

# British Geological Survey World Mineral Statistics 1996-2000



BRITISH GEOLOGICAL SURVEY

WORLD MINERAL STATISTICS  
1996–2000

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-fourth 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. From March 2002 customers will be able to have access to full online credit purchasing on the website [www.bgs.ac.uk/shop](http://www.bgs.ac.uk/shop).

At the present time, a gloomy view of the world economy prevails. From the metals and minerals industry come frequent announcements of plant closures, actual and potential, and reductions in mine and refinery capacity world-wide. The excess of production capacity is real but almost inevitable from time to time due to the nature of the industry. The lead-times for development of a mining and refining operation tend to be long and it is only the most skilful or, more probably, lucky management that succeeds in bringing a new operation on-stream at the optimum time. It is common for projects to be delayed by an array of obstacles including financial re-assessment, political factors and technical problems. Each individual mineral deposit is unique and unforeseen technical hitches are the norm rather than the exception, particularly where innovative technology is used. The production cuts are also real but the general trend for world output of most minerals, with the exceptions of environmental outcasts such as asbestos and mercury, has been steadily upwards for the last quarter-century. This is well illustrated by the production graphs in this volume and should be kept in mind when prophets foretell the inevitable eclipsing of manufacturing by service industries. We still need to consume huge quantities of minerals even if they now come from Guangxi or the Pilbara, rather than Cornwall and Lorraine.

In 2000, in spite of weak prices, production of precious metals and many base metals, headed by copper, continued to rise as the world's demand for increasingly sophisticated consumer goods maintained steady growth. Steel production, and hence the output of iron ore and manganese ore, was less strong reflecting a pause in major engineering projects and increased competition from other metals. Stainless steel was an exception and demand continued to be strong, hence the sharply rising production curves for chromium and nickel, its main alloying metal constituents. Chief among steel's competitors is aluminium and production of both this metal and magnesium showed a strong increase as manufacturers looked for weight savings in their products. Magnesium shows an eight per cent increase in production between 1999 and 2000 due almost entirely to increased output from China. In contrast, the production of the fertiliser minerals, phosphate rock and potash, have scarcely increased at all in the past twenty years and this must reflect the flat market and the environmental constraints on arable farming that have both restricted production and imposed a more efficient use of fertilisers.

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. In this we depend almost entirely on the support of the Department of Trade and Industry, whose role in funding 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.

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*20 January 2002*

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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 British Geological Survey 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 1996 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 2000 are for South Africa only.

Some 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 the following metals covered by Harmonised System Chapter 81 include under the term 'metal', unwrought and wrought forms, powder, alloys, waste and scrap, unless these are separately shown: antimony, bismuth, cadmium, chromium, cobalt, manganese, molybdenum, tantalum–niobium, titanium, tungsten, vanadium and zirconium. Trade tables of other metals include only unwrought forms under the term 'metal'.

#### *Exclusion of Warranty*

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#### *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 and the International Fertilizer Industry Association Ltd. 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 Société de l'Industrie Minérale, *Annuaire Statistique Mondial des Minéraux et Métaux*; Mining Journal, *Mining Annual Review*; 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	1996	1997	1998	1999	2000
Albania	3 380	4 453	4 128	4 624	*3 000
France	165 000	169 000	170 000	170 000	185 000
Greece	2 451 734	1 876 983	1 714 023	1 882 505	*2 000 000
Hungary	1 055 800	742 700	908 900	935 200	1 046 500
Romania	175 200	127 450	161 865	-----	-----
Russia	3 928 000	3 988 000	4 092 000	4 513 000	5 089 000
Turkey	544 513	369 482	458 028	207 743	458 537
Yugoslavia, Federal Republic of	323 000	470 000	226 000	500 000	630 000
Ghana	473 200	519 200	384 406	355 261	503 824
Guinea	18 492 600	16 510 000	17 300 000	17 320 000	17 950 000
Mozambique	11 459	8 218	6 103	7 883	8 130
Jamaica	11 828 634	11 987 304	12 646 439	11 688 481	11 126 524
USA (b) (d)	233 000	197 981	225 288	*270 000	*200 000
Brazil (c)	12 587 234	11 539 965	11 566 798	12 661 746	*13 000 000
Guyana	2 475 459	2 470 895	2 267 368	2 359 272	2 689 451
Suriname	3 702 527	3 877 183	3 931 108	3 714 595	3 610 381
Venezuela	4 834 052	4 966 794	4 825 647	4 166 450	4 360 720
China	8 878 800	*9 000 000	*8 600 000	*9 600 000	*8 800 000
India (f)	6 035 579	6 112 131	6 609 525	7 049 943	7 893 110
Indonesia	841 976	808 749	1 055 647	1 116 323	1 150 800
Iran (a)	230 420	244 999	336 006	912 451	440 000
Kazakhstan	3 345 900	3 416 000	3 436 800	3 606 500	3 729 600
Malaysia	218 680	279 066	160 271	222 724	123 270
Pakistan (e)	3 590	4 934	4 953	11 216	8 700
Vietnam	*30 000	29 000	46 360	*30 000	*30 000
Australia	43 063 000	44 464 000	44 653 000	48 416 000	53 801 000
World Total	126 000 000	124 000 000	126 000 000	132 000 000	139 000 000

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 ( $\text{Al}_2\text{O}_3$  content)

Country	1996	1997	1998	1999	2000
Azerbaijan	----	----	----	77 000	217 200
France	440 000	454 000	444 000	472 000	*500 000
Germany	755 333	737 815	*600 000	583 000	717 021
Greece	601 580	584 000	622 000	621 700	668 300
Hungary	*354 000	*243 000	250 000	337 500	357 100
Irish Republic	1 233 500	1 272 941	1 322 536	1 395 735	1 410 674
Italy	575 800	597 000	608 000	636 000	668 000
Romania	261 000	279 537	250 266	277 388	416 575
Russia	2 148 000	2 379 800	2 465 400	2 657 100	2 889 000
Slovakia	56 000	46 812	26 507	----	----
Spain	715 600	725 700	725 500	726 800	734 000
Turkey	159 298	164 333	156 825	159 122	155 448
Ukraine	1 159 460	1 074 500	1 290 720	1 230 200	1 360 000
United Kingdom	99 000	100 000	96 000	90 000	89 000
Yugoslavia, Federal Republic of	105 000	159 450	152 619	156 012	186 135
Guinea	640 000	519 647	499 630	568 479	540 922
Canada	1 060 000	1 165 000	1 229 000	1 233 000	1 197 400
Jamaica	3 199 513	3 394 177	3 440 167	3 569 633	3 600 125
USA	*4 700 000	*5 093 000	*5 654 000	*5 144 000	*4 782 000
Brazil	2 759 000	3 088 000	3 322 100	3 515 100	3 754 100
Suriname	1 642 942	1 725 857	1 771 889	1 853 032	1 906 073
Venezuela	1 701 675	1 730 368	1 553 445	1 335 000	1 755 265
China	2 493 500	2 936 100	3 340 000	3 837 400	4 290 000
India	1 706 000	1 940 000	1 855 000	1 930 000	2 107 000
Japan	718 900	728 000	737 600	736 600	781 700
Kazakhstan	1 083 700	1 094 200	1 084 500	1 157 692	1 216 578
Australia	13 348 000	13 384 000	12 173 000	14 532 000	15 681 000
World Total	43 700 000	45 600 000	45 700 000	48 800 000	52 000 000

Note(s):-

(1) Where possible figures in this table show the alumina equivalent ( $\text{Al}_2\text{O}_3$ ) of total hydrate produced, whether or not calcined

**Production of Primary Aluminium**

tonnes

Country	1996	1997	1998	1999	2000
Bosnia & Herzegovina	----	8 000	30 000	70 000	94 500
France	380 100	399 400	423 600	455 100	441 100
Germany	576 492	571 941	612 381	633 803	643 545
Greece	141 295	132 600	146 100	159 900	162 600
Hungary	32 000	33 700	34 000	34 000	33 850
Iceland	102 096	123 356	183 400	221 434	225 721
Italy	184 400	187 700	187 000	187 200	189 800
Netherlands	227 000	231 800	264 700	287 400	301 700
Norway (a)	863 327	918 511	994 195	1 007 989	1 000 000
Poland	51 500	51 500	51 500	51 600	52 300
Romania	140 872	161 907	174 040	174 100	179 039
Russia	2 873 000	2 906 000	3 010 000	3 149 000	3 247 000
Slovakia	115 600	110 190	108 000	105 200	109 000
Slovenia	65 800	74 400	70 800	77 200	83 800
Spain	361 828	360 061	360 400	375 500	365 700
Sweden	98 974	98 798	96 098	99 340	101 086
Switzerland	26 594	27 339	32 106	34 439	35 500
Turkey	62 100	62 020	61 803	61 705	61 501
Ukraine	89 875	100 547	106 678	115 425	119 290
United Kingdom	239 963	247 675	258 397	272 211	305 099
Yugoslavia, Federal Republic of	37 436	65 741	61 247	73 430	88 151
Cameroon	82 300	90 900	81 600	91 900	94 900
Egypt	179 200	178 200	187 200	186 700	188 900
Ghana	137 000	151 600	56 100	114 200	155 500
Mozambique	----	----	----	----	64 000
Nigeria	----	2 500	25 500	15 900	----
South Africa	569 607	673 043	676 999	689 230	674 000
Canada	2 283 212	2 327 188	2 374 118	2 389 834	2 373 460
Mexico	61 458	66 356	61 848	62 736	65 000
USA	3 577 200	3 603 400	3 712 700	3 778 600	3 668 400
Argentina	183 942	186 330	186 605	204 600	263 895
Brazil	1 197 400	1 189 100	1 208 000	1 249 600	1 271 400
Suriname	26 036	23 128	27 416	6 638	----
Venezuela	634 900	642 000	586 499	570 321	570 600
Bahrain	461 245	489 915	501 308	502 663	509 038
China	1 896 200	2 178 600	2 435 300	2 808 900	2 989 000
Dubai	258 500	379 200	386 648	440 700	536 000
India (b)	497 540	553 255	543 451	612 968	624 206
Indonesia	223 100	217 400	133 350	111 700	190 500
Iran (c)	77 535	95 521	123 758	137 421	*139 000
Japan	16 959	16 694	16 302	10 904	6 536
Tajikistan	198 300	188 900	195 630	229 100	271 100
Australia	1 372 000	1 495 000	1 627 000	1 719 000	1 769 000
New Zealand	283 329	310 324	317 600	326 800	328 400
<b>World Total</b>	<b>20 900 000</b>	<b>21 900 000</b>	<b>22 700 000</b>	<b>23 900 000</b>	<b>24 600 000</b>

Note(s):-

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

**Exports of Bauxite, Alumina and Aluminium**

tonnes

Country	1996	1997	1998	1999	2000
Armenia					
Scrap	*10 000	13 740	*14 000	9 965	...
Austria					
Unwrought	5 609	4 800	14 444	8 317	7 666
Unwrought alloys	69 802	62 467	72 884	77 157	84 770
Scrap	42 049	40 028	44 360	55 512	54 104
Azerbaijan					
Alumina	...	...	3 280	75 559	213 303
Unwrought	1 044	6 709	7 643	22 808	13 102
Scrap	...	...	492	3 836	12 174
Belarus					
Unwrought (a) (d)	*13 100	*1 500	*3 000	*2 200	*6 000
Scrap	(d) *6 900	(d) *1 300	4 008	4 056	4 700
Belgium-Luxembourg					
Bauxite	317	1 734	28 452	9 093	133 759
Alumina	3 106	1 817	2 381	3 203	5 098
Unwrought	1 135	2 644	53 783	35 818	29 754
Unwrought alloys	82 497	72 557	57 272	30 923	31 821
Scrap	115 070	147 630	135 234	132 901	142 861
Bosnia & Herzegovina					
Unwrought (a) (d)	...	*4 300	*23 800	*58 700	*77 000
Scrap (d)	*2 600	*6 000	*3 300	*4 100	*5 600
Bulgaria					
Unwrought (a)	8 842	12 765	(d) *3 500	(d) *3 200	(d) *700
Scrap	(d) *1 200	2 738	(d) *3 100	(d) *6 700	(d) *7 900
Croatia					
Bauxite	1 916	12 800	5 849	29 491	21 015
Scrap	900	2 100	3 554	5 575	8 033
Czech Republic					
Unwrought (a)	24 600	37 126	42 726	62 394	47 454
Scrap	11 900	15 148	21 233	26 118	26 241
Denmark					
Alumina	3 442	3 600	3 984	4 250	4 141
Unwrought alloys	20 594	29 623	28 778	28 452	23 333
Scrap	32 107	36 642	30 029	31 489	34 292
Estonia					
Unwrought (a)	(d) *2 300	9 245	(d) *5 900	37 870	2 309
Scrap	4 125	5 549	6 996	7 475	16 144
Finland					
Unwrought (a)	29 937	33 577	37 072	39 631	40 730
Scrap	4 227	3 339	4 046	6 242	8 529
France					
Bauxite	11 744	2 504	29 577	20 650	25 619
Alumina	114 149	106 756	117 898	123 213	129 376
Alumina hydrate	99 735	112 946	71 739	55 438	68 272
Unwrought	185 445	91 490	78 955	78 335	81 992
Unwrought alloys	97 180	135 365	99 711	74 915	75 453
Scrap	113 282	160 329	165 766	198 915	247 753
Georgia					
Unwrought	...	...	...	6 602	5 865
Scrap	...	(d) *4 900	(d) *7 600	(d) *7 600	27 816
Germany					
Bauxite	26 552	27 655	35 759	32 399	35 361
Alumina	214 801	268 415	233 561	198 433	191 531
Alumina hydrate	325 010	368 389	433 391	452 136	515 888
Unwrought	18 859	34 928	25 612	33 335	53 127
Unwrought alloys	241 472	194 687	211 075	266 917	321 684
Scrap	414 210	545 771	528 396	549 248	546 235
Greece					
Bauxite	819 411	537 011	477 582	391 130	666 578
Alumina	344 821	297 238	313 398	285 459	249 681
Alumina hydrate	24 952	34 070	13 595	12 063	6 500
Unwrought	37 663	30 429	42 384	54 366	84 799
Unwrought alloys	6 726	16 440	18 923	5 850	9 663
Scrap	5 429	14 532	5 460	10 865	16 410

**Exports of Bauxite, Alumina and Aluminium**

tonnes

Country	1996	1997	1998	1999	2000
Hungary					
Bauxite	10 000	59 280	4 612	5 158	2 711
Alumina	302 069	207 067	254 550	227 970	278 685
Unwrought (a)	19 227	19 163	21 733	12 653	12 185
Scrap	15 121	16 717	18 113	17 536	24 313
Iceland					
Unwrought (a)	101 117	119 794	162 035	221 444	209 680
Scrap	4 800	4 200	4 844	4 916	6 136
Irish Republic					
Alumina	1 346 339	1 407 607	1 505 074	1 443 841	1 873 414
Alumina hydrate	12 882	29 860	21 238	2 556	4 563
Unwrought alloys	5 078	5 839	5 476	5 993	5 879
Scrap	9 871	9 750	8 821	10 883	14 765
Italy					
Bauxite	17 528	2 623	4 312	107 978	255 878
Alumina	404 148	471 281	487 700	538 556	601 032
Alumina hydrate	6 650	5 868	12 493	21 793	33 622
Unwrought	5 267	5 077	11 751	9 293	2 894
Unwrought alloys	34 095	32 181	23 952	20 324	30 940
Scrap	11 800	18 640	12 469	11 224	21 689
Latvia					
Unwrought	1 094	1 891	6 958	16 337	23 419
Scrap	4 636	6 671	7 318	6 340	6 115
Lithuania					
Scrap	6 700	12 350	18 308	18 416	31 742
Macedonia					
Unwrought (a)	(d) *9 900	(d) *1 600	579	(d) *500	(d) *100
Moldova					
Scrap	1 143	2 017	4 577	19 242	...
Netherlands					
Bauxite	38 979	30 675	50 656	50 869	35 211
Alumina	116 849	214 325	241 320	172 798	287 473
Alumina hydrate	45 365	20 135	51 157	55 960	47 315
Unwrought	221 196	204 479	209 059	192 342	177 895
Unwrought alloys	262 576	250 015	259 682	288 157	275 788
Scrap	240 552	191 254	166 635	184 500	168 405
Norway					
Unwrought	210 191	192 313	126 168	119 024	138 907
Unwrought alloys	665 488	723 003	862 949	868 931	902 908
Scrap	19 443	20 516	20 362	19 259	24 721
Poland					
Unwrought (a)	25 600	27 800	48 300	37 094	36 275
Scrap	3 972	8 698	11 700	22 700	49 630
Portugal					
Unwrought (a)	2 512	3 480	34 213	69 426	106 601
Scrap	9 771	11 760	12 349	14 087	14 682
Romania					
Alumina	8 826	53 218	11 692	56 510	239 780
Unwrought	105 345	107 483	102 200	77 573	72 767
Scrap	...	...	4 242	19 946	32 905
Russia					
Bauxite	194 957	992 945	999 322	260 493	14 699
Alumina	74 677	274 110	349 195	142 605	85 969
Alumina hydrate	10 495	8 751	6 347	3 953	1 850
Unwrought	2 440 538	2 455 249	2 519 619	2 638 907	2 562 217
Unwrought alloys	177 904	253 574	270 783	476 770	632 410
Scrap (d)	*177 800	*336 900	*437 700	*502 600	*335 400
Slovakia					
Unwrought	97 882	110 155	117 123	370 000	143 438
Scrap	3 700	(d) *2 300	5 596	5 077	6 583
Slovenia					
Alumina	6 448	11 362	10 171	4 481	6 979
Unwrought (a)	47 750	55 970	51 054	56 505	60 836
Scrap	3 900	4 700	5 723	6 016	7 393

**Exports of Bauxite, Alumina and Aluminium**

tonnes

Country	1996	1997	1998	1999	2000
Spain					
Alumina	191 242	194 869	160 074	259 073	208 414
Alumina hydrate	248 779	243 999	240 130	306 990	268 920
Unwrought	9 316	7 812	20 419	1 968	2 890
Unwrought alloys	127 963	122 911	87 324	78 382	79 183
Scrap	5 130	10 971	9 449	19 921	34 991
Sweden					
Unwrought	993	1 309	800	1 286	8 982
Unwrought alloys	69 671	65 134	46 831	63 531	44 335
Scrap	53 979	44 156	49 202	42 182	66 697
Switzerland					
Unwrought (a)	8 473	8 945	8 388	11 581	15 691
Scrap	69 525	75 180	78 889	86 476	88 590
Turkey					
Alumina	36 986	41 706	27 187	22 903	17 613
Unwrought (a)	15 357	1 433	24 308	24 525	10 319
Scrap	6 245	10 339	8 593	10 504	12 992
Ukraine					
Alumina	*800 000	*800 000	*900 000	*800 000	...
Unwrought (a)	102 561	134 698	187 739	318 178	327 300
Scrap	3 073	35 272	47 633	36 229	(d) *49 100
United Kingdom					
Alumina	(b) 28 437	(b) 27 653	18 640	(b) 17 197	(b) 11 912
Unwrought	35 582	129 429	32 067	12 415	89 765
Unwrought alloys	171 401	241 147	193 134	225 110	257 938
Scrap	102 086	104 231	122 591	104 823	143 381
Yugoslavia, Federal Republic of					
Bauxite	32 000	4 655	549	48 398	2 124
Unwrought	34 600	(a) 62 526	(a) 61 394	66 420	2 636
Unwrought alloys	4 500	...	...	3 097	361
Scrap	700	387	6 907	2 975	423
Algeria					
Scrap	5 039	9 488	8 359	7 256	...
Cameroon					
Unwrought (a)	64 500	65 600	57 400	70 700	69 800
Egypt					
Unwrought (a)	96 880	89 400	63 778	69 868	...
Ghana					
Bauxite	383 370	...	615 851	247 249	...
Unwrought (a)	120 900	130 000	16 953	39 372	...
Guinea					
Bauxite	13 996 000	13 625 000	14 168 000	13 606 000	14 005 000
Alumina	619 258	506 990	521 199	560 000	570 938
Morocco					
Scrap	3 000	6 314	3 174	6 394	...
Mozambique					
Bauxite	8 380	8 218	6 103	7 883	8 130
Sierra Leone					
Bauxite	32 846	99 547	----	----	----
South Africa					
Unwrought (a)	541 352	580 025	556 985	630 634	504 438
Scrap	(d) *11 900	15 825	22 121	17 052	27 683
Canada					
Alumina	118 264	113 385	111 949	114 259	125 802
Unwrought	921 214	891 017	870 427	804 929	804 936
Unwrought alloys	899 444	995 840	986 011	1 056 981	1 032 337
Scrap	242 145	271 338	281 348	296 424	290 654
Cuba					
Scrap (d)	*4 900	*2 300	*2 400	*2 300	*1 800
Jamaica					
Bauxite	3 917 478	3 641 131	4 052 087	2 795 368	2 118 908
Alumina	3 270 982	3 446 373	3 496 027	3 621 983	3 642 538
Mexico					
Scrap	70 604	94 271	77 159	91 126	...
Panama					
Scrap	5 956	6 161	7 205	6 952	8 619

**Exports of Bauxite, Alumina and Aluminium**

tonnes

Country	1996	1997	1998	1999	2000
USA					
Bauxite	150 550	92 146	110 181	161 260	154 566
of which, re-exports	11 247	7 552	10 551	12 253	12 519
Alumina	925 413	1 230 903	1 258 515	1 144 458	1 108 536
Alumina hydrate	68 831	83 249	70 871	67 486	58 944
Unwrought	217 371	128 505	98 766	123 843	111 054
Unwrought alloys	208 604	239 759	172 802	199 415	168 293
Scrap	326 197	343 322	452 586	449 843	622 892
Argentina					
Unwrought	75 213	58 580	23 437	47 038	44 570
Unwrought alloys	18 639	54 939	64 293	76 700	143 289
Brazil					
Bauxite	4 569 442	4 373 463	4 315 642	4 511 896	4 166 202
Alumina	443 438	616 284	853 541	1 078 126	1 241 435
Unwrought	689 326	682 320	631 332	658 994	615 903
Unwrought alloys	19 647	33 854	61 110	129 588	144 051
Scrap	1 044	4 848	11 713	13 375	2 975
Colombia					
Scrap	6 366	6 614	8 285	12 270	10 861
Guyana					
Bauxite	2 100 568	2 200 300	2 346 113	2 389 003	...
Suriname					
Alumina	1 607 621	1 647 279	1 732 921	1 857 667	1 869 252
Unwrought	26 578	27 532	26 843	6 788	----
Venezuela					
Alumina	165 822	387 652	299 000	309 914	486 764
Unwrought	296 975	276 517	274 000	323 014	286 329
Unwrought alloys	55 249	78 642	74 800	91 762	101 936
Scrap	23 645	14 427	16 000	20 088	23 053
Bahrain					
Unwrought (a)	327 500	352 900	360 000	365 000	...
China					
Bauxite	201 126	160 645	84 258	847	1
Alumina	6 072	12 773	32 613	14 406	9 642
Alumina hydrate	39 958	44 617	40 552	35 225	44 973
Unwrought	72 137	163 151	237 756	99 540	81 189
Unwrought alloys	37 915	85 311	89 142	107 062	127 921
Scrap	6 162	4 294	4 995	6 910	7 557
Dubai					
Unwrought (a)	264 241	378 488	374 696	441 247	...
Hong Kong					
Alumina (e)	6 160	4 010	3 737	2 160	2 366
Unwrought	286 897	219 451	190 570	162 817	137 376
of which, re-exports	286 298	219 309	190 371	162 685	137 322
Unwrought alloys (e)	29 379	33 220	59 076	52 138	55 670
Scrap	131 968	126 052	96 147	86 067	66 534
of which, re-exports	84 020	91 350	75 534	65 593	48 514
India					
Bauxite (c)	103 925	86 876	98 942	596 801	...
Alumina (c)	560 615	427 183	216 879	86 062	...
Alumina hydrate (c)	21 420	18 695	29 927	31 496	...
Unwrought (c)	79 680	69 110	29 227	95 394	...
Unwrought alloys (c)	6 491	5 858	4 618	5 667	...
Indonesia					
Bauxite	702 160	715 010	740 199	826 927	879 204
Unwrought	173 776	158 325	133 306	72 129	167 239
Unwrought alloys	6 555	7 869	14 749	7 744	4 923
Scrap	2 609	3 001	4 662	4 294	3 634
Iran					
Unwrought (a)	(d) *6 200	(d) *2 400	15 213	25 602	34 624
Israel					
Unwrought (a)	*5 200	*5 500	2 300	2 800	...
Scrap	(d) *10 800	(d) *15 700	(d) *15 600	(d) *15 300	17 866

**Exports of Bauxite, Alumina and Aluminium**

tonnes

Country	1996	1997	1998	1999	2000
Japan					
Alumina	77 419	97 231	94 028	107 971	124 859
Alumina hydrate	157 624	125 913	151 147	199 347	212 458
Unwrought (a)	12 012	10 259	7 147	10 513	10 011
Scrap	12 273	21 433	26 695	27 636	34 625
Jordan					
Alumina hydrate	...	2 514	5 178	6 713	44
Scrap	4 309	4 475	4 567	5 534	5 172
Kazakhstan					
Alumina	977 390	1 201 868	1 002 376	1 159 644	...
Unwrought (a)	8 054	19 221	49 635	(d) *50 400	(d) *98 100
Scrap	(d) *28 800	31 880	42 920	(d) *56 200	(d) *89 100
Korea, Dem. P.R. of					
Unwrought (a) (d)	*2 700	*3 100	*3 400	*9 000	*3 100
Korea, Republic of					
Alumina	475	...	618	10 486	42 796
Unwrought	38 977	81 090	55 454	26 651	4 462
Unwrought alloys	3 961	16 252	14 916	5 167	7 363
Scrap	2 451	8 368	3 348	1 799	1 914
Kyrgyzstan					
Scrap	3 832	5 800	11 600	40 289	42 675
Malaysia					
Bauxite	166 782	177 000	87 000	93 000	...
Scrap	6 000	13 400	14 400	19 500	...
Oman					
Scrap	4 491	3 900	1 379	2 087	2 716
Philippines					
Scrap	1 739	9 620	19 383	16 705	...
Saudi Arabia					
Unwrought	1 878	...	15 850	6 812	1 388
Scrap	11 294	39 148	18 797	27 060	26 464
Singapore					
Alumina	901	17 585	11 981	9 057	7 943
of which, re-exports	887	16 880	11 796	8 941	7 752
Unwrought	139 363	92 024	58 345	77 812	74 994
of which, re-exports	137 160	...	57 175	77 102	74 295
Scrap	33 852	39 758	44 750	40 803	41 736
Taiwan					
Unwrought	30 150	10 548	3 025	11 540	13 185
Unwrought alloys	95 833	127 203	145 859	82 818	89 961
Scrap	14 135	13 744	14 311	28 032	47 284
Tajikistan					
Unwrought	193 698	183 031	186 778	224 282	288 000
Thailand					
Unwrought	646	5 253	7 925	4 631	160 943
Scrap	7 028	15 566	17 686	11 065	70 654
Australia					
Bauxite	*5 000 000	*5 500 000	*5 500 000	*7 000 000	*7 500 000
Alumina	10 367 230	10 531 994	10 460 475	10 737 791	12 071 264
Alumina hydrate	368 791	370 116	343 273	392 753	377 542
Unwrought	864 102	969 816	1 153 723	1 187 874	1 223 694
Unwrought alloys	204 056	186 149	160 982	201 941	157 328
Scrap	55 537	57 455	66 654	80 043	70 809
New Zealand					
Unwrought (a)	258 179	283 344	294 923	297 432	296 146
Scrap	9 469	8 546	12 801	12 638	12 716

