetic diamond dust

- (a) Years ended 31 March following that stated
- (b) Re-exports
- (c) Gem; total
- (d) Years ended 30 June of that stated
- (e) Included with 'gem'

## Imports of Diamond

carats

Country	1995	1996	1997	1998	1999
Austria					
Unsorted	5 935	25 602	4 199	6 554	...
Gem	53 811	32 082	17 639	23 076	...
Industrial	47 964	16 718	63 103	53 712	...
Dust	11 825 000	12 430 000	15 984 000	23 571 880	...
Belgium-Luxembourg					
Unsorted	18 637 000	13 551 000	8 020 000	4 000 000	4 000 000
Gem, rough	77 098 000	114 412 000	129 298 000	124 000 000	140 000 000
Gem, cut	5 922 000	6 759 000	6 418 000	6 000 000	6 000 000
Industrial	17 018 000	27 258 000	35 803 000	44 500 000	31 500 000
Dust	90 000 000	52 965 000	83 005 000	74 895 000	56 000 000
Cyprus					
Unsorted	£941 000	£1 051 000	£792 000	£666 000	£833 000
Gem, cut	£2 995 000	£4 309 000	£4 852 000	£2 257 000	£2 121 000
Industrial	£18 000	£5 000	£837 000	£175 000	£408 000
Czech Republic					
Unsorted	£190 000	£192 000	£90 000	£234 000	£86 000
Gem, rough	...	£300 000	£100 000	£121 000	£90 000
Gem, cut	£63 000	£128 000	£136 000	£168 000	£167 000
Industrial	£507 000	£320 000	£271 000	£214 000	£242 000
Finland					
Gem, cut	10 564	10 580	9 363	20 000	...
Industrial	3 572	503	164	50 000	...
France					
Unsorted	...	...	207 370	...	...
Gem, cut	274 686	313 148	350 793	...	...
Industrial	...	213 447	388 951	...	...
Dust	38 245 430	10 468 125	13 560 155	10 500 000	16 000 000
Germany					
Gem, cut	534 506	522 690	494 351	504 940	516 680
Industrial	561 634	470 303	1 797 380	2 434 993	2 645 448
Dust	95 655 000	74 230 000	51 350 000	61 055 000	70 825 000
Greece					
Unsorted	£587 000	£748 000	£503 000	£599 000	£180 000
Gem, rough	£32 000	£17 000	...	£155 000	£62 000
Gem, cut	£2 454 000	£2 280 000	£2 105 000	£2 435 000	£1 106 000
Industrial	£506 000	£711 000	£788 000	£1 049 000	£433 000
Hungary					
Dust	...	...	1 671 575	1 010 600	758 770
Irish Republic					
Unsorted	985 000	690 000	4 940 000	855 000	8 300 000
Gem, rough	5 110 000	1 170 000	535 000	250 000	2 170 000
Gem, cut	3 435 000	7 655 000	8 705 000	5 220 000	17 350 000
Industrial	124 525 000	53 580 000	61 785 000	3 045 000	5 980 000
Italy					
Unsorted	£507 000	£320 000	£486 000	£270 000	£1 334 000
Gem, rough	£190 000	£320 000	£476 000	£500 000	£341 000
Gem, cut	£114 729 000	£163 796 000	£17 391 000	£12 330 000	£215 392 000
Industrial	£3 358 000	£3 266 000	£3 001 000	£4 600 000	£5 041 000
Malta					
Gem, rough	£264 000	£118 000	£56 000	£88 000	...
Industrial	£115 000	£15 000	£13 000	£1 000	...
Netherlands					
Unsorted	£6 274 000	£7 566 000	£7 904 000	£7 431 000	£7 936 000
Gem, rough	£79 000	-----	£23 000	£156 000	£13 000
Gem, cut	£19 696 000	£20 294 000	£17 370 000	£14 976 000	£19 964 000
Industrial	£509 000	£471 000	£606 000	£385 000	£928 000
Norway					
Gem	25 000	25 000	...	...	2 445 000
Industrial	400 000	10 000	...	...	50 000
Dust	210 000	375 000	...	...	520 000
Poland					
Gem	30 000	340 000	50 000	6 350 000	10 000
Industrial	55 000	100 000	275 000	415 000	110 000

## Imports of Diamond

Country	1995	1996	1997	1998	1999
Portugal					
Unsorted	£253 000	£192 000	£79 000	£114 000	£67 000
Gem, rough	£30 852 000	£34 962 000	£49 170 000	£27 441 000	£19 294 000
Gem, cut	£3 231 000	£3 522 000	£3 832 000	£3 890 000	£11 777 000
Industrial	£1 394 000	£1 217 000	£1 014 000	£1 335 000	£684 000
Romania					
Gem, cut	296 021	199 393	166 776	...	...
Industrial	*£1 000 000	£500 000	£700 000	£600 000	...
Spain					
Unsorted	£409 000	£346 000	£1 141 000	£1 557 000	£2 502 000
Gem, cut	£12 535 000	£14 466 000	£19 806 000	£21 351 000	£27 521 000
Industrial	£934 000	£1 454 000	£1 789 000	£2 049 000	£2 923 000
Sweden					
Unsorted	£238 000	£43 000	£272 000	£546 000	£605 000
Gem, cut	£2 639 000	£2 800 000	£2 715 000	£2 478 000	£2 482 000
Industrial	£58 000	£57 000	£27 000	£77 000	£75 000
Dust	...	...	...	£4 263 000	£4 338 000
Switzerland					
Unsorted	----	365 000	445 000	10 000	15 000
Gem, rough	2 970 000	4 270 000	...	4 535 000	3 515 000
Gem, cut	425 000	420 000	375 000	420 000	485 000
Industrial	690 000	475 000	575 000	365 000	575 000
Dust	65 190 000	67 550 000	107 225 000	94 210 000	90 615 000
Turkey					
Gem	3 795 000	3 068 452	7 627 692	833 102	618 000
Industrial	95 000	111 921	1 111 596	28 783	198 545
Dust	5 645 000	9 030 000	7 244 305	...	3 878 635
United Kingdom					
Unsorted	£484 273 000	£496 369 000	£707 324 000	£384 549 000	£152 358 000
Gem, rough	£2 037 922 000	£2 358 426 000	£2 142 900 000	£2 212 245 000	£3 292 541 000
Gem, cut	£293 303 000	£393 167 000	£535 275 000	£532 256 000	£628 019 000
Industrial	£11 846 000	£13 521 000	£23 714 000	£81 619 000	£382 531 000
Dust	£13 454 000	£11 837 000	£13 441 000	£14 892 000	£12 447 000
Botswana					
Unsorted	...	...	35 250	...	...
Gem	...	...	262 690	...	...
Industrial	...	...	299 430	...	...
Mauritius					
Gem, rough	£12 860 000	£8 772 000	£8 200 000	£5 100 000	£8 514 000
Gem, cut	£2 281 000	£2 689 000	£5 400 000	£7 400 000	£7 412 000
Industrial	£1 500 000	£6 800 000	£6 900 000	£6 400 000	£6 922 000
South Africa					
Unsorted	44 373	41 138	55 280	68 677	63 256
Gem, rough	417 632	814 417	601 542	397 265	639 788
Gem, cut	5 595	6 936	72 135	70 734	56 764
Industrial	678 343	917 470	1 473 889	1 272 212	1 480 601
Dust	3 498 365	4 712 936	3 617 197	3 519 364	5 342 778
Tunisia					
Unsorted	...	150 000	140 000	140 000	...
Gem, cut	...	35 000	...	10 000	...
Industrial	...	100 000	5 185 000	235 000	...
Dust	...	30 000	105 000	120 000	...
Canada					
Unsorted	£14 485 000	£16 990 000	£14 547 000	£17 012 000	£22 046 000
Gem, cut	211 272	190 926	221 239	249 969	307 423
Industrial	1 494 537	2 266 981	1 733 188	822 194	682 472
Dust	4 153 747	4 063 259	5 082 213	2 343 870	2 532 949
Costa Rica					
Industrial	715 000	...	...	...	...
Mexico					
Industrial	637 345	636 125	539 110	470 530	1 354 900
Dust	457 095	1 427 255	2 250 650	6 723 830	4 787 910
Panama					
Gem	40 000	50 000	...	30 000	...

## Imports of Diamond

carats

Country	1995	1996	1997	1998	1999
USA					
Unsorted	25 500	77 114	14 529	29 325	27 796
Gem, rough	1 711 671	1 451 423	1 936 591	1 439 349	4 266 330
Gem, cut	11 875 425	12 256 625	13 448 617	16 401 998	19 120 150
Industrial	5 302 414	4 616 345	4 432 122	6 101 071	4 399 015
Dust	180 391 432	218 200 260	254 596 244	222 232 369	208 530 774
Chile					
Industrial	162 145	...	...	...	...
Dust	312 985	636 835	704 690	261 230	...
Venezuela					
Gem, cut	135 000	...	...	...	...
Industrial	3 235 000	1 425 000	5 100 000	300 000	600 000
Abu Dhabi					
Gem	660 000	665 000	255 000	740 000	1 760 000
Dust	10 000	85 000	...	100 000	...
China					
Unsorted	135 000	156 365	90 220	80 960	167 255
Gem, rough	975 000	1 275 425	1 488 295	1 620 820	2 677 240
Gem, cut	340 000	332 065	638 575	860 265	1 907 060
Industrial	1 870 000	1 465 900	2 332 965	91 300	624 500
Dust	1 185 000	8 493 900	11 838 030	2 210 882	3 432 070
Dubai	...	315 000	650 000	2 370 000	...
Hong Kong					
Unsorted	145 123	1 008 611	1 409 419	701 796	1 042 219
Gem, rough	1 429 791	1 172 490	1 219 496	1 794 802	6 712 549
Gem, cut	6 531 860	6 639 758	7 261 058	6 729 602	9 991 900
Industrial	2 994 650	448 374	1 023 602	770 004	1 681 310
India					
Gem, rough (c)	55 992 457	81 234 294	102 819 567	118 929 243	...
Gem, cut (c)	699 893	884 496	861 207	1 619 280	...
Dust (c)	£4 846 000	£5 380 000	£4 822 000	£2 662 000	...
Israel					
Gem, rough	£2 491 479 000	£2 708 907 000	£2 529 449 000	£1 858 253 000	£2 644 679 000
Gem, cut	£458 397 000	£542 800 000	£565 394 000	£664 209 000	£933 048 000
Industrial	£19 439 000	£11 590 000	£17 821 000	£11 913 000	£26 479 000
Dust	...	...	£6 353 000	£6 673 000	£3 696 000
Japan					
Gem, rough	35 880	37 297	31 940	22 289	17 770
Gem, cut	4 178 153	3 610 982	2 659 711	2 479 136	3 077 944
Industrial	591 898	969 731	1 976 261	2 150 393	1 555 576
Dust	2 295 965	2 418 571	2 725 505	78 121 591	101 872 554
Jordan					
Industrial	...	...	65 000	20 000	...
Korea, Republic of					
Gem, cut	140 000	309 954	...	59 744	25 000
Industrial	900 000	304 777	...	93 837	590 000
Dust	60 000	75 511	...	222 352	...
Malaysia					
Unsorted	£42 635 000	£48 281 000	£48 849 000	£32 200 000	£14 425 000
Gem, rough	£1 964 000	...	...	...	£66 000
Gem, cut	£41 368 000	£43 286 000	£42 743 000	£10 700 000	£15 308 000
Industrial	£7 666 000	£2 369 000	£2 442 000	£1 600 000	£639 000
Oman	150 000	1 640 000	180 000	1 775 000	...
Philippines					
Industrial	94 367	...	63 704	50 698	...
Singapore					
Unsorted	£554 000	£25 000	£1 047 000	£2 259 000	£163 000
Gem, rough	...	...	£869 000	£3 677 000	£224 000
Gem, cut	(a) £269 328 000	(a) £341 338 000	£298 971 000	£115 371 000	£198 204 000
Industrial	£12 303 000	£6 727 000	£8 917 000	£5 349 000	£10 663 000
Sri Lanka					
Unsorted	48 446	37 771	24 443	31 610	...
Gem, rough	1 234 621	806 991	777 967	717 606	...
Gem, cut	36 628	70 197	73 387	56 682	...
Industrial	103 311	113 573	139 628	155 282	...
Dust	299 209	784 768	306 909	250 160	...

## Imports of Diamond

Country	1995	1996	1997	1998	1999
Taiwan					
Unsorted	15 000	85 000	25 000	60 000	35 000
Gem, rough	590 000	-----	5 000	10 000	150 000
Gem, cut	305 000	385 000	560 000	580 000	1 380 000
Industrial	140 000	955 000	3 030 000	1 730 000	3 070 000
Dust	30 940 000	36 600 000	33 830 000	31 680 000	24 625 000
Thailand					
Unsorted	3 463 164	1 440 188	...	...	...
Gem, rough	2 219 681	1 055 215	8 274 281	...	...
Gem, cut	4 265 502	4 366 744	...	...	...
Industrial	155 666	272 902	323 867	...	...
Dust	12 133 662	5 639 409	...	...	...
Australia					
Unsorted	6 796	24 014	13 584	3 489	1 000
Gem, rough	43 551	68 871	613 222	309 037	(a) 169 000
Gem, cut	140 819	144 244	143 706	133 069	...
Industrial	1 521 421	1 684 309	1 164 113	889 903	824 000
Dust	1 000 434	767 611	1 560 960	1 427 285	...
New Zealand					
Unsorted (b)	£7 000	...	£15 000	£13 000	...
Gem, rough (b)	£17 000	...	£272 000	£139 000	...
Gem, cut (b)	£6 301 000	...	£7 343 000	£6 218 000	...
Industrial (b)	£55 000	...	£43 000	£174 000	...

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- (3) In this table the term 'Dust' corresponds to item 7501 10 of the Harmonised System and includes both natural and synthetic diamond dust

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

**Production of Diatomite**

tonnes

Country	1995	1996	1997	1998	1999
Czech Republic	29 000	35 000	42 000	35 000	37 000
Denmark					
Diatomite (a)	*1 000	*1 000	*1 000	...	...
Moler (d)	156 000	152 000	207 000	213 000	164 000
France	*90 000	*80 000	*80 000	*80 000	*80 000
Germany	43 021	47 728	50 475	53 953	53 444
Iceland	28 142	25 607	27 482	25 734	28 299
Italy	*25 000	*25 000	*25 000	*25 000	*25 000
Macedonia	*5 000	*5 000	*5 000	*5 000	*5 000
Poland	2 200	1 700	1 200	1 530	*1 000
Portugal	1 780	1 550	1 540	2 265	*2 000
Romania	49 790	57 000	24 000	34 600	11 592
Soviet Union (f)	*110 000	*100 000	*90 000	*80 000	*80 000
Spain (b)	44 623	39 115	*45 000	*60 000	*60 000
Turkey	...	...	1 000	3 643	5 926
Algeria	3 294	3 173	2 332	2 133	2 563
Kenya	577	415	297	468	507
Canada	*1 000	*1 000	*1 000	*1 000	...
Costa Rica	500	900	500	200	...
Mexico	50 200	52 200	59 463	66 812	72 181
USA (c)	722 000	729 000	773 000	725 000	747 000
Argentina	4 938	8 647	9 449	25 430	...
Brazil (e)	17 074	15 189	11 228	10 162	7 867
Chile	11 451	11 592	11 825	14 868	*12 000
Colombia	*4 000	*4 000	*4 000	*4 000	*4 000
Peru	*35 100	*35 100	*35 100	*35 100	*35 000
China	...	...	...	114 600	82 170
Japan	176 956	194 115	*194 000	*190 000	*190 000
Korea, Republic of	81 303	69 543	53 538	37 649	30 222
Thailand	5 591	1 576	91	----	----
Australia (g)	13 361	12 966	12 643	14 433	17 150
World Total	1 830 000	1 830 000	1 880 000	1 860 000	1 780 000

## Note(s):-

(1) In addition to the countries listed, Egypt, Hungary and Iran 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. Diatomite is produced in Armenia, Georgia and Russia but information is not available to provide estimates individual countries

(g) Years ended 30 June of that stated

## Exports of Diatomite

Country	1995	1996	1997	1998	1999
Austria	...	...	7 852	7 187	6 197
Belgium-Luxembourg	3 177	2 455	2 417	4 061	14 752
Czech Republic	7 714	7 359	6 563	5 989	5 929
Denmark	*80 000	*80 000	*100 000	*100 000	*80 000
France	34 036	34 684	31 561	31 441	29 973
Germany	6 788	5 727	7 408	10 430	5 540
Iceland	27 740	26 358	29 935	25 410	...
Italy	1 249	1 106	1 260	1 129	1 804
Netherlands	462	262	347	229	239
Russia	...	2 533	635	181	258
Spain	1 345	2 122	1 577	2 301	2 152
Sweden	1 187	1 343	1 223	1 266	1 339
United Kingdom	1 038	2 620	486	705	574
Algeria	...	1 123	693	353	735
Mexico	9 626	9 442	10 831	10 344	12 249
USA	143 803	145 340	140 965	138 706	123 931
Chile	4 867	4 566	5 581	6 357	...
China	134 330	132 872	138 309	125 529	73 003
Hong Kong (a)	3 844	3 327	2 641	2 463	1 363
Indonesia	734	2 585	656	2 805	...
Japan	1 840	2 068	1 715	2 669	2 206
Singapore (a)	417	640	502	549	341
Taiwan	1 584	4 448	4 921	3 693	929
Australia	326	340	402	141	121

Note(s):-

(a) Re-exports



## Imports of Diatomite

tonnes

Country	1995	1996	1997	1998	1999
Austria	...	...	19 156	16 869	20 392
Belarus	...	...	...	3 476	4 375
Belgium-Luxembourg	8 857	5 569	6 635	5 255	6 621
Bulgaria	900	472	701	...	...
Croatia	1 183	772	799	751	981
Cyprus	190	195	126	100	69
Czech Republic	2 718	5 602	6 301	2 318	2 115
Denmark	4 825	9 897	7 867	7 906	5 519
Finland	3 115	3 486	3 146	2 462	2 652
France	11 612	13 733	13 116	18 092	16 844
Germany	49 764	47 509	46 530	52 079	50 799
Greece	1 856	2 325	962	867	585
Hungary	...	...	2 290	2 989	3 222
Irish Republic	247	445	483	667	385
Italy	7 755	7 244	7 186	9 722	6 847
Netherlands	9 567	14 214	22 359	10 909	18 844
Norway	1 079	1 472	1 889	2 254	1 984
Poland	6 215	5 812	6 512	6 187	6 717
Portugal	...	1 186	1 243	1 667	1 493
Romania	2 027	1 893	2 144	2 592	3 209
Russia	...	2 894	3 462	4 220	6 195
Slovakia	...	1 568	2 055	1 913	1 868
Spain	4 620	4 218	5 258	5 563	5 706
Sweden	5 889	5 130	4 885	5 138	4 998
Switzerland	3 930	4 084	3 669	3 764	3 757
Turkey	1 109	1 308	893	880	880
United Kingdom	15 974	16 276	20 595	42 274	32 788
Yugoslavia, Federal Republic of	*100	...	1 269	1 240	955
Egypt	...	...	856	1 207	596
Morocco	2 324	984	739	...	...
Nigeria	...	571	715	451	956
South Africa	3 439	2 009	4 506	4 175	4 621
Tunisia	1 172	980	833	714	1 090
Canada	22 283	23 079	25 002	23 032	22 148
Costa Rica	66	182	186	226	142
El Salvador	630	634	1 676	762	1 120
Guatemala	838	819	1 004	980	891
Honduras	607	588	546	739	842
Mexico	830	971	2 117	3 561	5 095
Panama	613	650	534	552	620
USA	259	1 551	2 040	802	387
Argentina	...	4 665	5 382	5 793	6 669
Brazil	2 123	2 601	3 309	2 913	2 840
Colombia	3 039	3 063	2 734	2 800	4 222
Ecuador	329	312	268	329	231
Peru	2 690	1 941	2 123	2 177	2 718
Venezuela	2 683	732	1 336	1 385	1 241
China	3 796	3 149	5 848	9 306	3 668
Hong Kong	4 354	4 539	3 191	2 903	1 428
India (d)	1 357	2 504	2 596	2 996	...
Indonesia	4 871	3 533	4 231	2 477	...
Iran (c)	176	...	231	369	...
Israel (b)	*700	...	...	...	...
Japan	6 442	8 130	8 668	7 735	7 927
Malaysia	2 646	2 937	3 727	3 844	...
Philippines	888	3 722	2 513	714	...
Saudi Arabia	938	585	10 954	1 001	1 284
Singapore	1 803	2 191	1 773	1 804	2 599
Taiwan	15 040	11 028	11 020	10 287	9 784
Thailand	295	...	256	660	1 070

**Imports of Diatomite**

Country	1995	1996	1997	1998	1999
Australia	7 793	7 867	9 663	9 181	9 454
New Zealand (a)	1 686	...	1 470	1 385	...

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	1995	1996	1997	1998	1999
Czech Republic	183 000	211 000	243 000	266 000	244 000
Finland	41 801	40 265	40 000	42 740	43 827
France	632 000	546 000	621 000	620 000	609 000
Germany	432 624	359 666	455 969	333 893	...
Greece	27 000	60 000	68 000	71 000	78 500
Italy	2 199 315	2 287 086	2 118 117	2 503 541	*2 500 000
Macedonia	*15 000	*15 000	*10 000	8 137	11 275
Norway	75 397	72 555	78 169	82 036	73 000
Poland	45 600	58 300	75 900	72 900	*70 000
Portugal	106 559	96 955	81 597	80 000	...
Romania	30 920	34 975	25 962	37 010	36 635
Russia	40 470	29 330	*29 000	...	...
Spain	379 284	415 189	400 156	429 614	430 000
Sweden	47 226	43 167	42 308	34 363	...
Turkey	760 250	912 204	1 011 542	1 089 483	1 369 655
United Kingdom (c)	8 900	8 211	8 108	3 278	2 448
Yugoslavia, Federal Republic of	5 441	4 801	4 880	4 280	3 453
Algeria	*7 000	*7 000	*7 000	8 026	2 820
Egypt (d)	75 049	53 783	*57 000	325 654	*325 000
Morocco	17 233	12 659	15 110	18 332	1 112
Nigeria	...	800	1 225	1 682	...
South Africa	47 962	53 644	59 688	56 761	57 736
Zimbabwe	3 920	3 248	2 254	2 241	1 915
Guatemala	7 673	11 060	11 400	17 249	17 072
Mexico	121 779	139 972	155 760	197 866	262 241
USA	880 000	890 000	*900 000	*820 000	*875 000
Argentina	37 095	72 539	105 320	42 468	...
Brazil (e)	200 116	191 462	*150 000	*150 000	*150 000
Chile	7 293	3 702	3 808	1 460	*1 500
Colombia	58 100	78 093	66 845	*55 000	*55 000
Ecuador	10 297	10 321	60 328	69 319	*60 000
Peru	9 099	5 918	2 502	3 984	*4 000
Uruguay	5 099	2 006	3 229	2 240	1 556
Venezuela	170 404	204 735	160 000	148 000	156 000
China	*2 000 000	*2 000 000	*2 000 000	*2 000 000	*2 000 000
India (a)	106 896	101 697	112 238	116 351	161 800
Indonesia	49 415	*50 000	24 399	40 434	23 236
Iran (b)	132 457	122 343	160 615	*160 000	*175 000
Japan (f)	1 169 000	1 163 000	*1 050 000	*870 000	*980 000
Jordan	7 341	*7 000	----	4 008	...
Korea, Republic of	367 578	319 112	341 018	248 493	409 334
Malaysia	27 850	13 983	9 779	31 369	26 940
Myanmar (a)	8 749	13 295	11 960	*12 000	*12 000
Pakistan (d)	21 163	32 572	25 169	31 191	29 235
Philippines	30 783	44 392	12 717	2 938	16 740
Sri Lanka	22 620	23 970	25 676	25 274	26 012
Thailand	677 852	684 983	611 789	440 288	626 415
Uzbekistan	*4 000	*4 000	*4 000	...	...
Australia (d)	53 989	65 840	68 796	65 459	49 604
World Total	11 500 000	11 500 000	11 500 000	12 000 000	12 500 000

## Note(s):-

(1) In addition to the countries listed, Namibia is 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) Including weathered granite feldspar

## Exports of Feldspar

Country	1995	1996	1997	1998	1999
Austria	24 915	22 180	20 668	22 547	14 943
Czech Republic	74 181	67 515	54 474	57 546	62 273
Finland	27 264	25 972	23 048	25 953	27 876
France	67 169	92 883	122 119	126 350	242 379
Germany	81 210	61 033	60 999	35 317	70 699
Greece	19 065	25 789	...	10 576	17 703
Italy	30 727	37 349	42 687	89 042	136 362
Macedonia	...	5 568	5 496	8 587	...
Netherlands	1 567	23 276	2 990	3 680	821
Norway	67 340	69 578	67 741	83 943	69 297
Poland	...	...	200	100	556
Portugal	...	1 850	2 069	2 060	1 861
Russia	35 094	70 315	8 417	9 627	8 463
Spain	25 476	29 809	22 653	29 512	40 915
Sweden	25 448	24 731	16 385	14 531	23 574
Turkey	651 800	738 156	950 140	1 283 211	1 799 854
United Kingdom	317	237	853	148	108
South Africa	1 700	3 454	2 468	1 439	1 381
Guatemala	4 400	3 648	5 044	4 760	4 596
Mexico	8 502	8 323	11 379	8 809	10 676
USA	15 058	10 169	7 224	13 193	9 882
Brazil	374	59	3 025	49	3 081
China	703 315	567 741	591 265	608 501	539 040
Hong Kong (a) (c)	201 362	139 415	164 965	134 751	128 586
India (b)	84 622	94 716	77 644	52 631	...
Japan	30 176	33 324	13 062	8 533	6 422
Korea, Republic of	14 027	37 509	34 248	14 080	5 481
Philippines	23 205	-----	-----	-----	...
Singapore	(a) 6 513	(a) 6 738	105	67	321
of which, re-exports	(a) 6 479	(a) 6 666	93	-----	321
Taiwan	710	1 720	1 579	2 996	4 278
Thailand	303 399	284 768	290 688	241 387	282 680
Australia	61 851	47 052	42 980	27 095	33 731

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	1995	1996	1997	1998	1999
Austria	5 387	4 010	4 377	3 238	3 124
Belarus	...	...	...	15 806	22 511
Belgium-Luxembourg	20 696	25 405	24 836	24 363	24 396
Croatia	2 237	2 883	2 521	2 610	6 202
Czech Republic	620	3 923	5 685	5 474	6 317
Denmark	4 208	3 373	3 300	4 576	5 774
Finland	168	209	117	267	452
France	31 169	27 069	46 110	47 367	45 029
Germany	68 591	66 209	41 670	48 165	45 405
Greece	8 834	8 049	1 302	492	944
Irish Republic	(a) 191	(a) 1 577	121	130	103
Italy	537 518	602 980	714 234	1 023 919	1 433 174
Lithuania	4 521	5 479	11 625	4 155	4 178
Netherlands	19 879	50 098	14 118	12 732	9 469
Norway	839	889	841	466	833
Poland	30 762	34 800	35 600	40 000	57 382
Portugal	(a) (c) 29 709	20 357	34 456	31 026	48 594
Romania	...	...	8 752	9 838	15 523
Russia	...	1 262	532	1 204	166
Slovakia	...	...	22 759	...	17 959
Spain	168 658	215 198	229 481	315 236	411 192
Sweden	7 092	10 017	6 820	7 643	6 392
Switzerland	11 543	9 101	6 248	5 696	5 281
Turkey	10 133	10 107	7 546	18 100	633
Ukraine	...	3 792	2 283	4 231	2 558
United Kingdom	36 537	28 314	24 051	18 208	25 240
Algeria	...	3 680	5 001	4 411	...
Egypt	...	23 149	28 014	50 003	24 443
Tunisia	2 190	4 719	7 956	4 092	10 525
Canada	1 803	1 291	1 612	2 297	1 872
Costa Rica	5 426	5 175	5 287	6 287	5 053
Mexico	17 048	5 789	3 485	1 195	1 789
USA	8 978	7 154	8 578	6 556	6 837
Chile	1 051	2 913	2 202	2 694	...
Ecuador	105	2 486	2 984	2 325	8 831
Venezuela	514	440	499	645	591
China	537	3 919	11 121	20 256	11 253
Hong Kong	(a) 105 036	(a) 59 094	31 140	21 217	5 369
Indonesia	59 210	85 469	80 514	92 374	...
Israel (a) (b)	*4 000	...	...	...	...
Japan	9 280	10 864	13 004	6 613	1 805
Jordan	142	533	160	209	...
Korea, Republic of	8 024	1 288	1 024	854	1 933
Malaysia	177 338	235 751	267 457	236 281	...
Philippines	5 761	10 884	9 986	3 525	...
Saudi Arabia	1 671	877	-----	-----	1 600
Singapore	(a) 21 655	(a) 30 806	10 979	5 925	7 749
Syria (a) (c)	1 041	2 230	2 730	...	...
Taiwan	965 531	745 009	755 071	762 588	694 246
Thailand	15 978	23 062	10 306	9 111	13 592
Australia	69	51	138	80	78
New Zealand (d)	200	...	336	443	...

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**

Country	1995	1996	1997	1998	1999
France	130 000	110 800	106 600	105 600	105 800
Germany	39 081	32 448	23 868	30 641	28 260
Italy	124 749	126 671	105 794	104 187	*110 000
Romania	*15 000	*15 000	*15 000	*15 000	*15 000
Russia	140 000	75 000	*80 000	...	...
Spain	118 411	116 526	124 987	135 568	*140 000
Turkey	8 873	4 828	3 903	5 034	4 812
United Kingdom	*55 000	*65 000	*64 000	*65 000	46 000
Egypt (c)	551	*700	*700	*700	*700
Kenya	74 230	83 000	68 700	60 854	93 602
Morocco	105 800	95 900	103 800	105 000	83 100
Namibia	33 559	31 457	23 160	40 685	57 599
South Africa	195 794	201 928	206 990	236 640	217 540
Tunisia	1 856	720	1 426	1 188	...
Mexico	522 658	523 971	552 840	598 043	561 265
USA (d)	*51 000	*8 200	----	----	----
Argentina	5 105	5 666	7 168	11 517	...
Brazil (a)	89 258	97 749	78 032	72 082	44 926
China	*2 000 000	*2 150 000	*2 300 000	*2 350 000	*2 250 000
India (e)	22 944	19 926	11 338	48	220
Iran (b)	20 163	18 929	17 035	*20 000	*20 000
Korea, Dem. P.R. of	*40 000	*39 000	*39 000	*30 000	*25 000
Kyrgyzstan	3 000	2 767	4 176	3 200	2 997
Mongolia	133 300	165 000	174 200	168 218	153 693
Pakistan (c)	2 573	363	1 050	2 647	220
Tajikistan	5 000	3 000	*3 000	...	...
Thailand	24 114	17 247	7 826	3 743	13 005
Uzbekistan	5 000	3 000	----	----	...
World Total	4 000 000	4 000 000	4 100 000	4 200 000	4 100 000

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) In addition, the USA produced the following amounts of fluorspar equivalent in fluorosilicic acid derived from processing phosphate rock ('000 t): 1995: 98; 1996: 119; 1997: 121; 1998: 118; 1999: 120

(e) Years ended 31 March following that stated

**Exports of Fluorspar**

tonnes

Country	1995	1996	1997	1998	1999
Belarus	...	...	*1 500	2 077	924
Belgium-Luxembourg	147	1 270	821	1 131	1 972
Czech Republic	26 011	17 200	22 688	24 827	12 519
France	26 190	31 408	35 748	24 342	29 194
Germany	26 667	15 631	20 206	15 892	20 197
Italy	96	2 114	557	1 471	7 595
Netherlands	100	806	2 404	187	5 377
Russia	1 604	4 357	324	2 056	2 967
Spain	33 853	19 897	24 998	986	1 152
Sweden	991	2 320	2 102	4 400	5 967
United Kingdom	6 935	7 129	5 215	4 202	3 158
Kenya	56 202	59 175	72 300	45 618	64 094
Morocco	107 846	94 156	114 419	115 000	...
Namibia	27 400	32 624	18 307	42 135	49 438
South Africa	166 864	165 453	182 716	153 031	196 160
Canada	1 750	363	530	189	319
Mexico	291 905	252 809	317 341	335 236	365 959
USA	47 120	83 482	64 870	46 150	58 769
China	1 229 145	1 124 685	1 293 672	1 315 972	1 221 491
Hong Kong (a)	58	1 255	1 050	1 965	26 954
Japan	748	1 173	1 013	867	407
Mongolia	129 000	158 900	147 900	121 800	164 100
Thailand	19 315	17 432	10 760	7 740	5 515
Uzbekistan	*11 000	*13 000	*15 000	...	...

Note(s):-

(a) Re-exports

## Imports of Fluorspar

Country	1995	1996	1997	1998	1999
Austria	6 565	7 114	7 529	5 704	3 959
Belarus	...	...	*1 200	2 393	1 589
Belgium-Luxembourg	11 910	11 230	9 774	10 690	11 095
Croatia	68	187	275	275	206
Czech Republic	67 720	42 437	51 532	41 943	30 989
Denmark	341	568	4 926	7 152	1 011
Finland	12 577	12 564	11 317	11 246	7 503
France	6 971	4 629	6 267	5 902	4 218
Germany	221 860	238 905	263 201	290 687	300 656
Greece	7 969	13 608	14 313	15 298	14 029
Hungary	3 900	1 700	4 500	2 500	...
Irish Republic	90	185	200	158	33
Italy	94 803	95 823	111 666	106 304	184 145
Netherlands	6 810	10 965	12 561	4 883	7 055
Norway	46 231	43 358	42 397	42 804	*48 000
Poland	8 324	9 800	6 100	7 800	8 411
Portugal	1 300	1 057	971	1 380	1 457
Romania	15 106	22 970	19 271	11 831	24 684
Russia	167 200	238 024	227 161	227 373	173 544
Slovakia	8 900	7 300	8 730	8 600	6 584
Slovenia	1 500	1 500	1 800	1 700	1 144
Spain	13 056	8 762	11 347	16 394	28 859
Sweden	7 977	16 082	7 968	15 972	12 381
Switzerland	73	222	325	554	775
Turkey	6 772	7 025	12 219	8 141	9 472
Ukraine	(b) *9 500	23 551	40 871	40 092	28 210
United Kingdom	(b) *41 000	(b) *34 000	(b) *42 000	41 610	*45 000
Yugoslavia, Federal Republic of	...	...	4 016	4 786	3 591
Algeria	100	250	117	196	...
Egypt	500	1 654	1 021	297	129
Tunisia	35 921	47 737	50 182	53 672	65 378
Canada	108 968	142 632	157 661	186 351	169 974
Mexico	32 867	95 418	13 683	37 168	55 159
USA	575 817	384 889	822 211	498 204	457 152
Brazil	18 767	7 864	15 510	34 482	7 215
Chile	524	479	1 103	525	...
Peru	483	366	486	480	422
Venezuela	1 311	756	724	1 643	661
Hong Kong	-----	600	1 025	2 400	10 950
India (a)	53 627	54 666	39 136	72 352	...
Indonesia	959	973	706	493	...
Japan	593 723	549 239	573 738	545 726	535 413
Jordan	162	151	200	120	...
Kazakhstan	*3 000	*3 000	*3 000	3 391	...
Korea, Republic of	107 551	82 804	87 918	77 928	84 022
Malaysia	3 700	4 400	3 200	1 400	...
Pakistan	1 750	3 000	-----	-----	...
Philippines	3 137	1 435	1 071	439	...
Singapore	700	100	864	826	406
Taiwan	52 614	41 151	46 999	54 574	55 294
Thailand	5 457	8 124	3 830	3 863	5 763
Australia	9 202	7 692	5 636	3 620	6 848

Note(s) :-

(a) Years ended 31 March following that stated

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



## Mine Production of Gold

kilograms (metal content)

Country	1995	1996	1997	1998	1999
Armenia	300	244	*500	*350	*400
Bulgaria	1 307	1 776	1 713	1 660	1 524
Finland	1 050	1 670	1 900	2 370	2 770
France	5 931	5 651	4 953	3 793	3 567
Georgia	500	500	700	800	1 587
Italy	...	...	331	1 117	894
Poland (d)	510	598	375	409	485
Romania	*4 000	*4 000	*4 000	*4 000	*4 000
Russia	127 838	119 856	123 937	113 807	123 100
Slovakia	518	492	458	340	363
Spain	4 131	4 241	3 343	5 791	...
Sweden	6 528	6 145	6 777	5 944	4 202
Turkey	*1 200	*1 200	*1 000	*1 000	*1 200
Yugoslavia, Federal Republic of (d)	2 856	3 250	3 014	2 684	1 260
Burkina Faso	1 361	897	1 089	1 091	886
Burundi	3 819	2 256	-----	-----	-----
Cameroon	560	*600	*500	*500	*500
Congo, Democratic Republic	1 180	1 252	394	152	207
Eritrea	59	98	612	573	*500
Ethiopia (b)	1 183	199	755	...	2 928
Ghana	51 330	48 271	54 446	74 352	81 496
Guinea	7 862	6 838	3 713	7 835	12 001
Ivory Coast	1 940	1 883	2 419	*1 500	*1 500
Kenya	151	492	440	388	990
Liberia	*800	*700	*500	*800	*1 000
Mali	7 800	8 400	18 400	22 800	25 700
Mauritania	1 196	189	-----	-----	-----
Morocco	580	482	*450	*450	*450
Mozambique	236	67	6	15	19
Namibia	2 099	2 145	2 417	1 882	2 008
Niger	*100	*100	*100	*100	*100
South Africa	523 815	498 250	490 103	464 217	451 294
Sudan	*3 700	*4 500	*5 000	*5 000	*6 000
Tanzania	320	318	232	427	*6 100
Uganda (e)	3 094	5 067	6 819	5 029	5 778
Zambia (c)	79	109	226	210	79
Zimbabwe	23 959	24 699	24 225	25 175	27 114
Canada	152 032	166 378	171 376	165 599	159 038
Costa Rica	464	713	733	636	*500
Dominican Republic	3 288	3 659	2 350	1 421	651
Honduras	111	142	80	...	107
Mexico	20 292	24 477	25 317	25 426	23 755
Nicaragua	1 518	2 058	2 563	3 834	4 448
Panama	283	834	1 202	1 517	*1 500
USA	316 913	326 187	362 295	366 411	341 000
Argentina	837	723	2 289	20 400	38 515
Bolivia	14 405	12 634	13 292	14 444	11 782
Brazil	62 424	55 041	52 335	46 031	40 176
Chile	44 585	53 174	49 459	44 980	45 663
Colombia	21 165	22 073	18 811	18 813	34 599
Ecuador	7 410	7 208	3 069	1 474	2 025
French Guiana	2 470	2 949	3 225	2 735	2 819
Guyana	9 005	12 007	13 577	14 605	12 905
Peru	57 743	64 885	77 940	94 214	128 238
Venezuela	7 259	11 719	22 322	6 740	5 946
China	127 611	145 333	181 360	172 845	162 500
India (a)	2 036	2 710	2 636	2 683	2 442
Indonesia	62 818	83 564	89 979	124 019	129 032
Iran	370	242	281	360	350
Japan	9 185	8 627	8 384	8 601	9 405
Kazakhstan	14 900	10 221	9 675	9 800	*10 000
Korea, Dem. P.R. of	*5 000	*5 000	*5 000	*5 000	*5 000
Korea, Republic of	1 226	995	611	4	6
Kyrgyzstan	4 100	4 100	17 400	21 311	20 200

**Mine Production of Gold**

kilograms (metal content)

Country	1995	1996	1997	1998	1999
Malaysia	3 162	2 829	4 487	3 394	3 449
Mongolia	4 504	6 976	8 451	9 531	10 246
Myanmar (a) (d)	97	172	181	122	116
Oman	611	595	584	579	597
Philippines	27 026	30 180	32 199	34 049	31 107
Saudi Arabia	8 080	7 530	7 260	5 099	4 570
Tajikistan	300	1 450	2 550	3 200	2 700
Uzbekistan	63 600	78 300	81 700	81 000	89 000
Australia	253 084	289 519	313 230	310 070	299 460
Fiji	3 495	4 550	4 671	3 758	3 881
New Zealand	12 132	11 571	11 359	7 731	8 577
Papua New Guinea	51 701	51 573	48 482	61 641	65 747
Solomon Islands	16	4	...	1 415	3 426
<b>World Total</b>	<b>2 170 000</b>	<b>2 270 000</b>	<b>2 420 000</b>	<b>2 450 000</b>	<b>2 490 000</b>

## 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, Botswana, Central African Republic, Gabon, Laos, Madagascar, Nigeria, Rwanda and Sierra Leone produce less than 100 kg gold per year
  - (3) Greece, Norway and Thailand are believed to produce gold
- (a) Years ended 31 March following that stated  
(b) Years ended 7 July of that stated  
(c) Contained in blister copper, refinery muds and electrolytic copper  
(d) Metal production  
(e) Exports

## Exports of Gold

kilograms

Country	1995	1996	1997	1998	1999
Armenia					
Metal	...	202	79	1 123	3 435
Waste & scrap	(c) *1 600	2 500	2 527	201	----
Austria					
Metal	1 748	3 111	1 900	2 700	3 200
Waste & scrap	200	56 000	6 000	600	200
Belgium-Luxembourg					
Metal	25 188	27 892	29 500	32 100	3 800
Waste & scrap	£344 000	£1 647 000	£2 124 000	£1 019 000	...
Bulgaria					
Waste & scrap (c)	*1 300	*4 800	...	...	...
Croatia					
Metal	1 000	...	24	13	8
Cyprus					
Metal (a)	1	24	...	53	1 892
Czech Republic					
Metal	2 329	4 693	2 489	2 806	3 486
Waste & scrap	...	...	4 287	8 680	1 255
Denmark					
Metal	893	1 332	2 861	982	1 212
Waste & scrap	8 442	5 851	2 690	2 602	5 764
Estonia					
Waste & scrap	226	...	(c) *6 700	(c) *13 100	(c) *1 000
Finland					
Metal	2 000	3 834	4 947	...	...
Waste & scrap	41 000	106 000	51 273	636	329
France					
Metal	39 858	50 812	42 600	24 600	24 200
Waste & scrap	146 892	148 831	66 900	56 300	39 400
Georgia					
Metal (c)	...	...	*100	*1 000	...
Germany					
Metal	89 575	94 451	73 400	67 400	68 800
Waste & scrap	23 603	29 214	228 700	160 500	313 100
Greece					
Metal	...	...	...	117	1 467
Hungary					
Metal	...	441	740	805	1 181
Irish Republic					
Metal	£14 000	£3 000	£4 000	----	£7 000
Waste & scrap	£6 000	£2 000	£196 000	£984 000	£951 000
Italy					
Metal	13 032	27 432	13 734	23 276	32 614
Waste & scrap	...	...	...	568	357
Latvia					
Waste & scrap	159	1 597	504	172	55
Lithuania					
Waste & scrap	----	...	...	1	4 738
Netherlands					
Metal	12 972	15 286	13 182	7 759	8 066
Waste & scrap	56 000	193 370	...	104 500	35 900
Norway					
Metal	2 151	1 643	1 714	1 823	1 854
Waste & scrap	966	2 083	1 280	938	899
Poland					
Metal	330	132	1 451	201	419
Portugal					
Metal	...	...	1 207	851	16
Waste & scrap	...	16	1 329	127	16
Russia					
Metal	73 900	3 600	(c) *7 100	51 619	(c) *9 700
Waste & scrap (c)	*33 400	*6 500	...	...	...
Slovakia					
Ore	...	1 458 000	1 261 000	...	...
Spain					
Metal	15 888	15 201	36 177	103 927	3 472

## Exports of Gold

kilograms

Country	1995	1996	1997	1998	1999
Sweden					
Metal	...	12 724	4 000	1 000	16 907
Waste & scrap	108 989	3 519	1 000	...	14 000
Switzerland					
Metal	1 193 530	1 191 879	1 677 130	1 541 530	1 227 637
Waste & scrap	16 758	52 375	44 849	63 818	60 162
Ukraine					
Waste & scrap (c)	...	*1 500	*20 500	*27 600	*37 100
United Kingdom					
Metal	702 386	595 097	1 151 116	623 971	589 825
Waste & scrap	11 533	79 727	54 013	104 568	351 356
Yugoslavia, Federal Republic of					
Metal	...	...	1 000	2 254	617
Burkina Faso					
Metal	1 664	1 312	*1 200	...	...
Burundi					
Metal	3 819	2 256	----	----	----
Central African Republic					
Metal	62	23	19	24	41
Ghana					
Metal	...	...	...	...	71 091
Waste & scrap	...	...	...	...	8 020
Guinea					
Metal	7 863	6 838	3 719	7 834	12 001
Kenya					
Metal	211	420	2 248	...	...
Mozambique					
Metal	228	53	----	----	8
Namibia					
Metal	2 056	2 177	2 452	1 918	2 008
Senegal					
Metal	397	...	...	...	...
Sierra Leone					
Metal	4	...	16	...	...
South Africa					
Metal	...	...	502 457	460 823	452 621
Tanzania					
Metal	...	£1 780 000	£1 220 000	£2 020 000	£1 843 000
Uganda					
Metal	3 094	5 067	6 819	5 029	5 778
Zimbabwe					
Metal	£156 906 000	£192 112 000	£221 684 000	£95 159 000	£130 611 000
Canada					
Ores & concentrates (d)	7 066	5 465	6 010	5 654	4 446
Metal	170 975	197 287	218 346	225 273	186 430
Cuba					
Metal (c)	...	...	...	*800	*1 800
Waste & scrap (c)	...	*1 300	*1 400	*1 600	*2 400
Dominican Republic					
Metal	3 288	3 659	2 350	1 421	651
Nicaragua					
Metal	700	1 700	900	3 400	4 000
USA					
Metal, unrefined	69 990	71 073	87 550	91 598	86 748
Metal, refined	278 492	405 332	390 528	436 376	437 706
Metal, other	9 372	6 803	10 561	18 705	22 513
Waste & scrap	81 430	91 297	62 019	58 555	40 751
Bolivia					
Metal	10 593	9 561	10 288	11 998	9 953
Brazil					
Metal	34 777	46 970	48 236	44 234	39 026
Chile					
Metal	29 032	32 203	54 989	30 050	...
Colombia					
Ore	551 970	518 427	462 656	397 788	...

## Exports of Gold

kilograms

Country	1995	1996	1997	1998	1999
Guyana					
Metal	8 563	9 020	11 076	12 970	12 183
Peru					
Metal	37 223	45 978	46 271	97 982	131 511
China					
Metal (c)	*600	*1 600	*1 700	*5 100	*1 200
Hong Kong					
Metal	6 729	9 980	6 890	50 038	39 976
of which, re-exports	6 729	9 980	6 890	24 363	10 584
Waste & scrap	3 968	5 545	8 043	44 504	18 464
of which, re-exports	3 968	5 545	8 043	43 067	5 574
Indonesia					
Metal	3 825	806	10 020	49 834	...
Japan					
Metal	36 490	39 087	51 881	71 605	62 391
Waste & scrap	1 277	2 311	11 254	4 442	25
Kazakhstan					
Metal	-----	-----	8 489	16 200	24 300
Korea, Dem. P.R. of					
Metal (c)	*900	*2 900	...	*1 300	*1 400
Korea, Republic of					
Metal	197 668	427 533	577 064	695 861	317 763
Waste & scrap	1 494	265	108	59 197	334
Kyrgyzstan					
Metal (c)	...	...	*2 500	*20 400	*14 400
Malaysia					
Metal	£23 700 000	£20 200 000	£87 700 000	£44 600 000	...
Waste & scrap	£2 000 000	£2 400 000	£8 700 000	£19 900 000	...
Oman					
Metal	778	836	2 828	475	910
Philippines					
Ores & concentrates (b)	6 382	7 636	5 652	4 499	...
Metal	63 646	60 163	...	73 190	...
Singapore					
Metal	14 305	23 700	42 243	140 989	41 254
of which, re-exports	2 097	13 031	26 994	118 614	19 636
Waste & scrap	1 312	4 044	8 481	6 103	4 128
Taiwan					
Metal	2 409	3 258	3 056	2 678	4 200
Waste & scrap	908	1 385	6 113	12 592	58
Thailand					
Metal	6 579	44 277	42 828	44 409	18 777
Waste & scrap	36 856	6 493	5 930	78 983	38 515
Uzbekistan					
Metal (c)	*15 300	*10 400	*5 800	*6 000	*8 500
Australia					
Ores & concentrates (b)	*2 500	*1 700	*2 200	...	...
Metal	314 956	325 783	340 785	504 508	348 033
Waste & scrap	£1 596 000	£1 215 000	£1 285 000	£3 276 000	£113 000
Fiji					
Metal	3 410	4 687	4 671	3 885	...
New Zealand					
Metal (e)	37 624	44 377	38 702	33 487	...
Papua New Guinea					
Metal (f)	53 861	51 119	45 418	64 106	...

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

## Imports of Gold

Country	1995	1996	1997	1998	1999
Armenia					
Metal	(d) *700	196	154	100	557
Austria					
Metal	53 559	18 365	41 500	53 200	40 700
Waste & scrap	100	200	1 000	600	1 600
Belarus					
Metal (d)	*100	*300	*300	*100	*300
Belgium-Luxembourg					
Metal	17 102	9 000	10 700	13 000	3 900
Waste & scrap	£623 000	£22 584 000	£21 216 000	£14 616 000	...
Croatia					
Metal	£200 000	£60 000	£700 000	£598 000	£136 000
Cyprus					
Metal	2 430	3 381	4 169	2 031	1 672
Czech Republic					
Metal	2 463	3 388	2 346	2 415	2 244
Denmark					
Metal	1 518	1 664	17 933	4 429	1 237
Waste & scrap	802	470	321	1 017	1 951
Estonia					
Metal	186	...	182	953	105
Finland					
Metal	13 000	828	1 060	1 577	1 408
France					
Metal	139 599	84 814	54 200	49 700	55 000
Waste & scrap	306 256	35 199	16 600	2 800	1 900
Germany					
Metal	102 149	96 541	91 500	141 200	83 700
Waste & scrap	118 332	178 025	202 000	449 300	465 400
Greece					
Metal	14 349	14 947	1 883	14 827	5 740
Waste & scrap	...	32	...	3 698	1 633
Hungary					
Metal	...	227	259	243	395
Irish Republic					
Metal	£9 600 000	£8 558 000	£7 360 000	£7 921 000	£7 250 000
Italy					
Metal	346 071	331 746	407 273	440 713	405 952
Waste & scrap	2 612	1 027	408	424	368
Lithuania					
Metal	£6 000	£12 000	£103 000	£187 000	£78 000
Macedonia					
Metal	...	648	545	323	...
Malta					
Metal	£14 300 000	£19 900 000	£14 700 000	£12 600 000	...
Netherlands					
Metal	19 503	16 990	18 895	15 542	14 549
Waste & scrap	...	...	...	1 600	6 800
Norway					
Metal	1 358	1 418	1 750	2 183	2 111
Waste & scrap	707	416	525	301	67
Poland					
Metal	5	279	440	55	412
Portugal					
Metal	...	1 001	9 736	6 442	174
Slovakia					
Metal	(d) *3 000	(d) *800	(d) *600	3 376	722
Slovenia					
Metal	...	(d) *100	(d) *200	1 000	1 000
Spain					
Metal	29 837	28 213	139 445	84 963	1 399
Waste & scrap	----	1 803	1 862	262	528
Sweden					
Metal	£11 384 000	£10 503 000	£6 525 000	£4 407 000	£3 632 000
Waste & scrap	£94 000	£22 000	£30 000	£1 000	...
Switzerland					
Metal	1 205 818	1 285 661	1 592 971	1 551 295	1 402 791
Waste & scrap	56 883	101 740	117 973	182 026	28 426

## Imports of Gold

kilograms

Country	1995	1996	1997	1998	1999
Turkey					
Metal	60	517	9	15	----
Ukraine					
Metal (d)	*100	*200	*900	*600	*1 300
United Kingdom					
Ores & concentrates	3 451	...	...	...	...
Metal	404 356	744 997	506 211	1 190 371	828 356
Waste & scrap	232 584	205 740	152 707	217 272	160 432
Egypt					
Metal	...	----	6 663	6 765	...
South Africa					
Metal	...	1 432	240	361	231
Tunisia					
Metal	1 406	1 560	1 527	1 835	2 642
Zimbabwe					
Metal	19 647	32 665	117	...	...
Canada					
Ores & concentrates (e)	2 648	3 137	3 336	4 436	6 744
Metal	23 773	54 237	83 373	113 913	120 772
USA					
Ore (c)	6 148	4 989	3 445	3 441	689
Metal, unrefined	9 877	11 760	13 730	17 260	23 649
Metal, refined	111 163	143 263	192 299	256 490	195 612
Metal, other	45 874	59 650	70 310	107 460	107 386
Waste & scrap	14 432	12 995	14 055	16 727	30 379
Brazil					
Metal	147	58	379	174	...
China					
Metal (d)	*1 800	*1 700	*2 000	*8 200	*14 000
Dubai					
Metal	...	68	52	10	...
Hong Kong					
Metal	265 657	217 535	432 931	231 139	119 460
Waste & scrap	2 907	2 701	4 678	11 808	30 075
India					
Metal (a)	45 677	52 425	265 457	455 406	...
Israel					
Metal	£97 624 000	£97 400 000	£80 131 000	£75 195 000	£55 853 000
Waste & scrap	£600 000	£600 000	£1 113 000	£1 143 000	£415 000
Japan					
Metal	263 216	135 667	119 473	86 017	108 393
Waste & scrap	6 798	137 245	138 396	150 992	145 671
Jordan					
Metal	2 550	2 143	5 675	3 574	...
Kazakhstan					
Metal	...	...	...	900	1 800
Korea, Republic of					
Metal	217 102	424 381	604 881	459 244	363 757
Kuwait					
Metal	...	...	...	...	12 284
Macao					
Metal	420	...	...	...	...
Malaysia					
Metal	159 826	137 385	148 208	50 812	...
Oman					
Metal	10 151	11 550	14 072	8 858	6 518
Pakistan					
Metal	£106 600 000	£208 600 000	£251 600 000	£122 900 000	...
Philippines					
Metal	7 524	879	3 167	10 129	...
Saudi Arabia					
Metal	151 905	88 626	194 416	167 410	148 796

**Imports of Gold**

Country	1995	1996	1997	1998	1999
Singapore					
Metal	26 401	31 380	71 860	28 201	32 572
Waste & scrap	296	625	2 394	6 509	7 651
Sri Lanka					
Metal	971	17 988	27 394	29 329	...
Taiwan					
Metal	108 316	93 139	103 053	64 929	83 049
Thailand					
Metal	1 305 866	47 911	203 057	135 480	559 357
Australia					
Metal	£341 417 000	£320 814 000	£361 214 000	£1 200 405 000	£797 620 000
Waste & scrap	£2 240 000	£1 381 000	£34 000	£5 569 000	£2 076 000
New Zealand					
Metal (b)	584	...	1 234	1 262	...

## Note(s) :-

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

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



**Production of Graphite**

tonnes

Country	1995	1996	1997	1998	1999
Austria (a)	12 019	33 122	12 582	10 738	2 635
Czech Republic	27 000	30 000	25 000	28 000	22 000
Germany	5 214	2 603	1 030	270	...
Norway	2 558	7 065	7 713	8 271	7 399
Romania	2 179	2 931	2 563	1 951	1 041
Russia	13 700	13 928	14 275	...	...
Sweden	-----	500	1 581	3 277	4 504
Turkey	*20 000	*20 000	*15 000	*15 000	*15 000
Ukraine	8 757	5 367	4 289	5 104	7 464
Madagascar	16 119	11 295	15 397	18 690	14 516
Mozambique	3 019	3 283	5 125	5 889	4 007
Tanzania	100	6 776	*11 000	-----	-----
Zimbabwe	11 381	7 691	12 779	13 806	12 321
Canada	*25 000	*25 000	*25 000	*25 000	*25 000
Mexico	34 388	40 412	47 982	43 461	31 770
Brazil (b)	33 590	40 466	*40 000	*60 000	*60 000
China	2 215 100	1 950 000	1 680 400	...	...
India (c)	136 263	117 761	111 518	135 668	108 821
Korea, Dem. P.R. of	*40 000	*40 000	*40 000	*35 000	*25 000
Korea, Republic of	1 938	1 113	83	62	62
Sri Lanka	4 825	5 645	5 400	5 910	4 592
World Total	2 610 000	2 360 000	2 080 000	2 100 000	2 000 000

## 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  
(c) Years ended 31 March following that stated

## Exports of Graphite

Country	1995	1996	1997	1998	1999
Austria	5 094	5 344	4 063	3 902	3 463
Belgium-Luxembourg	39	31	113	1 494	1 678
Czech Republic	2 691	2 722	2 831	2 670	2 501
France	4 286	977	801	349	652
Germany	11 191	9 494	9 108	8 843	8 549
Italy	302	210	129	234	91
Netherlands	476	574	536	889	937
Norway	29 440	29 340	...	...	...
Russia	986	1 111	742	613	997
Spain	478	126	59	36	4 289
Sweden	1 421	103	515	2 311	3 262
Ukraine	3 756	4 663	2 328	1 905	2 259
United Kingdom	1 693	2 152	1 871	2 206	2 002
Madagascar	16 522	14 629	13 975	13 087	9 244
Mozambique	2 818	2 447	4 730	5 558	4 083
South Africa (a)	*1 300	*1 900	*1 700	*1 100	*1 100
Zimbabwe	49 204	10 943	10 997	12 125	8 974
Canada	...	20 823	26 148	20 617	18 763
Mexico	15 108	14 992	16 651	16 974	15 132
USA	38 217	27 158	41 404	28 769	30 966
Brazil	11 899	11 478	12 614	13 521	11 308
China	193 648	158 368	170 022	180 752	205 891
Hong Kong (c)	175	219	108	151	69
India (b)	659	248	265	556	...
Japan	3 436	3 055	3 027	1 949	1 894
Korea, Dem. P.R. of (a)	*3 100	*3 000	*5 900	*4 400	*3 800
Korea, Republic of	3 551	2 371	2 019	1 255	1 430
Sri Lanka	4 816	503	6 094	5 136	...