## 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 7601 of the Harmonised System 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) BGS estimates, based on known imports into certain countries  
 (e) Re-exports

**Imports of Bauxite, Alumina and Aluminium**

tonnes

Country	1996	1997	1998	1999	2000
Austria					
Bauxite	23 000	27 949	26 811	26 336	24 404
Alumina	43 932	47 437	29 867	41 975	50 969
Alumina hydrate	5 069	5 175	5 888	3 252	5 612
Unwrought	95 343	104 678	134 156	110 380	116 717
Unwrought alloys	100 137	138 453	119 015	115 108	139 214
Scrap	81 446	110 492	118 056	126 037	...
Azerbaijan					
Bauxite	76 014	----	----	...	603 461
Belarus					
Alumina	*3 500	*6 000	8 227	12 938	20 149
Unwrought	(b) 5 905	(b) 7 393	9 164	9 331	9 859
Scrap	500	600	589	2 253	4 282
Belgium-Luxembourg					
Bauxite	15 968	13 107	43 411	87 263	93 710
Alumina	10 022	9 951	11 825	10 029	9 709
Alumina hydrate	37 339	52 207	51 887	42 151	43 516
Unwrought	245 386	256 907	350 391	253 655	245 989
Unwrought alloys	120 039	131 427	146 289	159 506	185 915
Scrap	133 784	126 851	178 243	155 114	193 631
Bulgaria					
Unwrought (a)	9 218	13 960	*15 000	*17 000	...
Croatia					
Bauxite	47 163	63 101	57 069	81 288	62 267
Unwrought (a)	23 557	23 784	25 593	36 061	31 487
Cyprus					
Unwrought alloys	5 280	5 299	6 004	5 283	6 885
Czech Republic					
Bauxite	8 000	10 646	13 632	14 323	12 013
Alumina	13 900	14 289	17 825	14 761	17 095
Alumina hydrate	11 500	11 307	11 832	10 727	10 935
Unwrought	46 300	44 777	57 281	48 057	41 552
Unwrought alloys	30 100	36 302	48 415	56 214	64 904
Scrap	12 900	25 500	34 197	35 897	34 678
Denmark					
Bauxite	3 589	8 783	8 627	7 328	11 178
Alumina	13 572	16 182	12 444	16 856	17 027
Unwrought (a)	33 594	41 018	45 623	43 640	45 418
Scrap	18 515	22 118	22 982	20 922	20 371
Estonia					
Alumina	4 100	1 912	2 965	253	2 927
Unwrought	2 400	9 175	62	39	460
Finland					
Bauxite	8 017	9 431	21 079	8 275	3 848
Alumina	3 366	2 353	2 006	2 564	2 179
Alumina hydrate	35 320	38 834	43 101	33 673	36 424
Unwrought	19 660	17 882	17 192	20 702	20 721
Unwrought alloys	13 377	15 647	20 648	22 513	31 299
Scrap	50 794	54 430	46 938	48 048	30 155
France					
Bauxite	1 696 143	1 457 723	1 578 486	1 472 094	1 569 306
Alumina	536 034	438 896	507 418	578 950	460 901
Alumina hydrate	31 908	40 599	111 903	97 541	98 719
Unwrought	276 778	230 911	191 512	144 583	190 495
Unwrought alloys	216 169	266 763	284 396	320 070	337 271
Scrap	134 542	160 004	192 112	159 335	150 091
Germany					
Bauxite	1 354 738	2 181 018	1 531 027	2 200 973	2 170 064
Alumina	620 149	785 291	832 168	770 127	650 080
Alumina hydrate	309 106	293 677	290 460	326 953	359 940
Unwrought	564 377	698 561	637 505	525 335	610 431
Unwrought alloys	544 379	701 649	834 429	807 818	975 753
Scrap	259 670	440 194	479 496	446 510	441 033

**Imports of Bauxite, Alumina and Aluminium**

tonnes

Country	1996	1997	1998	1999	2000
Greece					
Bauxite	415	3	27 456	40 852	282 649
Alumina	2 092	995	6 334	2 399	5 225
Unwrought	53 971	87 660	85 870	73 680	95 031
Unwrought alloys	17 486	31 790	37 410	39 524	40 679
Scrap	2 620	6 476	4 306	7 989	16 678
Hungary					
Bauxite	66 195	1 664	1 897	21 334	25 212
Unwrought (a)	134 248	170 157	156 988	154 127	192 980
Scrap	676	11 714	9 760	9 566	9 344
Iceland					
Alumina	203 152	155 801	377 078	463 691	406 011
Unwrought	2 117	2 695	1 134	1 438	4 120
Irish Republic					
Bauxite	2 882 167	2 881 584	3 299 255	3 248 871	3 232 037
Alumina	3 855	7 753	10 500	5 490	9 493
Unwrought (a)	7 270	11 028	10 316	10 182	12 219
Scrap	2 200	5 100	2 058	2 040	2 301
Italy					
Bauxite	2 079 363	1 949 915	2 132 204	2 324 818	2 226 746
Alumina	190 608	195 571	200 800	209 097	213 732
Alumina hydrate	119 762	124 986	106 053	101 023	115 215
Unwrought	236 144	266 744	270 690	297 565	321 717
Unwrought alloys	248 755	308 337	337 340	355 201	383 057
Scrap	266 187	352 300	360 129	358 044	368 341
Latvia					
Scrap	...	...	3 888	8 812	10 380
Lithuania					
Alumina hydrate	6 800	7 833	8 456	14 231	9 718
Scrap	5 500	5 677	5 833	4 819	6 583
Macedonia					
Unwrought	3 949	3 330	7 232	*8 000	...
Netherlands					
Bauxite	81 771	38 981	57 122	39 105	108 474
Alumina	727 089	708 510	832 751	695 599	826 316
Alumina hydrate	87 336	118 140	129 002	138 863	154 745
Unwrought	347 845	444 457	430 688	447 344	492 419
Unwrought alloys	116 454	92 056	92 214	136 768	124 172
Scrap	187 604	225 060	224 627	215 563	239 333
Norway					
Bauxite	22 549	31 402	14 261	31 007	24 325
Alumina	1 693 565	1 733 334	1 899 852	1 920 834	2 034 199
Alumina hydrate	37 136	41 186	38 386	39 732	42 387
Unwrought	122 265	155 421	83 382	168 755	160 813
Unwrought alloys	27 275	40 842	64 552	17 256	91 639
Scrap	63 038	68 723	76 079	87 744	86 441
Poland					
Bauxite	35 800	37 300	30 100	29 447	27 063
Alumina	118 200	122 800	118 800	116 700	126 656
Alumina hydrate	20 100	21 700	24 000	21 900	24 499
Unwrought	26 600	30 500	44 500	48 900	54 469
Unwrought alloys	22 900	33 700	43 000	57 400	67 290
Scrap	1 100	5 100	20 900	19 200	16 057
Portugal					
Alumina	5 324	8 427	8 687	8 668	10 115
Unwrought	9 335	4 305	7 160	10 110	6 314
Unwrought alloys	58 341	75 464	102 015	149 605	188 624
Scrap	54	422	944	2 016	4 306
Romania					
Bauxite	546 446	666 583	303 426	612 281	1 428 143
Alumina	98 300	151 931	140 689	146 877	186 972
Russia					
Bauxite	1 249 488	1 020 999	...	1 479 905	299 651
Alumina	3 434 909	4 181 960	3 658 027	3 815 878	3 770 061
Alumina hydrate	48 654	7 255	10 504	29 948	70 027
Unwrought	23 804	32 362	33 947	98 502	153 792
Scrap	3 365	6 279	6 362	595	151

**Imports of Bauxite, Alumina and Aluminium**

tonnes

Country	1996	1997	1998	1999	2000
Slovakia					
Bauxite	132 000	85 000	531	2 759	4 125
Alumina	222 508	215 852	210 200	206 947	212 117
Alumina hydrate	100	1 499	40 800	53	92
Unwrought (a)	14 876	23 443	24 839	30 968	51 099
Scrap	300	800	1 100	4 193	...
Slovenia					
Bauxite	14 933	45 887	51 137	50 237	54 840
Alumina	159 993	184 114	177 720	181 496	177 313
Unwrought	29 570	41 750	64 059	64 779	78 859
Scrap	4 100	3 900	3 400	6 366	10 874
Spain					
Bauxite	2 457 173	2 392 221	2 578 888	2 414 176	2 757 733
Alumina	27 234	33 325	37 213	39 821	59 544
Alumina hydrate	12 678	18 318	18 704	16 295	19 818
Unwrought	82 781	125 442	88 719	79 073	90 024
Unwrought alloys	44 813	62 882	88 263	141 633	140 965
Scrap	41 781	45 697	52 081	54 864	57 095
Sweden					
Bauxite	46 890	32 526	28 222	27 707	13 219
Alumina	178 839	184 706	128 180	89 286	154 467
Alumina hydrate	*50 000	*50 000	*50 000	46 797	62 269
Unwrought	44 818	54 652	66 469	32 565	32 542
Unwrought alloys	60 705	62 415	71 998	72 028	76 515
Scrap	6 167	6 721	7 525	10 782	20 548
Switzerland					
Alumina	53 661	50 046	65 504	68 026	72 695
Alumina hydrate	15 431	16 757	18 600	19 868	20 916
Unwrought	87 994	108 871	94 919	76 248	67 842
Unwrought alloys	29 412	34 683	46 314	47 401	68 454
Scrap	11 434	13 034	17 098	14 142	18 745
Turkey					
Bauxite	34 837	25 680	24 844	25 247	35 758
Alumina	9 952	13 906	9 425	11 517	13 688
Unwrought	47 017	60 568	69 474	61 775	92 299
Unwrought alloys	53 979	81 767	73 704	71 072	80 861
Scrap	10 430	34 681	24 398	22 517	28 263
Ukraine					
Bauxite	3 097 062	2 045 854	3 075 299	2 880 090	...
Alumina	5 000	20 237	1 903	100	...
Unwrought (a)	3 018	1 147	888	971	...
United Kingdom					
Bauxite (e)	317 885	322 215	278 737	217 514	222 436
Alumina	525 758	505 974	381 804	541 344	569 815
Alumina hydrate	80 501	77 572	79 427	102 100	78 830
Unwrought	539 672	310 882	310 767	307 607	119 847
Unwrought alloys	130 334	132 373	184 942	136 950	157 300
Scrap	83 913	107 567	138 125	141 971	133 801
Yugoslavia, Federal Republic of					
Alumina	4 700	1 310	566	6 588	5 440
Unwrought (a)	1 300	4 170	3 831	1 688	2 997
Algeria					
Unwrought (a)	5 573	1 654	4 970	4 051	...
Cameroon					
Alumina	128 667	*185 000	153 480	...	...
Egypt					
Bauxite	400 670	322 724	381 795	389 068	...
Alumina	*360 000	*360 000	*380 000	*380 000	...
Ghana					
Alumina	*260 000	*300 000	*100 000	*120 000	...
Kenya					
Alumina	2 601	3 893	2 190	2 567	2 956
Unwrought (a)	4 855	4 005	3 783	1 527	2 098
Morocco					
Bauxite	19 944	44 910	43 751	48 968	...
Alumina	5 612	5 390	5 373	6 026	...
Unwrought (a)	1 599	2 439	3 700	3 543	...

**Imports of Bauxite, Alumina and Aluminium**

tonnes

Country	1996	1997	1998	1999	2000
Nigeria					
Bauxite	6 118	24 848	5 398	11 130	...
Unwrought (a)	11 658	32 055	63 096	3 335	...
South Africa					
Bauxite	13 403	13 414	11 663	9 307	13 766
Alumina	1 099 359	1 241 568	1 240 430	1 281 124	1 548 314
Alumina hydrate	15 458	14 316	12 339	11 236	5 851
Unwrought (a)	1 695	3 750	6 675	50 526	8 158
Scrap	2 188	1 719	1 969	1 374	2 920
Tunisia					
Alumina hydrate	33 837	35 248	36 943	43 041	...
Unwrought (a)	4 217	2 289	4 586	2 671	...
Canada					
Bauxite	2 574 206	3 134 947	3 888 711	3 064 154	2 838 270
Alumina	3 586 895	3 226 775	3 198 867	3 396 761	3 739 759
Unwrought	23 563	21 084	32 639	50 001	45 258
Unwrought alloys	115 973	154 537	169 029	196 476	231 145
Scrap	67 405	90 599	107 425	123 068	127 321
Costa Rica					
Unwrought (a)	7 566	11 986	6 224	5 936	10 879
El Salvador					
Unwrought (a)	4 169	4 783	3 956	4 257	4 340
Mexico					
Bauxite	24 621	53 899	42 315	33 162	46 929
Alumina	156 119	162 457	165 091	149 864	178 968
Alumina hydrate	63 696	65 119	62 498	61 141	98 504
Unwrought	39 109	40 109	63 514	73 325	114 433
Unwrought alloys	34 761	88 488	111 981	131 106	226 214
Scrap	25 647	41 305	47 649	88 697	129 551
Panama					
Unwrought (a)	1 690	1 646	1 459	1 779	...
USA					
Bauxite, crude dried	9 930 000	10 200 000	10 800 000	8 900 000	6 800 000
Bauxite, calcined	352 000	369 000	393 000	299 000	310 000
Alumina	4 380 845	4 042 664	4 151 311	3 896 251	3 929 109
Unwrought	1 057 773	1 153 740	1 355 321	1 359 698	1 087 624
Unwrought alloys	869 164	928 970	1 094 085	1 368 630	1 475 486
Scrap	401 579	453 568	500 938	614 356	624 892
Argentina					
Bauxite	36 162	34 292	34 169	27 721	36 506
Alumina	371 768	371 254	288 504	425 212	474 492
Alumina hydrate	17 556	18 836	23 423	22 035	26 217
Brazil					
Bauxite	1 140	39 810	11 643	5 882	8 387
Alumina	91 173	6 946	20 442	23 105	6 915
Unwrought	4 983	3 164	3 400	1 056	1 621
Unwrought alloys	3 610	2 544	2 421	1 051	708
Scrap	2 630	1 328	4 126	4 400	4 230
Chile					
Bauxite	5 403	2 174	10 852	2 011	...
Alumina	4 027	5 516	7 545	6 116	7 020
Unwrought	13 891	15 529	14 597	11 173	14 561
Colombia					
Bauxite	9 987	13 860	14 630	17 008	35 685
Alumina	5 764	8 104	8 694	6 675	7 220
Unwrought	17 144	24 958	20 864	20 673	24 706
Unwrought alloys	18 149	17 822	15 486	7 267	7 182
Ecuador					
Bauxite	8 033	12 756	12 610	7 124	39 045
Unwrought (a)	6 675	8 388	8 304	5 452	8 358
Peru					
Bauxite	4 468	2 235	4 674	1 170	...
Alumina	2 738	2 623	3 795	2 457	...
Unwrought (a)	3 578	2 756	2 840	1 190	...

**Imports of Bauxite, Alumina and Aluminium**

tonnes

Country	1996	1997	1998	1999	2000
Uruguay					
Bauxite	5 438	7 796	9 148	6 403	8 758
Alumina	1 061	1 565	1 533	1 501	1 897
Unwrought	2 209	3 351	3 270	2 802	3 188
Venezuela					
Bauxite	14 168	20 775	...	18 982	22 470
Alumina	8 415	7 244	12 053	6 031	9 576
Unwrought (a)	283	2 885	700	422	1 267
Abu Dhabi					
Scrap	4 947	5 729	5 093	9 477	...
Bahrain					
Alumina	844 625	914 610	968 830	785 522	913 638
China					
Bauxite	213 090	137 131	148 533	243 489	403 516
Alumina	1 155 088	1 094 407	1 574 909	1 623 186	1 881 714
Alumina hydrate	457	1 968	2 351	9 605	8 257
Unwrought	294 103	230 229	203 208	380 626	614 823
Unwrought alloys	72 630	58 662	103 780	153 378	299 306
Scrap	299 914	335 898	277 168	399 268	804 629
Dubai					
Bauxite	44 001	20 818	28 526	...	...
Alumina	530 819	774 452	726 399	...	...
Unwrought	25 148	32 961	6 625	...	...
Scrap	3 240	6 316	8 213	...	...
Hong Kong					
Bauxite	10 282	15 856	320	----	----
Alumina	9 882	4 112	3 307	2 258	2 358
Unwrought	434 806	443 478	350 211	207 391	191 310
Unwrought alloys	30 804	35 982	51 123	55 056	51 453
Scrap	138 277	103 941	81 810	66 524	42 911
India					
Bauxite (c)	27 178	32 245	59 027	29 902	...
Alumina (c)	10 606	14 256	11 499	14 819	...
Unwrought (c)	101 785	52 857	53 523	37 126	...
Unwrought alloys (c)	32 818	18 819	22 803	10 113	...
Scrap (c)	24 006	18 948	67 125	81 503	...
Indonesia					
Alumina	356 545	391 517	218 030	199 426	362 776
Alumina hydrate	57 401	68 233	96 288	91 718	91 569
Unwrought	75 813	84 402	63 380	78 288	78 313
Unwrought alloys	42 685	65 388	26 759	28 632	49 072
Scrap	1 267	5 300	1 534	878	2 807
Iran					
Alumina	*150 000	*180 000	*220 000	...	...
Unwrought (f)	*11 000	8 254	7 102	10 807	...
Scrap	*8 000	8 900	16 498	18 177	...
Israel					
Unwrought (a)	42 300	44 698	48 045	46 053	45 934
Japan					
Bauxite	2 080 086	1 995 236	1 977 481	1 953 644	2 096 283
Alumina	39 380	36 543	32 285	36 418	38 404
Alumina hydrate	74 310	69 871	68 931	49 682	53 365
Unwrought	2 066 178	2 163 622	1 859 817	1 833 005	1 963 630
Unwrought alloys	692 675	863 913	691 995	826 226	941 607
Scrap	149 442	158 893	152 998	160 654	130 423
Jordan					
Alumina	18 646	25 298	12 042	36 759	21 053
Unwrought (a)	3 958	6 741	6 884	6 926	10 719
Korea, Republic of					
Bauxite	181 352	180 978	162 983	168 254	215 674
Alumina	70 004	63 390	60 110	67 007	71 097
Alumina hydrate	138 967	99 874	102 003	135 399	155 507
Unwrought	551 730	605 021	497 457	730 031	683 793
Unwrought alloys	168 149	166 314	86 646	150 356	205 931
Scrap	66 575	80 760	54 968	105 963	101 949

**Imports of Bauxite, Alumina and Aluminium**

tonnes

Country	1996	1997	1998	1999	2000
Malaysia					
Alumina	32 700	*31 500	*41 500	54 900	...
Unwrought	105 800	107 700	71 600	102 000	...
Unwrought alloys	71 300	75 200	34 500	82 100	...
Scrap	29 000	24 700	23 300	32 400	...
Oman					
Bauxite	50	13 926	5 873	17 472	108
Pakistan					
Alumina (d)	6 194	6 508	6 267	6 144	5 685
Unwrought (a) (d)	20 105	10 161	4 764	3 554	9 379
Scrap (d)	58 890	53 020	56 786	56 512	58 397
Philippines					
Bauxite	4 618	6 077	680	986	...
Alumina	6 520	10 431	10 228	13 108	...
Unwrought (a)	12 279	33 887	24 308	34 402	...
Scrap	161	3 200	108	257	...
Saudi Arabia					
Bauxite	298 071	267 590	148 263	166 125	52 770
Alumina	7 500	6 514	*6 500	202 008	7 822
Unwrought (a)	5 024	4 378	3 821	3 081	2 515
Singapore					
Alumina	3 157	4 177	2 061	2 131	2 609
Alumina hydrate	38 052	28 789	26 162	5 938	12 017
Unwrought	99 334	102 586	82 097	76 658	81 032
Scrap	2 618	5 445	4 791	3 030	2 903
Syria					
Scrap	7 715	...	9 781	...	...
Taiwan					
Bauxite	70 906	79 577	71 931	57 556	67 891
Alumina	30 548	31 455	33 754	32 739	38 741
Alumina hydrate	54 596	42 949	53 791	51 739	54 613
Unwrought	301 137	355 481	314 429	387 253	419 544
Unwrought alloys	135 166	156 604	135 131	171 226	185 170
Scrap	132 510	212 883	167 070	139 504	138 603
Tajikistan					
Bauxite	...	320 336	352 571	...	...
Alumina	...	*230 000	*220 000	...	...
Thailand					
Bauxite	35 030	35 055	26 678	39 081	35 946
Alumina	12 525	13 492	10 043	13 086	18 405
Alumina hydrate	49 174	43 308	48 549	58 665	48 632
Unwrought	120 364	111 500	89 268	82 393	113 133
Unwrought alloys	100 444	126 599	106 866	77 242	242 964
Scrap	3 492	5 447	3 123	7 156	11 485
Australia					
Bauxite	6 241	13 935	12 602	6 562	9 837
Alumina	9 859	37 337	11 291	9 273	10 065
Unwrought (a)	13 086	4 161	5 900	5 259	6 025
Scrap	3 838	6 641	6 474	7 429	8 802
New Zealand					
Alumina	620 616	551 138	628 558	632 299	*620 000
Unwrought (a)	12 448	10 290	10 954	12 919	9 688
Scrap	3 332	5 185	5 386	3 163	1 761

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 7601 of the Harmonised System 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) Years ended 20 March following that stated

## Antimony

**Mine Production of Antimony**

tonnes (metal content)

Country	1996	1997	1998	1999	2000
Russia	6 000	6 000	4 000	4 000	4 500
Turkey	175	19	*20	*20	*20
Morocco	152	160	160	150	*150
South Africa	5 137	3 415	4 243	5 278	3 710
Canada	1 773	630	428	425	433
Guatemala	1 066	752	420	-----	-----
Mexico	983	1 909	1 301	273	52
USA	242	356	489	450	*340
Bolivia	6 488	5 999	4 735	2 790	1 907
Peru (a)	305	242	364	255	461
China	128 900	131 100	97 400	89 600	98 700
Kyrgyzstan	6 002	3 062	1 298	1 320	1 505
Tajikistan	*1 000	*1 200	*1 500	*1 800	*2 000
Thailand	90	80	260	70	100
Australia (b)	*2 000	*2 500	*2 400	*2 500	*2 200
World Total	160 000	157 000	119 000	109 000	116 000

## 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**

tonnes

Country	1996	1997	1998	1999	2000
Austria					
Metal	43	59	47	8	1
Belgium-Luxembourg					
Oxide (a)	*4 100	*6 700	*6 700	*8 700	*11 000
Estonia					
Metal	...	63	126	...	...
Oxide	...	155	258	...	...
France					
Ores & concentrates	28	...	26	12 203	1
Metal	387	74	132	13	292
Oxide	4 893	5 270	5 292	4 371	5 156
Germany					
Metal	84	32	38	48	36
Oxide	791	957	1 061	1 141	968
Italy					
Metal	10	9	3	36	13
Netherlands					
Metal	303	434	914	206	286
Oxide	...	962	1 027	792	649
Russia					
Ore	...	1 272	1 484	1 000	...
Metal	239	277	660	57	1
Oxide	216	1 824	715	97	143
Spain					
Metal	44	85	6	11	16
Oxide	...	370	829	819	701
Sweden					
Metal	10	2	25	0	4
Turkey					
Metal	4	2	540	412	84
United Kingdom					
Metal	146	116	100	88	875
Oxide	(a) *3 800	(a) *5 600	5 139	(a) *4 000	(a) *4 100
South Africa					
Ore (c)	1	1 585	3 655	4 278	4 146
Oxide	(a) *3 700	5 127	4 609	5 501	5 105
Canada					
Ores & concentrates	1 305	195	519	-----	-----
Mexico					
Metal	906	441	331	365	...
Oxide	3 945	3 350	2 901	5 012	6 522
USA					
Ores & concentrates	2 350	3 798	3 997	2 506	2 618
Metal	583	774	1 015	642	1 163
Oxide	4 832	4 033	3 953	3 866	7 532
Bolivia					
Ore	1 859	1 385	1 310	806	1 131
Metal	165	159	61	322	202
Oxide	5 504	5 968	4 508	2 657	1 312
Peru					
Metal	213	340	352	332	...
China					
Ores & concentrates	2 257	3 859	2 375	20	...
Metal	34 539	31 034	22 365	45 339	45 091
Oxide	20 040	28 329	28 062	36 704	36 086
Sulphide	6 769	13 850	5 636	1 975	...
Dubai					
Metal	...	66	20	...	...
Hong Kong					
Metal (b)	17 856	16 672	15 290	10 705	6 825
Indonesia					
Ore	...	0	...	1 028	1 245

**Exports of Antimony**

tonnes

Country	1996	1997	1998	1999	2000
Japan					
Metal	214	79	343	187	180
Oxide	2 016	2 157	1 925	2 339	2 321
Kazakhstan					
Metal	(a) *200	(a) *100	217	----	(a) *100
Korea, Republic of					
Metal	20	145	26	43	44
Oxide	1 154	1 335	604	308	195
Kyrgyzstan					
Metal	4 700	3 628	1 043	748	(a) *500
Oxide	(a) *400	(a) *1 400	919	783	755
Singapore					
Metal	217	181	11	246	530
Oxide	...	514	471	555	675
of which, re-exports	...	376	369	508	652
Taiwan					
Metal	57	655	379	411	749
Oxide	1 170	1 161	1 240	1 144	1 345
Thailand					
Metal	1 061	705	163	47	193
Oxide	222	1 082	787	3	50
Australia					
Ores & concentrates	2 493	2 704	2 863	2 971	2 357

Note(s):-

- (a) BGS estimates, based on known imports into certain countries
- (b) Re-exports
- (c) Sb content

**Imports of Antimony**

tonnes

Country	1996	1997	1998	1999	2000
Austria					
Metal	93	192	221	131	174
Oxide	202	176	226	262	252
Belarus					
Metal	...	...	26	15	32
Belgium-Luxembourg					
Ore	1 614	1 876	1 703	238	66
Metal	4 826	6 277	8 321	6 828	12 858
Oxide	675	772	1 016	888	1 612
Bulgaria					
Metal	98	103	*100	*100	...
Czech Republic					
Metal	49	19	67	12	2
Oxide	...	...	289	394	429
Estonia					
Metal	...	63	125	...	...
Oxide	...	219	195	1	1
Finland					
Oxide	254	236	177	164	215
France					
Ore	298	32	128	7	8
Metal	5 720	8 569	8 316	7 564	8 345
Oxide	832	1 008	1 218	1 283	2 520
Germany					
Ore	...	...	442	578	500
Metal	568	620	746	1 231	741
Oxide	5 352	5 064	5 170	4 850	6 835
Greece					
Metal	39	45	58	98	47
Italy					
Ore	...	417	453	272	611
Metal	686	626	956	1 882	1 429
Oxide	...	4 078	4 543	4 374	4 391
Netherlands					
Ore	...	...	7	153	265
Metal	818	724	1 748	1 414	762
Oxide	...	2 510	2 675	2 539	3 061
Norway					
Metal	1	29	10	5	3
Oxide	152	347	353	227	338
Poland					
Metal	258	86	50	36	70
Oxide	...	...	...	466	605
Portugal					
Metal	17	8	24	7	5
Romania					
Metal	(b) *60	71	87	45	63
Russia					
Metal	881	967	834	1 230	1 374
Oxide	...	644	204	374	640
Spain					
Metal	1 179	1 130	1 510	1 143	1 511
Oxide	...	902	1 004	1 041	813
Sweden					
Metal	19	75	81	60	26
Oxide	...	543	409	453	396
Switzerland					
Ores & concentrates	3 092	1 416	283	22	121
Metal	35	0	27	52	25
Oxide	414	677	681	786	969
Turkey					
Metal	90	120	55	30	11
Oxide	...	...	...	244	241
Ukraine					
Metal	14	25	24	21	...

## Antimony

**Imports of Antimony**

tonnes

Country	1996	1997	1998	1999	2000
United Kingdom					
Metal	2 171	2 808	950	133	470
Oxide	1 629	1 883	2 105	1 707	2 007
Yugoslavia, Federal Republic of					
Metal	91	100	61	65	42
Algeria					
Metal	100	121	72	200	...
Morocco					
Metal	9	11	32	25	...
South Africa					
Metal	317	162	204	221	120
Oxide	...	185	149	166	131
Tunisia					
Metal	76	30	45	45	...
Canada					
Metal	381	433	391	384	481
Oxide	1 952	1 965	2 138	2 174	2 059
Mexico					
Ores & concentrates	2 635	2 977	4 198	3 148	3 086
Metal	493	579	761	1 341	...
Oxide	1 014	1 333	1 440	1 907	...
USA					
Ore	1 630	1 513	2 644	3 606	4 632
Metal	18 293	14 975	13 298	14 753	14 193
Oxide	22 098	27 906	23 106	23 010	28 487
Argentina					
Metal	157	200	275	197	207
Brazil					
Ores & concentrates	397	202	9	25	4
Metal	736	920	1 136	1 062	1 258
Oxide	259	208	204	158	345
Sulphide	53	...	...	...	...
Colombia					
Metal	43	65	92	73	64
Venezuela					
Metal	37	25	77	25	34
China					
Ores & concentrates	7 691	9 010	3 681	144	80
Metal	3 020	2 675	2 782	1 246	472
Oxide	544	502	1 038	1 312	1 206
Dubai					
Metal	174	173	24	...	...
Hong Kong					
Metal	15 088	11 948	5 613	3 486	1 930
Oxide	...	2 874	2 459	2 040	1 184
India					
Metal (a)	1 487	1 414	1 406	1 949	...
Oxide (a)	115	108	214	289	...
Indonesia					
Metal	422	279	192	196	394
Oxide	337	392	365	336	388
Iran					
Metal	...	...	573	1 413	...
Japan					
Ores & concentrates	2 593	1 077	698	96	40
Metal	6 796	8 796	8 513	8 576	10 965
Oxide	10 276	11 162	8 887	8 270	8 497
Sulphide	310	283	243	250	1 069
Kazakhstan					
Metal	...	20	55	62	...
Korea, Republic of					
Metal	8 783	10 456	8 920	12 515	12 563
Oxide	1 053	690	1 149	3 974	5 407

**Imports of Antimony**

tonnes

Country	1996	1997	1998	1999	2000
Malaysia					
Metal	620	381	1 367	...	...
Pakistan					
Metal (c)	117	130	99	127	120
Philippines					
Metal	61	45	10	139	...
Singapore					
Metal	412	50	19	458	691
Oxide	...	2 093	1 366	1 798	2 401
Sri Lanka					
Metal	...	...	23	40	...
Taiwan					
Metal	4 607	4 644	2 962	5 008	5 062
Oxide	3 465	5 516	5 530	7 159	7 330
Thailand					
Ores & concentrates	875	274	138	553	-----
Metal	1 001	1 314	847	562	857
Oxide	638	650	521	829	1 192
Australia					
Metal	203	197	139	203	265
Oxide	555	523	622	559	533
New Zealand					
Metal	...	95	73	69	...

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	1996	1997	1998	1999	2000
Belgium	*2 000	*2 000	*1 500	*1 500	*1 500
France	*3 000	*2 500	*2 000	*1 000	*1 000
Georgia	*400	*400	*400	*400	*400
Germany	*250	*250	*200	*200	*200
Russia	*1 500	*1 500	*1 500	*1 500	*1 500
Ghana	5 443	4 577	*5 000	*7 000	*3 000
Namibia (a)	1 302	1 297	233	-----	-----
Canada	*250	*250	*250	*250	*250
Mexico	3 883	3 959	3 396	3 193	3 329
Bolivia	255	282	284	437	*280
Chile (b)	9 368	11 159	11 690	...	...
Peru	4 969	837	624	1 611	2 495
China	*15 000	*15 000	*15 500	*16 000	*16 000
Iran	*500	492	*500	*500	*500
Japan	*40	*40	*40	*40	*40
Kazakhstan	*1 500	*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**

tonnes

Country	1996	1997	1998	1999	2000
Denmark					
Metallic arsenic	...	1 156	1 301	----	----
France					
Metallic arsenic	19	7	8	5	7
Germany					
Metallic arsenic	19	13	17	22	27
Italy					
Metallic arsenic	...	0	14	5	15
Netherlands					
Metallic arsenic	...	26	41	31	46
United Kingdom					
Metallic arsenic	5	3	22	45	11
Namibia					
White arsenic	1 550	1 044	314	----	----
USA					
Metallic arsenic	81	81	534	1 408	76
Bolivia					
White arsenic	255	282	284	438	318
Chile					
White arsenic	9 368	11 159	11 690	...	...
China					
White arsenic (a)	*11 200	*16 600	*23 900	*16 500	...
Metallic arsenic	1 368	1 901	2 184	2 497	2 505
Japan					
Metallic arsenic	11	13	17	28	42
Australia					
Metallic arsenic	242	50	127	70	107
New Zealand					
Metallic arsenic	99	83	106	96	5

## 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	1996	1997	1998	1999	2000
Austria					
Metallic arsenic	18	18	22	1	----
Belgium-Luxembourg					
Metallic arsenic	32	20	40	46	149
Denmark					
Metallic arsenic	...	829	920	...	----
France					
Metallic arsenic	79	76	72	68	87
Germany					
Metallic arsenic	42	19	32	25	10
Greece					
Metallic arsenic	...	11	21	26	27
Irish Republic					
Metallic arsenic	...	20	19	20	218
Italy					
Metallic arsenic	...	76	102	77	75
Netherlands					
Metallic arsenic	...	...	75	92	77
Norway					
Metallic arsenic	36	36	36	61	54
Poland					
White arsenic	95	76	64	74	...
Metallic arsenic	35	42	40	25	25
Spain					
Metallic arsenic	...	73	93	112	153
Sweden					
Metallic arsenic	...	13	15	20	20
Switzerland					
Metallic arsenic	6	2	8	3	3
Turkey					
White arsenic	79	403	...	1	1
United Kingdom					
Metallic arsenic	83	122	81	108	109
Canada					
Metallic arsenic	193	138	668	1 711	257
USA					
White arsenic	27 969	29 996	38 636	29 131	31 117
Metallic arsenic	252	909	1 000	1 298	830
Brazil					
White arsenic	317	...	...	...	...
Hong Kong					
Metallic arsenic	...	69	71	58	39
India					
White arsenic (a)	1 162	1 328	2 170	873	...
Metallic arsenic (a)	48	109	183	310	...
Indonesia					
Metallic arsenic	98	143	123	256	390
Japan					
Metallic arsenic	0	78	----	103	45
Korea, Republic of					
Metallic arsenic	34	103	48	85	101
Taiwan					
White arsenic	40	99	159	99	40
Thailand					
Metallic arsenic	10	36	24	56	81
Australia					
White arsenic	1 188	1 234	2 122	...	...
Metallic arsenic	79	124	148	61	42
New Zealand					
Metallic arsenic	14	14	...	21	189

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 31 March following that stated

**Production of Asbestos**

tonnes

Country	1996	1997	1998	1999	2000
Bulgaria	400	300	672	354	*350
Greece	80 213	63 294	35 068	32 000	...
Russia	629 863	723 973	601 859	674 000	752 000
Slovakia	36 000	30 000	19 000	2 000	...
Yugoslavia, Federal Republic of	509	765	1 457	361	563
Egypt (b)	552	776	147	...	...
South Africa					
Crocidolite	5 100	232	----	----	----
Chrysotile	56 700	49 754	27 752	18 707	18 910
Swaziland					
Chrysotile	26 014	25 888	27 693	22 912	12 690
Zimbabwe					
Chrysotile	165 494	144 959	123 295	87 872	151 954
Canada					
Chrysotile	475 130	454 991	302 000	340 000	320 000
USA (a)	9 550	6 890	5 760	7 190	5 260
Argentina	446	301	309	259	254
Brazil	213 213	208 447	198 332	188 386	209 332
Colombia (c)	137 277	136 700	*136 000	...	...
China	440 500	437 000	314 000	329 000	*350 000
India					
Amphibole (e)	27 180	25 537	20 111	18 550	14 516
Iran (d)	2 127	10 373	2 258	*2 000	*2 000
Japan					
Chrysotile	2 269	2 254	1 389	1 052	...
Kazakhstan	134 484	181 818	155 400	139 300	178 400
World Total	2 400 000	2 500 000	2 000 000	2 000 000	2 200 000

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**

tonnes

Country	1996	1997	1998	1999	2000
Belarus	*3 000	*3 000	3 604	4 334	65
Belgium-Luxembourg	11	263	685	1	0
Czech Republic	27 100	----	51	1	...
Estonia	300	4	...	578	0
France	14 053	164	----	...	46
Greece	74 043	51 720	35 185	28 360	8 946
Italy	51	42	7	...	----
Lithuania	4 656	7 113	2 982	3 967	643
Poland	200	300	300	1	14
Russia	33 411	98 832	241 681	261 138	332 417
Slovakia	201	328	...	...	...
Spain	625	19	15	5	126
United Kingdom	967	16	45	49	2
South Africa	60 829	38 209	24 875	20 174	16 627
Swaziland	*20 000	*20 000	*19 000	*20 000	...
Zimbabwe	152 091	143 169	113 008	204 575	...
Canada	504 069	430 288	319 430	332 406	315 326
USA	24 231	23 061	18 896	21 997	18 765
Brazil	78 294	63 165	51 239	49 419	63 134
China	9 392	13 553	18 591	10 720	11 814
India (a)	275	282	348	172	...
Japan	133	160	32	20	----
Kazakhstan	139 100	60 429	123 906	107 428	174 000
Saudi Arabia	11 530	6 440	8 608	17 970	9 733

Note(s):-

(a) Years ended 31 March following that stated

**Imports of Unmanufactured Asbestos**

tonnes

Country	1996	1997	1998	1999	2000
Azerbaijan	...	...	2 589	2 976	8 252
Belarus	*20 000	*20 000	21 518	25 639	25 301
Belgium-Luxembourg	5 681	2 366	2	25	98
Croatia	2 363	3 033	2 746	1 704	2 586
Czech Republic	1 400	1 315	1 684	1 441	1 402
Denmark	225	125	----	----	----
Estonia	800	800	253	255	180
France	20 576	55	979	15	16
Germany	119	143	191	214	189
Greece	252	239	244	72	501
Hungary	5 249	5 759	7 452	1 486	3 558
Irish Republic	4 638	2 468	891	8	1 007
Italy	127	----	192	305	87
Latvia	1 212	1 828	1 385	1 042	857
Lithuania	6 343	10 819	5 877	4 102	1 356
Macedonia	2 999	1 998	2 000	*2 000	...
Moldova	1 537	3 189	357	300	5
Poland	15 700	23 000	9 700	24	19
Portugal	6 442	7 324	6 302	8 949	4 710
Romania	39 130	6 807	18 705	13 986	10 244
Russia	31 366	17 128	30 157	23 853	27 259
Slovakia	3 322	1 215	...	...	...
Slovenia	5 000	1 800	1 716	1 487	893
Spain	27 030	21 192	21 349	17 847	15 568
Sweden	158	----	----	----	0
Turkey	26 863	33 725	22 674	15 494	19 455
United Kingdom	7 099	4 820	1 840	789	246
Yugoslavia, Federal Republic of	...	1 365	1 427	592	607
Algeria	7 102	9 997	8 017	4 673	...
Egypt	29 849	10 100	7 850	3 347	...
Ghana	0	3	4 613	401	648
Morocco	5 643	4 376	1 623	1 428	...
Nigeria	15 841	7 799	12 515	79 108	...
Senegal	*300	*300	1 436	1 542	1 784
South Africa	9 133	9 571	7 013	10 262	10 217
Tunisia	6 081	3 573	4 907	1 700	...
Zambia	*500	*500	*500	*500	...
Canada	353	128	138	203	125
Cuba (d)	*7 100	*6 600	*4 400	...	...
El Salvador	398	999	1 266	1 688	1 678
Mexico	29 097	28 886	29 102	22 755	26 880
Panama	650	1 171	600	897	...
USA	30 449	20 922	15 823	15 808	14 637
Argentina	5 791	6 549	4 847	2 634	2 079
Bolivia	1 567	1 818	1 664	1 660	982
Brazil	31 909	38 941	39 597	24 049	35 491
Chile	9 349	9 198	5 125	2 295	1 460
Colombia	20 548	16 650	14 554	11 569	12 189
Ecuador	1 278	1 348	2 253	4 044	4 393
Peru	4 098	4 078	2 944	1 188	...
Uruguay	895	1 511	1 432	1 187	809
Venezuela	1 561	2 214	1 782	2 028	2 727
China	77 959	103 265	71 694	69 391	72 004
Dubai	6 100	7 660	5 291	...	...
India (c)	84 378	83 356	106 249	112 936	...
Indonesia	48 331	41 845	21 079	30 415	54 891
Iran (a)	...	75 587	40 505	65 364	...
Israel	*1 500	----	----	----	...
Japan	177 869	176 021	120 813	117 143	98 595
Kazakhstan	1 100	3 700	116	537	...
Korea, Republic of	77 145	44 985	29 619	32 519	28 972
Kyrgyzstan	12 542	22 200	18 800	18 901	17 307
Malaysia	19 600	21 700	8 400	...	...
Oman	2 061	1 331	1 231	3 636	2 347

## Asbestos

**Imports of Unmanufactured Asbestos**

tonnes

Country	1996	1997	1998	1999	2000
Pakistan (b)	9 216	989	4 583	2 865	4 160
Philippines	1 770	2 206	1 500	2 882	...
Singapore	429	243	18	91	4
Sri Lanka	4 818	18	1 744	10 903	...
Syria	2 672	3 068	1 488	...	...
Taiwan	6 164	5 773	5 682	6 572	5 421
Thailand	190 205	177 124	60 093	100 423	120 563
Australia	1 366	1 556	1 471	1 316	1 246

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	1996	1997	1998	1999	2000
Belgium	*30 000	*30 000	*40 000	*30 000	*30 000
Bosnia & Herzegovina	*2 000	*2 000	*2 000	*2 000	*2 000
Bulgaria	*120 000	*120 000	124 000	111 000	*120 000
France	81 200	77 000	75 400	75 700	92 000
Georgia	1 473	2 782	390	----	...
Germany	121 476	118 698	123 272	118 489	111 790
Greece	671	842	*800	*800	*800
Italy	42 795	26 694	31 792	*25 000	*25 000
Poland	6 200	3 400	----	----	----
Romania	12 541	12 729	10 327	4 632	4 266
Russia	55 000	*60 000	*60 000	*60 000	*60 000
Slovakia	44 930	62 102	14 877	15 900	13 700
Spain	81 621	102 411	79 820	*70 000	*25 000
Turkey	104 872	226 594	160 042	150 058	120 883
United Kingdom	93 000	*74 000	64 000	59 000	54 000
Algeria	31 348	39 140	37 006	50 510	51 925
Egypt (e)	48	320	600	...	...
Morocco	282 537	343 314	353 206	328 945	320 243
Nigeria	131 620	147 645	245 554	...	...
South Africa	7 428	2 071	610	2 844	1 628
Tunisia	15 360	12 847	8 011	3 000	3 702
Zimbabwe	1 150	1 217	1 844	3 140	5 032
Canada	58 000	77 000	90 000	123 000	15 000
Guatemala	2 776	3 000	----	75	113
Mexico	470 028	236 606	161 555	134 074	127 668
USA (b)	662 000	692 000	476 000	434 000	*600 000
Argentina	14 038	13 121	1 833	4 365	*4 400
Bolivia	4 745	4 402	2 500	6 005	*6 000
Brazil (d)	56 149	43 307	48 634	40 824	53 741
Chile	2 559	2 654	1 430	823	1 026
Colombia	6 800	900	*900	*900	*900
Peru	37 103	63 600	7 506	3 512	11 403
Afghanistan	*2 000	*2 000	*2 000	*2 000	*2 000
China	1 950 000	4 462 400	2 941 200	1 715 740	*2 500 000
India (a)	381 832	453 073	660 854	363 414	836 574
Iran (c)	158 844	150 241	178 355	183 850	*185 000
Kazakhstan	94 100	30 900	8 900	51 200	11 700
Korea, Dem. P.R. of	*110 000	*120 000	*100 000	*70 000	*70 000
Korea, Republic of	80	105	----	100	30
Laos	5 200	3 000	9 050	7 900	1 100
Malaysia	17 458	2 608	1 580	13 506	7 274
Myanmar (a)	22 073	20 467	18 562	27 679	32 669
Pakistan (e)	9 645	23 390	20 657	20 505	21 234
Saudi Arabia	8 000	9 000	10 800	13 200	16 000
Thailand	48 074	54 817	105 221	76 092	56 180
Australia	*12 000	*17 000	*15 000	*18 000	*14 000
World Total	5 400 000	8 000 000	6 300 000	4 700 000	5 900 000

## 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**

tonnes

Country	1996	1997	1998	1999	2000
Azerbaijan	2 000	2 000	1 780	1 920	2 667
Belgium-Luxembourg	40 181	15 802	17 222	11 198	6 177
Bulgaria	82 855	116 505	(b) *119 400	(b) *107 000	(b) *109 200
Georgia	...	617	470	2	60
Germany	17 470	18 552	14 779	14 978	15 906
Italy	1 082	427	1 876	432	306
Netherlands	59 982	34 350	54 463	54 129	49 611
Norway	6 945	16 207	11 514	4 630	5 169
Russia	3 596	1 693	(b) *300	(b) *3 900	(b) *1 800
Slovakia	38 400	15 580	16 010	15 494	(b) *5 300
Spain	64 381	80 981	70 264	18 054	25 431
Turkey	121 124	125 412	123 974	57 558	89 145
United Kingdom	5 483	9 475	6 590	8 196	28 511
Morocco	297 932	320 454	362 340	212 206	...
Tunisia	5 483	291	1 002	4 622	...
Canada	15 391	21 075	25 426	15 931	14 238
Mexico	125 008	65 325	18 145	15 349	8 229
USA	31 547	23 245	16 910	24 419	37 221
Bolivia	4 745	4 402	2 500	5 960	3 050
Peru	23 341	64 697	8 353	3 502	...
Venezuela	1 988	...	3 650	2 663	3 127
China	1 860 388	2 927 095	1 774 337	1 286 855	2 523 041
Hong Kong (c)	1 942	120	115	1 301	654
India (a)	140 023	24 372	106 232	37 845	...
Indonesia	2 384	4 031	3 161	1 350	2 705
Iran	*37 000	41 700	27 577	11 502	...
Kazakhstan	98 089	30 135	6 749	28 434	(b) *33 500
Korea, Dem. P.R. of (b)	...	...	*2 800	*7 200	*2 600
Laos	2 740	3 000	9 050	7 900	1 000
Oman	486	4 200	441	4 073	4 594
Saudi Arabia	...	...	5 902	5 364	638
Singapore	10 936	8 072	7 405	5 537	6 250
of which, re-exports	6 413	4 664	4 028	5 352	5 397
Thailand	43 000	31 250	57 652	58 914	35 112
Australia	2 259	2 737	2 055	688	1 078

## Note(s):-

(1) Trade in barytes is reported under item 2511 of the Harmonised System 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	1996	1997	1998	1999	2000
Albania	3 810	1 701	22	23	2
Austria	2 992	2 924	2 488	2 382	3 439
Azerbaijan	9 400	*9 400	9 364	14 765	34 332
Belarus	2 000	2 000	2 038	2 748	1 398
Belgium-Luxembourg	17 163	12 384	11 741	15 253	14 738
Croatia	243	560	105	356	299
Czech Republic	14 692	10 828	8 004	9 652	9 230
Denmark	5 023	15 988	24 606	27 101	33 413
Finland	1 745	2 134	2 223	2 120	2 644
France	17 667	24 860	25 271	22 576	25 084
Georgia	...	...	...	2 067	5 910
Germany	203 474	230 696	255 201	202 026	241 776
Greece	4 373	1 951	1 278	858	1 711
Hungary	*3 000	2 725	2 799	1 095	1 037
Irish Republic	574	676	114	230	192
Italy	67 046	74 827	70 887	66 177	70 143
Netherlands	136 882	136 604	114 635	73 579	98 200
Norway	142 150	158 036	145 616	134 596	158 610
Poland	5 416	4 800	6 700	8 225	7 958
Portugal	5 060	1 176	3 656	2 065	3 893
Romania	18 419	18 984	88 130	15 128	21 086
Russia	19 372	24 422	27 025	34 847	21 110
Slovakia	264	575	456	...	...
Spain	10 429	23 686	25 696	30 691	27 032
Sweden	2 668	4 155	4 212	2 433	2 149
Switzerland	1 961	3 663	4 520	2 051	2 090
Turkey	457	912	2 069	515	626
United Kingdom	85 018	139 065	98 506	65 703	57 362
Algeria	*10 000	37 769	39 041	4 990	...
Cameroon	4 400	*3 000	1 374	...	...
Congo	*3 000	*3 000	----	1 503	----
Gabon	1 300	*1 300	*1 300	*1 300	...
South Africa	1 886	1 980	1 421	1 716	2 423
Tunisia	3 800	949	350	2 687	...
Canada	15 631	21 860	13 642	56 003	57 702
Mexico	10 615	68 360	30 385	3 589	5 341
Trinidad & Tobago	30 051	33 914	33 512	26 000	19 412
USA	1 538 056	2 244 245	1 874 616	858 094	2 085 440
Argentina	4 269	8 762	2 982	5 922	3 497
Colombia	46 159	47 109	20 391	48 356	...
Ecuador	5 311	3 357	572	2 073	3 759
Venezuela	117 277	149 874	109 890	74 001	57 575
Abu Dhabi	10 494	3 069	297	196	...
China	553	47	249	326	497
Dubai	5 044	1 122	1 906	...	...
Hong Kong	259	222	365	947	708
Indonesia	70 705	85 550	71 988	55 010	54 426
Japan	139 559	114 384	90 894	113 018	108 156
Kazakhstan	*5 000	*5 000	7 290	431	...
Korea, Republic of	85 211	63 695	46 240	80 088	71 957
Malaysia	20 400	10 700	8 300	28 400	...
Oman	144	941	10 584	7 564	21 306
Philippines	1 700	908	870	1 615	...
Saudi Arabia	972	59 888	3 249	38 618	10 510
Singapore	11 833	7 845	4 951	2 687	5 909
Syria	4 100	13 712	2 668	...	...
Taiwan	6 965	5 538	5 011	3 748	3 527
Thailand	*6 000	11 123	9 711	11 167	6 549
Australia	21 210	7 289	19 190	5 401	17 725
New Zealand	809	833	949	828	631

Note(s) :-

(1) Trade in barytes is reported under item 2511 of the Harmonised System and is described as 'barytes and witherite'. However, only small quantities of witherite are traded

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

tonnes

Country	1996	1997	1998	1999	2000
Armenia					
Bentonite	5 000	*3 000	*3 000	3 493	2 807
Azerbaijan					
Bentonite	65 000	70 000	...	...	...
Bosnia & Herzegovina					
Bentonite	*800	*800	*800	*800	...
Bulgaria					
Bentonite	202 000	170 700	176 110	242 725	295 800
Croatia					
Bentonite	9 728	7 331	7 581	8 441	10 013
Cyprus					
Bentonite	70 927	101 000	140 000	177 000	167 000
Czech Republic					
Bentonite	59 000	110 000	125 000	160 000	280 000
Denmark					
Bentonite	8 050	*3 000	*9 000	...	...
Georgia					
Bentonite	13 000	12 000	*11 000	*12 000	...
Germany					
Bentonite	491 346	511 190	508 738	476 580	464 616
Greece					
Bentonite	973 517	942 555	1 148 408	1 049 657	*1 150 000
Hungary					
Bentonite	40 630	19 553	26 724	61 928	5 120
Italy					
Bentonite	471 535	511 760	580 209	...	...
Fuller's earth	26 455	22 025	29 470	...	...
Macedonia					
Bentonite	*30 000	*30 000	*30 000	*30 000	*30 000
Poland					
Bentonite	1 800	----	----	----	411
Fuller's earth	6 200	6 100	5 400	5 000	...
Romania					
Bentonite	43 543	27 133	25 434	20 577	35 789
Russia					
Bentonite	660 000	*655 000	...	...	...
Slovakia					
Bentonite	74 013	79 760	81 010	64 390	77 000
Spain					
Bentonite	151 045	196 661	46 241	...	...
Attapulgite	130 140	133 035	113 330	...	...
Sepiolite	565 636	554 268	553 584	...	...
Turkey					
Bentonite	482 057	521 158	565 708	899 614	636 273
Sepiolite	4 051	11 277	7 213	19 945	18 295
Ukraine					
Bentonite	35 000	*25 000	...	...	...
United Kingdom					
Fuller's earth (a)	142 600	134 800	94 400	74 500	*70 000
Algeria					
Bentonite	16 723	17 657	15 655	15 491	22 708
Fuller's earth	2 803	3 960	3 942	2 489	3 431
Egypt					
Bentonite (e)	2 210	1 267	1 545	*1 500	...
Morocco					
Bentonite	39 680	49 633	33 311	36 528	21 352
Fuller's earth (f)	17 223	24 465	30 650	21 956	30 665
Mozambique					
Bentonite	11 867	13 782	11 133	11 187	16 418
Senegal					
Attapulgite	79 200	82 607	110 400	118 200	130 562
South Africa					
Bentonite	48 076	75 538	48 382	50 363	85 187
Attapulgite	14 318	9 421	7 830	7 067	7 337
Canada					
Bentonite (b)	15 300	18 900	...	...	...
Guatemala					
Bentonite	3 755	4 000	2 278	4 301	3 317

## Production of Bentonite and Fuller's Earth

tonnes

Country	1996	1997	1998	1999	2000
Mexico					
Bentonite	69 810	111 503	185 729	208 611	269 730
Fuller's earth	41 800	51 430	48 016	47 522	51 685
Nicaragua					
Bentonite	1 361	1 724	1 406	1 760	...
USA					
Bentonite (c)	3 740 000	4 020 000	3 820 000	4 070 000	*4 080 000
Fuller's earth (c)	2 600 000	2 370 000	2 420 000	2 560 000	*2 530 000
Argentina					
Bentonite	134 588	113 572	131 320	128 809	*122 000
Fuller's earth	*1 500	*1 500	*1 500	*1 500	*1 500
Brazil					
Bentonite	168 633	117 156	264 303	296 489	312 132
Colombia					
Bentonite	...	8 640	*8 500	...	...
Peru					
Bentonite	18 592	22 285	19 563	19 659	21 059
China					
Bentonite	...	...	1 334 900	766 860	...
India					
Bentonite (d)	439 000	446 000	446 000	457 927	...
Fuller's earth (d)	29 000	27 000	27 000	87 953	...
Indonesia					
Bentonite	*26 000	*25 000	3 736	5 213	*5 000
Iran					
Bentonite (g)	84 404	109 520	118 290	*155 000	...
Japan					
Bentonite	468 728	495 646	443 566	428 247	415 115
Fuller's earth	89 885	...	...	...	...
Korea, Republic of					
Bentonite	93 864	142 027	59 765	112 258	67 652
Fuller's earth	21 820	24 829	28 805	35 246	28 400
Myanmar					
Bentonite (d)	4 908	3 871	*3 700	...	...
Pakistan					
Bentonite (e)	8 769	10 169	15 000	15 349	14 059
Fuller's earth (e)	11 864	12 307	14 659	15 565	19 378
Philippines					
Bentonite	3 486	...	3 900	1 844	1 500
Thailand					
Bentonite	11 260	3 200	5 806	4 535	...
Turkmenistan					
Bentonite	5 000	5 000	...	...	...
Uzbekistan					
Bentonite	15 000	15 000	...	...	...
Australia					
Bentonite (e)	79 157	73 148	104 458	179 804	99 272
Fuller's earth	17 173	28 262	15 670	10 240	11 860
New Zealand					
Bentonite	13 734	12 802	15 465	12 258	9 419
World Total Bentonite	10 800 000	11 300 000	11 400 000	11 600 000	11 600 000
World Total Fuller's Earth (h)	3 800 000	3 600 000	3 600 000	3 800 000	3 800 000