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	1995	1996	1997	1998	1999
Austria	7 486	7 038	9 616	9 223	7 670
Belgium-Luxembourg	1 582	1 827	2 428	5 167	5 836
Czech Republic	977	1 176	634	839	735
Denmark	432	405	452	381	422
Finland	389	360	344	543	549
France	3 221	3 934	3 756	1 702	25 371
Germany	36 110	41 345	39 272	39 190	38 228
Greece	499	521	674	564	119
Hungary	721	813	544	612	431
Irish Republic	240	215	705	221	430
Italy	10 261	10 029	9 606	11 407	9 462
Netherlands	21 269	8 604	6 566	4 296	2 611
Norway	831	212	54	77	3
Poland	1 948	2 360	2 187	3 021	2 586
Portugal	400	400	229	378	608
Russia	...	1 076	1 561	948	1 418
Slovakia	1 900	2 446	2 756	2 580	2 549
Spain	8 137	4 728	7 005	8 016	6 321
Sweden	595	496	578	489	707
Switzerland	476	440	674	523	748
Turkey	5 712	5 093	4 709	4 206	5 067
United Kingdom	30 244	25 349	23 740	27 885	21 197
Yugoslavia, Federal Republic of	*500	500	639	477	210
Egypt	200	912	787	551	1 906
South Africa	2 963	2 364	2 155	2 055	1 928
Canada	6 691	6 836	8 489	13 496	7 634
Mexico	3 022	2 922	4 333	4 031	7 970
USA	61 520	53 394	58 111	61 578	55 790
Argentina	747	1 155	864	829	607
Venezuela	1 056	1 118	930	547	664
China	763	368	801	1 557	1 239
Hong Kong	449	298	117	43	57
India (c)	773	824	1 081	694	...
Indonesia	2 206	1 851	1 832	1 875	...
Iran (a)	1 171	...	458	1 161	...
Japan	96 366	87 029	85 249	76 205	111 615
Korea, Republic of	27 732	65 959	46 887	30 722	37 222
Malaysia	2 100	2 300	*2 300	...	...
Pakistan (b)	2 225	2 392	2 942	2 030	2 302
Philippines	269	233	176	188	...
Saudi Arabia	1 346	943	1 410	843	5 529
Singapore	1 132	594	1 358	765	840
Taiwan	11 538	11 648	8 744	9 225	9 816
Thailand	1 160	*1 200	1 524	747	615
Australia	1 158	1 128	1 059	745	1 803

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

Country	1995	1996	1997	1998	1999
Armenia	35 000	15 000	*10 000	...	11 652
Austria					
Gypsum	873 404	887 730	894 398	872 468	898 830
Anhydrite	85 026	97 167	79 528	88 932	100 374
Azerbaijan	10 000	5 000	2 000	3 300	...
Bosnia & Herzegovina	*30 000	*30 000	*30 000	*30 000	...
Bulgaria	163 000	168 900	156 000	183 929	148 748
Croatia	96 590	86 060	102 470	104 660	137 991
Cyprus	152 800	94 100	222 000	270 000	197 000
Czech Republic	542 000	443 000	241 000	222 000	136 000
France	4 800 000	4 550 000	4 500 000	*4 500 000	*4 500 000
Georgia	...	...	3 700	5 700	9 600
Germany (a)	2 662 000	2 315 000	2 548 000	2 459 000	2 259 000
Greece	485 353	546 344	662 646	554 998	686 416
Hungary (a)	198 000	...	...	135 000	...
Irish Republic	406 000	422 800	477 000	*500 000	*500 000
Italy	1 492 594	1 274 672	1 215 767	1 237 522	*1 200 000
Latvia	78 800	63 888	116 916	119 096	...
Macedonia	28 000	39 000	25 000	*30 000	...
Moldova	13 600	12 700	14 400	19 100	...
Poland					
Gypsum	866 300	879 800	899 958	862 820	925 707
Anhydrite	156 900	148 400	135 000	166 100	237 000
Portugal	537 621	520 722	566 517	562 380	...
Romania	110 758	91 000	79 000	75 000	...
Russia	697 000	1 534 000	559 200	609 400	867 200
Slovakia (a)	131 000	121 000	116 000	128 000	117 000
Spain	9 000 000	8 500 000	*8 300 000	*10 000 000	...
Switzerland	*300 000	*300 000	*300 000	*300 000	...
Turkey	670 208	754 277	413 802	351 557	242 960
Ukraine	130 000	175 000	...	68 400	94 600
United Kingdom	*2 000 000	*2 000 000	*2 000 000	*2 000 000	*1 800 000
Yugoslavia, Federal Republic of	40 342	44 257	32 124	27 778	33 962
Algeria	*250 000	*250 000	*275 000	*275 000	...
Egypt (b)	2 361 000	575 908	784 836	741 192	...
Ethiopia (d)	35 179	33 024	40 072	37 325	35 983
Kenya	*28 000	*28 000	*25 000	*25 000	...
Libya	*180 000	*180 000	*180 000	*180 000	...
Mauritania	10 100	12 500	*10 000	*10 000	...
Morocco	*450 000	*450 000	*450 000	*450 000	...
Niger	*1 800	*1 800	2 500	2 559	1 502
Nigeria	150 000	383 250	432 559	...	...
Somalia	*2 000	*1 000	*1 000	*2 000	...
South Africa	288 178	340 688	396 929	485 749	513 760
Sudan	*10 000	*5 000	*5 000	*5 000	...
Tanzania	42 000	55 400	46 300	18 000	...
Tunisia	*100 000	*100 000	*100 000	*100 000	...
Canada					
Gypsum	8 253 000	8 289 000	8 937 000	8 827 000	9 308 000
Anhydrite	210 300	188 000	180 100	139 800	163 325
Cuba	120 800	112 400	133 400	134 300	110 400
Dominican Republic	95 000	86 848	115 261	80 016	85 654
El Salvador	*5 300	*5 400	*5 500	*6 000	*6 000
Guatemala	...	27 761	30 000	52 216	105 131
Honduras	*26 000	*26 000	*28 000	*30 000	*30 000
Jamaica	208 017	338 875	263 662	154 451	235 990
Mexico	4 854 339	6 064 682	5 869 175	7 035 369	6 953 756
Nicaragua	30 000	20 242	15 820	22 660	26 880
USA	16 600 000	17 500 000	18 600 000	19 000 000	18 800 000
Argentina	590 055	633 121	729 495	650 356	...
Brazil	(e) 817 290	(e) 1 003 150	(g) 1 507 114	(g) 1 631 957	(g) 1 456 309
Chile	464 060	520 089	398 354	780 676	...
Colombia	*450 000	522 236	564 681	*570 000	...
Ecuador	2 430	2 038	1 510	1 672	*2 000
Paraguay	*4 500	*4 500	*4 000	*5 000	*5 000

**Production of Gypsum**

tonnes

Country	1995	1996	1997	1998	1999
Peru	25 340	65 446	64 863	71 018	...
Venezuela	135 000	56 537	80 000	72 000	42 000
Afghanistan	*3 000	*3 000	*3 000	*3 000	...
Bhutan	52 102	55 000	*50 000	53 000	...
China	*7 340 000	*7 780 000	*9 100 000	*9 000 000	*9 100 000
India (f)	2 195 111	2 209 937	2 195 423	2 267 240	3 287 782
Iran (c)	8 085 263	7 696 252	8 281 098	*9 000 000	*9 000 000
Iraq	*300 000	*300 000	*300 000	*300 000	...
Israel	141 000	161 000	121 000	56 000	...
Jordan	*190 000	*190 000	193 527	175 807	...
Kazakhstan	115 000	-----	-----	-----	...
Laos	110 000	113 000	144 306	104 250	138 014
Lebanon	*2 000	*3 000	*3 000	*3 000	...
Mongolia	*25 000	*25 000	*25 000	*25 000	...
Myanmar (f)	37 011	37 500	40 642	40 234	43 102
Oman	104 490	130 930	122 664	189 510	180 130
Pakistan (b)	474 162	434 438	464 942	243 978	334 441
Saudi Arabia	332 483	356 378	*360 000	*360 000	...
Syria	335 683	325 000	*325 000	*325 000	...
Taiwan	3 135	2 603	2 613	...	...
Tajikistan	170 000	1 000	1 000	...	...
Thailand					
Gypsum	8 533 225	8 934 492	8 557 584	4 333 804	5 005 173
Anhydrite	-----	317 088	292 441	162 057	203 850
Turkmenistan	216 427	169 577	85 000	*100 000	...
Uzbekistan	65 000	80 000	80 000	...	...
Yemen, Republic of	100 000	97 000	99 000	*100 000	...
Australia (b)	1 843 300	1 717 700	1 891 100	2 564 200	*3 800 000
World Total	94 400 000	95 300 000	98 000 000	98 000 000	101 200 000

## 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
- (g) Crude

## Exports of Gypsum

Country	1995	1996	1997	1998	1999
Austria					
Crude	...	...	57 692	55 761	61 727
Calcined	...	...	90 321	88 194	102 614
Azerbaijan	...	10 746	...	...	2 738
Belarus					
Crude & calcined	...	...	...	895	11 900
Belgium-Luxembourg					
Crude	59 370	24 144	43 879	73 097	67 089
Calcined	3 157	3 067	6 751	3 567	4 846
Croatia					
Crude & calcined	18 608	854	...	5 542	8 830
Cyprus					
Crude & calcined	126 448	196 622	215 634	270 271	201 695
Czech Republic					
Crude	101 016	86 176	59 769	68 351	107 478
Calcined	...	...	5 855	5 570	8 426
Denmark					
Crude	7 095	40 328	60 411	58 092	15 624
Calcined	8 168	19 050	141 826	75 410	36 476
Finland					
Crude & calcined	8 178	1 408	3 492	3 721	3 485
France					
Crude	472 467	441 695	459 164	453 699	532 232
Calcined	491 318	407 573	422 105	405 544	291 434
Germany					
Crude	241 464	222 957	172 589	169 238	134 270
Calcined	806 568	888 118	680 859	828 936	636 192
Greece					
Crude	22 893	18 863	22 621	24 414	41 094
Calcined	65	3 199	944	4 500	4 568
Hungary					
Crude & calcined	...	373	535	758	290
Irish Republic					
Crude	508	546	528	510	566
Calcined	36 129	25 620	38 925	30 307	30 676
Italy					
Crude	47 114	63 190	60 425	73 382	59 426
Calcined	25 812	26 609	23 548	49 598	107 833
Latvia	64 090	40 052	103 751	79 505	59 416
Macedonia					
Crude & calcined	...	4 360	7 233	7 771	...
Moldova					
Crude & calcined	...	...	...	...	130 403
Netherlands					
Crude	56 772	38 187	29 677	20 580	6 725
Calcined	5 994	2 955	2 363	3 339	3 971
Poland					
Crude & calcined	30 100	41 600	87 600	82 100	78 562
Romania	8 780	6 738	6 565	5 638	4 252
Russia					
Crude & calcined	3 117	2 133	1 044	1 325	4 674
Slovakia					
Crude & calcined	...	20 500	28 400	29 100	10 900
Spain					
Crude	2 589 985	2 265 735	2 920 179	3 515 903	2 939 001
Calcined	153 541	203 801	309 283	295 504	415 179
Sweden					
Crude & calcined	684	376	563	885	3 039
Switzerland					
Crude	13 356	17 998	16 816	14 930	25 593
Calcined	1 081	1 844	2 081	4 301	5 328
Turkey					
Crude & calcined	13 036	18 090	32 755	36 608	45 319
United Kingdom					
Crude	2 884	2 059	10 239	9 322	8 529
Calcined	23 362	22 113	25 113	24 352	75 311

## Gypsum

## Exports of Gypsum

tonnes

Country	1995	1996	1997	1998	1999
Egypt					
Crude & calcined	40 800	23 000	57 865	32 003	14 508
Morocco					
Crude	268 600	216 613	225 089	...	...
Calcined	977	14 794	2 794	...	...
Tunisia					
Crude & calcined	8 355	15 069	19 829	17 566	17 328
Canada					
Crude	5 579 127	5 604 532	6 053 283	5 660 091	6 363 491
Calcined	2 871	2 910	1 350	1 530	1 835
Guatemala	22 038	14 387	15 474	33 001	28 104
Jamaica	191 417	192 178	160 972	166 038	...
Mexico	3 491 049	3 615 400	3 675 870	3 463 116	3 167 958
USA					
Crude	109 726	233 443	251 780	176 471	146 311
Calcined	161 535	142 593	237 885	211 499	588 606
Argentina	41 231	32 098	34 869	29 189	35 432
Colombia	11 426	6 347	3 208	...	...
Venezuela	16 106	4 553	4 542	5 722	14 658
China					
Crude	66 568	70 692	120 608	114 068	110 362
Calcined	13 718	8 626	7 898	10 850	10 830
Hong Kong (c)	458 066	213 163	47 654	18 051	140 178
India					
Crude & calcined (b)	43 770	67 105	20 198	38 734	...
Iran (a)	96 740	...	190 760	107 580	...
Japan					
Crude	1 844	1 712	1 727	1 212	1 279
Calcined	5 160	4 679	3 794	3 432	2 785
Korea, Republic of					
Crude & calcined	5 933	6 599	7 436	7 096	2 110
Kyrgyzstan					
Crude & calcined	...	12 035	...	105	1 088
Laos	124 000	110 740	146 230	89 298	134 745
Oman					
Crude	27 552	52 150	61 765	6 018	8 124
Philippines					
Crude	14 959	21 034	25 812	5 005	...
Calcined	20 128	10 201	29 322	5 506	...
Saudi Arabia					
Crude & calcined	...	50 625	62 762	56 109	53 795
Singapore					
Crude & calcined	11 558	20 355	12 740	17 727	6 138
of which, re-exports	5 321	2 881	2 475	800	739
Syria	53 893	40 836	18 823	11 893	...
Taiwan					
Crude	10 884	7 661	5 015	4 829	4 004
Calcined	7 804	4 819	5 373	2 242	1 718
Thailand					
Crude	6 511 788	6 425 567	6 772 085	3 973 203	4 260 735
Calcined	73 450	80 942	100 004	70 173	72 698
Australia					
Crude	131 107	136 209	303 417	764 832	1 133 723
Calcined	10 402	11 673	15 136	11 315	7 296

Note(s):-

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

(a) Years ended 20 March following that stated

(b) Years ended 31 March following that stated

(c) Re-exports

## Imports of Gypsum

Country	1995	1996	1997	1998	1999
Albania					
Crude & calcined	...	5 715	2 343	314	...
Austria					
Crude	...	...	22 130	20 698	21 638
Calcined	...	...	48 817	43 945	47 614
Azerbaijan					
Crude & calcined	...	...	...	...	16 147
Belarus					
Crude & calcined	...	...	...	93 572	151 694
Belgium-Luxembourg					
Crude	644 976	618 907	588 067	575 917	767 694
Calcined	396 698	358 952	365 400	381 601	338 404
Croatia					
Crude & calcined	18 287	25 918	35 642	37 026	24 018
Czech Republic					
Crude	7 622	22 088	27 283	34 531	25 760
Calcined	...	...	25 795	29 939	23 407
Denmark					
Crude	350 172	339 249	241 900	269 006	163 438
Calcined	27 285	6 787	6 567	10 061	12 558
Estonia					
Crude & calcined	16 797	...	11 419	9 484	15 763
Finland					
Crude	117 377	145 974	210 869	263 557	277 541
Calcined	6 133	6 614	7 898	6 344	19 871
France					
Crude	190 787	198 820	177 004	245 432	264 504
Calcined	18 695	26 220	29 439	35 933	41 167
Germany					
Crude	190 479	177 105	159 545	180 628	273 764
Calcined	142 560	99 327	73 950	71 634	50 807
Greece					
Crude	5 729	2 958	10 033	1 229	229
Calcined	2 506	2 089	1 736	1 963	2 753
Hungary					
Crude	50 700	48 792	62 476	66 295	50 147
Iceland					
Crude	4 617	4 033	6 155	8 042	...
Irish Republic					
Crude	2 820	1 307	6 892	6 814	7 266
Calcined	4 263	3 793	3 886	1 678	571
Italy					
Crude	7 196	5 636	546	715	3 765
Calcined	19 470	18 992	19 402	18 731	20 436
Lithuania					
Crude	43 400	13 750	40 939	30 365	28 668
Netherlands					
Crude	222 976	284 693	230 907	182 423	196 156
Calcined	317 815	344 334	328 365	335 844	419 469
Norway					
Crude	66 096	43 157	29 482	28 015	25 521
Calcined	244 012	262 186	332 441	375 899	354 670
Poland					
Crude	7 127	4 700	5 900	55 000	65 988
Calcined	19 148	40 700	81 700	119 500	180 149
Portugal					
Crude	...	25 784	39 636	42 798	44 279
Calcined	(d) 143 378	134 296	169 780	233 205	310 987
Romania					
Crude	3 200	3 400	4 573	4 982	10 109
Russia					
Crude	58 135	42 177	58 877	33 317	17 676
Slovakia					
Crude & calcined	...	109 608	108 726	88 800	94 824
Slovenia					
Crude	(a) *36 000	68 146	69 099	73 684	75 474
Spain					
Crude	117	2 273	...	6 021	121
Calcined	30 134	24 968	46 213	48 781	54 677
Sweden					
Crude	192 763	213 335	185 952	321 316	214 236
Calcined	20 962	109 118	92 476	57 108	137 657



## Imports of Gypsum

tonnes

Country	1995	1996	1997	1998	1999
Switzerland					
Crude	48 151	46 420	57 448	65 623	60 400
Calcined	66 464	62 421	67 896	71 705	69 844
Turkey	47 859	8 059	39 120	30 198	73 521
United Kingdom					
Crude	*800 000	586 999	521 455	328 175	403 476
Calcined	55 364	43 466	42 859	33 227	32 247
Burkina Faso	4 000	4 278	8 121	9 876	...
Egypt					
Crude & calcined	2 500	3 353	6 494	6 660	8 111
Ivory Coast					
Crude & calcined	...	68 702	...	...	...
Nigeria					
Crude & calcined	...	...	3 533	3 815	4 592
Senegal					
Crude & calcined	...	...	...	...	59 227
South Africa					
Crude & calcined	8 276	9 468	8 767	9 056	7 712
Tunisia					
Crude & calcined	1 076	1 015	1 305	1 442	2 026
Canada					
Crude	177 326	237 158	207 538	96 590	121 047
Calcined	35 375	33 077	31 775	38 463	28 876
Costa Rica					
Crude & calcined	18 879	59 576	36 482	77 994	57 947
El Salvador					
Crude & calcined	28 475	17 327	16 381	33 439	25 894
Guadeloupe	7 980	13 103	10 272	12 622	18 962
Martinique	4 370	7 454	10 143	7 450	18 398
Mexico					
Crude	1 469	3 376	4 942	4 694	6 595
Calcined	21 134	20 791	21 467	23 695	28 916
Panama	21 124	14 505	16 388	11 301	20 640
Trinidad & Tobago					
Crude & calcined	12 843	...	2 941	...	...
USA					
Crude	8 158 996	8 050 996	8 414 117	8 678 644	9 379 401
Ground & calcined	8 486	10 766	9 523	11 384	14 184
Colombia	154 714	119 818	219 546	217 046	104 396
Ecuador	44 852	33 079	71 176	116 229	37 041
Paraguay					
Crude & calcined	15 131	24 299	18 801	...	25 402
Uruguay					
Crude & ground	24 847	20 607	49 422	51 768	54 255
Venezuela	247 377	207 775	194 853	230 862	218 978
Abu Dhabi	29 530	52 272	45 311	51 254	319 894
Bahrain	9 205	20 242	6 651	5 710	8 512
China					
Crude	3 978	3 870	4 416	4 398	21 243
Calcined	15 542	15 561	16 299	15 085	20 404
Dubai					
Crude & calcined	...	7 205	4 104	3 198	...
Hong Kong					
Crude	74 532	57 019	70 968	10 969	26 752
Calcined	20 852	22 050	19 536	16 116	12 292
India					
Crude & calcined (c)	23 185	10 145	16 253	14 629	...
Indonesia	230 302	366 076	543 832	602 581	...
Israel (a)	*6 500	...	...	...	...
Japan					
Crude	3 982 086	4 090 538	4 814 767	2 928 552	2 539 371
Calcined	3 337	3 400	8 195	6 151	6 741
Jordan	9 649	9 248	8 097	7 085	...
Korea, Dem. P.R. of	(a) *23 200	...	...	...	...

## Imports of Gypsum

Country	1995	1996	1997	1998	1999
Korea, Republic of					
Crude	775 411	827 230	930 201	515 582	531 892
Calcined	8 361	7 669	3 721	2 644	2 165
Kuwait					
Crude	217 856	186 903	189 795	...	...
Kyrgyzstan					
Crude & calcined	19 144	28 898	*29 000	28 762	15 814
Macao	36 016	21 739	27 237	12 476	25 629
Malaysia					
Crude & calcined	550 430	770 000	...	...	...
Oman	7 589	5 611	2 201	2 581	7 131
Philippines					
Crude	198 723	211 206	280 900	91 735	...
Calcined	12 298	10 201	12 063	10 726	...
Qatar	1 555	300	2 635	...	...
Saudi Arabia					
Crude & calcined	35 721	36 214	39 002	32 133	33 905
Singapore					
Crude & calcined	137 797	175 992	110 256	128 390	83 880
Sri Lanka	45 529	46 080	52 318	63 670	...
Taiwan					
Crude	783 557	684 889	810 556	600 068	498 394
Calcined	6 162	4 199	6 606	4 029	5 172
Thailand					
Crude	660	2 126	79 150	319	243
Calcined	6 883	4 414	3 100	1 607	1 584
Australia					
Crude	42 759	1 351	11 928	2 877	15 640
Calcined	1 313	3 136	2 153	2 471	4 353
New Caledonia					
Crude & calcined	6 410	5 361	6 246	5 268	...
New Zealand					
Crude & calcined (b)	164 011	...	132 783	317 824	...

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	1995	1996	1997	1998	1999
Azerbaijan	30 000	15 000	5 000	...	...
Russia	20 000	9 000	73 000	168 000	25 000
USA	1 220 000	1 270 000	1 320 000	1 490 000	1 620 000
Chile (a)	6 400 616	6 332 255	8 832 344	9 851 673	9 800 000
China	*500 000	*500 000	*500 000	*500 000	*500 000
Indonesia	76 824	*75 000	83 000	65 000	74 000
Japan	5 492 000	6 178 000	6 036 000	6 142 000	*6 700 000
Turkmenistan	136 700	35 000	87 000	*90 000	*150 000
Uzbekistan	-----	-----	-----	*1 000	*2 000
World Total	13 900 000	14 400 000	16 900 000	18 300 000	18 900 000

Note(s):-

(a) Exports

## Exports of Iodine

Country	1995	1996	1997	1998	1999
Azerbaijan	19 000	9 000	7 000	...	...
Belgium-Luxembourg	112 000	1 000	1 558 600	1 632 000	1 707 500
France	53 000	74 000	73 900	43 700	30 200
Germany	584 400	432 700	324 200	539 600	568 300
Irish Republic	...	...	2 000	13 613	80
Italy	...	...	45 884	17 201	4 335
Lithuania	...	...	2 000	2 000	...
Norway	...	...	23	1 217	17 607
Russia	-----	27 000	21 000	69 000	85 000
Spain	8 000	...	19 037	41 526	6 938
United Kingdom	314 960	224 034	184 176	138 391	111 989
Canada	47 167	36 755	56 717	54 940	...
USA	1 666 488	2 576 096	3 257 253	3 196 101	3 026 934
Brazil	10 657	67 250	34 555	24 870	4 301
Chile	6 400 616	6 332 255	8 832 344	9 851 673	9 800 000
China	3 203	3 101	19 500	26 070	1 323
Indonesia	75 000	58 000	33 459	19 000	...
Japan	5 337 758	5 572 130	5 602 646	4 994 110	4 653 202
Singapore	...	...	10 525	4 378	6 373
of which, re-exports	...	...	10 320	3 361	5 728

## Imports of Iodine

kilograms

Country	1995	1996	1997	1998	1999
Austria	17 500	42 000	87 100	97 900	73 100
Belgium-Luxembourg	27 000	44 000	1 427 000	1 745 600	1 736 700
Cyprus	6 412	6 004	17 693	16 073	13 521
Czech Republic	...	...	21 000	8 000	15 000
Denmark	26 200	20 300	24 219	26 008	8 975
Finland	53 000	15 000	2 496	3 610	7 105
France	1 397 000	1 739 000	1 880 600	1 838 900	1 580 200
Germany	1 217 200	1 232 500	1 229 900	1 282 900	1 328 900
Greece	...	...	23 000	13 000	1 318
Irish Republic	...	...	...	90 707	7 136
Italy	...	...	944 562	841 025	834 259
Lithuania	...	...	3 000	3 000	1 000
Netherlands	952 000	...	1 373 000	1 845 000	2 051 200
Norway	591 000	439 000	549 692	351 791	124 711
Poland	45 000	33 000	31 000	25 000	29 000
Portugal	...	15 600	86 325	24 990	22 543
Romania	...	...	1 000	6 000	...
Russia	...	...	84 000	62 000	109 000
Spain	674 000	...	589 862	608 324	722 532
Sweden	...	...	2 000	10 000	2 000
Switzerland	74 981	65 784	62 428	8 784	3 585
Ukraine	14 752	1 613	12 486	6 960	1 211
United Kingdom	1 854 757	3 350 534	1 353 469	1 693 418	950 319
Yugoslavia, Federal Republic of	...	...	24 000	8 000	3 000
Egypt	...	...	206 000	99 000	330 000
South Africa	10 968	16 098	15 684	13 346	14 210
Tunisia	...	1 553	799	1 495	3 000
Canada	393 931	426 522	641 446	529 337	430 085
Mexico	1 685 447	1 490 841	...	...	...
USA	3 840 470	4 649 705	6 016 775	5 727 186	5 086 301
Argentina	...	...	37 000	35 000	37 984
Brazil	411 000	509 000	298 000	418 000	527 000
Colombia	...	...	27 000	26 000	22 000
Uruguay	1 500	...	1 600	2 000	2 000
Venezuela	17 049	2 622	13 000	...	10 000
China	143 292	41 258	346 284	575 456	748 671
Hong Kong	...	...	265 224	184 009	59 132
India (a)	601 579	483 150	477 125	606 917	...
Indonesia	...	8 241	170 905	18 193	...
Japan	334 400	142 800	205 206	349 110	290 195
Korea, Republic of	31 520	24 191	35 465	49 193	68 920
Pakistan (b)	...	14 433	21 338	27 976	19 000
Philippines	...	9 639	6 331	2 575	...
Singapore	...	...	3 576	8 856	20 699
Sri Lanka	741	1 136	422	25	...
Taiwan	34 112	32 720	28 709	28 227	21 852
Thailand	11 497	7 259	8 216	13 000	12 000
Australia	35 040	34 029	37 663	56 538	56 000
New Zealand (b)	28 257	...	35 699	29 481	...

Note(s) :-

(a) Years ended 31 March following that stated

(b) Years ended 30 June of that stated

## Production of Iron Ore

Country	1995	1996	1997	1998	1999
Austria	2 107 000	1 860 300	1 794 129	1 792 000	1 747 000
Bosnia & Herzegovina	*150 000	*150 000	*150 000	*150 000	...
Bulgaria	824 000	1 000 000	858 000	895 000	699 000
France	1 496 000	1 459 900	522 700	21 000	...
Germany (f)	68 720	104 280	200 940	604 912	615 165
Macedonia	*15 000	*15 000	*15 000	*15 000	...
Norway	2 168 381	1 554 599	724 400	588 700	533 800
Portugal (f)	14 535	18 620	18 905	20 200	11 733
Romania	865 000	860 000	756 000	459 000	...
Russia	78 300 000	72 100 000	70 867 300	72 343 300	82 200 000
Slovakia	405 000	436 000	452 800	479 212	458 035
Spain	2 028 798	1 263 318	57 930	52 161	64 000
Sweden	21 662 000	21 288 000	21 893 000	20 930 000	18 853 000
Turkey	4 931 176	6 279 951	5 986 900	5 885 429	4 846 032
Ukraine	50 741 000	47 590 000	52 993 500	51 070 200	47 769 100
United Kingdom	1 051	1 190	1 210	1 188	*1 000
Yugoslavia, Federal Republic of	5 520	5 200	7 230	5 125	2 088
Algeria	2 192 000	2 244 000	1 614 200	1 783 000	1 336 000
Egypt (d)	2 433 000	2 429 901	2 662 447	2 941 798	...
Mauritania	11 300 000	11 400 000	11 700 000	11 402 000	10 400 000
Morocco	47 192	11 842	12 011	9 285	6 625
Nigeria	...	31 912	76 544	18 796	...
South Africa (c)	31 945 511	30 829 900	33 225 130	32 965 235	29 507 849
Tunisia	226 200	238 800	264 400	221 800	222 100
Zimbabwe	311 352	323 942	479 032	371 589	598 650
Canada (g)	37 288 000	35 689 000	37 277 000	37 808 000	34 487 000
Mexico	10 704 000	11 809 000	11 956 000	11 101 000	10 814 000
USA	62 501 000	62 083 000	62 971 000	62 931 000	57 410 000
Brazil (a)	184 540 460	174 190 720	185 000 000	197 500 000	194 000 000
Chile	8 431 647	9 081 661	8 738 191	9 112 055	8 534 886
Colombia	734 000	605 716	754 772	525 825	587 867
Peru	5 975 967	4 467 689	4 746 070	4 905 632	4 078 186
Venezuela	18 954 920	18 454 912	18 359 509	16 784 217	16 100 000
China	262 099 600	252 282 700	268 612 000	246 891 000	237 230 100
India (b)	67 418 000	68 173 000	75 723 000	72 230 000	73 475 000
Indonesia	348 371	425 101	487 354	564 424	562 912
Iran (e)	6 463 440	7 426 606	6 217 727	*6 000 000	*6 000 000
Kazakhstan	14 902 200	12 975 100	13 132 600	9 335 800	9 607 200
Korea, Dem. P.R. of	*8 000 000	*2 000 000	*2 000 000	*1 000 000	...
Korea, Republic of	184 443	221 163	295 960	238 252	187 987
Malaysia (g)	202 322	325 114	269 087	376 009	337 462
Thailand	34 480	85 880	43 840	90 700	122 633
Australia	142 936 000	152 138 000	156 286 000	160 731 000	149 966 000
New Zealand	2 362 197	2 333 715	2 477 728	2 224 325	2 303 376
World Total	1 048 000 000	1 018 000 000	1 063 000 000	1 045 000 000	1 010 000 000

Note(s):-

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

(a) Including beneficiated and direct shipping ore

(b) Years ended 31 March following that stated

(c) Including by-product magnetite

(d) Years ended 30 June of that stated

(e) Years ended 20 March following that stated

(f) Including manganiferous iron ore

(g) Including by-product iron ore

**Exports of Iron Ore**

tonnes

Country	1995	1996	1997	1998	1999
Albania	...	39 780	1 243	1 737	...
Belgium-Luxembourg					
Iron ore	35 404	68 607	12 616	13 880	67 657
Burnt pyrites	-----	-----	-----	18 190	98 522
France	1 639 443	1 293 802	584 665	37 351	20 178
Georgia (d)	...	*5 000	*52 600	*48 500	...
Germany					
Iron ore	65 232	34 034	14 176	4 461	12 222
Burnt pyrites	16 165	12 886	94 633	13 678	1 318
Italy					
Burnt pyrites	8 511	18 957	17 296	48 802	65 162
Netherlands					
Iron ore	163 982	292 784	107 663	29 344	151 475
Burnt pyrites	2 031	16 196	63 895	44 352	20 576
Norway					
Iron ore	1 018 254	610 787	270 815	50 829	19 127
Burnt pyrites	153 439	155 982	87 562	64 053	38 232
Poland	130 480	30 396	2 000	5 000	7 744
Russia	11 256 800	13 833 500	11 772 600	13 828 300	10 841 114
Slovakia	80 000	95 000	79 500	75 000	95 900
Spain					
Iron ore	1 479 841	975 353	43 224	55 173	36 742
Burnt pyrites	139 156	198 896	138 015	55 052	33 256
Sweden	16 917 210	15 172 628	17 571 842	14 631 068	13 819 605
Ukraine	19 138 510	19 108 682	20 083 455	17 703 014	13 343 939
Yugoslavia, Federal Republic of					
Burnt pyrites	...	13 000	17 219	16 157	21 367
Liberia	180 000	...	100 000	100 000	...
Mauritania	11 514 000	11 158 000	11 700 000	11 400 000	...
Morocco					
Iron ore	1 531	-----	...	...	...
Burnt pyrites	26 891	13 140	5 300	...	...
South Africa	21 847 012	19 328 139	20 729 659	22 093 000	21 095 418
Tunisia	11 337	14 658	9 025	15 801	9 581
Canada	28 840 291	28 880 500	33 142 058	30 691 746	26 885 514
USA (b)	5 227 162	6 244 606	6 392 675	6 065 078	6 125 063
Brazil	130 178 346	128 989 790	134 092 571	150 210 269	139 801 476
Chile	6 161 316	6 982 429	6 726 425	7 071 147	...
Peru	6 100 000	4 100 000	3 800 000	4 600 000	3 800 000
Venezuela	10 612 000	9 579 320	9 321 862	8 603 412	6 616 973
China					
Iron ore	706	113	5 354	20 010	9 306
Burnt pyrites	79	46	55	124	6 972
India (c)	31 719 565	17 627 888	19 498 132	22 273 379	...
Kazakhstan	...	3 503 300	8 622 565	7 353 001	3 394 300
Korea, Dem. P.R. of (d)	*231 000	*177 000	*168 000	*83 000	*26 000
Malaysia	2 973	12 012	9 000	122 000	...
Philippines	4 744 000	4 546 000	4 500 000	4 500 000	...
Australia	130 367 019	128 273 927	146 757 247	136 396 291	146 200 021
New Zealand (a)	1 231 527	1 229 742	891 786	642 022	...

Note(s):-

(a) Years ended 30 June of that stated

(b) Including burnt pyrites

(c) Years ended 31 March following that stated

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

## Imports of Iron Ore

Country	1995	1996	1997	1998	1999
Austria					
Iron ore	4 636 000	4 335 000	5 101 249	5 237 875	...
Burnt pyrites	2 427	1 065	1 487	2 076	1 078
Belgium-Luxembourg	15 330 478	12 996 054	11 158 528	13 493 548	12 112 181
Bulgaria	1 484 326	1 143 871	1 992 564	2 208 000	...
Czech Republic	9 146 000	8 255 000	7 383 349	7 395 000	5 356 868
Denmark					
Iron ore	11 406	4 565	5 570	2 829	3 405
Burnt pyrites	56 850	48 625	21 828	66 946	45 165
Finland	2 964 991	3 305 768	3 731 829	3 922 531	3 818 567
France					
Iron ore	20 204 325	18 244 000	20 212 123	19 746 303	19 999 656
Burnt pyrites	17 196	17 819	13 329	8 337	5 894
Germany					
Iron ore	43 219 670	39 303 336	41 686 890	53 595 582	38 801 838
Burnt pyrites	96 560	71 484	94 633	86 364	89 957
Greece					
Burnt pyrites	65 276	91 592	61 204	39 557	22 886
Hungary	2 090 682	2 315 584	1 467 892	2 063 600	1 744 312
Iceland	20 000	22 736	24 560	22 768	...
Italy (a)	18 306 000	16 047 940	16 663 374	15 717 985	15 614 537
Netherlands					
Iron ore	8 742 225	8 332 365	8 595 877	8 827 125	7 949 025
Burnt pyrites	6 482	51 781	57 481	27 794	111 119
Norway	68 461	470 188	561 474	529 789	488 582
Poland					
Iron ore	10 529 085	(a) 9 803 503	(a) 10 583 000	(a) 9 982 000	(a) 7 418 423
Burnt pyrites	346 360	...	...	...	...
Portugal	689 164	454 811	558 546	590 086	538 354
Romania	6 278 469	5 843 451	6 625 253	6 569 462	4 171 545
Russia					
Iron ore	4 325 000	4 372 017	5 392 492	6 562 256	3 313 496
Burnt pyrites	...	7 109	3 552	8 805	...
Slovakia	4 888 000	4 180 000	4 307 000	3 975 500	4 270 146
Spain	7 190 450	6 105 975	5 858 327	6 583 581	6 283 186
Sweden					
Iron ore	183 000	144 669	102 638	69 083	68 929
Burnt pyrites	784	5 651	10 694	22 613	48 357
Switzerland (a)	21 341	18 579	14 720	14 373	13 222
Turkey	3 221 358	2 991 253	2 900 453	3 857 835	2 973 052
Ukraine	3 003 000	2 308 136	1 881 478	3 369 816	4 683 178
United Kingdom					
Iron ore	20 705 671	20 304 347	21 032 971	20 764 785	17 029 307
Burnt pyrites	8 188	3 555	18 409	25 787	21 649
Yugoslavia, Federal Republic of	250 000	987 662	1 067 222	52 515	1 254 517
Egypt	1 039 000	881 266	877 995	2 193 934	1 284 997
Libya	1 300 000	1 500 000	1 348 000	1 700 000	...
Nigeria	80 000	55 642	50 000	...	...
Tunisia	34 894	73 231	111 483	187 132	226 094
Canada	5 968 843	6 873 506	7 081 265	7 200 963	7 311 445
Mexico	824 207	1 310 474	2 885 308	3 954 913	3 732 476
Trinidad & Tobago	1 531 650	1 183 178	1 052 433	1 364 000	...
USA (a)	17 395 498	18 396 735	18 595 659	16 973 180	14 254 523
Argentina	4 361 701	4 947 040	5 054 185	5 558 631	4 142 666
Paraguay					
Iron ore	97 148	43 147	48 990	...	...
Burnt pyrites	6 615	...	...	...	...
Abu Dhabi	66 652	...	40 428	21 040	38 183
Bahrain	3 242 000	2 700 000	3 163 000	1 600 000	...
China					
Iron ore	41 057 844	43 873 023	55 067 487	51 594 678	55 272 881
Burnt pyrites	96 011	937	38 346	176 040	1 123
India (b)	879 131	851 790	371 390	149 248	...



**Imports of Iron Ore**

tonnes

Country	1995	1996	1997	1998	1999
Indonesia					
Iron ore	495 225	464 874	1 472 099	1 310 494	...
Burnt pyrites	2 011 921	2 047 762	398 536	98	...
Iran	2 900 000	2 600 000	3 000 000	1 700 000	...
Japan	120 434 681	119 204 779	126 600 755	120 618 050	120 107 002
Kazakhstan	*200 000	*200 000	*220 000	242 586	...
Korea, Republic of	35 046 110	22 568 274	38 592 030	33 611 499	35 400 291
Malaysia	1 757 773	1 769 231	2 100 000	800 000	...
Pakistan (c)	1 632 000	1 935 459	1 228 993	1 928 368	1 265 693
Philippines	5 000 000	4 800 000	4 800 000	4 800 000	...
Qatar	940 167	909 584	725 578	...	...
Saudi Arabia	2 863 970	2 552 569	2 360 040	2 800 886	3 046 235
Taiwan					
Iron ore	9 192 402	10 074 552	14 042 963	14 042 341	13 236 522
Burnt pyrites	...	...	----	126 281	73 474
Thailand	2 238	1	66 323	21	6 360
Australia	4 196 787	4 081 167	5 558 851	4 926 790	4 282 000

Note(s) :-

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

## Production of Pig Iron

Country	1995	1996	1997	1998	1999
Austria	3 878 212	3 429 208	3 965 864	4 034 229	3 913 000
Belgium	9 198 831	8 626 651	8 076 475	8 618 000	8 430 000
Bosnia & Herzegovina	*100 000	*100 000	*100 000	*100 000	*100 000
Bulgaria	1 606 700	1 513 000	1 643 000	1 390 000	1 120 000
Czech Republic	5 274 300	4 898 100	5 195 400	4 981 800	4 022 700
Finland	2 241 875	2 456 932	2 786 126	2 919 692	2 954 127
France	12 760 233	11 999 457	13 315 344	13 458 000	*13 500 000
Germany	30 012 000	27 722 000	30 940 000	30 162 000	*28 000 000
Hungary	1 514 597	1 496 370	1 139 934	1 258 851	1 309 584
Italy	11 663 000	10 320 000	11 304 000	10 770 000	10 604 000
Luxembourg	1 028 230	829 010	438 030	-----	-----
Netherlands	5 530 100	5 543 900	5 805 000	5 562 000	5 307 000
Norway	70 000	70 000	70 000	70 000	70 000
Poland	7 373 300	6 540 100	7 295 637	6 128 484	5 233 124
Portugal	415 000	423 000	431 000	365 000	389 000
Romania	4 203 100	4 024 600	4 556 000	4 541 151	3 006 268
Russia	39 800 000	37 148 200	37 327 600	34 661 000	40 856 000
Slovakia	3 207 000	2 928 000	3 072 000	2 756 000	2 987 000
Spain	5 106 000	4 127 000	3 927 000	4 278 000	4 146 000
Sweden	3 019 700	3 129 500	3 060 100	3 149 000	3 212 200
Switzerland	97 000	*100 000	*100 000	*80 000	*80 000
Turkey	4 403 000	5 253 000	5 565 000	5 286 000	5 181 000
Ukraine	18 000 000	17 800 000	20 600 000	20 936 000	23 000 000
United Kingdom	12 235 800	12 830 200	13 054 500	12 746 100	12 139 300
Yugoslavia, Federal Republic of	107 836	535 213	906 704	825 916	134 882
Algeria	898 804	855 564	525 771	740 968	807 218
Egypt	1 914 000	2 054 000	2 704 000	2 956 000	*3 070 000
Libya	963 000	862 000	1 007 000	1 200 000	1 290 000
Morocco	*15 000	*15 000	*15 000	*15 000	*15 000
Nigeria	36 000	12 000	-----	-----	-----
South Africa	7 173 000	6 911 000	7 307 000	6 920 000	6 100 000
Tunisia	151 700	145 100	150 000	122 900	180 000
Zimbabwe	*205 000	*219 000	*216 000	*217 000	*270 000
Canada	8 464 191	8 638 007	8 669 788	8 936 802	8 856 569
Mexico	7 842 100	8 023 369	8 889 365	10 115 642	10 892 000
Trinidad & Tobago	1 039 900	954 500	1 133 800	1 023 100	1 379 000
USA	51 400 000	49 900 000	50 100 000	49 800 000	47 900 000
Argentina	2 896 058	3 388 003	3 576 039	3 659 744	2 973 200
Brazil	25 309 000	24 313 000	25 336 000	25 446 800	24 948 500
Chile	854 563	995 920	941 465	992 568	1 030 000
Colombia	312 841	286 275	323 701	255 896	263 000
Paraguay	103 130	103 562	78 615	65 545	55 000
Peru	250 239	294 840	367 795	343 341	237 000
Venezuela	5 099 302	5 731 614	5 636 623	5 446 433	5 171 000
China	105 292 700	107 225 000	115 114 100	118 521 000	125 329 900
India (a)	21 429 000	23 747 000	24 737 000	23 468 000	*25 000 000
Indonesia	1 709 000	1 723 000	1 535 000	1 640 000	*1 740 000
Iran	4 832 000	5 629 000	6 481 000	5 626 000	6 232 000
Japan	74 904 502	74 596 833	78 519 469	74 981 000	74 520 000
Kazakhstan	2 489 000	2 536 000	3 089 000	2 594 000	3 468 000
Korea, Dem. P.R. of	*500 000	*500 000	*500 000	*250 000	*250 000
Korea, Republic of	22 343 857	23 009 717	22 712 406	23 299 189	23 329 000
Malaysia	1 228 000	1 172 000	1 486 000	910 000	960 000
Myanmar	20 000	40 000	40 000	*40 000	*40 000
Pakistan	1 100 000	1 500 000	1 400 000	1 500 000	*1 500 000
Qatar	622 000	635 000	564 000	706 000	670 000
Saudi Arabia	2 129 000	2 296 000	2 107 000	2 268 000	2 343 000
Taiwan	6 056 000	6 050 000	8 870 000	9 374 000	8 890 000
Vietnam	...	...	41 000	48 000	50 000

**Production of Pig Iron**

tonnes

Country	1995	1996	1997	1998	1999
Australia	7 861 000	7 381 000	7 884 000	7 724 000	7 468 000
New Zealand	626 000	619 000	534 000	609 000	*600 000
World Total	550 900 000	546 200 000	577 300 000	570 900 000	577 500 000

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 31 March following that stated

## Production of Crude Steel

Country	1995	1996	1997	1998	1999
Austria	4 919 840	4 442 000	5 181 000	5 282 000	5 202 000
Belarus	744 000	795 000	1 110 000	1 300 000	1 345 000
Belgium	11 539 883	10 751 711	10 717 603	11 404 000	10 910 000
Bosnia & Herzegovina	*115 000	68 000	72 000	88 000	...
Bulgaria	2 723 500	2 457 000	2 638 190	2 219 000	1 846 000
Croatia	45 373	45 752	68 733	104 854	77 213
Czech Republic	7 183 800	6 509 400	6 750 100	6 497 800	5 615 500
Denmark	648 000	739 000	787 000	800 000	727 000
Finland	3 175 671	3 301 436	3 734 299	3 951 589	3 955 658
France	18 100 061	17 632 984	19 767 457	20 124 000	20 196 000
Georgia	88 400	82 681	103 152	56 353	7 036
Germany	42 051 000	39 793 000	45 007 000	44 046 000	42 062 000
Greece	939 170	846 885	1 016 000	1 109 000	951 000
Hungary	1 864 657	2 059 942	1 818 523	1 940 110	1 833 756
Irish Republic	309 900	340 510	336 361	354 780	314 000
Italy	27 766 000	23 911 000	25 841 000	25 678 000	24 738 000
Latvia	279 326	293 166	464 529	470 835	*471 000
Luxembourg	2 613 137	2 501 487	2 580 219	2 476 909	2 600 324
Moldova	663 000	646 000	811 000	718 000	796 300
Netherlands	6 409 100	6 326 000	6 641 000	6 377 000	6 075 000
Norway	503 278	510 850	578 000	644 000	611 000
Poland	11 890 400	10 432 300	11 585 100	9 915 125	8 853 163
Portugal	828 000	852 000	911 000	906 000	984 000
Romania	6 556 900	6 083 000	6 675 000	6 335 896	4 354 637
Russia	51 589 000	49 253 000	48 502 000	43 673 000	51 518 000
Slovakia	3 958 000	3 458 000	3 484 000	3 428 000	3 569 000
Slovenia	407 000	314 000	372 690	405 210	405 000
Spain	13 802 000	12 161 000	13 770 000	14 827 000	14 882 000
Sweden	4 953 400	4 909 600	5 147 700	5 153 100	5 067 200
Switzerland	739 000	700 000	789 000	800 000	...
Turkey	13 183 000	13 382 221	13 644 093	13 165 724	13 816 277
Ukraine	21 856 800	21 948 800	25 285 700	24 105 255	26 912 700
United Kingdom	17 603 600	17 991 700	18 500 500	17 315 000	16 297 800
Yugoslavia, Federal Republic of	180 000	678 749	978 960	949 314	226 240
Algeria	826 728	646 001	394 718	646 621	767 248
Egypt	2 642 000	2 618 000	2 717 000	2 870 000	2 619 000
Libya	909 000	863 000	897 000	874 000	945 000
South Africa	8 741 000	7 999 000	8 311 000	7 506 000	6 925 000
Tunisia	200 700	187 000	195 000	171 000	229 000
Zimbabwe	220 000	212 000	214 000	212 000	228 000
Canada	13 996 155	14 637 476	15 458 635	15 832 839	16 136 095
Cuba	207 259	230 988	334 600	283 200	302 700
Dominican Republic	...	42 261	82 479	35 874	31 000
El Salvador	27 709	41 408	44 868	43 162	39 000
Mexico	12 147 446	13 171 832	14 218 339	14 213 051	15 299 000
Trinidad & Tobago	676 100	643 600	747 000	776 900	729 000
USA	95 191 000	95 535 000	98 485 000	98 658 000	97 427 000
Argentina	3 568 800	4 075 139	4 168 500	4 215 890	3 798 000
Brazil	25 076 400	25 237 000	26 152 900	25 759 900	24 996 200
Chile	1 014 116	1 178 266	1 167 492	1 171 409	1 292 000
Colombia	713 648	694 741	733 951	635 814	519 000
Ecuador	34 641	20 477	43 700	45 784	53 000
Paraguay	94 927	95 543	65 542	56 243	50 000
Peru	511 789	578 382	607 391	630 687	558 000
Uruguay	39 857	33 555	39 070	52 012	45 000
Venezuela	3 567 520	3 956 432	3 986 549	3 553 315	3 261 000
Bangladesh (b)	25 346	20 594	16 271	10 775	...
China	95 359 900	101 240 600	108 941 700	114 588 400	123 954 100
Hong Kong	*150 000	*100 000	...	...	...
India	22 003 000	23 753 000	24 415 000	23 480 000	24 269 000
Indonesia	4 130 000	4 109 000	3 816 000	2 699 000	2 891 000
Iran (c)	4 639 873	5 895 965	6 059 375	5 616 986	*6 100 000
Israel	220 000	265 000	270 000	*280 000	...
Japan	101 639 573	98 800 671	104 554 086	93 547 990	94 195 369

**Production of Crude Steel**

tonnes

Country	1995	1996	1997	1998	1999
Kazakhstan	3 026 592	3 216 596	3 880 248	3 089 000	4 087 129
Korea, Dem. P.R. of	600 000	600 000	600 000	*300 000	...
Korea, Republic of	37 500 138	39 642 629	42 554 151	39 895 839	41 042 000
Malaysia	2 450 000	3 216 000	2 962 000	1 903 000	2 260 000
Mongolia	15 600	19 200	22 700	16 300	13 100
Pakistan	409 000	416 000	479 000	494 000	*500 000
Philippines	923 000	920 000	980 000	884 000	530 000
Qatar	606 000	616 000	608 000	637 000	629 000
Saudi Arabia	2 451 000	2 683 000	2 539 000	2 356 000	2 610 000
Singapore	769 000	779 000	383 000	499 000	590 000
Syria	*70 000	*70 000	*70 000	*70 000	*70 000
Taiwan	11 605 000	12 655 000	15 478 000	16 922 000	15 438 000
Thailand	2 134 000	2 143 000	2 101 000	1 814 000	1 532 000
United Arab Emirates	60 000	90 000	*90 000	*90 000	...
Uzbekistan	367 200	444 000	379 000	343 000	344 000
Vietnam	271 000	311 000	314 000	306 000	308 000
Australia (a)	8 447 000	8 400 000	8 769 000	8 888 000	8 158 000
New Zealand	865 155	774 736	768 631	756 000	744 000
World Total	751 000 000	750 000 000	796 000 000	774 000 000	785 000 000

## Note(s):-

- (1) The figures in this table refer to crude steel and cast semi-manufactures are not included
- (2) Unless otherwise indicated, these figures include production from scrap
- (3) Small amounts of steel are believed to be produced in Albania, Azerbaijan, DR Congo, Estonia, Ghana, Jordan, Kenya, Lithuania, Macedonia, Mauritania, Morocco, Myanmar, Nigeria, Sri Lanka, Uganda

- (a) Including recovery from scrap
- (b) Years ended 30 June of that stated
- (c) Years ended 20 March following that stated

## Production of Ferro-Alloys

Country	1995	1996	1997	1998	1999
Albania					
Ferro-chrome	42 986	31 189	31 454	29 300	23 410
Austria					
Ferro-molybdenum	5 600	4 300	4 600	4 900	4 900
Ferro-nickel	4 300	3 900	3 700	3 300	2 600
Ferro-vanadium	5 400	5 600	5 900	5 900	6 400
Belgium					
Ferro-manganese	10 600	16 600	12 700	13 800	----
Ferro-silico-manganese	7 100	1 400	7 700	4 400	----
Ferro-molybdenum	12 100	11 700	8 300	9 600	5 300
Ferro-vanadium	4 000	2 150	2 400	2 300	1 800
Bosnia & Herzegovina					
Ferro-silicon	*1 000	*1 000	*1 000	*1 000	...
Silicon metal	*200	*200	*200	*200	...
Bulgaria					
Ferro-silicon	7 550	8 300	*8 000	*8 000	...
Other ferro-alloys	2 000	2 000	*2 000	*2 000	...
Croatia					
Ferro-chrome	26 081	10 559	24 231	11 861	----
Finland					
Ferro-chrome & ferro-silico-chrome	243 845	225 155	236 652	230 906	256 300
France					
Ferro-manganese & spiegeleisen	393 968	402 170	402 377	*400 000	*400 000
Ferro-silico-manganese	71 300	61 000	63 000	57 000	55 000
Ferro-silicon	108 000	103 000	109 000	106 000	...
Other ferro-alloys	55 000	72 000	101 000	55 000	...
Silicon metal	71 447	73 857	72 286	70 082	80 000
Georgia					
Ferro-manganese	12 564	7 612	3 991	10 312	6 441
Ferro-silico-manganese	7 588	6 995	16 616	31 775	26 249
Other ferro-alloys	64	1 014	39	3 446	4 856
Germany					
Ferro-chrome	21 665	25 303	25 856	20 879	16 960
Ferro-manganese	*10 000	*10 000	...	...	...
Other ferro-alloys	*30 000	*30 000	*30 000	*30 000	*30 000
Silicon metal	21 130	22 232	20 599	19 200	21 400
Greece					
Ferro-nickel	68 620	71 204	72 934	62 673	59 545
Hungary					
Ferro-alloys	...	50 461	51 474	54 637	41 074
Iceland					
Ferro-silicon	70 316	70 520	70 286	67 784	70 100
Italy					
Ferro-chrome	51 017	29 915	11 295	11 487	----
Ferro-manganese	40 848	42 727	...	...	...
Ferro-silico-manganese	103 961	100 353	*100 000	*100 000	*100 000
Ferro-silicon	----	11 741	...	19 909	...
Silicon metal	15 000	14 433	12 619	8 094	6 257
Macedonia					
Ferro-alloys	70 000	69 000	...	106 661	78 009
Silicon metal	*1 000	*1 000	*1 000	*1 000	...
Norway					
Ferro-chrome	148 000	108 900	145 124	174 678	159 714
Ferro-manganese	118 241	131 217	119 318	153 089	124 000
Ferro-silico-manganese	172 691	174 273	177 409	206 749	235 000
Ferro-silicon	474 875	463 423	*420 000	357 000	...
Other ferro-alloys	27 200	25 628	31 443	38 130	49 000
Silicon metal	100 467	*110 000	*110 000	132 000	*140 000
Poland					
Ferro-chrome	18 300	1 100	6 249	4 212	----
Ferro-manganese	46 300	59 900	47 500	50 152	57
Ferro-silico-manganese	20 500	25 000	20 000	15 100	(c) ...
Ferro-silicon	70 400	71 800	77 258	74 991	62 481
Other ferro-alloys	3 000	5 800	8 500	13 300	12 702

## Production of Ferro-Alloys

tonnes

Country	1995	1996	1997	1998	1999
<b>Romania</b>					
Ferro-chrome	15 053	9 650	950	873	----
Ferro-manganese	28 410	20 150	11 505	4 170	25
Ferro-silico-manganese	57 149	78 590	62 570	83 617	550
Ferro-silicon	19 320	23 827	9 620	5 553	----
Silicon metal	*300	*300	*300	*300	...
<b>Russia</b>					
Spiegeleisen	*7 000	*7 000	*7 000	*7 000	...
Ferro-chrome	291 058	135 495	248 000	218 100	266 900
Ferro-silico-chrome	*30 000	...	57 222	29 482	14 815
Ferro-manganese	82 500	67 000	47 100	78 800	*90 000
Ferro-nickel	*77 000	75 000	*40 000	*30 000	...
Ferro-phosphorus	...	2 300	3 600	----	...
Ferro-silicon	*350 000	496 000	498 000	496 000	...
Other ferro-alloys	*40 000	*40 000	*40 000	*40 000	...
Silicon metal	*40 000	*40 000	*40 000	*40 000	*40 000
<b>Slovakia</b>					
Ferro-chrome	65 260	19 900	11 394	11 715	6 986
Ferro-silico-manganese	...	...	45 159	46 627	37 000
Ferro-silicon	...	...	50 133	49 963	70 000
Other ferro-alloys	...	...	29 308	54 672	...
<b>Slovenia</b>					
Ferro-chrome	23 247	22 819	9 232	10 621	560
Ferro-silicon	*12 000	*10 000	*10 000	*10 000	*8 000
<b>Spain</b>					
Ferro-chrome	1 320	805	490	1 145	935
Ferro-manganese	10 759	15 701	22 788	18 360	10 000
Ferro-silico-manganese	83 671	101 840	122 199	107 952	95 000
Ferro-silicon	33 249	35 890	38 340	39 115	42 000
Silicon metal	17 780	16 936	19 220	18 424	28 000
<b>Sweden</b>					
Ferro-chrome	130 170	138 110	101 195	123 958	113 141
Ferro-silicon	21 970	21 287	22 410	20 356	21 440
<b>Turkey</b>					
Ferro-chrome	88 561	101 450	108 320	110 175	123 905
Ferro-silico-chrome	...	...	6 953	6 530	6 340
Ferro-silicon	11 900	4 460	4 730	4 810	420
<b>Ukraine</b>					
Spiegeleisen	2 500	800	----	----	----
Ferro-manganese	279 300	263 500	307 700	291 500	257 300
Ferro-silico-manganese	624 700	601 400	559 700	485 560	498 900
Ferro-silicon	321 200	254 400	288 200	222 511	243 600
<b>Yugoslavia, Federal Republic of</b>					
Ferro-nickel	2 414	6 501	6 209	1 215	----
<b>Egypt</b>					
Ferro-silicon (f)	4 284	17 430	54 080	56 703	...
Other ferro-alloys (f)	45 024	26 630	26 220	17 800	...
<b>South Africa</b>					
Ferro-chrome (d)	1 517 100	1 478 000	1 939 500	2 025 260	...
Ferro-manganese	507 173	548 458	498 759	542 120	*510 000
Ferro-silico-manganese	277 625	294 034	326 238	308 845	*280 000
Ferro-silicon	92 667	115 518	102 152	108 410	...
Other ferro-alloys	*1 000	*1 000	*1 000	*1 000	...
Silicon metal	30 082	28 495	34 001	32 611	...
<b>Zimbabwe</b>					
Ferro-chrome	254 142	261 918	233 386	246 782	248 395
Ferro-silico-chrome	46 667	33 175	16 614	21 385	...
<b>Canada</b>					
Ferro-niobium	3 300	3 400	3 400	3 400	3 500
Ferro-silicon	*80 000	*80 000	*80 000	*70 000	*70 000
Silicon metal	*30 000	*30 000	*30 000	*30 000	*30 000
<b>Dominican Republic</b>					
Ferro-nickel	80 710	78 488	85 450	65 892	63 760
<b>Mexico</b>					
Ferro-manganese	57 961	69 341	69 977	86 701	79 552
Ferro-silico-manganese	67 713	92 611	105 381	104 650	113 917

## Production of Ferro-Alloys

Country	1995	1996	1997	1998	1999
<b>USA</b>					
Ferro-chrome (d) (e)	72 469	36 789	60 700	30 000	...
Ferro-nickel	16 800	30 500	32 100	8 590	...
Ferro-silicon	358 000	362 000	359 000	334 000	*350 000
Other ferro-alloys	188 000	194 000	...	...	...
Silicon metal	158 000	171 000	183 000	188 000	*190 000
<b>Argentina</b>					
Ferro-manganese	6 500	7 115	7 672	5 000	*5 000
Ferro-silico-manganese	33 507	33 000	25 000	25 000	*25 000
Ferro-silicon	9 830	19 000	19 265	11 000	...
Other ferro-alloys	11 971	21 858	20 400	23 000	...
Silicon metal	...	...	...	7 000	...
<b>Brazil</b>					
Ferro-calcium-silicon	27 192	...	...	...	...
Ferro-chrome	95 840	72 609	67 429	65 683	78 874
Ferro-silico-chrome	5 129	4 622	7 056	6 824	11 910
Ferro-silico-magnesium	12 894	13 399	14 076	7 717	9 882
Ferro-manganese	130 207	215 260	152 530	121 633	85 260
Ferro-silico-manganese	167 162	232 218	175 919	124 458	148 384
Ferro-nickel	30 591	29 582	32 015	26 389	19 807
Ferro-niobium	23 185	21 522	25 475	30 973	28 557
Ferro-phosphorus	695	----	----	----	----
Ferro-silicon	243 824	236 838	212 183	166 278	200 833
Other ferro-alloys	669	----	1 046	1 170	----
Silicon metal	115 756	150 054	136 884	126 744	136 572
<b>Chile</b>					
Ferro-chrome	2 730	2 079	*2 000	*2 000	...
Ferro-manganese	7 987	8 498	5 608	5 122	*5 000
Ferro-silico-manganese	1 618	1 831	3 175	3 921	*4 000
Ferro-molybdenum	3 241	4 222	3 157	1 978	...
Ferro-silicon	4 279	4 650	1 294	1 159	...
<b>Colombia</b>					
Ferro-nickel	56 972	53 549	58 500	65 400	65 900
<b>Venezuela</b>					
Ferro-manganese	...	...	6 010	10 300	...
Ferro-silico-manganese	52 007	53 034	64 200	48 504	*50 000
Ferro-silicon	50 389	63 131	58 000	36 277	...
<b>Bhutan</b>					
Ferro-silicon	*12 000	*13 000	*15 000	*18 000	...
<b>China</b>					
Ferro-chrome	600 000	358 000	358 700	423 825	301 300
Ferro-silico-chrome	...	...	59 900	69 050	50 400
Ferro-manganese	*1 005 000	*1 150 000	*1 180 000	1 016 300	940 900
Ferro-silico-manganese	*830 000	*840 000	*770 000	(c) ...	...
Ferro-silicon	*1 210 000	*1 490 000	*1 250 000	1 276 600	1 118 900
Other ferro-alloys	*674 000	*342 000	*425 000	*762 000	...
<b>India</b>					
Ferro-chrome (b)	352 000	245 000	344 000	307 000	*300 000
Ferro-silico-chrome (b)	880	6 427	311	...	...
Ferro-manganese (b)	180 000	188 000	161 000	165 000	*100 000
Ferro-silico-manganese (b)	188 000	175 000	200 000	193 000	*200 000
Ferro-silicon (b)	74 000	78 330	80 000	57 000	*60 000
Other ferro-alloys (b)	*2 000	*5 000	*4 000	*1 000	...
<b>Indonesia</b>					
Ferro-manganese	*14 000	*14 000	*15 000	*13 000	*14 000
Ferro-nickel	53 675	47 800	*50 000	42 260	*45 000
<b>Iran</b>					
Ferro-chrome	11 900	10 500	11 450	13 745	...
Ferro-silicon	*10 000	*20 000	*20 000	*20 000	...



**Production of Ferro-Alloys**

tonnes

Country	1995	1996	1997	1998	1999
Japan					
Ferro-chrome	221 425	200 365	191 005	142 931	119 777
Ferro-manganese	346 977	343 104	376 663	334 081	315 152
Ferro-silico-manganese	64 870	75 802	78 323	70 886	65 744
Ferro-molybdenum	4 109	4 420	4 328	3 443	3 391
Ferro-nickel	351 337	328 699	352 840	345 772	332 353
Ferro-niobium	37	----	----	(c) ...	(c) ...
Ferro-silicon	3 650	3 075	3 426	951	11 452
Ferro-tungsten	120	64	62	61	43
Ferro-vanadium	3 618	3 902	4 232	4 073	3 349
Other ferro-alloys	4 669	4 820	9 594	1 101	5 752
Kazakhstan					
Ferro-chrome	494 277	345 857	605 125	542 050	731 583
Ferro-silico-chrome	21 300	*20 000	21 969	33 553	49 302
Ferro-silico-manganese	*20 000	*50 000	*55 000	57 376	73 495
Ferro-silicon	256 000	119 000	133 000	92 125	140 263
Other ferro-alloys	...	...	...	183 054	268 060
Korea, Dem. P.R. of					
Ferro-alloys	*31 000	*29 000	*29 000	*29 000	...
Korea, Republic of					
Ferro-manganese	118 798	126 135	158 755	158 418	140 000
Ferro-silico-manganese	97 785	83 375	77 078	106 997	(c) ...
Other ferro-alloys	3 264	4 687	2 174	2 785	260 000
Philippines					
Ferro-chrome	50 450	6 736	----	----	...
Ferro-manganese	*5 000	----	----	----	----
Ferro-silicon	*10 000	----	----	----	...
Taiwan					
Ferro-manganese	13 136	14 059	12 130	*12 500	----
Ferro-silicon	288	2 481	3 391	*4 000	...
Australia					
Ferro-manganese (a)	91 600	109 500	95 658	106 006	98 421
Ferro-silico-manganese (a)	104 400	93 200	89 537	101 455	115 585
Silicon metal	30 000	*30 000	31 000	*30 000	...
New Caledonia					
Ferro-nickel	152 068	150 375	159 019	157 959	157 592

## Note(s):-

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

## Exports of Iron, Steel and Ferro-Alloys

Country	1995	1996	1997	1998	1999
Albania					
Ferro-chrome (f)	*50 000	*32 400	*22 700	*23 400	*33 400
Ferro-silico-manganese	...	15 920	...	508	...
Armenia					
Scrap	98 000	65 000	234 316	186 000	...
Austria					
Pig iron	52	1 980	679	185	717
Ferro-alloys	30 457	20 802	5 889	7 595	5 518
Ingots, blooms, billets	263 011	163 078	236 630	219 382	227 262
Scrap	489 390	582 403	653 254	573 400	558 267
Azerbaijan					
Scrap	12 000	12 000	15 000	7 000	13 021
Belarus					
Ferro-alloys	...	417	27 994	3 417	3 246
Ingots, blooms, billets	...	341 203	450 346	592 800	708 504
Scrap	254 000	177 776	190 330	145 444	129 426
Belgium-Luxembourg					
Pig iron	90 389	87 912	91 244	130 812	124 891
Sponge & powder	1 784	1 684	1 760	2 262	2 673
Ferro-chrome	15 963	16 647	21 109	42 781	47 169
Ferro-manganese	22 606	17 788	26 424	19 238	13 324
Ferro-silico-manganese	15 201	12 493	11 175	17 715	33 190
Ferro-nickel	326	584	199	----	26
Ferro-silicon	16 365	12 166	9 238	37 804	30 411
Ferro-titanium & Fe-Si-Ti	168	69	389	450	456
Other ferro-alloys	661	471	623	10 251	4 610
Silicon metal	...	306	136	9 251	6 668
Ingots, blooms, billets	1 009 540	1 167 459	955 607	804 377	491 486
Scrap	1 976 236	1 756 507	1 673 084	1 408 715	1 561 184
Bosnia & Herzegovina					
Ferro-silicon (f)	...	*1 200	*2 000	*10 000	*15 200
Scrap (f)	*700	*4 900	*25 100	*32 000	*7 000
Bulgaria					
Pig iron	4 156	775	1 571	...	...
Ferro-alloys	3 215	3 205	2 902	(f) *4 500	(f) *4 100
Ingots, blooms, billets	250 405	213 000	246 000	...	...
Scrap	12 271	43 888	156 678	65 000	...
Croatia					
Ferro-chrome	25 242	12 605	23 943	12 173	...
Ferro-silico-manganese	2 413	...	63	26	45
Scrap	100 219	106 092	124 561	102 443	101 868
Cyprus					
Scrap (b)	25 902	34 373	21 344	15 944	16 744
Czech Republic					
Pig iron	206 000	168 000	230 102	161 308	42 092
Ferro-chrome	(f) *1 500	(f) *4 000	2 523	1 247	1 455
Ferro-vanadium	...	...	1 463	2 030	1 531
Other ferro-alloys	...	...	6 054	4 134	7 911
Ingots, blooms, billets	302 000	324 000	431 037	245 511	257 604
Scrap	789 000	905 000	977 588	873 412	852 585
Denmark					
Ingots, blooms, billets	23 490	36 042	71 590	58 023	25 693
Scrap	437 205	470 670	580 347	479 924	511 129
Estonia					
Pig iron (b) (f)	*45 700	*35 800	*128 900	*239 000	*38 600
Ferro-chrome	(f) *68 100	(f) *29 000	(f) *15 900	(f) *700	42 515
Ingots, blooms, billets	1 832	...	83	3 770	22 687
Scrap	253 963	220 740	411 098	644 816	569 703
Finland					
Ferro-chrome & ferro-silico-chrome	111 977	106 675	105 472	64 251	89 974
Ingots, blooms, billets	171 793	259 768	280 214	230 115	208 787
Scrap	179 782	228 366	365 761	269 999	212 045

## Exports of Iron, Steel and Ferro-Alloys

tonnes

Country	1995	1996	1997	1998	1999
France					
Pig iron	15 571	4 421	48 199	7 830	18 006
Sponge & powder	3 169	1 833	3 593	5 026	5 769
Ferro-chrome	2 208	538	702	455	426
Ferro-silico-magnesium	9 714	8 811	9 615	8 377	4 824
Ferro-manganese	42 043	35 561	54 584	46 927	35 019
Ferro-silico-manganese	58 750	41 422	61 372	56 855	44 218
Ferro-molybdenum	103	92	101	92	240
Ferro-nickel	32	25 407	25 813	14 256	1 563
Ferro-niobium	439	387	628	704	440
Ferro-silicon	29 328	30 433	33 873	41 049	48 316
Ferro-titanium & Fe-Si-Ti	1 408	1 379	1 082	1 535	1 443
Ferro-vanadium	151	7	32	18	22
Other ferro-alloys	29 903	29 336	33 062	40 983	30 331
Ingots, blooms, billets	1 284 831	1 328 288	1 692 045	1 804 004	2 416 133
Scrap	3 661 579	3 682 041	3 640 248	3 484 599	3 731 225
Georgia					
Pig iron	397	976	3 943	2 204	300
Ferro-manganese	(g) 67 869	(g) 35 109	10 155	10 430	15 069
Ferro-silico-manganese	...	...	16 672	31 587	28 837
Ingots, blooms, billets	43 809	14 423	59 666	27 274	6 708
Scrap	55 127	(f) *5 300	(f) *38 100	(f) *65 800	385 955
Germany					
Pig iron	118 391	91 977	127 095	65 445	81 300
Sponge & powder	27 923	20 831	29 485	21 011	16 304
Ferro-chrome	50 458	45 426	51 436	59 663	38 575
Ferro-silico-chrome	1 997	3 719	3 512	1 019	525
Ferro-silico-magnesium	6 036	5 543	6 470	6 875	6 896
Ferro-manganese	9 338	12 434	12 236	17 755	11 286
Ferro-silico-manganese	12 438	9 892	7 853	11 255	9 367
Ferro-molybdenum	1 330	1 309	855	681	1 153
Ferro-nickel	577	1 001	174	909	582
Ferro-niobium	272	925	590	312	853
Ferro-phosphorus	2 943	2 394	1 567	1 532	1 506
Ferro-silicon	38 637	31 849	35 707	44 943	47 426
Ferro-titanium & Fe-Si-Ti	4 318	2 476	2 106	2 304	2 500
Ferro-tungsten & Fe-Si-W	192	83	76	120	92
Ferro-vanadium	1 148	420	459	332	262
Other ferro-alloys	13 535	13 696	16 921	24 078	12 690
Silicon metal	8 787	8 796	9 477	7 943	8 957
Ingots, blooms, billets	1 860 775	2 254 291	2 240 378	1 734 789	1 842 123
Scrap	8 148 071	6 684 361	6 930 512	7 027 029	6 999 310
Greece					
Ferro-chrome	7 917	1 759	544	387	----
Ferro-nickel	8 500	----	----	----	...
Ingots, blooms, billets	19 993	60 036	6 145	92	999
Hungary					
Ferro-alloys	2 995	4 358	1 555	2 217	1 689
Ingots, blooms, billets	15 016	26 991	14 775	42 902	17 277
Scrap	774 095	614 916	646 064	552 051	468 613
Iceland					
Ferro-silicon	71 453	68 192	74 993	67 237	...
Scrap	17 538	11 263	25 832	20 834	...
Irish Republic					
Scrap	32 842	19 036	35 084	25 356	19 956
Italy					
Pig iron	4 617	8 353	34 762	31 739	20 514
Sponge & powder	13 952	15 343	17 802	20 647	20 905
Ferro-chrome	2 011	2 005	4 781	1 781	1 456
Ferro-silico-magnesium	...	...	103	107	29
Ferro-manganese	4 015	7 256	8 184	13 465	13 077
Ferro-silico-manganese	7 119	2 881	10 789	5 361	3 832
Ferro-molybdenum	...	...	324	303	137
Ferro-silicon	1 965	7 956	1 930	2 427	3 336
Ferro-vanadium	...	...	44	269	301
Other ferro-alloys	556	742	1 078	536	340
Silicon metal	2 133	2 850	5 225	2 918	2 046
Ingots, blooms, billets	825 367	656 997	231 924	184 330	306 045
Scrap	33 048	20 012	35 682	36 590	105 191

## Exports of Iron, Steel and Ferro-Alloys

Country	1995	1996	1997	1998	1999
Latvia					
Pig iron (b) (f)	*2 000	138 200	*154 500	*203 300	...
Ferro-chrome (b) (f)	*82 400	*13 100	*25 800	*30 100	...
Other ferro-alloys (b) (f)	*4 200	*4 700	*2 500	*8 700	...
Ingots, blooms, billets (b) (f)	*7 600	*12 800	*19 800	*26 200	...
Scrap	35 663	56 513	157 731	94 051	55 152
Lithuania					
Scrap	586 100	449 516	467 659	414 586	257 145
Macedonia					
Ferro-silicon	(f) *29 500	45 324	57 543	67 472	(f) *50 000
Other ferro-alloys	...	48 298	35 227	52 849	...
Silicon metal	(f) *5 200	2 896	4 604	1 096	...
Scrap	...	248	2 372	3 225	...
Malta					
Scrap	99 267	10 780	14 000	41 000	...
Moldova					
Scrap	9 843	2 987	1 372	5 811	3 946
Netherlands					
Pig iron	22 160	19 260	11 658	51 881	86 489
Ferro-chrome	73 516	61 689	75 798	53 185	35 413
Ferro-silico-chrome	1 931	1 460	566	2 379	134
Ferro-manganese	8 902	5 716	11 512	4 729	1 259
Ferro-silico-manganese	37 717	27 780	17 215	14 678	13 027
Ferro-molybdenum	2 260	...	4 579	4 268	4 800
Ferro-nickel	2 088	459	----	5 871	7 464
Ferro-silicon	15 574	13 538	13 270	3 501	3 111
Ferro-titanium & Fe-Si-Ti	605	...	1 695	214	...
Ferro-tungsten & Fe-Si-W	272	...	238	170	140
Ferro-vanadium	1 397	...	3 133	3 440	2 033
Other ferro-alloys	862	8 141	7 013	4 630	8 354
Silicon metal	7 237	4 963	4 984	5 892	8 093
Ingots, blooms, billets	1 208 725	1 511 682	1 343 578	454 945	965 500
Scrap	3 999 131	3 047 287	3 363 946	2 655 404	2 434 145
Norway					
Pig iron	77 000	91 000	70 000	65 000	...
Ferro-chrome (f)	*127 700	*119 100	*150 000	*161 000	*154 600
Ferro-manganese (f)	*125 000	*208 000	*196 000	*203 900	*191 200
Ferro-silico-manganese	176 406	187 244	206 103	223 406	246 923
Ferro-silicon	404 497	400 900	412 873	423 154	425 761
Other ferro-alloys	29 051	50 097	34 247	40 026	48 308
Silicon metal	98 323	97 136	109 435	119 560	142 247
Ingots, blooms, billets	191	155 184	131 337	143 442	140 600
Scrap	96 875	145 241	156 118	134 216	140 354
Poland					
Pig iron	115 270	74 000	157 900	135 200	74 456
Ferro-chrome	14 778	2 263	4 774	2 014	762
Ferro-manganese & Fe-Si-Mn	4 769	2 039	1 815	4 434	487
Ferro-silicon	31 077	41 872	46 438	43 852	37 655
Other ferro-alloys	545	954	762	1 325	835
Ingots, blooms, billets	688 000	1 076 000	1 198 000	...	825 288
Scrap	438 188	415 600	517 900	446 200	730 592
Portugal					
Ingots, blooms, billets	...	162 710	91 029	88 366	140 231
Scrap	62 000	56 384	127 179	122 069	78 393
Romania					
Pig iron	51 000	62 000	71 141	39 154	...
Sponge & powder	...	...	6 221	8 544	8 857
Ferro-alloys	61 000	86 951	56 162	47 625	8 186
Ingots, blooms, billets	294	1 228	72 858	148 306	237 609
Scrap	8 087	29 584	237 991	759 347	1 325 996

## Exports of Iron, Steel and Ferro-Alloys

tonnes

Country	1995	1996	1997	1998	1999
<b>Russia</b>					
Pig iron	2 106 400	2 888 200	2 419 873	2 466 100	2 795 637
Sponge & powder	...	322 671	393 548	421 164	401 263
Ferro-chrome	(c) ...	(c) ...	146 946	130 387	158 873
Ferro-silico-chrome	(c) ...	(c) ...	8 193	23 930	12 634
Ferro-manganese	(c) ...	(c) ...	3 809	6 226	1 884
Ferro-silico-manganese	(c) ...	(c) ...	78	4 620	6 235
Ferro-molybdenum	(c) ...	(c) ...	735	889	381
Ferro-nickel	(c) ...	(c) ...	9 690	4 549	3 414
Ferro-silicon	(c) ...	(c) ...	148 793	145 442	196 811
Ferro-titanium & Fe-Si-Ti	(c) ...	(c) ...	16 335	12 794	15 546
Ferro-tungsten & Fe-Si-W	(c) ...	(c) ...	2 722	1 759	1 025
Ferro-vanadium	(c) ...	(c) ...	2 314	3 134	4 631
Other ferro-alloys	494 017	357 260	2 844	1 349	1 119
Silicon metal	75 727	64 754	73 924	36 214	33 462
Ingots, blooms, billets	9 997 000	11 058 335	11 409 000	8 048 553	13 229 437
Scrap	1 742 000	2 735 206	5 250 351	7 260 386	7 546 891
<b>Slovakia</b>					
Pig iron	...	11 000	20 000	23 125	10 510
Ferro-silicon	35 679	66 475	(f) *61 600	(c) ...	64 144
Other ferro-alloys	103 382	46 696	(f) *85 100	149 358	82 922
Ingots, blooms, billets	340 000	128 000	120 000	(f) *114 000	(f) *49 000
Scrap	197 836	212 688	213 000	254 000	296 198
<b>Slovenia</b>					
Ferro-alloys	24 000	26 000	16 000	...	20 348
Scrap	49 000	55 125	102 973	86 802	87 155
<b>Spain</b>					
Pig iron	127	1 124	1 098	1 389	1 095
Ferro-chrome	230	717	1 028	906	1 151
Ferro-manganese	28 068	22 174	36 711	61 866	61 540
Ferro-silico-manganese	38 048	54 685	59 398	51 124	45 970
Ferro-molybdenum	12	(c) ...	36	221	229
Ferro-silicon	2 815	3 278	5 711	6 814	4 411
Other ferro-alloys	408	603	525	724	536
Silicon metal	6 647	10 781	11 118	8 517	16 580
Ingots, blooms, billets	104 918	245 137	316 018	384 502	369 672
Scrap	19 134	21 381	43 285	16 745	29 812
<b>Sweden</b>					
Pig iron	12 965	64 296	29 850	14 528	2 443
Sponge & powder	3 323	1 432	14 626	15 196	11 601
Ferro-chrome	80 200	*85 000	*80 000	76 912	...
Ferro-silico-magnesium	(c) ...	(c) ...	281	786	5 358
Ferro-manganese	2 120	2 013	2 165	1 730	1 245
Ferro-silico-manganese	2 143	272	60	176	168
Ferro-molybdenum	(c) ...	(c) ...	103	134	80
Ferro-phosphorus	(c) ...	(c) ...	579	474	602
Ferro-silicon	(c) ...	1 914	1 602	2 756	602
Ferro-vanadium	(c) ...	(c) ...	157	115	27
Other ferro-alloys	2 288	1 486	393	1 815	165
Silicon metal	(f) *200	...	...	...	565
Ingots, blooms, billets	89 354	105 434	149 382	267 585	121 611
Scrap	280 364	283 990	323 068	357 589	399 749
<b>Switzerland</b>					
Ferro-alloys	5 088	81	243	268	278
Silicon metal	1	1 114	14 206	10 533	4
Ingots, blooms, billets	2 265	1 677	1 572	1 895	1 219
Scrap	312 184	341 784	432 876	377 433	346 356
<b>Turkey</b>					
Pig iron	...	89 767	148 786	18 259	77 804
Ferro-chrome	72 112	93 852	94 360	86 457	136 643
Other ferro-alloys	1 461	849	436	825	3 902
Ingots, blooms, billets	1 746 491	1 094 825	1 332 505	796 778	658 024
Scrap	13 448	21 048	22 309	28 144	29 303

## Exports of Iron, Steel and Ferro-Alloys

Country	1995	1996	1997	1998	1999
Ukraine					
Pig iron	991 000	775 777	722 723	2 082 673	1 881 204
Ferro-manganese	...	(f) *101 800	(f) *169 200	172 112	121 804
Ferro-silico-manganese	397 222	379 185	446 991	353 747	342 070
Ferro-nickel	9 142	14 303	2 396	2 154	5 752
Ferro-silicon (f)	...	...	*101 700	*74 300	*80 000
Other ferro-alloys	14 586	11 202	16 322	14 957	2 035
Ingots, blooms, billets	3 016 119	2 843 280	4 196 639	4 937 336	7 989 718
Scrap	370 000	679 000	1 935 000	3 281 108	4 743 490
United Kingdom					
Pig iron	6 913	4 616	4 411	1 632	447
Sponge & powder	1 954	2 745	1 584	1 349	1 905
Ferro-chrome & ferro-silico-chrome	1 703	2 950	2 641	1 854	988
Ferro-manganese	433	2 796	1 578	2 878	407
Ferro-silico-manganese	1 484	230	532	2 456	1 830
Ferro-molybdenum	8 253	9 888	9 029	10 453	8 187
Ferro-nickel	1	218	4 363	3 376	264
Ferro-niobium	21	22	32	32	50
Ferro-phosphorus	76	248	126	167	81
Ferro-silicon	5 825	4 615	4 026	2 502	2 528
Ferro-titanium & Fe-Si-Ti	13 596	13 467	18 823	20 211	18 397
Ferro-vanadium	25	61	201	96	80
Other ferro-alloys	5 280	6 634	5 917	5 049	5 101
Ingots, blooms, billets	1 155 488	1 193 795	954 817	561 451	404 888
Scrap	3 446 618	3 435 328	3 561 352	3 177 490	3 491 489
Yugoslavia, Federal Republic of					
Ferro-alloys	...	7 000	7 182	1 723	6
Scrap	*5 000	3 000	3 370	8 566	16 756
Algeria					
Pig iron	...	298 285	206 913	49 473	...
Ingots, blooms, billets	...	17 607	19 352	31 055	...
Scrap	36 200	60 178	69 668	57 365	...
Egypt					
Ferro-alloys	42 000	32 898	32 512	41 312	33 060
Scrap	...	...	2 654	4 424	13 168
Mauritius					
Scrap	11 900	13 800	20 800	12 600	11 593
Morocco					
Scrap	120 747	52 753	168 209	163 200	...
Senegal					
Scrap	20 867	...	...	...	6 140
South Africa					
Pig iron	(f) *271 000	(f) *394 100	516 684	512 253	570 027
Ferro-chrome	1 354 500	1 415 000	1 633 000	1 649 874	...
Ferro-manganese	567 543	450 086	453 597	433 432	...
Ferro-silico-manganese	277 007	211 404	266 313	298 512	...
Ferro-silicon	50 500	30 308	47 469	48 002	...
Silicon metal	25 663	24 503	31 898	38 745	34 417
Ingots, blooms, billets	(f) *408 000	(f) *622 100	461 540	491 156	309 109
Scrap	(f) *226 000	(f) *397 800	585 441	449 823	593 449
Sudan					
Scrap	6 412	6 800	...	...	...
Tunisia					
Scrap	2 464	2 110	3 913	3 198	31 429
Zimbabwe					
Ferro-chrome	258 638	247 563	277 915	268 650	(a) 238 895
Ferro-silico-chrome	20 698	25 117	24 334	21 767	...
Ingots, blooms, billets	22 799	26 074	23 806	12 896	41 458
Scrap	61 716	...	92 291	43 641	...