### 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	1996	1997	1998	1999	2000
Armenia					
Bentonite	...	3 333	(c) *700	3 614	(c) *2 300
Austria					
Bentonite	...	6 757	7 281	1 239	2 881
Azerbaijan					
Bentonite	65 300	68 100	34 570	1 111	66
Belgium-Luxembourg					
Bentonite	1 566	1 447	2 207	3 933	4 084
Bosnia & Herzegovina					
Bentonite (c)	...	*4 900	*10 200	*11 100	*6 400
Bulgaria					
Bentonite (c)	*74 300	*102 600	*112 300	*145 100	*152 000
Croatia					
Bentonite	1 294	436	342	365	338
Cyprus					
Bentonite	31 397	51 912	54 475	82 084	71 060
Czech Republic					
Bentonite	21 633	20 608	23 306	26 099	32 853
Denmark					
Bentonite	2 770	2 199	3 650	4 309	5 113
Finland					
Bentonite	192	11 301	24 867	29 875	21 923
France					
Bentonite	22 569	25 523	27 795	30 189	37 805
Fuller's earth	2 689	2 975	2 431	2 312	2 609
Georgia					
Bentonite	...	(c) *8 400	(c) *11 800	10 136	8 166
Germany					
Bentonite	26 021	72 839	54 018	64 993	42 595
Greece					
Bentonite	65 071	12 002	126 698	39 742	10 810
Hungary					
Bentonite	620	501	873	1 673	4 503
Italy					
Bentonite	172 627	182 225	200 241	182 417	209 236
Macedonia					
Bentonite	5 025	8 287	10 546	...	...
Netherlands					
Bentonite	71 432	85 313	126 243	142 947	155 660
Fuller's earth	...	6 205	17 696	10 421	9 860
Romania					
Bentonite	...	927	409	6 893	14 789
Russia					
Bentonite	2 636	3 491	3 659	1 351	9 988
Slovakia					
Bentonite	58 042	66 771	45 766	55 948	55 209
Fuller's earth (c)	*800	*900	*500	*1 400	...
Spain					
Bentonite	12 446	13 398	62 307	61 964	68 216
Sepiolite	640 128	614 698	585 893	612 533	603 895
Fuller's earth	...	7 490	20 736	11 999	15 790
Sweden					
Bentonite	5 522	4 459	4 706	5 482	6 917
Turkey					
Bentonite	68 124	61 999	90 182	104 425	123 858
Ukraine					
Bentonite	(c) *12 300	(c) *16 400	18 500	25 900	46 300
United Kingdom					
Bentonite	84 357	96 781	108 868	76 459	76 862
Fuller's earth	32 730	61 077	739	554	429
Algeria	...	7 469	1 195	1 350	1 570
Egypt	2 017	2 092	2 040	3 635	...
Morocco					
Bentonite	27 775	40 238	33 428	31 275	...
Fuller's earth	1 192	892	1 043	1 170	...
Mozambique					
Bentonite	6 600	6 660	6 192	480	172

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

tonnes

Country	1996	1997	1998	1999	2000
Senegal					
Fuller's earth (b)	...	...	106 965	139 117	125 221
South Africa					
Bentonite	...	2 042	1 243	3 073	12 857
Canada					
Bentonite	3 241	1 397	2 306	1 912	314
Guatemala					
Bentonite	2 153	2 543	2 076	2 693	1 436
Mexico					
Bentonite	13 074	15 713	38 665	59 107	57 539
USA					
Bentonite	796 289	860 077	812 364	743 711	772 803
	111 820	146 667	119 205	152 708	135 897
Argentina					
Bentonite	29 671	35 102	32 916	32 592	41 126
Colombia					
Bentonite	642	1 170	970	320	566
China					
Bentonite	73 169	65 248	55 072	83 105	108 748
	1 182	5 967	3 910	7 116	12 150
India					
Bentonite (a)	174 117	183 616	210 975	123 857	...
Indonesia					
Bentonite	5 208	6 196	3 813	8 550	19 797
	4 510	3 079	3 262	7 702	15 059
Israel					
Bentonite (c)	*100	*700	*1 100	*1 000	*2 100
Japan					
Bentonite	2 038	2 245	1 518	2 372	1 780
Korea, Republic of					
Bentonite	11 221	6 102	3 240	4 538	1 807
Singapore					
Bentonite of which, re-exports	15 703 8 635	14 900 10 262	11 150 7 452	5 435 4 330	5 012 4 835
Thailand					
Bentonite	...	529	1 303	1 172	2 690
Australia					
Bentonite	21 616	17 869	13 126	13 348	13 443
	1 685	2 303	2 570	2 160	2 001
New Zealand					
	1 070	674	746	1 218	1 169

## 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, Harmonised System 2508.10 and 2508.20
- (3) Activated bentonite and fuller's earth, Harmonised System 3802.90, are excluded
- (4) Some countries are believed to include sodium-exchanged bentonite, often referred to as activated bentonite, under Harmonised System 3802.90, e.g. Italy

(a) Years ended 31 March following that stated

(b) Attapulgite

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

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

tonnes

Country	1996	1997	1998	1999	2000
Austria					
Bentonite	...	45 596	50 393	40 604	52 361
Belarus	...	...	7 222	6 910	11 736
Belgium-Luxembourg					
Bentonite	15 245	16 800	17 118	18 362	23 876
Fuller's earth	1 398	2 991	2 041	2 387	5 045
Croatia					
Bentonite	295	5 171	17 074	11 556	7 138
Czech Republic					
Bentonite	5 394	7 162	9 271	11 753	12 887
Denmark					
Bentonite	23 589	19 689	24 482	28 849	36 017
Fuller's earth	502	589	904	572	228
Finland					
Bentonite	22 722	48 473	56 864	53 935	30 609
Fuller's earth	689	366	1 791	51	42
France					
Bentonite	87 451	135 717	160 789	170 190	184 809
Fuller's earth	2 668	3 345	2 174	722	1 731
Georgia					
Bentonite	...	...	...	3 651	2 251
Germany					
Bentonite	164 551	207 106	243 554	281 618	233 046
Fuller's earth	21 878	9 538	9 207	7 045	5 419
Greece					
Bentonite	301	3 298	9 659	5 740	8 119
Hungary	4 396	6 348	3 363	4 243	3 587
Irish Republic					
Bentonite	931	2 195	2 125	775	1 271
Italy					
Bentonite	57 941	67 677	79 538	77 957	104 562
Fuller's earth	...	11 396	12 575	13 346	12 139
Lithuania					
Bentonite	894	1 302	1 779	1 387	1 670
Netherlands					
Bentonite	185 906	177 283	244 576	309 914	276 017
Fuller's earth	...	31 364	20 800	21 124	24 909
Norway					
Bentonite	24 533	17 242	17 518	16 191	15 220
Poland					
Bentonite	71 300	76 900	71 800	60 333	61 733
Fuller's earth	900	1 000	1 100	1 236	920
Portugal					
Bentonite	12 844	13 941	18 847	12 681	16 679
Romania	...	2 459	2 640	1 895	2 700
Russia					
Bentonite	146 584	186 178	131 473	176 089	149 475
Slovakia					
Bentonite	7 205	3 749	8 118	6 614	...
Slovenia	...	...	5 734	5 568	4 657
Spain					
Bentonite	38 940	54 551	51 248	54 139	59 714
Sweden					
Bentonite	110 649	90 429	146 144	118 387	62 250
Switzerland					
Bentonite	20 541	21 245	22 075	25 054	26 275
Fuller's earth	2 328	2 187	1 737	2 121	1 802
United Kingdom					
Bentonite	166 278	162 819	331 453	246 341	240 820
Fuller's earth	1 720	...	51 398	16 326	6 568
Egypt	2 535	5 315	4 335	7 339	...
Nigeria	...	2 758	11 837	7 561	...
South Africa					
Bentonite	3 753	1 984	2 701	2 551	2 795
Tunisia					
Bentonite	3 566	5 543	4 865	3 708	...

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

tonnes

Country	1996	1997	1998	1999	2000
Canada					
Bentonite	381 042	371 660	324 995	336 280	325 575
Fuller's earth	9 009	7 873	22 817	16 522	10 830
Mexico					
Bentonite	11 173	34 205	45 057	41 356	...
USA					
Bentonite	7 514	7 562	7 772	8 909	8 465
Fuller's earth	368	3 533	288	398	70
Brazil					
Bentonite	36 717	34 729	60 814	53 900	82 963
Chile					
Bentonite	6 224	7 762	6 040	6 078	1 295
Colombia					
Bentonite	17 082	9 629	10 258	4 812	3 846
Peru					
Bentonite	2 957	3 624	3 434	2 689	...
Uruguay					
Bentonite	363	101	414	506	949
Venezuela					
Bentonite	52 729	71 291	62 763	12 456	23 715
China					
Bentonite	2 007	1 679	2 083	5 583	5 319
Fuller's earth	2 272	1 160	1 152	457	234
Hong Kong					
Bentonite	16 181	8 408	3 880	7 024	9 996
India (b)	210	671	1 232	4 192	...
Indonesia					
Bentonite	36 019	24 476	12 206	16 259	29 263
Fuller's earth	205	76	54	1 782	405
Japan					
Bentonite	218 252	227 816	157 386	173 122	224 126
Fuller's earth	7 479	8 350	8 125	8 239	8 224
Korea, Republic of					
Bentonite	18 857	26 724	17 067	60 067	54 521
Fuller's earth	937	1 861	3 038	4 282	4 658
Kuwait					
Bentonite	29 889	5 461	...	...	...
Malaysia					
Bentonite	132 553	146 872	73 012	...	...
Fuller's earth	8 338	9 065	34 007	...	...
Pakistan					
Bentonite (a)	1 230	1 860	1 045	1 355	3 306
Philippines					
Bentonite	6 375	8 446	3 429	2 920	...
Fuller's earth	6 984	6 119	6 634	...	...
Saudi Arabia					
Bentonite	18 099	17 493	26 727	23 198	29 253
Singapore					
Bentonite	26 401	24 554	21 211	10 812	14 175
Taiwan					
Bentonite	33 839	34 838	30 692	33 992	33 723
Fuller's earth	1 247	2 173	2 527	3 111	3 883
Thailand					
Bentonite	...	33 685	17 961	33 955	42 344
Australia					
Bentonite	4 534	10 370	12 190	13 052	25 300
New Zealand	2 572	3 130	4 026	3 247	3 684

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, Harmonised System 2508.10 and 2508.20
- (3) Activated bentonite and fuller's earth, Harmonised System 3802.90, are excluded
- (4) Some countries are believed to include sodium-exchanged bentonite, often referred to as activated bentonite, under Harmonised System 3802.90, e.g. Italy

(a) Years ended 30 June of that stated

(b) Years ended 31 March following that stated

## Bismuth

**Mine Production of Bismuth**

tonnes (metal content)

Country	1996	1997	1998	1999	2000
Bulgaria	*40	*40	*40	*40	*40
Romania	*40	*40	*40	*40	*40
Russia	10	10	*10	*10	*10
Canada	176	230	219	255	243
Mexico	1 070	1 642	1 204	560	1 112
USA	*100	*50	...	...	...
Peru (a)	*1 000	*1 000	*1 000	*1 000	*1 000
China (c)	360	757	818	855	*855
Japan (b)	562	550	479	481	520
Kazakhstan	15	13	...	-----	-----
Tajikistan	*5	*5	*5	*5	*5
Australia	*100	*100	*100	*100	*100
World Total	3 500	4 400	4 000	3 400	4 000

## Note(s):-

- (1) The figures in this table are in some instances derived from reported bismuth content of refined and impure metal plus recoverable in ores and concentrates exported
  - (2) Production for some countries may include bismuth produced from imported ores but it is thought that any resulting duplication is insignificant in the countries shown
  - (3) In addition to the countries listed, Brazil is believed to produce bismuth
- (a) Including Bi content of bullion and concentrates exported  
 (b) Metal production  
 (c) Exports of metal have always been higher than mine production in recent years

**Exports of Bismuth**

tonnes

Country	1996	1997	1998	1999	2000
Belgium-Luxembourg					
Compounds	454	842	1 172	1 373	1 262
Finland					
Metal	----	...	17	27	0
France					
Compounds	40	81	14	10	52
Metal	77	47	44	11	31
Germany					
Compounds	79	336	27	28	38
Metal	133	75	102	51	125
Netherlands					
Metal	170	48	300	29	73
Russia					
Metal	10	35	269	11	...
Spain					
Compounds	...	...	40	52	43
Metal	27	12	12	7	4
Sweden					
Metal	...	6	----	24	25
United Kingdom					
Metal	859	2 038	1 973	2 381	2 943
Canada					
Metal	141	150	176	190	302
Mexico					
Metal	914	1 731	2 526	775	928
USA					
Compounds	64	135	340	196	557
Metal	161	243	266	302	530
Peru					
Metal	660	1 204	880	660	...
China					
Metal	1 199	1 603	1 344	2 694	5 369
Hong Kong					
Metal (a)	117	9	----	52	5
Japan					
Metal	5	11	5	9	3
Kazakhstan					
Metal	10	11	2	54	...
Korea, Republic of					
Metal	75	107	94	53	63

Note(s):-

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

(a) Re-exports

**Imports of Bismuth**

tonnes

Country	1996	1997	1998	1999	2000
Austria					
Metal	21	...	6	17	18
Belgium-Luxembourg					
Metal	36	38	3	24	17
Czech Republic					
Metal	...	32	21	31	35
Denmark					
Metal	1	...	5	6	2
France					
Compounds	75	163	130	123	226
Metal	312	283	300	291	446
Germany					
Compounds	471	426	710	861	1 383
Metal	421	940	1 314	1 597	1 810
Greece					
Metal	2	6	2	10	9
Irish Republic					
Metal	27	60	42	42	54
Italy					
Metal	96	165	150	145	190
Netherlands					
Compounds	...	393	597	292	393
Metal	170	188	263	130	1 107
Poland					
Metal	16	12	9	10	9
Russia					
Metal	11	13	6	36	30
Slovenia					
Metal	...	...	40	54	39
Spain					
Metal	191	135	250	119	167
Sweden					
Metal	11	34	11	39	41
Switzerland					
Metal	10	10	13	10	27
United Kingdom					
Metal	795	1 256	1 382	1 265	1 361
South Africa					
Compounds	...	...	411	1 696	819
Canada					
Metal	75	161	131	114	139
USA					
Metal	1 502	2 183	2 766	2 082	2 412
Brazil					
Metal	90	112	111	84	128
China					
Metal	0	51	4	95	78
Hong Kong					
Metal	381	46	2	9	72
India					
Metal (a)	84	20	49	40	...
Indonesia					
Compounds	12	1 207	216	387	...
Japan					
Metal	181	380	373	242	361
Korea, Republic of					
Metal	52	...	8	27	43
Taiwan					
Compounds	29	26	25	20	29
Metal	4	33	37	37	19
Thailand					
Metal	...	6	6	8	8
Australia					
Metal	7	7	15	3	4

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**

kilograms

Country	1996	1997	1998	1999	2000
France	(b) 7 400 000	8 800 000	8 600 000	8 063 000	7 909 000
Germany	*750 000	*700 000	*600 000	...	...
Italy	*300 000	*300 000	*300 000	*300 000	*300 000
Russia	70 000	*60 000	...	...	...
Spain	*100 000	*100 000	*100 000	*100 000	*100 000
Ukraine	1 642 000	956 000	1 866 000	*2 500 000	...
United Kingdom	30 600 000	35 600 000	35 900 000	24 800 000	33 200 000
USA (a)	227 000 000	247 000 000	230 000 000	239 000 000	*229 000 000
China	41 400 000	50 100 000	40 000 000	42 000 000	*45 000 000
India	2 524 430	2 509 190	1 477 000	886 700	1 062 200
Israel	154 000 000	184 000 000	185 000 000	181 000 000	210 000 000
Japan	*15 000 000	*20 000 000	*20 000 000	*20 000 000	*20 000 000
World Total	481 000 000	550 000 000	524 000 000	519 000 000	550 000 000

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	1996	1997	1998	1999	2000
Belgium-Luxembourg	1 784 000	1 663 800	27 007 000	32 234 800	...
Germany	3 700	12 300	38 400	17 700	12 300
Italy	...	4 532	1 000	6	...
Poland	----	19 000	27 000	8 000	8 154
Russia (a)	*59 400	...	...	...	...
Ukraine	(a) *535 900	...	1 314 924	589 900	...
United Kingdom	5 345 184	5 025 081	7 011 058	5 335 234	13 329 454
Yugoslavia, Federal Republic of	...	17 000	...	51 000	----
USA	2 924 481	2 465 395	1 666 235	2 180 599	1 865 377
China	41 772	58 716	58 144	113 669	...
India (b)	19 958	80 488	10 000	10 983	...

## 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

(b) Years ended 31 March following that stated

**Imports of Bromine**

kilograms

Country	1996	1997	1998	1999	2000
Austria	97 600	104 900	164 200	83 000	...
Belgium-Luxembourg	1 234 000	1 162 100	28 104 000	32 810 600	...
Denmark	6 000	118	2 000	39 000	----
Finland	...	1 000	70 000	63 346	114
France	9 072 000	7 888 000	9 295 000	10 769 000	...
Germany	3 148 000	3 092 100	2 667 000	2 281 100	4 095 300
Irish Republic	----	33 992	51 000	17 877	22 158
Italy	...	239 468	241 000	212 828	...
Poland	28 000	80 000	63 000	37 000	43 259
Spain	...	194 767	150 000	199 494	226 237
Sweden	...	...	5 000	2 000	6 000
Turkey	46 817	...	...	69 172	69 811
United Kingdom	7 045 247	5 213 006	8 001 874	6 927 595	5 987 217
Canada	1 230 197	1 345 534	1 090 190	1 193 598	1 405 207
Mexico (c)	199 213	221 000	350 000	283 000	...
USA	421 580	1 648 027	1 196 316	2 354 535	5 474 881
Brazil	34 000	...	...	...	...
China	137 446	1 892 148	1 919 719	2 538 086	...
India (a)	1 755 579	1 460 040	2 368 783	1 037 859	...
Korea, Republic of	1 091 227	974 234	923 099	...	...
Pakistan (b)	1 300	7 838	----	660	----
Taiwan	111 500	...	28 227	75 153	84 260
Thailand	1 398	5 320	...	20 501	42 000

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) Years ended 31 March following that stated

(b) Years ended 30 June of that stated

(c) May include some fluorine

## Cadmium

**Production of Cadmium**

tonnes

Country	1996	1997	1998	1999	2000
Belgium	1 579	1 420	1 318	1 235	1 148
Bulgaria	251	183	195	217	233
Finland	648	494	520	700	680
France	92	309	223	195	160
Germany (a)	1 145	1 140	1 020	1 145	*1 130
Italy	296	287	470	359	287
Macedonia	12	*10	*10	*10	*10
Netherlands	603	718	739	731	655
Norway	274	305	276	244	302
Poland	----	22	----	----	6
Russia	716	*750	*750	*750	*750
Spain	307	334	196	----	----
Turkey	42	89	69	64	----
United Kingdom	537	455	440	547	503
Yugoslavia, Federal Republic of	79	45	17	----	----
Algeria	44	36	13	----	----
Namibia	7	2	----	----	----
Canada (a)	2 433	2 260	2 090	1 911	2 024
Mexico	784	1 223	1 275	1 275	1 268
USA (a)	1 525	2 059	1 240	1 185	1 890
Argentina	40	45	34	----	----
Brazil	132	*130	*130	*130	*130
Peru	405	359	405	465	458
China	1 567	1 982	2 125	2 154	*2 200
India (b)	277	257	295	278	326
Japan	2 344	2 473	2 337	2 567	2 472
Kazakhstan (a)	567	745	1 622	1 246	257
Korea, Dem. P.R. of	*200	*200	*200	*200	*200
Korea, Republic of	930	*1 000	1 178	1 791	1 911
Thailand	385	238	----	----	----
Uzbekistan	*100	*100	*100	*100	*100
Australia	639	632	585	462	525
World Total	19 000	20 300	19 900	20 000	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**

tonnes

Country	1996	1997	1998	1999	2000
Belgium-Luxembourg					
Metal	1 591	1 816	2 172	1 089	1 956
Sulphide	31	14	22	15	12
Bulgaria					
Metal	(b) *50	248	(b) *280	(b) *320	(b) *240
Czech Republic					
Metal	...	...	...	45	141
Finland					
Metal	496	476	415	762	834
France					
Metal	879	1 493	1 155	1 252	2 533
Germany					
Metal	595	1 179	758	382	600
Italy					
Metal	221	301	212	363	5
Sulphide	...	29	35	23	2
Macedonia					
Metal	42	36	134	(b) *20	(b) *600
Netherlands					
Metal	711	858	1 108	1 206	791
Norway					
Metal	172	321	454	280	347
Poland					
Oxide	22	35	25	9	7
Russia					
Metal (b)	*850	*1 070	*650	*270	*400
Spain					
Metal	380	263	20	41	10
Sweden					
Oxide	...	...	15	87	96
United Kingdom					
Metal	174	18	28	215	19
Namibia					
Metal	9	2	----	----	----
South Africa					
Metal	(b) *100	2	0	0	1
Canada					
Metal	1 694	2 539	2 050	2 170	2 060
Mexico					
Metal	661	1 284	1 215	1 560	1 487
USA					
Metal	204	558	606	104	314
Sulphide	797	399	29	107	1 109
Peru					
Metal	315	494	347	479	...
China					
Metal	241	372	225	12	25
Hong Kong					
Metal (a)	452	231	66	----	...
Japan					
Metal	31	98	17	4	...
Sulphide	14	9	11	9	...
Kazakhstan					
Metal	794	866	1 216	...	...
Korea, Republic of					
Metal	773	1 576	799	2 120	2 205
Thailand					
Metal	420	303	39	1	19
Uzbekistan					
Metal (b)	10	*170	*150	...	...
Australia					
Metal	782	449	700	448	540

Note(s):-

(a) Re-exports

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

**Imports of Cadmium**

tonnes

Country	1996	1997	1998	1999	2000
Austria					
Metal	...	1	1	7	1
Oxide	85	64	56	40	44
Belgium-Luxembourg					
Metal	4 168	3 289	7 802	5 332	8 263
Oxide	54	...	14	...	39
Sulphide	119	----	----	9	0
Finland					
Metal	24	...	----	1	0
France					
Metal	820	823	990	930	1 058
Oxide	385	...	...	923	665
Sulphide	296	2	5	----	0
Germany					
Metal	178	26	34	7	6
Oxide	60	144	165	165	150
Sulphide	2	7	5	7	8
Italy					
Metal	51	43	20	37	35
Oxide	...	...	479	168	94
Sulphide	...	1	8	2	2
Netherlands					
Metal	286	267	426	149	25
Poland					
Metal	20	128	20	7	2
Oxide	16	7	51	41	141
Russia					
Metal	15	672	1 614	...	...
Spain					
Metal	13	129	91	126	43
Oxide	...	...	...	71	22
Sweden					
Metal	263	265	248	284	26
Oxide	...	...	...	26	20
Switzerland					
Metal	9	13	8	8	13
Turkey					
Metal	2	8	20	5	8
Oxide	...	...	...	28	46
United Kingdom					
Metal	345	854	632	462	786
Canada					
Sulphide	667	412	3	11	...
USA					
Metal	843	790	620	490	425
Oxide	650	645	605	475	386
Brazil					
Oxide	177	138	132	124	...
China					
Metal	1 151	1 323	854	869	2 739
Hong Kong					
Metal	624	234	38	19	0
India					
Metal (a)	2 214	1 766	1 238	2 339	...
Indonesia					
Sulphide	----	----	60	23	80
Iran					
Metal	...	...	37	91	...
Japan					
Metal	4 442	4 772	3 562	3 351	4 056
Korea, Republic of					
Metal	11	47	6	5	0
Singapore					
Metal	...	...	7	331	400
Taiwan					
Oxide	343	323	376	387	287
Sulphide	11	5	14	8	0

Note(s) :-

(a) Years ended 31 March following that stated

**Production of Chromium Ores and Concentrates**

tonnes

Country	1996	1997	1998	1999	2000
Albania	236 358	157 203	124 000	130 000	117 000
Finland	573 909	588 856	498 075	597 438	628 414
Macedonia	*5 000	*5 000	----	----	----
Russia	112 000	77 900	69 500	48 047	79 000
Turkey	1 279 032	1 702 633	1 404 470	1 014 544	545 725
Madagascar	139 272	133 960	166 096	----	118 750
South Africa	5 078 000	6 162 000	6 479 582	6 817 050	6 898 000
Sudan	*12 000	*30 500	60 000	23 800	...
Zimbabwe	658 416	669 757	605 405	653 479	668 043
Cuba	37 300	44 100	46 000	52 000	...
Brazil (a)	386 659	242 077	352 751	357 141	*500 000
China	130 200	176 800	20 940	220 540	...
India (e)	1 455 849	1 515 286	1 418 119	1 737 985	1 951 649
Indonesia	13 300	2 156	4 700	6 355	----
Iran (b) (c)	322 367	324 253	316 597	311 235	...
Kazakhstan	1 102 500	1 795 900	1 602 700	2 405 600	2 606 600
Myanmar (e)	3 299	4 059	2 447	...	...
Oman	15 252	17 985	29 756	26 010	15 100
Pakistan (d)	26 961	23 763	8 885	16 279	*8 000
Philippines (b)	118 622	98 115	42 228	17 530	20 920
United Arab Emirates	56 000	61 000	76 886	60 000	60 000
Vietnam	37 000	51 000	68 400	48 300	55 000
Australia	*5 500	18 756	72 496	71 886	74 260
World Total	11 800 000	13 900 000	13 500 000	14 600 000	15 000 000

## 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

## Chromium

**Exports of Chromium**

tonnes

Country	1996	1997	1998	1999	2000
Albania					
Ores & concentrates	89 200	55 600	52 058	13 399	30 684
Austria					
Ores & concentrates	500	203	526	709	729
Metal	180	1 057	2 956	3 015	3 198
Belgium-Luxembourg					
Ores & concentrates	22 155	17 266	6 046	18 695	16 307
Metal	105	702	233	227	395
Czech Republic					
Metal	189	102	49	13	1
Denmark					
Metal	256	390	468	257	637
Estonia					
Metal	...	213	6	88	318
Finland					
Ores & concentrates	1 005	675	255	31	282
Metal	----	36	408	0	0
France					
Ores & concentrates	671	2 060	2 467	2 823	2 658
Metal	3 101	4 128	4 783	4 697	5 990
Germany					
Ores & concentrates	7 130	9 372	16 478	16 098	14 675
Metal	499	1 878	1 037	726	1 108
Greece					
Ores & concentrates	3 920	----	----	2 162	3 000
Irish Republic					
Metal	8	9	7	43	35
Italy					
Ores & concentrates	2 330	16 551	2 228	1 234	2 669
Metal	51	25	260	416	594
Lithuania					
Metal	169	22	3	129	48
Netherlands					
Ores & concentrates	37 520	47 461	65 029	51 965	50 515
Metal	382	847	1 365	1 387	969
Poland					
Ores & concentrates	14 900	5 700	...	966	3 452
Metal	437	231	143	1 970	2
Russia					
Ores & concentrates	8 074	4 508	3 019	972	(b) *100
Metal	5 098	7 774	5 251	6 060	6 123
Slovakia					
Metal	1 583	1 821	1 707	1 983	...
Spain					
Ores & concentrates	1 126	1 754	1 268	2 057	1 315
Metal	584	803	503	1 569	815
Switzerland					
Metal	21	41	34	298	27
Turkey					
Ores & concentrates	374 213	623 914	537 652	569 083	467 010
Metal	73	34	36	50	91
Ukraine					
Metal	170	180	----	61	...
United Kingdom					
Ores & concentrates	881	886	707	871	524
Metal	3 204	5 732	5 803	5 549	8 800
Madagascar					
Ores & concentrates	157 157	117 760	147 700	57 500	118 000
South Africa					
Ores & concentrates	1 353 000	1 288 000	858 618	840 580	1 090 362
Sudan					
Ores & concentrates	39	12 725	10 500	23 868	40
Zimbabwe					
Ores & concentrates	32 862	38	11 406	1 037	...