## Exports of Iron, Steel and Ferro-Alloys

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Country	1995	1996	1997	1998	1999
Canada					
Pig iron	129 001	111 419	137 651	165 393	116 757
Sponge & powder	72 803	77 721	93 024	166 558	84 409
Ferro-chrome	986	1 011	860	53	217
Ferro-manganese	1 440	578	100	1 770	53
Ferro-silico-manganese	127	18	561	305	242
Ferro-niobium	1 234	2 062	2 387	2 060	2 201
Ferro-silicon	28 880	24 471	15 933	20 891	23 357
Other ferro-alloys	2 430	1 619	2 080	1 648	...
Silicon metal	25 250	29 408	38 840	37 722	43 749
Ingots, blooms, billets	419 412	355 645	376 157	324 632	369 333
Scrap	2 128 784	2 113 897	2 330 983	2 244 744	1 881 465
Cuba					
Ingots, blooms, billets (f)	...	*53 300	*92 000	*33 800	*57 000
Scrap (f)	*18 000	*73 000	*13 000	*2 000	*98 000
Dominican Republic					
Ferro-nickel	79 637	77 273	84 388	69 420	62 678
Mexico					
Ferro-manganese	27 641	28 406	36 864	34 329	30 575
Ferro-silico-manganese	25 586	26 299	44 578	47 802	52 107
Other ferro-alloys	195	553	717	486	713
Ingots, blooms, billets	2 004 358	2 019 755	2 271 512	2 488 820	2 650 417
Scrap	248 711	198 137	232 083	155 618	148 005
Nicaragua					
Scrap	17 599	26 168	19 575	17 763	...
Trinidad & Tobago					
Sponge	325 163	163 508	362 948	...	...
Ingots, blooms, billets	18 964	8 200	12 700	...	...
USA					
Pig iron	57 782	72 427	100 199	97 140	106 151
Sponge & powder	48 179	40 088	60 954	69 071	44 012
Ferro-chrome & ferro-silico-chrome	20 193	27 454	16 809	15 464	15 340
Ferro-manganese	13 597	14 063	19 428	21 591	23 768
Ferro-silico-manganese	11 790	9 327	10 879	12 969	8 914
Ferro-molybdenum	1 450	1 199	1 573	1 582	1 839
Ferro-nickel	2 179	5 652	12 110	1 747	85
Ferro-niobium	565	365	59	25	166
Ferro-phosphorus	7 063	4 950	3 208	2 543	1 621
Ferro-silicon	52 255	59 070	56 685	52 362	49 814
Ferro-vanadium	476	648	619	868	497
Other ferro-alloys	4 992	4 721	5 625	4 590	5 344
Silicon metal	27 214	18 999	24 878	24 767	38 871
Ingots, blooms, billets	435 606	274 006	246 190	241 434	131 336
Scrap	10 459 116	8 431 156	8 942 513	5 928 593	5 390 686
Argentina					
Pig iron	33 455	174 762	145 344	185 902	63 556
Ferro-silico-manganese	12 451	5 306	4 854	17 364	238
Ferro-silicon	9 579	12 700	10 154	2 176	2 705
Other ferro-alloys	11 038	14 624	14 463	14 693	8 293
Silicon metal	10	26	40	5 166	3 454
Ingots, blooms, billets	502	6 682	25 770	21 724	97 681
Brazil					
Pig iron	2 670 405	2 538 099	2 563 147	3 214 615	3 030 491
Ferro-chrome	24 343	11 102	16 374	3 790	227
Ferro-manganese	30 192	105 184	70 068	33 026	23 279
Ferro-nickel	12 696	15 205	18 483	8 515	4 431
Ferro-niobium	19 514	17 602	23 823	27 542	26 588
Fe-silico-spiegeleisen & Si-Mn	38 953	73 729	76 608	36 600	58 680
Ferro-silicon	181 093	185 793	159 796	134 664	160 061
Other ferro-alloys	32 315	33 168	37 469	37 121	29 450
Silicon metal	115 287	121 011	127 014	102 737	123 218
Ingots, blooms, billets	5 130 334	5 684 461	5 523 451	5 426 212	6 378 997
Chile					
Ferro-alloys	6 797	6 988	4 912	3 232	...
Ingots, blooms, billets	25 203	24 945	...	...	...
Scrap	1 390	2 578	13 494	16 365	...

## Exports of Iron, Steel and Ferro-Alloys

Country	1995	1996	1997	1998	1999
Colombia					
Ferro-nickel	56 497	55 374	52 482	57 183	61 501
Ecuador					
Scrap	32 045	25 129	34 814	13 218	...
Suriname					
Scrap	*25 000	26 300	40 618	*40 000	...
Venezuela					
Sponge & powder	1 187 489	1 053 899	1 143 657	...	2 239 643
Ferro-silico-manganese	30 805	24 786	37 293	24 129	16 077
Ferro-silicon	48 695	35 058	69 078	36 294	36 414
Ingots, blooms, billets	763 849	1 067 911	957 372	...	...
Scrap	98 506	99 097	138 122	129 500	29 738
Bahrain					
Scrap	43 488	33 168	51 482	45 793	33 448
China					
Pig iron	5 388 683	3 553 051	5 535 634	2 424 656	1 621 161
Sponge & powder	6 887	9 428	13 217	15 813	56 472
Ferro-chrome	320 950	130 847	98 069	102 083	73 813
Ferro-silico-chrome	46 610	31 079	31 296	40 725	17 465
Ferro-manganese	177 093	171 907	145 847	130 658	122 257
Ferro-silico-manganese	447 222	363 007	428 956	297 669	298 511
Ferro-molybdenum	12 650	12 188	24 458	31 739	38 586
Ferro-silicon	391 952	254 619	208 067	265 981	349 231
Ferro-titanium & Fe-Si-Ti	193	393	421	859	746
Ferro-tungsten & Fe-Si-W	2 079	666	2 210	3 617	4 111
Ferro-vanadium	1 909	1 446	1 949	2 308	2 125
Other ferro-alloys	74 772	65 129	121 614	84 319	57 101
Silicon metal	274 731	276 365	290 586	275 823	268 229
Ingots, blooms, billets	4 607 491	2 767 342	4 146 220	2 172 881	2 328 264
Scrap	97 814	54 711	68 251	24 922	62 873
Dubai					
Scrap	...	...	198 542	184 056	...
Hong Kong					
Ferro-manganese (b)	1 690	7 633	1 821	629	612
Ferro-silico-manganese (b)	6 490	4 284	3 371	604	1 819
Ferro-silicon (b)	23 700	28 333	18 816	6 479	2 380
Other ferro-alloys (b)	2 324	1 243	861	1 232	559
Ingots, blooms, billets (b)	6 923	227	40 630	20 708	984
Scrap	711 492	587 052	700 173	754 109	692 804
of which, re-exports	218 273	196 506	181 877	249 253	153 519
India					
Pig iron (d)	511 849	345 481	500 622	211 659	...
Sponge & powder (d)	174 885	42 328	45 702	26 682	...
Ferro-chrome (d)	152 551	146 889	199 948	129 722	...
Ferro-silico-chrome (d)	-----	253	365	5 770	...
Ferro-manganese (d)	4 645	2 856	358	7 343	...
Ferro-silico-manganese (d)	54 042	28 405	34 606	34 113	...
Other ferro-alloys (d)	11 278	4 193	15 353	38 786	...
Silicon metal (d)	611	5 992	3 894	777	...
Ingots, blooms, billets (d)	231 992	285 334	298 049	57 643	...
Scrap (d)	398	41 948	32 747	8 607	...
Indonesia					
Sponge & powder	62 327	75 065	92 631	25 515	...
Ferro-nickel	48 672	48 639	41 222	41 342	...
Ingots, blooms, billets	22 932	3 409	82 988	97 364	...
Scrap	14 985	11 604	10 729	10 325	...
Iran					
Ferro-chrome (f)	*7 000	*7 400	*6 900	*10 500	*10 900
Ferro-silicon (f)	*2 000	*8 500	*6 600	*50 300	*13 300
Other ferro-alloys (f)	...	*1 000	*1 300	*800	*700
Ingots, blooms, billets (h)	...	...	442 572	500 307	...
Scrap (f)	*55 700	*200 400	*54 300	*48 100	...
Israel					
Scrap (f)	...	...	*23 800	*28 900	...



## Exports of Iron, Steel and Ferro-Alloys

tonnes

Country	1995	1996	1997	1998	1999
Japan					
Pig iron	499 752	953 841	250 256	2 310 635	1 734 043
Sponge & powder	23 200	22 196	22 973	24 345	35 842
Ferro-chrome	1 347	1 191	915	700	1 462
Ferro-manganese	45 375	37 503	45 557	26 814	19 400
Ferro-silico-manganese	230	163	122	217	3 104
Ferro-nickel	9 938	35 505	69 663	74 018	111 311
Ferro-silicon	9 589	9 619	5 305	4 065	5 065
Other ferro-alloys	3 997	4 186	3 418	2 762	3 625
Silicon metal	1 757	1 855	2 284	2 447	2 768
Ingots, blooms, billets	633 476	428 106	574 508	1 196 176	2 256 797
Scrap	915 217	1 992 562	2 313 259	3 821 597	4 315 228
Jordan					
Scrap	10 500	*11 000	16 065	14 433	...
Kazakhstan					
Pig iron	...	36 881	6 010	866	...
Ferro-chrome	417 269	282 229	444 072	443 035	563 505
Ferro-silico-chrome	14 954	51 733	27 451	14 119	18 916
Ferro-manganese	3 646	119	1 040	131	60
Ferro-silico-manganese	6 535	47 239	49 394	47 577	65 207
Ferro-phosphorus	(f) *2 900	...	1 408	1 140	2 801
Ferro-silicon	158 328	84 856	78 487	66 107	71 714
Ingots, blooms, billets	(f) *800	(f) *1 200	(f) *117 700	8 846	170 358
Scrap	153 000	152 000	267 426	515 198	(f) *1 200 000
Korea, Dem. P.R. of					
Pig iron (f)	*48 900	*41 000	*60 100	*65 600	*42 700
Ferro-alloys (f)	*2 000	*5 200	*8 900	*3 600	*3 100
Ingots, blooms, billets (f)	*28 500	*24 800	*68 300	*54 800	*53 400
Scrap (f)	*126 300	*58 400	*163 100	*33 200	*51 600
Korea, Republic of					
Ferro-manganese	----	3 700	9 746	22 928	11 996
Ferro-silico-manganese	970	5 117	19 802	15 573	7 453
Ferro-vanadium	299	91	203	124	355
Other ferro-alloys	1 381	603	516	729	...
Silicon metal	254	1 297	645	443	1 151
Ingots, blooms, billets	461 305	434 240	714 951	636 250	218 644
Scrap	22 289	12 159	38 734	41 819	26 341
Kuwait					
Scrap	213 158	184 434	34 072	162 132	194 504
Kyrgyzstan					
Scrap	22 275	25 606	26 000	16 543	12 760
Macao					
Scrap	9 364	8 495	5 563	3 563	8 466
Malaysia					
Sponge & powder	952 000	1 057 000	825 000	...	...
Ingots, blooms, billets	22 951	23 000	36 000	...	...
Scrap	10 400	11 900	10 000	16 900	...
Mongolia					
Ingots, blooms, billets	19 300	16 000	14 500	10 200	5 600
Scrap	*70 000	71 913	*72 000	...	...
Oman					
Scrap	62 946	60 298	39 241	100 861	24 739
Philippines					
Ferro-chrome	24 819	16 725	5 985	----	...
Other ferro-alloys	3 620	----	----	15	...
Scrap	13 674	8 372	32 724	38 547	...
Saudi Arabia					
Scrap	6 200	*6 000	3 898	2 232	2 536
Singapore					
Pig iron	1 462	331	325	222	293
of which, re-exports	1 415	330	325	222	293
Ferro-alloys	2 726	2 896	1 919	1 205	720
of which, re-exports	2 666	2 819	1 797	1 029	681
Ingots, blooms, billets	5 998	3 425	1 996	3 065	...
of which, re-exports	1 710	1 121	374	2 604	...
Scrap	259 269	245 019	331 733	474 047	339 241
Sri Lanka					
Scrap	47 426	47 370	52 141	...	...

**Exports of Iron, Steel and Ferro-Alloys**

Country	1995	1996	1997	1998	1999
Taiwan					
Pig iron	3 106	1 313	1 776	1 943	4 477
Ferro-silicon	1 677	1 380	1 155	1 147	1 801
Other ferro-alloys	1 181	939	1 272	1 620	...
Silicon metal	493	268	463	731	1 159
Ingots, blooms, billets	9 951	13 808	15 255	32 598	37 300
Scrap	175 730	92 318	123 154	94 857	107 331
Thailand					
Scrap	50 999	33 357	*48 000	96 161	76 003
Australia					
Sponge & powder	831	520	4 440	591	...
Ferro-manganese	72 579	59 076	41 087	57 316	27 470
Ferro-silico-manganese	99 414	92 713	86 129	81 313	70 188
Other ferro-alloys	715	222	1 009	800	478
Silicon metal	26 186	26 977	26 742	28 244	36 954
Ingots, blooms, billets	1 147 529	1 245 214	1 458 304	1 826 387	1 545 831
Scrap	305 982	678 186	764 775	576 772	758 865
New Caledonia					
Ferro-nickel	148 649	151 612	158 224	158 930	*156 000
New Zealand					
Scrap (e)	28 646	21 487	23 395	24 578	...

## 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) Including ferro-silico-chrome
- (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
- (h) Years ended 20 March following that stated

## Imports of Iron, Steel and Ferro-Alloys

tonnes

Country	1995	1996	1997	1998	1999
<b>Austria</b>					
Pig iron	24 764	18 614	17 428	24 618	22 503
Sponge & powder	6 487	8 001	10 066	10 648	10 519
Ferro-chrome	19 760	22 895	26 550	24 032	19 629
Ferro-silico-chrome	479	639	748	1 012	340
Ferro-silico-magnesium	706	860	968	1 248	1 239
Ferro-manganese	14 753	15 596	20 357	21 744	20 115
Ferro-silico-manganese	10 318	16 051	16 505	17 155	8 933
Ferro-molybdenum	705	1 000	1 068	942	683
Ferro-nickel	103	230	----	11	...
Ferro-niobium & ferro-niobium-tantalum	229	305	369	620	388
Ferro-phosphorus	728	952	817	964	955
Ferro-silicon	11 942	12 317	16 575	21 433	17 623
Ferro-titanium & Fe-Si-Ti	237	492	684	1 156	681
Ferro-tungsten & Fe-Si-W	583	443	422	589	483
Ferro-vanadium	438	536	612	1 025	1 285
Other ferro-alloys	1 444	1 110	1 187	3 493	1 371
Silicon metal	2 878	6 771	16 749	6 728	6 298
Ingots, blooms, billets	183 140	121 689	110 803	272 943	167 328
Scrap	529 245	400 628	682 250	685 810	578 309
<b>Belarus</b>					
Pig iron	98 000	(f) 89 261	(f) 159 502	132 842	128 122
Sponge & powder	...	...	...	2 625	26 040
Ferro-alloys	15 000	(f) 49 809	(f) 48 239	33 474	31 815
Ingots, blooms, billets	...	...	...	21 579	19 835
Scrap	262 000	400 804	724 923	767 280	732 835
<b>Belgium-Luxembourg</b>					
Pig iron	101 121	70 321	91 304	203 699	200 890
Sponge & powder	59 795	31 882	30 765	4 778	31 988
Ferro-chrome	126 545	112 788	113 044	146 391	146 100
Ferro-silico-chrome	3 280	3 240	3 335	4 032	4 296
Ferro-manganese	65 080	46 646	43 122	47 039	52 600
Ferro-silico-manganese	53 724	52 007	36 909	57 422	52 669
Ferro-molybdenum	2 215	2 150	2 264	3 248	2 850
Ferro-nickel	22 507	23 775	24 508	32 099	28 692
Ferro-niobium	601	693	656	719	535
Ferro-phosphorus	526	277	246	613	691
Ferro-silicon	54 053	51 024	44 760	69 163	60 179
Ferro-titanium & Fe-Si-Ti	697	604	1 019	1 323	1 347
Ferro-vanadium	493	154	236	310	198
Other ferro-alloys	2 199	3 098	2 208	11 788	4 492
Silicon metal	3 254	2 591	1 985	13 901	16 559
Ingots, blooms, billets	1 688 815	1 767 032	2 881 218	2 809 762	2 905 305
Scrap	3 744 666	3 960 595	4 024 388	3 938 147	2 474 180
<b>Bulgaria</b>					
Pig iron	14 420	16 016	16 577	21 600	...
Ferro-manganese	2 530	3 596	5 744	(d) ...	...
Other ferro-alloys	12 024	8 708	10 916	10 000	...
Ingots, blooms, billets	63 398	7 693	65 045	...	...
Scrap	1 415	18 564	66 152	143 000	...
<b>Croatia</b>					
Pig iron	13 332	13 306	13 371	10 696	10 329
Ferro-alloys	97 401	26 329	2 935	3 077	2 199
Silicon metal	...	...	...	427	451
Ingots, blooms, billets	51 757	29 979	20 128	27 390	26 718
Scrap	1 635	2 102	5 554	16 531	6 368
<b>Czech Republic</b>					
Pig iron	189 000	139 000	143 000	161 000	62 465
Ferro-alloys	117 000	105 000	108 957	116 199	92 761
Silicon metal	...	...	4 098	4 510	3 151
Ingots, blooms, billets	...	...	206 223	313 838	184 221
Scrap	89 000	84 000	39 923	114 108	134 543

## Imports of Iron, Steel and Ferro-Alloys

Country	1995	1996	1997	1998	1999
Denmark					
Pig iron	85 193	100 754	97 192	133 126	121 314
Sponge & powder	2 145	1 994	3 942	2 594	2 408
Ferro-manganese	2 028	2 420	3 117	3 889	3 112
Ferro-silico-manganese	3 910	4 475	5 177	6 879	6 291
Ferro-silicon	2 962	2 593	3 520	3 010	2 272
Other ferro-alloys	1 907	1 652	1 920	4 110	946
Ingots, blooms, billets	112 835	22 380	43 609	83 489	7 541
Scrap	168 942	330 509	357 694	273 910	235 598
Estonia					
Pig iron	1 145	...	242	8 764	6 421
Ferro-alloys	940	...	8 992	40 558	44 456
Scrap	4 865	35 000	210 201	401 586	373 702
Finland					
Pig iron	74 625	67 924	31 744	30 498	22 009
Sponge & powder	935	2 624	14 003	18 644	33 587
Ferro-chrome	3 052	4 838	5 055	9 685	4 314
Ferro-manganese	10 398	8 875	10 837	12 377	11 726
Ferro-silico-manganese	25 953	26 929	26 197	34 270	31 005
Ferro-molybdenum	1 184	1 539	1 581	1 646	1 673
Ferro-nickel	70 338	53 096	53 783	44 569	44 635
Ferro-niobium	364	323	358	449	423
Ferro-phosphorus	105	170	145	190	288
Ferro-silicon	13 833	17 537	18 024	15 113	14 411
Ferro-titanium & Fe-Si-Ti	530	671	536	852	735
Ferro-vanadium	244	263	141	207	240
Other ferro-alloys	2 661	2 897	3 422	6 303	3 026
Silicon metal	1 610	2 055	2 411	2 942	3 077
Ingots, blooms, billets	561 763	461 912	224 157	209 121	331 409
Scrap	297 460	226 200	348 080	449 640	345 704
France					
Pig iron	200 945	185 124	189 127	213 188	228 303
Sponge & powder	13 719	15 325	18 734	25 713	25 642
Ferro-chrome	260 050	206 897	266 349	283 292	283 009
Ferro-silico-chrome	148	182	143	108	196
Ferro-silico-magnesium	2 526	2 817	3 084	2 702	2 789
Ferro-manganese	42 817	51 833	49 156	59 532	50 040
Ferro-silico-manganese	45 074	46 725	57 786	59 597	45 014
Ferro-molybdenum	4 871	4 595	5 098	4 835	4 709
Ferro-nickel	42 696	63 162	57 202	41 604	19 050
Ferro-niobium	1 356	1 586	1 745	1 983	1 632
Ferro-phosphorus	3 101	2 801	2 431	3 437	3 174
Ferro-silicon	55 536	49 630	47 952	60 877	53 961
Ferro-titanium & Fe-Si-Ti	4 759	4 925	4 459	5 478	5 119
Ferro-tungsten & Fe-Si-W	672	411	568	769	299
Ferro-vanadium	993	858	909	1 154	1 059
Other ferro-alloys	8 088	8 653	10 133	22 355	11 864
Silicon metal	15 670	18 894	20 136	20 336	16 105
Ingots, blooms, billets	1 041 393	801 104	890 109	1 404 233	1 386 584
Scrap	1 705 635	1 632 170	2 402 691	2 748 147	2 948 480
Germany					
Pig iron	414 887	242 049	296 685	339 177	257 567
Sponge & powder	54 970	46 172	58 410	57 330	61 791
Ferro-chrome	444 412	339 641	396 657	449 711	417 825
Ferro-silico-chrome	28 616	18 711	22 121	19 592	9 003
Ferro-silico-magnesium	4 687	4 600	4 066	3 831	3 613
Ferro-manganese	198 334	152 092	175 233	180 041	131 569
Ferro-silico-manganese	135 336	121 775	144 301	101 243	134 131
Ferro-molybdenum	7 842	6 757	8 449	9 828	8 811
Ferro-nickel	11 954	77 681	88 858	56 098	29 629
Ferro-niobium	2 221	3 395	3 664	3 359	2 603
Ferro-phosphorus	26 550	7 266	5 540	4 612	5 662
Ferro-silicon	184 678	179 525	173 056	175 323	187 994
Ferro-titanium & Fe-Si-Ti	8 357	7 586	7 056	8 380	7 556
Ferro-tungsten & Fe-Si-W	901	529	455	645	549
Ferro-vanadium	3 895	3 861	5 423	5 506	4 075
Other ferro-alloys	18 276	21 224	20 138	27 124	9 872
Silicon metal	100 688	95 897	121 559	117 776	85 384
Ingots, blooms, billets	1 767 641	998 882	1 141 721	1 593 375	1 165 465
Scrap	1 253 512	1 334 691	1 862 205	2 678 292	2 863 594

## Imports of Iron, Steel and Ferro-Alloys

tonnes

Country	1995	1996	1997	1998	1999
Greece					
Pig iron	16 864	14 439	13 132	11 561	7 706
Ferro-manganese	4 083	2 667	2 349	*1 800	1 025
Ferro-silico-manganese	4 945	8 503	8 738	7 607	4 763
Ferro-silicon	2 193	2 427	5 754	3 048	2 212
Other ferro-alloys	381	353	489	800	436
Ingots, blooms, billets	626 795	455 454	464 809	145 225	402 216
Scrap	460 576	543 799	762 235	491 145	278 010
Hungary					
Pig iron	24 535	31 737	32 281	45 615	25 644
Ferro-manganese	8 575	7 262	9 316	10 369	11 082
Ferro-silicon	7 716	6 710	6 570	6 415	6 213
Other ferro-alloys	7 822	7 882	5 230	4 556	4 046
Ingots, blooms, billets	327 726	166 791	233 838	282 161	292 283
Scrap	9 325	1 829	13 575	57 710	22 479
Irish Republic					
Pig iron	10 257	320	2 964	3 804	3 074
Ferro-alloys	1 654	2 256	1 117	2 325	2 821
Ingots, blooms, billets	6 755	3 315	1 775	1 558	1 331
Scrap	153 246	51 870	5 000	12 661	94 958
Italy					
Pig iron	1 636 859	1 351 649	1 310 196	1 711 795	1 249 505
Sponge & powder	21 717	18 581	48 362	161 618	107 120
Ferro-chrome	225 766	184 552	230 009	259 357	299 033
Ferro-silico-chrome	165	293	532	172	393
Ferro-silico-magnesium	(d) ...	(d) ...	5 537	5 855	8 375
Ferro-manganese	69 017	55 184	68 961	68 274	77 851
Ferro-silico-manganese	75 494	70 452	71 842	81 050	90 136
Ferro-molybdenum	(d) ...	(d) ...	4 397	5 735	4 869
Ferro-nickel	20 852	37 603	39 560	40 062	26 998
Ferro-niobium	(d) ...	(d) ...	1 407	1 395	1 140
Ferro-phosphorus	(d) ...	(d) ...	1 219	1 492	1 278
Ferro-silicon	112 967	100 594	112 822	112 673	129 115
Ferro-titanium & Fe-Si-Ti	(d) ...	(d) ...	3 651	3 296	3 410
Ferro-tungsten & Fe-Si-W	(d) ...	(d) ...	168	146	114
Ferro-vanadium	(d) ...	(d) ...	1 493	1 296	1 566
Other ferro-alloys	28 086	23 803	8 819	16 523	7 189
Silicon metal	17 599	19 889	32 053	33 896	31 667
Ingots, blooms, billets	2 036 702	1 155 267	1 649 167	2 111 264	2 684 986
Scrap	6 337 321	4 935 364	4 303 774	5 112 063	4 255 639
Latvia					
Pig iron	4 784	680	2 837	2 665	1 959
Ingots, blooms, billets	5 000	11 000	1 000	...	41 995
Scrap	6 241	65 650	280 169	216 098	174 691
Lithuania					
Scrap	32 000	49 217	82 817	63 050	5 921
Macedonia					
Ferro-alloys	...	14 731	585	154	...
Ingots, blooms, billets	...	65 730	61 804	11 317	...
Scrap	1 000	4 081	889	11 611	...
Netherlands					
Pig iron	199 003	156 013	176 940	196 800	79 328
Sponge & powder	8 141	1 722	2 280	2 956	19 458
Ferro-chrome	200 212	194 728	150 790	176 092	204 088
Ferro-silico-chrome	2 753	148	5 408	2 731	1 751
Ferro-silico-magnesium	1 823	(d) ...	(d) ...	1 891	1 020
Ferro-manganese	34 042	23 416	39 020	55 750	32 599
Ferro-silico-manganese	46 497	50 575	37 709	39 946	38 231
Ferro-molybdenum	2 633	(d) ...	6 971	4 735	6 279
Ferro-nickel	8 370	3 428	2 977	23 309	27 420
Ferro-niobium	681	(d) ...	466	4 263	6 049
Ferro-phosphorus	759	(d) ...	(d) ...	2 165	2 459
Ferro-silicon	42 428	38 326	63 684	75 765	74 596
Ferro-titanium & Fe-Si-Ti	1 287	(d) ...	3 217	1 380	2 588
Ferro-tungsten & Fe-Si-W	606	(d) ...	711	750	670
Ferro-vanadium	725	(d) ...	2 380	1 266	1 572
Other ferro-alloys	1 671	13 144	5 377	2 256	2 205
Silicon metal	13 532	13 410	23 258	26 156	44 396
Ingots, blooms, billets	56 957	32 245	71 199	123 650	85 602
Scrap	3 281 654	2 816 539	2 073 111	1 396 827	1 354 536

## Imports of Iron, Steel and Ferro-Alloys

Country	1995	1996	1997	1998	1999
<b>Norway</b>					
Pig iron	10 405	9 227	8 179	10 216	17 924
Sponge & powder	4 049	967	37 973	900	37 267
Ferro-chrome	864	660	688	712	366
Ferro-manganese	15 449	6 079	15 181	22 231	37 484
Ferro-silico-manganese	5 645	49	3 933	294	52
Ferro-silicon	6 152	5 207	9 161	7 825	3 408
Other ferro-alloys	4 613	728	975	844	1 690
Silicon metal	8 704	5 360	13 203	8 235	10 456
Ingots, blooms, billets	196 095	124 334	166 505	178 746	117 345
Scrap	230 461	215 747	290 278	346 976	331 948
<b>Poland</b>					
Pig iron	44 537	39 500	30 700	26 300	22 338
Ferro-chrome	11 961	9 362	8 332	8 929	7 225
Ferro-silico-magnesium	1 897	2 362	2 151	1 672	1 725
Ferro-manganese	9 013	4 546	12 324	20 858	35 376
Ferro-silico-manganese	7 682	16 181	14 673	12 345	18 173
Ferro-molybdenum	744	584	610	794	586
Ferro-phosphorus	980	941	1 020	1 086	1 184
Ferro-silicon	8 837	11 568	13 047	9 858	15 345
Ferro-vanadium	405	280	259	246	361
Other ferro-alloys	970	877	1 397	2 530	1 880
Silicon metal	4 070	4 583	5 150	6 049	6 708
Ingots, blooms, billets	53 000	146 000	133 000	...	47 777
Scrap	238	400	14 400	19 300	86 886
<b>Portugal</b>					
Pig iron	...	20 671	23 285	27 032	18 969
Ferro-manganese	(d) ...	1 239	1 108	1 304	1 203
Ferro-silico-manganese	(d) ...	7 177	7 553	6 310	7 252
Ferro-silicon	(d) ...	4 087	4 658	4 360	4 017
Other ferro-alloys	13 000	1 619	2 626	4 576	5 353
Ingots, blooms, billets	...	3 277	14 126	22 860	53 177
Scrap	62 000	34 555	39 749	173 559	288 200
<b>Romania</b>					
Ferro-alloys	61 531	47 740	80 566	85 521	56 083
Silicon metal	...	...	708	2 044	1 979
Ingots, blooms, billets	88 410	343 965	340 439	346 160	238 673
<b>Russia</b>					
Pig iron	...	161 789	53 894	24 127	4 174
Sponge & powder	...	3 907 416	584 588	55 495	3 515
Ferro-chrome	19 100	20 008	8 247	8 734	7 449
Ferro-silico-chrome	...	1 026	-----	-----	-----
Ferro-manganese	155 200	125 778	144 674	150 344	105 338
Ferro-silico-manganese	...	210 725	154 570	114 641	121 292
Ferro-molybdenum	...	(d) ...	311	1 124	2 141
Ferro-niobium	...	(d) ...	139	362	224
Ferro-silicon	...	54 950	40 534	15 249	4 464
Ferro-titanium & Fe-Si-Ti	...	(d) ...	120	1 437	387
Ferro-vanadium	...	(d) ...	104	219	233
Other ferro-alloys	...	4 549	882	1 465	2 367
Silicon metal	...	2 170	1 824	2 245	4 436
Ingots, blooms, billets	...	235 835	19 912	17 731	16 544
Scrap	91 000	124 952	92 841	77 093	301 901
<b>Slovakia</b>					
Pig iron	21 000	27 000	18 000	24 341	17 317
Sponge & powder	(b) *600	...	425	2 095	3 677
Ferro-alloys	21 000	13 000	13 000	15 508	12 408
Silicon metal	...	...	3 165	...	4 589
Ingots, blooms, billets	11 000	11 000	13 081	...	17 318
Scrap	236 000	158 000	115 000	188 586	134 405
<b>Slovenia</b>					
Pig iron	11 000	14 615	9 847	8 387	10 632
Ferro-alloys	15 000	13 671	22 176	25 332	26 458
Ingots, blooms, billets	3 000	2 103	2 533	3 166	2 315
Scrap	260 000	142 673	203 099	261 088	179 747

## Imports of Iron, Steel and Ferro-Alloys

tonnes

Country	1995	1996	1997	1998	1999
<b>Spain</b>					
Pig iron	321 804	373 164	255 342	350 118	324 990
Sponge & powder	229 007	225 759	342 934	567 763	771 805
Ferro-chrome	150 798	146 344	188 775	192 914	218 710
Ferro-silico-chrome	5 258	5 718	5 949	5 351	4 151
Ferro-silico-magnesium	4 893	(d) ...	4 065	3 527	2 632
Ferro-manganese	28 929	18 364	13 967	13 514	20 919
Ferro-silico-manganese	29 012	21 563	24 976	25 312	31 338
Ferro-molybdenum	2 396	(d) ...	3 260	2 266	2 114
Ferro-nickel	25 027	28 043	25 806	32 235	34 987
Ferro-niobium	265	(d) ...	368	387	220
Ferro-phosphorus	1 291	(d) ...	1 968	1 990	1 649
Ferro-silicon	21 439	33 346	42 561	43 300	39 520
Ferro-titanium & Fe-Si-Ti	242	(d) ...	488	561	745
Ferro-tungsten & Fe-Si-W	31	(d) ...	57	50	40
Ferro-vanadium	583	(d) ...	531	343	563
Other ferro-alloys	3 669	12 661	3 897	11 667	16 719
Silicon metal	3 126	3 649	3 655	4 953	3 045
Ingots, blooms, billets	335 428	412 996	474 682	438 176	848 086
Scrap	4 799 745	4 479 581	5 249 904	5 998 402	5 677 123
<b>Sweden</b>					
Pig iron	42 187	39 062	31 011	59 364	54 919
Sponge & powder	4 393	4 239	5 357	7 650	7 604
Ferro-chrome	79 408	64 878	71 078	76 916	80 231
Ferro-silico-chrome	2 568	2 397	2 334	3 458	2 642
Ferro-silico-magnesium	(d) ...	(d) ...	1 270	1 919	7 377
Ferro-manganese	29 828	24 501	22 952	28 899	31 463
Ferro-silico-manganese	21 328	18 163	16 127	19 347	20 701
Ferro-molybdenum	(d) ...	(d) ...	2 508	4 013	3 354
Ferro-nickel	20 440	16 657	17 979	15 090	5 195
Ferro-niobium	(d) ...	(d) ...	376	611	595
Ferro-phosphorus	(d) ...	(d) ...	991	969	987
Ferro-silicon	25 080	30 978	31 064	36 840	31 381
Ferro-titanium & Fe-Si-Ti	(d) ...	(d) ...	1 813	2 264	2 285
Ferro-tungsten & Fe-Si-W	(d) ...	(d) ...	722	601	402
Ferro-vanadium	(d) ...	(d) ...	1 070	1 575	1 487
Other ferro-alloys	11 480	9 555	1 415	4 947	2 729
Silicon metal	1 795	2 487	2 101	2 413	3 808
Ingots, blooms, billets	247 078	335 334	393 046	305 002	389 416
Scrap	362 905	333 059	492 324	612 175	454 865
<b>Switzerland</b>					
Pig iron	44 518	30 921	22 268	36 101	27 870
Sponge & powder	5 549	4 855	6 381	8 038	9 033
Ferro-aluminium	1 055	1 860	333	28	1
Ferro-chrome	805	522	732	1 012	913
Ferro-manganese	2 757	3 617	5 518	3 824	3 302
Ferro-silico-manganese	4 396	3 830	4 413	5 615	5 145
Ferro-silicon	5 171	4 702	5 850	6 042	5 741
Other ferro-alloys	748	947	1 185	1 276	279
Silicon metal	1 589	1 397	16 579	12 023	1 120
Ingots, blooms, billets	132 120	59 664	93 321	90 596	52 522
Scrap	90 186	76 086	165 862	217 924	208 365
<b>Turkey</b>					
Pig iron	580 624	393 343	244 247	194 160	153 706
Sponge & powder	1 962	2 363	3 221	14 088	8 634
Ferro-manganese	24 600	33 940	32 459	24 323	29 364
Ferro-silico-manganese	103 832	93 835	102 756	91 245	90 684
Ferro-silicon	...	45 023	41 466	48 971	51 768
Other ferro-alloys	3 594	4 715	5 232	6 554	9 308
Silicon metal	...	...	...	1 841	2 005
Ingots, blooms, billets	1 009 767	1 311 824	1 219 268	1 484 361	1 607 637
Scrap	6 613 223	7 085 308	7 747 674	6 550 614	7 877 831
<b>Ukraine</b>					
Ferro-alloys	...	...	20 280	18 096	...
Scrap	181 000	89 836	90 061	26 250	...

## Imports of Iron, Steel and Ferro-Alloys

Country	1995	1996	1997	1998	1999
United Kingdom					
Pig iron	234 061	240 886	210 112	225 303	155 802
Sponge & powder	20 487	21 414	25 690	33 529	25 894
Ferro-chrome & ferro-silico-chrome	135 108	133 540	118 915	114 275	116 900
Ferro-silico-magnesium	10 961	11 508	11 374	9 671	8 597
Ferro-manganese	135 494	131 528	135 902	111 500	90 027
Ferro-silico-manganese	40 453	35 098	38 261	49 448	53 951
Ferro-molybdenum	1 375	392	773	599	627
Ferro-nickel	39 115	35 416	20 251	11 909	4 459
Ferro-niobium	767	921	856	1 086	955
Ferro-phosphorus	3 021	3 227	3 025	2 980	2 729
Ferro-silicon	92 069	96 025	96 005	82 802	83 334
Ferro-titanium & Fe-Si-Ti	7 761	7 591	5 161	4 887	4 123
Ferro-tungsten & Fe-Si-W	98	44	112	56	68
Ferro-vanadium	450	291	378	378	633
Other ferro-alloys	3 448	1 806	3 108	4 475	4 733
Silicon metal	44 041	45 831	46 675	45 285	59 071
Ingots, blooms, billets	794 305	373 414	458 875	549 465	410 282
Scrap	177 248	242 588	211 827	179 204	171 107
Yugoslavia, Federal Republic of					
Pig iron	...	1 624	2 100	800	570
Ferro-chrome	*1 000	1 900	2 100	779	583
Ferro-manganese	...	5 200	(d) ...	(d) ...	5 633
Ferro-silicon	...	...	(d) ...	(d) ...	3 521
Other ferro-alloys	...	...	11 351	6 626	596
Ingots, blooms, billets	...	92 000	124 152	34 804	220 158
Scrap	*50 000	78 000	37 577	42 372	82 104
Algeria					
Ferro-manganese	1 000	402	1 931	1 951	...
Other ferro-alloys	...	262	1 758	3 202	...
Egypt					
Pig iron	...	881 266	94 208	32 122	42 259
Ferro-alloys	...	25 792	22 300	20 322	15 004
Ingots, blooms, billets	282 518	642 562	1 209 431	1 910 852	1 246 300
Scrap	97 400	121 382	54 909	277 279	518 218
Ethiopia					
Scrap (g)	...	...	...	60 435	75 761
Kenya					
Ingots, blooms, billets	1 000	2 810	495	----	1 076
Mauritius					
Pig iron & ingots	39 430	31 116	34 587	37 331	...
Morocco					
Pig iron	3 409	2 600	1 448	...	...
Ferro-alloys	403	339	373	...	...
Ingots, blooms, billets	536 555	523 064	587 408	...	...
Scrap	3	1 524	2 313	...	...
Nigeria					
Ferro-alloys	100	1 813	2 058	1 456	1 281
Ingots, blooms, billets	...	17 738	32 930	68 477	17 731
South Africa					
Sponge & powder	...	...	3 884	85 719	313 568
Ferro-chrome	1 371	626	465	628	9 080
Ferro-silico-magnesium	1 477	814	220	457	218
Ferro-silico-manganese	243	253	196	5 338	571
Ferro-molybdenum	1 048	1 104	1 258	1 040	1 419
Ferro-nickel	1 866	5 251	2 263	4 508	2 159
Ferro-niobium	172	91	87	223	79
Ferro-phosphorus	1 067	...	1 882	168	...
Ferro-silicon	38 217	16 617	3 100	2 844	3 564
Ferro-titanium & Fe-Si-Ti	709	925	417	537	562
Other ferro-alloys	700	1 137	222	1 428	1 696
Silicon metal	422	1 658	2 895	9 609	4 078
Scrap	155 300	67 077	50 048	43 066	47 454
Tunisia					
Pig iron	1 939	1 589	680	1 795	81
Ferro-alloys	1 631	2 564	2 808	2 216	2 709
Ingots, blooms, billets	29 421	68 343	108 477	106 408	192 070
Scrap	737	900	1 304	3 110	550



## Imports of Iron, Steel and Ferro-Alloys

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Country	1995	1996	1997	1998	1999
Zimbabwe					
Ferro-manganese	1 710	10 091	1 100	772	...
Ferro-silicon	1 269	49 475	45 341	3 201	...
Canada					
Pig iron	18 533	32 245	130 002	124 430	168 225
Sponge & powder	76 822	32 498	52 411	35 831	15 050
Ferro-calcium-silicon	2 111	1 785	2 042	1 903	1 922
Ferro-chrome	62 706	64 545	58 333	50 502	45 329
Ferro-silico-chrome	885	665	594	487	697
Ferro-manganese	52 877	83 002	70 568	70 021	73 045
Ferro-silico-manganese	41 494	54 426	43 979	52 200	37 156
Ferro-molybdenum	1 414	1 283	1 664	1 846	1 838
Ferro-nickel	631	64	----	4	29
Ferro-niobium	1 646	1 266	1 683	1 885	1 855
Ferro-phosphorus	1 394	1 067	1 247	1 270	1 175
Ferro-silicon	26 699	42 477	43 877	50 924	46 795
Ferro-titanium & Fe-Si-Ti	759	902	1 134	1 465	1 439
Ferro-vanadium	598	576	793	1 018	696
Other ferro-alloys	1 776	1 869	2 536	2 215	2 636
Silicon metal	17 451	25 465	20 106	19 522	20 873
Ingots, blooms, billets	1 481 839	1 053 550	821 685	834 911	392 208
Scrap	1 632 583	1 264 712	1 531 652	1 482 266	1 568 817
Costa Rica					
Ingots, blooms, billets	50 944	53 313	80 212	69 651	58 851
El Salvador					
Ingots, blooms, billets	9 449	17 101	38 595	69 711	59 259
Scrap	18 827	47 725	17 774	24 184	11 663
Guatemala					
Ingots, blooms, billets	37 058	40 677	43 341	182 242	130 362
Scrap	35 143	57 499	50 282	31 613	10 001
Mexico					
Pig iron	77 964	306 638	493 510	514 741	299 954
Sponge & powder	1 399 089	1 233 530	411 611	212 839	353 500
Ferro-chrome	5 863	7 519	9 301	8 154	9 785
Ferro-manganese	17 372	23 164	16 313	15 151	11 506
Ferro-silico-manganese	8 504	14 849	15 539	25 967	13 081
Ferro-silicon	18 449	23 104	27 717	31 062	51 257
Other ferro-alloys	3 921	4 291	6 797	8 811	8 936
Ingots, blooms, billets	137 371	389 983	399 660	773 613	432 820
Scrap	874 406	1 294 771	1 895 475	1 280 083	*2 500 000
Panama					
Ingots, blooms, billets	34 584	27 008	51 713	29 000	33 598
Trinidad & Tobago					
Ferro-alloys	8 348	8 030	11 397	...	...
USA					
Pig iron	2 383 358	2 657 503	3 153 082	5 145 121	4 989 059
Sponge & powder	1 323 901	1 181 377	1 223 391	1 170 294	1 338 542
Ferro-chrome	499 236	419 647	388 858	418 492	603 794
Ferro-silico-chrome	49 667	49 396	36 502	24 946	35 947
Ferro-manganese	321 744	375 368	302 996	336 097	314 929
Ferro-silico-manganese	304 706	324 957	303 109	345 044	299 997
Ferro-molybdenum	6 721	7 929	5 891	7 720	8 540
Ferro-nickel	45 890	43 405	38 218	35 918	37 840
Ferro-niobium	5 685	4 801	6 957	8 076	7 380
Ferro-phosphorus	7 592	10 556	11 457	13 651	10 598
Ferro-silicon	220 645	210 937	195 209	203 804	248 905
Ferro-titanium & Fe-Si-Ti	5 646	7 758	6 233	7 335	4 747
Ferro-tungsten & Fe-Si-W	874	702	1 087	825	895
Ferro-vanadium	3 026	2 481	2 535	2 455	2 730
Other ferro-alloys	31 442	37 778	40 090	39 356	31 897
Silicon metal	97 310	83 936	125 087	106 929	118 500
Ingots, blooms, billets	4 695 297	6 848 093	5 771 636	6 220 275	7 565 441
Scrap	2 021 268	2 560 969	2 833 522	3 024 556	3 686 289

## Imports of Iron, Steel and Ferro-Alloys

Country	1995	1996	1997	1998	1999
Argentina					
Pig iron	2 650	2 900	1 322	1 580	975
Ferro-chrome	3 026	3 339	3 164	3 715	2 097
Ferro-manganese	5 448	5 571	6 289	8 649	8 212
Ferro-silico-manganese	371	7 064	21 550	4 344	17 187
Ferro-silicon	2 356	161	974	3 174	3 196
Other ferro-alloys	1 166	1 357	1 632	2 226	1 897
Silicon metal	2 151	2 718	5 119	4 214	5 292
Ingots, blooms, billets	396 876	270 655	528 367	413 903	151 337
Scrap	6 491	12 831	7 743	9 827	...
Brazil					
Sponge & powder	9 760	10 345	8 491	5 430	4 463
Ferro-chrome	6 096	6 890	6 842	5 676	4 970
Ferro-manganese	13 984	8 683	9 346	10 131	28 453
Other ferro-alloys	6 027	8 817	7 428	7 277	4 596
Chile					
Ferro-alloys	5 280	5 701	11 542	11 921	...
Colombia					
Ferro-chrome	533	623	290	331	135
Ferro-manganese	5 621	4 515	5 857	5 382	4 145
Ferro-silico-manganese	4 035	3 104	4 494	2 447	1 754
Ferro-silicon	2 554	2 627	3 040	2 233	1 896
Other ferro-alloys	1 020	687	928	853	916
Ingots, blooms, billets	147 588	115 889	173 515	171 523	87 543
Scrap	220 266	116 036	142 511	119 033	...
Ecuador					
Ingots, blooms, billets	206 414	191 701	160 715	177 712	129 394
Peru					
Sponge	73 881	62 830	...	22 113	36 649
Ferro-chrome	697	438	971	1 210	849
Ferro-manganese	3 160	2 156	2 162	2 320	3 927
Ferro-silico-manganese	4 237	4 262	7 030	8 375	3 050
Ferro-silicon	1 165	1 776	1 280	1 708	863
Ingots, blooms, billets	41 461	47 075	91 284	117 554	46 851
Scrap	...	...	19 581	18 883	...
Uruguay					
Ferro-alloys	746	1 107	778	666	724
Ingots, blooms, billets	243	509	200	3 004	...
Venezuela					
Sponge & powder	21 739	3 363	3 025	...	1 690
Ferro-chrome	263	281	358	209	88
Ferro-manganese	23 256	15 794	20 180	15 209	6 885
Other ferro-alloys	1 477	1 480	1 686	3 250	1 319
Silicon metal	2 350	1 031	2 119	...	1 560
Ingots, blooms, billets	68 947	4 670	24 967	...	12 933
Scrap	173 612	250 110	66 254	98 300	23 003
Abu Dhabi					
Scrap	...	7 046	3 366	1 274	----
Bangladesh					
Pig iron (a)	...	43 934	15 493	...	...
Ferro-alloys (a)	...	3 400	103 635	...	...
Scrap (a)	...	405	13 127	...	...
China					
Pig iron	80 084	42 491	24 013	23 972	58 811
Sponge & powder	48 751	6 989	31 181	12 811	43 922
Ferro-alloys	6 901	6 234	28 999	6 975	9 003
Silicon metal	531	405	1 876	2 468	924
Ingots, blooms, billets	645 232	398 005	394 774	690 829	2 134 955
Scrap	1 334 519	1 283 322	1 828 759	2 018 655	3 339 073
Dubai					
Silicon metal	...	9 730	11 542	11 920	...
Ingots, blooms, billets	...	7 065	9 817	11 497	...
Scrap	...	17 400	18 009	26 205	...

## Imports of Iron, Steel and Ferro-Alloys

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Country	1995	1996	1997	1998	1999
Hong Kong					
Sponge & powder	1 378	1 073	1 717	2 378	3 122
Ferro-manganese	2 737	9 073	2 353	643	645
Ferro-silico-manganese	3 821	2 008	5 034	406	1 443
Ferro-silicon	22 208	21 445	12 566	2 682	2 298
Other ferro-alloys	3 586	4 941	633	731	302
Silicon metal	8 856	7 145	3 856	1 008	811
Ingots, blooms, billets	273 909	319 684	143 730	237 749	360 476
Scrap	257 917	243 392	255 113	249 397	204 829
India					
Pig iron (e)	29 798	17 809	2 666	2 247	...
Sponge & powder (e)	3 583	3 258	2 903	3 209	...
Ferro-chrome & ferro-silico-chrome (e)	13 456	8 131	14 185	3 510	...
Ferro-manganese & Fe-Si-Mn (e)	2 738	20 546	14 993	7 117	...
Ferro-molybdenum (e)	358	217	245	153	...
Ferro-nickel (e)	12 193	8 635	9 469	4 924	...
Ferro-silicon (e)	22 510	17 901	14 112	7 898	...
Other ferro-alloys (e)	1 650	2 879	4 689	3 522	...
Silicon metal (e)	10 951	15 195	13 823	8 725	...
Ingots, blooms, billets (e)	324 176	392 234	414 223	607 764	...
Scrap (e)	1 964 571	1 975 667	1 658 894	1 494 745	...
Indonesia					
Pig iron	557 878	372 572	220 848	75 138	...
Sponge & powder	495 842	203 761	228 625	57 543	...
Ferro-manganese	22 336	11 964	36 009	7 482	...
Ferro-silico-manganese	35 405	30 103	32 545	16 085	...
Ferro-silicon	11 768	9 800	9 158	8 480	...
Other ferro-alloys	2 164	1 507	2 407	996	...
Ingots, blooms, billets	1 388 605	1 376 411	1 718 583	268 109	...
Scrap	1 462 333	788 561	869 730	399 964	...
Iran					
Ingots, blooms, billets (c)	27 894	...	89 291	33 553	...
Israel					
Ingots, blooms, billets	170 000	211 000	...	...	...
Japan					
Pig iron	2 613 359	791 976	1 052 218	184 396	143 294
Sponge & powder	154 732	156 601	227 821	113 446	92 788
Ferro-chrome	825 718	718 567	811 555	628 345	599 839
Ferro-silico-chrome	13 208	10 142	4 729	3 414	3 171
Ferro-manganese	123 917	110 917	95 240	109 853	89 570
Ferro-silico-manganese	240 510	233 277	257 536	201 284	227 218
Ferro-molybdenum	2 122	2 585	3 167	2 214	2 193
Ferro-nickel	66 772	58 460	49 752	41 069	34 284
Ferro-niobium	5 051	4 758	4 977	6 516	6 889
Ferro-phosphorus	12 947	5 881	7 639	7 324	6 827
Ferro-silicon	557 155	517 618	556 735	401 939	440 152
Ferro-titanium & Fe-Si-Ti	5 620	3 122	6 276	4 792	3 979
Ferro-tungsten & Fe-Si-W	672	415	775	974	560
Ferro-vanadium	1 336	1 281	1 770	1 915	1 985
Other ferro-alloys	14 448	10 409	14 099	11 065	11 611
Silicon metal	181 696	191 494	166 312	163 202	184 596
Ingots, blooms, billets	567 734	299 397	274 082	45 554	8 042
Scrap	1 208 644	375 078	414 555	176 907	282 019
Jordan					
Ingots, blooms, billets	210 762	350 369	252 480	299 354	...
Kazakhstan					
Ferro-manganese	...	(d) ...	(d) ...	14 969	18 857
Other ferro-alloys	...	(f) 18 807	(f) 20 373	4 048	5 410
Scrap	1 000	8 000	78 000	1 884	...
Korea, Dem. P.R. of					
Ferro-manganese (b)	*6 600	*2 700	*1 800	*2 300	*5 400
Other ferro-alloys (b)	*4 300	*7 200	*16 400	*8 300	...

## Imports of Iron, Steel and Ferro-Alloys

Country	1995	1996	1997	1998	1999
Korea, Republic of					
Pig iron	2 141 583	2 426 685	3 691 551	2 481 263	2 752 486
Sponge & powder	690 492	850 124	911 933	607 926	742 820
Ferro-chrome	187 302	204 707	299 313	287 466	384 336
Ferro-silico-chrome	16 108	15 198	12 311	17 063	14 492
Ferro-manganese	37 962	43 650	41 085	36 445	33 766
Ferro-silico-manganese	76 301	99 513	120 438	89 959	84 002
Ferro-molybdenum	1 592	1 018	1 785	1 423	2 149
Ferro-nickel	41 680	62 551	85 172	86 594	85 779
Ferro-niobium	355	396	634	779	1 099
Ferro-phosphorus	5 184	3 340	3 392	3 681	4 271
Ferro-silicon	125 369	118 423	128 241	118 983	133 739
Ferro-titanium & Fe-Si-Ti	242	491	764	462	579
Ferro-tungsten & Fe-Si-W	92	184	74	90	122
Ferro-vanadium	1 519	863	728	762	632
Other ferro-alloys	2 605	2 605	-----	6 465	...
Silicon metal	16 775	19 516	19 325	12 592	22 623
Ingots, blooms, billets	3 246 945	4 176 046	3 631 133	1 579 493	2 638 634
Scrap	5 003 359	5 054 668	6 532 716	5 566 790	6 583 505
Kyrgyzstan					
Scrap	*10 000	461	*500	*500	...
Malaysia					
Pig iron	182 097	169 910	...	...	...
Spiegeleisen	10 678	...	...	...	...
Sponge & powder	23 282	3 459	5 897	4 934	...
Ferro-manganese	13 846	36 091	19 597	4 791	...
Ferro-silicon	6 901	12 410	8 211	4 125	...
Ferro-vanadium	268	274	314	48	...
Other ferro-alloys	2 126	1 048	947	341	...
Ingots, blooms, billets	580 958	944 411	...	...	...
Scrap	1 064 500	1 089 543	991 000	417 000	...
Oman					
Ingots, blooms, billets	...	8	4 007	24 501	...
Pakistan					
Pig iron (a)	2 820	36	6 109	8 457	-----
Ferro-chrome	1 659	1 125	1 600	1 200	...
Ferro-manganese (a)	...	20 090	8 263	7 582	6 828
Ferro-silico-manganese	85	78	...	...	...
Ferro-silicon	7 245	12 702	...	...	...
Other ferro-alloys	1 093	211	...	...	...
Ingots, blooms, billets (a)	...	48 340	48 336	32 504	...
Scrap (a)	...	90 576	121 263	65 790	...
Philippines					
Pig iron	59 112	69 145	24 536	12 574	...
Ferro-manganese	3 080	5 190	2 857	3 262	...
Ferro-silico-manganese	2 077	1 234	540	918	...
Ferro-silicon	5 431	4 908	3 670	5 255	...
Other ferro-alloys	485	265	296	164	...
Ingots, blooms, billets	2 234 573	1 951 019	1 799 813	983 318	...
Scrap	53 281	109 516	60 488	51 961	...
Saudi Arabia					
Pig iron	27 626	44 848	11 893	46 486	96 906
Ferro-alloys	4 102	4 282	6 324	2 837	9 497
Silicon metal	...	...	664	778	599
Ingots, blooms, billets	289 889	196 330	149 110	321 101	108 426
Scrap	...	...	37 004	23 853	12 124
Singapore					
Pig iron	78 599	75 870	21 500	26 510	63 399
Sponge & powder	21	29	1 714	1 507	2 111
Ferro-manganese	763	962	904	682	953
Ferro-silico-manganese	...	...	4 204	4 204	4 939
Ferro-silicon	7 788	12 439	1 901	1 420	3 484
Other ferro-alloys	...	1 704	3 568	406	349
Silicon metal	...	...	...	865	578
Ingots, blooms, billets	226 880	275 172	422 065	116 968	316 183
Scrap	158 143	83 557	63 521	68 633	141 027
Sri Lanka					
Ingots, blooms, billets	69 203	99 609	121 798	132 766	...

## Imports of Iron, Steel and Ferro-Alloys

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Country	1995	1996	1997	1998	1999
<b>Syria</b>					
Ingots, blooms, billets	26 329	25 296	22 350	51 209	...
Scrap	11 748	9 119	1 789	909	...
<b>Taiwan</b>					
Pig iron	1 090 114	850 315	1 112 462	955 323	951 797
Sponge & powder	55 824	24 373	24 957	22 969	24 836
Ferro-chrome	192 574	196 389	285 664	309 496	397 972
Ferro-manganese	39 274	38 225	51 793	42 990	67 161
Ferro-silico-manganese	64 962	51 311	77 702	79 780	71 212
Ferro-molybdenum	1 096	1 920	2 234	2 974	2 876
Ferro-nickel	16 820	56 118	81 818	90 978	110 969
Ferro-niobium	203	245	164	345	189
Ferro-silicon	62 098	58 713	63 313	64 723	66 445
Ferro-tungsten & Fe-Si-W	161	...	122	230	106
Ferro-vanadium	16 610	453	490	468	575
Other ferro-alloys	2 489	3 205	6 558	6 421	4 846
Silicon metal	21 673	20 163	25 275	19 434	18 092
Ingots, blooms, billets	7 426 257	5 941 500	7 013 973	7 528 921	9 121 332
Scrap	673 190	1 048 932	1 960 652	2 398 392	1 800 846
<b>Thailand</b>					
Pig iron	281 689	227 771	219 603	118 441	135 430
Sponge & powder	6 506	1 557	1 325	1 638	2 752
Ferro-chrome	2 607	3 117	3 095	3 398	3 977
Ferro-manganese	13 972	8 457	7 744	7 675	5 526
Ferro-silico-manganese	16 912	29 218	21 947	17 553	19 148
Ferro-silicon	19 016	16 751	15 645	12 569	14 910
Other ferro-alloys	615	915	775	2 418	1 614
Silicon metal	2 291	2 614	3 536	2 735	3 828
Ingots, blooms, billets	3 428 112	3 995 668	3 256 499	3 260 000	3 190 960
Scrap	1 035 693	899 238	728 218	320 014	629 698
<b>Australia</b>					
Pig iron	51 949	5 579	26 729	97 178	41 115
Sponge & powder	72 202	4 095	13 388	9 257	4 539
Ferro-chrome	11 703	7 616	11 707	8 438	11 871
Ferro-manganese & Fe-Si-Mn	10 948	15 084	8 075	11 933	6 600
Ferro-molybdenum	320	262	334	294	283
Ferro-niobium	94	364	150	100	91
Ferro-silicon	37 565	49 999	35 825	33 952	32 604
Ferro-titanium & Fe-Si-Ti	327	363	356	361	412
Ferro-vanadium	77	31	700	232	295
Other ferro-alloys	1 454	1 441	1 934	1 629	8 790
Silicon metal	3 316	4 804	2 948	3 771	4 076
Ingots, blooms, billets	19 158	34 423	124 113	37 217	...
Scrap	2 657	28 094	2 216	10 363	5 000
<b>New Zealand</b>					
Ferro-manganese (a)	1 999	...	2 446	1 611	...
Ferro-silicon (a)	2 330	...	2 820	1 821	...
Other ferro-alloys (a)	2 522	...	1 577	3 315	...
Silicon metal (a)	2 774	...	2 296	1 888	...