**Exports of Chromium**

tonnes

Country	1996	1997	1998	1999	2000
USA					
Ores & concentrates	70 728	25 882	129 335	115 509	145 085
Metal	1 432	2 466	1 185	2 408	1 356
Brazil					
Ores & concentrates	103 680	87 029	154 521	194 486	142 605
China					
Ores & concentrates	4 712	12 817	3 990	3 612	2 404
Metal	2 952	3 736	3 418	5 240	6 771
India					
Ores & concentrates (a)	565 825	438 948	492 540	714 448	...
Indonesia					
Ores & concentrates	6 074	5 500	399	2 363	...
Iran					
Ores & concentrates (b)	*147 900	*164 600	*125 400	*186 700	*169 800
Japan					
Ores & concentrates	390	8 649	116	95	8 322
Metal	544	327	173	346	218
Kazakhstan					
Ores & concentrates	262 709	579 647	388 448	528 272	(b) *526 600
Metal	117	120	----	----	(b) *390
Korea, Republic of					
Metal	51	7	4	64	20
Oman					
Ores & concentrates	8 230	7 787	3 624	4 150	9 783
Pakistan					
Ores & concentrates (c)	47 452	77 915	71 511	33 904	78 310
Philippines					
Ores & concentrates	73 589	131 130	54 111	34 573	...
Taiwan					
Ores & concentrates	1 417	1 264	953	803	357
Metal	329	390	398	201	163
United Arab Emirates					
Ores & concentrates	*35 000	*13 000	23 000	*33 600	*700
Vietnam					
Ores & concentrates	...	58 000	71 000	...	...
Australia					
Ores & concentrates	----	15 753	71	42 229	81 936

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	1996	1997	1998	1999	2000
Austria					
Ores & concentrates	48 157	55 345	34 793	34 979	36 490
Metal	147	611	452	771	2 050
Belgium-Luxembourg					
Ores & concentrates	22 127	25 082	25 877	23 869	9 817
Metal	555	947	565	540	557
Croatia					
Ores & concentrates	14 796	69 168	32 010	2 161	15 705
Czech Republic					
Ores & concentrates	10 700	3 737	8 782	10 325	11 821
Metal	136	41	8	10	35
Denmark					
Ores & concentrates	506	666	904	775	294
Metal	31	46	46	27	64
Estonia					
Ores & concentrates	...	3 497	2 349	983	7
Metal	...	175	1	136	317
Finland					
Ores & concentrates	2 631	3 224	5 174	6 647	6 288
Metal	12	22	110	54	42
France					
Ores & concentrates	29 538	27 620	29 023	27 752	27 174
Metal	586	917	923	711	649
Germany					
Ores & concentrates	177 909	180 312	201 728	101 700	119 869
Metal	1 479	1 950	1 888	1 777	2 905
Greece					
Ores & concentrates	1 638	3 007	2 170	2 162	213
Hungary					
Ores & concentrates	1 008	700	700	700	1 010
Metal	44	110	68	...	104
Irish Republic					
Metal	67	9	42	75	46
Italy					
Ores & concentrates	123 272	105 047	83 863	41 184	60 566
Metal	419	626	617	711	467
Lithuania					
Metal	158	----	----	110	58
Macedonia					
Ores & concentrates	10 384	1 000	839	*800	...
Netherlands					
Ores & concentrates	69 338	57 589	61 785	38 827	55 178
Metal	1 039	1 318	2 230	2 170	1 488
Norway					
Ores & concentrates	308 000	(a) *251 000	(a) *425 000	(a) *468 000	(a) *282 000
Metal	54	115	102	80	48
Poland					
Ores & concentrates	55 200	31 900	30 400	32 658	25 804
Portugal					
Ores & concentrates	2 755	1 603	1 947	1 886	1 916
Romania					
Ores & concentrates	43 200	15 348	13 479	2 966	1 301
Metal	219	6	47	337	95
Russia					
Ores & concentrates	360 637	627 345	466 565	625 538	714 322
Metal	559	256	40	286	696
Slovakia					
Ores & concentrates	66 500	39 413	45 121	31 312	54 500
Metal	2	5	1	60	...
Slovenia					
Ores & concentrates	58 400	23 900	30 020	647	607
Metal	13	17	16	18	8
Spain					
Ores & concentrates	8 696	4 459	3 673	4 750	5 861
Metal	299	200	335	219	385
Sweden					
Ores & concentrates	295 500	290 000	319 000	*320 000	...
Metal	486	557	629	1 459	888
Switzerland					
Ores & concentrates	1 165	1 117	1 233	1 380	1 483
Metal	113	155	127	123	135

**Imports of Chromium**

tonnes

Country	1996	1997	1998	1999	2000
Turkey					
Ores & concentrates	5 080	819	19 497	48 285	69 470
United Kingdom					
Ores & concentrates	176 199	157 914	120 967	83 608	163 666
Metal	1 181	1 554	1 787	1 573	1 520
Yugoslavia, Federal Republic of					
Ores & concentrates	3 600	3 128	2 441	2 757	629
Metal	43	2	----	----	3
Egypt					
Ores & concentrates	...	2 637	93	417	...
South Africa					
Ores & concentrates	...	...	...	8 251	21 301
Metal	127	103	121	48	172
Canada					
Ores & concentrates	39 757	33 732	34 042	42 803	15 084
Metal	413	436	455	632	700
Mexico					
Ores & concentrates	7 700	6 691	5 526	5 721	9 356
USA					
Ores & concentrates	251 160	303 598	380 788	228 958	267 792
Metal	8 266	10 037	9 512	9 171	9 964
Argentina					
Ores & concentrates	37 695	39 392	42 409	53 615	55 031
Brazil					
Ores & concentrates	5 352	14 199	9 777	8 482	48 347
Metal	98	117	167	239	257
Chile					
Ores & concentrates	10 592	9 809	16 028	6 815	13 210
Peru					
Ores & concentrates	1 609	1 904	4 202	1 876	...
Venezuela					
Ores & concentrates	2 233	2 502	2 355	790	2 539
China					
Ores & concentrates	764 377	894 001	711 544	816 230	1 112 791
Metal	1 327	1 815	598	969	751
Hong Kong					
Metal	13	7	31	2	22
India					
Ores & concentrates (b)	820	1 724	686	6 886	...
Metal (b)	170	193	126	156	...
Japan					
Ores & concentrates	686 451	577 402	416 665	380 115	501 727
Metal	1 953	1 973	2 365	2 343	3 202
Korea, Republic of					
Ores & concentrates	539	385	209	35	188
Metal	675	748	948	1 492	1 312
Philippines					
Ores & concentrates	211	1 280	23	...	...
Singapore					
Ores & concentrates	508	494	294	522	588
Metal	18	23	40	26	23
Taiwan					
Ores & concentrates	8 179	8 852	9 809	9 160	8 318
Metal	258	166	172	195	248
Thailand					
Ores & concentrates	6 478	5 406	999	5 016	4 872
Australia					
Ores & concentrates	12 253	9 214	8 661	10 912	10 141
Metal	163	256	250	206	160

Note(s) :-

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

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

(b) Years ended 31 March following that stated

**Production of Coal**

tonnes

Country	1996	1997	1998	1999	2000
Albania					
Lignite	90 000	40 000	48 706	32 595	20 666
Armenia	6 000	5 000	----	----	...
Austria					
Brown coal & lignite	1 108 058	1 130 339	1 140 151	1 137 388	1 254 605
Bosnia & Herzegovina					
Brown coal & lignite	1 690 000	1 740 000	1 790 000	*1 800 000	*1 900 000
Bulgaria					
Anthracite & bituminous	138 000	102 000	120 406	123 200	118 200
Brown coal & lignite	31 164 000	29 606 000	29 783 000	25 734 000	26 980 000
Croatia					
Bituminous	64 369	48 535	50 839	15 311	----
Czech Republic					
Bituminous	21 784 000	20 847 000	19 521 000	17 227 000	17 028 000
Lignite	902 000	747 000	652 000	512 000	453 000
Brown coal	59 539 000	57 395 000	51 283 000	44 858 000	50 610 000
France					
Anthracite & bituminous	7 312 000	5 779 000	4 864 000	4 533 000	3 166 000
Lignite	798 000	1 030 000	735 000	558 000	296 000
Georgia					
	22 500	4 600	14 700	12 000	7 000
Germany					
Anthracite & bituminous	48 196 515	46 789 987	41 639 952	40 258 004	34 251 019
Brown coal	187 246 925	177 159 541	166 036 413	161 282 000	167 691 000
Greece					
Lignite	54 732 680	58 939 419	60 910 433	61 861 049	*65 000 000
Hungary					
Bituminous	963 000	925 000	877 000	738 000	744 000
Lignite	7 541 000	8 054 000	7 628 000	7 702 000	7 862 000
Brown coal	6 967 000	7 193 000	6 563 000	6 477 000	5 670 000
Italy					
Bituminous	41 000	...	...	...	...
Lignite	223 400	203 061	83 700	80 000	...
Macedonia					
Lignite	7 145 000	6 700 000	8 180 000	7 400 000	7 100 000
Norway					
Bituminous (d)	229 636	386 440	328 170	403 940	631 926
Poland					
Anthracite	234 000	157 000	65 000	----	----
Bituminous	137 753 000	137 636 000	115 661 000	111 894 136	99 956 580
Lignite	63 845 400	63 169 437	62 820 314	60 838 707	59 505 486
Romania					
Anthracite & bituminous	6 965 000	5 642 000	4 331 000	3 741 000	...
Brown coal & lignite	37 809 000	30 604 000	23 774 000	20 793 000	(i) 31 386 700
Russia					
	254 800 000	245 000 000	231 919 000	249 521 000	258 000 000
Slovakia					
Brown coal	3 756 000	3 853 000	3 893 000	3 732 000	3 646 100
Slovenia					
Brown coal & lignite	4 778 000	4 954 000	4 891 000	4 562 000	4 479 300
Spain					
Anthracite	6 498 980	6 666 820	5 682 568	5 436 000	5 160 000
Bituminous	7 195 634	7 200 513	6 717 821	6 295 000	6 173 000
Sub-bituminous	4 071 521	4 124 414	3 925 498	3 704 000	3 628 000
Lignite	9 585 773	8 462 519	9 749 739	8 831 000	8 524 000
Turkey					
Anthracite	3 581 788	3 645 896	3 336 021	2 738 040	3 330 355
Bituminous	126 751	117 310	157 334	93 310	110 945
Lignite	57 532 425	56 779 793	66 583 499	66 706 450	61 314 974
Ukraine					
Bituminous	74 132 000	75 514 000	75 767 000	80 640 000	79 923 000
Lignite	1 587 000	1 433 000	1 409 000	1 184 000	1 067 000
United Kingdom					
Bituminous (g)	50 197 000	48 495 000	41 177 000	37 077 000	31 972 000
Yugoslavia, Federal Republic of					
Bituminous	62 754	91 540	104 596	49 481	87 882
Lignite	37 827 576	42 312 896	43 577 410	30 037 930	33 638 291
Brown coal	538 759	512 228	389 996	413 289	398 438

**Production of Coal**

tonnes

Country	1996	1997	1998	1999	2000
Botswana	763 240	776 917	928 100	945 316	...
Congo, Democratic Republic					
Bituminous	95 000	95 000	100 000	100 000	100 000
Egypt	350 000	350 000	200 000	*250 000	...
Malawi	69 930	63 210	54 238	43 831	34 250
Morocco					
Anthracite	505 600	376 300	269 100	129 200	28 725
Niger	182 022	162 840	181 213	168 466	158 200
Nigeria					
Sub-bituminous	7 800	9 830	11 801	...	...
South Africa					
Anthracite	2 465 611	1 997 314	2 064 000	1 919 244	1 617 969
Bituminous	203 900 000	216 620 006	222 200 000	221 594 925	221 272 242
Swaziland					
Bituminous	128 973	203 115	410 021	426 299	378 043
Tanzania					
Bituminous	52 000	28 448	...	...	...
Zambia					
Bituminous	128 063	164 443	185 717	127 854	...
Zimbabwe					
Bituminous	5 174 685	5 300 749	5 467 100	4 977 355	3 986 202
Canada					
Bituminous	40 026 879	41 216 344	38 284 407	36 513 393	33 804 234
Sub-bituminous	24 985 963	25 782 503	25 285 315	24 299 674	24 168 751
Lignite	10 838 575	11 652 553	11 790 106	11 659 351	11 190 106
Mexico					
Bituminous	13 746 817	12 707 443	12 378 788	13 302 345	14 287 138
USA					
Anthracite	4 325 000	4 257 000	4 765 000	4 325 000	4 100 000
Bituminous	572 199 000	593 143 000	580 934 000	545 882 000	497 600 000
Sub-bituminous	308 707 000	313 043 000	350 307 000	368 965 000	393 500 000
Lignite	79 883 000	78 327 000	77 807 000	79 123 000	80 500 000
Argentina					
Bituminous	328 762	250 136	218 270	353 839	*360 000
Brazil					
Bituminous & lignite (e)	4 787 615	5 542 000	5 084 357	6 062 963	6 924 000
Chile					
Bituminous	233 600	134 435	116 611	82 240	...
Lignite	1 210 483	1 278 862	113 564	425 110	(b) 503 350
Colombia					
Bituminous	29 695 000	32 797 000	33 751 000	32 754 000	38 142 000
Peru					
Anthracite	20 699	21 694	7 384	1 488	16 625
Bituminous	*45 000	*45 000	*45 000	...	...
Venezuela					
Bituminous	4 180 641	5 291 908	6 458 324	6 592 904	7 843 736
Afghanistan					
Bituminous	200 000	220 000	230 000	...	...
Bhutan					
Bituminous	68 000	*70 000	*69 000	...	...
China					
Anthracite	314 766 800	293 608 300	228 650 000	181 811 500	...
Bituminous	1 015 383 900	1 003 636 000	953 090 000	816 257 400	(i) 998 000 000
Lignite	66 548 700	75 575 800	50 770 000	45 566 300	...
India					
Bituminous (h)	286 080 000	296 656 000	292 270 000	304 103 000	309 628 000
Lignite (h)	22 540 000	23 052 000	23 419 000	22 124 000	23 552 000
Indonesia					
Anthracite & bituminous	50 332 000	54 608 400	60 320 949	73 648 000	76 885 000
Iran					
Bituminous (c)	1 726 297	1 598 529	1 711 138	1 507 096	*1 500 000
Japan					
Bituminous	6 480 000	4 270 000	3 660 000	3 689 513	3 148 410
Kazakhstan					
Bituminous	73 240 000	70 174 000	68 057 900	56 617 400	72 352 000
Lignite	3 591 000	2 473 000	1 714 700	1 760 200	2 438 400

**Production of Coal**

tonnes

Country	1996	1997	1998	1999	2000
Korea, Dem. P.R. of					
Anthracite	30 300 000	70 000 000	66 500 000	67 200 000	67 200 000
Lignite	13 000 000	21 000 000	23 800 000	24 000 000	24 000 000
Korea, Republic of					
Anthracite	4 950 780	4 514 000	4 361 000	4 197 000	4 150 000
Kyrgyzstan	409 900	521 500	445 700	415 200	419 400
Laos	75 214	108 013	86 081	78 826	121 317
Malaysia	73 747	105 231	349 849	308 502	382 942
Mongolia					
Anthracite & bituminous	1 256 700	303 300	...	1 423 500	1 437 300
Brown coal & lignite	3 853 900	4 620 700	(i) 5 057 000	3 528 500	3 562 700
Myanmar (h)	30 700	29 849	31 025	42 773	52 553
Pakistan (a) (j)	3 253 903	3 133 393	3 164 226	3 461 270	3 164 301
Philippines					
Bituminous	955 631	1 078 654	1 157 304	1 204 979	1 353 453
Taiwan					
Bituminous	147 446	99 089	79 140	91 674	83 380
Tajikistan	20 000	20 000	20 000	16 600	20 700
Thailand					
Anthracite	3 000	----	----	----	----
Lignite	21 685 894	23 443 475	20 161 721	18 266 308	17 713 753
Uzbekistan					
Bituminous	74 000	59 000	68 000	89 100	91 500
Lignite	2 763 000	2 888 000	2 855 000	2 864 000	2 410 000
Vietnam					
Anthracite	9 823 000	11 388 000	11 700 000	9 097 000	*10 900 000
Australia					
Bituminous (f)	198 638 000	216 690 000	222 040 000	232 860 000	244 820 000
Brown coal (j)	53 604 000	58 160 000	65 600 000	65 820 000	65 780 000
New Zealand					
Bituminous	1 671 730	1 500 145	1 626 000	1 620 866	1 792 784
Sub-bituminous	1 588 840	1 950 548	1 527 000	1 672 947	1 580 235
Lignite	248 764	213 341	166 000	211 917	212 616
World Total	4 699 000 000	4 771 000 000	4 602 000 000	4 388 000 000	4 364 000 000

Note(s):-

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

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

**Exports of Coal**

tonnes

Country	1996	1997	1998	1999	2000
Belgium-Luxembourg					
Anthracite	293 244	289 285	874 527	781 378	1 121 661
Other coal	1 304 878	1 652 469	1 372 040	1 700 894	1 556 603
Briquettes	30 025	31 303	14 350	39 215	18 869
Czech Republic					
Hard coal (b)	6 738 000	6 647 799	6 726 000	6 123 838	5 885 403
Lignite	6 173 000	4 664 842	3 687 730	3 216 502	2 732 595
Briquettes	...	366 442	242 501	183 687	155 398
Denmark					
Hard coal (b)	115 130	106 416	139 321	201 571	112 534
Estonia					
Hard coal (b)	...	71 496	7 501	941	48 021
France					
Anthracite	27 368	15 107	3 033	4 074	1 240
Other coal	262 423	204 038	64 546	74 877	87 494
Briquettes	32 049	43 570	20 048	12 996	12 871
Germany					
Hard coal (b)	1 037 327	513 327	322 353	200 506	178 430
Brown coal	544 460	339 407	251 869	200 744	220 449
Briquettes	132 804	427 260	232 346	207 775	260 538
Irish Republic					
Anthracite	4	----	----	42 771	32 942
Briquettes	23 716	7 572	19 073	24 264	23 638
Italy (b)	7 947	3 709	7 650	23 011	32 153
Netherlands					
Anthracite	86 315	112 565	143 879	93 150	99 939
Other coal	2 236 539	2 824 677	4 124 961	4 744 469	8 316 654
Briquettes	23 590	32 210	20 760	9 463	3 612
Norway (b)	156 071	...	...	...	...
Poland					
Hard coal	28 925 379	29 474 000	28 078 000	24 103 604	23 244 864
Lignite	44 900	37 000	23 500	13 400	9 477
Russia					
Anthracite	3 597 167	2 128 855	1 751 578	1 585 933	2 469 473
Other coal	21 744 000	20 695 000	21 609 000	25 661 298	41 191 291
Lignite	2 007 429	813 206	309 131	126 815	251 990
Briquettes	51 041	29 778	11 838	12 068	539
Spain					
Anthracite	180	5 367	13 214	7 191	13 377
Ukraine	2 288 843	2 374 743	1 882 275	2 138 128	...
United Kingdom					
Anthracite	420 230	393 772	282 025	335 907	305 615
Other coal	553 789	666 119	688 621	439 022	637 489
Briquettes	117 070	98 171	57 410	53 759	79 869
Mozambique	...	17 839	17 903	20 502	29 010
South Africa					
Anthracite	2 203 555	1 648 594	1 376 000	1 080 136	1 240 666
Other coal	57 965 702	57 333 704	65 700 000	65 100 000	69 767 465
Zimbabwe (b)	36 356	45 882	42 810	32 536	...
Canada					
Hard coal (b)	34 748 142	35 613 722	32 907 404	33 920 300	32 421 988
Lignite	11 589	72 788	46 403	30 040	64 407
USA					
Anthracite	700 105	580 216	612 548	438 326	448 424
Other coal	82 076 000	75 667 653	69 626 919	53 050 767	52 408 665
Lignite	235 283	455 778	290 176	44 964	43 240
Briquettes	12 852	29 832	45 116	45 475	60 762
Colombia	24 780 000	27 580 000	30 061 000	29 932 000	32 299 252
Venezuela	3 874 294	4 927 922	5 920 000	6 753 276	5 185 905
China					
Anthracite	1 729 132	2 115 741	2 786 821	3 145 563	3 887 055
Other coal	27 267 751	28 606 785	29 503 933	34 261 511	51 158 963
India (a)	478 229	540 722	822 968	1 156 289	...

**Exports of Coal**

tonnes

Country	1996	1997	1998	1999	2000
Indonesia					
Anthracite	1 368 830	1 091 542	1 318 772	1 107 111	354 874
Other coal	30 586 265	41 038 390	46 931 707	54 099 358	56 797 343
Briquettes	78 500	168 000	94 750	78 775	831 895
Kazakhstan					
Hard coal	20 839 652	24 857 303	23 578 438	16 175 232	...
Lignite	232 381	219 849	110 474	68 595	...
Kyrgyzstan					
Hard coal	100 400	78 000	23 000	10 792	21 597
Laos					
Lignite	43 000	68 075	68 884	95 529	118 198
Malaysia					
15 330		2 025	31 800	224	...
Vietnam					
3 647 000		3 454 000	3 162 000	3 260 000	3 050 000
Australia					
Anthracite	349 957	485 664	703 037	711 437	449 725
Other coal	140 435 752	157 253 593	166 339 204	170 695 035	186 434 364
Lignite	53 110	31	13	250	13
Briquettes	60 339	62 894	122	133	11 015
New Zealand					
1 426 258		1 166 060	1 092 781	1 101 662	...

Note(s):-

(1) This table excludes bunker shipments

(a) Years ended 31 March following that stated

(b) Including anthracite

**Imports of Coal**

tonnes

Country	1996	1997	1998	1999	2000
Austria					
Hard coal (c)	...	3 796 610	3 577 943	3 355 572	3 412 703
Brown coal	...	18 863	10 899	20 345	38 117
Briquettes	...	139 250	105 177	109 408	117 219
Belarus	997 100	786 400	716 370	642 847	576 460
Belgium-Luxembourg					
Anthracite	949 594	856 978	981 210	953 736	1 040 686
Other coal	11 370 988	11 862 591	11 358 312	9 806 997	9 702 654
Brown coal	159 220	158 490	213 354	161 605	198 317
Briquettes	49 488	38 967	26 611	38 522	20 372
Bulgaria					
Anthracite	2 026 300	1 883 600	2 146 700	1 106 600	...
Briquettes	1 368 000	1 421 900	1 199 200	...	...
Croatia					
Hard coal	61 407	62 452	167 867	261 671	806 241
Lignite	146 924	133 684	98 170	82 830	80 303
Cyprus	158 828	122 626	22 083	29 157	57 607
Czech Republic	3 211 000	2 274 356	1 578 070	1 029 446	1 094 508
Denmark					
Anthracite	31 860	71 644	78 571	75 855	89 167
Other coal	12 430 959	14 003 715	8 284 775	7 057 146	6 435 687
Estonia					
Hard coal (c)	...	118 648	87 466	87 072	149 092
Finland					
Hard coal (c)	6 178 787	7 439 189	4 613 280	3 596 331	5 072 701
France					
Anthracite	1 390 400	1 904 691	1 655 772	1 777 657	1 088 272
Other coal	14 365 536	11 661 093	12 303 542	13 516 239	16 091 962
Lignite	41 251	37 919	31 437	21 085	51 244
Briquettes	111 050	139 330	112 082	82 872	77 348
Germany					
Anthracite	258 966	348 536	387 288	352 617	440 328
Other coal	16 089 372	19 511 920	21 801 982	21 733 088	22 483 547
Brown coal	2 558 933	2 150 892	1 943 544	2 089 587	1 812 000
Briquettes	111 376	530 856	370 663	232 540	195 611
Greece					
Hard coal (c)	1 572 505	1 230 221	1 175 265	1 126 351	1 038 517
Hungary					
Hard coal (c)	1 893 219	1 742 672	...	1 567 991	1 663 064
Brown coal	549 196	456 029	265 559	...	221 555
Iceland					
Hard coal	65 569	58 255	69 685	60 654	100 853
Irish Republic					
Anthracite	111 763	109 108	120 081	156 350	102 388
Other coal	2 486 235	3 053 424	2 728 413	1 621 849	1 666 083
Briquettes	33 907	40 867	43 912	45 771	42 306
Italy					
Anthracite	391 852	658 500	197 665	214 079	231 539
Other coal	16 331 639	15 249 673	15 474 813	17 155 041	18 768 117
Latvia	207 251	143 194	123 669	123 618	79 833
Lithuania					
Hard coal (c)	387 454	323 538	269 298	144 540	129 430
Lignite	26 584	3 421	1 910	...	675
Macedonia					
Hard coal	90 564	82 533	82 500	...	...
Brown coal	90 510	119 116	98 682	...	...
Briquettes	92 997	85 038	97 256	...	...
Moldova					
Anthracite	509 838	135 703	93 354	70 495	83 315
Other coal	559 974	236 489	410 031	115 902	54 879
Netherlands					
Anthracite	299 485	156 257	952 934	1 187 521	1 890 491
Other coal	17 528 000	18 998 000	20 352 039	17 140 488	18 794 685
Brown coal	43 698	43 828	19 477	30 060	30 042
Briquettes	12 419	42 113	45 423	17 205	12 541

**Imports of Coal**

tonnes

Country	1996	1997	1998	1999	2000
Norway					
Anthracite (a)	83 151	106 361	152 694	88 456	86 671
Other coal (a)	706 033	725 246	766 142	734 845	746 117
Lignite (a)	40 755	28 809	48 049	90 777	86 497
Poland					
Hard coal (c)	1 976 700	3 244 000	4 198 000	2 374 285	1 503 434
Portugal					
Anthracite	322 221	447 943	336 726	180 884	375 617
Other coal	4 776 330	5 160 295	4 653 374	5 867 892	5 999 032
Romania (c)	4 728 117	5 248 649	3 866 796	2 412 701	2 467 034
Russia					
Anthracite	2 396 401	5 376 810	4 465 260	1 129 790	4 258 806
Other coal	17 545 000	9 721 829	10 480 000	14 912 207	21 259 190
Brown coal	213 712	82 223	21 809	2 996	9 898
Slovakia					
Hard coal (c)	4 994 457	4 837 174	4 439 131	4 370 495	4 852 343
Lignite	3 391 000	2 195 000	(g) 1 418 000	1 135 575	806 199
Slovenia					
Hard coal (c)	20 377	32 907	231 472	299 022	...
Lignite	412 979	341 558	151 918	81 155	296 245
Spain					
Anthracite	282 449	159 315	281 363	1 185 524	1 326 932
Other coal	11 845 564	11 180 489	14 264 919	18 925 349	20 321 647
Sweden					
Anthracite	95 962	42 372	25 942	12 775	13 939
Other coal	3 139 894	2 972 087	3 012 878	2 919 133	2 974 052
Switzerland					
Anthracite	8 132	7 342	10 199	13 139	14 357
Other coal	122 822	73 154	58 467	48 021	236 123
Turkey					
Hard coal (c)	7 853 373	9 600 283	8 447 808	6 515 726	13 173 182
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	1 127 416	1 247 553	501 809	602 346	1 055 238
Other coal	16 512 925	18 581 823	20 742 610	20 167 409	22 388 726
Briquettes	56 279	29 631	13 556	8 298	13 731
Yugoslavia, Federal Republic of					
Hard coal	(e) *49 000	112 418	32 128	111 007	30 975
Lignite	...	...	66 841	87 793	104 963
Algeria	318 097	380 362	619 932	528 247	...
Botswana					
Hard coal (c)	...	20 477	1 945	26 258	...
Egypt					
Hard coal	1 875 508	1 626 164	1 483 924	1 320 394	...
Kenya					
Anthracite	9 651	12 363	6 698	7 131	449
Other coal	66 100	31 975	33 083	165	64 773
Mauritius	38 482	27 783	86 344	128 879	222 423
Morocco (c)	2 208 734	2 195 410	2 655 992	2 595 055	...
South Africa	1 218 664	1 159 917	1 532 284	1 024 068	1 250 751
Canada					
Anthracite	527 520	523 133	713 282	518 410	570 068
Other coal	11 123 242	14 181 304	19 136 149	19 450 505	19 190 383
Cuba	163 000	...	...	...	...
Mexico					
Hard coal (c)	1 540 509	2 157 455	2 301 340	2 428 819	2 421 959
Lignite	1 721	1 830	1 816	4 852	4 208
Panama	66 968	114 148	55 734	69 650	...
USA					
Anthracite	107 954	25 194	5 121	33 957	17 468
Other coal	6 343 234	6 715 663	7 821 385	8 170 338	11 253 751
Lignite	11 625	72 788	46 403	31 420	65 266
Briquettes	28 212	-----	2	10 101	15 171

**Imports of Coal**

tonnes

Country	1996	1997	1998	1999	2000
Argentina	1 029 290	1 051 391	988 459	926 300	1 104 346
Brazil					
Anthracite	728 535	648 973	604 071	487 980	945 853
Other coal	12 271 892	11 606 358	10 054 963	12 941 936	13 928 271
Chile	4 673 570	4 638 125	4 605 359	5 362 132	4 416 807
Peru	360 236	486 441	386 995	379 386	...
Venezuela	20 532	102 188	28 557	54 390	74 288
China					
Anthracite	380 941	85 724	43 736	143 044	213 178
Other coal	2 823 516	1 912 883	1 538 397	1 528 002	1 903 630
Hong Kong					
Hard coal (c)	6 768 343	5 575 100	7 100 704	6 391 157	6 057 500
India (c) (d)	3 174 902	16 439 621	16 536 179	19 699 968	...
Indonesia					
Hard coal (c)	411 046	384 852	59 475	198 067	140 116
Iran (b)	...	412 025	299 065	1 102 230	...
Israel	...	8 671 000	9 637 000	9 598 458	9 589 000
Japan					
Anthracite	3 233 592	3 474 785	3 261 130	2 781 904	3 678 658
Other coal	126 182 656	129 453 043	128 337 217	134 417 103	141 464 086
Lignite	20 371	13 382	14 483	13 642	12 370
Kazakhstan					
Hard coal	1 059 800	975 300	1 211 147	1 121 398	...
Korea, Dem. P.R. of (e)	*324 000	*268 000	*186 000	*596 000	*255 000
Korea, Republic of					
Anthracite	874 640	721 918	788 973	1 138 826	2 038 016
Other coal	44 932 078	48 860 765	51 416 850	52 314 965	61 807 033
Kyrgyzstan					
Hard coal	844 500	281 207	800 979	763 821	725 637
Lignite	...	...	...	46 752	20 776
Malaysia					
Anthracite	39 400	8 138	...	8 422	...
Other coal	2 905 820	2 514 694	2 297 599	2 633 500	...
Pakistan (f)	944 000	909 638	1 012 326	912 451	1 005 811
Philippines (c)	1 659 482	3 750 874	4 244 518	4 023 445	...
Saudi Arabia					
Hard coal (c)	...	34 645	30 612	24 338	1 440
Taiwan					
Anthracite	59 645	50 605	50 516	43 405	79 925
Other coal	30 747 694	36 646 759	37 292 319	40 923 370	45 262 506
Thailand					
Anthracite	46 159	8 094	23 095	110 804	164 689
Other coal	3 795 532	3 191 919	1 521 416	3 031 334	3 933 738
Australia					
Anthracite	7 262	10 065	247	9 723	8 193
Other coal	148 183	79 037	174 501	110 233	16 232
New Caledonia	227 995	258 341	298 736	244 321	253 642

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	1996	1997	1998	1999	2000
Russia	*4 200	*4 100	*4 000	*4 500	*4 500
Botswana	406	334	335	332	319
Congo, Democratic Republic	4 041	3 153	3 871	3 200	*3 000
Morocco	540	780	287	882	1 305
South Africa	244	316	296	306	397
Zambia (a)	6 959	6 037	*7 000	*7 000	*7 000
Zimbabwe	106	126	100	129	79
Canada	5 714	5 709	5 861	5 323	5 281
Cuba	2 300	2 500	2 700	2 600	2 800
Brazil	1 000	1 500	2 500	2 900	4 100
China	192	466	409	303	*300
Indonesia	*800	*650	*650	*650	*650
Australia (b)	1 609	1 996	2 138	1 802	*1 300
New Caledonia	2 356	2 964	3 036	2 803	2 620
World Total	30 500	30 600	33 200	32 700	33 700

Note(s):-

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

(a) Years ended 31 March following that stated

(b) Years ended 30 June of that stated

**Production of Cobalt Metal**

tonnes

Country	1996	1997	1998	1999	2000
Belgium	*1 200	*1 200	*1 200	*950	*1 110
Finland	4 160	5 000	5 250	6 200	7 700
Norway	3 097	3 417	3 850	4 000	3 400
Russia	4 200	4 000	3 700	3 800	*4 500
Congo, Democratic Republic (c)	2 340	1 608	3 290	4 230	3 210
Morocco	80	226	242	472	1 005
South Africa (b)	244	316	296	306	397
Uganda	----	----	----	77	411
Zambia	4 799	3 949	5 011	3 946	3 342
Canada (a)	3 601	3 792	4 415	4 198	4 376
Brazil	193	266	364	630	792
China	1 200	*1 200	*1 200	*1 200	*1 200
Japan	228	264	329	247	311
Australia	...	617	1 395	1 701	2 637
World Total	25 300	25 900	30 500	32 000	34 400

Note(s):-

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

(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	1996	1997	1998	1999	2000
Austria					
Metal	63	75	126	80	87
Belgium-Luxembourg					
Ore	----	67	630	280	92
Metal	(a) *2 200	(a) *2 300	(a) *2 500	2 640	(a) *2 700
Oxides	(a) *2 100	(a) *3 000	(a) *2 500	4 263	(a) *4 400
Estonia					
Metal	...	20	16	58	58
Oxides	131	111	100	12	4
Finland					
Metal	1 776	2 074	1 633	2 733	3 976
Oxides	1 876	2 264	2 565	2 812	3 256
France					
Metal	468	573	786	507	...
Oxides	19	60	76	131	209
Germany					
Metal	1 255	1 387	1 103	1 396	931
Oxides	51	197	121	136	164
Irish Republic					
Oxides	173	104	136	110	68
Italy					
Metal	76	71	75	45	566
Oxides	30	56	77	155	188
Netherlands					
Metal	3 614	1 354	989	1 363	2 451
Oxides	137	85	148	198	527
Norway					
Metal	3 149	3 461	3 666	4 055	3 908
Poland					
Metal	1	1	32	29	22
Russia					
Ore	115	1 564	6 215	895	...
Metal	2 554	4 572	3 023	9 136	8 493
Oxides	142	261	267	1 031	1 265
Spain					
Metal	49	50	1	13	24
Oxides	24	17	34	109	39
Sweden					
Metal	181	103	144	260	234
Oxides	396	251	314	295	257
Switzerland					
Metal	124	183	118	94	85
United Kingdom					
Metal	2 362	1 858	2 001	1 793	1 623
Oxides	1 233	1 229	1 323	1 012	1 146
Congo, Democratic Republic					
Metal	*3 500	*2 800	*4 500	*4 600	...
Morocco					
Ore	4 893	----	2 500	2 560	...
Metal	100	218	240	464	...
South Africa					
Metal (e)	194	256	266	263	331
Oxide	...	81	198	234	1 008
Uganda					
Metal	----	----	----	67	395
Zambia					
Metal	*4 800	*3 900	*5 000	4 036	...
Zimbabwe					
Metal	300	300	*300	417	...
Canada					
Metal	4 821	6 002	6 751	6 318	4 961
Oxides	632	549	476	278	349
Cuba					
Oxide, sinter & sulphide (b)	*2 300	*2 400	*2 800	*2 700	*2 900

**Exports of Cobalt**

tonnes

Country	1996	1997	1998	1999	2000
USA					
Metal	2 028	1 902	2 024	1 710	2 822
Oxides	408	676	582	603	1 321
Brazil					
Metal	190	211	241	549	627
China					
Metal	171	216	222	123	191
Oxides	114	204	287	238	155
Hong Kong					
Ore (c)	...	...	11	1 262	1 260
Metal (c)	850	1 154	704	1 600	3 788
Oxides (c)	1 989	1 819	216	59	68
India					
Metal (d)	44	27	17	220	...
Japan					
Metal	788	900	119	751	1 106
Oxides	65	88	134	193	234
Korea, Republic of					
Metal	5	39	34	96	240
Philippines					
Oxide	----	4	28	56	...
Saudi Arabia					
Oxide	164	----	305	480	183
Singapore					
Metal	313	454	678	1 113	884
of which, re-exports	292	453	627	825	644
Oxide	87	104	120	239	296
of which, re-exports	82	86	118	236	282
Taiwan					
Metal	202	445	445	112	191
Australia					
Ore	1	159	40	17	1 127
Metal	298	875	2 306	3 100	4 410
Oxides	132	289	32	1	4

## 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

## Cobalt

**Imports of Cobalt**

tonnes

Country	1996	1997	1998	1999	2000
Austria					
Metal	283	439	340	332	537
Belgium-Luxembourg					
Metal (b)	*1 000	*1 500	*2 000	*5 000	*3 600
Oxides	263	340	358	436	476
Czech Republic					
Metal	...	48	81	55	34
Denmark					
Metal	123	8	6	2	8
Estonia					
Metal	...	2	36	29	42
Finland					
Ore	----	138	12 690	90 323	66 618
Oxides	15	----	68	2	----
France					
Ore	30	76	1 639	80	65
Metal	1 256	2 023	1 768	1 428	1 618
Oxides	539	649	568	534	566
Germany					
Metal	2 508	2 127	2 481	2 094	2 289
Oxides	346	339	477	488	385
Greece					
Metal	39	43	57	44	108
Irish Republic					
Metal	149	191	265	151	207
Oxides	12	35	21	70	101
Italy					
Metal	682	691	595	564	539
Oxides	669	735	914	874	1 089
Netherlands					
Metal	577	456	679	1 394	781
Oxides	244	452	337	228	624
Norway					
Metal	1 754	1 100	1 661	1 371	1 717
Oxides	696	408	631	645	642
Poland					
Metal	33	37	48	37	46
Oxide	35	46	54	31	38
Russia					
Metal	107	1	72	17	158
Oxide	16	56	27	72	109
Slovenia					
Metal	...	...	83	134	180
Spain					
Metal	190	163	146	204	287
Oxides	540	783	901	1 071	1 223
Sweden					
Metal	816	669	1 004	680	764
Switzerland					
Metal	275	353	353	316	380
Turkey					
Metal	83	70	60	58	75
Oxides	46	80	53	59	59
United Kingdom					
Metal	3 875	3 980	3 950	4 434	3 835
Oxides	713	799	672	504	496
South Africa					
Ore	...	0	327	2 862	1 993
Metal	195	629	840	822	729
Oxides	2	7	44	67	10
Canada					
Metal	856	1 224	1 325	862	825
Mexico					
Metal	52	97	158	101	...
Oxides	176	250	267	205	476

**Imports of Cobalt**

tonnes

Country	1996	1997	1998	1999	2000
USA					
Metal	6 651	7 858	8 036	7 584	8 324
Oxide	892	1 149	1 205	1 264	1 513
Brazil					
Metal	306	1 002	297	185	325
Oxide	246	243	208	149	135
Venezuela					
Oxides	*100	29	13	36	44
China					
Ore	4 913	494	2 787	7 573	16 038
Metal	428	572	600	1 348	2 077
Oxides	108	150	52	98	87
Dubai					
Metal	11	272	434	...	...
Hong Kong					
Ore	204	273	----	...	787
Metal	1 342	1 626	890	1 481	3 608
Oxide	153	333	161	230	122
India					
Ore (a)	251	607	2 465	2 356	...
Metal (a)	361	408	384	357	...
Indonesia					
Ore	----	49	22	1 554	8 142
Metal	29	42	163	5	154
Oxides	69	...	79	82	239
Iran					
Metal	...	...	39	15	...
Oxide	*50	61	29	49	...
Japan					
Metal	6 662	7 016	6 789	7 476	9 337
Oxide	1 119	1 753	1 752	2 800	3 354
Korea, Republic of					
Metal	573	626	561	820	1 020
Oxides	172	147	126	218	511
Malaysia					
Metal	300	100	400	700	...
Oxides	83	44	72	62	...
Philippines					
Metal	...	33	12	20	...
Saudi Arabia					
Oxides	142	192	74	1 666	287
Singapore					
Metal	355	619	780	852	827
Oxide	290	207	137	279	275
Taiwan					
Metal	790	879	1 010	859	1 035
Oxides	232	197	164	182	210
Thailand					
Metal	48	119	109	131	204
Oxide	52	55	32	84	126
Australia					
Metal	44	73	125	78	76
Oxide	75	96	79	113	75

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	1996	1997	1998	1999	2000
Albania	2 630	324	2 300	869	-----
Armenia	9 088	6 770	9 158	9 830	12 234
Bulgaria	84 800	75 500	75 500	76 000	*76 000
Cyprus	1 700	3 900	4 908	5 006	5 100
Finland	9 261	8 500	9 500	10 500	11 500
Georgia	6 900	6 000	3 500	1 000	...
Macedonia	*13 500	*13 000	9 100	10 200	*10 000
Norway	7 394	6 671	2 699	-----	-----
Poland	421 900	414 737	435 800	463 200	454 100
Portugal	107 774	106 580	114 515	99 472	76 300
Romania	24 434	22 638	19 065	16 455	16 079
Russia	523 000	505 000	*500 000	*510 000	*550 000
Spain	38 398	38 887	39 438	3 500	23 469
Sweden	71 659	86 610	73 685	71 160	77 765
Turkey	52 200	64 600	73 900	73 051	76 053
Yugoslavia, Federal Republic of	69 467	73 567	70 900	51 700	52 900
Botswana	23 299	19 820	22 124	20 960	18 700
Congo, Democratic Republic	40 165	39 651	38 236	33 000	33 000
Morocco	15 100	15 400	10 700	7 123	6 500
Namibia	14 904	17 879	6 500	-----	5 070
South Africa	188 000	185 000	187 800	162 900	147 600
Zambia	339 744	331 235	378 798	270 995	249 304
Zimbabwe	9 028	6 832	5 952	4 977	6 000
Canada	688 426	659 500	705 766	620 085	634 182
Cuba	2 362	2 208	1 351	1 090	*1 000
Mexico	340 710	390 536	384 641	381 184	364 566
USA	1 918 300	1 939 600	1 859 400	1 600 900	1 443 000
Argentina	...	30 421	170 273	210 126	145 197
Brazil	46 203	39 952	34 446	31 371	31 786
Chile	3 115 800	3 392 000	3 686 900	4 391 200	4 602 000
Colombia	2 222	1 145	*1 800	*2 100	2 018
Peru	485 595	506 498	483 338	536 387	553 924
China	436 400	495 500	486 800	520 100	590 000
India	47 800	37 200	48 000	34 100	33 800
Indonesia	525 900	548 300	809 100	766 100	1 012 000
Iran	107 600	118 700	128 300	130 000	145 000
Japan	1 145	932	1 070	1 038	1 211
Kazakhstan	250 200	316 000	338 600	373 500	430 200
Korea, Dem. P.R. of	*10 000	*10 000	*10 000	*10 000	*10 000
Malaysia	20 219	18 821	13 907	4 600	-----
Mongolia	121 000	130 000	127 784	128 210	125 871
Myanmar	4 841	2 977	3 200	26 700	27 700
Pakistan	*3 000	-----	-----	-----	-----
Philippines	62 297	48 637	45 381	37 631	30 644
Saudi Arabia	1 142	1 101	782	821	837
Uzbekistan	64 000	74 400	74 400	66 000	*65 000
Australia	548 000	558 000	607 000	721 000	833 000
Papua New Guinea	186 665	111 515	152 200	187 921	203 061
World Total	11 100 000	11 500 000	12 300 000	12 700 000	13 200 000

**Smelter Production of Copper**

tonnes

Country	1996	1997	1998	1999	2000
Belgium	157 300	142 500	138 400	142 800	144 700
Bulgaria	98 000	98 000	112 000	107 200	160 600
Finland	150 300	159 000	156 000	149 600	155 400
Germany	385 400	349 100	320 000	*330 000	350 000
Norway	31 248	32 900	31 700	33 300	27 000
Poland	393 900	432 000	422 700	466 225	462 838
Romania	32 565	25 024	18 709	24 010	16 495
Russia	549 600	535 000	510 000	520 000	535 000
Slovakia	14 000	*10 000	*10 000	2 050	----
Spain	248 500	288 900	291 382	292 773	289 957
Sweden	92 600	93 493	81 642	76 023	105 033
Turkey	21 100	23 100	23 900	32 900	29 000
Yugoslavia, Federal Republic of	106 600	105 500	107 700	53 800	51 800
Congo, Democratic Republic (a)	49 800	38 400	35 000	28 000	25 200
Namibia	20 705	23 802	8 739	----	13 488
South Africa	148 400	163 600	153 200	149 300	140 000
Zambia (a)	324 100	301 500	255 081	258 900	242 600
Zimbabwe	*18 000	*18 000	18 000	14 500	*10 000
Canada	529 346	529 525	553 148	550 171	543 593
Mexico	311 264	332 999	334 714	314 430	308 225
USA	1 300 000	1 440 000	1 490 000	1 090 000	810 700
Brazil	172 075	177 060	167 205	193 014	185 345
Chile	1 355 600	1 389 600	1 403 100	1 473 900	1 460 400
Peru	323 797	323 382	356 189	350 377	340 447
China	615 600	789 000	838 600	837 000	999 700
India	45 300	51 400	107 600	224 500	256 000
Indonesia	----	----	----	126 700	173 800
Iran (b)	102 038	106 287	129 020	132 000	181 200
Japan	1 122 571	1 214 172	1 171 657	1 256 276	1 331 352
Kazakhstan	275 097	327 397	351 336	383 457	414 857
Korea, Dem. P.R. of	*10 000	*10 000	*10 000	*10 000	*10 000
Korea, Republic of	130 000	146 000	284 000	350 000	370 900
Oman	35 900	33 900	35 100	26 100	33 100
Philippines	185 000	173 200	161 600	162 000	159 900
Uzbekistan	95 000	110 600	84 900	72 000	75 000
Australia	186 000	208 000	236 000	344 000	393 000
<b>World Total</b>	<b>9 600 000</b>	<b>10 200 000</b>	<b>10 400 000</b>	<b>10 600 000</b>	<b>10 800 000</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	1996	1997	1998	1999	2000
Austria	69 120	74 093	74 786	74 075	...
Belgium	386 000	373 000	368 000	388 000	423 000
Bulgaria	22 300	34 500	32 100	37 800	48 200
Cyprus	1 688	4 045	4 920	5 260	5 088
Finland	110 715	116 328	122 894	114 700	114 000
France	39 100	35 600	22 400	6 500	----
Germany	670 800	673 712	695 869	695 626	709 400
Italy	85 800	85 700	29 100	28 500	72 800
Norway	33 937	32 900	31 700	33 300	25 300
Poland	424 708	440 644	446 837	470 494	486 002
Romania	28 323	22 912	21 008	20 983	13 803
Russia	599 000	639 900	655 900	736 600	824 000
Slovakia	28 100	30 300	19 900	1 988	----
Spain	263 989	292 000	303 076	304 617	315 734
Sweden	126 379	128 414	125 355	113 960	133 118
Turkey	100 712	114 600	91 900	60 500	67 100
United Kingdom	56 615	60 402	53 774	50 334	----
Yugoslavia, Federal Republic of	104 000	113 534	94 396	49 902	45 632
Congo, Democratic Republic	42 200	39 600	35 000	27 800	25 200
South Africa	116 000	126 500	123 100	116 400	100 300
Zambia	317 066	333 200	302 600	268 400	227 438
Zimbabwe	22 000	16 100	10 000	14 500	14 400
Canada	559 200	560 582	562 261	548 563	551 434
Mexico	240 500	280 500	336 800	324 200	323 200
USA	2 352 400	2 465 400	2 489 300	2 118 600	1 803 000
Argentina	*16 000	*16 000	*16 000	*16 000	*16 000
Brazil	172 075	177 060	167 205	193 014	185 345
Chile	1 748 200	2 116 600	2 334 900	2 666 400	2 668 300
Peru	338 061	384 085	411 431	433 831	451 726
China	1 120 500	1 179 400	1 211 300	1 174 200	1 371 000
India	39 303	65 900	134 000	208 100	259 100
Indonesia	----	----	----	90 800	158 400
Iran (a)	135 340	138 406	150 048	132 000	155 850
Japan	1 251 373	1 278 699	1 277 352	1 341 549	1 437 351
Kazakhstan	267 144	301 056	324 763	361 890	394 723
Korea, Dem. P.R. of	*10 000	*10 000	*10 000	*10 000	*10 000
Korea, Republic of	244 434	263 000	371 000	448 000	471 800
Myanmar (b)	----	----	9 730	27 853	26 546
Oman	20 420	23 635	24 360	17 171	24 281
Philippines	155 800	146 600	152 400	148 000	138 700
Uzbekistan	100 000	115 000	89 900	72 000	*75 000
Australia	335 000	295 000	310 000	440 000	*510 000
<b>World Total</b>	<b>12 800 000</b>	<b>13 600 000</b>	<b>14 000 000</b>	<b>14 400 000</b>	<b>14 800 000</b>

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, Egypt and Mongolia produce refined copper

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

**Exports of Copper**

tonnes

Country	1996	1997	1998	1999	2000
Albania					
Scrap	(a) *1 700	(a) *4 800	(a) *200	(a) *700	1 989
Armenia					
Ore	...	30 942	(a) *138 600	46 463	...
Scrap	(a) *500	(a) *200	(a) *1 200	4 172	...
Austria					
Unwrought	73 521	97 477	104 976	90 720	104 410
Unwrought alloys	6 312	2 330	1 746	624	1 509
Scrap	27 171	23 045	23 901	19 450	19 797
Azerbaijan					
Scrap	...	(a) *400	160	6 487	12 439
Belarus					
Unwrought	(a) *500	(a) *500	315	243	48
Scrap	(a) *500	(a) *3 100	4 975	6 126	7 400
Belgium-Luxembourg					
Ore	3	1	7 290	1 098	256
Matte & cement	56	156	4 770	5 518	2 166
Unwrought, unrefined	18 352	2 943	1 583	12 017	17 675
Unwrought, refined	129 340	146 106	144 764	171 924	199 088
Unwrought alloys	8 139	7 972	12 518	15 914	24 856
Scrap	60 467	92 842	69 907	96 893	152 934
Bosnia & Herzegovina					
Scrap (a)	*4 000	*3 600	*2 500	*2 200	*4 400
Bulgaria					
Ore	86 996	97 100	71 100	(a) *69 200	(a) *51 700
Unwrought	...	109 782	(a) *112 000	(a) *119 000	(a) *219 300
Scrap	2 047	1 838	(a) *4 400	(a) *3 300	(a) *6 400
Croatia					
Scrap	5 298	5 810	5 622	6 860	7 265
Cyprus					
Unwrought	1 491	4 048	4 938	5 260	5 105
Scrap	20 366	2 046	3 824	43 931	1 895
of which, re-exports	20 366	1 059	3 788	43 911	1 875
Czech Republic					
Unwrought	4 600	4 586	3 188	2 051	5 615
Scrap	26 600	26 574	28 055	32 461	37 390
Denmark					
Scrap	31 610	30 743	31 986	35 184	38 978
Estonia					
Unwrought	(a) *1 400	168	201	60	139
Scrap	4 436	4 869	4 253	5 647	8 819
Finland					
Unwrought, unrefined	35 102	39 275	32 951	32 347	41 580
Unwrought, refined	40 703	49 261	39 185	30 845	16 735
Unwrought alloys	960	1 388	1 004	838	847
Scrap	28 611	37 445	20 932	16 955	16 557
France					
Matte & cement	226	555	1 023	190	155
Unwrought	16 570	20 028	38 410	21 981	12 421
Unwrought alloys	7 283	10 169	12 754	13 329	13 776
Scrap	126 414	132 939	122 322	199 970	203 291
Georgia					
Ores & concentrates	...	...	...	5 531	46 486
Scrap	(a) *600	(a) *1 700	(a) *2 800	(a) *5 700	7 196
Germany					
Ore	14 898	24 727	11 896	14 898	26 023
Matte & cement	776	1 087	19	848	636
Unwrought, unrefined	532	4 171	236	118	25
Unwrought, refined	246 759	146 752	109 741	140 165	94 125
Unwrought alloys	21 905	25 952	26 457	27 496	35 588
Scrap	248 568	335 664	306 024	272 055	289 766
Greece					
Scrap	6 372	10 859	4 655	2 902	6 298
Hungary					
Scrap	13 305	13 268	14 183	13 742	20 586
Irish Republic					
Scrap	9 202	11 043	9 715	9 227	11 790