## 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
- (f) Imports from CIS only
- (g) Years ended 7 July of that stated

## Production of Kaolin

Country	1995	1996	1997	1998	1999
Austria	56 789	31 833	42 654	39 666	*40 000
Belgium	*300 000	*300 000	*300 000	*300 000	*300 000
Bosnia & Herzegovina	*3 000	*3 000	*3 000	*3 000	...
Bulgaria	168 000	189 000	158 000	154 760	144 341
Czech Republic (h)	757 949	724 053	822 394	1 101 312	1 049 225
Finland	12 392	14 204	...	...	...
France	345 000	326 000	332 000	330 000	*330 000
Germany (g)	570 000	700 000	721 000	736 000	*700 000
Greece	66 682	60 453	56 459	46 388	64 931
Hungary (c)	5 000	*5 000	*5 000	*5 000	...
Italy	87 920	126 000	180 570	247 970	...
Poland	50 800	59 400	69 700	69 200	*76 000
Portugal	212 065	177 423	216 075	271 296	...
Romania	49 024	45 199	29 169	24 742	23 586
Russia	60 000	40 000	48 400	40 600	...
Slovakia	13 300	23 240	22 720	14 580	22 930
Slovenia	*10 000	*10 000	*10 000	*10 000	...
Spain (k)	316 074	317 918	296 015	312 539	350 000
Turkey	489 635	449 559	472 646	403 733	449 954
Ukraine	286 900	249 300	237 900	201 670	221 526
United Kingdom (a) (l)	2 585 881	2 281 438	2 359 676	2 391 595	2 303 607
Yugoslavia, Federal Republic of	56 926	68 460	65 724	75 092	40 321
Algeria	24 068	23 332	18 533	13 640	16 833
Burundi	4 766	3 979	3 539	3 500	----
Egypt (d)	70 597	115 409	112 657	138 184	...
Eritrea	*3 200	2 620	*2 500	*1 000	...
Ethiopia (j)	701	1 428	3 512	378	681
Madagascar	1 545	*1 500	*1 500	*1 500	...
Nigeria	11 950	102 078	125 219	*100 000	*100 000
South Africa	146 857	150 597	122 798	90 883	122 413
Tanzania	596	1 332	...	...	...
Mexico	221 685	253 602	235 278	339 013	489 993
USA (e)	9 480 000	9 180 000	9 280 000	9 450 000	*9 710 000
Argentina	39 860	64 241	47 365	46 832	*47 000
Brazil (b)	1 269 468	1 251 603	*1 500 000	*1 600 000	*1 700 000
Chile	10 845	13 452	14 238	11 530	...
Ecuador	45 054	86 541	7 345	9 685	...
Paraguay	66 300	*66 500	*66 700	*66 700	*67 000
Peru	8 445	14 295	7 875	4 968	...
Venezuela	3 000	7 542	5 000	4 000	12 000
Bangladesh (d)	6 597	6 855	8 849	7 731	...
China	900 000	950 000	950 000	1 000 000	...
India (i) (m)	160 689	183 072	166 453	159 493	156 496
Indonesia	14 373	*15 000	1 956	8 567	21 389
Iran (n)	265 591	364 506	484 785	*500 000	*500 000
Israel	15 000	14 000	16 000	27 000	...
Japan	182 122	141 230	110 915	83 257	53 092
Jordan	65 998	...	57 255	78 000	...
Kazakhstan	20 000	20 000	*20 000	...	...
Korea, Republic of	897 360	852 457	898 347	627 360	672 824
Malaysia	404 336	324 578	221 769	198 930	213 972
Pakistan (d)	33 039	45 446	66 235	66 672	64 692
Philippines	5 193	1 149	1 440	1 783	7 820
Sri Lanka	16 000	19 473	20 126	11 110	12 573
Taiwan	20 406	25 083	27 491	72 588	75 784
Thailand (h)	436 890	557 604	315 098	262 859	127 770
Uzbekistan	*5 500 000	*5 500 000	*5 500 000	*5 500 000	*5 500 000

**Production of Kaolin**

tonnes

Country	1995	1996	1997	1998	1999
Australia (d) (f)	231 000	239 000	217 000	182 000	201 000
New Zealand	13 662	26 325	21 874	16 965	16 686
<b>World Total</b>	<b>27 100 000</b>	<b>26 900 000</b>	<b>27 100 000</b>	<b>27 500 000</b>	<b>27 900 000</b>

Note(s):-

(1) In addition to the countries listed, Colombia, Denmark, Dem. P. R. of Korea, Lebanon 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) Excluding New South Wales
- (g) Washed and dried
- (h) Beneficiated
- (i) Beneficiated; excludes directly used natural kaolin
- (j) Years ended 6 July of that stated
- (k) Washed
- (l) Dry weight
- (m) Years ended 31 March following that stated
- (n) Years ended 20 March following that stated

## Exports of Kaolin

Country	1995	1996	1997	1998	1999
Albania	*10 000	10 060	*10 000	*10 000	...
Austria	*10 800	4 900	5 037	2 965	2 743
Belgium-Luxembourg	197 923	250 271	308 573	324 359	248 829
Bulgaria	76 132	97 024	110 954	(a) *100 000	(a) *100 000
Croatia	...	...	...	3 605	3 143
Czech Republic	383 498	361 858	397 720	418 948	428 335
Denmark	598	517	912	1 436	1 003
Finland	1 892	1 829	2 333	3 572	5 466
France	281 358	260 426	260 812	330 616	307 307
Germany	354 103	196 066	178 366	194 610	387 173
Greece	12 941	26 464	15 733	8 952	3 811
Hungary	5 529	4 403	1 866	1 814	1 539
Italy	34 831	30 811	42 537	56 878	60 852
Netherlands	157 631	102 372	85 534	138 731	185 784
Poland	11 000	10 500	4 800	...	3 342
Portugal	100	1 008	4 951	2 741	9 701
Russia	62	3 003	574	302	1 233
Slovakia	100	1 694	819	----	290
Slovenia	1 000	1 160	198	295	95
Spain	138 647	137 994	144 343	104 342	103 831
Sweden	10 600	13 753	25 476	35 697	13 507
Turkey	256 907	190 761	158 642	185 431	262 211
Ukraine	206 402	236 053	291 161	230 888	246 565
United Kingdom (d)	2 222 316	1 957 761	2 052 914	2 093 460	2 018 974
Egypt	600	3 250	64 456	46 205	2 806
South Africa	...	...	1 503	4 962	5 199
USA	3 246 515	3 246 749	3 395 222	3 585 990	3 349 793
Argentina	2 614	4 513	8 242	9 620	8 158
Brazil	579 810	602 150	764 743	964 268	1 156 593
Colombia	3 374	3 432	4 994	5 530	6 255
China	439 439	882 146	820 520	882 169	892 785
Hong Kong (e)	457 193	261 578	396 008	284 962	205 996
India (b)	6 242	10 469	10 138	7 810	...
Indonesia	192 983	148 380	126 462	90 976	...
Israel (a)	...	*7 500	*16 100	...	*15 500
Japan	10 860	8 108	9 139	12 475	13 628
Jordan	793	744	1 155	768	...
Kazakhstan	15 000	12 000	10 000	8 020	(a) *2 900
Korea, Dem. P.R. of (a)	*3 800	*2 600	*6 000	*7 500	*4 800
Korea, Republic of	108 337	53 579	23 623	24 504	22 926
Malaysia	98 874	68 200	68 900	111 300	...
Singapore	1 400	2 300	927	539	1 471
of which, re-exports	...	...	918	525	1 408
Taiwan	7 486	12 044	21 344	19 262	17 129
Thailand	27 281	20 624	12 184	10 454	15 237
Australia	131 928	154 326	25 141	24 796	24 150
New Zealand (c)	17 787	15 047	18 147	15 109	...

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	1995	1996	1997	1998	1999
Austria	240 200	227 000	227 663	216 307	222 559
Belarus	*15 000	*15 000	*15 000	21 909	33 581
Belgium-Luxembourg	644 275	682 224	690 593	596 714	556 417
Croatia	16 213	14 193	21 410	4 849	5 636
Cyprus	8 393	16 361	421	4 020	5 197
Czech Republic	3 825	5 846	10 087	16 028	13 412
Denmark	14 587	16 037	28 862	20 210	19 910
Finland	1 378 081	1 198 212	1 402 209	1 357 735	1 249 452
France	444 127	396 785	439 674	368 970	400 812
Germany	717 388	633 467	729 379	739 660	719 302
Greece	57 137	73 542	57 688	44 061	44 968
Hungary	26 145	34 027	38 726	37 509	33 601
Irish Republic	14 837	13 978	11 774	11 627	12 980
Italy	886 062	868 006	834 122	930 913	989 397
Latvia	3 300	3 000	1 300	2 300	3 630
Macedonia	*8 000	5 383	8 965	9 895	...
Netherlands	523 965	509 753	360 327	393 780	460 095
Norway	252 658	224 811	241 707	250 210	263 832
Poland	91 409	62 900	60 100	55 000	54 656
Portugal	76 766	95 805	109 909	121 639	128 709
Romania	41 602	54 330	58 851	49 338	53 812
Russia	*150 000	159 884	131 238	101 940	133 106
Slovakia	60 100	52 500	60 800	74 800	76 847
Slovenia	19 600	20 800	22 300	24 816	24 934
Spain	453 490	434 099	470 225	585 468	630 623
Sweden	400 921	342 964	386 758	371 589	402 204
Switzerland	78 243	74 682	56 975	59 144	46 985
Turkey	84 717	85 789	116 727	139 326	114 965
United Kingdom	17 377	39 194	88 946	47 272	28 902
Yugoslavia, Federal Republic of	*8 000	8 000	7 702	9 075	8 778
Algeria	8 200	6 073	5 813	10 684	...
Egypt	48 900	55 829	85 127	120 712	87 720
Morocco	18 588	14 700	16 005	...	...
South Africa	35 081	17 360	22 054	24 753	17 509
Tunisia	44 860	51 575	50 058	57 353	65 454
Zimbabwe	926	24 166	1 747	1 528	...
Canada	621 166	599 842	717 103	860 450	917 129
Guatemala	6 227	6 175	4 378	2 682	4 306
Mexico	151 604	221 292	300 139	338 176	377 341
USA	12 017	13 728	30 384	52 943	57 255
Argentina	30 924	26 528	21 548	25 684	19 129
Brazil	2 372	7 001	4 305	4 941	3 746
Chile	22 152	16 463	24 196	16 002	...
Colombia	7 899	10 486	11 402	8 967	7 763
Ecuador	7 946	3 447	13 166	13 911	8 589
Peru	2 369	2 998	1 509	2 704	1 907
Uruguay	5 492	7 331	10 334	13 333	9 026
Venezuela	32 873	31 729	27 772	21 987	23 741
Bangladesh (b)	17 700	7 148	65 102	...	...
China	30 805	37 211	54 295	64 326	105 182
Dubai	...	7 603	9 847	32 228	...
Hong Kong	405 245	175 803	172 105	139 015	56 287
India (c)	423	1 428	3 103	4 825	...
Indonesia	132 108	125 343	144 964	134 903	...
Iran (a)	10 899	...	11 195	19 975	...
Israel	*14 500	*15 000	*15 000	...	...
Japan	1 265 419	1 399 224	1 333 036	1 393 293	1 347 092
Jordan	5 582	4 337	4 276	4 486	...
Korea, Republic of	274 433	264 587	274 430	211 674	255 206
Malaysia	44 231	42 000	*42 000	...	...
Pakistan (b)	6 540	8 940	8 252	10 138	8 270
Philippines	34 307	45 854	50 050	59 000	...
Saudi Arabia	6 908	5 563	5 571	4 790	6 513
Singapore	22 500	22 000	10 451	9 613	10 907

**Imports of Kaolin**

Country	1995	1996	1997	1998	1999
Sri Lanka	1 600	...	...	8 358	...
Taiwan	1 468 705	1 141 070	1 146 106	988 891	994 472
Thailand	45 990	65 400	64 141	38 281	53 087
Australia	18 342	14 595	20 753	16 578	8 892
New Zealand (b)	10 360	...	6 641	6 636	...

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 Lead**

tonnes (metal content)

Country	1995	1996	1997	1998	1999
Bulgaria	32 500	28 500	32 000	22 000	13 500
Finland	-----	1 200	2 200	1 800	130
Greece	14 283	8 383	19 335	22 632	19 699
Irish Republic	46 100	45 300	45 000	35 900	39 200
Italy	15 400	13 900	11 800	6 800	-----
Macedonia	24 700	26 900	28 000	26 000	*22 000
Norway	1 462	2 083	2 231	-----	-----
Poland	58 100	58 700	54 729	59 533	68 358
Romania	23 194	18 712	19 447	15 128	20 484
Russia	22 800	23 000	16 000	13 000	13 000
Spain	30 077	23 732	19 925	21 422	28 000
Sweden	100 070	98 812	108 624	114 430	116 393
Turkey	10 376	11 736	13 113	14 603	14 225
United Kingdom	*1 600	*1 800	*1 600	*1 600	1 000
Yugoslavia, Federal Republic of	3 342	16 005	14 029	16 700	8 600
Algeria	900	600	800	700	700
Morocco	68 870	75 253	78 228	80 000	80 000
Namibia	22 100	20 300	18 300	13 500	10 300
South Africa	88 501	88 613	83 114	84 128	80 191
Tunisia	6 600	4 765	1 424	4 274	*6 500
Canada	210 286	257 253	186 234	189 752	161 193
Honduras	2 461	4 669	5 930	4 329	5 226
Mexico	164 348	173 831	174 661	166 060	125 656
USA	393 640	435 945	458 536	493 094	520 165
Argentina	10 521	11 272	13 760	15 004	14 256
Bolivia	20 387	16 538	18 608	13 848	10 153
Brazil	5 689	7 894	8 729	7 567	10 281
Chile	944	1 374	1 264	337	170
Peru	237 597	248 929	262 466	257 713	270 634
China	514 200	643 400	711 900	580 500	548 900
India	34 000	35 000	32 900	37 700	37 700
Iran (a)	15 900	15 700	18 200	13 300	14 000
Japan	9 659	7 753	5 227	6 198	6 074
Kazakhstan	53 324	28 804	30 346	30 100	34 100
Korea, Dem. P.R. of	*50 000	*40 000	*35 000	*30 000	*26 000
Korea, Republic of	4 064	5 131	3 632	3 559	1 822
Myanmar	4 800	2 200	2 800	2 200	3 500
Tajikistan	*1 000	*2 500	*2 000	*2 000	*2 000
Thailand	13 000	19 500	5 000	6 100	9 500
Uzbekistan	*15 000	*10 000	*1 800	*1 000	-----
Australia	455 000	527 000	531 000	619 000	681 000
World Total	2 800 000	3 100 000	3 100 000	3 000 000	3 000 000

Note(s):-

(a) Years ended 20 March following that stated

## Production of Refined Lead

tonnes

Country	1995	1996	1997	1998	1999
Austria	21 919	22 188	21 941	23 248	24 000
Belgium (a)	144 069	142 178	142 901	...	125 843
Bulgaria	60 149	74 700	72 600	77 084	81 000
Czech Republic	22 574	21 823	21 843	24 327	27 017
France	297 100	301 100	283 400	290 200	274 000
Germany	313 910	238 100	329 203	352 885	352 767
Greece	3 800	*5 000	*6 000	*6 000	*6 000
Irish Republic	11 200	11 900	12 600	13 000	13 000
Italy	189 400	209 800	211 600	199 300	215 300
Macedonia	22 500	23 600	26 046	28 415	19 738
Netherlands	21 500	22 000	19 500	17 200	*18 000
Poland	66 421	65 983	64 732	64 333	63 985
Portugal	7 700	5 900	*6 000	*6 000	*6 000
Romania	23 020	19 370	17 686	19 872	17 462
Russia	30 300	30 000	52 000	36 000	44 000
Slovenia	7 400	7 200	6 200	7 000	7 000
Spain	81 500	90 960	88 000	90 000	96 000
Sweden	83 088	84 494	89 350	91 631	83 927
Switzerland	8 045	7 550	8 870	8 572	9 173
Turkey	4 000	12 000	9 000	8 800	9 000
Ukraine	14 000	21 000	11 000	7 340	9 903
United Kingdom	320 704	351 351	384 112	349 704	347 600
Yugoslavia, Federal Republic of	11 468	30 317	23 632	23 756	----
Algeria	7 500	6 200	7 100	6 300	6 200
Kenya	2 000	*2 200	*1 000	*1 000	*1 000
Morocco	65 200	65 200	64 202	61 953	65 209
Namibia	26 752	18 845	1 530	236	----
Nigeria	*7 500	*5 000	*5 000	*5 000	*5 000
South Africa	32 100	32 200	41 500	39 200	*40 000
Zambia	69	----	----	----	----
Zimbabwe	*3 000	3 400	*2 000	*2 000	*2 000
Canada	281 391	310 791	271 395	265 487	262 912
Mexico	232 900	216 400	255 200	223 200	195 000
Trinidad & Tobago	*1 500	*2 000	*1 000	*1 000	*1 000
USA (b)	1 357 900	1 372 000	1 417 100	1 390 600	1 447 000
Argentina	28 728	28 101	32 116	30 357	25 695
Brazil (c)	79 000	45 000	44 500	48 000	52 000
Colombia	*8 000	*10 000	*10 000	*12 000	*12 000
Peru	89 577	94 324	86 015	109 492	111 276
Venezuela	23 000	25 000	25 000	25 000	25 000
China	607 900	715 500	707 500	756 900	918 400
India	66 000	67 000	59 900	63 700	51 700
Indonesia	*30 000	*30 000	*30 000	22 000	18 000
Iran	45 200	46 900	49 400	47 000	*47 000
Israel	8 200	12 000	12 000	12 000	13 000
Japan	287 578	287 373	296 759	302 064	293 525
Kazakhstan	88 500	67 259	81 975	118 634	158 661
Korea, Dem. P.R. of	*45 000	*40 000	*30 000	*25 000	*22 000
Korea, Republic of	180 700	140 800	182 000	180 100	190 300
Malaysia	33 600	36 000	35 900	29 000	33 000
Myanmar (d)	2 074	1 986	1 585	1 855	1 717
Pakistan	*3 000	*3 000	*3 000	*3 000	*3 000
Philippines	23 000	25 000	25 000	22 000	24 000
Saudi Arabia	6 000	15 500	17 000	18 000	20 000
Sri Lanka	1 000	----	----	----	----
Taiwan	26 000	28 500	36 300	38 800	44 500
Thailand	19 070	17 711	19 080	22 100	26 800
United Arab Emirates	*4 000	4 100	2 200	2 000	*2 000

**Production of Refined Lead**

tonnes

Country	1995	1996	1997	1998	1999
Australia	241 000	228 000	238 000	202 000	273 000
New Zealand	10 000	10 000	10 000	10 000	10 000
World Total	5 700 000	5 800 000	6 000 000	6 000 000	6 300 000

## 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

## Exports of Lead

tonnes

Country	1995	1996	1997	1998	1999
Albania					
Scrap (f)	*100	*100	*500	*500	*400
Austria					
Unwrought (a)	4 597	5 999	5 434	6 380	5 066
Belarus					
Unwrought	...	...	3 702	2 909	19
Scrap	*2 000	*3 000	*4 500	5 268	4 623
Belgium-Luxembourg					
Ore	37 048	8 163	81 019	106 868	96 153
Unwrought	71 364	82 617	75 154	56 205	60 774
Unwrought alloys	18 100	22 396	22 434	27 194	30 083
Scrap	44 241	10 472	7 127	5 100	6 984
Bulgaria					
Unwrought (a)	59 537	60 324	66 700	(f) *55 000	(f) *60 000
Scrap (f)	*2 300	*200	*300	*900	*1 500
Croatia					
Unwrought	87	380	1 200	1 341	1 027
Scrap	9 381	4 420	315	485	480
Cyprus					
Scrap	739	1 300	1 255	1 211	1 958
of which, re-exports	739	983	974	887	1 832
Czech Republic					
Unwrought (a)	7 400	10 600	4 858	2 784	6 704
Scrap	...	100	1 585	3 039	3 313
Denmark					
Unwrought (a)	439	1 203	658	645	13 859
Scrap	19 691	2 612	2 009	5 987	1 306
Estonia					
Scrap	(f) *1 400	(f) *5 200	618	282	1 059
Finland					
Unwrought	4	499	2 707	425	495
Scrap	8 939	11 485	5 735	1 160	12 366
France					
Unwrought	58 341	74 256	58 592	60 833	56 919
Unwrought alloys	29 236	31 479	28 907	28 650	20 997
Scrap	5 437	12 392	6 357	3 024	5 101
Germany					
Unwrought	39 278	31 059	43 068	52 691	48 249
Unwrought alloys	23 007	22 726	29 750	36 231	35 420
Scrap	27 221	13 598	13 866	14 910	15 561
Greece					
Unwrought (a)	1 554	4 761	2 924	2 594	5 885
Hungary					
Scrap	21 130	18 742	2 215	2 509	2 315
Irish Republic					
Ores & concentrates	93 141	73 440	50 561	36 158	33 400
Scrap	1 709	1 404	123	61	971
Italy					
Ore	11 014	11 856	9 000	4 850	5 000
Unwrought	10 458	12 768	55 597	17 278	25 616
Unwrought alloys	1 848	3 126	2 737	3 854	765
Scrap	3 232	2 268	191	1 423	4 589
Latvia					
Scrap	1 286	585	45	58	36
Lithuania					
Scrap	1 600	2 400	2 676	417	650
Macedonia					
Ore	...	13 679	17 485	17 642	...
Unwrought (a)	(f) *3 200	17 861	18 478	20 837	...
Netherlands					
Unwrought	6 091	10 087	10 708	1 966	2 160
Unwrought alloys	592	934	62	...	759
Scrap	28 061	14 621	21 557	21 856	20 227
Norway					
Ore	----	2 140	6 400	----	...
Scrap	12 140	10 075	8 122	10 660	13 494

## Exports of Lead

tonnes

Country	1995	1996	1997	1998	1999
Poland					
Ores & concentrates	47 556	61 305	59 436	59 992	76 115
Unwrought (a)	20 393	21 900	27 700	36 800	45 838
Scrap	382	222	333	391	...
Portugal					
Unwrought (a)	1 100	2 936	1 279	5	202
Scrap	2 700	1 692	714	1 541	3 556
Romania					
Unwrought, refined	2 803	5 849	3 598	3 348	3 788
Scrap	...	...	...	1 456	5 224
Russia					
Ores & concentrates	31 447	23 613	32 598	21 754	21 006
Unwrought (a) (f)	*44 100	*41 800	*31 900	*27 000	*22 000
Scrap	...	27 032	16 355	14 796	4 410
Slovakia					
Unwrought (a) (f)	...	*600	*3 500	*3 600	*2 000
Scrap (f)	*700	*2 200	*1 100	*500	...
Slovenia					
Unwrought (a)	6 400	6 706	9 200	6 095	7 014
Spain					
Ore	57 871	41 501	24 727	41 230	34 760
Unwrought (a)	4 489	5 055	767	2 073	6 217
Scrap	3 577	1 734	823	1 465	1 073
Sweden					
Ore	75 946	79 738	75 552	114 854	124 500
Unwrought	40 790	43 932	45 002	48 786	43 876
Unwrought alloys	8 876	7 960	6 225	9 079	13 501
Scrap	184	420	151	680	221
Switzerland					
Unwrought (a)	3 860	5 344	6 100	3 155	2 849
Scrap	16 756	9 400	7 002	6 607	6 032
Turkey					
Ore (e)	891	7 220	9 856	10 135	12 836
Ukraine					
Unwrought (a) (f)	...	*10 400	*5 400	*3 000	*5 100
Scrap (f)	...	...	*1 400	*2 300	*900
United Kingdom					
Unwrought	90 685	65 697	85 007	104 327	82 893
Unwrought alloys	43 642	36 958	31 909	33 096	31 439
Scrap	10 878	10 068	10 618	6 178	12 153
Yugoslavia, Federal Republic of					
Concentrates	...	...	5 318	4 510	3 585
Unwrought (a)	(f) *3 300	25 600	18 646	5 335	2 220
Algeria					
Unwrought	200	1 539	1 682	1 595	...
Scrap	200	1 362	3 023	1 798	...
Morocco					
Ore	36 905	45 720	47 500	...	...
Unwrought	49 787	54 057	50 758	59 000	48 000
Namibia					
Concentrates (b)	----	----	11 407	11 999	5 360
Unwrought	22 177	24 416	1 354	283	----
South Africa					
Concentrates (b)	86 125	86 642	85 836	77 029	65 832
Unwrought	----	(f) *600	2 355	2 701	1 721
Tunisia					
Ore	9 928	8 674	5 917	3 684	7 885
Scrap	1 107	2 954	1 023	2 121	546
Canada					
Ores & concentrates (b) (g)	90 024	179 433	111 703	52 249	58 831
Unwrought	208 977	214 356	208 319	206 103	220 965
Scrap	7 871	9 692	12 973	7 632	6 465
Honduras					
Ores & concentrates (b)	2 461	4 669	5 930	4 329	5 226

## Exports of Lead

tonnes

Country	1995	1996	1997	1998	1999
Mexico					
Ores & concentrates	17 985	16 430	10 836	12 238	39 699
Unwrought	105 320	82 384	102 678	71 834	30 182
Scrap	2 440	3 560	2 290	1 292	1 790
USA					
Ores & concentrates (b)	88 544	129 789	82 190	87 938	93 504
of which, re-exports	28 779	69 780	39 721	15 516	----
Unwrought	48 540	82 265	70 429	70 417	84 599
Unwrought alloys	2 297	5 647	5 635	6 642	6 054
Scrap	104 352	85 376	89 417	101 667	115 030
Argentina					
Ores & concentrates	8 468	13 420	15 413	18 976	13 406
Bolivia					
Ore	35 076	29 417	35 812	34 937	24 925
Brazil					
Ores & concentrates	3 731	13 696	10 604	11 228	15 081
Peru					
Ores & concentrates	232 398	210 149	218 882	200 695	225 555
Unwrought (a)	79 762	84 138	91 286	96 721	98 675
China					
Ore	53 629	14 572	25 681	34 371	22 906
Unwrought (a)	185 284	260 515	184 569	250 940	468 368
Scrap	589	152	61	1 751	1 060
Dubai					
Scrap	...	...	6 201	2 871	...
Hong Kong					
Unwrought (a)	6 855	7 799	10 848	13 039	12 506
of which, re-exports	6 715	7 415	10 626	12 860	12 403
Scrap	762	285	93	429	1 195
India					
Unwrought (a) (i)	1 425	3 312	2 034	411	...
Indonesia					
Unwrought	2 060	1 729	4 832	6 255	...
Unwrought alloys	7 200	13 405	3 340	9 103	...
Scrap	42	49	109	3 791	...
Iran					
Ore (c)	134 050	...	10 850	9 644	...
Israel					
Unwrought (a) (f)	*600	*500	*1 900	*3 100	*3 500
Scrap (f)	*1 000	*1 300	*800	*500	*1 400
Japan					
Unwrought (a)	3 492	7 279	5 980	6 416	6 858
Scrap	1 195	9 562	15 614	8 575	9 368
Jordan					
Scrap	1 259	682	1 670	937	...
Kazakhstan					
Unwrought (a)	58 326	60 979	77 823	85 170	109 968
Scrap	115	1 650	852	167	120
Korea, Dem. P.R. of					
Unwrought (a) (f)	*6 800	*9 000	*8 100	*2 600	*3 400
Korea, Republic of					
Unwrought (a)	20 494	10 018	25 563	45 217	30 949
Malaysia					
Unwrought (a)	6 900	3 000	1 500	18 000	...
Scrap	900	1 300	2 700	1 900	...
Oman					
Unwrought	2 300	3 800	3 894	...	...
Saudi Arabia					
Unwrought (a)	4 200	12 400	*15 000	10 008	7 610
Scrap	11 900	1 889	4 085	1 211	4 641
Singapore					
Unwrought (a)	15 305	13 913	23 610	30 946	18 022
of which, re-exports	15 137	13 794	23 610	30 469	17 916
Scrap	10 479	3 787	2 234	4 161	2 475
of which, re-exports	1 743	151	2 234	891	129



**Exports of Lead**

tonnes

Country	1995	1996	1997	1998	1999
Taiwan					
Unwrought	224	1 913	783	6 161	12 163
Unwrought alloys	7 803	13 600	11 832	5 335	5 813
Thailand					
Ore	17 270	10 000	14 500	18 502	19 500
Unwrought	255	39	811	4 313	15
Scrap	52	47	276	519	775
Australia					
Ores & concentrates	146 708	165 029	194 456	350 755	408 968
Unwrought , base bullion (h)	167 169	168 225	171 511	134 897	150 809
Unwrought, refined (a)	199 780	186 089	199 864	170 416	244 972
Scrap	20 155	13 015	4 472	2 438	4 872
New Zealand					
Unwrought (d)	7 070	8 937	9 550	11 388	...
Scrap (d)	861	456	217	70	...

## 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
- (i) Years ended 31 March following that stated

## Imports of Lead

tonnes

Country	1995	1996	1997	1998	1999
Austria					
Unwrought (a)	46 271	40 425	44 295	50 910	36 534
Scrap	7 462	6 395	4 469	2 314	2 351
Belarus					
Unwrought	...	(h) 3 857	(h) 4 146	3 659	484
Scrap	*100	*200	*500	931	607
Belgium-Luxembourg					
Ore	86 998	100 450	62 349	95 581	96 710
Unwrought	20 066	17 475	34 272	30 980	43 849
Unwrought alloys	11 605	12 221	10 669	21 679	18 426
Scrap	53 974	30 612	20 882	19 611	28 612
Bulgaria					
Ore	56 462	56 404	60 739	...	...
Croatia					
Unwrought (a)	2 817	3 391	4 054	2 949	827
Cyprus					
Unwrought (a)	1 587	2 463	3 002	2 888	2 105
Czech Republic					
Unwrought (a)	15 700	14 100	18 821	28 816	34 306
Denmark					
Unwrought	2 946	3 218	2 692	1 753	1 062
Unwrought alloys	1 270	2 924	2 541	2 123	1 469
Scrap	1 743	1 148	2 620	1 611	1 895
Finland					
Unwrought	2 012	1 008	1 286	1 260	1 658
Unwrought alloys	1 570	348	765	570	475
Scrap	502	790	821	542	81
France					
Ore	195 812	205 016	205 411	201 999	192 078
Unwrought	42 102	47 987	40 095	35 964	58 384
Unwrought alloys	7 295	9 117	11 990	14 429	15 744
Scrap	90 042	35 139	37 609	43 194	51 764
Germany					
Ore	103 231	48 673	60 804	135 270	191 178
Unwrought	133 920	106 964	103 565	88 922	91 258
Unwrought alloys	14 347	19 618	15 482	33 734	22 243
Scrap	14 356	8 707	14 500	13 735	16 738
Greece					
Unwrought (a)	6 669	5 426	6 214	2 982	5 420
Scrap	2 855	1 931	8 100	10 861	4 897
Hungary					
Unwrought (a)	12 261	13 799	13 876	12 387	9 867
Irish Republic					
Unwrought (a)	17 859	25 502	21 325	27 329	20 761
Scrap	7 978	9 977	6 684	5 066	7 889
Italy					
Ore	66 128	104 483	92 300	97 969	182 670
Unwrought	78 282	75 146	83 682	63 422	72 520
Unwrought alloys	26 884	28 980	21 775	18 686	25 635
Scrap	4 467	8 449	7 369	2 843	2 157
Macedonia					
Unwrought	...	329	3 363	1 024	...
Scrap	...	380	118	216	...
Netherlands					
Unwrought	46 536	39 990	44 108	31 942	10 084
Unwrought alloys	10 321	8 253	5 659	...	9 128
Scrap	13 251	10 095	10 302	9 787	10 821
Norway					
Unwrought (a)	5 087	4 304	3 146	2 322	2 483
Poland					
Unwrought (a)	5 501	5 900	10 400	8 900	14 788
Portugal					
Unwrought (a)	20 300	18 596	22 934	28 072	19 615
Romania					
Ores & concentrates	...	3 001	5 182	7 449	12 966
Unwrought (a)	500	200	293	2 355	6 537

## Imports of Lead

tonnes

Country	1995	1996	1997	1998	1999
Russia					
Ore	...	17 490	...	(f) *24 000	(f) *43 000
Unwrought	62 100	45 071	30 054	19 536	27 242
Scrap	*500	1 358	820	247	20
Slovakia					
Unwrought (a)	2 300	1 500	1 000	1 053	957
Slovenia					
Unwrought (a)	6 300	8 300	9 200	10 200	9 025
Scrap	17 500	2 700	----	49	101
Spain					
Unwrought	43 820	(a) 63 436	67 745	80 785	86 108
Unwrought alloys	985	...	13 315	15 198	15 185
Scrap	5 072	3 532	9 635	12 394	13 972
Sweden					
Unwrought	1 060	7 522	686	1 957	1 400
Unwrought alloys	1 327	1 846	1 747	3 945	3 808
Scrap	28 209	11 153	4 717	1 857	3 055
Switzerland					
Unwrought (a)	6 077	5 726	6 966	4 468	6 237
Turkey					
Unwrought (a)	35 834	39 058	41 324	50 713	40 283
United Kingdom					
Ores & concentrates (b)	45 503	44 654	40 569	34 276	34 080
Unwrought	164 680	183 408	210 837	197 127	210 939
Unwrought alloys	2 218	2 893	1 448	2 727	3 078
Scrap	19 720	8 882	5 120	5 537	8 402
Algeria					
Unwrought	4 000	7 235	4 290	7 280	...
Egypt					
Unwrought	5 800	8 318	16 548	13 079	8 960
Scrap	2 600	243	14 380	5 256	...
Morocco					
Ore	23 665	29 476	14 403	...	...
Unwrought alloys	1 740	133	532	...	...
Namibia					
Concentrates (b)	6 872	7 662	----	5	...
South Africa					
Unwrought (a)	8 330	10 397	20 581	16 914	11 774
Scrap	878	1 901	4 688	7 126	3 253
Tunisia					
Unwrought (a)	4 441	5 094	4 767	5 650	4 642
Uganda					
Unwrought (a)	...	271	735	503	...
Canada					
Ores & concentrates (b) (g)	66 996	89 498	53 194	31 290	58 980
Unwrought	4 869	28 151	36 424	34 140	13 575
Scrap	95 705	76 992	85 293	93 476	110 918
Cuba					
Unwrought	*2 200	*2 000	*2 000	*2 000	...
El Salvador					
Scrap	1 599	2 466	2 604	3 231	2 697
Mexico					
Ores & concentrates	22 922	29 164	16 478	26 615	28 304
USA					
Ores & concentrates (b)	124 032	369 179	130 667	90 018	40 896
Unwrought	233 026	238 389	237 107	234 350	276 398
Unwrought alloys	33 234	30 217	29 305	34 339	36 972
Scrap	10 343	17 543	16 453	12 184	16 171
Argentina					
Unwrought	1 656	2 825	7 649	8 755	4 306
Brazil					
Ore	9 498	...	...	...	...
Unwrought (a)	47 707	33 346	60 633	59 956	56 013
Scrap	*5 000	5 034	*5 000	*5 000	...

## Imports of Lead

tonnes

Country	1995	1996	1997	1998	1999
Chile					
Unwrought (a)	7 289	6 119	8 666	3 995	...
Colombia					
Unwrought (a)	3 481	2 993	6 938	9 800	7 644
Scrap	1 651	403	96	170	...
Venezuela					
Unwrought (a)	8 778	5 935	6 354	5 892	5 201
Scrap	1 883	2 031	1 860	1 338	509
China					
Ores & concentrates	31 817	69 958	118 330	236 034	169 669
Unwrought (a)	4 583	7 038	6 985	15 413	15 774
Scrap	5 690	820	204	7	----
Dubai					
Unwrought	...	2 150	2 248	4 042	...
Scrap	...	2 837	1 354	351	...
Hong Kong					
Unwrought (a)	8 284	8 459	8 287	20 502	13 790
Scrap	822	727	77	13	46
India					
Ore (c)	14 625	52 428	40 287	10 678	...
Unwrought (c)	20 837	31 831	41 243	51 608	...
Unwrought alloys (c)	1 132	1 711	6 547	13 539	...
Scrap (c)	40 882	9 654	16 346	16 373	...
Indonesia					
Unwrought	54 857	59 602	87 847	30 940	...
Unwrought alloys	16 100	14 427	3 606	1 879	...
Scrap	989	2 507	968	0	...
Iran					
Unwrought (d)	...	...	8 578	9 892	...
Israel					
Unwrought	(f) *1 400	(f) *1 600	(f) *1 600	1 383	(f) *500
Japan					
Ore	164 819	151 797	154 470	183 272	167 880
Unwrought	79 563	40 066	44 236	28 774	16 632
Unwrought alloys	12 189	11 753	9 210	6 919	4 455
Jordan					
Unwrought	1 700	...	1 518	2 496	...
Kazakhstan					
Ore	7 861	6 053	31 976	57 382	98 989
Scrap	*5 000	*7 000	*8 000	9 337	8 581
Korea, Republic of					
Ores & concentrates	140 653	96 026	104 468	164 829	178 010
Unwrought	84 001	151 348	137 411	77 420	90 817
Unwrought alloys	64 139	25 952	32 945	41 115	25 746
Scrap	3 194	4 779	4 168	972	6 359
Malaysia					
Unwrought (a)	56 900	91 100	60 600	62 300	...
Scrap	800	200	*100	*300	...
Oman					
Unwrought	776	335	3 430	4 916	...
Pakistan					
Unwrought (a) (e)	...	6 985	5 747	6 594	237
Philippines					
Unwrought (a)	11 100	10 800	8 166	5 872	...
Saudi Arabia					
Unwrought (a)	...	260	1 000	1 390	3 791
Singapore					
Unwrought	16 616	44 063	27 291	35 457	101 716
Scrap	7 865	3 041	2 047	2 281	2 236
Taiwan					
Unwrought	110 511	105 354	105 778	107 734	135 173
Unwrought alloys	3 393	4 215	8 399	3 384	3 074
Thailand					
Unwrought	30 464	42 961	28 643	(a) 23 762	(a) 166 180
Unwrought alloys	13 320	19 015	9 867	...	...
Scrap	680	628	97	7	49

**Imports of Lead**

tonnes

Country	1995	1996	1997	1998	1999
Australia					
Ores & concentrates	31 680	49 573	50 014	...	...
Unwrought (a)	8 814	7 462	6 771	11 251	10 417
New Zealand					
Unwrought (a) (e)	1 734	...	2 092	944	...

## 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) Imports from CIS only

**Production of Lithium Minerals**

Country	1995	1996	1997	1998	1999
Portugal					
Lepidolite	8 740	7 626	6 838	13 306	...
Namibia	2 611	1 971	632	247	----
Zimbabwe	33 498	30 929	49 833	28 055	36 671
Canada	*21 000	*22 000	*22 500	*22 500	*22 500
USA (a)	(b) *3 500	(b) *4 000	(b) *4 000	...	...
Argentina	*400	----	(c) (d) 1 876	(c) (d) 16 760	...
Brazil					
Amblygonite	29	41	24	----	----
Petalite	137	30	386	260	493
Spodumene	7 005	6 500	6 523	9 225	10 629
Chile (c)	12 943	14 180	24 246	28 377	*28 000
China	49 897	40 640	66 909	43 122	46 198
Australia					
Spodumene	80 135	139 287	56 567	42 337	54 023
World Total (Li content)	*9 200	*10 400	*12 500	*13 000	*11 300

Note(s):-

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

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

**Exports of Lithium**

tonnes

Country	1995	1996	1997	1998	1999
Belgium-Luxembourg					
Oxides	94	8	161	273	406
Carbonate	9	12	2 563	2 804	3 951
France					
Oxides	148	108	93	131	88
Carbonate	532	1 772	2 163	2 528	2 563
Germany					
Oxides	554	802	819	644	650
Carbonate	2 278	2 978	1 439	989	1 403
Netherlands					
Oxides	351	...	493	299	220
Carbonate	572	...	634	156	281
Russia					
Oxides	1 471	710	914	868	627
Carbonate	317	76	17	2	12
Spain					
Carbonate	18	...	231	14	301
Switzerland					
Oxides	...	...	33	117	63
United Kingdom					
Oxides	202	171	103	134	91
Carbonate	536	638	342	397	311
Namibia					
Lithium minerals	599	323	381	----	----
Zimbabwe					
Lithium minerals	17 867	30 315	11 223	8 872	16 480
USA					
Oxides	4 105	4 432	5 739	4 365	5 027
Carbonate	6 567	7 883	5 119	3 295	2 789
Argentina					
Carbonate	...	...	515	5 082	1 280
Chile					
Carbonate	13 089	13 694	21 597	24 699	...
China					
Oxides	3 251	1 131	992	1 913	2 195
Carbonate	3 613	3 102	937	932	602
Australia					
Lithium minerals	71 242	46 770	...	...	...

## Imports of Lithium

Country	1995	1996	1997	1998	1999
Austria					
Carbonate	59	46	61	280	106
Belgium-Luxembourg					
Oxides	332	154	325	603	643
Carbonate	554	860	2 241	3 500	4 020
France					
Oxides	830	512	346	429	482
Carbonate	1 069	1 050	1 026	1 203	1 293
Germany					
Oxides	3 931	4 051	4 975	4 563	3 903
Carbonate	5 120	5 891	7 286	2 429	4 034
Italy					
Oxides	...	...	167	278	274
Carbonate	...	...	1 720	1 937	1 057
Netherlands					
Oxides	430	...	171	298	249
Carbonate	1 314	...	711	673	754
Russia					
Oxides	...	...	140	55	517
Carbonate	...	...	297	1 647	1 793
Spain					
Oxides	183	...	188	238	257
Carbonate	568	...	546	421	633
Sweden					
Oxides	...	...	54	156	160
Carbonate	...	...	280	103	208
United Kingdom					
Oxides	645	763	602	589	391
Carbonate	1 328	1 963	2 070	1 925	766
South Africa					
Oxides	6 875	6 094	228	152	199
Carbonate	...	...	127	146	133
Canada					
Carbonate	1 050	1 419	1 109	1 151	1 086
USA					
Carbonate	5 969	4 587	5 090	14 005	13 927
Venezuela					
Carbonate	510	...	413	...	680
China					
Oxides	35	86	----	300	182
Carbonate	----	68	1 397	2 956	3 543
Hong Kong					
Oxides	...	...	123	302	40
India					
Oxides (a)	678	672	1 230	784	...
Carbonate (a)	202	192	262	152	...
Indonesia					
Oxides	222	82	90	63	...
Japan					
Oxides	1 183	1 538	1 360	1 343	1 572
Carbonate	4 598	5 584	5 927	4 768	6 655
Korea, Republic of					
Oxides	276	376	288	249	...
Carbonate	1 044	1 232	1 031	713	983
Taiwan					
Carbonate	119	129	127	437	115
Thailand					
Oxides	162	167	165	50	120
Australia					
Oxides	181	213	245	230	271
Carbonate	138	104	164	162	127

Note(s) :-

(a) Years ended 31 March following that stated



**Production of Magnesite**

tonnes

Country	1995	1996	1997	1998	1999
Austria	783 497	710 620	790 297	722 876	748 635
Greece	565 720	682 346	623 030	698 049	495 144
Netherlands (f)	*200 000	*200 000	*200 000	*200 000	*200 000
Poland	21 523	19 257	6 403	5 745	----
Russia	3 687 000	3 181 000	2 700 000	2 200 000	2 400 000
Slovakia	814 000	824 800	863 600	877 842	826 902
Spain	607 048	591 745	*500 000	*600 000	...
Turkey	1 928 064	2 341 922	2 063 975	2 703 720	1 724 744
Yugoslavia, Federal Republic of	75 000	88 696	98 384	80 923	30 642
Egypt (d)	11 258	12 627	7 536	2 806	...
South Africa	84 639	71 358	76 699	74 375	*75 000
Zimbabwe	5 597	10 659	13 050	4 321	5 356
Canada (b)	*165 000	*165 000	*165 000	*165 000	*165 000
Brazil (c)	334 000	326 538	294 629	308 300	259 834
Colombia	*10 500	12 634	*10 500	*10 500	*10 500
China	*8 000 000	*8 000 000	*8 000 000	*8 500 000	*8 500 000
India (e)	345 077	377 510	373 520	349 852	329 790
Iran (a)	78 654	110 554	115 758	*130 000	*155 000
Korea, Dem. P.R. of	*1 600 000	*1 600 000	*1 600 000	*800 000	*800 000
Pakistan (d)	4 733	13 876	4 057	3 157	2 125
Philippines	*700	*700	*700	*700	*700
Australia	262 932	237 707	245 192	360 113	280 363
World Total	19 600 000	19 600 000	18 800 000	18 800 000	17 600 000

## 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
- (e) Years ended 31 March following that stated
- (f) Chloride produced from solution mining

## Exports of Magnesite and Magnesias

Country	1995	1996	1997	1998	1999
Austria					
Magnesite	*300	100	89	80	...
Magnesia	105 596	94 754	132 283	95 145	...
Belgium-Luxembourg					
Magnesite	472	486	212	384	364
Magnesia	40 026	44 485	64 508	82 040	51 821
Czech Republic (a)	*2 000	*4 000	*2 400	*3 800	*300
Denmark	442	447	1 058	1 427	976
France					
Magnesia	14 964	22 316	20 926	16 809	12 889
Germany					
Magnesite	2 049	3 391	1 211	602	119
Magnesia	73 859	69 347	70 206	71 504	41 274
Greece					
Magnesite	19 241	21 023	13 728	16 205	19 027
Magnesia	186 731	158 423	168 398	149 459	138 019
Irish Republic	722	584	3 696	554	707
Italy					
Magnesite	3 757	4 836	12 653	7 393	4 505
Magnesia	87 003	71 531	37 841	54 927	38 418
Netherlands					
Magnesite	4 779	10 980	10 413	476	636
Magnesia	79 542	80 215	319 723	95 637	113 402
Norway	4 276	3 504	*3 500	*3 500	...
Russia	322 408	267 275	299 395	204 662	161 814
Slovakia	250 200	249 100	236 700	310 400	375 100
Spain					
Magnesite	36 600	1 385	1 400	397	24 080
Magnesia	133 644	132 013	136 560	139 567	153 600
Sweden	4 190	332	159	370	240
Turkey					
Magnesite	75 748	37 206	27 115	39 135	36 089
Magnesia	144 083	124 944	165 794	173 115	188 931
United Kingdom					
Magnesite	311	340	175	234	70
Magnesia	63 083	64 564	58 774	46 754	35 838
Yugoslavia, Federal Republic of					
Magnesia	*7 000	9 600	6 428	4 338	259
Zimbabwe	7 816	6 389	501	2 189	...
Canada					
Magnesia	61 586	54 250	54 167	57 102	61 944
Mexico					
Magnesia	49 683	39 422	47 607	30 872	35 901
USA					
Magnesite	31 901	33 192	51 797	54 398	29 589
Magnesia	96 769	111 038	102 628	94 948	92 868
Brazil					
Magnesia	141 515	93 781	92 062	87 714	66 863
China					
Magnesite	124 173	206 576	166 536	108 535	33 131
Magnesia	2 185 767	1 724 195	2 122 125	1 945 208	2 068 708
Hong Kong (c)	15 444	13 076	8 495	9 284	31 088
India					
Magnesite (b)	201	830	80	319	...
Magnesia (b)	665	1 397	535	1 350	...
Israel					
Magnesia	*11 000	*9 000	*7 000	*11 000	...
Japan					
Magnesite	358	393	418	285	174
Magnesia	64 366	59 725	55 350	37 054	38 354
Korea, Dem. P.R. of (a)	*106 000	*94 500	*86 100	*31 500	*66 300
Korea, Republic of					
Magnesia	33	50	----	2 607	5 190
Singapore	873	655	987	1 259	197

**Exports of Magnesite and Magnesia**

tonnes

Country	1995	1996	1997	1998	1999
Taiwan					
Magnesia	2 215	2 600	2 553	327	2 171
Australia					
Magnesite	665	155	604	811	163
Magnesia	94 911	73 540	89 737	139 568	123 655

## 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

## Imports of Magnesite and Magnesias

Country	1995	1996	1997	1998	1999
Austria					
Magnesite	199 100	132 700	176 566	136 780	108 884
Magnesia	41 300	29 900	49 691	53 684	32 182
Belarus	*1 100	*1 100	*2 100	2 846	4 007
Belgium-Luxembourg					
Magnesite	1 557	1 178	1 274	1 585	1 738
Magnesia	68 293	82 493	68 013	82 172	61 148
Bulgaria	9 332	11 313	8 753	*9 000	...
Croatia	802	688	677	836	405
Czech Republic					
Magnesite	7 500	2 300	972	885	1 810
Magnesia	48 500	40 200	41 237	40 207	36 544
Denmark					
Magnesite	4 101	1 074	1 143	1 077	639
Magnesia	7 842	4 809	7 045	5 178	3 509
Finland					
Magnesia	3 973	12 653	8 032	12 834	12 536
France					
Magnesite	2 671	4 080	7 544	9 615	21 054
Magnesia	217 764	192 423	186 512	199 802	145 692
Germany					
Magnesite	16 838	26 105	10 547	8 371	15 190
Magnesia	568 632	523 866	496 025	471 106	385 102
Greece					
Magnesite	18 529	11 032	1 508	9 851	8 275
Magnesia	273	1 420	381	541	814
Hungary	18 600	20 200	12 849	12 163	9 787
Irish Republic					
Magnesite	240	337	232	252	3 531
Magnesia	44 762	47 152	42 419	45 694	44 757
Italy					
Magnesite	28 933	27 136	21 130	31 542	30 695
Magnesia	121 808	103 752	121 772	111 329	98 192
Lithuania					
Magnesite	----	1 300	1 393	1 182	2 167
Netherlands					
Magnesite	2 890	5 136	1 823	2 890	13 228
Magnesia	67 811	129 955	67 510	210 890	235 603
Norway					
Magnesite	1 700	243	187	5 302	5 469
Magnesia	3 815	4 833	5 833	386	222
Poland	103 200	95 100	110 100	98 400	79 277
Portugal					
Magnesite	1 800	1 590	2 530	1 762	1 869
Magnesia	3 500	2 850	2 699	2 597	3 203
Romania	29 264	37 842	28 322	27 905	21 960
Russia	15 300	20 422	76 993	32 524	42 092
Slovakia	15 600	20 500	24 300	18 600	21 518
Slovenia	4 200	4 200	5 900	7 100	7 993
Spain					
Magnesite	1 974	3 098	7 683	5 548	4 421
Magnesia	96 302	82 845	89 628	103 699	95 497
Sweden					
Magnesite	394	145	52	52	169
Magnesia	36 013	32 622	24 478	37 095	39 854
Switzerland					
Magnesite	346	619	289	1 114	306
Magnesia	4 762	3 606	4 001	3 867	3 538
Turkey					
Magnesia	21 984	15 654	19 627	15 164	18 288
Ukraine	...	343 745	509 873	357 850	484 823
United Kingdom					
Magnesite	21 849	17 600	11 190	12 176	40 888
Magnesia	155 566	155 458	153 388	147 167	120 289
Yugoslavia, Federal Republic of					
Magnesite	*4 000	6 500	5 468	5 617	1 054
Magnesia	*1 000	5 300	2 400	...	122

**Imports of Magnesite and Magnesias**

tonnes

Country	1995	1996	1997	1998	1999
Egypt	29 700	27 774	16 706	11 748	10 937
South Africa					
Magnesite	6 800	6 737	1 917	3 965	3 441
Magnesia	125 853	85 974	70 144	69 005	54 229
Canada					
Magnesite	158 313	220 375	190 355	120 294	25 914
Magnesia	102 553	130 375	84 378	103 898	112 090
Mexico					
Magnesite	712	1 177	1 113	1 023	522
Magnesia	33 600	50 613	40 631	38 693	36 609
USA					
Magnesite	13 605	9 185	10 863	4 645	7 822
Magnesia	543 971	397 203	446 748	568 382	532 292
Argentina					
Magnesia	25 141	21 015	23 286	22 385	14 879
Brazil					
Magnesia	7 048	12 766	9 874	7 844	...
Chile					
Magnesia	11 481	15 235	13 201	18 688	...
Colombia	6 675	7 032	10 024	11 960	8 616
Peru					
Magnesia	4 633	4 181	2 148	5 067	2 274
Venezuela					
Magnesite	26 617	18 525	20 537	13 487	8 888
Magnesia	30 284	26 717	44 289	16 600	12 640
China	3 825	7 863	5 983	7 420	5 295
Hong Kong	9 807	7 092	3 329	3 296	3 066
India					
Magnesite (b)	2 876	2 070	2 284	5 074	...
Magnesia (b)	115 097	64 883	54 906	37 026	...
Indonesia					
Magnesite	312	567	313	217	...
Magnesia	52 491	34 138	30 012	27 163	...
Israel	*2 200	*1 900	*3 000	*1 400	...
Japan					
Magnesite	14 469	6 129	2 738	1 828	1 607
Magnesia	593 617	506 740	577 942	499 443	486 827
Kazakhstan	*38 200	*30 200	*20 500	12 184	...
Korea, Republic of					
Magnesite	1 900	466	5 088	1 240	1 237
Magnesia	174 478	182 780	186 167	175 726	177 116
Malaysia					
Magnesite	12 300	7 400	14 200	4 800	...
Philippines					
Magnesite	10 721	6 033	4 936	1 971	...
Magnesia	4 288	8 583	12 119	2 653	...
Singapore	13 068	12 006	13 649	9 286	2 504
Taiwan					
Magnesite	681	6 584	703	2 209	273
Magnesia	158 116	146 904	194 721	195 145	211 222
Thailand					
Magnesite	32 140	24 156	26 923	16 544	24 144
Magnesia	6 601	5 175	4 993	4 976	4 043
Australia					
Magnesite	2 576	1 151	776	2 428	2 391
Magnesia	3 867	8 503	8 755	4 469	3 990
New Zealand					
Magnesite (a)	1 265	...	2 089	3 062	...
Magnesia (a)	28 168	...	25 928	20 767	...

Note(s) :-

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

(a) Years ended 30 June of that stated

(b) Years ended 31 March following that stated

## Production of Manganese Ore

Country	1995	1996	1997	1998	1999
Austria (a)	42 463	26 000	*25 000	...	...
Bosnia & Herzegovina	*2 000	*2 000	...	...	...
Bulgaria	19 000	44 270	47 430	55 600	----
Georgia (f)	41 900	101 900	14 200	16 000	47 900
Greece	2 130	2 572	2 542	1 898	345
Hungary	56 360	65 016	57 000	34 000	32 000
Italy	6 448	6 523	2 128	974	...
Romania	130 000	*150 000	...	...	...
Turkey	37 000	37 500	31 160	53 283	29 000
Ukraine (f)	3 200 000	3 070 000	3 039 500	2 217 000	1 984 800
Gabon	1 930 000	1 983 000	1 904 000	2 092 000	2 092 000
Ghana	205 200	447 900	333 400	384 173	611 500
Morocco	31 263	29 466	30 806	28 332	29 150
Namibia	100 000	92 647	39 671	----	----
South Africa					
Metallurgical	3 150 688	3 240 069	3 087 775	3 012 827	3 092 784
Chemical	47 881	(e) ...	32 886	31 294	29 210
Mexico	370 200	456 300	507 400	492 400	445 000
Brazil (b)	2 613 477	2 735 746	*2 300 000	*2 300 000	*2 000 000
Chile	70 449	62 887	63 673	48 931	40 581
China	8 010 700	7 663 300	5 975 600	5 283 000	3 186 000
India (c) (g)	1 836 705	1 870 783	1 641 963	1 537 693	1 565 483
Indonesia	*19 000	*19 000	*20 000	...	...
Iran (d)	99 332	82 694	86 523	...	...
Kazakhstan	492 000	472 900	426 100	634 100	536 000
Malaysia	27 000	13 000	----	----	----
Thailand	3 478	3 095	499	52	721
Australia	2 176 000	2 109 000	2 136 000	1 500 000	1 900 000
World Total	24 700 000	24 800 000	22 000 000	20 000 000	17 900 000

## 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
- (g) Years ended 31 March following that stated

## Exports of Manganese

tonnes

Country	1995	1996	1997	1998	1999
Austria					
Metal	37	752	311	58	2 517
Belgium-Luxembourg					
Ore	14 298	20 196	20 899	16 648	18 734
Metal	2 075	2 217	2 489	2 247	1 347
Bulgaria					
Ore	35 306	39 508	29 034	*30 000	...
Czech Republic					
Metal	...	...	...	20	157
Estonia					
Metal	11	...	...	41	437
France					
Ore (a)	133 661	160 742	107 499	116 556	198 347
Metal	1 159	777	811	610	120
Georgia					
Metal (e)	...	...	...	*200	*200
Germany					
Metal	8 488	6 798	8 859	8 243	6 654
Italy					
Ore	211	3 109	4 043	1 627	266
Metal	56	506	166	103	623
Netherlands					
Ore	14 455	19 065	14 660	14 075	12 125
Metal	8 906	5 543	3 560	5 160	5 806
Norway					
Metal	949	116	68	35	...
Russia					
Metal (e)	*600	*1 600	*1 700	*5 200	*2 100
Spain					
Ore	1 220	2 854	1 459	1 414	1 844
Metal	339	1 563	2 347	2 334	2 924
Sweden					
Metal	237	...	145	115	105
Turkey					
Metal	...	----	5	25	107
Ukraine					
Ore	183 956	201 621	232 767	286 622	172 377
Metal	(e) *6 800	(e) *5 800	(e) *4 900	(e) *26 200	34 950
United Kingdom					
Metal	*2 500	*2 400	*3 400	4 742	*3 900
Gabon					
Ore	1 852 000	1 977 000	1 789 900	2 063 800	...
Ghana					
Ore	193 096	266 440	...	...	479 437
Morocco					
Ore	27 916	28 770	31 063	30 000	...
Namibia					
Ore	83 913	92 647	34 400	----	----
South Africa					
Ore	1 589 226	1 648 053	1 772 801	1 679 975	1 568 560
Metal	(e) *34 900	(e) *23 300	36 234	35 362	29 960
Canada					
Metal	344	274	260	484	223
Mexico					
Ore	144 361	57 629	89 307	48 713	31 325
USA					
Ore	17 808	32 324	84 294	8 406	4 240
Metal	5 805	5 843	8 005	5 837	3 575
Brazil					
Ore	1 245 054	987 877	981 810	1 089 946	506 640
China					
Ore	3 292	4 191	579	1 616	7 206
Metal	57 293	49 934	63 471	73 214	80 626

**Exports of Manganese**

Country	1995	1996	1997	1998	1999
Hong Kong					
Metal (c)	339	279	121	38	130
India					
Ore (b) (d)	236 529	309 846	259 194	166 963	...
Indonesia					
Ore (a)	----	13 043	8 500	10 000	...
Japan					
Metal	176	532	485	391	35
Kazakhstan					
Ore	*180 000	*250 000	*300 000	421 832	547 877
Metal (e)	...	*300	*100	*900	*200
Singapore					
Ore	13 863	6 422	17 218	19 825	19 319
of which, re-exports	3 856	4 972	3 952	3 781	4 988
Australia					
Ore	*1 704 000	*1 740 000	*1 541 000	*1 066 000	*1 312 000
Metal	226	39 335	1 098	49	1 218

## 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



## Imports of Manganese

tonnes

Country	1995	1996	1997	1998	1999
Austria					
Metal	1 395	1 706	1 882	2 143	8 287
Belgium-Luxembourg					
Ore	94 326	164 757	139 130	127 521	83 407
Metal	3 896	4 323	4 076	3 728	4 823
Bulgaria					
Ore	1 055	967	1 918	*2 000	...
Croatia					
Metal	65	72	54	51	14
Czech Republic					
Ore	47 253	18 515	18 231	3 507	3 505
Metal	200	200	198	207	155
Denmark					
Ore	132	218	500	207	129
Metal	61	55	31	29	129
Estonia					
Metal	29	...	...	41	437
Finland					
Ore	15 873	9 424	24 339	22 184	18 681
Metal	157	98	140	1 375	774
France					
Ore (b)	1 274 390	1 111 060	998 570	1 204 454	950 913
Metal	6 712	5 897	6 352	8 251	6 396
Germany					
Ore (b)	11 355	12 717	26 234	23 108	21 711
Metal	24 898	18 666	18 324	42 939	27 449
Greece					
Ore	23 720	12 720	27 130	22 396	23 050
Metal	378	392	399	500	474
Hungary					
Metal	----	200	328	357	361
Irish Republic					
Ore (b)	25 443	39 259	47 339	37 408	39 799
Metal	19	25	16	64	55
Italy					
Ore (b)	327 145	201 200	166 266	283 914	135 299
Metal	3 941	3 445	2 665	2 791	2 708
Macedonia					
Ore	*45 000	16 000	40 453	12 625	...
Netherlands					
Ore	29 708	25 792	18 057	24 485	19 833
Metal	10 693	9 232	6 128	8 270	8 156
Norway					
Ore	734 973	676 573	730 758	721 529	650 379
Metal	1 949	1 540	1 648	2 224	1 783
Poland					
Ore	166 359	200 200	155 600	109 600	9 950
Metal	359	408	319	310	337
Romania					
Ore	189 671	197 862	98 943	46 763	35 545
Metal	100	200	...	115	153
Russia					
Ore	295 000	270 777	177 539	479 117	738 422
Metal	*300	310	64	1 320	2 832
Slovakia					
Ore	80 197	120 870	113 852	148 434	185 765
Spain					
Ore	318 091	402 092	275 957	486 951	332 673
Metal	1 932	2 054	4 101	5 147	4 227
Sweden					
Ore	4 459	172	93	1 735	3 071
Metal	2 305	2 299	2 669	3 257	8 059
Switzerland					
Metal	539	633	627	483	480
Turkey					
Metal	289	175	106	78	50

## Imports of Manganese

Country	1995	1996	1997	1998	1999
United Kingdom					
Ore (b)	91 991	40 306	71 233	28 300	8 233
Metal	6 365	7 477	7 225	8 796	7 287
Cameroon					
Ore	1 500	1 900	*2 000	*2 000	...
Egypt					
Ore	1 000	12 617	953	674	483
Kenya					
Ore (b)	2 709	414	1 660	2 236	1 503
South Africa					
Ore	5 900	5 180	14 797	4 023	5 017
Metal	100	500	200	83	322
Canada					
Ore (a)	9 603	6 736	3 974	24 967	59 301
Metal	4 932	4 853	5 087	5 580	5 853
Mexico					
Ore	76 727	62 773	109 022	78 176	75 431
USA					
Ore	394 048	461 525	356 903	345 645	471 706
Metal	11 048	11 750	15 062	16 026	15 335
Argentina					
Ore	77 225	63 615	74 093	64 419	20 345
Brazil					
Metal	3 008	2 658	3 353	2 247	2 161
Colombia					
Ore	1 683	12 492	13 134	18 036	1 816
Venezuela					
Ore	112 520	109 000	104 011	99 800	47 785
China					
Ore	1 289 870	1 585 287	1 316 784	1 179 052	1 056 874
Metal	337	278	532	122	79
Dubai					
Metal	...	23	88	29	...
Hong Kong					
Metal	514	399	319	254	354
India					
Ore (c)	3 689	2 760	5 065	4 343	...
Metal (c)	1 380	1 333	1 298	1 565	...
Indonesia					
Ore (b)	31 752	13 052	15 488	24 724	...
Metal	181	149	100	37	...
Israel					
Ore	*2 000	*2 700	*3 500	*1 800	...
Japan					
Ore (b)	1 272 977	1 261 623	1 363 516	1 207 907	1 227 064
Metal	33 827	36 846	40 565	39 197	39 936
Korea, Republic of					
Ore	500 999	392 179	482 797	494 333	503 337
Metal	3 243	2 650	3 337	5 539	10 580
Philippines					
Ore (b)	4 617	15 362	13 559	800	...
Saudi Arabia					
Ore	25 955	48 586	8 459	93 219	115 806
Metal	...	...	1 773	...	904
Singapore					
Ore	50 676	37 861	38 600	----	----
Metal	200	100	111	134	1 112
Taiwan					
Ore	72 570	62 305	65 971	57 714	29 028
Metal	548	440	590	886	841
Thailand					
Metal	81	152	147	148	114

## Manganese

**Imports of Manganese**

tonnes

Country	1995	1996	1997	1998	1999
Australia					
Ore	22	130	26	2 034	11 138
Metal	2 366	1 206	1 783	2 121	1 921

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) Years ended 31 March following that stated

**Production of Mercury**

Country	1995	1996	1997	1998	1999
Finland	90 245	88 120	63 000	54 000	55 000
Slovenia	5 000	5 000	5 000	5 000	-----
Spain	1 503 648	861 825	389 229	672 681	433 000
Ukraine	*40 000	*30 000	-----	-----	-----
Algeria	295 148	368 081	490 383	224 077	240 327
Mexico	*15 000	*15 000	*15 000	*15 000	*15 000
USA	*15 000	*15 000	*15 000	*15 000	*15 000
Chile (a) (b)	9 000	5 000	4 000	5 000	6 500
China	779 000	508 000	835 000	225 000	195 000
Kyrgyzstan	380 000	642 000	611 000	637 600	645 900
Tajikistan	*50 000	*45 000	*40 000	*35 000	*35 000
World Total	3 200 000	2 600 000	2 500 000	1 900 000	1 600 000

## 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	1995	1996	1997	1998	1999
Austria	800	1 000	8 400	67 100	2 100
Belgium-Luxembourg	13 000	35 000	10 400	22 300	52 500
Czech Republic	...	...	8 000	3 000	3 000
Denmark	4 700	100	4 414	399	245
Estonia	...	...	35 000	17 000	...
Finland	141 000	85 000	138 780	115 238	36 918
France	11 000	114 000	15 900	34 000	94 600
Germany	116 300	99 500	95 600	136 400	152 300
Italy	29 000	58 000	43 773	12 011	1 164
Netherlands	256 000	250 000	580 000	199 700	90 600
Norway	...	...	52 647	32 008	14 525
Poland	8 000	4 000	...	...	7 000
Russia	(a) *926 000	(a) *345 900	(a) *133 000	(a) *70 000	965 000
Slovenia	...	6 289	673	16 097	545
Spain	677 000	549 000	594 295	312 578	511 305
Sweden	1 000	1 000	...	2 000	1 000
Switzerland	18 783	3 507	6 908	21 679	41 153
Ukraine	(a) *23 000	40	28 290	5 028	----
United Kingdom	224 168	109 770	16 628	34 528	5 251
Algeria	...	245 000	394 715	376 913	...
Canada	107 394	137 065	4 264	8 037	1 778
USA	178 905	64 097	133 794	63 155	203 230
Chile	9 075	4 761	4 244	5 382	...
China	32 889	16 579	15 749	88 442	2 088
Hong Kong (b)	1 577 054	389 353	710 230	352 114	141 700
Japan	1 638	44 606	6 213	4 924	7 074
Korea, Republic of	419	516	1 568	598	1 903
Kyrgyzstan	261 000	628 000	692 000	623 000	...
Singapore (b)	2 467	1 147	1 752	3 872	4 254
Taiwan	18 231	9 599	36 381	1 728	----
Australia	760	1 453	848	14 946	3 000

Note(s):-

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

(b) Re-exports

## Imports of Mercury

Country	1995	1996	1997	1998	1999
Austria	3 000	1 100	9 900	900	1 500
Belgium-Luxembourg	37 000	53 000	70 000	72 600	102 600
Czech Republic	...	...	5 000	4 000	3 000
Denmark	1 900	1 100	1 405	856	1 070
Finland	...	...	4 730	9 070	12 659
France	96 000	65 000	23 100	36 000	206 700
Germany	133 500	90 000	77 700	41 400	27 600
Greece	3 000	4 000	5 000	4 000	4 001
Hungary	4 000	5 000	...	...	...
Irish Republic	5 300	1 600	122	429	103 960
Italy	52 000	19 000	29 194	11 268	17 341
Netherlands	465 000	1 041 000	495 000	424 300	59 900
Norway	7 000	3 000	304	585	314
Poland	12 000	4 000	16 000	3 000	4 000
Portugal	...	----	8 126	933	869
Romania	147 000	98 000	1 000	...	----
Russia	...	...	30 000	46 000	11 000
Slovakia	...	...	3 000	771	8 000
Spain	11 000	299 000	148 980	224 706	132 400
Sweden	5 000	26 000	38 000	15 000	17 000
Switzerland	19 810	13 185	28 231	11 333	7 895
Turkey	15 764	31 638	41 853	40 830	38 032
United Kingdom	4 950	4 046	44 387	7 935	7 514
Yugoslavia, Federal Republic of	...	...	12 000	2 000	4 000
Egypt	...	28 000	1 000	2 000	4 000
Nigeria	...	21 095	2 000	15 000	4 000
South Africa	63 573	...	...	...	...
Canada	6 179	5 429	7 116	11 383	9 434
Mexico	9 852	7 726	8 207	19 800	26 382
USA	377 053	339 814	163 535	128 344	61 599
Argentina	52 000	15 000	14 000	13 000	37 284
Brazil	55 000	75 000	57 000	82 000	49 720
Chile	8 778	9 788	5 064	2 538	...
Colombia	52 000	88 000	25 000	97 000	26 000
Ecuador	8 000	18 000	5 000	9 480	11 460
Peru	31 000	26 000	42 000	45 000	42 000
Uruguay	3 200	1 000	----	----	----
Venezuela	8 607	924	3 000	...	3 000
Bangladesh (c)	...	9 594	300	...	...
China	799 940	29 061	481 285	523 664	883 201
Hong Kong	1 976 586	434 299	772 866	861 554	174 154
India (b)	428 473	253 738	267 797	124 823	...
Indonesia	12 811	5 151	26 771	16 281	...
Israel (a)	*3 000	...	...	...	...
Japan	13 847	8 639	13 812	6 911	10 351
Korea, Republic of	26 000	39 996	36 808	17 804	25 533
Malaysia	23 990	6 080	7 705	2 987	...
Pakistan (c)	...	55 210	68 156	60 516	121 452
Philippines	203 503	118 107	5 004	39 396	...
Singapore	45 426	62 458	93 142	64 938	319 035
Sri Lanka	183	1 435	22 148	889	...
Taiwan	6 002	9 384	9 528	7 173	6 317
Thailand	13 145	30 405	10 547	13 000	13 000
Australia	55 898	45 737	66 834	39 901	27 000

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	1995	1996	1997	1998	1999
Finland	5 483	4 592	5 630	7 241	8 470
France (e)	*10 000	*10 000	14 100	*17 000	...
Russia	*10 000	*10 000	*10 000	*10 000	*10 000
Spain (e)	12 623	10 747	12 397	10 278	*13 000
Yugoslavia, Federal Republic of	-----	16 596	420	247	229
Madagascar	432	317	1 138	1 232	54
South Africa	2 137	1 515	1 423	1 556	1 010
Zimbabwe	1 040	42	30	1 309	499
Canada	*23 000	*23 000	*23 000	*25 000	*25 000
Mexico	5 028	4 273	975	890	971
USA (d) (e)	108 000	96 600	114 000	87 100	104 000
Argentina	3 343	2 137	3 528	3 480	*3 300
Brazil	*5 200	*7 000	*4 000	*4 000	*5 000
China (c)	*44 200	*42 200	*47 500	*40 200	*40 700
India (b)	3 072	3 063	2 604	2 551	2 312
Iran (f)	3 894	5 444	1 086	...	...
Korea, Republic of (a)	43 709	35 923	34 489	38 459	24 734
Malaysia (g)	5 848	5 501	5 708	3 642	3 675
Sri Lanka	2 385	2 400	3 700	2 784	1 425
Taiwan	9 792	8 511	7 806	7 750	*7 800
Australia	1 076	1 015	1 085	639	1 016
World Total	300 000	290 000	300 000	270 000	270 000

## Note(s):-

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

- (a) Includes sericite
- (b) Years ended 31 March following that stated
- (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

## Exports of Mica

Country	1995	1996	1997	1998	1999
Austria	2 919	2 500	2 870	3 431	3 634
Belgium-Luxembourg	87	-----	-----	304	61
Finland	4 381	4 328	4 576	5 592	7 969
France	10 063	9 383	10 593	12 108	12 567
Germany	2 189	1 855	1 972	2 028	1 630
Italy	1 395	158	316	374	451
Netherlands	1 632	807	1 527	1 362	1 913
Norway	2 486	1 795	1 942	2 051	2 172
Russia	1 420	1 657	1 007	837	730
Spain	1 141	1 218	1 028	460	1 745
Sweden	443	112	113	983	60
Turkey	83	95	365	575	308
United Kingdom					
Unmanufactured	5	10	78	24	120
Ground	5 560	5 001	5 056	4 686	3 869
Waste	88	209	270	474	254
Madagascar	*430	*450	603	212	491
South Africa	852	488	387	334	262
Zimbabwe	979	787	723	1 109	...
Canada	16 804	17 297	15 560	18 099	24 435
USA					
Unmanufactured	1 170	2 160	2 404	1 660	4 422
Ground	6 689	6 368	6 476	6 901	7 753
Brazil	1 683	1 522	1 629	498	1 009
China	44 196	42 222	47 542	40 178	40 714
Hong Kong (a)	1 070	583	116	92	11
India					
Block (b)	233	648	1 652	997	...
Splittings (b)	1 000	1 290	1 906	644	...
Condenser films (b)	65	3 365	23	10	...
Ground (b)	27 387	19 687	39 319	41 991	...
Waste (b)	4 686	3 604	4 253	6 040	...
Japan	829	910	915	626	862
Korea, Republic of	27	47	54	6 859	40
Malaysia	5 745	5 785	...	...	...
Singapore	1 472	1 400	501	517	207
of which, re-exports	1 439	1 372	471	305	186
Sri Lanka	1 760	2 569	3 051	2 433	...
Taiwan	261	914	636	2 079	1 861

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

tonnes

Country	1995	1996	1997	1998	1999
Austria	356	282	597	604	696
Belgium-Luxembourg					
Ground	1 374	----	...	729	844
Czech Republic	...	...	540	657	699
Denmark	137	251	353	298	226
Finland	703	675	1 002	1 273	768
France					
Ground (c)	1 811	1 190	1 161	1 151	1 320
Waste	2 851	3 305	3 044	2 039	2 025
Germany					
Unmanufactured	1 289	904	868	878	1 485
Ground	22 387	23 447	22 661	26 492	18 735
Greece	226	110	129	61	201
Irish Republic	397	6 808	864	557	582
Italy					
Unmanufactured	(a) 11 117	...	290	230	326
Ground	...	2 201	2 259	2 220	4 442
Netherlands	1 943	4 284	3 199	3 476	3 742
Norway	2 248	2 553	3 399	2 998	3 150
Poland	665	741	594	891	826
Portugal	...	129	45	110	144
Russia	1 200	1 458	203	1 853	126
Spain	2 421	1 880	2 314	2 351	2 129
Sweden	910	723	862	963	475
Switzerland	447	286	307	476	665
Turkey	341	408	129	81	56
United Kingdom					
Unmanufactured	200	179	12	29	125
Ground	5 905	6 367	9 036	7 961	7 041
Waste	10 716	9 532	8 342	10 379	5 854
South Africa	759	611	...	...	...
Canada	3 750	4 188	4 058	4 861	5 073
Jamaica	233	224	213	202	...
Mexico	1 200	984	1 553	1 435	1 792
USA					
Block	129	102	47	73	37
Splittings	3 064	4 998	3 967	2 630	2 659
Ground	14 175	13 563	12 959	15 492	20 626
Other unmanufactured	7 616	4 979	10 380	7 637	5 143
Colombia	207	177	280	254	318
Venezuela	396	939	420	226	322
China	530	398	1 029	1 213	1 090
Dubai					
Mica	...	539	389	195	...
Hong Kong	109	2 164	131	51	192
Indonesia	730	1 446	1 367	773	...
Iran (d)	388	...	20	258	...
Japan					
Unmanufactured	7 296	5 882	6 529	7 581	7 863
Ground	32 708	39 097	40 481	32 436	34 496
Waste	3 903	4 819	2 695	3 572	2 609
Korea, Republic of	6 535	6 166	7 675	4 379	6 117
Malaysia	585	1 690	...	...	...
Philippines	168	310	236	223	...
Saudi Arabia	209	1 075	1 386	1 123	1 597
Singapore	1 402	1 574	1 684	933	817
Taiwan					
Unmanufactured	214	414	448	499	760
Ground	1 457	1 414	1 901	1 683	2 592
Thailand	894	1 053	1 089	590	860

**Imports of Mica**

Country	1995	1996	1997	1998	1999
Australia	2 128	1 766	1 483	1 879	2 172
New Zealand (b)	£181 000	...	£209 000	£101 000	...

## 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	1995	1996	1997	1998	1999
Armenia	*500	*500	*1 800	*2 600	*3 000
Bulgaria	*400	*400	*400	*400	*400
Russia	4 400	4 800	4 800	4 800	4 800
Canada	9 522	8 097	8 223	8 469	5 930
Mexico	3 883	4 211	4 842	5 949	7 961
USA	60 900	54 900	60 900	53 300	43 000
Chile	17 889	17 415	21 339	25 298	27 268
Peru	3 637	3 968	4 266	4 345	5 472
China	33 000	29 600	33 300	30 015	29 745
Iran (a)	1 430	2 112	2 851	...	...
Japan	689	596	698	632	585
Kazakhstan	156	44	81	100	...
Kyrgyzstan	...	...	...	148	242
Mongolia	1 823	2 201	1 992	1 848	1 954
Uzbekistan	*400	*500	*500	*500	*500
World Total	139 000	129 000	146 000	141 000	134 000

## Note(s):-

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

(a) Years ended 20 March following that stated

## Exports of Molybdenum

Country	1995	1996	1997	1998	1999
Austria					
Metal	1 571	1 651	1 747	1 684	1 700
Oxides	28	654	81	85	1
Belgium-Luxembourg					
Ores & concentrates	12 777	13 329	13 466	17 437	12 615
Metal	376	201	296	104	143
Oxides	48	52	150	216	242
Estonia					
Metal	89	...	5	18	49
France					
Ores & concentrates	19	49	873	118	89
Metal	244	83	61	65	57
Germany					
Ores & concentrates	108	365	111	36	206
Metal	1 497	1 042	1 368	1 070	1 132
Oxides	918	885	731	770	17
Italy					
Metal	194	32	65	197	94
Netherlands					
Ores & concentrates	7 460	4 347	5 662	6 106	4 869
Metal	407	299	408	249	167
Oxides	339	...	161	96	246
Russia					
Ores & concentrates	1 013	4 281	4 645	7 368	10 941
Metal	(b) *3 800	654	901	932	569
United Kingdom					
Ores & concentrates	2 234	2 003	3 717	2 401	996
Metal	528	247	143	248	84
Oxides	14	20	30	20	36
Canada					
Ores & concentrates (a)	8 998	8 512	11 235	10 748	10 558
Mexico					
Ores & concentrates	9 634	10 496	12 347	10 702	10 774
USA					
Ores & concentrates (a)	45 231	45 166	58 531	42 480	28 527
Metal	1 569	1 412	916	1 127	976
Oxides	2 949	1 830	1 262	1 149	1 155
Chile					
Ores & concentrates	33 347	29 302	36 266	43 323	...
Oxides	2 666	3 164	2 947	3 618	...
Peru					
Ores & concentrates	7 369	7 782	8 452	7 991	9 800
China					
Ores & concentrates	639	1 441	2 819	4 567	9 300
Metal	790	453	531	849	1 029
Oxides	15 167	13 933	21 983	17 147	7 976
Japan					
Metal	102	264	110	126	121
Oxides	83	114	92	106	24
Korea, Republic of					
Metal	12	4	9	107	153
Mongolia					
Ores & concentrates	3 438	5 081	4 109	4 131	4 164
Taiwan					
Metal	15	...	142	254	122
Oxides	56	...	130	86	55

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	1995	1996	1997	1998	1999
Austria					
Ores & concentrates	6 246	3 665	5 566	232	...
Metal	265	182	255	289	163
Oxides	2 886	2 681	2 378	2 761	...
Belgium-Luxembourg					
Ores & concentrates	28 674	19 341	22 075	22 613	13 339
Metal	490	163	207	208	156
Oxides	283	702	969	529	605
Czech Republic					
Metal	27	43	448	60	37
Estonia					
Metal	...	...	6	38	34
Finland					
Ores & concentrates	3 135	2 596	3 172	2 959	3 258
France					
Ores & concentrates	3 523	2 378	2 539	2 354	3 273
Metal	570	429	627	...	526
Oxides	378	148	96	57	73
Germany					
Ores & concentrates	13 573	9 167	8 437	12 976	10 331
Metal	1 270	1 492	1 465	1 922	1 993
Oxides	855	1 197	1 085	703	378
Greece					
Metal	14	2	...	97	26
Hungary					
Metal	...	97	95	124	122
Italy					
Ores & concentrates	3 069	2 864	3 725	4 629	3 575
Metal	142	300	164	173	159
Oxides	...	...	248	94	90
Netherlands					
Ores & concentrates	*40 000	17 247	17 660	18 706	18 939
Metal	136	337	691	340	346
Oxides	622	...	1 004	814	1 153
Poland					
Metal	18	37	32	48	102
Portugal					
Metal	10	10	16	16	14
Russia					
Ores & concentrates	900	759	626	1 491	1 202
Metal	*50	71	52	41	292
Spain					
Ores & concentrates	2 429	2 489	3 238	3 129	3 050
Metal	66	52	119	81	50
Sweden					
Ores & concentrates	6 178	5 504	7 451	6 271	5 173
Metal	459	121	1 168	186	205
Oxides	...	...	371	448	626
Switzerland					
Metal	29	52	28	37	25
Turkey					
Metal	8	67	7	10	42
United Kingdom					
Ores & concentrates	15 509	16 899	18 898	17 495	13 840
Metal	985	861	859	903	1 376
Oxides	309	237	89	110	65
Nigeria					
Metal	...	99	121	...	...
South Africa					
Ores & concentrates	900	1 000	866	1 815	1 107
Metal	11	4	16	11	...
Oxides	250	121	619	465	742
Canada					
Metal	105	94	80	92	92
Oxides	1 176	884	648	664	1 074

## Imports of Molybdenum

Country	1995	1996	1997	1998	1999
USA					
Ores & concentrates	8 965	8 105	10 513	10 736	10 325
Metal	826	1 011	1 040	662	688
Oxides	900	1 161	1 420	1 182	842
Brazil					
Ores & concentrates	13 283	2 581	3 316	3 479	3 932
Metal	300	373	267	164	199
Oxides	...	...	156	44	42
Chile					
Ores & concentrates	17 593	12 253	11 794	11 252	...
China					
Ores & concentrates	5 395	7 689	6 992	10 843	15 680
Metal	171	221	624	410	189
Oxides	214	182	904	261	166
India					
Ores & concentrates (a)	2 845	2 264	2 866	2 682	...
Metal (a)	97	80	111	111	...
Japan					
Ores & concentrates	26 230	26 061	31 262	30 540	26 477
Metal	1 072	699	713	517	484
Oxides	1 732	1 342	1 698	1 816	1 147
Korea, Republic of					
Ores & concentrates	3 211	4 658	4 072	5 379	6 402
Metal	147	131	120	100	278
Kyrgyzstan					
Metal	181	197	...	18	14
Malaysia					
Metal	141	137	106	163	...
Philippines					
Metal	3	24	11	----	...
Singapore					
Metal	13	57	8	18	4
Taiwan					
Metal	179	208	211	240	297
Oxides	365	...	188	249	240
Australia					
Ores & concentrates	368	522	596	434	381
Metal	57	159	82	69	141
Oxides	257	152	106	587	46

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

**Mine Production of Nickel**

tonnes (metal content)

Country	1995	1996	1997	1998	1999
Finland	4 382	3 872	3 252	1 967	730
Greece	19 947	20 558	20 996	18 544	16 556
Macedonia	3 500	*3 000	5 300	5 800	100
Norway	3 389	3 119	2 725	3 219	2 948
Russia	224 000	230 000	235 000	235 000	235 000
Ukraine	*2 200	1 700	-----	-----	-----
Yugoslavia, Federal Republic of	300	3 000	2 700	800	-----
Botswana	18 088	22 095	20 157	22 851	22 898
South Africa (a)	29 803	33 861	34 849	36 679	35 798
Zimbabwe	11 700	11 600	11 000	10 400	9 593
Canada	181 820	192 649	190 529	208 302	186 177
Cuba	40 800	51 300	59 100	65 100	63 900
Dominican Republic	46 523	43 560	47 730	40 300	39 680
USA	1 560	1 330	-----	-----	-----
Brazil	29 124	25 245	31 936	36 764	43 784
Colombia	29 806	27 154	31 230	29 422	39 274
China	41 800	43 800	46 600	48 700	49 500
Indonesia	86 600	87 900	71 100	74 100	89 100
Kazakhstan	9 900	3 500	4 000	3 600	-----
Philippines	15 075	15 003	18 133	20 685	9 374
Australia	102 700	113 000	123 400	143 900	125 000
New Caledonia	119 905	122 486	136 459	124 729	110 062
World Total	1 023 000	1 060 000	1 096 000	1 131 000	1 079 000

Note(s):-

(a) Refined nickel and nickel in matte

**Smelter/Refinery Production of Nickel**

Country	1995	1996	1997	1998	1999
Austria	2 000	2 000	2 000	1 800	1 700
Finland	16 025	29 141	35 285	43 379	52 800
France	10 305	11 171	10 702	11 778	11 700
Greece	17 155	17 801	17 610	15 004	13 462
Macedonia	3 500	*3 000	5 300	5 800	100
Norway	53 237	61 582	62 700	70 150	74 100
Russia	201 100	190 000	230 000	227 000	228 000
Ukraine	*2 200	*900	-----	-----	-----
United Kingdom	35 157	38 561	36 091	39 050	38 086
Yugoslavia, Federal Republic of	962	2 556	2 440	466	-----
South Africa	29 803	33 861	34 849	36 410	29 100
Zimbabwe	16 500	17 100	19 100	19 300	19 800
Canada	125 311	130 136	131 639	146 755	124 260
Cuba	21 387	26 730	33 571	38 192	37 510
Dominican Republic	30 897	30 388	32 554	25 218	24 461
USA	8 290	15 100	15 996	4 290	-----
Brazil	15 676	16 432	18 199	21 083	22 931
Colombia	24 565	22 933	25 170	28 140	28 341
China	38 900	44 600	43 300	40 100	44 400
Indonesia	10 735	9 600	9 999	8 500	9 205
Japan	135 000	130 500	128 400	126 500	134 700
Australia	76 900	74 000	73 700	80 000	85 000
New Caledonia	42 200	42 174	44 312	44 491	45 289
World Total	918 000	950 000	1 013 000	1 033 000	1 025 000

Note(s):-

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



## Exports of Nickel

tonnes

Country	1995	1996	1997	1998	1999
Austria					
Mattes, sinters etc.	228	1 395	77	109	49
Unwrought (a)	314	339	1 069	524	586
Scrap	381	166	398	219	471
Belgium-Luxembourg					
Unwrought	8 794	12 168	16 519	11 566	12 324
Unwrought alloys	1 682	1 530	1 796	1 920	1 936
Scrap	850	834	1 245	770	1 126
Czech Republic					
Unwrought (a)	1 800	500	1 776	125	353
Scrap	3 100	4 400	5 355	751	899
Denmark					
Scrap	219	338	367	912	1 343
Estonia					
Unwrought (a)	(b) *400	(b) *100	142	324	198
Scrap	(b) *300	(b) *300	90	341	408
Finland					
Ores & concentrates	49 186	36 675	53 974	11 480	14 868
Unwrought	12 847	21 474	23 650	26 409	29 457
Scrap	272	133	26	454	76
Oxides	827	884	1 163	1 399	1 106
France					
Unwrought	6 145	6 736	7 842	7 347	6 884
Unwrought alloys	119	735	907	707	707
Scrap	3 663	4 457	4 499	10 420	5 674
Germany					
Unwrought	13 330	7 184	8 545	17 087	13 553
Unwrought alloys	3 299	4 315	3 572	4 678	4 573
Scrap	9 823	7 203	9 236	6 674	12 308
Oxides	114	122	141	46	19
Irish Republic					
Scrap	428	515	512	662	935
Italy					
Unwrought (a)	438	4 650	2 217	2 985	1 443
Scrap	644	617	395	1 162	805
Latvia					
Scrap	1 562	1 222	1 828	2 651	2 412
Lithuania					
Scrap	690	580	241	51	65
Netherlands					
Mattes, sinters etc.	(b) *2 900	(b) *10 600	6 530	27 745	(b) *6 400
Unwrought (a)	3 903	5 287	37 258	23 450	26 234
Scrap	7 376	3 051	2 810	2 017	1 204
Oxides	(b) *500	(b) *200	1 437	1 384	...
Norway					
Ore	33 253	34 880	30 512	34 016	26 546
Unwrought	52 644	60 919	62 295	70 153	73 328
Scrap	479	294	145	176	399
Russia					
Ore	81 457	84 552	64	-----	250
Mattes, sinters etc. (b)	...	*8 700	*9 800	*11 800	*8 500
Unwrought	(a) 152 829	166 214	218 722	212 186	207 448
Unwrought alloys	...	988	3 135	1 948	3 837
Scrap (b)	*10 400	*15 000	*16 900	*10 200	*5 300
Oxides	4 462	610	544	845	350
Slovenia					
Unwrought	...	100	600	400	435
Spain					
Unwrought (a)	47	41	917	2 252	8 013
Scrap	589	302	512	143	584
Sweden					
Unwrought (a)	157	245	93	103	301
Scrap	503	248	198	166	532
Switzerland					
Unwrought (a)	227	128	120	50	469
Scrap	176	356	661	445	606

## Exports of Nickel

Country	1995	1996	1997	1998	1999
Ukraine					
Unwrought	...	----	----	2 535	121
Scrap	(b) *300	----	134	57	1
United Kingdom					
Mattes, sinters etc.	392	218	146	58	183
Unwrought	20 277	22 761	18 887	20 502	20 709
Unwrought alloys	2 901	3 290	3 558	4 271	3 739
Scrap	4 960	4 361	4 367	5 109	5 777
Botswana					
Mattes, sinters etc. (c)	14 519	18 992	14 691	16 516	16 342
South Africa					
Mattes, sinters etc. (b)	...	...	*41 400	*39 900	*37 700
Unwrought (d)	16 704	21 352	20 365	22 570	16 195
Scrap (b)	*700	*2 600	*3 200	*3 000	*900
Tunisia					
Scrap	200	257	1 221	356	480
Zimbabwe					
Unwrought	12 697	11 950	13 609	10 324	11 462
Canada					
Mattes, sinters etc.	78 706	96 242	86 696	107 817	103 250
Unwrought (a)	86 234	97 155	101 075	107 257	87 135
Scrap	3 294	2 595	4 159	2 322	3 200
Cuba					
Oxide, sinter & sulphide (e)	*38 200	*55 500	*59 900	*68 800	*67 600
USA					
Mattes, sinters etc.	4 568	5 479	3 104	1 690	1 991
Unwrought (a)	6 144	6 677	5 754	7 394	10 517
Scrap	28 447	21 790	25 056	25 952	24 191
Brazil					
Mattes, sinters etc.	----	----	180	8 724	19 015
Unwrought	4 378	5 582	5 907	7 933	13 008
China					
Unwrought (a)	1 480	309	4 748	15 051	14 455
Scrap	445	77	905	779	861
Oxides	277	146	830	251	325
Hong Kong					
Unwrought (a) (f)	5 576	5 605	5 177	5 682	6 184
Scrap	215	179	62	316	911
Indonesia					
Ore	1 733 154	1 791 190	1 899 153	2 214 986	...
Mattes, sinters etc.	54 824	45 373	41 164	34 881	...
Israel					
Scrap (b)	*500	*1 700	*1 900	*1 400	*2 700
Japan					
Mattes, sinters etc.	6 498	5 182	1 468	6 129	7 905
Unwrought (a)	475	897	1 385	393	501
Scrap	749	2 557	8 563	954	489
Oxides	2 097	1 025	3 026	3 312	4 580
Kazakhstan					
Unwrought	...	635	253	0	5
Korea, Republic of					
Unwrought (a)	3 205	21	935	16	29
Scrap	1 573	1 054	1 813	1 568	1 096
Philippines					
Ores & concentrates	890 818	1 249 197	780 432	1 249 923	...
Scrap	22	21	965	2 447	...
Singapore					
Unwrought (f)	3 770	4 327	7 250	5 901	9 229
Scrap	510	1 069	1 517	971	1 303
Oxides	...	...	...	409	315
Taiwan					
Unwrought (a)	311	63	91	118	575
Scrap	1 665	1 553	1 366	934	1 681

**Exports of Nickel**

tonnes

Country	1995	1996	1997	1998	1999
Australia					
Ore	122 039	155 747	181 099	216 731	225 750
Mattes, sinters etc.	*59 000	*55 000	*60 000	*61 000	*41 000
Unwrought	40 677	44 469	43 292	53 007	71 146
Unwrought alloys	4 800	3 078	1 884	1 371	1 794
Scrap	703	273	185	104	65
New Caledonia					
Ores	4 588 952	4 773 883	5 391 000	4 238 000	*3 500 000
Mattes, sinters etc.	14 529	15 354	14 857	16 812	*15 000

## 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) Ni content
- (d) Includes metal and metal content of sulphate
- (e) Ni-Co content (mainly nickel)
- (f) Re-exports

## Imports of Nickel

Country	1995	1996	1997	1998	1999
Austria					
Mattes, sinters etc.	167	126	164	334	245
Unwrought (a)	3 337	3 419	3 503	3 618	3 742
Scrap	859	754	176	84	73
Belgium-Luxembourg					
Mattes, sinters etc.	522	179	313	13	448
Unwrought	31 960	32 621	32 253	27 872	36 987
Unwrought alloys	120	121	1 721	2 054	559
Scrap	1 499	2 574	3 277	719	694
Oxides	193	187	145	234	207
Czech Republic					
Unwrought (a)	2 100	1 300	934	1 475	1 077
Denmark					
Unwrought (a)	142	113	131	160	84
Finland					
Ore	134 831	200 610	163 962	247 276	249 028
Mattes, sinters etc.	4 088	9 843	7 314	21 701	24 266
Unwrought (a)	9 530	6 316	9 511	7 976	6 558
Scrap	7 017	821	247	289	183
Oxides	2 996	292	346	540	2
France					
Mattes, sinters etc.	17 255	16 365	16 744	16 697	15 985
Unwrought	30 558	26 480	32 807	39 221	36 956
Unwrought alloys	6 011	4 851	6 740	6 658	6 652
Scrap	3 083	1 507	1 379	2 199	2 040
Oxides	310	222	216	537	397
Germany					
Mattes, sinters etc.	5 096	9 317	8 629	11 560	8 436
Unwrought	72 065	57 564	62 752	77 030	79 030
Unwrought alloys	6 189	3 859	1 488	1 502	1 705
Scrap	12 911	10 474	11 723	7 486	9 103
Oxides	411	343	411	472	779
Irish Republic					
Unwrought (a)	1 137	1 141	1 129	1 487	1 170
Italy					
Mattes, sinters etc.	5 545	3 022	2	171	14
Unwrought	40 553	30 370	41 065	46 414	45 687
Unwrought alloys	920	1 718	940	1 112	1 036
Scrap	121	70	1 415	1 808	1 964
Netherlands					
Mattes, sinters etc.	...	...	36 543	18 593	...
Unwrought	7 841	5 924	15 384	42 306	75 302
Unwrought alloys	215	92	63	211	643
Scrap	4 472	4 642	3 307	1 881	1 995
Oxides	1 211	...	825	570	544
Norway					
Mattes, sinters etc.	109 317	141 942	132 146	139 094	151 010
Unwrought (a)	151	204	79	168	154
Poland					
Unwrought	1 820	1 666	1 390	1 880	1 489
Portugal					
Unwrought (a)	200	281	290	356	265
Romania					
Unwrought	1 174	626	563	593	391
Russia					
Ore	...	516 139	628 682	129 544	17 729
Unwrought	...	305	1 246	2 096	412
Scrap	5 066	3 271	2 903	3 158	4 021
Slovenia					
Unwrought (a)	1 600	1 942	4 375	3 916	4 275
Spain					
Mattes, sinters etc.	91	86	584	43	22
Unwrought (a)	20 785	10 796	21 567	18 222	25 979
Oxides	94	86	122	149	213

## Imports of Nickel

tonnes

Country	1995	1996	1997	1998	1999
Sweden					
Mattes, sinters etc.	2 355	5 442	4 372	6 289	5 700
Unwrought	16 720	14 387	14 113	20 039	21 667
Unwrought alloys	1 441	749	661	1 546	1 185
Scrap	17 096	24 811	21 064	17 967	9 570
Switzerland					
Unwrought (a)	801	1 055	964	1 596	1 068
Scrap	223	403	401	234	161
Turkey					
Unwrought (a)	1 432	1 453	1 677	1 815	1 493
United Kingdom					
Mattes, sinters etc.	53 820	63 833	54 534	59 263	55 705
Unwrought	20 931	17 469	17 706	12 538	15 675
Unwrought alloys	3 796	1 248	3 424	4 182	7 334
Scrap	8 406	14 631	13 181	11 884	15 740
Oxides	375	149	155	98	201
Egypt					
Unwrought	...	...	311	328	351
South Africa					
Unwrought (a)	16 355	3 943	5 319	9 579	8 460
Canada					
Ores & concentrates (b)	2 474	2 118	7 423	1 138	934
Mattes, sinters etc.	49 437	56 741	49 902	51 363	61 173
Unwrought (a)	7 308	6 448	2 599	1 946	3 319
Scrap	21 919	16 051	16 572	16 641	20 448
Oxides	180	188	957	2 774	2 116
Mexico					
Unwrought (a)	1 098	1 533	2 102	2 277	1 656
USA					
Ores & concentrates (b)	9 150	21 505	43 029	3 110	...
Slurry, mattes, sinters etc.	725	693	2 480	2 762	4 260
Unwrought (a)	121 439	116 028	122 832	122 517	108 758
Scrap	9 478	8 545	12 397	8 430	9 037
Oxides	1 164	1 318	1 532	2 176	1 859
Argentina					
Unwrought	316	281	532	529	420
Brazil					
Unwrought (a)	7 639	7 730	7 105	6 277	8 799
Colombia					
Unwrought	545	185	175	148	86
Venezuela					
Unwrought (a)	131	110	153	190	73
China					
Ore	98	237	2 662	1 813	79
Mattes, sinters etc.	18	489	40	560	640
Unwrought (a)	570	916	1 117	4 983	4 498
Scrap	413	43	36	70	138
Oxides	647	1 701	2 272	1 642	2 154
Hong Kong					
Mattes, sinters etc.	----	----	7 342	157 378	86
Unwrought (a)	11 427	10 937	8 977	13 122	10 760
Oxides	...	...	1 321	1 424	1 747
India					
Mattes, sinters etc. (c)	1 982	1 417	2 015	1 055	...
Unwrought (a) (c)	11 855	9 123	11 814	11 526	...
Scrap (c)	259	1 049	1 845	1 347	...
Japan					
Ore	3 821 354	4 061 516	4 362 374	4 086 149	3 905 809
Mattes, sinters etc.	90 993	83 632	76 715	80 563	87 820
Unwrought	61 698	46 501	57 096	39 003	48 282
Unwrought alloys	889	500	747	1 050	624
Scrap	6 444	7 711	12 836	10 273	11 736
Oxides	172	80	221	129	103

**Imports of Nickel**

Country	1995	1996	1997	1998	1999
Korea, Republic of					
Mattes, sinters etc.	18 760	14 818	20 772	24 281	24 504
Unwrought (a)	19 104	14 667	19 069	21 374	38 782
Scrap	2 065	2 786	12 509	61	545
Oxides	247	317	256	207	168
Malaysia					
Unwrought (a)	445	404	759	529	...
Pakistan					
Unwrought (a) (d)	...	477	373	555	373
Singapore					
Mattes, sinters etc.	845	344	13	2	1
Unwrought	5 389	4 351	9 026	6 775	9 227
Scrap	544	389	329	605	664
Oxides	...	...	493	449	453
Taiwan					
Mattes, sinters etc.	7 352	7 679	4 797	10 928	10 784
Unwrought (a)	39 747	33 358	41 888	38 803	55 578
Scrap	448	286	232	155	534
Oxides	1 938	837	1 265	1 156	1 147
Thailand					
Unwrought (a)	1 717	1 664	1 325	1 002	7 056
Australia					
Unwrought (a)	699	809	1 290	1 545	1 196
Scrap	541	1 023	256	----	131

## 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	1995	1996	1997	1998	1999
Albania	520 866	488 214	359 666	309 000	268 000
Austria	1 034 868	992 398	972 340	959 285	*1 000 000
Azerbaijan	9 161 300	9 100 300	9 100 000	11 400 000	13 800 000
Belarus	1 932 100	1 860 300	1 822 000	1 830 000	1 800 000
Bulgaria	43 000	32 000	27 750	31 700	38 700
Croatia	1 500 269	1 469 052	1 496 223	1 389 408	1 292 665
Czech Republic	149 000	155 000	159 000	172 000	176 000
Denmark	9 181 000	10 286 000	11 375 000	11 752 000	14 773 000
France	2 486 039	2 107 486	1 779 728	1 708 883	1 539 131
Georgia	42 700	127 900	133 800	119 200	91 300
Germany	2 959 580	2 848 341	2 820 783	2 884 110	2 832 176
Greece	454 266	517 001	467 000	315 000	*300 000
Hungary	1 669 000	1 476 801	1 360 327	1 257 830	1 242 855
Italy	5 207 980	5 368 971	5 892 055	5 560 072	4 993 000
Lithuania	127 000	180 000	160 000	160 000	...
Netherlands	2 721 492	2 221 028	2 068 906	1 714 000	1 594 000
Norway	139 358 000	156 788 000	156 215 000	150 006 000	148 728 000
Poland	292 500	317 304	289 139	357 090	424 806
Romania	6 717 000	6 626 000	6 517 000	6 309 043	6 153 527
Russia	307 000 000	300 400 000	306 000 000	303 283 000	305 167 000
Slovakia	74 247	68 000	63 136	61 000	60 270
Spain	651 954	513 451	379 563	535 140	306 000
Turkey	3 500 495	3 499 635	3 454 021	3 226 873	2 900 000
Ukraine	4 089 900	4 097 800	4 128 100	3 899 900	3 791 400
United Kingdom	121 794 000	121 930 000	120 321 000	124 222 000	128 262 000
Yugoslavia, Federal Republic of	1 066 227	1 030 441	979 081	913 029	704 838
Algeria	51 852 000	54 401 000	54 234 000	54 922 800	*53 000 000
Angola	31 200 000	35 400 000	36 500 000	36 000 000	38 500 000
Benin	124 000	*200 000	*150 000	*150 000	*150 000
Cameroon	5 400 000	5 600 000	6 300 000	5 300 000	4 800 000
Congo	9 264 000	10 400 000	11 600 000	13 600 000	14 600 000
Congo, Democratic Republic	1 516 000	1 500 000	1 400 000	1 300 000	1 250 000
Egypt (b)	44 000 000	44 119 000	41 800 000	40 700 000	*40 000 000
Equatorial Guinea	345 000	1 000 000	2 000 000	3 750 000	4 070 000
Eritrea	632 220	685 234	...	...	...
Gabon	17 800 000	18 300 000	18 200 000	16 900 000	17 000 000
Ghana	*250 000	*250 000	*250 000	*250 000	*250 000
Ivory Coast	489 000	1 400 000	*1 500 000	*500 000	*750 000
Libya	68 620 000	69 600 000	71 100 000	70 700 000	68 000 000
Nigeria	101 671 000	105 400 000	113 400 000	106 200 000	99 900 000
South Africa	----	----	*600 000	*1 200 000	*1 100 000
Sudan	...	...	...	600 000	3 500 000
Tunisia	4 251 000	4 191 000	3 800 000	3 895 300	4 000 000
Barbados	62 750	49 810	45 004	79 143	...
Canada	96 135 300	98 290 500	103 172 000	107 213 800	101 721 800
Cuba	1 470 800	1 475 900	1 461 500	1 678 200	2 136 300
Guatemala	474 700	733 000	989 460	1 280 740	1 177 410
Mexico	140 727 000	153 083 000	161 251 000	163 630 000	155 047 000
Trinidad & Tobago	6 732 200	6 658 800	6 379 200	6 337 500	6 448 600
USA	326 524 000	321 795 000	321 148 000	311 193 000	292 727 000
Argentina	38 171 053	41 575 471	44 174 851	44 834 345	42 420 709
Bolivia	1 312 945	1 355 452	1 392 133	1 602 357	1 700 000
Brazil	37 046 259	41 851 471	44 545 677	51 620 023	58 900 000
Chile	552 019	485 950	446 117	427 553	406 752
Colombia	30 155 238	32 286 570	33 622 738	38 885 956	42 041 092
Ecuador	19 689 627	19 594 002	19 766 766	19 121 078	*19 000 000
Peru	6 000 172	5 928 066	5 826 583	5 696 200	5 219 862
Suriname	425 000	457 000	620 000	600 000	700 000
Venezuela	150 000 000	160 000 000	170 000 000	170 000 000	160 000 000
Abu Dhabi	87 200 000	90 000 000	88 400 000	*89 500 000	*82 000 000
Bahrain	1 975 000	1 930 000	1 934 000	1 879 000	1 870 000
Brunei	8 180 000	8 300 000	8 100 000	7 800 000	9 000 000
China (a)	150 049 500	157 333 900	160 741 400	162 603 300	160 215 400
Dubai	13 928 000	13 133 000	12 153 000	*11 500 000	*10 500 000

tonnes

**Production of Crude Petroleum**

Country	1995	1996	1997	1998	1999
India (d)	34 517 000	32 900 000	33 772 000	32 722 000	32 011 000
Indonesia	72 800 000	73 000 000	72 400 000	71 300 000	65 900 000
Iran	182 700 000	183 800 000	184 100 000	187 800 000	175 200 000
Iraq	31 833 000	29 900 000	58 000 000	105 200 000	125 500 000
Israel	6 568	8 459	13 564	5 630	...
Japan	786 000	764 000	768 000	722 000	666 000
Kazakhstan	20 500 000	22 960 100	25 779 000	25 945 000	29 993 000
Kuwait (c)	105 300 000	105 800 000	105 700 000	108 100 000	99 300 000
Kyrgyzstan	88 500	84 000	84 800	78 300	76 900
Malaysia	33 680 000	34 190 000	34 100 000	34 630 000	33 000 000
Mongolia	-----	-----	-----	6 000	10 000
Myanmar	620 000	551 000	590 000	480 000	490 000
Oman	42 400 000	44 100 000	45 100 000	44 748 000	45 020 000
Pakistan (b)	2 664 056	2 825 730	2 853 565	2 739 000	2 665 000
Philippines	170 000	160 000	*150 000	41 000	43 000
Qatar	21 300 000	26 400 000	32 500 000	35 000 000	33 400 000
Saudi Arabia (c)	426 700 000	434 600 000	442 100 000	442 800 000	411 800 000
Sharjah & Ras al Khaimah	228 300	236 100	223 500	...	...
Syria	31 589 000	30 600 000	30 100 000	30 100 000	29 000 000
Taiwan	59 000	53 000	53 000	-----	...
Tajikistan	30 000	30 000	30 000	20 000	20 000
Thailand	2 424 000	2 813 000	3 231 000	3 396 000	*3 900 000
Turkmenistan	4 500 000	4 400 000	6 000 000	6 500 000	7 000 000
Uzbekistan	7 600 000	7 600 000	7 900 000	8 100 000	8 100 000
Vietnam	7 700 000	8 803 000	10 909 000	12 500 000	14 960 000
Yemen, Republic of	16 358 000	16 556 000	17 338 000	17 600 000	18 700 000
Australia	27 031 036	28 406 671	30 000 000	28 000 000	27 000 000
New Zealand	1 474 600	1 950 100	2 586 800	2 054 300	1 811 300
Papua New Guinea	4 679 000	5 000 000	3 600 000	3 800 000	4 500 000
<b>World Total</b>	<b>3 158 000 000</b>	<b>3 242 000 000</b>	<b>3 339 000 000</b>	<b>3 393 000 000</b>	<b>3 318 000 000</b>

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) Years ended 31 March following that stated



## Production of Natural Gas

million m<sup>3</sup>

Country	1995	1996	1997	1998	1999
Albania	28	23	18	16	13
Austria	1 482	1 492	1 428	1 568	1 741
Azerbaijan	6 644	6 305	5 960	5 590	6 000
Belarus	266	249	246	252	300
Bulgaria	23	19	13	*10	*10
Croatia	1 966	1 786	1 717	1 570	1 567
Czech Republic	165	146	118	137	143
Denmark	5 161	6 254	7 694	7 348	7 780
France	3 356	2 901	2 586	2 183	1 940
Germany	20 270	21 921	21 320	20 544	23 074
Greece	35	38	38	33	...
Hungary	5 365	5 134	4 689	4 340	3 693
Irish Republic	2 830	2 740	2 359	1 742	1 366
Italy	20 383	20 048	19 123	18 981	17 624
Netherlands	80 164	90 630	80 282	76 331	71 177
Norway	31 449	41 971	46 726	48 146	51 582
Poland	4 803	4 754	4 836	4 852	4 757
Romania	19 016	18 162	15 916	14 441	14 577
Russia	594 900	575 000	544 000	591 400	591 641
Slovakia	349	307	284	260	219
Slovenia	18 220	12 840	12 100	12 500	12 500
Spain	422	467	174	114	112
Turkey	182	204	199	202	96
Ukraine	18 161	18 408	18 131	17 967	17 984
United Kingdom	75 480	89 896	91 558	95 506	105 028
Yugoslavia, Federal Republic of	906	671	688	731	679
Algeria	58 100	62 130	68 900	73 750	82 200
Angola	521	600	600	600	600
Egypt	12 430	13 400	13 500	13 860	13 500
Gabon	100	100	100	100	100
Libya	6 200	6 200	6 400	6 200	5 900
Nigeria	4 885	5 400	5 100	5 100	5 700
South Africa	...	...	*1 500	*1 500	*2 000
Tunisia	300	300	300	300	300
Canada	176 364	182 211	184 181	188 984	194 105
Mexico	26 610	29 300	31 700	34 330	*35 000
Trinidad & Tobago	6 635	7 100	7 380	8 642	9 423
USA (e)	526 700	533 900	535 200	529 800	528 400
Argentina	25 941	28 473	30 319	32 832	37 619
Bolivia	3 294	3 329	3 010	3 106	4 100
Brazil	4 800	5 500	6 000	6 300	6 700
Chile	2 104	*2 100	*2 200	...	...
Colombia	4 400	4 700	5 900	6 300	5 200
Peru	1 000	984	1 067	1 417	*1 400
Venezuela	29 973	29 731	30 800	32 300	32 000
Abu Dhabi	21 633	24 831	37 209	...	...
Afghanistan (c)	2 200	*2 300	*2 300	*2 400	...
Bahrain	7 702	7 929	8 070	8 552	8 778
Bangladesh (d)	7 006	7 520	7 390	7 955	*8 300
Brunei	11 185	11 097	11 099	10 704	11 164
China	17 947	20 114	22 703	22 297	25 198
India (b)	20 916	21 262	19 703	25 706	26 884
Indonesia	84 929	89 669	90 293	84 370	86 833
Iran	35 300	40 210	47 000	50 000	51 000
Iraq	3 400	3 500	4 300	6 500	7 600
Japan	2 209	2 230	2 279	2 301	2 297
Jordan	350	*350	289	264	...
Kazakhstan	5 500	6 100	7 600	4 878	6 485
Kuwait (a)	4 700	6 000	5 900	7 095	6 792
Kyrgyzstan	36	26	24	18	25
Malaysia	29 046	35 166	40 582	38 474	40 851
Myanmar	1 477	1 625	*1 700	...	...
Oman	4 100	4 400	5 000	5 000	5 600
Pakistan (d)	17 791	18 878	19 761	19 814	21 095

**Production of Natural Gas**million m<sup>3</sup>

Country	1995	1996	1997	1998	1999
Qatar	13 500	13 700	17 400	19 580	24 000
Saudi Arabia (a)	38 040	41 340	45 340	46 820	46 200
Syria	4 400	4 400	4 400	4 000	3 900
Taiwan	889	874	849	870	848
Tajikistan	40	50	40	30	40
Thailand	11 361	13 274	16 168	17 598	*20 000
Turkmenistan	32 300	35 180	17 500	14 000	22 800
Uzbekistan	48 600	49 000	51 200	54 790	55 600
Vietnam	...	...	700	1 100	1 100
Australia	29 761	29 799	29 876	30 361	30 755
New Zealand	4 497	5 089	5 424	4 767	5 560
Papua New Guinea	100	140	125	138	128
World Total	2 265 000	2 336 000	2 339 000	2 363 000	2 420 000

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) Years ended 31 March following that stated
- (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	1995	1996	1997	1998	1999
Austria	...	...	48 276	51 392	52 941
Azerbaijan	...	...	293 000	2 149 000	4 268 465
Belarus	200 000	300 000	400 000	381 500	300 000
Belgium-Luxembourg	68 607	71 488	55 597	3 423	56 242
Croatia	123 038	117 526	296 338	30 874	6 502
Czech Republic	108 000	84 000	90 000	103 504	109 319
Denmark	5 130 017	4 616 379	6 507 328	8 061 369	8 873 887
Estonia (a) (b)	*20 000	*63 000	*70 000	*394 000	*337 000
France	55 769	24 597	41 785	400 408	453 634
Georgia	29 333	70 352	137 810	61 528	52 205
Germany	488 495	1 089 862	1 008 553	156 975	168 289
Greece	517 877	894 507	700 026	740 109	1 216 076
Italy	380 643	317 706	321 595	208 758	265 456
Latvia (a) (b)	*1 357 000	*2 582 000	*2 560 000	*2 090 000	...
Lithuania	7 722	122 963	201 316	264 790	227 079
Netherlands	1 010 158	693 411	229 487	14 164	11 620
Norway	121 860 012	136 799 832	136 909 684	131 818 902	128 179 516
Russia	125 644 300	122 336 100	127 271 000	137 234 000	124 644 350
Slovakia	...	15 000	24 000	23 000	...
Slovenia	179	127 834	163 870	82 082	----
Ukraine	13 639	----	5 139	87 910	1 479 484
United Kingdom	81 221 560	77 654 502	71 795 525	73 428 795	73 702 335
Algeria	32 287 000	33 934 000	33 734 000	34 297 945	...
Benin	*124 000	*82 000	...	...	...
Cameroon	3 727 760	4 982 805	...	...	...
Congo	7 607 689	10 195 754	7 522 635	11 268 439	12 637 482
Egypt	7 242 853	6 684 826	6 147 800	2 791 380	2 819 200
Gabon	...	18 571 000	...	...	...
Libya	*53 900 000	*52 900 000	*52 600 000	*54 700 000	...
Nigeria	89 300 000	88 800 000	89 800 000	75 200 000	...
Tunisia	3 289 700	3 147 701	2 795 499	2 920 270	3 276 844
Canada	60 013 946	60 373 811	64 915 842	67 517 536	66 000 000
Guatemala	126 816	530 434	893 216	1 218 743	991 100
Mexico	68 493 006	79 658 127	88 975 000	90 009 000	80 290 000
Trinidad & Tobago	2 986 937	2 807 397	2 835 482	2 700 000	3 186 000
USA	89 329	3 427 197	7 327 812	6 839 731	5 876 075
Argentina	14 010 000	17 229 682	17 632 260	17 501 194	14 192 646
Colombia	14 219 000	16 633 000	17 769 000	23 500 000	26 573 000
Ecuador	13 157 802	11 801 032	12 780 207	11 999 416	11 839 541
Peru	1 436 600	1 800 000	2 200 000	2 100 000	1 400 000
Suriname	177 800	190 000	160 000	180 000	270 000
Venezuela	95 232 000	103 503 000	115 700 000	117 500 000	144 321 848
Brunei	7 705 978	7 420 268	7 091 923	68 616 000	6 853 700
China	18 826 988	20 402 546	19 828 882	15 600 712	7 167 271
Indonesia	37 086 773	38 841 706	39 363 253	37 097 731	...
Iran	*130 200 000	*130 600 000	(a) *128 500 000	*124 700 000	...
Iraq	*3 100 000	*4 300 000	35 100 000	*75 200 000	...
Israel (a)	...	...	...	*98 000	*95 000
Japan	----	----	188 453	132 283	----
Kazakhstan	11 306 977	14 502 982	16 381 784	20 429 000	20 606 434
Kuwait	59 700 000	61 600 000	57 299 847	60 134 435	47 722 869
Kyrgyzstan	24 600	21 100	...	...	...
Malaysia	19 164 600	17 494 100	15 872 000	18 013 000	17 724 800
Oman	35 734 000	40 498 000	41 661 000	41 100 000	...
Pakistan (c)	*300 000	331 749	406 041	168 579	352 482
Philippines	13 209 000	...	...	1 760 000	...
Qatar	18 195 088	17 004 283	17 175 819	...	...
Saudi Arabia	313 600 000	304 500 000	314 406 535	318 291 013	...
Singapore	60 844	63 180	15 360	934	----
of which, re-exports	60 844	----	1 482	18	----
Syria	18 370 830	17 443 170	16 758 000	16 672 750	...
Thailand	----	84 602	670 914	695 038	819 950
Turkmenistan (a)	...	...	*54 000	*58 000	*522 000

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**Exports of Crude Petroleum**

Country	1995	1996	1997	1998	1999
Vietnam	7 700 000	8 803 000	10 909 000	12 500 000	12 000 000
Yemen, Republic of	...	12 394 000	15 628 000	13 706 000	15 657 000
Australia	9 776 000	9 237 000	11 664 000	12 238 000	10 122 296
New Zealand (c)	987 552	1 072 040	1 590 266	972 763	...
Papua New Guinea	4 944 935	5 215 951	3 754 855	4 031 937	...

Note(s):-

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

## Imports of Crude Petroleum

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Country	1995	1996	1997	1998	1999
Austria	...	...	8 467 771	8 396 114	7 684 052
Azerbaijan	...	...	261 000	91 000	...
Belarus	11 457 143	10 644 670	10 460 800	10 054 600	9 899 905
Belgium-Luxembourg	25 797 016	29 307 612	32 327 044	33 613 385	31 741 912
Bulgaria	7 390 443	6 893 796	5 832 748	...	...
Croatia	4 929 170	4 098 141	4 008 271	3 446 481	4 608 832
Cyprus	808 725	748 947	1 039 834	1 128 541	1 184 607
Czech Republic	7 052 000	7 671 000	7 023 306	6 947 928	5 997 039
Denmark	5 236 573	5 174 129	4 768 350	4 605 084	4 752 381
Finland	8 394 854	9 498 391	9 476 213	11 426 549	11 180 897
France	75 789 890	83 237 071	86 964 817	91 356 469	81 273 805
Germany	100 548 800	103 541 602	100 737 953	108 124 652	103 753 381
Greece	11 356 000	17 850 000	10 753 000	16 532 000	9 269 870
Hungary	5 872 242	5 512 325	5 480 450	6 738 041	5 755 022
Irish Republic	...	2 076 881	2 887 604	3 136 654	1 775 747
Italy	73 062 000	74 542 000	78 030 889	85 432 822	79 784 467
Lithuania	3 014 500	3 672 207	5 033 453	6 339 260	4 527 321
Macedonia	159 190	656 235	378 118	787 653	(c) *1 216 000
Netherlands	59 992 028	61 489 000	61 200 000	62 244 603	59 563 859
Norway	1 406 524	1 332 752	1 559 657	1 921 796	2 186 298
Poland	13 036 603	13 350 838	14 713 000	15 367 000	15 272 026
Portugal	13 237 000	11 131 892	12 701 350	13 372 594	13 084 461
Romania	8 657 249	7 155 735	6 244 782	5 973 527	4 294 300
Russia	...	8 983 372	7 905 006	7 884 624	6 015 437
Slovakia	5 301 328	5 443 068	5 335 000	5 446 000	5 351 444
Slovenia	515 575	2 673 170	2 715 086	2 331 808	271 555
Spain	52 299 461	51 955 000	53 471 773	59 116 315	52 380 984
Sweden	16 599 000	21 342 000	21 005 871	20 264 108	18 787 590
Switzerland	4 544 005	5 290 311	4 832 714	5 015 516	5 034 861
Turkey	23 605 000	22 767 000	...	23 791 392	...
Ukraine	...	...	8 977 000	9 884 000	...
United Kingdom	40 358 431	41 265 377	41 382 610	36 135 627	29 923 937
Yugoslavia, Federal Republic of	...	1 321 098	...	...	518 512
Cameroon	...	895 366	...	...	...
Egypt	...	...	...	5 816 132	4 851 002
Ethiopia (d)	674 313	417 100	...	...	...
Ghana	...	...	...	...	9 325 081
Ivory Coast	...	3 025 748	...	...	...
Kenya	1 356 907	1 412 947	1 833 744	2 157 695	810 782
Madagascar	435 754	545 007	447 449	374 330	389 815
Morocco	6 751 486	5 743 316	6 014 215	...	...
Senegal	650 686	...	...	...	853 799
Sierra Leone	85 188	98 898	69 670	...	...
South Africa	8 915 695	6 807 470	3 864 487	...	...
Sudan	108 527	...	...	...	...
Tanzania	2	272 116	...	...	429 489
Tunisia	907 100	757 987	935 168	821 651	1 092 639
Zambia	384 758	...	...	...	...
Barbados	194 400	...	303 100	...	...
Canada	36 366 949	39 442 330	47 298 401	48 264 579	41 840 219
Costa Rica	706 133	675 988	636 191	...	...
Cuba	5 136 000	5 354 000	5 900 000	6 100 000	...
Dominican Republic	2 403 000	2 324 000	...	...	...
El Salvador	745 266	720 862	789 345	877 392	977 055
Guatemala	781 135	738 980	778 628	779 972	748 252
Jamaica	788 077	649 083	745 802	755 738	...
Martinique	712 768	798 713	717 032	612 249	513 027
Netherlands Antilles	*10 000 000	*10 000 000	*10 000 000	12 572 075	...
Nicaragua	608 729	653 883	773 945	913 718	863 426
Panama	1 222 756	2 040 500	2 091 063	2 314 953	2 525 709
Trinidad & Tobago	1 800 000	2 923 174	2 452 317	3 800 000	4 947 000
USA	368 919 493	394 606 231	418 577 642	442 208 021	440 214 413
Argentina	699 756	780 149	1 166 567	1 269 436	948 079
Brazil	22 605 389	24 986 296	24 341 816	21 970 247	18 207 522
Chile	7 922 607	8 437 850	8 554 579	9 516 634	9 835 320

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**Imports of Crude Petroleum**

Country	1995	1996	1997	1998	1999
Paraguay	228 423	149 128	187 068	218 921	88 377
Peru	2 463 147	2 909 915	3 977 618	4 767 658	3 097 123
Uruguay	1 454 800	1 505 118	1 503 635	1 090 000	1 705 449
Bangladesh (a)	...	1 241 197	1 505 082	...	...
China	17 089 939	22 616 949	35 469 702	27 322 633	36 613 687
India (b)	27 357 268	33 710 000	34 399 000	68 904 365	...
Indonesia	9 290 566	9 424 156	9 508 614	10 507 985	...
Israel	...	10 257 000	...	6 771 000	...
Japan	260 224 328	219 942 965	226 878 133	214 850 343	212 049 133
Jordan	3 162 859	3 272 680	3 440 862	3 555 855	...
Kazakhstan	...	...	1 725 962	2 073 726	714 503
Korea, Dem. P.R. of (c)	*1 022 000	*936 000	*506 000	*504 000	*317 000
Korea, Republic of	84 282 365	81 333 520	116 681 048	110 606 443	118 024 367
Kyrgyzstan	2 947	12 102	70 150	62 390	64 800
Malaysia	1 276 592	1 398 010	1 255 925	1 928 586	...
Pakistan (a)	...	3 992 005	3 844 271	4 048 453	4 476 093
Philippines	15 973 931	17 065 409	17 446 853	15 856 000	...
Singapore	51 502 955	55 473 463	55 507 008	52 014 065	44 434 723
Sri Lanka	1 735 212	1 870 000	1 600 174	2 179 278	...
Taiwan	29 750 116	33 396 747	34 477 160	34 983 693	36 521 001
Thailand	21 273 355	29 209 836	31 190 196	23 090 320	28 855 806
Australia	15 744 000	19 333 000	20 427 000	22 926 000	24 220 854
New Zealand (a)	3 864 183	*3 580 000	3 452 007	4 133 358	...

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
- (d) Years ended 7 July of that stated

**Production of Phosphate Rock**

tonnes

Country	1995	1996	1997	1998	1999
Finland	680 415	651 463	689 053	715 705	734 068
Russia	9 068 000	8 679 800	10 004 800	10 045 800	11 218 900
Algeria	758 000	1 050 000	1 062 600	1 155 000	1 096 000
Egypt (e)	378 756	210 882	201 000	215 736	...
Morocco	20 314 000	20 792 000	23 084 000	22 644 000	22 161 000
Senegal					
Phosphate rock	1 543 800	1 376 800	1 584 405	1 519 210	1 797 152
Aluminium phosphate (a)	40 100	77 508	8 680	21 230	64 356
South Africa	2 790 000	2 655 200	2 717 400	2 960 800	2 940 500
Tanzania	21 000	28 000	3 000	2 000	2 000
Togo	2 569 000	2 730 700	2 631 400	2 253 400	1 714 500
Tunisia	6 301 600	7 150 900	7 222 100	7 950 800	8 006 300
Zimbabwe	154 482	122 631	93 849	91 433	84 763
Mexico	622 354	682 079	713 662	756 349	926 987
USA	43 500 000	45 400 000	45 900 000	44 200 000	40 600 000
Brazil (d)	3 896 012	3 830 301	4 275 609	4 421 403	4 300 627
Chile	12 164	17 356	12 605	31 405	...
Colombia	*50 000	40 484	44 517	*50 000	*50 000
Peru	88 638	65 436	52 174	46 821	...
Venezuela	85 510	147 850	291 000	322 000	366 000
China	31 200 800	31 040 200	25 093 700	27 091 000	29 117 700
Christmas Island (b) (c) (e)	421 590	542 800	567 860	587 660	699 828
India (f)	1 319 328	1 349 983	1 623 190	1 276 269	1 643 430
Iraq	*1 000 000	*1 000 000	*1 000 000	*1 000 000	*1 000 000
Israel	2 642 000	2 616 000	2 708 000	2 940 000	...
Jordan	4 983 900	5 421 500	5 895 600	5 925 000	6 013 600
Kazakhstan	1 410 000	*1 170 000	*700 000	130 000	900 000
Korea, Dem. P.R. of	*70 000	*70 000	*70 000	*70 000	*70 000
Pakistan (e)	15 094	...	11 045	...	3 456
Sri Lanka	32 114	34 044	29 635	37 598	30 258
Syria	1 598 000	2 189 000	2 392 000	2 496 000	2 084 000
Thailand	9 301	3 528	3 818	3 029	3 880
Uzbekistan	...	-----	-----	105 500	139 200
Vietnam	470 000	475 000	581 500	585 000	710 000
Australia	4 631	585	419	813	1 250
Nauru (b) (e)	527 073	551 320	541 050	...	...
<b>World Total</b>	<b>139 000 000</b>	<b>142 000 000</b>	<b>142 000 000</b>	<b>142 000 000</b>	<b>142 000 000</b>

## Note(s):-

(1) In addition to the countries listed, Indonesia is believed to produce phosphate rock

(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

(f) Years ended 31 March following that stated

**Exports of Phosphate Rock**

Country	1995	1996	1997	1998	1999
Austria	...	...	196	3 086	1 452
Belgium-Luxembourg	21 332	8 251	12 675	40 624	35 678
France	3 063	7 001	1 149	4 538	8 414
Germany	325	217	81	1 646	890
Italy	648	1 644	30 205	2 391	1 411
Netherlands	115 164	128 266	99 188	174 733	71 146
Poland	39 288	45 000	46 000	19 000	20 607
Russia	3 098 300	3 571 910	4 258 900	4 329 320	4 470 414
Spain	20	49	1 431	78 253	189
Switzerland	8 337	9 704	9	4 289	-----
United Kingdom	884	2 441	425	321	266
Algeria	670 700	992 800	1 103 000	1 151 000	1 062 900
Egypt	48 000	64 800	180 700	222 000	206 000
Morocco	9 420 400	10 139 919	11 669 340	11 732 000	11 382 500
Senegal	846 468	725 096	616 700	412 583	523 986
South Africa	1 408 300	973 600	902 600	845 500	994 600
Togo	2 652 100	2 685 500	2 686 600	2 242 600	1 624 329
Tunisia	1 308 203	1 205 749	1 247 043	937 165	978 676
USA	2 760 000	1 570 000	335 000	378 000	272 000
Peru	...	14 820	69 471	23 032	15 402
China	948 933	1 368 667	1 660 379	2 150 227	2 503 019
Christmas Island (a) (b)	421 590	542 800	567 860	587 660	699 828
Indonesia	12 876	10 167	1 600	175	...
Israel	1 963 800	2 007 900	1 472 500	1 546 000	2 779 900
Jordan	3 878 500	4 307 726	4 367 215	4 563 421	...
Kazakhstan	1 670	195	167 044	667 060	904 062
Malaysia	2 400	2 000	5 800	900	...
Syria	1 374 236	1 361 405	1 658 705	1 838 942	1 627 000
Australia	11 079	13 086	8 348	5 199	7 600
Nauru	527 073	551 320	541 050	*535 000	*750 000

Note(s):-

(a) Including phosphate dust

(b) Years ended 30 June of that stated



## Imports of Phosphate Rock

tonnes

Country	1995	1996	1997	1998	1999
Albania	5 800	13 300	10 700	...	...
Austria	161 600	207 200	238 676	295 555	...
Belarus	*300 000	*300 000	371 600	373 677	331 601
Belgium-Luxembourg	1 475 929	1 626 789	1 866 679	1 817 279	1 734 417
Bulgaria	267 513	437 052	521 792	329 400	204 700
Croatia	259 286	239 512	279 807	226 811	173 853
Czech Republic	96 600	74 300	78 835	58 305	47 753
Denmark	139 400	83 900	93 200	72 800	68 361
Finland	91 286	112 500	59 444	101 365	85 396
France	1 652 197	1 706 019	1 557 341	1 471 321	1 356 181
Germany	288 878	257 521	284 812	252 950	142 779
Greece	479 920	626 328	525 614	437 066	361 710
Hungary	45 692	36 393	21 704	15 481	8 043
Irish Republic	7 632	12 191	7 214	11 115	1 828
Italy	271 384	231 734	142 211	167 485	197 727
Lithuania	412 200	468 682	539 771	666 384	859 600
Macedonia	*62 000	47 452	57 983	84 735	44 100
Netherlands	2 094 664	1 998 529	1 944 971	1 922 476	1 711 205
Norway	605 079	680 521	667 801	628 205	671 668
Poland	1 706 712	1 790 000	1 752 000	1 684 000	1 528 188
Portugal	147 412	132 483	137 590	183 954	156 689
Romania	733 321	683 211	480 297	272 912	340 340
Russia	107 300	37 833	84 365	59 098	106 025
Spain	1 812 391	2 107 936	2 207 570	2 105 369	2 210 185
Sweden	102 265	61 024	55 138	74 048	73 942
Turkey	620 663	604 869	1 117 910	1 041 910	873 875
Ukraine	*890 000	823 768	879 867	704 576	755 133
United Kingdom	52 218	27 455	38 103	23 410	19 830
Yugoslavia, Federal Republic of	*200 000	165 800	200 312	164 488	72 259
Egypt	----	29 100	74 000	30 084	33
Ivory Coast	1 000	3 133	1 600	2 100	1 500
Mauritius					
Guano	1 500	1 286	2 001	1 000	1 800
Nigeria	...	...	14 004	451	1 000
South Africa	482 000	495 625	556 506	424 235	280 807
Canada	1 182 871	1 006 913	1 083 389	1 161 024	612 478
Cuba	*5 000	*5 000	*5 000	*5 000	...
Mexico	1 377 624	1 757 003	1 729 588	2 138 524	1 862 153
USA	710 530	575 588	904 221	807 333	744 739
Brazil	531 716	653 787	675 561	780 896	619 022
Chile	53 794	34 319	19 791	13 459	...
Colombia	87 548	50 478	80 225	88 276	...
Uruguay	11 000	30 850	17 955	56 587	40 348
Venezuela	67 440	44 025	71 516	72 755	163 317
Bangladesh (b)	133 200	84 563	138 110	188 900	...
India (c)	2 443 753	2 038 253	2 667 811	3 099 453	...
Indonesia	591 129	955 842	680 023	787 528	...
Iran (a)	422 728	387 000	346 253	393 494	...
Israel	...	...	...	5 500	12 800
Japan	1 332 573	1 178 028	1 030 763	976 372	932 946
Kazakhstan	...	...	73 900	7 800	27 710
Korea, Dem. P.R. of	700	5 500	9 300	...	...
Korea, Republic of	1 658 750	1 630 534	1 640 561	1 517 860	1 481 853
Lebanon	361 000	375 000	261 843	406 731	377 221
Malaysia					
Phosphate rock	538 928	586 900	602 900	560 200	728 900
Guano	5 317	5 118	...	...	...
Pakistan (b)	253 280	240 487	154 000	143 950	159 346
Philippines	742 364	707 262	331 258	557 645	...
Saudi Arabia	4 612	6 077	4 030	6 330	1 007
Sri Lanka	2 281	1 122	1 380	6 653	...
Taiwan	373 927	313 517	265 234	235 394	224 137
Thailand	16 200	16 000	120 400	250 347	194 752
Uzbekistan	...	...	530 000	400 000	650 000

**Imports of Phosphate Rock**

Country	1995	1996	1997	1998	1999
Australia	1 028 461	828 223	999 006	1 100 805	673 812
New Zealand (b)	795 631	*790 000	845 585	818 909	...