**Exports of Copper**

tonnes

Country	1996	1997	1998	1999	2000
Italy					
Matte & cement	1 794	59	1 114	6 219	677
Unwrought	9 676	5 215	3 438	4 888	12 084
Unwrought alloys	9 275	13 125	14 436	18 192	21 555
Scrap	46 468	57 488	50 519	54 144	66 030
Latvia					
Scrap	(a) *22 600	(a) *17 200	8 838	8 200	9 196
Lithuania					
Scrap	18 177	12 301	9 741	8 360	12 134
Macedonia					
Ore	54 115	19 754	38 170	...	(a) *5 000
Unwrought	1 271	4 937	(a) *1 200	(a) *1 800	(a) *1 100
Moldova					
Scrap	2 575	1 820	2 382	4 937	...
Netherlands					
Matte & cement	399	476	2 142	1 456	67
Unwrought	12 938	11 173	9 757	9 261	6 702
Scrap	104 176	106 125	74 457	87 502	132 013
Norway					
Ore	35 024	32 485	14 825	----	60
Unwrought	33 261	33 273	30 642	33 898	25 968
Unwrought alloys	1 922	1 808	1 589	1 971	1 674
Scrap	10 998	13 034	9 229	12 737	17 248
Poland					
Ores & concentrates	8	15 808	23 966	494	0
Unwrought	200 005	209 000	182 386	220 950	240 290
Unwrought alloys	7 978	11 452	10 778	8 794	6 121
Scrap	602	3 257	8 675	10 139	26 153
Portugal					
Ore	492 279	465 368	447 370	441 029	325 725
Unwrought	38	6	1 035	1 098	269
Scrap	9 222	9 044	9 892	12 337	20 006
Romania					
Ore	...	...	14 362	28 499	19 489
Matte & cement	...	2 434	2 015	...	...
Unwrought	13 254	15 141	8 394	9 990	13 064
Scrap	107	206	17 856	34 668	41 553
Russia					
Ore	56 779	34 693	39 797	26 182	25 161
Unwrought	562 772	571 451	550 900	640 150	647 978
Scrap	(a) *242 700	355 359	356 479	201 255	18 947
Slovakia					
Ores & concentrates	3 500	10 300	----	7 989	...
Unwrought	1 700	900	1 180	2 071	343
Scrap	(a) *2 600	(a) *4 500	4 544	8 345	7 854
Slovenia					
Scrap	3 500	5 200	6 257	6 372	7 857
Spain					
Ore	81 981	54 205	59 880	83 383	29 057
Unwrought, unrefined	27 228	33 514	27 464	25 461	27 068
Unwrought, refined	86 371	106 791	103 469	93 098	57 383
Unwrought alloys	3 238	4 714	4 706	7 955	7 502
Scrap	39 750	46 328	31 089	48 860	53 947
Sweden					
Ore	42 150	60 147	15 783	29 437	28 758
Matte & cement	...	6 108	7 053	...	3 853
Unwrought, refined	26 625	18 637	19 739	13 290	12 232
Unwrought alloys	5 951	11 375	8 841	7 924	8 712
Scrap	17 996	18 112	14 254	18 448	31 160
Switzerland					
Unwrought	4 846	6 242	6 556	5 791	4 313
Scrap	43 626	53 012	42 885	50 650	61 756
Turkey					
Ore	121 985	180 669	154 149	194 300	190 007
Matte & cement	...	...	4 569	7 179	2 235
Unwrought	10 018	8 139	7 630	17 704	5 899

**Exports of Copper**

tonnes

Country	1996	1997	1998	1999	2000
Ukraine					
Unwrought	7 778	5 271	11 140	51 156	(a) *70 200
Scrap	(a) *25 700	97 662	91 794	*90 000	*75 000
United Kingdom					
Ore & matte	1 072	10 163	8 559	9 667	6 717
Unwrought	6 767	5 852	9 776	8 648	10 725
Unwrought alloys	25 384	24 053	28 796	35 612	21 301
Scrap	115 731	111 722	108 407	107 527	220 383
Yugoslavia, Federal Republic of					
Unwrought	66 808	72 710	97 915	30 579	1 808
Algeria					
Scrap	9 337	9 338	5 772	5 806	...
Botswana					
Matte & cement (b)	23 400	18 100	20 400	20 200	23 500
Congo, Democratic Republic					
Unwrought, unrefined (c)	*20 000	*31 000	*30 000	*30 000	...
Unwrought, refined	15 900	5 900	...	...	...
Egypt					
Scrap	127	2 143	116	1 037	...
Ghana					
Scrap	*1 100	*1 100	1 528	1 709	...
Morocco					
Ore	40 650	40 827	35 725	29 480	...
Matte & cement	1 894	2 744	2 250	1 752	...
Scrap	5 527	7 062	5 140	7 732	...
Namibia					
Unwrought	18 306	21 360	7 750	----	5 004
South Africa					
Ores & concentrates (b)	...	8 617	5 613	6 454	5 259
Unwrought	69 478	68 669	80 877	70 683	43 251
Scrap	(a) *42 400	26 398	47 645	76 085	57 643
Tunisia					
Scrap	2 168	3 919	1 142	3 208	...
Uganda					
Scrap	2 222	224	118	216	225
Zambia					
Unwrought, refined	276 079	303 784	227 980	232 723	...
Zimbabwe					
Unwrought	10 538	7 999	11 023	25 361	...
Canada					
Ores & concentrates (b)	386 200	492 534	414 180	268 808	679 591
Matte & cement (b)	18 315	17 181	19 505	20 037	13 137
Unwrought	466 096	457 437	440 497	376 832	345 898
Scrap	113 559	126 177	101 346	65 153	73 133
Cuba					
Concentrates (a)	*8 300	*12 500	*9 400	*4 900	*10 100
Scrap (a)	*4 900	*3 200	*4 500	*4 100	*4 900
Mexico					
Concentrates	49 685	44 534	68 722	76 846	321 113
Matte & cement	2 936	2 475	15 663	6 361	3 726
Unwrought	153 704	196 678	237 005	132 914	98 752
Scrap	73 756	96 387	58 423	130 740	...
USA					
Ores & concentrates (b)	185 219	124 186	36 497	75 698	160 245
Matte & cement	14 999	32 075	10 556	12 717	18 369
Unwrought, unrefined	22 973	31 643	28 812	32 786	24 435
Unwrought, refined	178 167	93 342	85 618	25 602	97 006
Unwrought alloys	19 017	24 725	20 064	19 409	25 788
Scrap	400 413	386 286	310 763	316 777	488 050
Argentina					
Ores & concentrates	...	80 443	574 981	718 762	509 658
Scrap	8 555	3 640	2 583	5 882	11 293
Brazil					
Unwrought, refined	41 827	35 987	7 003	21 172	13 453

**Exports of Copper**

tonnes

Country	1996	1997	1998	1999	2000
Chile					
Ores & concentrates (b)	1 123 400	1 107 100	1 169 400	1 531 800	1 780 400
Unwrought, unrefined	226 900	158 400	157 400	157 100	170 000
Unwrought, refined	1 603 600	2 031 700	2 248 200	2 547 900	2 518 400
Scrap	2 308	2 489	2 751	4 463	4 423
Colombia					
Ore	13 762	9 786	16 671	8 699	10 923
Scrap	6 142	5 906	7 278	10 468	8 380
Ecuador					
Scrap	1 898	2 760	2 717	2 317	2 491
Peru					
Ore	201 684	295 679	250 747	192 814	320 657
Unwrought, unrefined	83 247	56 790	44 674	30 678	23 588
Unwrought, refined	320 102	361 477	347 575	415 849	376 523
Scrap	2 839	3 515	3 066	2 108	...
Venezuela					
Scrap	12 696	8 638	7 200	9 952	10 647
China					
Unwrought, unrefined	11 600	5 661	12 972	3 495	2 430
Unwrought, refined	39 791	77 869	106 108	94 586	114 525
Unwrought alloys	1 612	735	2 336	4 956	1 784
Scrap	8 024	11 934	9 584	11 162	10 154
Hong Kong					
Unwrought	54 598	59 835	76 815	44 418	57 962
of which, re-exports	54 296	59 694	76 675	43 610	54 768
Scrap	293 945	313 847	211 752	153 146	148 580
of which, re-exports	200 620	242 233	145 158	98 419	93 788
Indonesia					
Ores & concentrates	1 860 070	1 716 828	2 014 754	1 939 989	2 580 180
Unwrought	1 656	5 519	5 286	101 453	145 303
Scrap	2 504	4 329	9 772	8 498	7 791
Iran					
Ores & concentrates (a)	*100	*1 000	*15 000	*28 500	*105 500
Unwrought (a)	*4 000	*8 400	*23 200	*37 300	*19 900
Scrap (a)	*3 500	*2 600	*400	*4 400	*1 400
Israel					
Scrap	(a) *11 700	11 547	10 937	9 884	10 436
Japan					
Unwrought, unrefined	11 267	23 951	34 448	38 542	42 772
Unwrought, refined	164 606	157 696	292 907	318 854	299 377
Unwrought alloys	*9 000	11 413	18 215	16 471	18 167
Scrap	60 136	79 940	75 492	83 904	110 327
Jordan					
Scrap	3 440	2 804	2 166	2 071	2 838
Kazakhstan					
Ores & concentrates	20 339	11 097	0	10 326	(a) *96 800
Unwrought	266 626	306 033	339 205	355 931	392 482
Scrap	(a) *33 200	(a) *32 500	24 097	43 256	(a) *87 400
Korea, Dem. P.R. of					
Unwrought (a)	*600	*400	*500	*8 500	*2 000
Korea, Republic of					
Matte & cement	1 778	1 997	945	871	2 073
Unwrought	8 064	40 494	297 495	148 662	27 115
Unwrought alloys	579	689	1 423	5 492	9 196
Scrap	13 210	27 761	24 905	16 049	33 869
Kyrgyzstan					
Unwrought	(a) *5 300	(a) *5 500	(a) *4 300	(a) *500	120
Scrap	9 262	11 157	5 467	6 174	7 858
Malaysia					
Ore (b)	...	21 400	15 400	6 800	-----
Scrap	36 600	53 700	42 100	...	...
Mongolia					
Ores & concentrates	473 600	479 700	485 700	492 700	496 000
Scrap	442	508	139	168	428
Oman					
Unwrought	39 700	23 100	18 619	20 733	21 505
Scrap	104 404	58 623	39 240	34 420	2 213

**Exports of Copper**

tonnes

Country	1996	1997	1998	1999	2000
Pakistan					
Scrap (d)	1 544	23 192	2 028	3 265	3 746
Philippines					
Ores & concentrates	178 678	120 811	116 721	161 786	...
Unwrought	143 330	118 925	101 661	157 625	...
Scrap	21 766	32 782	26 070	56 586	...
Saudi Arabia					
Unwrought	980	...	8 504	11 181	3 096
Scrap	3 976	16 694	13 002	12 266	23 251
Singapore					
Unwrought	197 161	201 835	105 611	137 197	78 198
of which, re-exports	195 067	200 556	104 910	136 292	76 430
Scrap	65 453	64 963	70 668	57 685	60 191
Taiwan					
Matte & cement	...	2 261	2 005	3 649	4 056
Unwrought	5 137	5 494	5 073	5 191	6 237
Scrap	21 888	33 146	26 531	41 781	74 469
Thailand					
Unwrought	41	381	1 098	899	2 164
Scrap	5 669	18 688	18 926	15 536	18 446
Uzbekistan					
Unwrought (a)	*27 400	*25 000	*11 400	*16 200	*14 000
Australia					
Ores & concentrates	788 040	979 965	1 234 500	1 072 651	1 021 452
Unwrought, refined	117 285	116 050	126 804	253 919	323 372
Unwrought alloys	977	834	1 493	1 057	2 584
Scrap	26 448	30 708	29 157	26 673	33 256
New Zealand					
Scrap	1 982	2 133	1 871	2 192	3 016
Papua New Guinea					
Ores & concentrates (b)	170 216	86 791	187 249	182 290	184 477

## Note(s):-

- (1) In this table the term 'unwrought' copper corresponds to items 7402, 7403, 7405 of the Harmonised System and includes both unrefined (including blister) and refined copper  
(2) The term 'unwrought' as used here includes alloys unless these are separately specified. The term 'scrap' includes scrap alloys

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

(b) Cu content

(c) Including leach cathodes

(d) Years ended 30 June of that stated

**Imports of Copper**

tonnes

Country	1996	1997	1998	1999	2000
Austria					
Unwrought, unrefined	7 962	3 468	3 710	1 659	...
Unwrought, refined	34 438	39 497	35 536	26 540	36 391
Unwrought alloys	5 993	3 138	3 873	5 137	4 435
Scrap	55 765	90 668	82 586	88 130	81 509
Belarus					
Unwrought	*1 300	*1 300	1 978	2 213	1 707
Scrap	*1 500	*1 500	1 692	2 900	4 859
Belgium-Luxembourg					
Ore	17 421	2 888	20	1	121
Matte & cement	...	332	1 057	1 124	74
Unwrought, unrefined	123 023	101 160	94 045	140 069	215 157
Unwrought, refined	77 331	102 245	100 955	71 186	40 660
Unwrought alloys	9 234	4 690	5 979	3 474	3 683
Scrap	183 124	186 786	233 722	220 103	265 246
Bulgaria					
Ores & concentrates	92 674	86 580	*106 000	*37 000	...
Unwrought	6 300	8 700	*5 000	*5 000	...
Czech Republic					
Unwrought	19 186	12 203	14 352	14 510	14 288
Scrap	2 000	2 711	2 828	1 854	3 133
Denmark					
Unwrought	2 057	2 432	2 403	2 173	2 825
Scrap	8 243	6 509	14 707	8 021	10 673
Finland					
Ore	494 217	464 435	544 111	514 879	468 557
Unwrought, refined	20 503	21 206	14 223	15 229	9 631
Unwrought alloys	4 378	5 546	5 086	4 744	4 474
Scrap	28 461	34 309	15 046	11 317	7 576
France					
Matte & cement	1 101	2 755	1 119	191	151
Unwrought, unrefined	9 066	4 785	4 644	670	72
Unwrought, refined	455 948	527 980	585 477	550 007	585 829
Unwrought alloys	16 446	20 011	15 416	15 154	21 121
Scrap	90 091	87 556	100 868	93 233	87 946
Germany					
Ore	689 055	640 856	605 691	839 574	708 614
Matte & cement	12 002	20 230	7 915	2 910	7 515
Unwrought, unrefined	81 345	62 636	45 406	36 613	32 370
Unwrought, refined	450 441	526 854	578 913	565 299	689 673
Unwrought alloys	42 407	39 486	41 963	34 552	44 175
Scrap	427 249	568 738	610 197	515 564	490 828
Greece					
Unwrought	89 723	96 933	103 592	114 876	135 629
Unwrought alloys	464	815	1 691	678	624
Scrap	1 631	4 088	651	2 590	7 841
Hungary					
Unwrought	12 400	15 967	17 000	18 900	29 877
Scrap	2 871	2 754	3 743	4 913	8 310
Irish Republic					
Scrap	300	1 080	646	353	1 354
Italy					
Unwrought, unrefined	25 113	5 579	4 749	1 900	2 763
Unwrought, refined	437 613	450 196	564 851	625 183	603 259
Unwrought alloys	27 100	20 829	22 320	19 961	20 460
Scrap	228 079	259 546	254 408	195 367	179 050
Lithuania					
Scrap	15 300	6 409	2 499	527	1 764
Macedonia					
Unwrought	2 376	2 557	156	*100	...
Moldova					
Scrap	1 318	1 298	1 605	500	...
Netherlands					
Unwrought	37 515	44 133	78 016	137 729	155 553
Unwrought alloys	1 547	3 028	3 245	1 216	1 374
Scrap	95 804	101 936	92 486	76 482	78 166

**Imports of Copper**

tonnes

Country	1996	1997	1998	1999	2000
Norway					
Matte & cement (a)	*23 000	*25 000	*22 000	*20 000	...
Unwrought	3 155	4 422	3 713	3 225	3 594
Scrap	5 777	5 892	5 234	6 275	5 890
Poland					
Unwrought	1 686	2 251	600	4 151	8 106
Scrap	1 376	1 497	1 136	2 627	6 249
Portugal					
Unwrought	4 087	3 955	2 532	3 486	3 409
Scrap	710	902	2 282	1 879	487
Romania					
Ores & concentrates	35 902	22 584	10 964	51 193	41 206
Unwrought	4 628	754	...	4 165	15 938
Russia					
Ore	214 673	143 159	62 843	57 754	127 001
Unwrought	3 375	7 360	6 165	3 439	8 961
Scrap	2 207	3 933	2 347	711	221
Slovakia					
Ores & concentrates	14 000	16 600	24 600	*12 000	...
Unwrought, refined	4 788	7 769	7 500	1 264	1 136
Unwrought alloys	1 112	1 319	800	509	...
Slovenia					
Unwrought	3 900	4 000	4 819	3 881	3 540
Scrap	1 500	1 700	2 670	2 125	3 755
Spain					
Ore	736 576	888 487	935 942	1 003 472	936 207
Unwrought, unrefined	13 958	2 533	1 511	7 441	17 557
Unwrought, refined	21 226	12 431	29 069	29 186	30 885
Unwrought alloys	6 233	10 274	11 596	10 216	9 976
Scrap	59 273	67 737	72 145	66 828	81 310
Sweden					
Ore	85 258	67 018	53 966	67 539	152 426
Unwrought, unrefined	1 412	1 428	9 151	8 356	55
Unwrought, refined	43 888	47 673	61 531	76 899	82 430
Unwrought alloys	4 914	4 926	4 471	5 443	3 968
Scrap	29 025	32 096	41 339	35 529	34 120
Switzerland					
Unwrought	6 223	7 770	7 902	7 641	7 604
Unwrought alloys	1 112	1 319	1 482	1 980	3 588
Scrap	14 493	19 055	24 314	19 472	16 675
Turkey					
Ore	9 728	35 951	8 219	18 369	56 968
Unwrought	79 546	112 331	135 874	148 212	196 414
Scrap	20 536	17 443	7 358	14 822	21 744
United Kingdom					
Unwrought, unrefined	6 618	2 262	236	629	1 083
Unwrought, refined	328 106	365 895	348 509	303 267	338 641
Unwrought alloys	3 601	3 353	5 423	4 965	7 403
Scrap	47 366	54 856	54 483	35 572	23 089
Yugoslavia, Federal Republic of					
Ores & concentrates	189 580	184 399	138 527	28 679	67 875
Unwrought	10 200	6 459	4 627	387	1 808
Algeria					
Unwrought	2 055	55	26	141	...
Egypt					
Unwrought	...	1 041	1 396	406	...
Namibia					
Ores & concentrates (a)	1 029	9 628	3 199	-----	8 028
Nigeria					
Matte & cement	6 073	14	27	170	...
Unwrought	60	5 973	124	69	...
South Africa					
Ores & concentrates	22 365	5 255	455	47	259
Unwrought	2 281	1 570	2 184	1 531	3 851
Scrap	4 922	4 837	4 796	5 730	5 114
Tanzania					
Unwrought	17 568	25	14	3	...

## Copper

**Imports of Copper**

tonnes

Country	1996	1997	1998	1999	2000
Togo					
Unwrought	...	...	4 000	3 862	...
Tunisia					
Unwrought	3 062	2 265	2 521	3 069	...
Zambia					
Ores & concentrates (a)	4 599	4 560	4 560	4 560	1 140
Zimbabwe					
Matte & cement	1 900	3 200	*3 000	7 607	...
Unwrought	400	100	100	3 789	...
Canada					
Ores & concentrates (a)	134 825	134 853	123 650	137 662	211 299
Matte & cement	11 553	9 211	10 700	22 178	2 039
Unwrought	46 206	49 738	38 214	44 187	23 278
Unwrought alloys	5 364	6 892	7 624	8 276	12 303
Scrap	153 322	172 870	113 032	74 103	92 260
Mexico					
Ores & concentrates	16 167	108 388	100 661	143 352	245 596
Unwrought	47 690	66 387	184 581	191 838	271 412
Scrap	15 157	16 100	22 331	31 653	28 642
USA					
Ores & concentrates (a)	62 718	45 829	217 936	93 261	233
Matte & cement (a)	754	1 111	1 036	1 060	946
Unwrought, unrefined	106 661	155 384	180 184	174 758	194 685
Unwrought, refined	621 903	646 058	720 383	930 103	1 036 636
Unwrought alloys	17 415	22 122	17 510	23 596	9 619
Scrap	212 370	211 621	166 100	135 972	143 210
Argentina					
Unwrought, refined	33 594	36 078	40 682	27 973	33 043
Brazil					
Ores & concentrates	379 668	413 411	421 349	582 104	486 703
Unwrought	102 710	116 819	139 884	115 844	160 772
Scrap	4 984	2 066	1 206	1 129	4 120
Colombia					
Unwrought	603	535	1 033	2 054	3 785
Venezuela					
Unwrought, refined	16 711	17 304	16 900	11 522	...
Unwrought alloys	502	344	100	166	165
Abu Dhabi					
Scrap	...	...	2 861	6 231	...
China					
Ores & concentrates	824 810	937 776	1 182 867	1 250 148	1 813 288
Matte & cement	4 488	1 020	33	262	423
Unwrought, unrefined	133 010	111 070	95 858	129 960	124 710
Unwrought, refined	149 699	88 345	162 650	404 764	667 623
Unwrought alloys	8 232	11 410	9 892	13 012	19 813
Scrap	710 983	796 841	956 644	1 701 391	2 501 168
Dubai					
Scrap	4 685	2 490	2 209	...	...
Hong Kong					
Unwrought, unrefined	1 317	8 218	3 337	389	119
Unwrought, refined	89 005	137 654	267 964	47 589	54 044
Unwrought alloys	1 224	948	1 573	2 385	4 284
Scrap	355 475	332 420	188 490	112 815	106 409
India					
Ore (b)	60 056	87 890	296 022	400 546	...
Unwrought (b)	157 914	138 025	61 235	49 964	...
Scrap (b)	137 263	145 197	140 030	205 116	...
Indonesia					
Unwrought	105 233	58 997	68 284	44 446	32 917
Unwrought alloys	2 152	1 795	2 744	2 179	2 812
Scrap	1 188	2 755	1 406	2 327	3 966

Country	1996	1997	1998	1999	2000
Japan					
Ores & concentrates	3 840 935	3 769 017	3 975 398	4 286 193	4 443 316
Matte & cement	7 065	12 283	1 736	1 449	1 755
Unwrought	366 103	358 711	275 378	265 517	221 994
Unwrought alloys	6 026	6 342	3 237	2 790	5 561
Scrap	145 783	193 549	162 798	174 463	190 231
Kazakhstan					
Ores & concentrates	60 774	12 313	15 024	...	...
Scrap	*1 000	*1 000	1 467	1 582	...
Korea, Republic of					
Ore	347 994	518 112	973 450	1 166 630	1 177 284
Unwrought, unrefined	84 064	108 823	62 649	59 894	47 931
Unwrought, refined	305 141	395 659	487 358	484 686	418 932
Unwrought alloys	1 576	804	811	646	799
Scrap	111 575	119 921	88 947	184 778	203 607
Kuwait					
Unwrought	14 651	13 221	15 400	10 937	...
Kyrgyzstan					
Scrap	1 781	3 507	1 716	56	20
Malaysia					
Unwrought	145 500	162 800	136 300	*160 000	...
Oman					
Ores & concentrates	128 454	177 795	77 013	134 497	276 047
Pakistan					
Unwrought	11 697	10 800	9 600	10 000	10 501
Scrap (c)	4 722	2 776	99	3 773	2 189
Philippines					
Concentrates	509 068	496 324	435 065	518 920	432 061
Unwrought	18 669	15 798	10 017	17 124	13 142
Scrap	479	549	1 697	4 977	...
Saudi Arabia					
Unwrought	67 597	38 679	77 756	49 198	79 549
Singapore					
Unwrought	196 244	213 115	199 662	116 942	59 988
Scrap	27 437	28 221	26 821	18 701	21 647
Taiwan					
Unwrought	546 140	589 980	585 810	656 359	630 570
Unwrought alloys	11 084	10 198	13 902	17 040	13 256
Scrap	35 052	37 498	41 447	50 179	44 317
Thailand					
Unwrought	161 159	157 363	90 599	123 283	158 997
Scrap	3 342	3 686	1 795	2 949	4 358
Australia					
Matte & cement	21 955	3 196	3 691	5 499	6 386
Unwrought	17 010	7 687	524	2 895	21 302
Unwrought alloys	1 926	18 467	2 606	2 944	4 194
Scrap	2 918	4 022	4 318	6 679	4 136
New Zealand					
Unwrought	10 744	7 450	7 294	7 332	3 168
Scrap	3 303	2 040	...	4 520	3 410

## Note(s) :-

- (1) In this table the term 'unwrought' copper corresponds to items 7402, 7403, 7405 of the Harmonised System 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	1996	1997	1998	1999	2000
Russia	19 200 000	19 400 000	19 800 000	16 200 000	20 500 000
Angola	2 500 000	1 314 182	2 764 858	3 572 200	4 014 000
Botswana	17 707 000	20 111 000	19 770 000	21 348 000	24 635 000
Central African Republic	487 360	486 787	419 967	431 138	450 000
Congo, Democratic Republic	22 240 000	20 977 000	21 362 000	22 000 000	16 500 000
Ghana	714 300	829 524	823 125	680 964	887 049
Guinea	200 664	417 146	392 488	382 743	368 599
Ivory Coast	301 591	306 665	*310 000	398 282	320 208
Lesotho	...	...	...	43 000	20 000
Liberia	*150 000	*200 000	*300 000	*200 000	*200 000
Namibia	1 402 129	1 419 530	1 465 959	1 632 860	1 541 747
Sierra Leone	270 092	*400 000	*250 000	*300 000	*350 000
South Africa	9 946 750	10 041 380	10 704 628	10 014 815	10 805 303
Swaziland	75 000	----	----	----	----
Tanzania	126 700	123 100	97 800	235 000	354 400
Zimbabwe	437 266	421 307	28 732	42 578	23 028
Canada	----	----	300 006	2 492 807	2 557 964
Brazil	*200 000	*100 000	100 349	*900 000	*1 000 000
Guyana	46 729	36 573	34 399	46 668	83 912
Venezuela	172 016	284 208	96 811	95 144	51 970
China	118 380	120 385	...	685 000	...
India (a)	31 836	30 994	34 580	40 956	57 406
Indonesia	*29 000	*30 000	*28 000	*30 000	...
Australia	41 993 000	40 175 000	40 843 000	29 784 000	26 647 000
World Total	118 300 000	117 200 000	120 000 000	111 600 000	112 100 000

Note(s):-

- (1) This table does not show production of synthetic diamond  
(2) So far as possible the amounts shown include estimates for illegal production