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	1995	1996	1997	1998	1999
Russia					
Platinum (a)	38 900	37 300	27 300	38 600	14 500
Palladium (a)	127 500	171 100	160 800	173 600	176 800
Other platinum metals	*3 600	*3 500	*3 500	*3 500	*3 700
South Africa	183 097	188 636	196 651	200 155	216 469
Zimbabwe					
Platinum	6	7	345	2 730	390
Palladium	16	*12	245	1 855	278
Other platinum metals	-----	-----	27	189	30
Canada					
Platinum	6 300	5 400	4 600	5 500	5 500
Palladium	9 800	8 500	7 200	8 600	8 600
Other platinum metals	800	700	600	700	700
USA					
Platinum	*1 590	*1 840	*2 610	*3 240	*2 920
Palladium	*5 260	*6 100	*8 430	*10 580	*9 800
Colombia	973	672	406	437	488
Australia					
Platinum	74	119	315	155	90
Palladium	528	559	429	827	816
World Total	378 000	424 000	413 000	451 000	441 000

## 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 and Philippines are believed to produce platinum group metals
- (a) Sales from mine production and stocks

## Exports of Platinum Group Metals

kilograms

Country	1995	1996	1997	1998	1999
Austria					
Platinum & platinum metals	1 191	1 741	600	700	1 200
Waste & scrap	200	1 300	400	600	600
Azerbaijan					
Waste & scrap (a)	...	...	*24 300	*50	...
Belarus					
Waste & scrap (a)	*1 200	...	*50	*3 900	...
Belgium-Luxembourg					
Platinum	8 047	9 612	12 087	10 200	4 500
Platinum metals	14 487	41 061	34 533	22 700	18 000
Waste & scrap	£1 139 000	£1 995 000	£1 502 000	£2 655 000	...
Bulgaria					
Waste & scrap (a)	*1 300	*600	*400	*25 900	*57 000
Croatia					
Platinum & platinum metals	£325 000	£638 000	£499 000	£74 000	£108 000
Czech Republic					
Waste & scrap (a)	*3 900	*500	*300	*11 500	*11 700
Denmark					
Platinum & platinum metals	11	142	134	330	38
Estonia					
Waste & scrap	1 538	(a) *14 300	129 705	154 786	133 252
France					
Platinum	8 251	8 888	5 900	5 500	5 600
Platinum metals	7 736	11 180	11 180	13 900	9 000
Waste & scrap	27 878	2 816	15 900	12 300	18 806
Germany					
Platinum	18 228	17 347	20 300	21 300	22 000
Palladium	18 249	16 105	17 800	21 000	21 900
Other platinum metals	3 854	3 593	1 600	2 800	3 200
Waste & scrap	132 032	31 588	329 400	620 300	671 500
Irish Republic					
Platinum & platinum metals	17 346	271	1 643	2 719	303
Waste & scrap	...	...	688	2 828	4 572
Italy					
Platinum	...	...	1 113	739	3 604
Platinum metals	...	...	2 522	3 107	3 863
Waste & scrap	...	...	237	671	932
Latvia					
Waste & scrap	407	470	270	----	582
Lithuania					
Waste & scrap	----	...	91	45	7 164
Macedonia					
Waste & scrap	...	33	15	9 085	...
Netherlands					
Platinum	£22 451 000	(e) £23 941 000	£25 168 000	£20 204 000	£21 255 000
Platinum metals	£4 120 000	...	£1 224 000	£1 692 000	£2 159 000
Waste & scrap	4 000	...	1 243	6 200	8 600
Norway					
Platinum & platinum metals	7 931	4 823	5 943	6 049	6 853
Poland					
Platinum & platinum metals	14	8	27	139	273
Russia					
Platinum (d)	38 900	37 300	27 300	38 600	14 500
Palladium (d)	127 500	171 100	160 800	173 600	176 800
Waste & scrap (a)	*500	*92 000	*335 600	*152 000	*7 400
Spain					
Platinum & platinum metals	1 282	...	1 447	5 943	22
Waste & scrap	2 000	737	549	184	471
Sweden					
Platinum & platinum metals	£642 000	£644 000	£700 000	£1 300 000	£1 939 000
Switzerland					
Platinum	35 635	44 663	63 863	73 859	66 473
Palladium	26 138	20 537	81 953	67 180	108 573
Other platinum metals	125	430	533	438	364
Waste & scrap	2 649	5 408	32 302	19 367	17 305
Ukraine					
Waste & scrap (a)	*800	*10 300	*37 400	*22 000	*63 900

**Exports of Platinum Group Metals**

kilograms

Country	1995	1996	1997	1998	1999
United Kingdom					
Platinum	27 258	29 155	66 576	22 838	24 127
Palladium	27 654	25 248	21 113	59 018	13 401
Other platinum metals	5 622	7 018	16 170	17 057	5 354
Waste & scrap	4 478	58 505	203 889	953 343	934 758
South Africa					
Platinum & platinum metals	175 158	186 036	187 167	193 500	...
Waste & scrap (a)	*5 400	*118 900	*105 700	*174 400	*112 500
Canada					
Ores & concentrates (b)	10 320	8 686	8 934	8 884	6 957
Platinum metals	5 249	5 050	6 927	7 112	6 289
USA					
Ores & concentrates (b)	598	486	710	748	240
Platinum	21 470	20 648	31 511	27 367	27 710
of which, re-exports	6 518	7 937	8 510	13 077	8 365
Palladium	33 907	33 605	61 127	70 841	68 727
of which, re-exports	7 891	6 906	18 632	34 600	23 901
Other platinum metals	1 348	407	1 403	3 885	4 548
of which, re-exports	523	96	547	2 167	3 584
Waste & scrap	8 153	8 640	13 251	19 744	42 803
China					
Platinum & platinum metals	3 094	1 775	3 363	2 911	2 443
Hong Kong					
Platinum & platinum metals (c)	1 071	1 554	1 946	2 733	3 594
Waste & scrap (c)	1 125	838	1 203	979	1 942
India					
Platinum & platinum metals (f)	386	449	3 666	2 910	...
Israel					
Platinum & platinum metals	£400 000	£97 000	£150 000	£73 000	£117 000
Waste & scrap (a)	*1 100	*3 300	*10 300	*7 500	*400
Japan					
Platinum	5 715	6 808	9 002	8 492	8 005
Platinum metals	9 462	28 043	20 472	17 967	16 355
Waste & scrap	1 276	4 382	13 822	41 546	4 862
Kazakhstan					
Waste & scrap (a)	*50	*100	...	*42 800	*8 000
Korea, Republic of					
Platinum & platinum metals	441	4 050	13 805	51 746	2 399
Waste & scrap	92	----	8 597	4 891	95 683
Singapore					
Platinum & platinum metals (c)	231	1 495	9 130	2 069	800
Waste & scrap	...	...	...	960	1 894
Taiwan					
Platinum & platinum metals	4 633	276	307	167	123
Waste & scrap	85 229	1 500	18 619	1 323	205
Uzbekistan					
Waste & scrap (a)	...	...	*31 500	*400	...
Australia					
Platinum & platinum metals	376	212	1 165	1 616	...
Waste & scrap	£2 770 000	£396 000	£3 322 000	£602 157	£956 000

## 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) Sales

(e) Platinum and platinum metals

(f) Years ended 31 March following that stated

## Imports of Platinum Group Metals

kilograms

Country	1995	1996	1997	1998	1999
Austria					
Platinum & platinum metals	4 725	5 506	7 100	4 000	4 400
Belarus					
Platinum & platinum metals (d)	*600	*200	*50	*100	*100
Belgium-Luxembourg					
Platinum	2 760	4 587	4 900	8 400	100
Platinum metals	5 894	24 094	108 900	11 300	...
Waste & scrap	...	£1 003 000	£9 466 000	£19 060 000	...
Croatia					
Platinum & platinum metals	£189 000	£291 000	£383 000	£63 000	£370 000
Cyprus					
Platinum & platinum metals	91	4 492	1 447	316	513
Czech Republic					
Platinum & platinum metals (d)	*400	*1 200	*400	*100	*100
Denmark					
Platinum & platinum metals	658	559	1 612	1 325	232
Waste & scrap	22	12	13	1 194	755
Estonia					
Waste & scrap	...	...	...	13 219	...
Finland					
Platinum & platinum metals	1 000	451	99	175	110
France					
Platinum	13 992	13 868	16 900	12 700	19 500
Platinum metals	9 273	12 535	19 400	26 400	21 000
Waste & scrap	2 178	19 706	2 100	7 500	4 700
Germany					
Platinum	23 764	22 775	26 900	21 700	29 100
Palladium	27 169	24 790	31 700	29 400	22 400
Other platinum metals	5 576	6 791	4 300	4 300	4 200
Waste & scrap	85 132	1 347 887	2 238 400	2 687 900	3 185 800
Hungary					
Platinum & platinum metals	(d) *100	104	123	50	87
Irish Republic					
Platinum & platinum metals	113 996	27 729	83 046	46 402	3 192
Italy					
Platinum	...	...	5 772	7 158	7 594
Platinum metals	...	...	26 070	32 112	31 738
Waste & scrap	337	530	980	792	938
Netherlands					
Platinum	£12 374 000	(b) £17 602 000	£28 298 000	£9 954 000	£9 329 000
Platinum metals	£7 059 000	...	£11 828 000	£1 605 000	£14 225 000
Waste & scrap	...	574	657	400	300
Norway					
Platinum & platinum metals	388	622	633	863	1 248
Waste & scrap	1 384	1 489	1 651	1 376	1 073
Poland					
Platinum & platinum metals	144	2 086	125	3 497	360
Romania					
Platinum & platinum metals	30 606	...	...	...	...
Spain					
Platinum & platinum metals	2 389	...	15 629	15 986	2 902
Sweden					
Platinum & platinum metals	£9 177 000	£6 864 000	£5 094 000	£7 553 000	£5 721 000
Switzerland					
Platinum	31 326	27 977	56 369	61 421	32 678
Palladium	23 932	38 047	65 435	78 486	93 200
Other platinum metals	653	545	429	384	285
Waste & scrap	14 651	2 815	5 957	5 628	9 801
Turkey					
Platinum & platinum metals	5 666	17 257	399	582	72
Ukraine					
Platinum & platinum metals (d)	*650	*1 000	*600	*600	*500
United Kingdom					
Ores & concentrates	68 325	...	...	...	...
Platinum	19 136	16 432	15 809	17 407	24 721
Palladium	25 584	40 909	25 190	27 272	21 534
Other platinum metals	4 036	4 808	6 967	8 829	5 624
Waste & scrap	110 072	651 881	705 721	384 379	432 205

**Imports of Platinum Group Metals**

kilograms

Country	1995	1996	1997	1998	1999
South Africa					
Platinum & platinum metals	85 545	...	6 735	27 683	13 895
Waste & scrap	...	2 877 877	2 720 501	2 762 116	1 014 431
Canada					
Platinum & platinum metals (c)	11 388	12 196	12 670	10 357	8 856
USA					
Platinum	71 460	76 097	76 300	97 013	106 288
Palladium	121 472	145 982	148 377	174 615	197 001
Rhodium	9 650	9 602	14 643	13 281	15 535
Other platinum metals	9 081	17 750	13 492	11 338	13 984
Waste & scrap	6 310	5 065	5 382	5 419	...
Brazil					
Platinum	563	902	2 168	2 136	2 717
Palladium	1 539	2 259	3 636	2 286	3 446
Venezuela					
Platinum & platinum metals	1 259	390	...	...	...
China					
Platinum & platinum metals	1 800	3 455	4 117	3 720	6 476
Dubai					
Platinum & platinum metals	...	129	37	749	...
Hong Kong					
Platinum & platinum metals	11 324	18 379	20 650	29 389	42 763
Waste & scrap	184	466	584	535	893
India					
Platinum & platinum metals (a)	231	436	1 105	1 693	...
Indonesia					
Platinum & platinum metals	79	20 026	...	1 498	...
Israel					
Platinum & platinum metals	£1 500 000	£800 000	£1 697 000	£1 329 000	£1 447 000
Japan					
Platinum	73 199	72 806	66 187	72 323	69 295
Palladium	99 369	77 735	103 376	80 976	87 885
Rhodium	1 675	1 739	2 129	2 431	3 611
Other platinum metals	5 172	6 253	6 774	7 314	7 321
Waste & scrap	1 013	25 152	256 613	538 538	390 992
Korea, Republic of					
Platinum & platinum metals	7 353	51 890	20 824	8 939	14 125
Malaysia					
Platinum & platinum metals	55 771	133 096	11 491	5 897	...
Singapore					
Platinum & platinum metals	23 466	11 044	16 932	6 343	10 251
Taiwan					
Platinum & platinum metals	15 378	11 672	10 171	4 172	4 335
Thailand					
Platinum & platinum metals	51 373	4 891	16 430	...	...
Australia					
Platinum & platinum metals	3 889	2 235	5 507	8 658	...
Waste & scrap	£114 000	£33 000	£1 000	£36 000	£81 000

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) Platinum and platinum metals

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

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

## Production of Potash

tonnes (K<sub>2</sub>O content)

Country	1995	1996	1997	1998	1999
Belarus	2 795 000	2 716 000	3 247 000	3 451 000	3 613 000
France					
Potassic salts	801 600	751 000	665 300	417 100	311 300
Germany					
Potassic salts	3 278 374	3 331 785	3 443 600	3 580 347	3 543 360
Russia	2 831 000	2 685 000	3 596 000	3 461 000	4 312 000
Spain					
Chloride	635 615	680 472	638 835	494 166	656 000
Ukraine	55 100	55 200	52 200	33 600	*33 000
United Kingdom					
Chloride	582 000	618 000	564 500	608 400	494 700
Canada					
Chloride	9 065 604	7 992 034	8 989 000	9 201 000	8 329 000
USA					
Potassic salts	1 480 000	1 390 000	1 400 000	1 300 000	1 200 000
Brazil					
Chloride	215 411	235 000	271 000	316 000	337 000
Chile					
Chloride	*60 000	*212 700	*245 000	*285 000	...
Nitrate	*48 000	*43 000	*45 000	*47 000	...
China	263 200	218 200	286 000	332 900	765 700
Israel					
Chloride	1 326 000	1 500 000	1 488 000	1 668 000	1 701 600
Jordan	1 068 002	1 059 197	849 405	916 385	1 080 114
World Total	24 500 000	23 500 000	25 800 000	26 100 000	26 700 000



## Potash

## Exports of Potash

tonnes

Country	1995	1996	1997	1998	1999
Belarus					
Chloride (a)	2 384 000	2 244 737	2 878 300	2 911 700	*3 250 000
Belgium-Luxembourg					
Fertiliser salts	3 560	9 381	4 020	4 989	3 923
Sulphate (b)	*315 000	*282 000	*349 000	*292 000	*140 000
Chloride	179 953	164 274	191 480	177 146	138 232
Other potassic fertilisers	4 031	6 389	7 428	6 503	4 909
Finland					
Sulphate (b)	*41 000	*46 000	*17 500	*44 400	*65 900
France					
Sulphate	...	4 624	1 806	1 962	729
Chloride	299 522	283 693	261 541	177 019	138 839
Other potassic fertilisers	...	387	1 583	1 153	18 196
Germany					
Fertiliser salts (a)	(e) 2 471 985	(d) 2 648 218	(d) 2 873 050	(d) 2 916 848	(d) 2 898 276
Other potassic fertilisers (a)	39 917	...	...	...	...
Hungary					
Potassic fertilisers	...	13 154	14 417	11 832	2 073
Italy					
Potassic fertilisers	678	934	9 382	38 095	2 060
Latvia					
Chloride (b) (c)	*120 000	*144 000	*149 000	*62 000	...
Lithuania					
Potassic fertilisers	1 530	16 175	15 855	35 296	10 993
Netherlands					
Potassic fertilisers	90 400	92 100	94 800	105 000	...
Poland					
Potassic fertilisers	1 166	3 800	6 000	1 000	1 135
Russia					
Fertiliser salts	20 000	17 000	1 000	5 156	5 622
Sulphate (b)	*11 000	*21 000	*26 000	*56 000	*56 000
Chloride	(b) *3 565 000	3 590 036	4 909 164	5 031 735	5 496 356
Other potassic fertilisers (b)	*180 000	*236 000	*192 000	*267 000	*209 000
Spain					
Sulphate	46 071	72 249	63 136	74 346	54 473
Chloride	730 080	643 490	667 967	427 674	464 464
Sweden					
Sulphate	129 694	137 876	110 894	92 095	78 326
Ukraine					
Chloride (b)	*340 000	*48 000	*179 000	*155 000	...
Other potassic fertilisers (b)	*2 900	*31 200	*4 500	*10 400	...
United Kingdom					
Chloride	*550 000	*540 000	*540 000	570 681	*420 000
Other potassic fertilisers	601	2 505	4 164	1 200	1 153
Canada					
Chloride	13 795 493	12 922 578	14 545 380	14 252 452	14 322 979
Other potassic fertilisers	7 681	14 737	20 260	16 803	30 207
USA					
Sulphate	629 000	694 000	692 000	746 000	601 000
Chloride	297 000	393 000	365 000	364 000	462 000
Chile					
Fertiliser salts	147 294	147 829	164 257	169 181	...
Chloride	180	9 810	72 684	112 259	*200 000
China					
Fertiliser salts	1 932	132 440	----	10	...
Sulphate	265	278	10 755	21 473	1 397
Chloride	196 564	525 701	587 010	452 094	860 051
Israel					
Chloride (a)	1 162 800	1 033 200	1 471 800	1 450 200	1 341 600
Other potassic fertilisers (b)	*52 900	*48 300	*91 800	*127 700	...
Japan					
Potassic fertilisers	487	786	687	726	559
Jordan					
Fertiliser salts	1 764 371	1 753 702	1 419 101	1 486 194	1 706 000
Chloride	...	7 870	15 206	8 781	...

**Exports of Potash**

Country	1995	1996	1997	1998	1999
Korea, Republic of					
Sulphate	27 500	105 363	92 878	53 283	25 835
Singapore					
Sulphate (c)	2 074	139	42	111	-----
Chloride (c)	39 327	29 438	35 282	37 193	144 298
Other potassic fertilisers (c)	989	5 853	6 751	3 460	3 707
Taiwan					
Sulphate	75 761	86 700	104 133	63 939	61 112

## Note(s):-

- (a) K<sub>2</sub>O content
- (b) BGS estimates, based on known imports into certain countries
- (c) Re-exports
- (d) Including sulphate, chloride and other potassic fertilisers
- (e) Including sulphate and chloride

## Imports of Potash

tonnes

Country	1995	1996	1997	1998	1999
Austria					
Fertiliser salts (a)	4 688	2 049	5 098	8 781	...
Sulphate (a)	7 130	5 688	4 453	5 591	...
Chloride (a)	34 076	141 533	57 371	60 691	...
Other potassic fertilisers (a)	502	726	1 215	1 508	...
Belgium-Luxembourg					
Fertiliser salts	32 980	23 051	28 948	33 135	29 987
Sulphate	94 881	134 136	154 895	111 311	138 679
Chloride	1 313 877	1 153 987	1 288 361	1 087 291	1 122 857
Other potassic fertilisers	16 549	23 511	19 777	17 384	17 478
Bulgaria					
Fertiliser salts (a)	12 000	27 000	...	...	...
Croatia					
Chloride	178 418	163 127	182 206	136 730	103 534
Other potassic fertilisers	...	...	...	2 337	3 816
Czech Republic					
Potassic fertilisers	116 900	109 600	106 364	93 279	78 380
Denmark					
Sulphate	29 494	7 190	30 816	22 042	15 642
Chloride	244 743	125 870	154 139	152 495	189 877
Other potassic fertilisers	10 588	14 967	9 881	7 062	15 330
Estonia					
Potassic fertilisers	...	...	2 852	2 857	3 500
Finland					
Chloride (a)	115 400	101 400	97 200	101 200	91 300
Other potassic fertilisers	6 892	2 234	444	103	...
France					
Fertiliser salts	37 829	40 346	12 715	1 045	1 622
Sulphate	95 573	101 484	101 910	90 079	93 584
Chloride	1 391 722	1 485 627	1 686 159	2 028 433	1 778 253
Other potassic fertilisers	28 405	34 777	33 015	30 028	27 100
Germany					
Chloride (a)	54 696	64 319	112 012	66 333	53 632
Greece					
Sulphate	110 351	144 232	164 451	102 220	82 587
Chloride	37 397	27 312	12 472	42 680	22 835
Other potassic fertilisers	8 954	7 916	8 400	10 986	11 075
Hungary					
Potassic fertilisers	107 255	112 821	116 522	96 263	70 417
Iceland					
Sulphate	1 030	21	701	6 877	...
Chloride	5 386	7 881	2 707	6 987	...
Irish Republic					
Sulphate	5 634	1 911	629	3 296	1 223
Chloride	225 024	311 191	184 488	186 347	105 305
Other potassic fertilisers	-----	-----	2 877	110	113
Italy					
Sulphate	90 861	98 508	79 936	94 700	95 951
Chloride	485 201	405 292	524 284	508 389	420 286
Other potassic fertilisers	23 623	16 080	23 545	19 055	21 943
Latvia					
Potassic fertilisers	11 727	24 658	11 698	12 697	13 055
Lithuania					
Fertiliser salts	1 000	3 300	3 023	8 643	10 494
Chloride	77 500	67 343	71 555	67 304	76 275
Other potassic fertilisers	...	...	10 445	3 256	4 515
Macedonia					
Potassic fertilisers	*14 000	8 845	9 442	12 307	...
Netherlands					
Potassic fertilisers	600 300	570 600	551 200	550 000	...
Norway					
Sulphate	177 640	169 303	187 970	234 934	182 419
Chloride	359 922	372 793	342 143	353 059	355 237
Other potassic fertilisers	367	524	658	311	534
Poland					
Fertiliser salts	11 476	...	...	...	...
Sulphate	12 010	...	...	...	...
Chloride	732 981	(c) 826 000	(c) 824 000	(c) 761 000	(c) 706 564

## Imports of Potash

Country	1995	1996	1997	1998	1999
Portugal					
Sulphate	...	1 198	2 370	2 423	799
Chloride	68 000	79 072	87 941	67 242	72 648
Romania					
Potassic fertilisers	96 577	84 858	83 763	60 987	82 029
Slovakia					
Potassic fertilisers	93 900	112 700	66 098	49 900	22 913
Spain					
Sulphate	16 323	8 146	14 812	20 244	23 631
Chloride	256 636	348 434	337 638	414 794	333 473
Other potassic fertilisers	849	762	1 329	1 072	8 525
Sweden					
Fertiliser salts	2 480	25	100	135	...
Sulphate	...	...	...	...	20 071
Chloride	...	7 479	11 808	10 825	65 185
Other potassic fertilisers	4 981	4 589	4 747	4 676	4 678
Switzerland					
Sulphate	2 937	3 152	2 365	2 240	3 767
Chloride	25 821	19 193	18 607	18 616	17 748
Other potassic fertilisers	4 578	4 997	5 052	2 988	3 204
Turkey					
Sulphate	11 336	21 385	19 554	27 796	23 429
Chloride	137 000	115 971	100 000	125 183	116 065
Ukraine					
Potassic fertilisers	...	41 077	61 316	39 868	55 053
United Kingdom					
Fertiliser salts	26 965	26 017	25 038	18 325	20 780
Chloride	441 494	462 630	331 300	209 519	235 772
Other potassic fertilisers	6 011	9 129	12 066	12 308	7 648
Yugoslavia, Federal Republic of					
Potassic fertilisers	...	...	55 570	58 057	30 693
Algeria					
Potassic fertilisers	66 700	*70 000	31 268	58 389	...
Cameroon					
Potassic fertilisers (a)	100	----	----	5 000	6 900
Egypt					
Potassic fertilisers (a)	8 800	12 600	10 500	52 746	6 700
Ivory Coast					
Potassic fertilisers (a)	11 700	7 200	50 000	----	29 900
Kenya					
Potassic fertilisers	3 026	1 362	3 306	25 683	2 789
Madagascar					
Potassic fertilisers	7 900	6 100	1 400	*1 400	...
Mauritius					
Potassic fertilisers	27 588	28 801	31 814	24 520	27 208
Morocco					
Sulphate	31 977	37 172	29 331	...	...
Chloride	51 058	51 659	48 057	...	...
Nigeria					
Potassic fertilisers (a)	----	56 278	9 813	15 446	6 000
Reunion					
Potassic fertilisers (a)	900	1 800	----	900	1 600
Senegal					
Potassic fertilisers (a)	18 000	12 000	29 200	21 000	26 000
South Africa					
Sulphate	31 997	25 293	33 734	29 495	16 163
Chloride	202 073	282 244	227 503	238 069	256 629
Other potassic fertilisers	...	...	11 832	8 124	6 221
Tunisia					
Potassic fertilisers	12 962	16 571	12 121	8 063	8 064
Zimbabwe					
Sulphate	22 538	18 534	38 925	...	...
Chloride	12 281	35 689	59 018	...	...

## Imports of Potash

tonnes

Country	1995	1996	1997	1998	1999
Belize					
Potassic fertilisers	3 052	978	346	543	...
Canada					
Sulphate	61 825	73 518	75 733	78 484	64 728
Chloride	5 651	12 318	4 851	4 854	4 256
Other potassic fertilisers	1 452	2 291	5 711	8 884	10 906
Costa Rica					
Sulphate	23 808	19 679	19 897	9 513	6 526
Chloride	56 912	58 841	74 262	81 474	90 823
Other potassic fertilisers	5 107	12 091	28 001	45 150	50 039
Cuba					
Sulphate	14 000	19 000	17 700	11 902	...
Chloride	154 000	145 000	89 475	50 307	*50 000
Dominican Republic					
Potassic fertilisers	18 600	28 300	31 300	27 500	24 000
El Salvador					
Potassic fertilisers	10 863	16 350	12 461	14 803	14 899
Guatemala					
Potassic fertilisers	55 071	54 753	69 156	66 494	63 405
Honduras					
Potassic fertilisers	18 156	8 029	26 182	27 453	18 521
Jamaica					
Potassic fertilisers	13 027	12 744	14 274	10 675	*16 000
Martinique					
Potassic fertilisers	15 472	23 674	10 231	17 548	12 188
Mexico					
Sulphate	24 822	34 475	57 248	65 261	59 439
Chloride	96 386	194 579	215 677	215 751	220 454
Nicaragua					
Fertiliser salts	5 082	3 112	9 425	11 408	4 886
Potassic fertilisers	5 621	3 303	3 693	3 591	2 197
Panama					
Potassic fertilisers	18 882	18 906	17 625	11 308	...
USA					
Fertiliser salts	3 242	33 331	30 516	8 820	8 991
Sulphate	51 777	60 370	56 235	94 574	85 986
Chloride	7 912 547	8 127 007	9 037 671	9 139 970	8 816 574
Other potassic fertilisers	29 957	41 698	33 751	42 024	28 436
Argentina					
Sulphate	7 116	17 942	11 523	10 656	5 268
Chloride	36 700	37 879	37 765	27 988	20 263
Other potassic fertilisers	7 940	9 468	12 170	12 100	13 010
Brazil					
Sulphate	50 005	45 923	60 118	54 910	43 033
Chloride	2 484 865	3 015 165	3 558 455	3 270 975	3 190 748
Chile					
Sulphate	6 953	12 472	7 309	11 603	...
Chloride	59 383	74 732	63 086	83 033	*70 000
Other potassic fertilisers	25 169	33 488	22 349	40 572	...
Colombia					
Sulphate	12 707	16 542	28 248	30 513	28 337
Chloride	252 310	247 888	256 845	332 912	312 743
Ecuador					
Fertiliser salts	6 045	...	512	...	...
Chloride	65 827	59 490	60 306	69 212	80 153
Other potassic fertilisers	3 555	5 511	6 204	11 320	15 010
Peru					
Chloride	8 445	17 812	28 226	36 448	30 266
Other potassic fertilisers	12 745	21 904	22 061	22 087	22 316
Uruguay					
Potassic fertilisers	5 349	13 331	18 930	17 162	12 838
Venezuela					
Sulphate	16 796	25 846	...	...	12 729
Chloride	74 043	64 538	31 428	...	69 270

## Imports of Potash

Country	1995	1996	1997	1998	1999
Bangladesh					
Potassic fertilisers (d)	...	99 513	220 419	...	...
China					
Fertiliser salts	40 063	172 548	...	...	...
Sulphate	439 884	416 504	628 128	534 354	197 238
Chloride	3 858 241	3 438 962	4 625 909	5 120 377	5 195 481
Other potassic fertilisers	98 172	...	20 039	39	1
Dubai					
Chloride	...	3 906	3 800	2 814	...
India					
Sulphate (b)	15 255	6 341	18 691	20 904	...
Chloride (b)	1 885 667	830 649	1 613 979	1 946 072	...
Other potassic fertilisers (b)	125 737	21 052	135 829	392 120	...
Indonesia					
Sulphate	12 929	6 330	7 471	5 560	...
Chloride	522 035	478 840	610 172	217 011	...
Other potassic fertilisers	----	6 330	6 001	26 296	...
Iran					
Potassic fertilisers (a)	----	13 800	29 600	51 700	90 100
Japan					
Sulphate	22 582	238 567	195 075	186 179	154 310
Chloride	968 381	909 857	926 442	794 725	747 781
Other potassic fertilisers	223 886	83 752	78 079	83 926	66 032
Korea, Republic of					
Chloride	...	712 505	688 715	573 396	595 954
Other potassic fertilisers	...	10 498	13 131	14 868	32 444
Malaysia					
Sulphate	11 837	11 552	5 960	6 206	...
Other potassic fertilisers	1 056 948	919 947	1 093 398	1 161 863	...
Oman					
Potassic fertilisers	2 137	587	3 257	2 895	...
Pakistan					
Potassic fertilisers (a)	400	46 400	400	16 600	12 600
Philippines					
Sulphate	185	1 107	4 554	1 398	...
Chloride	208 515	285 291	209 692	201 882	...
Saudi Arabia					
Sulphate	20 565	12 424	9 152	8 266	36 920
Other potassic fertilisers	2 967	11 231	7 153	7 727	9 159
Singapore					
Chloride	41 974	27 704	27 868	33 551	67 355
Other potassic fertilisers	14 806	5 229	6 093	17 379	4 144
Sri Lanka					
Chloride	28 428	40 801	46 525	78 773	...
Other potassic fertilisers	49 964	75 256	31 445	11 887	...
Syria					
Potassic fertilisers	8 225	17 852	...	7 350	...
Taiwan					
Chloride	344 918	287 285	328 237	321 719	278 542
Thailand					
Sulphate	15 715	11 738	16 787	6 819	7 551
Chloride	182 770	206 032	230 282	240 385	289 250
Vietnam					
Potassic fertilisers (a)	28 400	27 100	51 700	135 200	211 700
Australia					
Sulphate	12 409	15 385	23 793	46 969	19 062
Chloride	364 127	286 294	363 813	324 797	339 328
Other potassic fertilisers	9 458	3 573	6 394	10 145	17 873
New Zealand					
Sulphate (d)	684	...	8 196	6 437	...
Chloride (d)	216 494	...	208 055	226 817	...

Note(s) :-

(a) K<sub>2</sub>O content

(b) Years ended 31 March following that stated

(c) Including sulphate and fertiliser salts

(d) Years ended 30 June of that stated

**Production of Rare Earth Minerals**

tonnes

Country	1995	1996	1997	1998	1999
Congo, Democratic Republic					
Monazite	*20	*10	----	----	----
Madagascar					
Bastnaesite	*5	*5	*5	...	...
Monazite	*100	*100	*100	...	...
USA					
Bastnaesite (a)	22 200	20 400	*10 000	*5 000	*5 000
China (a)	48 000	55 373	53 250	65 000	70 000
India					
Monazite (b)	*5 000	*5 000	*5 000	*5 000	...
Malaysia					
Monazite	814	618	688	517	1 147
Xenotime	8	----	79	----	----
Australia					
Monazite	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) In addition to the countries listed, rare earth minerals are believed to be produced in Brazil, Indonesia, Democratic P.R. of Korea, Republic of Korea, Mozambique, Nigeria, the former Soviet Union and Vietnam

- (a) REO content. Assumed to be 60% of concentrates produced  
(b) Years ended 31 March following that stated

## Exports of Rare Earths

Country	1995	1996	1997	1998	1999
Austria					
Cerium compounds	975	553	485	416	...
Other rare earth compounds	2 167	1 651	1 260	1 111	...
Metals	285	278	619	725	...
Belgium-Luxembourg					
Rare earth compounds	81	106	217	385	97
Ferro-cerium & other pyrophoric alloys	73	6	14	17	18
Metals	11	10	131	310	107
Estonia					
Rare earth compounds	5 195	(b) *3 100	(b) *800	(b) *500	2 855
France					
Rare earth compounds	9 766	3 430	1 252	1 521	...
Ferro-cerium & other pyrophoric alloys	155	258	192	...	164
Metals	73	184	163	201	212
Germany					
Rare earth compounds	147	151	144	112	...
Ferro-cerium & other pyrophoric alloys	9	9	6	0	2
Metals	10	30	29	20	15
Irish Republic					
Rare earth compounds	...	...	21	92	443
Italy					
Metals	...	...	12	31	5
Netherlands					
Metals	37	...	69	89	43
Russia					
Rare earth compounds	(b) *300	2 879	...	...	...
Turkey					
Ferro-cerium & other pyrophoric alloys	...	32	78	184	54
United Kingdom					
Cerium compounds	568	473	407	463	374
Other rare earth compounds	772	933	595	261	252
Ferro-cerium & other pyrophoric alloys	29	11	11	15	23
Metals	416	44	70	70	352
USA					
Cerium compounds	5 127	6 148	6 010	4 912	4 169
Other rare earth compounds	1 546	2 221	1 660	1 725	1 684
Metals	370	211	826	737	1 211
China					
Ores & concentrates	676	1 405	300	----	...
Cerium compounds	7 877	9 994	13 826	16 694	21 267
Other rare earth compounds	27 608	33 522	31 275	48 922	...
Ferro-cerium & other pyrophoric alloys	130	288	294	117	...
Metals	6 870	5 055	8 207	6 097	8 293
Hong Kong					
Cerium compounds	...	...	----	356	455
India					
Rare earth compounds (a)	----	98	299	155	...
Japan					
Cerium compounds	541	658	849	656	1 230
Other rare earth compounds	395	417	532	348	329
Metals	804	408	403	383	289
Kazakhstan					
Metals	(b) *150	(b) *50	110	11	1
Malaysia					
Ores & concentrates	1 080	1 033	...	...	...
Singapore					
Ferro-cerium & other pyrophoric alloys	...	...	142	116	101
of which, re-exports	...	...	131	78	71
Metals	...	...	...	144	156
Taiwan					
Rare earth compounds	813	172	430	85	304
Metals	12	24	103	2	6
Thailand					
Ores & concentrates	----	100	----	120	1 311
Ferro-cerium & other pyrophoric alloys	37	50	157	...	...



**Exports of Rare Earths**

tonnes

Country	1995	1996	1997	1998	1999
Australia					
Cerium compounds	11	1	9	89	...

## Note(s):-

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

(a) Years ended 31 March following that stated

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

## Imports of Rare Earths

Country	1995	1996	1997	1998	1999
Austria					
Cerium compounds	433	484	780	192	1 169
Other rare earth compounds	541	810	715	1 505	...
Metals	829	276	673	769	643
Belgium-Luxembourg					
Cerium compounds	390	419	424	574	606
Other rare earth compounds	193	24	64	67	...
Ferro-cerium & other pyrophoric alloys	18	12	17	16	2
Metals	22	207	376	551	353
France					
Cerium compounds	1 311	6 658	11 028	19 647	16 540
Other rare earth compounds	13 027	15 752	906	1 369	...
Ferro-cerium & other pyrophoric alloys	65	37	61	...	26
Metals	305	406	412	430	281
Germany					
Cerium compounds	1 114	1 704	2 178	2 593	1 928
Other rare earth compounds	1 408	1 027	726	463	2 921
Ferro-cerium & other pyrophoric alloys	1	4	4	4	19
Metals	447	500	530	522	625
Hungary					
Rare earth compounds	...	192	194	163	198
Italy					
Rare earth compounds	...	...	505	518	...
Metals	...	...	19	8	23
Netherlands					
Cerium compounds	47	...	...	78	55
Other rare earth compounds	1 164	...	...	518	...
Ferro-cerium & other pyrophoric alloys	44	...	...	...	23
Metals	25	...	68	200	79
Norway					
Rare earth compounds	23	97	46	96	...
Metals	320	367	414	506	734
Poland					
Metals	132	125	45	5	4
Spain					
Rare earth compounds	288	...	370	385	407
Ferro-cerium & other pyrophoric alloys	152	...	59	...	40
Metals	13	...	14	7	34
Sweden					
Metals	...	...	31	61	18
Turkey					
Rare earth compounds	132	140	289	225	125
Ferro-cerium & other pyrophoric alloys	2	14	193	140	20
United Kingdom					
Cerium compounds	592	1 233	1 916	2 039	2 255
Other rare earth compounds	641	683	398	378	527
Ferro-cerium & other pyrophoric alloys	11	9	3	85	11
Metals	197	168	323	136	107
South Africa					
Rare earth compounds	207	270	262	418	557
Canada					
Cerium compounds	515	563	553	418	310
Other rare earth compounds	231	381	191	241	174
USA					
Cerium compounds	4 097	4 816	2 768	6 798	5 984
Other rare earth compounds	12 068	18 538	13 493	13 599	17 935
Ferro-cerium & other pyrophoric alloys	89	119	136	131	136
Metals	791	368	426	794	1 485
Brazil					
Cerium compounds	464	321	...	...	360
Other rare earth compounds	1 166	1 001	1 449	1 477	1 218
Metals	357	432	747	533	703

**Imports of Rare Earths**

tonnes

Country	1995	1996	1997	1998	1999
China					
Ores & concentrates	1 606	10 673	22	4	...
Rare earth compounds	380	780	855	992	...
Ferro-cerium & other pyrophoric alloys	50	281	97	84	...
Metals	357	24	226	277	162
Hong Kong					
Rare earth compounds	830	601	540	525	608
Metals	...	...	329	340	174
Japan					
Cerium compounds	7 973	7 756	8 405	8 207	8 757
Other rare earth compounds	9 913	8 997	10 215	10 424	1 948
Metals	2 838	2 395	2 696	3 727	4 659
Korea, Republic of					
Cerium compounds	278	697	749	731	1 249
Other rare earth compounds	1 394	1 500	336	677	...
Metals	25	67	72	7	12
Oman					
Rare earth compounds	...	112	32	...	...
Singapore					
Rare earth compounds	...	...	824	635	914
Ferro-cerium & other pyrophoric alloys	...	...	731	728	906
Taiwan					
Ores & concentrates	129	147	72	63	37
Rare earth compounds	2 616	3 197	2 808	2 678	2 751
Ferro-cerium & other pyrophoric alloys	36	19	71	66	11
Metals	155	80	764	1 077	1 288
Thailand					
Rare earth compounds	89	288	206	...	...
Ferro-cerium & other pyrophoric alloys	69	84	94	...	...
Australia					
Rare earth compounds	127	156	97	103	...
Metals	133	9	12	9	5

Note(s) :-

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

## Production of Salt

Country	1995	1996	1997	1998	1999
Albania					
Sea salt	...	7 000	22 732	15 865	24 689
Armenia	32 800	26 428	22 642	24 911	26 955
Austria					
Rock salt	1 056	923	1 103	1 343	1 481
Salt in brine	263 292	...	...	...	...
Evaporated salt	523 044	(e) 755 000	(e) 704 000	(e) 734 000	(e) 808 000
Azerbaijan	10 000	10 000	2 500	5 500	...
Belarus (i)	882 363	913 313	1 203 162	798 000	...
Bosnia & Herzegovina	*50 000	*50 000	*50 000	*50 000	...
Bulgaria	1 500 000	1 600 000	1 600 000	2 400 000	1 300 000
Croatia	21 784	18 820	16 620	31 062	18 477
Denmark	576 000	590 000	540 000	463 000	548 000
Finland	6 653	4 311	...	...	...
France					
Rock salt	165 000	308 000	315 000	470 000	634 000
Brine salt	1 438 000	1 414 000	1 368 000	1 313 000	1 438 000
Salt in brine	4 365 000	4 295 000	4 051 000	4 482 000	4 051 000
Sea salt	1 486 000	988 000	1 199 000	1 262 000	1 115 000
Other salt	402 000	583 000	417 000	211 000	270 000
Germany					
Rock salt	6 414 000	7 837 000	6 306 000	5 548 000	7 542 000
Brine salt	967 000	999 000	1 128 000	1 123 000	1 184 000
Salt in brine	5 050 000	5 015 000	5 420 000	5 440 000	5 589 000
Greece	143 351	138 239	173 886	208 000	176 867
Italy					
Rock salt & brine salt	3 430 374	3 528 120	3 594 549	3 413 522	...
Sea salt	990 688	*1 000 000	...	...	...
Netherlands	4 976 000	5 530 000	*5 000 000	5 500 000	...
Poland					
Rock salt	812 100	922 700	790 700	748 100	923 200
Brine salt	2 603 200	2 449 200	2 468 700	2 535 700	2 487 700
Portugal					
Rock salt	587 288	604 396	595 997	597 065	522 000
Sea salt	27 903	91 049	73 987	79 033	90 750
Romania	2 489 300	2 688 900	2 612 000	2 220 114	2 198 909
Russia	3 100 000	1 900 000	*1 900 000	1 829 000	1 981 000
Slovakia	99 750	106 800	126 800	100 471	119 000
Slovenia	2 738	*5 000	*5 000	*5 000	...
Spain					
Rock salt	2 214 680	2 216 482	2 305 062	2 286 230	(k) 3 620 000
Sea salt	1 376 154	1 119 796	1 192 935	1 321 059	...
Other salt	94 499	100 369	95 708	92 408	...
Switzerland	465 000	530 000	430 000	374 000	544 000
Turkey					
Rock salt	75 671	55 924	85 743	93 931	89 377
Sea salt	464 089	519 866	532 003	438 864	618 856
Other salt	902 290	1 403 624	1 726 253	1 636 831	1 437 894
Ukraine	2 867 100	2 847 800	2 622 900	2 310 970	...
United Kingdom					
Rock salt	*1 800 000	*2 200 000	*1 800 000	*700 000	*1 500 000
Brine salt	*1 300 000	*1 300 000	*1 300 000	*1 300 000	*1 300 000
Salt in brine (a)	3 548 000	3 512 000	3 561 000	*3 500 000	*3 000 000
Yugoslavia, Federal Republic of					
Rock salt	...	...	...	8 539	8 444
Sea salt	13 500	21 646	28 000	19 305	17 066
Algeria					
Brine salt & sea salt	143 745	154 115	136 357	172 025	163 748
Angola	*30 000	*30 000	*30 000	*30 000	...
Botswana	208 126	93 886	184 533	214 700	233 069
Cape Verde	...	1 710	3 957	...	...
Djibouti	...	...	272	82 876	156 556
Egypt (j)	1 193 000	1 148 200	1 232 000	1 380 000	...
Eritrea	254 701	200 412	252 072	114 136	...
Ethiopia (d)	*5 000	*5 000	*1 000	*1 000	...
Ghana	*50 000	*50 000	*50 000	*50 000	...
Kenya	73 484	41 000	6 280	21 742	44 886

## Production of Salt

tonnes

Country	1995	1996	1997	1998	1999
Libya	*30 000	*30 000	*30 000	*30 000	...
Madagascar	51 907	41 750	36 762	26 746	...
Mali	*5 000	*6 000	*5 000	*6 000	...
Mauritania	*6 000	*6 000	*6 000	*6 000	...
Mauritius (c)	7 000	6 500	6 000	6 200	...
Morocco	173 049	165 393	257 500	126 571	156 158
Mozambique	*40 000	*60 000	*60 000	*60 000	...
Namibia	429 779	356 868	492 780	530 280	496 850
Niger	*3 000	*3 000	*3 000	*2 000	...
Senegal	1 682 500	1 624 900	1 705 900	1 700 400	...
Sierra Leone	4 839	5 519	1 345	2 325	1 229
Somalia	*1 000	*2 000	*1 000	*1 000	...
South Africa	311 388	289 859	326 803	352 490	358 584
Sudan	*75 000	*50 000	*50 000	*50 000	...
Tanzania	105 006	86 700	72 500	72 100	...
Tunisia (c)	319 000	557 000	437 000	466 000	455 000
Uganda	*10 000	*10 000	*10 000	*5 000	...
Bahamas (i)	1 038 768	*1 000 000	1 029 000	1 077 000	828 000
Canada					
Rock salt	8 004 482	9 550 261	10 948 027	10 783 788	9 928 917
Other salt (e)	2 870 497	2 745 328	2 586 181	2 511 758	2 680 932
Costa Rica	32 200	37 000	*37 000	*37 000	...
Cuba	154 500	159 800	163 600	134 600	159 100
Dominican Republic					
Rock salt	10 806	11 330	*12 000	*12 000	...
Sea salt	41 822	49 719	*50 000	*50 000	...
El Salvador (c)	*50 000	*50 000	43 243	40 346	...
Guatemala (c)	50 800	*50 000	*50 000	*50 000	*50 000
Honduras	*25 000	*25 000	*25 000	*25 000	*25 000
Mexico	7 669 549	8 508 148	7 932 772	8 412 063	8 235 621
Netherlands Antilles (i)	424 065	366 265	432 225	487 373	...
Nicaragua (c)	*15 000	*15 000	13 619	15 132	16 141
Panama (c)	20 398	21 425	29 349	24 900	...
USA					
Rock salt (f)	13 000 000	14 500 000	12 200 000	12 700 000	...
Salt in brine (f)	20 500 000	21 500 000	21 400 000	21 100 000	(k) *41 000 000
Evaporated salt (f)	7 230 000	6 870 000	6 960 000	6 980 000	...
Argentina	1 009 697	1 096 321	841 029	751 695	...
Brazil					
Rock salt	1 340 000	1 514 153	1 452 000	1 484 000	1 430 000
Sea salt	4 460 000	3 870 000	5 064 000	5 353 000	4 528 000
Chile	3 494 451	4 042 796	5 488 135	6 207 266	6 800 000
Colombia					
Rock salt	119 092	152 642	141 923	165 699	156 933
Sea salt	162 315	423 513	232 085	330 404	304 433
Peru	125 651	293 308	79 492	220 310	...
Venezuela (c)	*350 000	*350 000	*350 000	*350 000	*350 000
Afghanistan	*13 000	*13 000	*13 000	*13 000	...
Bangladesh (j)	952 000	42 984	31 874	33 986	...
Cambodia	*40 000	*40 000	*40 000	*40 000	...
China	29 777 200	29 035 700	30 826 600	22 425 200	28 123 600
India					
Rock salt	1 900	2 500	3 100	2 400	3 000
Sea salt	8 470 100	10 149 400	10 751 500	8 471 100	9 775 700
Other salt	4 072 000	4 314 200	3 496 500	3 390 900	4 674 000
Indonesia	*670 000	*670 000	*680 000	*650 000	...
Iran (g)	721 110	1 410 644	1 382 753	*1 250 000	*1 300 000
Iraq	*250 000	*250 000	*250 000	*250 000	...
Israel					
Rock salt	709 000	512 000	573 000	292 000	...
Sea salt	236 000	253 000	311 000	326 000	...
Japan (h)	1 360 000	1 350 000	1 329 000	1 293 000	1 327 000
Jordan (b)	57 000	50 000	61 000	194 845	...
Kazakhstan	310 000	230 000	*230 000	...	...
Korea, Dem. P.R. of	*600 000	*590 000	*590 000	*550 000	...

## Production of Salt

Country	1995	1996	1997	1998	1999
Korea, Republic of	*770 000	*770 000	*770 000	*780 000	...
Kuwait	33 767	33 537	...	41 006	38 745
Lebanon	*3 000	*4 000	*4 000	*4 000	...
Mongolia	726	696	1 354	103	1 516
Myanmar (b) (c)	*35 000	*35 000	*35 000	*35 000	...
Oman	14 317	12 429	13 048	13 778	11 230
Pakistan					
Rock salt (j)	887 991	975 490	1 010 605	1 037 951	1 019 044
Sea salt (j)	12 171	-----	19 821	14 712	16 427
Philippines	612 858	618 481	686 514	727 754	704 347
Sri Lanka	*60 000	89 500	103 731	82 483	96 709
Syria	111 000	72 000	*70 000	*70 000	...
Taiwan	220 531	233 321	62 484	7 425	76 916
Tajikistan	70 000	50 000	*40 000	...	...
Thailand					
Rock salt	380 511	529 674	554 891	546 096	739 502
Other salt	*100 000	*100 000	*100 000	*100 000	...
Turkmenistan	276 912	255 788	216 500	*215 000	...
Uzbekistan	100 000	60 000	*60 000	...	...
Vietnam	*375 000	*375 000	*390 000	*400 000	...
Yemen, Republic of	69 000	135 000	136 000	...	...
Australia (l)	8 298 000	7 993 000	8 883 000	9 034 000	10 022 000
New Zealand	*50 000	*67 000	70 000	130 000	29 000
World Total	196 700 000	203 800 000	205 200 000	194 500 000	204 400 000

## 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) Years ended 31 March following that stated  
(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	1995	1996	1997	1998	1999
Albania	...	13 830	1 925	251	...
Belarus	882 363	913 313	1 203 162	797 847	529 132
Belgium-Luxembourg	193 167	234 927	420 425	30 165	45 977
Bosnia & Herzegovina (a)	...	*6 700	*10 100	*7 400	*32 100
Bulgaria	112 200	17 500	4 900	*5 000	...
Croatia	2 674	3 326	9 141	2 493	2 283
Cyprus	...	2	926	5 699	2 941
Czech Republic	13 900	17 800	17 046	16 031	13 967
Denmark	325 569	335 686	327 368	275 254	347 207
France	605 536	796 564	673 761	591 511	693 027
Germany	2 698 101	2 852 410	2 576 659	2 750 863	2 984 868
Greece	17 049	25 683	21 649	29 445	41 469
Hungary	2 100	3 069	1 839	437	236
Iceland	521	3 985	3 314	2 437	...
Italy	314 116	292 480	186 050	265 377	307 128
Lithuania	2 000	2 500	3 620	4 928	2 061
Netherlands	3 714 195	3 340 723	3 059 922	2 039 700	2 910 915
Norway	3 397	5 511	5 118	9 567	7 929
Poland	530 577	513 300	390 700	337 700	422 351
Portugal	5 700	16 085	25 600	13 048	3 362
Romania	397 903	565 510	585 665	439 530	492 524
Russia	26 000	14 343	15 577	13 108	23 109
Slovakia	*42 000	51 173	50 938	52 000	46 826
Slovenia	1 700	1 100	3 300	4 800	4 817
Spain	729 857	896 043	714 877	669 534	732 727
Sweden	54 306	1 774	1 884	1 989	1 829
Switzerland	86 792	73 243	38 160	35 844	22 002
Turkey	10 084	10 706	13 061	17 674	20 778
Ukraine	1 464 187	1 424 393	1 367 601	1 012 089	928 343
United Kingdom	455 119	447 154	284 571	485 815	309 046
Algeria	----	3 420	9 520	25 803	41 900
Botswana	...	...	107 291	...	...
Egypt	266 400	298 527	269 661	294 096	268 218
Ghana	...	...	...	...	36 960
Kenya	100 335	109 474	109 375	123 796	97 578
Madagascar	10 814	2 331	827	----	9
Morocco	54 796	64 601	11 189	*10 000	...
Namibia	78 960	38 454	37 276	62 384	12 003
Senegal	188 271	155 543	83 588	81 903	62 099
South Africa	2 157	1 294	2 639	1 826	2 138
Tanzania	*3 000	*3 000	8 400	...	7 313
Tunisia	403 433	428 104	347 679	394 410	391 352
Uganda	...	1 039	451	1 806	...
Bahamas	1 038 768	*1 000 000	1 029 000	1 077 000	828 000
Canada	2 987 612	3 818 652	3 635 862	4 190 782	3 849 203
Dominican Republic	*25 000	27 600	41 300	*42 000	41 251
Jamaica	4 048	3 930	3 209	2 139	...
Mexico	7 179 256	7 609 782	6 105 698	6 442 297	6 842 605
Netherlands Antilles	424 065	366 265	432 225	487 373	...
Trinidad & Tobago	3 193	10 181	6 639	7 000	...
USA	670 906	898 502	771 095	728 642	893 571
Argentina	47 060	44 226	50 455	40 503	36 676
Brazil	130 267	163 766	273 469	444 608	516 331
Chile	1 214 742	3 922 438	3 037 461	2 059 050	...
Colombia	22 011	94 732	61 681	76 007	34 672
Peru	17 397	155 338	539 441	294 484	653 103
China	336 650	365 417	235 058	332 649	392 355
Hong Kong (c)	5 488	4 306	13 311	1 495	1 454
India (b)	259 282	392 421	244 359	190 651	...
Indonesia	20 475	28 673	15 081	23 252	...
Iran (e)	112 423	...	88 966	112 756	...
Israel (a)	*53 000	*56 000	*125 000	*81 000	*81 000
Japan	1 634	2 225	2 046	1 925	2 044
Jordan	1 475	2 064	18 333	144 749	...

## Exports of Salt

tonnes

Country	1995	1996	1997	1998	1999
Kazakhstan	17 000	37 000	(a) *31 000	19 237	...
Korea, Republic of	10 094	29 448	34 734	19 483	16 852
Kuwait	198	1 490	3 182	4 264	180
Malaysia	2 800	6 500	9 100	15 900	...
Pakistan (d)	*42 000	32 999	40 042	145 315	34 563
Saudi Arabia	5 500	11 082	10 062	12 163	11 889
Singapore	7 538	6 217	5 990	3 497	2 644
of which, re-exports	6 900	5 842	5 572	3 381	2 318
Syria	...	...	12 124	3 542	...
Thailand	70 522	63 806	60 608	91 016	94 222
Yemen, Republic of	...	999	6 652	58 139	14 931
Australia	7 648 946	7 651 312	8 187 274	8 700 065	8 472 082
New Zealand (d)	14 917	13 088	16 467	20 139	...

## 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	1995	1996	1997	1998	1999
Albania	...	3 104	3 179	6 028	...
Austria	65 100	210 100	83 561	82 949	146 444
Azerbaijan	...	...	...	...	58 141
Belarus	50 695	63 671	53 000	54 374	21 196
Belgium-Luxembourg	1 490 943	3 570 812	3 614 738	3 602 237	3 373 286
Bulgaria	118 473	120 119	106 200	145 000	177 500
Croatia	67 427	102 138	110 510	79 927	121 907
Cyprus	7 462	8 099	6 699	13 318	9 888
Czech Republic	585 100	724 600	628 270	552 813	814 794
Denmark	349 251	444 177	273 186	249 388	379 402
Estonia	60 299	65 000	68 975	69 177	76 508
Faeroe Islands	22 263	22 623	18 235	16 284	18 622
Finland	422 518	342 313	413 004	404 295	371 534
France	363 293	462 937	599 152	559 453	581 948
Germany	1 813 085	1 673 685	1 792 547	1 583 346	1 514 180
Greece	92 130	140 162	144 966	149 344	102 191
Greenland	2 679	2 422	4 071	3 042	4 188
Hungary	434 814	627 424	551 789	418 601	551 648
Iceland	95 194	90 996	87 194	94 408	...
Irish Republic	76 576	96 700	100 635	90 066	110 287
Italy	564 006	648 456	673 571	656 656	581 887
Latvia	56 416	76 002	81 501	91 179	108 065
Lithuania	106 600	139 579	167 029	168 245	176 718
Macedonia	*50 000	42 077	29 153	26 523	...
Malta	1 305	1 810	1 682	3 132	...
Moldova	39 502	48 849	52 164	39 151	44 054
Netherlands	282 981	499 651	452 393	324 111	502 862
Norway	692 406	675 715	683 521	703 443	753 514
Poland	31 273	81 800	81 700	74 200	116 447
Portugal	73 000	40 819	90 057	105 823	75 053
Romania	1 026	2 176	1 236	644	774
Russia	*900 000	902 966	840 626	625 397	479 981
Slovakia	180 600	199 200	129 300	160 100	186 687
Slovenia	78 400	129 811	120 618	91 314	143 054
Spain	20 841	21 906	25 460	37 542	60 771
Sweden	1 059 590	1 095 521	808 890	947 996	1 072 731
Switzerland	1 267	4 000	4 685	5 114	16 756
Turkey	7 454	3 504	4 660	7 643	10 706
United Kingdom	238 599	316 796	242 368	237 284	267 767
Yugoslavia, Federal Republic of	...	200 191	268 677	217 349	174 945
Benin	*3 000	*3 000	*3 000	*3 000	...
Burkina Faso	28 000	28 133	36 996	39 945	...
Burundi	*10 000	*10 000	*10 000	*10 000	...
Cameroon	47 767	38 756	*38 800	*38 800	...
Central African Republic	4 764	3 288	*3 300	*3 300	...
Congo	5 300	26 134	6 275	10 026	...
Egypt	1 200	1 800	2 369	2 860	3 849
Ethiopia (d)	...	...	...	120 062	77 402
Gabon	*7 300	*3 800	*3 800	*3 800	...
Ivory Coast	...	60 675	...	...	...
Kenya	38 600	14 000	6 800	...	19 694
Malawi	25 392	*25 000	*25 000	*25 000	...
Mauritius	1 100	1 700	1 400	1 700	3 292
Morocco	666	778	6 781	...	...
Nigeria	*300 000	330 235	358 403	375 491	307 042
Reunion	2 900	2 900	*2 900	*2 900	...
Rwanda	...	...	16 609	16 388	...
South Africa	153 413	170 360	84 602	119 775	60 596
Tanzania	27 600	2 900	8 700	...	26 593
Uganda	*55 000	61 092	41 913	108 080	...
Zimbabwe	67 181	69 662	80 155	81 293	79 292
Barbados	1 918	2 053	2 180	1 848	2 101
Belize	868	921	1 031	1 261	1 166
Canada	1 294 921	1 137 699	1 269 550	978 145	1 375 423
Costa Rica	6 397	19 555	15 057	23 442	31 561
Dominica	747	713	825	*550	907

## Imports of Salt

Country	1995	1996	1997	1998	1999
El Salvador	1 982	6 591	4 984	3 581	2 554
Guadeloupe	2 196	2 419	2 259	2 577	2 471
Guatemala	738	3 970	7 265	4 902	6 634
Honduras	1 535	1 923	2 122	1 915	3 312
Jamaica	16 919	28 351	11 784	23 201	...
Martinique	2 394	2 590	2 365	2 196	2 467
Mexico	55 449	46 280	63 715	64 858	85 623
Netherlands Antilles	*500	*500	*500	424	...
Nicaragua	653	3 702	1 323	1 210	7 325
Panama	806	1 753	6 661	3 186	3 594
St. Lucia	812	771	645	704	621
St. Pierre & Miquelon	1 512	542	1 183	1 141	1 105
Trinidad & Tobago	17 664	7 400	24 525	23 500	...
USA	7 095 451	10 625 971	9 166 803	8 815 490	8 854 293
Brazil	79 890	62 894	363 730	207 418	215 593
Colombia	37 930	85 495	79 569	73 563	57 326
French Guiana	511	474	571	*500	...
Paraguay	16 292	13 007	19 480	...	9 271
Suriname	1 624	1 706	2 088	...	...
Uruguay	45 051	92 117	85 565	87 424	70 392
Venezuela	144 792	148 938	147 293	211 518	97 088
Abu Dhabi	2 196	2 604	3 211	3 386	7 360
Bahrain	*3 500	*3 500	10 295	12 366	22 882
Bangladesh (b)	63 600	*50 000	56 568	17 500	...
China	8 243	3 671	6 299	4 432	3 532
Dubai	...	12 880	10 974	12 746	...
Hong Kong	82 535	81 282	64 086	60 345	58 640
India (c)	20 654	22 051	1 236	88	...
Indonesia	590 504	633 984	748 440	907 997	...
Japan	8 063 196	7 725 601	7 917 873	7 914 304	8 236 050
Kazakhstan	*8 000	*10 000	*10 000	9 746	...
Korea, Dem. P.R. of (a)	*128 000	*136 000	*61 000	*78 000	*35 000
Korea, Republic of	1 644 014	1 841 069	1 874 890	2 144 680	2 356 280
Kuwait	7 182	10 502	10 482	11 191	10 965
Kyrgyzstan	15 255	14 559	*14 600	8 602	4 766
Laos	...	28 770	31 877	...	...
Macao	2 207	2 349	2 119	2 385	2 185
Malaysia	267 800	218 900	390 900	187 400	...
Oman	3 811	9 345	3 335	4 248	14 254
Philippines	186 514	336 027	352 914	110 629	...
Qatar	5 557	5 143	5 852	...	...
Saudi Arabia	10 657	10 620	11 530	18 194	17 119
Singapore	72 877	65 382	139 094	55 711	85 621
Sri Lanka	16 100	...	...	6 354	...
Taiwan	893 861	851 495	991 491	1 301 310	112 918
Thailand	1 065	33 587	55 242	1 137	67 978
Australia	10 263	10 936	12 522	12 310	14 071
Fiji	5 000	*5 000	*5 000	*5 000	...
New Caledonia	840	877	1 199	972	...
New Zealand (b)	108 173	...	65 728	121 844	...
Papua New Guinea	...	8 660	21 895	...	...
Solomon Islands	709	868	1 803	...	...

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

(d) Years ended 7 July of that stated

**Production of Sillimanite Minerals**

tonnes

Country	1995	1996	1997	1998	1999
France					
Andalusite	71 000	81 000	67 200	79 000	...
Spain					
Andalusite	*1 200	*250	*220	*250	...
South Africa					
Andalusite	206 378	233 728	236 990	232 646	136 949
Sillimanite	317	497	----	65	----
Zimbabwe					
Kyanite	875	140	1 113	3 780	5 038
USA					
Kyanite (b)	*90 000	*90 000	*90 000	90 000	90 000
Brazil					
Kyanite (c)	758	705	*700	*700	*700
China	...	...	...	113 000	129 600
India					
Kyanite (a)	8 944	7 055	6 068	6 134	6 485
Sillimanite (a)	9 086	8 528	12 458	12 123	14 936
Australia					
Kyanite	*800	*800	*800	*800	*1 000
Sillimanite	----	20	----	26	274

## 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) Years ended 31 March following that stated  
(b) Including related minerals  
(c) Including beneficiated and directly shipped material

**Exports of Sillimanite Minerals**

Country	1995	1996	1997	1998	1999
Belgium-Luxembourg	30	402	941	2 663	4 357
France	54 301	62 842	56 347	51 279	42 872
Germany	7 987	6 492	7 440	8 081	4 779
Italy	...	...	352	487	147
Netherlands	5 649	...	2 669	6 787	12 293
United Kingdom	7 858	8 356	7 442	6 677	5 681
South Africa					
Andalusite	148 551	158 526	156 810	144 277	108 574
Sillimanite	182	34	----	38	----
Canada					
Mullite	3 979	6 395	4 703	4 332	4 660
USA					
Sillimanite minerals	36 022	35 003	36 234	30 143	29 499
Mullite	11 565	20 465	20 100	37 918	32 000
China	2 183	8 513	9 675	7 687	12 463
India (a)	1 260	794	545	679	...
Japan	10 112	6 529	4 577	2 474	3 347
Taiwan	958	...	...	732	622

Note(s):-

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

(a) Years ended 31 March following that stated

**Imports of Sillimanite Minerals**

tonnes

Country	1995	1996	1997	1998	1999
Austria	3 486	3 256	2 414	11 483	2 447
Belgium-Luxembourg	7 915	8 830	6 430	9 199	10 059
Czech Republic	...	...	2 767	3 281	2 557
Denmark	2 497	1 235	1 658	3 306	1 250
Finland	826	165	108	62	62
France	7 950	5 141	3 286	3 091	3 339
Germany	80 570	47 939	43 196	58 525	52 924
Irish Republic	7 414	6 622	1 800	3 809	3 820
Italy	...	...	50 912	70 741	77 567
Netherlands	7 625	...	7 622	28 365	17 799
Norway	3 359	3 598	3 017	2 314	2 542
Poland	19 827	16 461	15 643	14 519	7 760
Portugal	...	631	616	716	491
Slovakia	(b) *900	...	1 785	...	2 910
Spain	15 224	...	14 865	17 956	16 687
Sweden	...	...	7 557	7 363	4 334
Switzerland	359	452	352	440	366
Turkey	8 161	2 063	3 523	...	2 622
United Kingdom					
Sillimanite minerals	56 289	52 229	53 877	47 985	36 489
Mullite	28 921	17 765	12 922	8 417	7 276
Canada	12 180	15 103	*20 000	22 181	19 057
Mexico					
Sillimanite minerals	2 356	2 962	2 810	2 300	1 995
Mullite	2 433	2 666	3 207	3 785	4 941
USA	8 298	18 682	14 006	15 596	11 877
China	492	861	1 643	1 096	4 115
Hong Kong	65 704	20 918	27 304	15 770	44 695
India (a)	1 100	1 585	1 364	1 424	...
Japan	21 765	25 316	27 722	24 879	12 590
Japan					
Mullite	2 746	4 049	6 464	4 826	5 041
Korea, Republic of					
Sillimanite minerals	13 611	11 646	12 160	10 784	10 470
Mullite	10 664	7 098	5 462	2 670	3 489
Taiwan					
Sillimanite minerals	5 613	7 539	8 400	7 810	5 782
Mullite	1 021	684	547	538	879
Thailand					
Mullite	12 784	...	7 177	832	1 370
Australia					
Sillimanite minerals	8 420	6 696	6 679	4 265	2 496
Mullite	117	86	109	141	57

Note(s) :-

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

(a) Years ended 31 March following that stated

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

## Mine Production of Silver

kilograms (metal content)

Country	1995	1996	1997	1998	1999
Bulgaria	29 000	48 770	31 530	23 790	*25 000
France	3 507	2 718	2 402	1 027	1 140
Greece	*33 000	16 700	37 300	44 000	39 000
Irish Republic	13 700	14 700	13 300	10 800	10 400
Italy	13 900	9 100	4 400	2 500	100
Macedonia	*10 000	*10 000	*10 000	*10 000	*10 000
Poland	(a) 1 001 000	1 107 300	1 084 200	1 143 690	1 160 355
Portugal	38 600	33 700	33 900	31 880	26 450
Romania	*18 000	*18 000	*18 000	*18 000	*18 000
Russia	480 000	*500 000	*500 000	*400 000	*400 000
Spain	175 730	204 015	142 520	99 910	...
Sweden	268 200	271 866	304 048	299 051	341 584
Turkey	53 000	71 000	90 000	87 000	*90 000
Yugoslavia, Federal Republic of (a)	31 054	68 805	42 640	34 474	7 643
Algeria	2 000	1 600	*1 500	*1 500	*1 500
Ghana	1 200	*1 200	*1 300	*1 400	*1 400
Morocco	204 000	199 000	261 000	307 000	278 000
Namibia	65 847	42 300	41 000	13 980	----
South Africa	174 316	168 689	144 005	144 481	151 960
Tunisia	2 500	1 500	100	400	*400
Zambia	7 875	9 643	7 219	6 936	6 076
Zimbabwe	15 640	9 982	5 923	6 681	5 396
Canada	1 284 757	1 308 758	1 223 953	1 195 943	1 231 302
Dominican Republic	21 066	17 018	12 407	7 409	3 140
Honduras	30 202	36 378	42 809	42 898	46 473
Mexico	2 324 349	2 527 875	2 674 979	2 686 021	2 466 981
Nicaragua	1 067	790	1 077	1 946	1 780
Panama	569	1 307	2 178	*2 000	*2 000
USA	1 564 900	1 570 200	2 181 600	2 064 600	1 951 000
Argentina	47 787	50 399	52 550	35 768	73 788
Bolivia	425 053	384 384	387 200	403 961	422 500
Brazil	13 000	12 000	10 000	10 000	10 000
Chile	1 041 098	1 147 002	1 091 311	1 340 199	1 379 853
Colombia	5 915	6 407	3 515	5 218	7 593
Peru	1 928 853	1 976 536	2 090 311	2 024 571	2 221 885
China	910 000	1 140 000	1 300 000	1 299 000	1 378 714
India (a) (b)	35 531	39 689	53 925	55 409	53 627
Indonesia	265 212	255 404	279 161	348 974	292 331
Iran	*60 000	*46 000	*50 000	*55 000	*50 000
Japan	100 078	85 115	87 180	94 472	94 004
Kazakhstan (a)	371 000	414 310	389 576	535 800	645 600
Korea, Dem. P.R. of	*50 000	*50 000	*50 000	*50 000	*50 000
Malaysia	11 079	9 720	9 647	7 285	2 744
Mongolia	*21 000	*21 000	*21 000	*21 000	*21 000
Myanmar (a) (b)	4 417	3 670	*1 900	*3 400	*4 200
Philippines	28 483	23 987	20 744	18 220	18 214
Saudi Arabia	16 900	16 600	16 900	13 844	10 470
Uzbekistan	50 000	*50 000	*50 000	50 500	61 100
Australia	939 000	1 013 000	1 106 000	1 474 000	1 720 000
Fiji	2 078	1 984	2 654	1 787	2 159
New Zealand	27 794	29 340	31 684	22 681	24 308
Papua New Guinea	65 153	59 036	49 165	59 294	66 542
Solomon Islands	3	1	...	1 466	2 138
World Total	14 288 000	15 108 000	16 070 000	16 621 000	16 990 000

Note(s):-

(1) Countries producing less than 1000 kg per year include Ethiopia and the Republic of Korea, and Croatia and Oman in 1995

(a) Smelter and/or refinery production

(b) Years ended 31 March following that stated

## Exports of Silver

kilograms

Country	1995	1996	1997	1998	1999
Austria					
Metal	41 576	52 016	54 900	57 500	133 700
Belgium-Luxembourg					
Ores & concentrates	...	44 000	500	239 000	22 500
Metal	1 403 148	1 313 552	1 229 800	773 400	53 900
Bulgaria					
Metal (d)	*21 300	*22 700	*14 300	*18 800	*27 000
Denmark					
Metal	13 133	56 957	60 194	97 904	20 456
Finland					
Metal	18 000	24 000	25 785	7 447	8 300
France					
Metal	1 143 329	1 072 677	908 700	725 000	615 700
Waste & scrap	369 949	827 476	1 098 369	612 503	...
Germany					
Metal	1 375 651	1 020 727	1 168 100	2 022 300	2 252 100
Italy					
Metal	...	...	453 461	569 198	447 420
Latvia					
Metal	1 153	495	----	----	----
Lithuania					
Metal	£7 000	£20 000	£1 000	£6 000	£600
Macedonia					
Metal (d)	*1 000	*10 100	*11 000	*9 300	*6 200
Netherlands					
Metal	59 438	...	...	...	...
Norway					
Metal	77 178	106 519	102 917	92 509	122 387
Poland					
Metal	897 000	891 000	929 000	1 032 000	...
Portugal					
Metal	...	86	4 687	416	277
Russia					
Ores & concentrates	...	...	----	4 398 062	...
Metal	558 300	547 600	...	(d) *1 217 100	(d) *420 000
Waste & scrap	254 800	69 400	...	...	...
Slovakia					
Metal (d)	*1 000	...	*2 900	*3 100	...
Spain					
Metal	264 996	...	360 915	423 041	27 952
Sweden					
Metal	...	...	260 000	282 000	308 000
Switzerland					
Metal	2 528 421	3 025 378	2 440 242	3 124 694	2 028 356
Turkey					
Metal	10 534	401	...	647	352
United Kingdom					
Metal	2 156 844	3 155 901	3 187 801	2 053 193	1 402 128
Yugoslavia, Federal Republic of					
Metal	...	...	36 000	7 106	661
Morocco					
Metal	242 000	205 000	270 741	...	...
Namibia					
Metal	66 848	42 704	40 188	13 980	----
South Africa (f)					
Metal	148 477	137 558	179 321	130 606	154 559
Canada					
Ores & concentrates (e)	229 119	224 056	216 990	141 206	108 608
Metal	1 209 950	1 450 625	1 262 953	1 625 501	1 708 629
Dominican Republic					
Metal	21 066	17 018	12 407	7 409	3 140
Honduras					
Concentrates (e)	30 202	36 378	42 809	42 898	46 473
Mexico					
Ores & concentrates	370 650	774 000	1 378 586	3 496 444	6 540 820
Metal	...	1 800 451	...	2 345 477	3 594 800

## Exports of Silver

Country	1995	1996	1997	1998	1999
USA					
Ores & concentrates (b)	741	1 544	35 003	13 917	91 749
Metal	3 703 425	3 534 291	4 044 085	3 055 422	1 074 903
Waste & scrap	1 573 549	1 273 699	1 021 496	1 064 176	1 314 128
Bolivia					
Ores & concentrates	2 627 661	3 742 531	2 307 449	1 641 817	1 737 576
Metal	80 974	69 882	72 310	79 256	73 206
Brazil					
Metal	114 752	57 024	58 534	48 772	35 385
Chile					
Metal	640 119	729 475	731 261	779 744	...
Peru					
Metal	658 083	710 930	686 932	792 233	1 008 168
Venezuela					
Metal	29 911	...	...	...	...
China					
Metal	15 970	6 418	26 688	88 574	308 335
Hong Kong					
Metal	60 118	43 121	50 419	345 428	1 399 377
of which, re-exports	59 617	42 781	50 359	250 087	672 083
India					
Metal (c)	780	1 040	5 149	2 775	...
Indonesia					
Metal	73 719	38 065	13 255	164 350	...
Israel					
Metal (d)	...	*2 200	*8 500	*1 600	...
Japan					
Metal	206 058	217 256	316 901	368 422	456 783
Waste & scrap	14 158	110	164 140	187 317	252 129
Kazakhstan					
Metal	90 694	132 154	254 209	582 600	636 300
Korea, Dem. P.R. of					
Metal (d)	*3 200	...	...	*7 300	*19 100
Korea, Republic of					
Metal	239 444	389 495	249 024	454 500	426 346
Kyrgyzstan					
Metal (d)	...	...	...	*2 500	*2 600
Malaysia					
Metal	2 480	407	...	...	...
Oman					
Metal	4 490	3 702	3 471	617	----
Philippines					
Ores & concentrates (b)	20 948	9 821	7 803	6 640	...
Metal	6 887	2 541	5 470	6 868	...
Singapore					
Metal	1 503 166	1 790 424	1 290 904	827 385	695 506
of which, re-exports	1 448 844	1 705 454	1 257 720	768 599	681 321
Taiwan					
Metal	12 088	8 540	12 206	2 867	6 008
Thailand					
Metal	4 645	5 667	30 298	...	...
Uzbekistan					
Metal (d)	...	*300	*32 800	*1 300	...



**Exports of Silver**

kilograms

Country	1995	1996	1997	1998	1999
Australia					
Ores & concentrates	-----	13 834	1	-----	4 160
Metal (g)	204 691	320 539	215 817	374 792	428 000
New Zealand					
Metal (a)	931	1 413	3 563	2 704	...
Papua New Guinea					
Metal	68 306	58 131	45 426	65 247	...

## 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  
(b) Ag content  
(c) Years ended 31 March following that stated  
(d) BGS estimates, based on known imports into certain countries  
(e) Ag content of all ores and concentrates  
(f) Refined metal, matte, in copper and lead concentrates, anode slimes, in blister copper  
(g) Silver content of refined bullion and welding or brazing rods

## Imports of Silver

Country	1995	1996	1997	1998	1999
Austria					
Metal	93 864	80 321	88 100	125 200	254 500
Belgium-Luxembourg					
Ores & concentrates	354 000	3 160 000	13 800	16 900	1 188 000
Metal	2 718 609	2 717 000	2 544 300	2 366 500	1 558 500
Bulgaria					
Metal (c)	-----	*300	*100	*900	...
Croatia					
Metal	£312 000	£200 000	£501 000	£326 000	£242 000
Cyprus					
Metal	12 287	13 640	10 512	11 168	8 312
Czech Republic					
Metal (c)	*17 200	*23 000	*48 200	*80 700	*86 700
Denmark					
Metal	148 611	135 017	143 604	109 846	18 075
Estonia					
Metal	6 033	(c) *5 100	(c) *10 400	(c) *4 000	7 457
Faeroe Islands					
Metal	127	175	224	275	243
Finland					
Metal	66 000	113 000	91 170	72 799	74 314
France					
Metal	1 724 937	1 933 921	1 786 800	1 326 300	1 223 400
Waste & scrap	200 600	482 889	241 900	682 847	...
Germany					
Ores & concentrates	1 000	-----	1 041 400	5 027 600	4 540 700
Metal	1 267 012	1 074 428	1 233 100	1 728 800	1 481 600
Greece					
Metal	...	...	...	...	52 252
Hungary					
Metal	...	11 177	1 641	8 132	12 908
Iceland					
Metal	497	633	600	...	...
Irish Republic					
Metal	8 684	5 903	37 893	15 907	3 307
Italy					
Ores & concentrates	239 274	26 845	...	...	...
Metal	...	...	1 245 426	1 171 220	1 453 167
Lithuania					
Metal	£79 000	£88 000	£130 000	£128 000	£109 000
Malta					
Metal	2 637	2 242	...	...	...
Netherlands					
Metal	£11 195 000	£8 721 000	£13 305 000	£18 131 000	£25 764 000
Norway					
Metal	125 114	119 114	104 085	128 173	147 328
Portugal					
Metal	...	1 497	98 115	81 514	540
Slovakia					
Metal	(c) *2 600	(c) *5 700	(c) *8 000	22 226	11 349
Slovenia					
Metal	(c) *6 400	9 152	11 325	61 000	58 000
Spain					
Ores & concentrates	21 000	28 512	28 165	33 340	35 452
Metal	567 432	...	702 290	813 653	187 098
Sweden					
Metal	...	...	145 000	176 000	239 000
Switzerland					
Metal	1 330 260	3 714 520	1 836 921	1 569 782	1 902 786
Turkey					
Metal (b)	47 473	43 586	38 757	53 677	52 101
Ukraine					
Metal (c)	*700	*1 300	*500	*1 100	...
United Kingdom					
Metal	4 327 315	2 876 985	3 310 292	6 772 335	2 564 996

## Imports of Silver

kilograms

Country	1995	1996	1997	1998	1999
South Africa					
Metal	15 810	25 995	20 436	17 737	19 986
Tunisia					
Metal	...	11 262	14 702	12 772	...
Canada					
Ores & concentrates (d)	297 796	393 683	276 680	242 298	339 075
Metal	152 857	97 148	302 593	235 852	138 654
Costa Rica					
Metal	283	445	148	1 920	...
Jamaica					
Metal	920	1 263	260	856	...
Panama					
Metal	2 316	3 235	3 303	2 318	...
USA					
Ores & concentrates (d)	580 821	517 637	413 663	425 900	254 929
Metal	3 176 769	3 011 695	2 702 658	3 630 615	3 524 227
Waste & scrap	2 144 722	1 808 928	1 528 969	1 783 572	1 650 424
Argentina					
Metal	...	...	25 922	...	54 454
Brazil					
Metal	246 677	198 508	226 606	176 853	193 437
Chile					
Metal	590	826	1 130	1 059	...
Venezuela					
Metal	13 643	12 245	...	...	...
Abu Dhabi					
Metal	4 236	5 306	283	----	402
China					
Ores & concentrates	941 000	59 000	47 067	1 513 479	551 020
Metal	59 250	87 086	125 421	156 479	299 830
Dubai					
Metal	...	1 497 172	2 624 906	986 627	...
Hong Kong					
Metal	208 350	190 362	250 072	204 899	406 976
India					
Metal (a)	1 900 582	1 888 255	2 659 959	3 586 416	...
Indonesia					
Metal	850	3 190	8 752	...	...
Israel					
Metal (c)	*35 000	*87 500	*93 700	*85 300	...
Japan					
Ores & concentrates	10 301 000	14 918 000	21 143 000	12 401 000	14 076 000
Metal	1 360 605	1 493 522	1 787 141	1 098 083	1 427 911
Waste & scrap	764 498	15 125 733	18 296 905	17 679 525	11 692 212
Jordan					
Metal	311	17	106	353	...
Kazakhstan					
Metal	...	...	...	14 100	2 400
Korea, Republic of					
Metal	439 064	451 261	340 196	73 322	217 691
Kuwait					
Metal	...	...	250 000	225 000	...
Malaysia					
Metal	322 082	66 461	165 550	321 964	...
Oman					
Metal	481 863	76 504	79 609	478 219	...
Pakistan					
Metal	£6 132 000	£7 097 000	£5 200 000	£200 000	...
Philippines					
Metal	6 778	10 684	6 717	2 251	...
Saudi Arabia					
Metal	4 362	19 505	7 214	2 067	4 655
Singapore					
Metal	882 055	938 284	728 498	450 818	349 299

**Imports of Silver**

Country	1995	1996	1997	1998	1999
Taiwan Metal	271 686	256 352	481 051	262 574	315 240
Thailand Metal	874 972	459 887	526 308	...	...
Australia Metal	£6 556 000	£5 628 000	£4 262 000	£15 603 000	£19 834 000
New Zealand Metal (e)	46 072	...	39 927	45 847	...

## 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	1995	1996	1997	1998	1999
Albania					
Pyrites	1 059	...	...	...	...
Austria					
Recovered (c)	*1 500	...	...	...	...
Recovered (d)	46 000	38 000	48 000	53 000	50 000
Belarus					
Recovered (d)	20 000	25 000	20 000	20 000	20 000
Belgium					
Recovered (c) (d)	347 000	406 000	430 000	428 000	408 000
Bulgaria					
Pyrites	25 000	25 000	25 000	30 000	20 000
Recovered (c)	92 000	120 000	128 000	134 000	131 000
Recovered (d)	25 000	27 000	25 000	25 000	30 000
Croatia					
Recovered (d)	15 000	15 000	15 000	15 000	15 000
Czech Republic					
Recovered	35 091	35 593	33 874	...	...
Denmark					
Recovered (d)	8 050	7 461	3 875	3 312	3 729
Finland					
Pyrites	385 104	357 646	325 000	340 000	370 000
Recovered (c)	215 000	291 000	307 000	296 000	299 000
Recovered (d)	36 908	48 675	50 000	45 000	42 000
France					
Recovered (d)	1 065 000	989 700	958 800	868 800	822 000
Recovered (e)	106 000	99 000	*100 000	*100 000	...
Germany					
Recovered (c)	85 800	83 800	79 800	90 191	84 400
Recovered (d)	1 433 200	1 463 400	1 497 500	1 612 143	1 696 353
Recovered (e)	43 600	43 400	45 000	48 528	42 440
Greece					
Pyrites	8 432	4 437	...	...	...
Recovered (d)	109 000	127 000	145 000	150 000	148 000
Hungary					
Recovered	28 799	27 000	32 000	31 000	34 000
Italy					
Recovered (d)	*300 000	*300 000	*300 000	*300 000	...
Macedonia					
Recovered (c)	...	20 000	20 000	20 000	29 000
Netherlands					
Recovered (c)	*125 000	*150 000	*150 000	*150 000	...
Recovered (d)	*300 000	*150 000	137 600	...	...
Norway					
Recovered (c)	*90 000	*90 000	*90 000	*90 000	*95 000
Recovered (d)	13 000	18 000	18 000	14 000	12 000
Poland					
Frasch	2 391 700	1 732 500	1 676 000	1 348 000	1 175 000
Recovered (c)	239 000	242 000	256 400	*260 000	*260 000
Recovered (d)	33 100	37 400	43 900	56 600	73 500
Portugal					
Pyrites	*5 000	*5 000	*5 000	*5 000	...
Recovered	*4 000	*4 000	*3 000	...	...
Romania					
Pyrites	96 652	49 116	52 000	50 073	17 153
Recovered	59 000	68 000	43 000	46 000	41 000
Russia					
Pyrites	459 000	400 000	417 000	254 000	300 000
Recovered (d)	2 747 000	2 504 483	2 973 652	3 972 852	4 443 284
Recovered (e)	333 000	324 000	344 000	411 000	510 000
Sulphur ore	...	9 564	9 410	...	...
Slovakia					
Recovered (c)	3 000	6 000	7 000	6 000	5 000
Recovered (d)	-----	-----	20 000	21 000	24 000
Spain					
Pyrites	403 342	479 063	445 201	405 373	340 000
Recovered (c)	282 111	419 942	456 000	461 000	455 000
Recovered (d)	160 000	249 694	...	...	...

## Production of Sulphur and Pyrites

tonnes (sulphur content)

Country	1995	1996	1997	1998	1999
Sweden					
Recovered (c)	57 000	67 000	71 000	73 000	65 000
Recovered (d)	51 993	53 104	63 408	57 551	56 989
Sulphur ore	48 819	49 982	57 773	...	...
Turkey					
Pyrites	163 000	255 000	241 000	*300 000	...
Recovered (d) (e)	*46 000	*50 000	*40 000	...	...
Ukraine					
Sulphur ore	237 600	168 100	99 700	96 949	79 979
United Kingdom					
Recovered (c)	62 300	44 700	39 200	40 500	26 600
Recovered (d)	140 000	132 000	177 000	184 000	136 000
Yugoslavia, Federal Republic of					
Recovered (c)	...	21 000	33 000	46 000	49 000
Algeria					
Recovered (d)	*20 000	*20 000	*20 000	*20 000	*16 000
Egypt					
Recovered (d)	*4 000	4 000	3 000	2 000	...
Libya					
Recovered (d)	*13 000	*13 000	*13 000	...	...
Namibia					
Pyrites	51 330	45 338	47 300	14 100	----
South Africa					
Pyrites	158 000	184 000	167 253	152 379	141 427
Recovered (a) (c) (d)	348 000	342 000	351 000	299 514	264 209
Zambia					
Pyrites	25 000	33 000	31 000	29 000	26 000
Recovered (c)	61 000	41 000	52 000	52 000	52 000
Zimbabwe					
Pyrites	29 700	25 100	20 200	22 200	23 300
Recovered	*4 500	*5 000	*5 000	...	...
Canada					
Recovered (c)	1 083 046	1 043 847	1 073 128	1 152 922	*1 150 000
Recovered (d)	7 934 945	8 445 949	8 407 686	8 544 544	8 815 000
Cuba					
Recovered (d)	*5 000	*5 000	*5 000	*5 000	5 000
Mexico					
Recovered (c)	359 000	359 000	417 000	474 000	474 000
Recovered (d)	883 000	921 000	923 000	912 000	860 000
Netherlands Antilles					
Recovered (d)	24 410	23 921	28 616	35 000	34 000
Trinidad & Tobago					
Recovered (d)	*5 000	*5 000	*5 000	*5 000	*5 000
USA					
Frasch	*3 150 000	*2 900 000	*2 820 000	*1 800 000	*1 800 000
Recovered (c)	1 400 000	1 430 000	1 550 000	1 610 000	*1 300 000
Recovered (d)	7 250 000	7 480 000	7 650 000	8 220 000	*8 000 000
Argentina					
Recovered (c)	23 000	23 000	23 000	23 000	23 000
Brazil					
Pyrites	26 266	29 477	22 783	25 719	23 232
Recovered (c)	170 942	175 121	175 511	186 806	217 119
Recovered (d)	41 951	33 424	33 823	36 973	57 962
Chile					
Recovered (c)	588 000	587 000	768 000	899 000	1 037 000
Colombia					
Recovered (d)	*15 000	*15 000	*15 000	...	...
Sulphur ore	60 000	49 425	53 541	...	...
Ecuador					
Recovered (d)	17 300	28 100	14 900	18 900	...
Sulphur ore	*4 000	*4 000	*4 000	*4 000	...
Peru					
Recovered (c)	*60 000	*60 000	*60 000	*60 000	...
Venezuela					
Recovered (d)	180 000	250 000	319 000	425 000	440 000

**Production of Sulphur and Pyrites**

tonnes (sulphur content)

Country	1995	1996	1997	1998	1999
Abu Dhabi					
Recovered (d)	256 500	259 000	...	967 000	1 089 000
Bahrain					
Recovered (d)	51 300	74 338	66 202	61 873	67 230
China					
Pyrites	6 175 000	6 398 000	6 043 520	3 654 490	7 453 080
Recovered	967 000	1 215 000	1 424 430	1 549 000	1 633 000
Sulphur ore	403 000	239 000	*300 000	228 000	240 000
India					
Pyrites (f)	31 000	31 600	27 600	19 500	2 100
Recovered (c)	92 000	98 000	131 000	196 000	261 000
Recovered (d) (e)	41 000	40 000	51 000	60 000	101 000
Indonesia					
Recovered (c)	-----	-----	-----	-----	154 000
Recovered (d)	5 000	5 000	5 000	5 000	5 000
Sulphur ore	*3 500	*3 500	*3 500	*3 500	...
Iran					
Recovered (c)	*50 000	*50 000	*50 000	*50 000	...
Recovered (d)	*840 000	*840 000	*850 000	*850 000	...
Iraq					
Frasch	*250 000	*250 000	*250 000	*250 000	...
Recovered (d)	*225 000	*225 000	*200 000	*200 000	...
Israel					
Recovered (d)	24 000	24 000	30 000	32 000	31 000
Japan					
Pyrites	88 000	45 000	39 000	23 000	41 000
Recovered (b) (c)	1 434 000	1 409 000	1 424 000	1 410 000	1 513 000
Recovered (d)	1 682 000	1 791 000	2 013 000	2 083 000	2 060 000
Kazakhstan					
Pyrites	*71 000	*71 000	-----	-----	-----
Recovered (c)	131 000	139 000	139 000	212 000	245 000
Recovered (d)	255 000	515 000	778 000	935 500	1 110 800
Korea, Dem. P.R. of					
Pyrites	*105 000	*86 000	*45 000	*40 000	*23 000
Recovered (c)	*18 000	*18 000	*18 000	*20 000	*18 000
Korea, Republic of					
Recovered (c)	322 000	319 000	338 000	476 000	528 000
Recovered (d)	246 000	415 000	613 000	656 000	630 000
Kuwait					
Recovered (d)	559 000	595 000	664 000	650 000	639 000
Oman					
Recovered (d)	*35 000	*30 000	*30 000	...	...
Pakistan					
Recovered	*27 000	*27 000	22 002	18 988	21 166
Philippines					
Recovered (c)	178 000	163 000	103 000	132 000	133 000
Recovered (d)	12 000	20 000	20 000	20 000	20 000
Qatar					
Recovered (d)	48 000	46 000	73 000	146 000	155 000
Saudi Arabia					
Recovered (d)	1 650 000	1 750 000	1 750 000	2 050 000	2 100 000
Singapore					
Recovered (d)	178 000	185 000	220 000	180 000	160 000
Syria					
Recovered (d)	30 000	30 000	30 000	30 000	30 000
Taiwan					
Recovered	167 468	181 600	163 964	184 324	194 812
Thailand					
Recovered (c)	26 000	46 000	46 000	46 000	46 000
Recovered (d)	57 000	100 000	130 000	180 000	180 000
Turkmenistan					
Sulphur ore	8 050	8 112	...	...	...
Uzbekistan					
Recovered (c)	147 000	147 000	163 000	163 000	163 000
Recovered (d)	321 000	251 000	250 000	270 000	283 000

**Production of Sulphur and Pyrites**

tonnes (sulphur content)

Country	1995	1996	1997	1998	1999
Australia					
Recovered (c)	263 000	327 000	474 000	507 000	441 000
Recovered (d)	27 000	27 000	22 000	22 000	25 000
Total Pyrites	8 300 000	8 500 000	8 000 000	5 400 000	9 100 000
Total Frasch	5 800 000	4 900 000	4 700 000	3 400 000	3 200 000
Total Recovered	39 700 000	41 500 000	44 100 000	48 000 000	49 200 000
Total Sulphur Ore	800 000	500 000	500 000	500 000	500 000

## Note(s):-

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



## Exports of Sulphur and Pyrites

tonnes

Country	1995	1996	1997	1998	1999
Austria					
Sulphur, sublimed & precipitated	13 474	12 679	6 064	3 012	4 907
Belgium-Luxembourg					
Pyrites	1 989	1 702	1 695	1 880	1 832
Sulphur	12 058	16 691	10 582	13 424	8 493
Sulphur, sublimed & precipitated	958	73	103	208	171
Croatia					
Sulphur, crude	...	...	1 700	3 322	3 375
Czech Republic					
Sulphur	5 900	3 900	2 102	2 549	1 835
Sulphur, sublimed & precipitated	...	...	6 227	6 465	1 546
Denmark					
Sulphur	762	3 958	4 654	3 517	4 717
Finland					
Pyrites (c)	*502 100	*443 800	*499 500	*501 900	*337 200
France					
Sulphur, crude	595 621	645 790	540 537	503 616	475 879
Sulphur, refined	9 860	7 613	9 199	10 792	3 082
Sulphur, sublimed & precipitated	490	814	860	694	3 060
Germany					
Pyrites	739	614	495	375	480
Sulphur, crude	776 053	940 867	924 574	1 059 498	1 113 801
Sulphur, refined	23 219	28 542	22 143	22 936	18 278
Sulphur, sublimed & precipitated	366	380	319	367	342
Greece					
Sulphur	28	4 999	331	471	267
Hungary					
Sulphur, sublimed & precipitated	5 097	9 330	10 975	18 742	...
Italy					
Pyrites	7 404	8 361	8 667	9 237	6 616
Sulphur	67 311	64 883	74 497	50 376	69 344
Sulphur, sublimed & precipitated	481	309	230	278	136
Lithuania					
Sulphur	10 300	8 800	11 348	8 985	2 158
Netherlands					
Pyrites	----	2 729	98 621	64 161	85 665
Sulphur, crude	165 463	230 678	207 261	132 707	150 612
Sulphur, refined	20 871	(b) ...	(b) ...	80 293	69 659
Sulphur, sublimed & precipitated	551	137	38	181	50
Norway					
Pyrites	2 395	----	...	30	...
Sulphur, sublimed & precipitated	6 216	10 264	12 139	10 355	10 827
Poland					
Sulphur	1 643 505	1 302 430	1 127 300	832 700	801 354
Portugal					
Sulphur	6 500	7 332	5 056	11 349	16 837
Romania					
Sulphur	...	3 308	6 810	2 388	3 350
Russia					
Pyrites	...	43 297	18 518	28 044	16 221
Sulphur	2 130 536	1 008 260	1 723 936	1 773 308	2 642 574
Sulphur, sublimed & precipitated	...	519	142	1	...
Slovakia					
Sulphur	...	...	14 700	17 100	...
Spain					
Pyrites	42 837	26 089	...	51 795	57
Sulphur	36 896	29 533	38 072	52 434	58 527
Sulphur, sublimed & precipitated	1 446	652	612	366	465
Sweden					
Sulphur, crude	1 436	568	14 857	3 938	934
Sulphur, sublimed & precipitated	30	...	85	85	73
Switzerland					
Sulphur	1 854	1 314	3 860	45	202
Turkey					
Sulphur, sublimed & precipitated	8 959	294	2 072	2 673	1 108
Ukraine					
Sulphur	48 491	39 084	24 789	24 879	23 163

## Exports of Sulphur and Pyrites

Country	1995	1996	1997	1998	1999
United Kingdom					
Sulphur, crude	2 710	1 816	22 423	51 809	52 752
Sulphur, sublimed & precipitated	1 824	3 532	14 624	140	277
Yugoslavia, Federal Republic of					
Pyrites	...	...	16 453	18 228	752
Egypt					
Sulphur, crude	700	1 300	1 679	1 312	1 552
Namibia					
Pyrites	62 158	3 105	956	73	----
South Africa					
Sulphur	6 739	35 742	24 492	46 717	...
Canada					
Sulphur	6 077 430	6 026 287	6 465 467	5 145 955	5 024 568
Mexico					
Sulphur	531 605	509 274	482 188	586 645	513 285
Netherlands Antilles					
Sulphur	24 410	23 921	28 616	35 000	34 000
USA					
Pyrites	7 251	5 261	5 580	2 160	55 904
Sulphur, crude	548 249	496 566	651 088	853 250	656 372
Sulphur, refined	254 050	102 897	131 974	52 898	58 808
Sulphur, sublimed & precipitated	109 725	168 335	45 137	36 887	26 042
Colombia					
Sulphur	1 378	1 414	968	2 181	977
Venezuela					
Sulphur	111	231	1 747	3 105	...
Bahrain					
Sulphur	46 500	79 700	24 293	55 796	60 069
China					
Pyrites	13 243	30 317	20 056	36 759	6 229
Sulphur, crude	7 884	1 380	324	5 206	3 120
Sulphur, sublimed & precipitated	616	503	807	1 156	935
India					
Sulphur, sublimed & precipitated (a)	562	946	1 710	2 837	...
Iran					
Sulphur	463 500	581 100	473 000	393 700	434 000
Japan					
Sulphur, crude	645 174	716 155	983 480	1 080 709	1 057 959
Sulphur, sublimed & precipitated	1 682	1 232	1 054	915	812
Jordan					
Sulphur, crude	...	...	93 448	157 254	...
Kazakhstan					
Sulphur	...	(c) *94 000	(c) *205 000	222 315	146 818
Korea, Republic of					
Sulphur, crude	55 276	103 412	200 704	255 023	253 900
Sulphur, sublimed & precipitated	661	6	1 115	1 275	1 338
Kuwait					
Sulphur	553 000	630 739	579 000	596 000	613 000
Qatar					
Sulphur	37 730	33 203	58 447	146 300	145 000
Saudi Arabia					
Sulphur	1 510 600	1 800 900	1 634 800	1 854 400	2 025 600
Singapore					
Sulphur, crude	45 329	74 178	57 519	80 464	66 939
Sulphur, sublimed & precipitated	34 145	57 845	79 337	52 194	65 459
Taiwan					
Sulphur, crude	1 906	779	423	573	3 199
Sulphur, sublimed & precipitated	489	547	562	625	616
Thailand					
Sulphur	583	525	6 361	295	444

**Exports of Sulphur and Pyrites**

tonnes

Country	1995	1996	1997	1998	1999
Australia					
Sulphur	3 442	3 072	2 206	1 663	1 219
Sulphur, sublimed & precipitated	0	196	117	342	125

Note(s):-

- (a) Years ended 31 March following that stated
- (b) Included with crude
- (c) BGS estimates, based on known imports into certain countries

## Imports of Sulphur and Pyrites

Country	1995	1996	1997	1998	1999
Austria					
Pyrites	866	570	546	1 096	373
Sulphur, crude	39 400	42 000	...	5 157	8 327
Sulphur, sublimed & precipitated	33 723	26 989	1 546	5 306	4 477
Azerbaijan					
Sulphur	...	...	...	6 900	7 914
Belarus					
Sulphur	*150 000	*150 000	*180 000	196 705	183 680
Belgium-Luxembourg					
Pyrites	209	109	37	14	30
Sulphur, crude	421 290	179 782	203 751	186 424	213 641
Sulphur, refined	10 318	130 316	158 558	192 737	214 285
Sulphur, sublimed & precipitated	5 485	2 049	2 033	1 974	5 699
Bulgaria					
Sulphur	7 400	3 922	6 165	2 400	----
Croatia					
Sulphur, crude	80 825	82 022	71 669	49 409	41 367
Sulphur, sublimed & precipitated	167	162	397	173	141
Cyprus					
Sulphur	1 504	1 491	1 301	1 728	1 583
Czech Republic					
Sulphur	113 402	105 838	91 456	75 514	57 111
Sulphur, sublimed & precipitated	...	...	20 768	26 279	53 084
Denmark					
Sulphur	38 130	21 867	15 140	9 564	10 963
Finland					
Sulphur	17 601	11 662	5 863	27 597	22 605
France					
Pyrites	7 318	4 891	1 701	2 474	3 260
Sulphur, crude	114 446	104 022	134 934	117 946	113 106
Sulphur, refined	32 921	18 484	39 964	16 355	12 456
Sulphur, sublimed & precipitated	2 571	17 825	6 072	11 152	18 845
Germany					
Pyrites	153 831	163 293	206 363	163 625	87 902
Sulphur, crude	44 869	29 552	58 912	46 141	8 626
Sulphur, sublimed & precipitated	1 023	883	1 196	1 639	2 248
Greece					
Sulphur, crude	158 068	163 888	162 421	153 871	196 347
Sulphur, sublimed & precipitated	360	445	139	5	28
Hungary					
Sulphur	20 056	11 483	7 104	2 479	1 208
Sulphur, sublimed & precipitated	...	58	96	129	97
Italy					
Pyrites	20 934	12 003	13 960	18 791	5 022
Sulphur, crude	293 265	191 228	178 006	198 532	65 608
Sulphur, sublimed & precipitated	127	915	217	2 316	355
Lithuania					
Sulphur	105 300	143 933	132 900	178 045	227 009
Netherlands					
Pyrites	314	212	...	69 520	41 736
Sulphur, crude	103 609	94 201	61 199	24 989	52 231
Sulphur, sublimed & precipitated	2 195	756	10 120	16 712	5 094
Norway					
Pyrites	253 343	245 043	206 857	254 119	213 347
Sulphur, crude	862	399	4 353	911	927
Sulphur, sublimed & precipitated	21	8	965	68	1
Poland					
Sulphur	953	1 274	100	8 300	46 014
Portugal					
Sulphur	11 700	7 322	2 644	2 469	2 378
Sulphur, sublimed & precipitated	...	10	703	4 576	1 709
Romania					
Sulphur, crude	103 627	60 166	41 736	43 195	27 314
Sulphur, sublimed & precipitated	80	2	25	824	80
Russia					
Sulphur	197 200	155 504	244 862	159 698	147 694
Sulphur, sublimed & precipitated	...	1 300	340	271	186

## Imports of Sulphur and Pyrites

tonnes

Country	1995	1996	1997	1998	1999
Slovakia					
Sulphur	12 700	34 641	34 515	39 078	18 057
Slovenia					
Sulphur	41 400	32 169	44 119	49 628	44 682
Spain					
Sulphur	72 463	62 222	64 412	45 617	41 490
Sulphur, sublimed & precipitated	1 192	271	261	167	186
Sweden					
Pyrites	335	293	346	3 526	376
Sulphur	106 403	90 214	96 511	91 838	82 577
Sulphur, sublimed & precipitated	383	1 074	2 323	1 855	2 224
Switzerland					
Pyrites	240	214	275	301	304
Sulphur	38 978	38 563	39 107	40 601	39 081
Sulphur, sublimed & precipitated	22	75	73	52	46
Turkey					
Pyrites	24 185	26 210	34 644	17 437	...
Sulphur, crude	87 321	116 619	170 473	126 446	133 554
Sulphur, sublimed & precipitated	106	94	116	93	71
Ukraine					
Sulphur	*570 000	428 250	332 662	371 493	348 423
United Kingdom					
Pyrites	1 103	113	24	29	11
Sulphur, crude	298 913	245 934	371 962	196 327	178 872
Sulphur, sublimed & precipitated	1 100	549	495	2 420	247
Yugoslavia, Federal Republic of					
Sulphur, crude	*2 500	1 900	1 808	1 429	703
Algeria					
Sulphur	*55 000	652	849	2 759	3 400
Egypt					
Sulphur	131 400	322 138	302 774	211 856	91 682
Sulphur, sublimed & precipitated	...	541	17 876	540	404
Gabon					
Sulphur	1 500	2 000	4 000	1 500	1 300
Kenya					
Sulphur	4 697	602	900	840	----
Morocco					
Sulphur	2 806 820	2 600 662	2 962 609	2 529 300	2 836 300
Namibia					
Sulphur	----	----	20 000	57 200	45 000
Niger					
Sulphur	...	...	17 362	14 483	15 414
Nigeria					
Sulphur	----	...	10 700	10 000	20 300
Sulphur, sublimed & precipitated	...	10 502	15 908	9 120	173
Senegal					
Sulphur	348 300	312 000	324 100	350 700	246 769
South Africa					
Sulphur, crude	601 692	525 579	539 704	531 432	696 552
Sulphur, sublimed & precipitated	1 000	658	659	291	244
Tunisia					
Sulphur	1 419 169	1 443 453	1 692 993	1 529 990	1 570 351
Sulphur, sublimed & precipitated	759	693	1 018	1 001	1 340
Zimbabwe					
Sulphur	34 845	116 817	10 676	14 568	...
Canada					
Pyrites	15 873	14 382	13 870	28 452	25 434
Sulphur, crude	25 593	24 386	46 518	51 368	48 554
Sulphur, sublimed & precipitated	1 756	1 040	485	1 207	610
Cuba					
Sulphur	155 269	109 910	259 836	177 989	151 100
El Salvador					
Sulphur	2 374	5 392	5 389	2 849	2 357
Guatemala					
Sulphur	1 845	3 191	2 707	3 194	2 394

## Imports of Sulphur and Pyrites

Country	1995	1996	1997	1998	1999
Jamaica					
Sulphur	9 203	...	6 374	6 271	...
Mexico					
Sulphur, crude	570 287	798 971	669 104	645 476	731 586
Sulphur, sublimed & precipitated	342	310	1 463	1 044	1 395
USA					
Sulphur, crude	2 198 669	1 624 295	1 507 026	1 292 188	1 249 239
Sulphur, sublimed & precipitated	240	252	1 585	2 198	4 182
Argentina					
Sulphur	105 512	96 192	105 193	86 711	95 759
Brazil					
Sulphur	1 253 748	1 306 963	1 509 913	1 325 069	1 419 419
Chile					
Sulphur	25 746	20 375	14 493	16 719	...
Colombia					
Sulphur	36 898	68 235	81 278	81 531	65 293
Ecuador					
Sulphur	1 604	677	456	2 401	2 120
Paraguay					
Sulphur	1 500	3 100	3 000	3 000	2 000
Peru					
Sulphur	3 538	...	4 139	4 838	4 789
Suriname					
Sulphur	*1 000	*1 000	*1 000	*1 000	...
Uruguay					
Sulphur	4 500	15 896	22 455	19 471	19 565
Venezuela					
Sulphur	163	78	35	356	72
Bangladesh					
Sulphur (b)	*30 000	13 700	43 545	30 000	...
China					
Sulphur	53 000	467 293	356 964	941 076	1 979 401
Sulphur, sublimed & precipitated	138 838	342 994	384 070	241 132	154 811
Hong Kong					
Sulphur	30 531	163	321	----	388
Sulphur, sublimed & precipitated	569	561	710	529	204
India					
Sulphur, crude (a)	1 543 002	1 543 187	1 617 256	1 583 023	...
Sulphur, sublimed & precipitated (a)	1 015	780	1 144	1 098	...
Indonesia					
Sulphur, crude	291 781	389 631	327 545	356 042	294 000
Sulphur, sublimed & precipitated	38 213	392	15 840	11 315	...
Israel					
Sulphur	261 000	432 100	467 500	595 000	575 500
Japan					
Pyrites	114 878	48 469	42 019	44 477	4 166
Sulphur	610	705	572	389	34
Sulphur, sublimed & precipitated	697	701	1 433	1 225	1 133
Jordan					
Sulphur, crude	301 508	337 365	340 266	410 723	...
Sulphur, sublimed & precipitated	401	348	...	24	...
Korea, Republic of					
Pyrites	208	22 112	22 296	36 762	14 086
Sulphur	441 343	343 058	226 600	243 888	...
Sulphur, sublimed & precipitated	216	232	207	171	117
Kuwait					
Pyrites	...	...	...	10 503	38 192
Lebanon					
Sulphur	31 700	42 400	79 631	121 724	101 244
Malaysia					
Sulphur, crude	38 700	52 900	20 200	138 100	...
Sulphur, sublimed & precipitated	1 316	2 919	2 262	9 214	...
Pakistan					
Sulphur (b)	19 130	28 347	25 036	20 071	16 107

**Imports of Sulphur and Pyrites**

tonnes

Country	1995	1996	1997	1998	1999
Philippines					
Sulphur, crude	149 446	176 909	90 395	111 550	...
Sulphur, sublimed & precipitated	145	147	6 435	56	...
Saudi Arabia					
Pyrites	...	...	9 691	----	2 346
Singapore					
Sulphur, crude	138	6 582	83	1 311	71
Sulphur, sublimed & precipitated	66	81	77	24	28
Sri Lanka					
Sulphur, crude	1 202	1 091	1 123	1 352	...
Sulphur, sublimed & precipitated	1 222	717	54	86	...
Syria					
Sulphur, crude	...	...	32 029	10 306	...
Taiwan					
Sulphur	8 873	531	301	407	450
Sulphur, sublimed & precipitated	178 335	159 488	182 328	144 490	132 529
Thailand					
Sulphur, crude	4 787	8	18	...	...
Sulphur, refined	43 727	81 079	46 648	95 994	...
Sulphur, sublimed & precipitated	406	222	276	157	5 674
Australia					
Pyrites	1 552	1 079	1 122	1 828	168
Sulphur	167 859	118 831	158 739	230 408	244 825
Sulphur, sublimed & precipitated	5 634	123	171	283	599
New Zealand					
Sulphur, crude (b)	219 978	*170 000	174 036	187 744	...
Sulphur, sublimed & precipitated (b)	70	...	748	718	...

Note(s) :-

(a) Years ended 31 March following that stated

(b) Years ended 30 June of that stated

## Production of Talc

Country	1995	1996	1997	1998	1999
Austria	131 614	129 748	141 984	137 114	129 576
Finland	464 000	418 000	435 000	495 000	509 000
France	322 400	349 300	362 200	391 200	405 300
Germany	17 722	10 005	13 035	15 473	*15 000
Greece	*400	180	100	150	2 860
Hungary	*1 150	*1 200	*1 200	*1 200	*1 200
Italy	159 106	132 647	140 816	133 557	*140 000
Macedonia	*10 000	*10 000	*10 000	*10 000	*10 000
Norway	*30 000	28 140	*28 000	*28 000	*26 000
Portugal	8 706	8 277	8 236	9 882	*10 000
Romania	9 976	10 248	7 578	8 134	8 289
Russia	105 000	79 793	97 561	78 956	107 690
Slovakia	5 000	5 000	6 100	2 820	1 900
Spain	112 341	109 756	118 355	110 150	110 430
Sweden	25 000	25 000	25 000	24 000	19 000
Turkey					
Talc	*4 000	*4 000	*4 000	*5 000	*5 000
Pyrophyllite	...	...	38 000	37 000	48 378
United Kingdom	4 298	5 338	5 749	4 937	6 256
Egypt (d)	15 356	33 649	30 282	35 119	...
Morocco					
Talc	...	...	3 060	3 324	2 975
Pyrophyllite	...	...	16 790	22 565	11 680
South Africa					
Talc	15 841	16 397	21 055	20 296	18 544
Wonderstone (Pyrophyllite)	5 519	2 140	2 129	2 532	2 606
Zambia	475	333	44	...	...
Zimbabwe	2 080	1 076	1 023	1 039	1 081
Canada	104 000	76 000	73 000	71 000	77 000
Mexico	11 134	10 100	13 586	18 843	18 981
USA	1 060 000	994 000	1 050 000	971 000	925 000
Argentina					
Talc	12 474	11 777	13 380	14 585	*14 000
Pyrophyllite	4 189	2 180	4 242	3 450	*4 000
Brazil					
Talc (b)	254 919	275 499	*280 000	*280 000	*290 000
Agalmatolite (b)	115 550	108 501	*110 000	*110 000	*110 000
Pyrophyllite (b)	150 000	21 472	*20 000	*20 000	*20 000
Chile	4 107	4 276	3 986	3 772	*3 800
Colombia	19 248	14 800	14 832	*15 000	*15 000
Peru	13 818	12 985	5 750	11 165	...
Uruguay	863	898	1 133	972	2 905
Venezuela	*32 000	*32 000	*32 000	*32 000	...
Bhutan	3 332	3 500	*3 000	...	...
China	*2 400 000	*2 400 000	4 068 900	2 097 800	1 741 320
India					
Pyrophyllite (e)	144 050	141 655	102 875	91 924	115 316
Steatite (e)	540 570	512 579	474 957	481 554	527 687
Indonesia					
Pyrophyllite	...	...	32 594	22 611	...
Iran (a)	9 052	26 530	29 178	...	...
Japan					
Talc	57 269	56 153	*53 000	*50 000	*50 000
Pyrophyllite	649 000	618 000	620 000	497 000	438 000
Korea, Dem. P.R. of	*180 000	*180 000	*180 000	*150 000	*120 000
Korea, Republic of					
Talc	29 364	19 066	25 751	24 411	15 313
Pyrophyllite	789 994	780 062	994 366	843 609	754 657
Nepal (c)	2 363	5 323	6 809	5 553	6 257
Pakistan (d)	34 128	28 265	45 414	48 927	67 670
Taiwan	3 500	1 500	1 331	73	*100
Thailand					
Talc	4 352	7 238	7 139	2 172	4 960
Pyrophyllite	76 189	64 330	304 524	40 241	38 053



**Production of Talc**

tonnes

Country	1995	1996	1997	1998	1999
Australia					
Talc (d)	125 701	176 163	185 601	199 315	*190 000
Pyrophyllite (d)	777	595	337	702	347
World Total	8 400 000	8 100 000	10 300 000	7 700 000	7 300 000

## Note(s):-

- (a) Years ended 20 March following that stated
- (b) Including beneficiated and directly shipped material
- (c) Years ended 15 July of that stated
- (d) Years ended 30 June of that stated
- (e) Years ended 31 March following that stated

## Exports of Talc

Country	1995	1996	1997	1998	1999
Austria	142 245	145 925	146 131	157 732	159 206
Belgium-Luxembourg	70 990	66 979	74 238	77 276	79 086
Finland (a)	*186 500	*168 000	*141 000	*143 000	*174 000
France	160 024	176 799	209 299	216 966	213 881
Germany	5 108	6 102	6 041	6 273	4 215
Greece	...	54	116	972	1 597
Italy	65 867	68 246	78 612	80 228	87 787
Macedonia	...	712	844	612	...
Netherlands	56 045	50 889	58 185	70 522	87 984
Norway	36 142	35 800	36 512	35 488	33 688
Russia	577	1 164	1 144	257	732
Slovakia	...	7 800	4 500	2 600	1 777
Spain	40 710	39 583	49 945	43 887	55 137
Sweden	20 396	23 077	24 243	18 351	17 964
Switzerland	274	577	870	721	606
Turkey	59	87	165	208	122
United Kingdom	3 341	3 227	3 100	4 574	3 650
Egypt	...	4 610	5 887	8 481	4 233
South Africa					
Talc	...	24	56	104	96
Pyrophyllite	*4 000	*2 000	*2 000	*2 000	*2 500
Canada	30 028	26 073	26 276	29 661	44 447
USA	191 585	198 969	188 902	158 872	150 654
Brazil	3 145	2 053	3 914	3 925	6 028
Peru	2 389	3 493	5 454	5 670	5 665
China	1 600 326	1 023 901	1 021 001	766 019	732 480
Hong Kong (c)	12 581	10 238	10 375	9 650	7 311
India (b)	30 410	99 197	27 361	32 224	...
Japan	7 258	7 097	7 755	5 222	6 830
Korea, Republic of					
Talc	1 782	2 638	2 402	1 099	445
Pyrophyllite	254 595	226 170	253 195	152 290	175 757
Singapore	3 399	2 754	1 931	1 563	2 184
of which, re-exports	3 375	2 744	1 922	1 544	1 576
Taiwan	4 084	4 079	4 809	6 377	6 984
Thailand	5 328	3 469	2 873	2 589	3 621
Australia	157 257	150 567	91 307	2 796	111 610

Note(s):-

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

(b) Years ended 31 March following that stated

(c) Re-exports

## Imports of Talc

tonnes

Country	1995	1996	1997	1998	1999
Austria	15 101	24 123	19 304	15 748	42 804
Belarus	...	...	...	1 567	1 252
Belgium-Luxembourg	72 139	74 660	96 181	98 211	92 906
Croatia	813	975	1 366	1 007	1 094
Cyprus	295	227	240	233	255
Czech Republic	(a) *3 000	...	6 669	6 313	7 802
Denmark	8 919	9 208	11 877	12 991	13 668
Finland	336	313	866	5 927	4 934
France	35 031	31 038	40 503	49 837	36 144
Germany	241 536	226 138	228 450	213 254	212 333
Greece	5 658	5 381	4 614	7 014	5 129
Hungary	...	...	8 181	9 077	9 245
Irish Republic	3 070	1 354	986	1 083	1 210
Italy	48 625	85 744	92 190	94 832	101 338
Netherlands	141 160	134 954	81 171	116 447	181 949
Norway	15 576	16 478	14 868	16 776	11 795
Poland	22 734	23 100	21 600	14 900	15 061
Portugal	10 396	12 921	12 511	14 432	15 284
Romania	...	...	553	520	678
Russia	...	2 196	3 301	5 091	6 961
Slovakia	...	500	600	500	382
Spain	35 899	38 162	43 173	49 177	60 767
Sweden	26 598	24 718	25 309	30 967	31 823
Switzerland	12 893	13 263	14 284	14 183	15 836
Turkey	3 237	4 762	6 933	8 576	8 443
United Kingdom	68 839	73 084	83 013	76 744	62 182
Yugoslavia, Federal Republic of	(a) *300	...	960	1 049	819
Algeria	...	777	2 750	2 169	...
Egypt	...	1 125	638	2 705	3 149
Ivory Coast	...	2 328	...	...	...
Morocco	2 176	2 285	2 789	...	...
Nigeria	...	1 607	1 629	3 050	3 508
South Africa	7 365	6 146	6 328	6 670	5 021
Tunisia	2 582	3 350	3 082	2 668	4 103
Canada	51 143	58 304	55 281	47 459	57 992
Costa Rica	1 383	1 724	1 344	2 593	1 800
El Salvador	449	550	662	793	658
Guatemala	395	319	563	575	549
Honduras	142	174	259	494	609
Jamaica	548	527	515	334	...
Mexico	100 216	112 872	117 138	114 554	121 713
Panama	896	884	1 023	913	908
Trinidad & Tobago	...	553	575	...	...
USA	142 886	179 738	115 166	157 564	194 812
Argentina	2 670	2 619	4 101	4 684	7 932
Brazil	5 404	8 572	9 495	10 591	10 763
Chile	4 773	6 620	7 824	6 732	...
Colombia	4 042	5 326	5 109	5 763	3 616
Ecuador	1 860	1 301	2 090	2 254	1 395
Peru	1 058	1 093	1 056	897	1 023
Venezuela	11 271	8 205	7 223	4 320	9 737
China	5 051	5 362	8 179	8 971	10 274
Dubai	...	2 569	3 309	3 273	...
Hong Kong	14 481	6 369	5 498	3 331	7 832
Indonesia	88 146	109 550	88 156	50 920	...
Israel (a)	*1 500	...	...	...	...
Japan	720 901	567 721	579 930	453 587	404 581
Jordan	2 025	1 603	1 976	2 278	...
Korea, Republic of					
Talc	390 567	276 323	210 047	143 386	78 119
Pyrophyllite	920	5 501	10 983	7 293	11 651
Malaysia	26 016	35 589	58 800	50 479	...
Pakistan (b)	...	22 497	1 648	12 155	2 476
Philippines	20 786	21 008	16 785	18 937	...

**Imports of Talc**

Country	1995	1996	1997	1998	1999
Saudi Arabia	4 861	7 100	4 906	5 285	9 156
Singapore	13 588	11 701	29 604	12 057	14 079
Sri Lanka	1 959	2 269	2 500	2 195	...
Syria	16 427	1 615	3 909	12 378	...
Taiwan	165 906	136 799	132 001	133 462	136 148
Thailand	58 078	3 469	48 169	51 503	60 451
Australia	1 248	938	1 712	668	1 277
New Zealand (b)	3 354	...	2 023	2 720	...

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	1995	1996	1997	1998	1999
Burundi					
Columbite-tantalite	42	37	46	30	42
Ethiopia					
Tantalite (a)	43	70	80	80	50
Namibia					
Tantalite	16	----	----	----	----
Nigeria					
Columbite	65	57	496	9	...
Rwanda					
Columbite-tantalite	72	99	269	378	...
Zimbabwe					
Columbite-tantalite	0	----	1	6	3
Canada					
Pyrochlore	5 800	5 700	5 700	5 600	5 800
Tantalite	67	187	180	190	177
Brazil					
Pyrochlore	39 989	36 474	*48 000	*60 000	*79 000
Columbite-tantalite	*175	*190	*190	*330	*330
Djalmaite	21	8	...	...	...
China					
Columbite-tantalite	34	45	...	175	201
Malaysia					
Struverite	127	265	391	521	675
Australia					
Tantalite	365	557	299	400	405
World total concentrates	46 800	43 700	55 800	67 700	87 100
Nb content	*19 300	*17 800	*22 900	*27 800	*35 900
Ta content	*310	*450	*430	*550	*560

## Note(s):-

- (1) Niobium and tantalum minerals are believed to be produced also in Russia, and minor quantities in Congo, French Guiana, Uganda 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 producer is Thailand and small amounts from Australia, Brazil, Nigeria, Portugal, and D R Congo

(a) Years ended 7 July of that stated

## Exports of Tantalum and Niobium

Country	1995	1996	1997	1998	1999
Austria					
Tantalum	43	36	43	47	66
Czech Republic					
Tantalum	...	...	601	551	417
France					
Tantalum	108	79	39	5	31
Germany					
Niobium & tantalum ores	39	109	72	191	308
Tantalum	153	141	165	154	246
Italy					
Tantalum	12	12	21	1	2
Russia					
Tantalum	...	8	7	10	6
Turkey					
Tantalum	...	3	20	12	15
United Kingdom					
Tantalum	244	314	349	290	350
Rwanda					
Columbite & tantalite	137	138	224	239	...
Canada					
Niobium & tantalum ores (a)	1 610	40	31	8	...
USA					
Tantalum ores & concentrates	1	53	91	391	403
Tantalum	324	372	455	486	553
Brazil					
Columbite-tantalite	200	106	323	217	75
China					
Tantalum	56	73	123	176	239
Japan					
Tantalum	108	173	219	242	302
Malaysia					
Columbite & tantalite	300	238	...	...	...
Tin slags	597	...	...	...	...
Singapore					
Tantalum (b)	...	...	...	251	49
Tin slags	126	60	----	----	----
of which, re-exports	15	----	----	----	----
Taiwan					
Tantalum	15	19	15	19	2
Thailand					
Tantalum ores & concentrates	824	1 040	2 740	...	...
Tantalum	64	62	68	36	78
Tin slags	----	----	4 107	816	290
Australia					
Tantalum	132	268	264	290	128

Note(s):-

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

(a) May include vanadium ores

(b) Re-exports

**Imports of Tantalum and Niobium**

tonnes

Country	1995	1996	1997	1998	1999
Austria					
Tantalum	57	49	1	4	1
Czech Republic					
Tantalum	166	158	179	155	170
France					
Tantalum	67	39	17	27	15
Germany					
Tantalum	179	169	235	183	203
Irish Republic					
Tantalum	12	3	10	23	22
United Kingdom					
Tantalum	908	980	1 463	1 375	1 119
USA					
Tantalum concentrates	1 042	1 109	908	1 218	992
Niobium concentrates	1 039	224	131	70	95
Tantalum	529	480	400	829	945
Niobium	259	341	423	563	468
China					
Tantalum	119	138	135	203	257
Hong Kong					
Tantalum	21	32	3	8	61
India					
Niobium & tantalum ores (a)	170	466	266	143	...
Japan					
Niobium ores & concentrates	81	2	29	57	56
Tantalum	129	186	128	154	287
Korea, Republic of					
Tantalum	8	13	26	35	38
Australia					
Tantalum	5	6	12	11	2

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

## Mine Production of Tin

tonnes (metal content)

Country	1995	1996	1997	1998	1999
Portugal	4 627	4 637	3 566	2 958	2 163
Russia	9 000	7 500	7 500	3 500	5 200
United Kingdom	1 972	2 103	2 396	448	----
Burundi	10	4	15	----	13
Congo, Democratic Republic	1 000	----	----	----	----
Nigeria	250	2 500	2 800	1 900	*1 500
Rwanda	198	209	155	440	*200
Bolivia	14 419	14 802	12 898	11 308	12 417
Brazil	20 767	20 568	19 065	14 607	13 200
Peru (a)	22 331	27 004	27 952	25 745	30 403
China	61 900	69 700	67 500	70 100	80 100
Indonesia	38 378	51 024	55 174	53 959	47 754
Laos	1 170	1 508	1 030	595	703
Malaysia	6 402	5 175	5 065	5 754	7 339
Mongolia	59	18	10	----	----
Myanmar	...	...	100	100	100
Thailand	1 590	1 050	550	1 460	2 450
Vietnam	4 500	*4 000	*3 000	*3 000	*3 000
Australia	8 656	8 824	10 168	10 204	10 026
World Total	197 000	221 000	219 000	206 000	217 000

Note(s):-

(a) Recoverable



**Smelter Production of Tin**

tonnes

Country	1995	1996	1997	1998	1999
Portugal	100	-----	-----	-----	-----
Russia	12 000	12 300	9 200	3 900	3 850
Nigeria	259	56	70	1 920	...
Mexico	415	1 234	1 188	1 083	1 262
Bolivia (a)	17 709	16 733	16 853	11 102	11 166
Brazil	16 787	18 361	17 525	14 342	11 989
Peru	...	800	8 759	13 928	17 342
China	67 700	71 500	67 700	79 300	90 800
India	...	...	3 700	3 700	*3 600
Indonesia	44 218	48 960	52 577	53 997	48 340
Kazakhstan	3 600	-----	-----	-----	-----
Malaysia	39 443	38 051	38 400	27 900	28 900
Myanmar	*190	-----	-----	-----	-----
Thailand	8 243	10 981	11 984	15 353	17 600
Vietnam	2 300	*2 300	2 790	2 770	*2 800
Australia	570	460	605	655	585
World Total	214 000	222 000	231 000	230 000	240 000

Note(s):-

(a) Refined, including alloys

## Exports of Tin

Country	1995	1996	1997	1998	1999
Austria					
Unwrought (a)	120	167	102	78	106
Scrap	120	131	179	241	294
Belgium-Luxembourg					
Unwrought	5 541	6 782	7 642	7 518	7 097
Unwrought alloys	202	395	211	309	206
Scrap	211	199	479	81	167
Czech Republic					
Unwrought (a)	613	175	219	15	109
Denmark					
Scrap	158	102	137	153	114
Estonia					
Scrap	2 760	...	8	172	336
Finland					
Unwrought alloys	44	185	238	90	63
Scrap	89	22	64	148	101
France					
Unwrought	108	109	160	233	283
Unwrought alloys	463	591	715	651	359
Scrap	1 344	1 374	2 805	3 165	2 274
Germany					
Unwrought	621	248	426	395	854
Unwrought alloys	603	483	648	1 065	826
Scrap	349	467	559	568	509
Irish Republic					
Scrap	103	19	45	154	78
Italy					
Unwrought (a)	137	2 595	152	543	200
Scrap	180	164	185	243	140
Netherlands					
Unwrought	1 181	451	743	7 466	6 818
Unwrought alloys	871	882	691	568	816
Scrap	343	313	265	1 308	563
Portugal					
Concentrates	9 696	9 653	6 927	6 257	4 155
Russia					
Concentrates	5 530	3 421	2 538	2 303	4 315
Unwrought (a)	8 884	8 859	7 608	2 103	792
Scrap	*500	50	7	13	...
Slovenia					
Scrap	97	21	...	...	...
Spain					
Unwrought (a)	74	95	691	1 544	257
Scrap	81	28	654	169	91
Sweden					
Unwrought (a)	174	207	260	361	282
Scrap	219	173	115	415	462
Switzerland					
Unwrought (a)	135	153	105	80	95
Scrap	140	69	171	127	136
United Kingdom					
Concentrates	3 256	3 667	3 646	1 292	173
Unwrought	2 689	568	281	3 396	70
Unwrought alloys	1 455	1 767	1 759	2 100	2 322
Scrap	1 389	4 416	875	1 356	3 470
Burundi					
Concentrates	14 654	5 502	20 935	----	18 408
Nigeria					
Unwrought	*100	*100	*100	*100	...
Rwanda					
Concentrates	466	393	327	219	...
Canada					
Unwrought (a)	1 316	1 465	988	467	577
Scrap	...	5 918	740	2 946	1 340
Jamaica					
Scrap	104	1 715	...	...	...

## Exports of Tin

tonnes

Country	1995	1996	1997	1998	1999
USA					
Unwrought (a)	5 399	6 730	6 043	6 284	8 075
of which, re-exports	2 614	1 950	1 380	1 228	1 341
Scrap	9 135	9 587	7 507	9 504	8 544
Bolivia					
Concentrates	2 454	3 769	3 554	2 617	1 842
Unwrought	12 915	11 326	12 424	10 382	11 770
Brazil					
Unwrought (a)	9 948	11 787	11 979	6 717	6 052
Peru					
Concentrates	37 099	38 271	31 627	20 900	21 855
Unwrought	54	4 501	10 949	6 599	3 241
China					
Unwrought	25 138	29 412	30 663	45 489	54 159
Unwrought alloys	18 169	6 716	10 425	8 084	10 424
Hong Kong					
Concentrates (b)	769	821	914	132	----
Unwrought (a)	15 281	10 811	6 078	11 730	6 520
of which, re-exports	15 175	10 702	5 991	10 634	6 367
Scrap	66	227	229	270	15
India					
Unwrought (a) (c)	344	7 573	6 348	483	...
Indonesia					
Unwrought (a)	39 667	46 312	49 908	52 100	46 435
Scrap	----	62	181	198	...
Japan					
Concentrates	59	167	167	28	1
Unwrought (a)	69	193	211	289	310
Scrap	357	470	1 161	760	697
Jordan					
Scrap	120	1 071	1 720	...	...
Korea, Republic of					
Unwrought (a)	169	298	565	3 730	276
Scrap	28	90	12	37	50
Laos					
Concentrates (d)	736	1 060	730	551	703
Malaysia					
Unwrought (a)	35 196	34 342	31 653	22 376	24 026
Scrap	661	1 070	...	...	...
Singapore					
Concentrates (b)	1 388	1 370	1 617	2 057	5 909
Unwrought	33 740	38 656	43 502	40 655	43 768
of which, re-exports	32 181	36 554	...	38 891	42 163
Scrap	1 698	1 504	1 250	261	351
of which, re-exports	942	318	...	29	26
Taiwan					
Unwrought (a)	108	212	248	386	364
Scrap	454	728	760	1 529	2 314
Thailand					
Unwrought (a)	2 676	4 850	7 983	11 163	12 267
Scrap	----	70	97	148	169
Vietnam					
Unwrought	2 300	*2 300	2 790	2 770	...
Australia					
Concentrates	15 877	15 726	17 069	15 590	16 651
Unwrought (a)	556	498	537	542	508
Scrap	323	277	1 789	1 492	681

## 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) Years ended 31 March following that stated

(d) Sn content

## Imports of Tin

Country	1995	1996	1997	1998	1999
Austria					
Unwrought (a)	970	822	806	641	820
Scrap	39	52	44	86	114
Belgium-Luxembourg					
Unwrought	636	1 544	1 833	1 579	1 063
Unwrought alloys	1 087	968	584	1 062	1 227
Scrap	2 464	1 420	2 259	3 953	3 006
Croatia					
Unwrought (a)	123	117	105	74	73
Czech Republic					
Unwrought (a)	415	526	587	436	483
Finland					
Unwrought (a)	261	241	352	377	111
France					
Concentrates	12	451	230	1 008	203
Unwrought	8 695	8 191	8 104	8 505	7 596
Unwrought alloys	1 059	608	386	905	686
Scrap	172	536	1 740	1 957	1 163
Germany					
Unwrought	21 343	19 685	20 735	21 195	18 620
Unwrought alloys	916	702	782	768	473
Scrap	278	248	400	416	572
Greece					
Unwrought (a)	454	491	502	296	153
Hungary					
Unwrought (a)	346	464	332	314	443
Irish Republic					
Unwrought (a)	317	343	363	288	869
Italy					
Unwrought	5 824	6 317	5 206	6 335	5 726
Unwrought alloys	196	258	590	437	313
Scrap	46	120	5	73	9
Netherlands					
Unwrought	8 990	10 180	12 945	13 345	10 042
Unwrought alloys	1 032	1 073	989	1 116	1 094
Scrap	230	203	370	793	508
Norway					
Unwrought	541	553	477	402	387
Unwrought alloys	93	90	81	104	130
Poland					
Unwrought	1 338	1 229	1 298	1 090	980
Portugal					
Unwrought	622	725	748	940	834
Unwrought alloys	416	458	276	411	92
Romania					
Unwrought (a)	569	511	434	412	204
Russia					
Concentrates	...	13 218	3 870	310	390
Unwrought (a)	...	125	181	410	1 538
Slovakia					
Unwrought	414	607	8	746	836
Spain					
Concentrates	25	66	15	2	358
Unwrought	5 238	24 354	4 429	4 109	3 458
Unwrought alloys	889	1 516	719	497	435
Scrap	136	81	97	42	47
Sweden					
Unwrought	489	495	549	663	634
Unwrought alloys	240	62	276	308	271
Scrap	198	93	112	164	95
Switzerland					
Unwrought (a)	779	636	851	864	814
Turkey					
Unwrought (a)	1 095	1 409	1 234	1 335	1 267
Ukraine					
Unwrought	*1 100	368	288	48	33

## Imports of Tin

tonnes

Country	1995	1996	1997	1998	1999
United Kingdom					
Unwrought	9 767	10 010	14 768	10 753	9 112
Unwrought alloys	1 695	1 901	1 303	1 220	958
Scrap	562	557	456	477	394
Yugoslavia, Federal Republic of					
Unwrought (a)	*50	107	206	123	28
Egypt					
Unwrought	209	4 024	209	380	232
Morocco					
Unwrought (a)	159	142	120	...	...
South Africa					
Unwrought (a)	2 219	2 425	2 391	1 823	2 316
Canada					
Unwrought	4 493	4 462	4 659	4 223	7 663
Scrap	319	489	701	451	576
Mexico					
Concentrates	705	1 760	1 746	1 541	609
Unwrought	1 183	1 537	1 534	2 772	2 891
Scrap	56	31	12	55	255
USA					
Unwrought	33 347	30 004	40 580	44 105	48 012
Unwrought alloys	11 321	11 828	3 869	1 319	3 090
Scrap	15 928	6 744	1 961	4 187	2 736
Argentina					
Unwrought	1 042	1 135	1 280	1 159	1 100
Bolivia					
Concentrates	12 015	11 479	8 550	----	26
Chile					
Unwrought	591	790	797	552	...
Colombia					
Unwrought (a)	301	293	291	336	234
Peru					
Unwrought (a)	182	128	154	147	88
Venezuela					
Unwrought (a)	875	669	353	738	323
China					
Concentrates	44	434	509	692	871
Unwrought	685	741	1 138	1 040	1 291
Unwrought alloys	1 569	1 320	1 512	1 948	2 498
Dubai					
Concentrates	...	673	706	40	...
Unwrought	...	550	735	938	...
Hong Kong					
Concentrates	849	100	1 699	82	----
Unwrought	12 224	11 135	5 619	8 991	4 765
Unwrought alloys	3 670	2 758	1 435	6 240	5 308
Scrap	50	200	232	226	144
India					
Concentrates (b)	1 441	2 478	5 016	144	...
Unwrought (a) (b)	3 172	5 049	4 203	3 655	...
Scrap (b)	1 318	1 779	26	76	...
Iran					
Unwrought (d)	347	...	545	231	...
Israel					
Unwrought (a)	*200	*250	*300	*320	...
Japan					
Unwrought	28 019	25 272	28 133	23 624	25 993
Unwrought alloys	2 958	2 294	2 488	2 480	2 901
Scrap	75	96	49	143	89
Kazakhstan					
Unwrought	*250	*260	*710	912	...
Korea, Republic of					
Unwrought	11 244	11 118	12 054	11 771	12 125
Unwrought alloys	275	733	198	257	390

## Imports of Tin

Country	1995	1996	1997	1998	1999
Malaysia					
Concentrates	57 754	53 137	...	...	...
Unwrought (a)	7 210	7 861	7 132	6 594	...
Pakistan					
Scrap	1 472	765	138	341	...
Philippines					
Unwrought (a)	794	874	750	557	...
Saudi Arabia					
Unwrought	42	62	62	51	207
Singapore					
Concentrates	1 103	820	917	289	578
Unwrought	3 976	2 108	3 930	1 879	5 007
Scrap	856	684	652	589	540
Taiwan					
Unwrought	7 254	7 280	9 857	9 088	11 052
Unwrought alloys	2 445	2 656	2 862	3 026	2 489
Scrap	263	461	437	551	229
Thailand					
Concentrates	...	...	22 031	26 451	30 675
Unwrought (a)	1 438	209	87	69	195
Australia					
Unwrought (a)	825	945	2 476	2 750	2 544
New Zealand					
Unwrought (a) (c)	93	*400	83	90	...

## 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) Years ended 31 March following that stated

(c) Years ended 30 June of that stated

(d) Years ended 20 March following that stated

**Production of Titanium Minerals**

tonnes

Country	1995	1996	1997	1998	1999
Norway					
Ilmenite	857 747	758 711	558 000	589 534	579 623
Ukraine					
Ilmenite	359 000	*250 000	*250 000	*250 000	*250 000
Rutile	112 000	*50 000	*50 000	*50 000	*50 000
Egypt					
Ilmenite (c)	-----	57 000	53 496	57 495	...
South Africa					
Ilmenite (b)	*1 680 000	*1 700 000	*1 853 000	*1 836 000	*1 870 000
Rutile	*90 000	*110 000	*115 000	*115 000	*120 000
Canada					
Ilmenite (a) (b)	*2 200 000	*2 500 000	*2 400 000	*2 700 000	*2 500 000
USA	...	...	...	*400 000	*400 000
Brazil					
Ilmenite	102 125	125 520	97 174	103 000	96 000
Rutile	1 985	1 771	1 742	1 800	4 300
China					
Ilmenite	...	...	218 200	58 200	57 708
India					
Ilmenite (d)	298 369	231 513	332 727	377 907	387 755
Rutile (d)	12 963	9 305	14 365	16 039	17 471
Korea, Republic of					
Ilmenite	322 637	389 992	344 808	241 865	203 413
Malaysia					
Ilmenite	151 680	244 642	167 504	124 689	127 695
Sri Lanka					
Ilmenite	54 311	66 456	22 533	37 148	-----
Rutile	2 884	3 532	2 968	1 930	-----
Vietnam					
Ilmenite	*50 000	*25 000	90 000	99 000	*120 000
Australia					
Ilmenite	1 980 000	2 030 000	2 233 000	2 424 000	1 978 000
Rutile	204 000	183 000	234 000	244 000	188 000
Leucoxene	31 000	30 000	32 000	32 000	32 000
World Total (e)					
Ilmenite (wt. of concs)	8 300 000	8 600 000	8 600 000	9 300 000	8 600 000
Rutile (wt. of concs)	424 000	358 000	418 000	429 000	380 000
All forms (TiO <sub>2</sub> content)	*4 200 000	*4 300 000	*4 400 000	*4 700 000	*4 300 000

## 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 1999 South Africa produced an estimated 1100000 tonnes (85% TiO<sub>2</sub>) and Canada produced 928000 tonnes (80-95% TiO<sub>2</sub>)  
(c) Years ended 30 June of that stated  
(d) Years ended 31 March following that stated  
(e) 1995-1997 totals exclude USA

## Exports of Titanium

Country	1995	1996	1997	1998	1999
Austria					
Metal	116	167	239	121	194
Oxides	3 317	1 565	2 194	2 195	2 904
Belarus					
Oxides	...	...	...	3 332	1 458
Belgium-Luxembourg					
Metal	1 057	451	569	870	885
Oxides	202 601	214 954	243 120	259 406	265 178
Czech Republic					
Oxides	20 100	17 900	21 682	23 423	26 505
Estonia					
Metal	19	183	49	39	95
Finland					
Oxides (b)	*44 200	*32 900	*57 200	*58 000	*72 200
France					
Titanium minerals	2 331	2 931	1 443	868	56
Metal	2 365	2 339	4 470	4 510	4 341
Oxides	176 727	175 744	212 059	184 689	171 636
Georgia					
Metal	58	----	----	205	539
Germany					
Titanium minerals	1 141	970	588	11 251	670
Metal	3 991	4 092	4 092	3 570	5 007
Oxides	219 166	237 877	277 670	267 996	287 789
Greece					
Oxides	400	1 000	1 400	820	1 159
Italy					
Metal	2 634	4 534	3 559	4 595	4 090
Oxides	32 417	25 780	37 264	39 792	34 989
Netherlands					
Titanium minerals	6 226	7 992	8 693	2 209	3 669
Metal	828	1 091	1 185	1 309	1 809
Oxides	(b) *48 800	(b) *39 100	68 626	71 717	(b) *48 700
Norway					
Titanium minerals	461 240	400 932	...	...	...
Oxides (b)	*16 500	*24 500	*28 100	*27 100	*20 500
Poland					
Oxides	16 000	13 500	19 600	47 600	21 406
Russia					
Metal	19 504	28 879	33 826	27 854	14 518
Slovenia					
Oxides	27 000	21 688	32 707	31 848	35 928
Spain					
Metal	82	363	236	350	327
Oxides	37 480	53 695	55 761	51 446	66 156
Sweden					
Metal	1 187	998	805	1 392	1 182
Oxides	3 935	7 478	6 013	7 150	7 983
Switzerland					
Metal	293	317	233	311	305
Oxides	637	621	567	443	385
Turkey					
Metal	103	28	62	788	295
Ukraine					
Titanium minerals	126 822	122 590	211 877	231 419	279 580
Metal	(b) *700	730	1 664	1 785	5 093
Oxides	...	36 645	35 418	39 543	57 896
United Kingdom					
Metal	10 145	11 028	12 379	11 443	8 952
Oxides	157 124	148 315	158 332	165 635	176 960
Sierra Leone					
Ilmenite	...	...	...	----	2 614
Rutile	...	5 924	...	----	4 757
South Africa					
Titanium minerals (b)	*207 500	*316 600	*258 400	*315 700	*214 600
Titanium slag (b)	*528 000	*579 500	*525 900	*549 900	*523 000
Oxides (b)	*6 800	*7 200	*10 300	*15 200	*11 100



## Exports of Titanium

tonnes

Country	1995	1996	1997	1998	1999
Canada					
Titanium minerals & slag	*900 000	*1 100 000	*800 000	*1 000 000	*900 000
Metal	731	666	492	930	1 037
Oxides	88 923	70 627	80 855	88 167	85 948
Mexico					
Oxides	62 566	64 953	25 406	...	...
USA					
Titanium minerals	33 400	15 825	24 359	60 374	13 127
Metal	11 256	13 392	17 175	17 449	17 275
Oxides	344 261	340 137	405 072	400 614	385 709
Brazil					
Oxides	4 503	5 919	8 155	13 320	8 095
China					
Titanium minerals	5 819	24 912	18 673	1 828	12 144
Metal	1 627	1 974	2 108	1 721	1 399
Oxides	27 852	24 223	26 904	34 572	44 772
Hong Kong					
Oxides (c)	24 477	24 826	27 083	23 703	23 430
India					
Ilmenite (a)	207 812	42 961	109 312	64 955	...
Other titanium minerals (a)	11 240	7 399	8 955	6 744	...
Oxides (a)	70	649	846	4 173	...
Israel					
Metal (b)	*300	*400	*300	*200	*200
Japan					
Metal	12 471	15 855	24 193	19 418	16 802
Oxides	80 455	77 740	94 876	97 371	108 388
Kazakhstan					
Metal	9 183	12 953	18 493	17 571	8 817
Korea, Republic of					
Titanium minerals	64 400	59 920	36 190	24 320	18 430
Oxides	13 442	17 567	16 375	20 885	21 510
Kyrgyzstan					
Metal	(b) *100	(b) *300	(b) *100	45	----
Malaysia					
Ilmenite	169 001	115 122	146 600	69 600	...
Oxides	40 872	49 584	56 600	50 500	...
Singapore					
Oxides	20 952	23 939	42 526	39 268	43 071
of which, re-exports	7 019	9 757	7 604	5 338	17 216
Sri Lanka					
Ilmenite	...	1 093	30 000	20	...
Rutile	4 193	21 282	100	80	...
Other titanium minerals	20 000	...	...	20	...
Taiwan					
Metal	118	...	391	767	1 106
Oxides	58 691	71 916	47 795	72 876	81 366
Thailand					
Ilmenite	4 300	4 178	3 106	----	6 708
Vietnam					
Titanium minerals	*35 000	*25 000	90 000	99 000	(b) *90 500
Australia					
Ilmenite	1 075 241	1 062 364	1 349 892	1 285 873	1 051 000
Rutile	220 939	168 763	207 604	217 863	171 000
Leucoxene	18 550	28 698	33 623	21 094	31 000
Oxides	122 293	130 692	132 155	133 619	142 585

## 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

## Imports of Titanium

Country	1995	1996	1997	1998	1999
Austria					
Metal	292	338	510	608	454
Oxides	17 542	15 896	20 658	18 986	16 942
Belarus					
Oxides	*2 500	*2 500	*5 500	9 231	5 271
Belgium-Luxembourg					
Ilmenite	20 901	3 091	262	413	635
Other titanium minerals	68 581	57 625	50 007	82 705	83 099
Titanium slag	39 770	54 267	49 146	36 414	43 252
Metal	1 348	1 298	1 030	1 363	1 666
Oxides	53 877	58 084	163 638	179 944	170 623
Bulgaria					
Titanium minerals	1 260	479	670	700	...
Croatia					
Oxides	2 512	2 648	2 569	2 269	2 453
Cyprus					
Oxides	1 113	850	1 148	963	867
Czech Republic					
Titanium minerals	77 800	56 200	55 949	61 093	67 855
Metal	...	...	84	136	453
Oxides	2 300	2 600	3 113	3 002	3 191
Denmark					
Metal	659	629	1 097	785	323
Oxides	14 917	14 067	17 451	16 203	18 273
Estonia					
Metal	4	...	19	77	127
Oxides	931	...	963	1 412	888
Finland					
Titanium minerals	*117 000	*105 000	*103 000	*108 500	...
Oxides	6 848	6 908	8 860	9 082	9 617
France					
Ilmenite	87 049	37 667	52 490	81 127	53 667
Other titanium minerals	150 076	117 162	96 119	141 575	92 682
Titanium slag	...	159 761	92 773	...	116 357
Metal	3 846	4 942	7 343	7 472	6 638
Oxides	91 826	115 143	123 629	124 028	127 084
Germany					
Ilmenite	351 729	342 250	236 404	345 057	315 818
Other titanium minerals	58 209	251 050	195 479	277 325	275 515
Titanium slag	255 902	81 392	127 137	...	134 790
Metal	7 636	7 973	9 426	8 560	9 430
Oxides	162 088	153 144	153 104	182 501	169 879
Greece					
Titanium minerals	474	1 045	600	774	689
Oxides	18 842	17 672	20 728	22 639	20 946
Hungary					
Metal	...	...	135	234	181
Oxides	4 600	5 400	6 300	6 200	...
Irish Republic					
Oxides	5 500	2 094	3 740	3 411	3 947
Italy					
Titanium minerals	2 341	4 689	1 654	5 145	3 973
Titanium slag	...	...	67 407	...	69 236
Metal	4 618	5 845	5 031	6 254	5 794
Oxides	113 655	116 220	138 209	141 229	141 100
Netherlands					
Ilmenite	2 789	...	...	6 085	31 567
Other titanium minerals	54 602	(b) 62 820	(b) 47 130	28 515	28 239
Metal	1 442	1 561	3 104	2 397	3 505
Oxides	70 005	61 571	69 661	73 719	59 198
Norway					
Titanium minerals	13 444	29 637	352	122	19
Metal	540	538	638	1 139	670
Oxides	8 010	6 986	7 540	8 948	8 807
Poland					
Titanium minerals	70 585	62 500	69 800	87 200	74 439
Oxides	8 700	8 400	13 900	15 700	21 414

## Imports of Titanium

tonnes

Country	1995	1996	1997	1998	1999
Portugal					
Oxides	15 800	18 100	17 784	18 995	18 018
Romania					
Titanium minerals	1 405	2 295	2 219	3 281	1 517
Oxides	3 727	2 034	2 617	3 633	3 684
Russia					
Titanium minerals	71 600	76 518	89 925	93 599	63 408
Metal	...	478	1 049	2 615	1 449
Oxides	30 100	28 571	29 658	28 319	43 036
Slovakia					
Oxides	3 000	100	2 293	2 500	1 606
Slovenia					
Titanium minerals	13 800	11 500	11 700	11 600	11 533
Oxides	1 500	1 400	1 700	2 000	2 107
Spain					
Ilmenite	102 621	138 171	155 093	122 165	129 460
Other titanium minerals	2 185	...	1 706	2 181	1 958
Metal	1 523	1 465	1 583	1 957	2 301
Oxides	58 080	63 339	76 095	79 856	73 963
Sweden					
Titanium minerals	1 183	658	422	700	548
Metal	376	401	367	585	1 540
Oxides	33 690	33 705	36 856	35 384	39 550
Switzerland					
Metal	385	443	481	521	391
Oxides	18 667	18 452	19 861	19 737	19 090
Turkey					
Titanium minerals	3 161	7 343	5 514	5 824	5 464
Oxides	38 767	44 462	60 872	53 710	51 135
United Kingdom					
Ilmenite	128 270	164 050	156 649	100 765	95 473
Other titanium minerals	100 275	75 937	93 122	181 420	84 841
Titanium slag	74 027	91 045	99 308	119 386	120 890
Metal	17 682	18 495	28 117	30 712	26 758
Oxides	76 926	83 245	80 138	102 697	71 912
Yugoslavia, Federal Republic of					
Oxides	...	1 500	1 800	2 100	1 387
Algeria					
Oxides	8 000	7 717	5 778	8 636	...
Egypt					
Titanium minerals	1 200	1 400	1 346	1 324	1 775
Oxides	9 000	8 035	8 969	14 856	12 487
Morocco					
Oxides	7 098	6 000	6 468	6 700	...
Nigeria					
Oxides	...	2 704	5 546	4 056	23 806
South Africa					
Metal	...	...	288	133	172
Oxides	8 584	6 383	7 427	9 803	8 209
Tunisia					
Oxides	4 500	3 851	3 990	4 344	5 554
Canada					
Titanium minerals	33 596	7 382	8 458	4 737	4 923
Metal	2 037	2 033	1 692	1 908	1 371
Oxides	106 322	84 683	110 686	117 814	111 959
Mexico					
Ilmenite	119 720	143 836	119 540	174 418	167 767
Rutile sand	648	813	1 245	1 088	627
Titanium slag	15 002	20 199	37 343	20 001	...
Oxides	16 051	30 991	57 539	55 984	...
USA					
Ilmenite	583 247	608 336	565 461	402 961	402 129
Rutile (c)	310 861	324 482	345 842	386 983	343 840
Titanium slag	404 132	421 140	429 919	626 258	677 723
Metal	23 403	35 709	37 547	27 772	17 843
Oxides	182 863	167 044	194 269	199 913	224 810

## Imports of Titanium

Country	1995	1996	1997	1998	1999
Argentina					
Titanium minerals	1 478	2 061	1 948	2 321	1 804
Oxides	22 681	29 337	30 465	31 625	30 564
Brazil					
Rutile	1 168	863	1 195	1 062	220
Oxides	66 282	64 344	69 578	70 433	74 482
Chile					
Oxides	8 924	4 957	10 961	10 154	...
Colombia					
Oxides	14 274	12 612	16 052	13 812	13 284
Uruguay					
Oxides	2 593	1 750	2 582	2 771	2 763
Venezuela					
Oxides	14 867	8 508	13 578	11 293	11 199
China					
Titanium minerals	21 501	56 622	29 850	20 520	15 540
Metal	1 765	2 684	2 315	3 201	2 269
Oxides	59 966	92 886	100 610	89 782	120 037
Dubai					
Metal	...	146	296	241	...
Oxides	...	10 613	12 414	12 647	...
Hong Kong					
Oxides	32 600	33 197	38 452	34 287	33 388
India					
Titanium minerals (d)	1 944	5 167	7 230	...	...
Metal (d)	102	276	222	94	...
Oxides (d)	14 549	31 981	27 729	21 083	...
Indonesia					
Titanium minerals	2 794	2 535	1 500	2 575	...
Oxides	30 265	14 007	13 240	23 106	...
Israel					
Oxides	*11 000	*10 000	12 833	10 424	12 125
Japan					
Titanium minerals	437 638	402 325	408 705	468 445	461 267
Metal	6 914	8 828	13 041	11 694	4 096
Oxides	96 152	100 243	102 809	82 817	79 034
Jordan					
Oxides	2 826	*2 900	3 487	3 776	...
Kazakhstan					
Titanium minerals	*25 000	*30 000	*30 000	34 341	...
Korea, Republic of					
Rutile sand	12 398	12 510	12 259	9 383	10 081
Titanium minerals	82 507	56 092	165 097	149 357	133 383
Metal	2 980	2 208	3 582	2 712	3 838
Oxides	85 447	78 255	91 455	65 826	94 641
Malaysia					
Titanium minerals	83 000	117 628	132 400	93 500	...
Oxides	13 552	15 200	19 400	16 200	...
Oman					
Oxides	514	529	851	1 063	...
Pakistan					
Oxides (a)	...	7 249	7 895	9 611	916
Philippines					
Titanium minerals	2 390	2 414	1 422	920	...
Oxides	25 452	24 249	29 161	19 222	...
Saudi Arabia					
Titanium minerals	122 414	69 311	105 695	50 157	85 252
Oxides	2 665	2 579	1 598	2 814	...
Singapore					
Titanium minerals	46 200	43 700	52 849	32 307	49 842
Metal	...	...	...	143	503
Oxides	14 289	25 140	21 163	18 774	23 969
Sri Lanka					
Oxides	2 300	2 300	2 300	2 451	...

**Imports of Titanium**

tonnes

Country	1995	1996	1997	1998	1999
Taiwan					
Titanium minerals	84 493	75 232	117 431	103 828	99 337
Metal	1 213	1 950	3 467	2 419	2 375
Oxides	73 784	59 145	45 186	60 625	67 275
Thailand					
Rutile	6 103	5 725	6 153	...	...
Other titanium minerals	4 473	4 882	5 792	4 787	...
Oxides	39 920	38 993	42 550	26 244	33 610
Australia					
Titanium minerals	1 213	419	299	15 620	22
Metal	152	346	576	555	597
Oxides	1 125	1 004	330	1 082	12 104
New Zealand					
Oxides (a)	9 116	10 300	9 434	8 810	...

## Note(s) :-

- (1) Significant quantities of titanium slag are traded, but it is not always possible to identify this material in national trade accounts
  - (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) Including ilmenite
  - (c) Including synthetic rutile
  - (d) Years ended 31 March following that stated

## Mine Production of Tungsten

tonnes (metal content)

Country	1995	1996	1997	1998	1999
Austria	568	1 072	1 138	1 077	1 218
Portugal (c)	873	777	1 029	821	435
Russia (c)	4 568	4 500	4 500	3 000	3 000
Burundi	*22	*16	*16	*10	*10
Rwanda	46	104	78	30	30
Uganda	17	-----	...	8	0
Mexico	287	188	179	130	40
Bolivia	655	581	513	497	334
Brazil (a)	98	99	40	...	...
Peru	577	263	226	60	...
China	27 470	26 650	25 030	23 845	20 200
Kazakhstan	314	96	-----	-----	-----
Korea, Dem. P.R. of	*900	*900	*900	*800	*700
Kyrgyzstan	*100	*100	*100	*100	*100
Mongolia	62	22	33	46	*20
Myanmar (b)	531	334	272	178	87
Tajikistan	*75	*50	-----	-----	-----
Thailand (c)	45	35	28	31	28
Uzbekistan	*300	*300	*250	*200	*200
Vietnam	50	130	210	-----	...
Australia (d) (e)	31	61	2	4	4
World Total	37 600	36 300	34 500	30 900	26 500

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	1995	1996	1997	1998	1999
Austria					
Metal	1 248	1 265	1 060	830	1 399
Belgium-Luxembourg					
Metal	146	211	177	157	213
Carbide	65	128	96	128	28
Czech Republic					
Ore	94	128	137	106	128
Metal	200	100	116	174	133
Estonia					
Ore	...	...	5 736	711	278
France					
Metal	362	398	518	449	420
Carbide	315	358	350	...	357
Germany					
Metal	1 245	1 494	1 555	1 426	1 469
Irish Republic					
Metal	39	17	33	59	83
Italy					
Metal	250	190	373	446	196
Netherlands					
Ore	...	10	20	388	97
Metal	556	414	432	417	237
Poland					
Ores & concentrates	846	----	----	342	...
Metal	0	56	97	33	...
Portugal					
Ore	1 400	1 319	1 881	1 269	601
Metal	...	18	26	59	86
Russia					
Ore	(d) *4 700	3 226	8 843	5 446	4 639
Metal (d)	*450	*930	*510	*740	*1 280
Spain					
Metal	15	20	108	71	68
Sweden					
Metal	44	31	134	53	50
Carbide	...	...	255	...	227
Switzerland					
Metal	127	54	137	171	206
United Kingdom					
Metal	862	1 074	1 939	2 300	1 233
Carbide	781	807	270	291	485
Rwanda					
Ores & concentrates	19	43	63	...	...
Uganda					
Ore	156	76	40	51	35
Mexico					
Ores & concentrates	367	234	279	198	39
USA					
Metal	2 034	1 586	1 832	2 693	2 639
Ammonium paratungstate (a)	289	152	121	287	103
Carbide	1 686	1 316	1 104	1 210	701
Bolivia					
Ore	1 174	1 031	917	882	589
Peru					
Ores & concentrates	1 199	839	328	56	109
China					
Ores & concentrates	260	140	751	190	80
Metal	1 312	1 262	1 041	1 561	1 946
Ammonium paratungstate	17 731	12 425	14 596	12 675	...
Carbide	(d) *100	...	...	...	...
Hong Kong					
Ore (c)	157	3 179	362	245	104
India					
Metal (b)	50	203	95	83	...

**Exports of Tungsten**

Country	1995	1996	1997	1998	1999
Israel					
Metal (d)	*160	*260	*340	*400	*390
Japan					
Metal	1 424	1 437	1 300	1 586	1 362
Korea, Republic of					
Metal	480	567	608	700	607
Carbide	...	1 086	1 071	1 158	...
Myanmar					
Ores & concentrates	170	170	194	42	...
Singapore					
Ore (c)	843	776	464	297	242
Metal	143	151	189	177	267
Taiwan					
Metal	58	...	183	319	143
Thailand					
Ore	164	213	303	65	107
Australia					
Ores & concentrates	280	----	16	20	20
Metal	88	7	52	34	2

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



## Imports of Tungsten

tonnes

Country	1995	1996	1997	1998	1999
Austria					
Ore	1 000	300	1 800	1 500	...
Metal	747	730	355	459	380
Belgium-Luxembourg					
Metal	327	228	382	378	284
Carbide	207	137	100	122	39
Czech Republic					
Metal	200	100	125	89	52
Estonia					
Ore	...	...	5 521	198	296
Metal	...	...	...	58	327
Finland					
Metal	16	88	86	76	61
France					
Metal	628	*600	393	685	877
Carbide	387	329	224	...	462
Germany					
Ore	947	378	272	479	805
Metal	2 331	2 329	2 376	3 131	3 792
Carbide	968	667	1 059	1 091	874
Irish Republic					
Metal	269	314	586	335	235
Italy					
Metal	169	135	173	278	363
Carbide	...	...	430	...	313
Netherlands					
Ore	----	68	171	405	215
Metal	329	546	*400	270	169
Russia					
Metal	...	166	87	158	116
Spain					
Metal	154	99	45	52	51
Sweden					
Metal	304	388	393	338	461
Carbide	...	...	839	...	933
Switzerland					
Metal	88	120	146	112	122
United Kingdom					
Metal	1 222	1 614	1 889	2 055	1 812
Carbide	1 601	1 041	1 357	2 293	744
Nigeria					
Metal	...	...	8	2	35
South Africa					
Metal	30	7	74	155	127
Canada					
Metal	221	149	217	201	150
Carbide	402	400	...	...	...
Mexico					
Metal	213	219	...	305	*200
USA					
Ore	7 443	7 627	8 616	8 606	4 696
Metal	2 950	2 686	2 462	2 485	2 128
Ammonium paratungstate (a)	1 290	1 580	2 100	1 920	1 920
Carbide	533	491	699	999	863
China					
Ore	2 814	2 693	2 564	1 474	1 950
Metal	118	151	138	127	312
Hong Kong					
Ore	28	614	189	1	1
Metal	5	12	92	109	349
India					
Ore (c)	480	315	440	210	...
Metal (c)	229	123	294	387	...
Indonesia					
Metal	31	41	316	128	...

**Imports of Tungsten**

Country	1995	1996	1997	1998	1999
Israel					
Metal (b)	*100	...	...	...	...
Japan					
Ore	551	478	1 473	1 881	1 794
Metal	970	871	895	750	629
Korea, Republic of					
Metal	120	110	124	170	176
Kyrgyzstan					
Metal	110	440	15	12	14
Malaysia					
Metal	481	822	793	273	...
Singapore					
Ore	913	317	103	66	17
Metal	143	137	167	147	168
Taiwan					
Metal	164	171	197	264	374
Thailand					
Metal	27	28	76	38	140
Australia					
Metal	167	85	110	96	68

## 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

**Mine Production of Vanadium**

tonnes (metal content)

Country	1995	1996	1997	1998	1999
Hungary	*200	*200	*200	*100	-----
Russia	*11 000	*11 000	*9 000	*9 000	*9 000
South Africa	14 122	14 740	15 590	18 868	*16 000
USA	*2 700	*900	*2 700	*2 400	...
China	*13 700	*14 000	*15 000	*15 500	*16 000
Kazakhstan	924	*900	*900	*1 000	*1 000
World Total	42 600	41 700	43 400	46 900	44 400

## 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

Country	1995	1996	1997	1998	1999
Austria					
Pentoxide	817	472	...	...	...
Belgium-Luxembourg					
Vanadiferous residues	779	6 969	4 097	6 803	6 395
Pentoxide	176	60	4	28	8
Vanadium-titanium pig iron	...	16	149	1	...
Denmark					
Vanadium-titanium pig iron	39	135	13	67	108
France					
Pentoxide	178	17	2	86	322
Metal	3	...	59	2	22
Germany					
Vanadiferous residues	360	566	364	189	282
Pentoxide	70	201	296	163	183
Metal	511	320	659	581	133
Italy					
Vanadiferous residues	...	...	55	1 735	1 748
Netherlands					
Pentoxide	59	...	217	258	214
Russia					
Pentoxide	...	...	4 453	2 430	7 638
Metal	...	15	61	51	35
United Kingdom					
Metal	1	7	188	...	...
South Africa					
Pentoxide (b)	12 736	14 322	15 723	17 531	...
Mexico					
Vanadiferous residues	2 039	1 556	1 384	4 298	2 186
USA					
Pentoxide	1 244	2 974	1 108	1 165	647
Metal	247	157	155	346	322
China					
Vanadiferous residues	...	11 018	...	...	...
Pentoxide	6 457	4 299	6 465	7 586	6 167
Korea, Republic of					
Vanadiferous residues	...	...	...	2 925	4 728
New Zealand					
Vanadiferous residues (a)	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) Years ended 30 June of that stated

(b) Includes vanadium content of pentoxide and vanadiferous residues

**Imports of Vanadium**

tonnes

Country	1995	1996	1997	1998	1999
Austria					
Vanadiferous residues	*25 000	*26 000	*27 000	*27 000	*29 000
Pentoxide	2 324	3 174	3 110	2 030	2 752
Metal	379	----	45	88	6
Belgium-Luxembourg					
Pentoxide	4 741	3 330	3 342	1 389	1 707
Czech Republic					
Pentoxide	...	...	...	360	3 641
Metal	...	...	1	26	70
France					
Ores & concentrates	183	427	509	374	156
Pentoxide	335	246	406	476	362
Metal	36	...	875	114	264
Germany					
Vanadiferous residues	----	133	43	133	903
Pentoxide	1 496	730	926	918	828
Metal	5	32	24	47	18
Italy					
Pentoxide	...	...	373	447	166
Netherlands					
Pentoxide	1 078	...	640	2 983	1 198
Russia					
Pentoxide	...	...	204	232	1 718
Metal	...	158	534	316	132
Spain					
Vanadiferous residues	...	...	122	181	...
Sweden					
Metal	45	71	58	96	59
United Kingdom					
Pentoxide	116	73	161	156	307
Metal	236	368	628	690	374
South Africa					
Pentoxide	...	...	91	116	34
Tunisia					
Pentoxide	...	134	334	92	181
Canada					
Pentoxide	2 250	1 986	2 316	2 332	1 308
USA					
Vanadiferous residues	7 713	5 593	9 543	24 069	13 840
Pentoxide	1 036	873	1 425	1 381	351
Metal	847	96	525	11	22
Brazil					
Pentoxide	318	385	58	58	84
China					
Vanadiferous residues	18 671	2 001	3 001	10 123	7 002
Metal	----	1 022	30	1	37
Japan					
Pentoxide	4 920	4 675	5 322	5 043	3 700
Metal	166	148	226	190	103
Korea, Republic of					
Pentoxide	714	1 332	2 259	1 705	2 535
Taiwan					
Vanadiferous residues	47	...	171	336	444
Metal	44	...	63	27	8
Australia					
Pentoxide	17	23	232	31	31
Metal	135	152	123	10	...

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

## Mine Production of Zinc

tonnes (metal content)

Country	1995	1996	1997	1998	1999
Bulgaria	23 600	19 400	20 700	17 500	10 600
Finland	16 385	26 294	31 200	30 700	19 600
Georgia	*2 000	*1 000	*1 000	*1 000	*1 000
Greece	15 083	7 230	17 627	19 851	17 943
Irish Republic	183 500	164 500	193 100	177 200	195 900
Italy	23 100	11 000	8 500	2 500	----
Macedonia	20 800	22 000	21 000	20 000	*16 000
Norway	11 180	8 990	6 709	960	----
Poland	154 500	159 000	158 271	157 874	160 082
Romania	36 737	32 082	31 737	25 650	28 107
Russia	131 100	126 000	121 000	114 000	132 000
Spain	172 381	145 468	147 098	138 014	153 000
Sweden	167 962	160 133	155 385	164 711	174 448
Turkey	65 300	68 000	63 800	57 700	57 000
Yugoslavia, Federal Republic of	3 195	15 108	12 782	14 967	3 615
Algeria	3 600	3 000	3 500	4 300	4 900
Congo, Democratic Republic	4 518	3 182	1 686	1 234	*1 000
Morocco	79 849	81 316	89 141	112 000	111 704
Namibia	30 209	34 377	39 658	42 142	34 639
South Africa	71 118	76 853	71 062	69 630	69 733
Tunisia	44 200	31 920	2 967	31 367	*45 000
Canada	1 121 172	1 222 386	1 076 385	1 061 645	1 008 860
Honduras	27 117	37 037	39 483	36 639	40 996
Mexico	363 658	377 599	379 252	395 391	362 807
USA	643 877	628 063	631 900	755 000	843 180
Argentina	32 104	31 093	33 357	35 560	34 192
Bolivia	146 131	145 092	154 491	152 110	146 144
Brazil	188 472	117 341	152 634	87 475	98 590
Chile	35 403	36 004	33 934	15 943	32 263
Peru	692 290	760 353	867 691	868 758	899 494
China	1 000 600	1 161 000	1 209 900	1 273 200	1 476 000
India	154 500	154 000	142 200	194 500	185 000
Iran	72 500	76 300	76 500	82 000	79 000
Japan	95 274	79 709	71 569	67 670	64 263
Kazakhstan	162 400	159 400	222 600	225 600	288 300
Korea, Dem. P.R. of	*90 000	*80 000	60 000	44 000	37 000
Korea, Republic of	7 747	8 384	8 992	10 489	9 832
Myanmar	721	572	*500	500	300
Saudi Arabia	----	----	619	3 550	3 161
Thailand	13 500	18 100	9 100	19 500	18 600
Uzbekistan	*24 000	*12 000	*2 000	----	----
Vietnam	*12 000	*16 000	*17 000	*26 000	*26 000
Australia	937 000	1 076 000	1 035 000	1 066 000	1 163 000
World Total	7 100 000	7 400 000	7 400 000	7 600 000	8 100 000

**Production of Slab Zinc**

tonnes

Country	1995	1996	1997	1998	1999
Belgium	211 100	207 400	213 600	205 000	232 400
Bulgaria	68 800	68 000	70 400	72 600	71 200
Finland	176 583	175 635	175 333	198 940	225 200
France	313 900	324 500	317 200	320 400	318 000
Germany	322 460	328 100	317 679	333 968	332 852
Italy	260 200	268 700	268 300	231 600	145 300
Macedonia	46 700	59 200	53 147	57 162	49 608
Netherlands	206 300	207 100	203 200	217 100	221 400
Norway	130 800	135 100	142 249	137 925	143 976
Poland	162 700	163 100	170 600	174 800	176 600
Portugal	4 000	3 600	*3 600	*4 000	*4 000
Romania	28 300	28 200	30 200	29 400	28 700
Russia	166 400	172 000	189 000	192 000	225 000
Spain	358 200	360 800	370 911	365 767	*370 000
Turkey	18 900	23 700	37 458	35 800	27 000
Ukraine	5 000	*2 000	*2 000	-----	-----
United Kingdom	105 998	96 867	107 704	99 600	132 800
Yugoslavia, Federal Republic of	5 976	29 954	29 454	13 600	700
Algeria	27 200	29 300	36 400	31 100	32 200
Congo, Democratic Republic	500	100	-----	-----	-----
South Africa	98 700	101 100	108 463	106 662	108 000
Canada	720 346	716 467	703 798	745 131	780 832
Mexico	222 748	221 736	231 444	230 325	218 943
USA	362 800	366 000	366 000	367 600	371 300
Argentina	38 567	39 292	41 772	41 777	43 423
Brazil	200 976	193 339	192 701	183 806	194 010
Peru	158 987	173 139	166 105	174 655	196 978
China	1 076 700	1 163 800	1 434 400	1 486 300	1 703 200
India	158 500	149 000	166 000	180 000	189 000
Iran	2 400	5 000	7 000	17 000	21 000
Japan	663 562	599 053	603 112	607 899	633 383
Kazakhstan	169 171	170 081	188 996	240 728	249 327
Korea, Dem. P.R. of	*95 000	*90 000	*55 000	*43 000	*40 000
Korea, Republic of	279 335	286 604	335 488	390 260	430 108
Thailand	56 852	72 380	84 054	88 700	97 300
Uzbekistan	70 000	45 000	53 000	52 000	27 000
Australia	330 000	336 000	318 000	320 000	349 000
World Total	7 300 000	7 400 000	7 800 000	8 000 000	8 400 000

## Exports of Zinc

Country	1995	1996	1997	1998	1999
Austria					
Unwrought (a)	5 038	2 977	13 108	14 955	18 948
Scrap	2 607	2 869	3 079	3 537	2 360
Belgium-Luxembourg					
Ore	388 192	1 095 059	1 130 638	607 159	686 666
Unwrought	166 695	144 915	143 121	105 298	87 099
Unwrought alloys	156 204	147 855	...	...	142 586
Scrap	20 395	21 319	36 920	26 148	23 481
Bulgaria					
Unwrought (a)	62 623	72 093	67 196	(b) *70 000	(b) *60 500
Czech Republic					
Unwrought (a)	300	300	3 008	758	1 861
Scrap	4 100	3 700	4 794	2 509	2 607
Denmark					
Scrap	6 371	5 744	7 038	6 069	6 804
Estonia					
Scrap	1 869	(b) *1 400	1 931	1 768	1 845
Finland					
Unwrought	125 664	137 317	128 746	155 494	186 944
Unwrought alloys	4 644	2 918	4 842	4 250	2 316
Scrap	9 517	7 700	9 344	8 363	7 016
France					
Ore	33 884	10 146	16 407	19 655	21 623
Unwrought	67 390	226 741	177 074	143 683	127 893
Unwrought alloys	3 940	5 567	7 479	15 376	25 970
Scrap	25 554	28 116	39 161	37 834	34 189
Germany					
Ore	43 318	46 030	41 710	56 509	64 299
Unwrought	63 397	70 130	49 088	53 350	58 110
Unwrought alloys	25 362	27 710	38 446	37 150	38 577
Scrap	24 589	29 044	33 795	35 691	45 412
Greece					
Ores & concentrates	28 778	8 503	32 501	42 878	29 500
Unwrought (a)	604	719	300	1 211	2 000
Scrap	1 873	1 198	1 552	700	527
Hungary					
Unwrought	...	467	1 153	841	928
Scrap	2 047	1 961	2 259	2 574	2 423
Irish Republic					
Ores & concentrates	325 529	282 567	347 300	315 099	338 609
Italy					
Ore	103	2 474	18 326	24 546	24 972
Unwrought	13 695	40 392	15 616	8 731	5 633
Unwrought alloys	9 807	13 329	15 425	10 739	5 883
Scrap	9 389	8 773	9 138	6 915	10 211
Latvia					
Unwrought (b)	*600	*200	*2 000	*1 000	...
Macedonia					
Ore	...	3 568	11 091	2 099	...
Unwrought (a)	(b) *13 700	55 592	53 655	53 067	(b) *45 400
Netherlands					
Unwrought	192 938	166 630	193 761	254 995	240 868
Unwrought alloys	37 414	47 315	40 230	45 738	2 406
Scrap	18 050	20 608	24 966	21 793	19 267
Norway					
Unwrought	111 572	112 980	124 187	116 805	121 857
Unwrought alloys	8 571	8 430	6 651	9 168	10 239
Poland					
Ore	39 120	46 948	39 780	19 900	26 329
Unwrought	68 180	63 378	59 300	67 900	94 040
Unwrought alloys	1 201	2 437	2 605	3 766	...
Romania					
Ore	...	...	3 286	11 302	23 737
Unwrought	5 852	8 199	14 756	18 625	18 617
Russia					
Ores & concentrates	95 481	86 651	56 583	38 436	46 092
Unwrought (a)	103 253	119 498	120 577	117 167	118 192
Scrap	200	240	810	1 960	2 094



## Exports of Zinc

tonnes

Country	1995	1996	1997	1998	1999
Slovakia					
Unwrought	2 800	700	400	400	1 352
Scrap	100	100	500	...	580
Spain					
Ore	137 214	116 180	136 282	121 884	150 074
Unwrought	165 521	183 142	180 175	122 746	142 447
Unwrought alloys	12 810	14 997	20 259	25 988	29 440
Scrap	540	2 251	2 419	1 402	2 785
Sweden					
Ore	298 492	315 030	292 797	293 053	329 282
Unwrought (a)	105	158	4 193	3 172	710
Scrap	7 506	6 524	5 580	6 224	27 393
Switzerland					
Scrap	1 755	2 127	2 026	2 894	4 030
Turkey					
Ores & concentrates	69 954	85 914	96 167	101 840	100 503
Unwrought	0	3 309	15 511	15 702	4 838
Ukraine					
Unwrought (a)	...	----	23	281	1 113
United Kingdom					
Unwrought	16 632	10 925	10 309	10 879	16 275
Unwrought alloys	25 070	23 008	24 730	23 840	21 392
Scrap	24 493	26 871	33 723	21 877	42 703
Yugoslavia, Federal Republic of					
Unwrought (a)	...	22 300	20 465	1 038	845
Algeria					
Unwrought (a)	10 300	26 558	24 244	24 446	...
Morocco					
Ore	171 466	178 175	191 172	...	...
Namibia					
Concentrates (c)	22 997	34 377	34 524	36 096	32 589
South Africa					
Unwrought	5 000	8 177	13 177	11 231	20 468
Tunisia					
Ore	87 636	73 938	6 914	31 070	74 159
Unwrought	...	...	...	16 635	9 050
Zambia					
Unwrought	*1 500	----	----	----	...
Canada					
Ores & concentrates (c)	604 408	706 735	489 373	391 133	326 925
Unwrought	536 041	581 609	547 597	576 926	610 812
Unwrought alloys	2 763	204	48	381	574
Scrap	41 263	28 608	27 304	27 111	25 567
Honduras					
Ores & concentrates (c)	27 117	37 037	39 483	36 639	40 996
Mexico					
Ores & concentrates	254 391	258 125	293 516	336 269	316 057
Unwrought	86 039	75 859	61 431	65 154	74 109
USA					
Ore (c)	431 312	470 213	483 511	571 373	531 307
of which, re-exports	7 483	45 280	24 555	19 181	37
Unwrought (a)	15 314	16 222	18 689	13 844	21 962
Scrap	38 020	31 594	34 744	26 676	23 581
Argentina					
Ores & concentrates	4 530	7 273	1 447	309	286
Unwrought	11 659	7 590	7 818	9 307	7 505
Bolivia					
Ore	292 812	297 973	311 324	311 792	294 519
Brazil					
Unwrought	51 649	49 447	23 200	14 765	26 244
Chile					
Concentrates	90 684	66 258	80 022	45 420	...
Peru					
Concentrates	968 517	1 090 687	1 235 089	1 010 549	1 170 245
Unwrought	80 731	122 155	107 802	121 712	124 174

## Exports of Zinc

Country	1995	1996	1997	1998	1999
China					
Ores & concentrates	154 770	109 391	381 309	201 325	233 150
Unwrought	181 211	217 413	543 841	370 612	507 501
Unwrought alloys	10 314	9 364	13 167	12 282	19 641
Scrap	3 187	2 105	2 298	5 108	5 955
Dubai					
Unwrought	...	...	1 091	613	...
Hong Kong					
Unwrought (a)	105 319	100 304	97 120	109 077	110 351
of which, re-exports	105 319	91 264	90 808	100 634	104 026
Scrap	28 744	14 416	15 258	15 307	27 800
of which, re-exports	24 890	13 268	15 228	14 999	27 164
India					
Ore (e)	140	31 239	92 364	30 921	...
Unwrought (a) (e)	23	949	11 752	16 555	...
Indonesia					
Ore	...	...	28 425	39 103	...
Iran					
Ores & concentrates (f)	----	...	194 807	47 658	...
Japan					
Unwrought	27 970	28 500	23 531	46 683	70 834
Unwrought alloys	1 962	1 823	1 755	12 837	8 547
Scrap	7 865	6 930	7 093	5 876	6 487
Jordan					
Scrap	2 014	3 203	2 603	458	...
Kazakhstan					
Ore	10 400	23 075	57 964	74 538	78 300
Unwrought (a)	147 691	149 549	191 126	218 024	(b) *275 700
Korea, Dem. P.R. of					
Unwrought (a) (b)	*11 100	*8 100	*6 000	*2 700	*600
Korea, Republic of					
Unwrought (a)	35 325	24 282	91 204	159 056	153 523
Unwrought alloys	225	212	369	8 151	9 321
Scrap	2 326	2 192	2 210	671	68
Malaysia					
Scrap	5 200	2 900	4 100	4 600	...
Myanmar					
Concentrates (e)	*4 000	2 760	*2 800	*2 800	...
Philippines					
Scrap	321	165	2 007	3 153	...
Singapore					
Unwrought	217 539	34 858	123 959	135 404	110 009
of which, re-exports	216 716	33 608	...	133 259	108 005
Scrap	2 244	1 049	2 944	2 509	2 622
Taiwan					
Unwrought (a)	7 722	6 968	9 881	9 342	10 764
Scrap	3 976	1 400	2 504	3 788	1 911
Thailand					
Unwrought	----	20	22 117	41 174	21 959
Unwrought alloys	1	----	1 561	6 993	8 699
Scrap	439	4	3 068	1 345	873
Uzbekistan					
Unwrought (b)	*15 100	*5 500	*6 800	*14 600	*14 000
Vietnam					
Ores & concentrates	...	...	55 000	85 000	...

**Exports of Zinc**

tonnes

Country	1995	1996	1997	1998	1999
Australia					
Ores & concentrates	1 353 713	1 487 647	1 478 789	1 565 066	1 697 017
Unwrought	224 754	239 722	218 420	227 836	280 367
Scrap	1 587	1 509	1 145	1 312	1 191
New Zealand					
Scrap (d)	1 152	928	1 054	253	...

## 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 30 June of that stated
- (e) Years ended 31 March following that stated
- (f) Years ended 20 March following that stated

## Imports of Zinc

Country	1995	1996	1997	1998	1999
Austria					
Unwrought	37 646	43 104	46 741	58 890	47 261
Unwrought alloys	13 030	14 428	17 913	18 882	16 079
Scrap	1 129	893	1 310	947	721
Belarus					
Unwrought (a)	*300	700	300	1 313	2 031
Belgium-Luxembourg					
Ore	553 969	1 393 376	1 605 860	1 048 756	1 018 447
Unwrought	147 995	222 649	247 904	232 249	192 761
Unwrought alloys	10 698	12 692	11 221	13 567	3 474
Scrap	15 819	23 869	48 650	48 518	50 113
Bulgaria					
Ore	104 054	116 953	147 283	(b) *104 000	(b) *99 000
Croatia					
Unwrought (a)	1 754	2 358	2 501	3 039	2 186
Czech Republic					
Unwrought (a)	17 959	17 125	20 101	22 394	21 387
Denmark					
Unwrought	13 483	10 645	10 795	14 305	9 983
Unwrought alloys	552	1 389	1 707	828	707
Scrap	148	21	517	390	328
Estonia					
Scrap	6 258	6 000	6 445	6 135	6 147
Finland					
Ore	211 074	288 603	292 378	376 747	411 447
Scrap	1 854	1 809	2 089	4 046	3 235
France					
Ore	622 177	604 490	634 286	563 460	601 964
Unwrought	135 057	108 023	114 185	116 935	128 500
Unwrought alloys	46 027	49 102	43 838	46 526	35 640
Scrap	13 600	11 952	16 031	12 966	17 242
Germany					
Ore	588 845	439 315	323 616	378 135	208 729
Unwrought	229 384	187 880	236 170	258 576	252 203
Unwrought alloys	63 275	52 863	70 458	75 088	77 944
Scrap	12 067	10 021	7 839	5 826	15 262
Greece					
Unwrought (a)	19 002	21 179	25 331	22 637	20 894
Hungary					
Unwrought (a)	11 952	13 660	15 701	20 456	19 047
Irish Republic					
Unwrought (a)	1 083	2 845	3 587	3 788	2 512
Italy					
Ore	457 915	518 843	517 834	495 111	252 306
Unwrought	113 677	101 735	98 129	148 873	198 080
Unwrought alloys	20 658	27 639	33 696	40 263	53 550
Scrap	13 765	21 825	21 981	17 571	19 236
Lithuania					
Unwrought	73	698	1 889	301	304
Macedonia					
Unwrought	...	92 110	74 053	487	...
Netherlands					
Ore	371 759	334 142	312 478	412 481	404 839
Unwrought	213 770	115 621	119 536	159 018	125 505
Unwrought alloys	1 666	783	375	4 959	5 863
Scrap	4 707	3 882	7 875	5 470	7 265
Norway					
Ore	123 148	124 025	194 381	221 918	216 338
Unwrought (a)	1 835	1 347	2 359	3 819	2 264
Scrap	2 167	2 423	1 371	660	888
Poland					
Ore	72 800	86 488	72 800	94 400	100 582
Unwrought (a)	2 301	3 745	5 400	6 900	8 703
Portugal					
Unwrought	(a) 19 700	6 395	7 421	11 718	13 560
Unwrought alloys	...	9 012	7 976	9 590	6 631

## Imports of Zinc

tonnes

Country	1995	1996	1997	1998	1999
Romania					
Ores & concentrates	-----	-----	-----	46 016	75 015
Unwrought (a)	3 159	1 000	654	7 899	4 976
Russia					
Ore	(b) *66 500	140 525	230 577	206 605	226 951
Unwrought (a)	6 212	38 101	40 468	40 129	5 577
Slovakia					
Unwrought (a)	26 062	25 305	23 294	26 172	20 545
Slovenia					
Unwrought (a)	7 500	14 068	19 696	20 927	18 960
Spain					
Ore	427 416	521 113	516 042	509 558	599 672
Unwrought	2 787	2 366	3 815	822	2 082
Unwrought alloys	5 443	9 487	9 688	10 497	12 907
Scrap	540	319	2 576	2 446	2 536
Sweden					
Unwrought	23 512	32 029	30 943	37 829	28 570
Unwrought alloys	15 098	7 587	6 440	8 804	8 869
Switzerland					
Unwrought	21 010	17 091	19 098	20 126	19 243
Unwrought alloys	3 062	2 770	2 215	3 065	3 106
Turkey					
Ore	5 080	32 066	68 240	83 377	59 099
Unwrought (a)	38 821	47 442	64 941	67 404	65 380
Scrap	100	200	100	235	942
Ukraine					
Unwrought	6 340	12 172	9 122	15 470	13 562
United Kingdom					
Ores & concentrates	214 849	154 230	135 209	139 806	91 613
Unwrought	137 882	133 989	136 217	162 046	112 223
Unwrought alloys	5 716	4 124	12 035	10 908	6 035
Scrap	2 295	2 995	3 238	3 806	3 642
Yugoslavia, Federal Republic of					
Concentrates	(b) *2 000	(b) *8 000	29 746	20 216	1
Unwrought	...	14 700	10 581	4 149	3 744
Egypt					
Unwrought (a)	17 700	9 058	12 331	16 141	17 212
Kenya					
Unwrought (a)	12 975	13 234	13 989	8 729	10 360
Morocco					
Unwrought (a)	7 733	6 314	7 138	8 500	...
Nigeria					
Unwrought (a)	...	8 102	59 895	7 696	7 364
South Africa					
Unwrought (a)	7 518	1 035	6 452	2 217	1 096
Scrap	567	723	142	307	86
Tanzania					
Unwrought	3 200	900	1 700	...	2 447
Tunisia					
Unwrought (a)	4 974	5 552	6 514	6 848	4 834
Uganda					
Unwrought (a)	...	1 661	1 859	29 099	...
Canada					
Ores & concentrates (c)	176 628	181 783	187 547	210 494	266 454
Unwrought	11 766	11 651	18 949	13 749	12 370
Scrap	2 128	2 131	2 234	680	831
Costa Rica					
Unwrought (a)	5 423	4 913	6 649	6 643	8 047
El Salvador					
Unwrought (a)	262	282	774	399	656
Guatemala					
Unwrought (a)	1 648	1 480	2 189	4 206	3 953
Honduras					
Unwrought (a)	593	685	922	864	775

## Imports of Zinc

Country	1995	1996	1997	1998	1999
USA					
Ore (c)	13 032	17 320	51 451	46 250	78 092
Unwrought (a)	848 910	818 870	876 447	872 056	1 068 120
Scrap	42 260	31 862	29 555	29 239	26 569
Argentina					
Ores & concentrates	16 941	17 144	18 107	8 170	8 093
Unwrought	5 332	8 361	9 326	9 161	5 485
Brazil					
Ores & concentrates	131 395	213 088	211 610	213 281	216 288
Unwrought (a)	37 470	4 003	3 388	8 389	17 853
Chile					
Unwrought (a)	11 861	9 612	8 339	8 670	7 900
Colombia					
Unwrought (a)	20 867	17 266	22 376	21 001	16 830
Ecuador					
Unwrought (a)	4 500	3 387	4 962	4 839	3 298
Uruguay					
Unwrought	1 389	1 467	1 170	1 764	1 418
Venezuela					
Unwrought	17 946	8 772	11 204	13 958	9 978
Unwrought alloys	15 033	6 586	8 269	7 803	4 003
Bangladesh					
Unwrought	21 500	36 400	22 000	28 000	...
China					
Ores & concentrates	102 454	295 079	166 503	52 508	44 003
Unwrought	13 955	10 612	10 800	12 090	16 091
Unwrought alloys	52 749	58 899	61 171	75 385	91 347
Scrap	22 491	20 374	23 493	25 667	42 127
Dubai					
Unwrought	...	4 279	6 027	5 326	...
Hong Kong					
Unwrought	32 331	29 603	24 977	38 344	27 250
Unwrought alloys	97 609	91 725	83 674	92 287	102 650
Scrap	32 833	16 894	11 089	12 701	13 629
India					
Ores & concentrates (d)	39 516	42 661	31 776	62 668	...
Unwrought (d)	53 900	81 453	73 892	60 830	...
Unwrought alloys (d)	1 383	524	1 839	1 699	...
Scrap (d)	7 202	18 341	41 943	41 344	...
Indonesia					
Unwrought	96 419	88 743	83 747	59 987	...
Unwrought alloys	6 069	5 458	5 652	5 667	...
Scrap	813	180	5	0	...
Iran					
Unwrought (e)	15 095	*15 000	19 139	6 734	...
Israel					
Unwrought (a)	*22 000	15 200	16 500	*18 700	*17 000
Japan					
Ore	1 072 653	922 875	989 373	945 295	1 123 071
Unwrought	116 986	134 798	179 672	113 370	55 335
Unwrought alloys	9 956	10 027	11 849	8 012	7 559
Scrap	991	305	339	48	351
Jordan					
Unwrought (a)	2 205	1 396	990	1 272	...
Kazakhstan					
Ores & concentrates	3 445	11 628	21 403	14 495	1 434
Korea, Dem. P.R. of					
Ores & concentrates (b)	*40 400	*47 300	*30 000	*17 000	*23 000
Korea, Republic of					
Ores & concentrates	534 362	530 786	661 456	800 136	881 885
Unwrought (a)	52 792	89 553	68 779	71 019	111 374
Macao					
Unwrought	798	521	205	619	228
Malaysia					
Unwrought (a)	47 554	49 017	61 225	68 670	...

**Imports of Zinc**

tonnes

Country	1995	1996	1997	1998	1999
Pakistan					
Unwrought (a) (f)	...	11 098	13 530	15 029	597
Philippines					
Unwrought (a)	56 973	55 420	53 549	39 771	...
Saudi Arabia					
Unwrought	12 589	11 628	10 112	13 792	14 187
Singapore					
Unwrought	38 708	45 457	240 041	168 951	132 465
Scrap	3 511	2 424	3 685	2 181	1 857
Sri Lanka					
Unwrought (a)	2 022	1 869	1 558	1 836	...
Syria					
Unwrought	...	...	1 599	4 185	...
Taiwan					
Unwrought	205 648	196 420	228 896	240 737	272 973
Unwrought alloys	25 227	14 094	13 699	14 827	17 956
Scrap	66 870	62 456	53 718	50 027	51 656
Thailand					
Ores & concentrates	43 831	62 222	136 904	135 863	143 269
Unwrought	44 461	37 748	21 472	14 445	10 210
Unwrought alloys	9 517	10 002	6 662	7 233	8 480
Australia					
Ores & concentrates	10 559	10 431	...	10 275	54 223
Unwrought (a)	1 507	413	805	1 785	3 477
New Zealand					
Unwrought (a) (f)	19 352	...	16 310	15 915	...

## 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

**Production of Zirconium Minerals**

Country	1995	1996	1997	1998	1999
Russia (a)	2 652	5 080	5 745	6 293	6 800
Ukraine	*60 000	*55 000	*65 000	*65 000	...
South Africa	260 000	260 000	265 000	*300 000	*400 000
USA	*120 000	*120 000	*120 000	*150 000	*190 000
Brazil (a)	16 343	15 560	19 252	20 132	29 448
China	14 074	2 293	3 428	134	1 850
India	*18 000	*19 000	*19 000	*19 000	*19 000
Indonesia	*2 000	*2 000	105	231	*250
Malaysia	3 790	4 511	4 050	3 057	1 763
Sri Lanka	21 971	15 863	12 451	8 814	----
Australia	505 000	460 000	418 000	369 000	361 000
World Total	1 024 000	959 000	932 000	942 000	1 075 000

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



**Exports of Zirconium**

tonnes

Country	1995	1996	1997	1998	1999
Belgium-Luxembourg					
Concentrates	574	5 354	464	1 587	2 119
Metal	153	124	142	167	142
Estonia					
Metal	20	...	...	...	17
France					
Concentrates	1 954	821	685	458	679
Germany					
Concentrates	3 607	4 354	4 461	6 174	5 704
Metal	216	132	152	229	254
Italy					
Concentrates	20 910	19 435	20 567	20 831	22 988
Metal	4 421	1 426	368	330	386
Netherlands					
Concentrates	14 199	16 810	17 331	7 568	6 038
Norway					
Concentrates	2 041	4 230	1 637	170	10
Russia					
Concentrates	...	4 383	5 200	4 877	3 969
Metal	...	62	117	170	40
Spain					
Concentrates	(c) 3 823	3 027	2 033	3 399	5 605
Ukraine					
Concentrates	14 042	15 079	18 722	15 746	36 282
United Kingdom					
Concentrates	2 436	2 819	4 492	3 039	496
Metal	318	669	281	247	370
South Africa					
Concentrates (a)	*276 600	*292 800	*310 300	*300 000	*292 800
Canada					
Metal	245	128	92	205	333
USA					
Concentrates	42 441	36 546	44 341	41 200	69 542
Metal	1 700	1 089	1 305	1 169	1 020
Brazil					
Concentrates	818	1 004	712	276	230
China					
Concentrates	3 090	834	1 770	1 419	330
Metal	57	233	174	140	94
Hong Kong					
Concentrates (b)	71 027	60 181	25 243	22 019	23 831
Indonesia					
Concentrates	216	1 100	1 000	2 001	...
Malaysia					
Concentrates	2 560	3 300	5 500	6 200	...
Taiwan					
Concentrates	526	700	79	572	881
Metal	301	232	430	621	850
Thailand					
Concentrates	----	20	100	1 740	419
Australia					
Concentrates	513 532	423 853	341 805	398 761	290 051

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) Re-exports

(c) Including zirconium sand

## Imports of Zirconium

Country	1995	1996	1997	1998	1999
Austria					
Concentrates	1 216	2 177	591	900	1 017
Belarus					
Concentrates	*500	*1 000	*1 500	1 625	971
Belgium-Luxembourg					
Concentrates	3 117	2 861	2 782	3 062	3 531
Metal	1 082	240	387	1 014	535
Czech Republic					
Concentrates	2 100	2 000	2 106	3 151	3 736
Metal	...	...	170	200	174
France					
Concentrates	64 417	63 530	56 561	54 164	60 282
Metal	189	146	314	156	116
Germany					
Concentrates	65 239	64 751	60 265	72 300	...
Metal	384	318	489	496	396
Italy					
Concentrates	144 390	115 945	121 271	144 636	141 560
Metal	117	229	94	377	141
Netherlands					
Concentrates	49 893	56 821	28 197	26 225	32 422
Metal	309	62	155	170	88
Poland					
Concentrates	572	1 142	1 455	1 024	956
Metal	315	433	191	36	22
Portugal					
Concentrates	3 400	3 004	4 718	4 375	3 955
Romania					
Concentrates	1 200	800	215	178	110
Metal	102	0	18	...	57
Russia					
Concentrates	*5 000	6 072	3 457	5 119	8 445
Spain					
Concentrates	83 388	83 582	104 929	98 066	108 668
Metal	110	...	164	170	114
Sweden					
Concentrates	1 170	788	369	506	648
Metal	180	...	...	...	122
Switzerland					
Metal	125	60	96	61	94
Turkey					
Concentrates	149	382	251	1 680	1 072
Zirconium sand	18 718	9 490	...	...	...
United Kingdom					
Concentrates	56 128	57 432	57 830	54 986	37 695
Metal	461	386	534	510	259
Nigeria					
Metal	...	20	29	44	5
Tunisia					
Concentrates	2 300	1 589	368	690	431
Canada					
Concentrates	17 788	22 512	5 765	8 654	5 838
Metal	556	349	358	322	280
Mexico					
Zirconium sand	13 343	16 606	17 971	19 251	17 291
USA					
Concentrates	93 601	92 483	62 361	89 542	57 626
Metal	736	620	759	894	859
Brazil					
Concentrates	9 115	7 975	8 707	6 632	5 504
China					
Concentrates	129 075	118 848	81 988	98 616	130 688
Metal	587	535	781	665	888

**Imports of Zirconium**

tonnes

Country	1995	1996	1997	1998	1999
Hong Kong					
Concentrates	85 572	63 010	27 662	23 216	23 905
India					
Concentrates (a)	3 198	4 646	7 540	4 679	...
Indonesia					
Concentrates	2 590	1 475	2 066	1 170	...
Japan					
Concentrates	129 199	113 203	90 496	78 626	74 647
Metal	628	617	714	671	654
Korea, Republic of					
Concentrates	17 732	12 289	14 259	6 252	12 494
Metal	104	138	86	135	165
Malaysia					
Concentrates	5 070	5 000	6 600	4 500	...
Philippines					
Zirconium sand	498	248	454	21	...
Saudi Arabia					
Concentrates	...	...	340	280	780
Singapore					
Concentrates	4 700	3 100	4 088	2 940	3 465
Metal	33	2	2	10	3
Taiwan					
Concentrates	14 150	12 086	11 815	15 737	15 360
Zirconium sand	8 745	10 124	10 751	10 490	10 291
Metal	75	...	23	71	331
Thailand					
Concentrates	106	1 507	2 167	2 032	21
Australia					
Concentrates	461	29 094	447	443	351

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 Beryl**

tonnes

Country	1995	1996	1997	1998	1999
Russia	*1 000	*1 000	*1 000	*1 000	*1 000
Madagascar (a)	32	11	28	30	*30
Zambia	2	4	4	4	*4
USA	5 040	5 260	5 770	6 080	5 070
China	*55	*55	*55	*55	*55
Kazakhstan	*100	*100	*100	(a) 221	(a) 221

Note(s):-

(a) Includes ornamental and industrial products

**Production of Borates**

tonnes

Country	1995	1996	1997	1998	1999
Russia	1 010 000	1 020 000	*1 000 000	*1 000 000	*1 000 000
Turkey	1 143 994	1 446 697	1 568 571	*1 650 000	1 400 000
USA (a)	1 190 000	1 150 000	1 190 000	1 170 000	1 220 000
Argentina	244 933	342 210	422 556	279 272	302 900
Bolivia	6 891	9 231	12 469	15 930	15 362
Chile	211 312	149 008	170 605	280 140	*200 000
Peru	40 581	39 982	46 988	17 945	...
China (b)	294 600	...	248 300	247 100	289 400
Iran	*1 000	*1 000	*1 000	*1 000	*1 000
Kazakhstan	50 000	40 000	*20 000	13 100	...

Note(s):-

(a) Sold or used by producers

(b) B<sub>2</sub>O<sub>3</sub> equivalent**Production of Germanium Metal**

tonnes

Country	1995	1996	1997	1998	1999
Belgium	...	22	23	...	...
Ukraine	...	0	0	1	1
USA (a)	*10	*18	*20	*22	*20
China	10	11	...	14	14
Japan	2	2	1	0	1

Note(s):-

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

(a) Including production of secondary metal

**Production of Primary Magnesium Metal**

tonnes

Country	1995	1996	1997	1998	1999
France	14 450	14 000	13 800	14 700	15 000
Norway	32 000	37 790	34 200	35 400	40 800
Russia	37 500	31 500	33 000	34 100	35 200
Ukraine	13 000	12 896	7 654	5 040	3
Yugoslavia, Federal Republic of	2 560	3 090	3 942	3 965	1 203
Canada	*46 000	*46 000	*49 000	*60 000	*64 000
USA	142 100	133 100	124 800	106 100	75 000
Brazil	*9 700	*9 000	*9 000	*9 000	*9 000
China	93 600	73 200	75 985	70 464	120 700
India	1 000	1 000	1 000	1 500	*1 500
Israel	...	...	7 400	24 500	28 000
Kazakhstan	8 972	13 431	17 900	20 907	21 200

**Production of Nepheline Syenite**

tonnes

Country	1995	1996	1997	1998	1999
Norway	293 684	299 610	303 717	319 835	305 000
Russia (b)	...	827 814	939 020	859 698	857 000
South Africa (a)	145 459	145 000	114 201	116 000	...
Canada	618 000	606 000	647 000	636 000	650 000

Note(s):-

(a) Mostly used as aggregate

(b) Nepheline concentrates

tonnes

**Production of Perlite**

Country	1995	1996	1997	1998	1999
Armenia	*45 000	*45 000	*20 000	*35 000	*35 000
Bulgaria	32 500	25 500	20 000	20 078	13 580
Georgia	*5 000	*5 000	*5 000	...	...
Greece	565 479	598 640	695 917	658 332	777 898
Hungary	109 913	*110 000	110 000	130 000	148 000
Italy	*60 000	*60 000	*60 000	*60 000	*60 000
Russia	*60 000	*45 000	*45 000	...	...
Slovakia	21 850	25 160	25 019	24 238	19 460
Turkey	171 058	157 580	103 416	124 312	147 818
Ukraine	*25 000	*25 000	*25 000	...	...
Morocco	...	...	51 195	...	...
South Africa	1 338	682	403	*400	*400
Mexico	33 529	37 417	51 758	54 840	61 596
USA	813 000	811 000	656 000	832 000	821 000
Argentina	20 058	21 547	27 578	21 495	...
China	...	...	...	...	104 900
India (d)	452	310	80	207	383
Iran (b)	1 300	2 300	4 200	...	...
Japan	275 600	304 300	288 010	250 000	260 000
Philippines	17 134	19 638	25 941	6 356	10 235
Thailand	1 100	1 200	700	3 600	5 800
Australia (a)	4 098	6 234	6 304	6 068	3 886
New Zealand	1 800	(c) 1 880	(c) 4 960	*2 000	*2 000

Note(s):-

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

(a) Years ended 30 June of that stated

(b) Years ended 20 March following that stated

(c) Including zeolite

(d) Years ended 31 March following that stated

**Production of Selenium Metal**

tonnes

Country	1995	1996	1997	1998	1999
Belgium	*250	*250	*250	*200	*200
Finland	27	43	43	43	37
Germany	*115	*115	*115	*100	*100
Poland	73	73	76	67	*70
Russia	*40	*40	*40	*40	*40
Sweden	26	20	*20	*20	*20
Yugoslavia, Federal Republic of	40	38	45	41	20
Zambia	18	19	17	13	7
Canada	561	694	592	398	438
USA	373	379	353	*350	...
Chile (a)	51	73	63	29	...
Peru	15	13	13	18	23
China	*65	*65	*65	*65	*65
India (b)	11	12	13	11	6
Japan	548	588	546	550	548
Kazakhstan	*40	*40	*40	*40	*40
Philippines	42	44	38	40	35
Uzbekistan	*20	*20	*20	*20	*20

Note(s):-

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

(a) Exports

(b) Years ended 31 March following that stated

**Production of Natural Sodium Carbonate**

tonnes

Country	1995	1996	1997	1998	1999
Botswana	201 657	119 137	199 990	195 500	*196 000
Ethiopia (a)	200	4 907	5 009	5 272	4 409
Kenya	218 450	223 000	257 640	242 910	245 680
USA	10 100 000	10 200 000	10 700 000	10 100 000	10 200 000

Note(s):-

(a) Years ended 7 July of that stated

**Production of Strontium Minerals**

tonnes

Country	1995	1996	1997	1998	1999
Spain	105 866	114 829	95 162	119 077	128 457
Turkey (b)	...	...	47 250	32 040	...
Algeria	*5 400	*5 400	*5 400	*5 400	*5 400
Mexico	138 342	141 142	134 707	118 230	149 804
Argentina (a)	9 325	3 775	3 049	2 416	...
Iran	*20 000	*20 000	*20 000	*20 000	*20 000
Pakistan (c)	1 427	1 221	706	598	634
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) Exports

(c) Years ended 30 June of that stated

**Production of Tellerium Metal**

tonnes

Country	1995	1996	1997	1998	1999
Canada	102	59	59	62	67
USA	50	50	50	50	50
Peru	30	25	25	22	17
Japan	43	40	25	39	35

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	1995	1996	1997	1998	1999
Czech Republic	611	589	624	611	605
France	981	930	748	508	438
Hungary	221	212	209	----	----
Portugal	19	14	17	19	10
Romania	*100	*100	*100	*100	*100
Russia	2 250	*2 000	*2 000	*2 000	*2 000
Spain	254	254	254	255	255
Ukraine	*500	*500	*500	*500	*500
Gabon	630	560	472	731	294
Namibia	2 005	2 450	2 903	2 778	2 687
Niger	2 974	3 326	3 492	3 713	2 916
South Africa	1 443	1 447	1 122	965	926
Canada	10 462	11 689	12 020	10 936	7 923
USA	2 324	2 420	2 170	1 872	1 807
Argentina	58	23	35	8	8
Brazil	125	----	----	----	----
China	*500	*500	*500	*500	*500
India	*200	*200	*200	*200	*200
Kazakhstan	1 630	1 210	1 090	1 270	1 588
Pakistan	*23	*23	*23	*23	*23
Uzbekistan	1 800	1 459	1 764	2 000	2 130
Australia	3 712	4 976	5 490	4 901	5 987
World Total	32 800	34 900	35 700	33 900	30 900
World Total (U <sub>3</sub> O <sub>8</sub> equivalent)	38 700	41 200	42 100	40 000	36 400



**Production of Vermiculite**

tonnes

Country	1995	1996	1997	1998	1999
Russia	*40 000	*30 000	*25 000	*25 000	*25 000
Egypt (c)	...	140	54	*50	...
Kenya	457	734	1 418	353	164
South Africa	221 748	196 000	211 001	221 331	*212 000
Zimbabwe	13 742	10 249	14 841	14 804	12 844
USA (a)	171 000	*170 000	...	...	...
Brazil (b)	18 806	21 999	23 000	*24 300	*23 400
China	...	...	...	...	92 610
India (d)	1 798	3 755	4 699	4 274	2 792
Japan	*15 000	*15 000	*15 000	*15 000	*15 000
Australia (c)	...	5 000	3 327	7 589	10 490

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

(d) Years ended 31 March following that stated

**Production of Wollastonite**

tonnes

Country	1995	1996	1997	1998	1999
Czech Republic	800	800	----	...	...
Finland	29 592	22 304	20 700	16 700	13 883
Namibia	967	248	194	267	367
South Africa	...	...	...	646	...
Mexico	20 194	28 365	20 655	41 264	44 126
USA	*130 000	*150 000	*150 000	...	...
China	*100 000	*200 000	*200 000	*300 000	*300 000
India (a)	96 017	93 060	97 742	94 700	116 880

Note(s):-

(1) In addition to the countries listed, Japan, Kazakhstan, Dem P R of Korea, Pakistan and Turkey are believed to produce wollastonite

(a) Years ended 31 March following that stated