(a) Years ended 31 March following that stated

**Exports of Diamond**

carats

Country	1996	1997	1998	1999	2000
Austria					
Gem, cut	40 476	5 614	3 132	3 630	...
Industrial	1 543	2 229	1 308	9 756	...
Dust	1 100 000	815 000	746 960	3 976 470	8 500 000
Belgium-Luxembourg					
Unsorted	37 000	369 000	1 000	...	...
Gem, rough	115 919 000	132 880 000	160 778 000	158 000 000	125 000 000
Gem, cut	7 230 000	7 723 000	7 762 000	3 500 000	3 500 000
Industrial	13 915 000	28 104 000	19 000 000	7 500 000	11 500 000
Dust	51 615 000	67 265 000	67 300 000	23 000 000	28 500 000
France					
Gem, cut	£68 200 000	£40 000 000	£45 900 000	£25 700 000	£64 500 000
Industrial	£200 000	£100 000	£300 000	£400 000	£1 084 000
Dust	...	3 708 955	...	...	1 000 000
Germany					
Gem, cut	147 309	108 063	263 058	176 713	175 521
Industrial	63 783	74 078	70 582	28 164	48 843
Dust	89 060 000	46 710 000	48 145 000	32 725 000	46 500 000
Irish Republic					
Industrial	11 775 000	59 785 000	23 745 000	52 530 000	24 430 000
Italy					
Unsorted	...	£61 000	£60 000	£369 000	£744 000
Gem, cut	£5 251 000	£4 946 000	£5 600 000	£9 144 000	£12 151 000
Industrial	£448 000	£427 000	£400 000	£483 000	£309 000
Netherlands					
Unsorted	£2 231 000	£2 555 000	£2 191 000	£3 094 000	£2 016 000
Gem, rough	£323 000	£6 000	£27 000	...	£14 000
Gem, cut	£6 569 000	£6 361 000	£6 443 000	£7 536 000	£6 466 000
Industrial	£2 053 000	£1 273 000	£1 777 000	£1 013 000	£2 951 000
Poland					
Industrial	...	55 000	5 000	10 000	...
Portugal					
Gem, rough	£512 000	£16 487 000	£5 610 000	£430 000	...
Gem, cut	£34 258 000	£34 744 000	£15 694 000	£29 996 000	£19 186 000
Romania					
Spain					
Gem, cut	£708 000	£874 000	£1 032 000	£1 505 000	£2 760 000
Industrial	£425 000	£351 000	£777 000	£496 000	£241 000
Sweden					
Gem, cut	£20 000	£200 000	£60 000	£125 000	£27 000
Switzerland					
Unsorted	75 000	60 000	65 000	80 000	30 000
Gem, rough	3 555 000	2 440 000	1 005 000	1 860 000	1 520 000
Gem, cut	1 380 000	1 070 000	300 000	400 000	720 000
Industrial	13 000	375 000	1 415 000	815 000	320 000
Dust	60 770 000	72 285 000	76 720 000	82 420 000	80 145 000
United Kingdom					
Unsorted	13 236 583	11 117 190	5 794 334	2 784 476	8 615 264
Gem, rough	63 333 558	69 757 480	65 595 954	63 338 299	61 766 734
Gem, cut	1 441 476	2 667 551	1 729 965	1 706 334	776 015
Industrial	25 737 087	25 772 889	35 394 187	29 978 880	28 767 728
Dust	41 146 270	73 505 020	56 682 115	49 034 945	...
Angola	917 419	1 314 182	2 764 858	2 132 900	2 749 800
Botswana					
Unsorted	...	21 669 025	16 411 175	22 338 695	...
Gem, cut	...	7 435	20 695	...	...
Industrial	...	43 850	42 160	946 835	...
Central African Republic					
Gem	333 782	340 126	278 873	431 138	...
Industrial	153 578	146 661	141 094	(c) ...	...
Guinea	200 664	392 334	337 448	383 620	367 521
Mauritius					
Unsorted	...	£900 000	£800 000	£200 000	...
Gem, rough	£192 000	£100 000	£2 000	£1 132 000	£150 000
Gem, cut	£16 841 000	£16 800 000	£16 400 000	£19 108 000	£22 980 000
Industrial	...	£2 600 000	£2 800 000	£261 000	£274 000
Namibia	1 486 457	1 475 871	1 188 616	1 768 329	1 706 206

**Exports of Diamond**

carats

Country	1996	1997	1998	1999	2000
Sierra Leone	270 100	70 000	15 800	9 320	77 200
South Africa					
Unsorted, gem and industrial	...	£775 033 000	£735 383 000	£967 414 000	£1 071 120 000
Dust	...	£12 559 000	£15 396 000	£12 901 000	£15 055 000
Tanzania	£10 050 000	£10 160 000	£7 310 000	£7 073 000	...
Tunisia					
Gem, cut	...	...	125 000	225 000	...
Industrial	135 000	120 000	...	10 000	...
Canada					
Unsorted	...	...	...	2 403 254	2 287 019
Gem, rough	3 404	8 364	23 652	31 281	13 919
of which, re-exports	420	7 300	13 298	4 552	3 219
Gem, cut	47 082	37 751	50 243	51 318	44 417
of which, re-exports	19 847	27 714	47 744	48 034	37 176
Industrial	82 104	51 164	21 262	21 287	2 557
of which, re-exports	21 834	43 183	18 068	14 302	1 626
Dust	144 333	214 006	105 948	117 795	93 019
of which, re-exports	36 842	130 296	12 097	----	----
USA					
Unsorted	161 880	392 257	235 438	412 683	736 156
of which, re-exports	92 190	324 721	185 942	309 157	267 782
Gem, rough	1 032 812	901 327	904 523	723 083	1 008 538
of which, re-exports	993 896	874 585	879 790	660 830	829 500
Gem, cut	1 929 108	2 562 779	3 174 135	5 028 081	15 446 571
of which, re-exports	1 853 409	2 475 724	3 016 585	4 644 266	14 640 872
Industrial	3 927 204	4 003 704	5 007 158	4 217 660	3 986 251
of which, re-exports	2 958 963	3 260 520	3 876 268	3 378 584	2 158 149
Dust	107 751 472	128 697 795	107 973 890	101 218 432	100 573 455
of which, re-exports	3 064 608	2 616 355	3 505 648	2 813 377	1 991 284
China					
Unsorted	5 395	34 445	20 140	205	9 790
Gem, rough	166 760	157 430	181 220	342 900	677 070
Gem, cut	433 395	712 770	741 365	1 252 785	1 445 740
Industrial	3 185 000	13 611 550	8 696 265	6 714 690	9 799 845
Dust	16 459 475	11 032 415	11 590 400	43 798 030	105 481 230
Hong Kong					
Unsorted (b)	1 223 601	2 189 423	681 469	1 332 656	769 577
Gem, rough (b)	1 689 051	1 679 345	2 209 337	6 582 249	8 349 438
Gem, cut	2 202 611	2 593 636	2 875 100	3 903 552	4 962 704
of which, re-exports	2 166 337	2 568 985	2 860 234	3 866 240	4 793 456
Industrial (b)	1 322 837	1 375 890	765 292	1 407 546	63 000
India					
Gem, rough (a) (b)	1 272 190	961 399	1 096 363	1 741 501	...
Gem, cut (a)	16 218 345	10 785 173	11 146 970	14 478 995	...
Dust (a)	25 298 473	5 316 542	6 046 126	12 449 088	...
Israel					
Gem, rough	£607 964 000	£640 967 000	£519 386 000	£820 167 000	£1 135 839 000
Gem, cut	£3 363 652 000	£3 471 354 000	£3 281 923 000	£3 948 839 000	£5 171 691 000
Industrial	£3 527 000	£5 653 000	£6 442 000	£31 382 000	£64 106 000
Japan					
Industrial	1 932 442	2 018 739	2 519 134	3 095 358	2 925 490
Dust	12 007 423	15 066 371	16 529 190	17 204 192	19 299 341
Korea, Republic of					
Gem, cut	14 868	4 283	108 902	...	70 000
Industrial	570	59	28 905	...	555 000
Kuwait					
Gem	1 215 000	635 000	480 000	535 000	...
Malaysia					
Unsorted	£1 900 000	£1 000 000	£700 000	£515 000	...
Gem, rough	£1 000 000	...	...	£2 000	...
Gem, cut	£53 900 000	£38 700 000	£19 800 000	£15 471 000	...
Singapore					
Gem	£143 214 000	£140 313 000	£59 892 000	£69 828 000	£116 349 000
of which, re-exports	£136 831 000	£119 016 000	£57 102 000	£66 262 000	£115 766 000
Industrial	£19 061 000	£12 068 000	£2 571 000	£9 899 000	£10 082 000
of which, re-exports	£18 377 000	£7 626 000	£2 180 000	£9 777 000	£9 261 000

**Exports of Diamond**

carats

Country	1996	1997	1998	1999	2000
Sri Lanka					
Gem, rough	207 749	197 132	58 928	...	...
Gem, cut	294 569	221 955	141 594	...	...
Industrial	421	3 554	4 893	...	...
Taiwan					
Gem, cut	10 000	...	...	...	...
Industrial	12 455 000	...	...	...	...
Dust	19 220 000	...	...	...	...
Thailand					
Unsorted	146 760	2 631 379	...	80 994	866 335
Gem, rough	237 316	141 394	...	2 922 926	1 456 619
Gem, cut	2 313 449	5 357 875	...	8 511 310	...
Industrial	10 321	107 630	...	1 185 480	1 279 034
Dust	...	4 324 916	...	3 892 850	394 680
Australia					
Unsorted	*36 869 000	*29 541 000	*52 218 000	*51 704 000	*31 292 000
Gem	27 940	32 638	31 869	22 000	48 000
Industrial	59 949	2 289	681	...	...
New Zealand					
Gem, cut (b)	£165 000	£153 000	£631 000	£373 000	£628 000

## Note(s):-

- (1) Carats have been used as the unit in this table except where the only obtainable figure is the value. In these cases the national currency figure has been converted to £ sterling
  - (2) See explanatory notes at the front of the volume regarding currency conversion
  - (3) In this table the term 'Dust' corresponds to item 7105.10 of the Harmonised System and includes both natural and synthetic diamond dust
- (a) Years ended 31 March following that stated  
 (b) Re-exports  
 (c) Included with 'gem'

**Imports of Diamond**

carats

Country	1996	1997	1998	1999	2000
Austria					
Unsorted	25 602	4 199	6 554	13 205	...
Gem	32 082	17 639	23 076	35 716	...
Industrial	16 718	63 103	53 712	653	...
Dust	12 430 000	15 984 000	23 571 880	24 887 565	33 500 000
Belgium-Luxembourg					
Unsorted	13 551 000	8 020 000	4 000 000	4 000 000	4 000 000
Gem, rough	114 412 000	129 298 000	124 000 000	140 000 000	120 500 000
Gem, cut	6 759 000	6 418 000	6 000 000	6 000 000	7 000 000
Industrial	27 258 000	35 803 000	44 500 000	31 500 000	27 000 000
Dust	52 965 000	83 005 000	74 895 000	56 000 000	62 500 000
Cyprus					
Unsorted	7 933	3 093	2 023	3 374	4 162
Gem, cut	10 973	13 344	8 493	10 598	9 987
Industrial	2 005	2 859	537	1 937	1 495
Czech Republic					
Unsorted	£192 000	£90 000	£234 000	£86 000	£245 000
Gem, rough	£300 000	£100 000	£121 000	£90 000	£47 000
Gem, cut	£128 000	£136 000	£168 000	£167 000	£398 000
Industrial	£320 000	£271 000	£214 000	£242 000	£297 000
Dust	...	£639 000	£650 000	£535 000	£702 000
Finland					
Gem, cut	10 580	9 363	20 000	115 000	105 000
Industrial	503	164	50 000	175 000	125 000
France					
Unsorted	...	207 370	...	...	10 500 000
Gem, cut	313 148	350 793	...	...	2 000 000
Industrial	213 447	388 951	...	...	2 000 000
Dust	10 468 125	13 560 155	10 500 000	16 000 000	12 000 000
Germany					
Gem, cut	522 690	494 351	504 940	516 680	530 657
Industrial	470 303	1 797 380	2 434 993	2 645 448	3 418 322
Dust	74 230 000	51 350 000	61 055 000	70 825 000	57 500 000
Greece					
Unsorted	£748 000	£503 000	£599 000	£180 000	£447 000
Gem, rough	£17 000	...	£155 000	£62 000	£11 000
Gem, cut	£2 280 000	£2 105 000	£2 435 000	£1 106 000	£2 062 000
Industrial	£711 000	£788 000	£1 049 000	£433 000	£801 000
Hungary					
Dust	...	1 671 575	1 010 600	758 770	715 975
Irish Republic					
Unsorted	690 000	4 940 000	855 000	8 300 000	34 310 000
Gem, rough	1 170 000	535 000	250 000	2 170 000	1 910 000
Gem, cut	7 655 000	8 705 000	5 220 000	17 350 000	20 375 000
Industrial	53 580 000	61 785 000	3 045 000	5 980 000	8 565 000
Italy					
Unsorted	£320 000	£486 000	£270 000	£1 334 000	£1 612 000
Gem, rough	£320 000	£476 000	£500 000	£341 000	£631 000
Gem, cut	£163 796 000	£17 391 000	£12 330 000	£215 392 000	£236 883 000
Industrial	£3 266 000	£3 001 000	£4 600 000	£5 041 000	£7 469 000
Malta					
Gem, rough	£118 000	£56 000	£88 000	£33 000	...
Industrial	£15 000	£13 000	£1 000	£2 000	...
Netherlands					
Unsorted	£7 566 000	£7 904 000	£7 431 000	£7 936 000	£8 713 000
Gem, rough	----	£23 000	£156 000	£13 000	£184 000
Gem, cut	£20 294 000	£17 370 000	£14 976 000	£19 964 000	£26 503 000
Industrial	£471 000	£606 000	£385 000	£928 000	£236 000
Norway					
Unsorted	...	...	...	420 000	30 000
Gem	25 000	...	...	2 445 000	2 550 000
Industrial	10 000	...	...	50 000	90 000
Dust	375 000	...	...	520 000	290 000
Poland					
Unsorted	...	...	...	40 000	20 000
Gem	340 000	50 000	6 350 000	10 000	30 000
Industrial	100 000	275 000	415 000	110 000	235 000

**Imports of Diamond**

carats

Country	1996	1997	1998	1999	2000
Portugal					
Unsorted	£192 000	£79 000	£114 000	£67 000	£43 000
Gem, rough	£34 962 000	£49 170 000	£27 441 000	£19 294 000	£17 753 000
Gem, cut	£3 522 000	£3 832 000	£3 890 000	£11 777 000	£12 550 000
Industrial	£1 217 000	£1 014 000	£1 335 000	£684 000	£491 000
Romania					
Gem, cut	199 393	166 776	...	...	...
Industrial	£500 000	£700 000	£600 000	...	...
Slovenia					
Gem, cut	...	...	10 000	10 000	15 000
Industrial	...	...	10 000	35 000	110 000
Dust	...	...	700 000	845 000	1 730 000
Spain					
Unsorted	£346 000	£1 141 000	£1 557 000	£2 502 000	£3 264 000
Gem, cut	£14 466 000	£19 806 000	£21 351 000	£27 521 000	£30 064 000
Industrial	£1 454 000	£1 789 000	£2 049 000	£2 923 000	£2 246 000
Sweden					
Unsorted	£43 000	£272 000	£546 000	£605 000	£687 000
Gem, cut	£2 800 000	£2 715 000	£2 478 000	£2 482 000	£3 002 000
Industrial	£57 000	£27 000	£77 000	£75 000	£227 000
Dust	...	...	£4 263 000	£4 338 000	£4 797 000
Switzerland					
Unsorted	365 000	10 000	10 000	15 000	30 000
Gem, rough	4 270 000	4 170 000	4 535 000	3 515 000	4 435 000
Gem, cut	420 000	375 000	420 000	485 000	585 000
Industrial	475 000	575 000	365 000	575 000	930 000
Dust	67 550 000	107 225 000	94 210 000	90 615 000	83 965 000
Turkey					
Unsorted	...	...	...	70 970	974 245
Gem	3 068 452	7 627 692	833 102	618 000	4 873 050
Industrial	111 921	1 111 596	28 783	198 545	463 625
Dust	9 030 000	7 244 305	...	3 878 635	4 908 115
United Kingdom					
Unsorted	8 282 231	14 987 637	10 211 264	4 676 550	5 568 191
Gem, rough	72 676 862	65 930 928	105 803 662	151 651 213	80 804 440
Gem, cut	6 924 970	8 853 149	6 694 184	4 809 531	6 309 887
Industrial	20 733 158	28 967 856	28 797 763	8 406 120	16 000 464
Dust	60 909 330	68 967 250	82 518 395	64 953 625	98 375 325
Botswana					
Unsorted	...	35 250	100 000	...	...
Gem	...	262 690	204 070	22 030	...
Industrial	...	299 430	3 857 785	156 470 650	...
Dust	...	...	40 090	...	...
Mauritius					
Gem, rough	£8 772 000	£8 200 000	£5 100 000	£8 514 000	£10 853 000
Gem, cut	£2 689 000	£5 400 000	£7 400 000	£7 412 000	£6 668 000
Industrial	£6 800 000	£6 900 000	£6 400 000	£6 922 000	£4 777 000
South Africa					
Unsorted	41 138	55 280	68 677	63 256	61 130
Gem, rough	814 417	601 542	397 265	639 788	826 225
Gem, cut	6 936	72 135	70 734	56 764	101 330
Industrial	917 470	1 473 889	1 272 212	1 480 601	1 197 831
Dust	4 712 936	3 617 197	3 519 364	5 342 778	5 624 013
Tunisia					
Unsorted	150 000	140 000	140 000	225 000	...
Gem, cut	35 000	...	10 000	95 000	...
Industrial	100 000	5 185 000	235 000	----	...
Dust	30 000	105 000	120 000	50 000	...
Canada					
Unsorted	£16 990 000	£14 547 000	£17 012 000	£22 046 000	£31 940 000
Gem, cut	190 926	221 239	249 969	307 423	...
Industrial	2 266 981	1 733 188	822 194	682 472	...
Dust	4 063 259	5 082 213	2 346 249	2 533 200	3 759 535
Mexico					
Industrial	636 125	539 110	470 530	1 354 900	...
Dust	1 427 255	2 250 650	6 723 830	4 787 910	...

**Imports of Diamond**

carats

Country	1996	1997	1998	1999	2000
Panama					
Gem	50 000	...	30 000	10 000	...
USA					
Unsorted	77 114	14 529	29 325	27 796	124 529
Gem, rough	1 451 423	1 936 591	1 439 349	4 266 330	2 276 708
Gem, cut	12 256 625	13 448 617	16 401 998	19 120 150	19 507 925
Industrial	4 616 345	4 432 122	6 101 071	4 399 015	5 068 360
Dust	218 200 260	254 596 244	222 232 369	208 530 774	289 134 221
Chile					
Dust	636 835	704 690	261 230	...	...
Venezuela					
Industrial	1 425 000	5 100 000	300 000	600 000	...
Abu Dhabi					
Gem	665 000	255 000	740 000	1 760 000	...
Dust	85 000	...	100 000	30 000	...
China					
Unsorted	156 365	90 220	80 960	167 255	260 565
Gem, rough	1 275 425	1 488 295	1 620 820	2 677 240	3 170 885
Gem, cut	332 065	638 575	860 265	1 907 060	3 607 675
Industrial	1 465 900	2 332 965	91 300	624 500	474 910
Dust	8 493 900	11 838 030	2 210 882	3 432 070	1 950 515
Dubai	315 000	650 000	2 370 000	...	...
Hong Kong					
Unsorted	1 008 611	1 409 419	701 796	1 042 219	785 071
Gem, rough	1 172 490	1 219 496	1 794 802	6 712 549	8 948 599
Gem, cut	6 639 758	7 261 058	6 729 602	9 991 900	11 222 357
Industrial	448 374	1 023 602	770 004	1 681 310	2 080 459
India					
Gem, rough (a)	81 234 294	102 819 567	118 929 243	112 015 856	...
Gem, cut (a)	884 496	861 207	1 619 280	3 096 916	...
Dust (a)	12 389 398	7 360 533	3 709 153	6 509 609	...
Israel					
Gem, rough	£2 708 907 000	£2 529 449 000	£1 858 253 000	£2 644 679 000	£3 031 605 000
Gem, cut	£542 800 000	£565 394 000	£664 209 000	£933 048 000	£1 418 302 000
Industrial	£11 590 000	£17 821 000	£11 913 000	£26 479 000	£62 375 000
Dust	...	£6 353 000	£6 673 000	£3 696 000	£4 929 000
Japan					
Gem, rough	37 297	31 940	22 289	17 770	21 976
Gem, cut	3 610 982	2 659 711	2 479 136	3 077 944	2 710 978
Industrial	969 731	1 976 261	2 150 393	1 555 576	523 671
Dust	2 418 571	2 725 505	78 121 591	101 872 554	113 250 487
Jordan					
Unsorted	...	...	...	5 000	5 000
Industrial	...	65 000	20 000	15 000	55 000
Korea, Republic of					
Gem, cut	309 954	...	59 744	25 000	175 000
Industrial	304 777	...	93 837	590 000	1 020 000
Dust	75 511	...	222 352	...	...
Malaysia					
Unsorted	£48 281 000	£48 849 000	£32 200 000	£14 425 000	...
Gem, cut	£43 286 000	£42 743 000	£10 700 000	£15 308 000	...
Industrial	£2 369 000	£2 442 000	£1 600 000	£639 000	...
Oman	1 640 000	180 000	1 775 000	----	9 840 000
Philippines					
Industrial	...	63 704	50 698	...	...
Singapore					
Unsorted	£25 000	£1 047 000	£2 259 000	£163 000	£78 000
Gem, rough	...	£869 000	£3 677 000	£224 000	£2 146 000
Gem, cut	(b) £341 338 000	£298 971 000	£115 371 000	£198 204 000	£241 561 000
Industrial	£6 727 000	£8 917 000	£5 349 000	£10 663 000	£11 572 000
Sri Lanka					
Unsorted	37 771	24 443	31 610	...	...
Gem, rough	806 991	777 967	717 606	...	...
Gem, cut	70 197	73 387	56 682	...	...
Industrial	113 573	139 628	155 282	...	...
Dust	784 768	306 909	250 160	...	...

**Imports of Diamond**

carats

Country	1996	1997	1998	1999	2000
Taiwan					
Unsorted	85 000	25 000	60 000	35 000	10 000
Gem, rough	----	5 000	10 000	150 000	5 000
Gem, cut	385 000	560 000	580 000	1 380 000	2 075 000
Industrial	955 000	3 030 000	1 730 000	3 070 000	9 440 000
Dust	36 600 000	33 830 000	31 680 000	24 625 000	33 435 000
Thailand					
Unsorted	1 440 188	108 217 127	...	48 701 533	...
Gem, rough	1 055 215	8 274 281	...	747 944 375	210 850 398
Gem, cut	4 366 744	88 912 115	...	...	43 283 548
Industrial	272 902	323 867	...	713 137	3 939 995
Dust	5 639 409	158 222 379	...	59 279 323	5 534 594
Australia					
Unsorted	24 014	13 584	3 489	1 000	...
Gem, rough	68 871	613 222	309 037	(b) 169 000	(b) 258 000
Gem, cut	144 244	143 706	133 069	...	...
Industrial	1 684 309	1 164 113	889 903	824 000	664 000
Dust	767 611	1 560 960	1 427 285	1 626 000	1 596 000
New Zealand					
Unsorted	£166 000	£17 000	£600	£11 000	£23 000
Gem, rough	£313 000	£222 000	£139 000	£60 000	...
Gem, cut	£7 480 000	£7 623 000	£6 939 000	£7 911 000	£9 498 000
Industrial	£74 000	£72 000	£174 000	£53 000	£42 000

## Note(s) :-

- (1) Carats have been used as the unit in this table except where the only obtainable figure is the value. In these cases the national figure has been converted to £ sterling
- (2) See explanatory notes at the front of the volume regarding currency conversion
- (3) In this table the term 'Dust' corresponds to item 7105.10 of the Harmonised System and includes both natural and synthetic diamond dust
- (a) Years ended 31 March following that stated
- (b) Gem; total

**Production of Diatomite**

tonnes

Country	1996	1997	1998	1999	2000
Czech Republic	35 000	42 000	35 000	37 000	34 000
Denmark (a)	*1 000	*1 000	...	...	...
Denmark					
Moler (d)	152 000	207 000	213 000	164 000	*160 000
France	*80 000	*80 000	*80 000	*80 000	*75 000
Germany	47 728	50 475	53 953	53 444	54 309
Hungary	2 990	2 885	2 368	1 240	1 878
Iceland	25 607	27 482	25 734	28 299	27 614
Italy	*25 000	*25 000	*25 000	*25 000	*25 000
Macedonia	*5 000	*5 000	*5 000	*5 000	*5 000
Poland	1 700	1 200	1 530	1 240	1 200
Portugal	1 550	1 540	2 265	785	686
Romania	56 906	23 880	34 600	11 592	9 712
Soviet Union (f)	*100 000	*90 000	*80 000	*80 000	*80 000
Spain (b)	39 115	43 207	57 105	55 000	55 000
Turkey	...	1 000	3 643	5 926	...
Algeria	3 173	2 332	2 133	2 563	2 979
Kenya	415	297	468	3 587	3 634
Canada	*1 000	*1 000	*1 000	...	...
Costa Rica	900	500	200	...	...
Mexico	52 200	59 463	66 812	72 181	96 448
USA (c)	729 000	773 000	725 000	747 000	677 000
Argentina	8 647	9 449	25 430	34 056	*35 000
Brazil (e)	15 189	14 215	13 557	9 223	7 201
Chile	11 592	11 825	14 868	14 477	13 384
Colombia	*4 000	*4 000	*4 000	*4 000	*4 000
Peru	*35 100	*35 100	*35 100	*35 000	*35 000
China	...	...	114 600	82 170	...
Iran (h)	...	...	600	4 350	*5 000
Japan	194 115	*194 000	*190 000	*190 000	*190 000
Korea, Republic of	69 543	53 538	37 649	30 222	34 143
Saudi Arabia	...	...	1 000	1 000	1 000
Thailand	1 576	91	----	2 332	390
Australia (g)	12 966	12 643	14 433	25 330	28 810
<b>World Total</b>	<b>1 830 000</b>	<b>1 890 000</b>	<b>1 870 000</b>	<b>1 810 000</b>	<b>1 750 000</b>

Note(s):-

(1) In addition to the countries listed, Egypt is 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 for individual countries

(g) Years ended 30 June of that stated

(h) Years ended 20 March following that stated

**Exports of Diatomite**

tonnes

Country	1996	1997	1998	1999	2000
Austria	...	7 852	7 187	6 197	7 177
Belgium-Luxembourg	2 455	2 417	4 061	14 752	1 850
Czech Republic	7 359	6 563	5 989	5 929	5 976
Denmark	*80 000	*100 000	*100 000	*80 000	*80 000
France	34 684	31 561	31 441	29 973	35 585
Germany	5 727	7 408	10 430	5 540	5 209
Iceland	26 358	29 935	25 410	28 482	11 414
Italy	1 106	1 260	1 129	1 804	1 531
Netherlands	262	347	229	239	564
Russia	2 533	635	181	258	407
Spain	2 122	1 577	2 301	2 152	2 243
Sweden	1 343	1 223	1 266	1 339	1 682
United Kingdom	2 620	486	705	565	515
Algeria	1 123	693	353	735	880
Kenya	...	...	619	534	540
South Africa	...	606	670	5 723	1 063
Mexico	9 442	10 831	10 344	12 249	15 063
USA	145 340	140 965	138 706	123 931	131 770
Chile	4 566	5 581	6 357	8 280	7 082
China	132 872	138 309	125 529	73 003	74 161
Hong Kong (a)	3 327	2 641	2 463	1 363	808
Indonesia	2 585	656	2 805	4 349	6 725
Iran	...	...	5 550	5 887	...
Japan	2 068	1 715	2 669	2 206	1 139
Saudi Arabia	2 056	2 678	4 807	1 080	945
Singapore (a)	640	502	549	341	260
Taiwan	4 448	4 921	3 693	929	1 158

Note(s):-

(a) Re-exports

**Imports of Diatomite**

tonnes

Country	1996	1997	1998	1999	2000
Austria	...	19 156	16 869	20 392	22 891
Belarus	...	...	3 476	4 375	2 299
Belgium-Luxembourg	5 569	6 635	5 255	6 621	6 776
Bulgaria	472	701	...	...	...
Croatia	772	799	751	981	631
Czech Republic	5 602	6 301	2 318	2 115	1 895
Denmark	9 897	7 867	7 906	5 519	5 993
Finland	3 486	3 146	2 462	2 652	2 738
France	13 733	13 116	18 092	16 844	14 075
Germany	47 509	46 530	52 079	50 799	45 488
Greece	2 325	962	867	585	714
Hungary	...	2 290	2 989	3 222	2 975
Irish Republic	445	483	667	385	211
Italy	7 244	7 186	9 722	6 847	7 865
Netherlands	14 214	22 359	10 909	18 844	20 654
Norway	1 472	1 889	2 254	1 984	1 974
Poland	5 812	6 512	6 187	6 717	7 150
Portugal	1 186	1 243	1 667	1 493	2 151
Romania	1 893	2 144	2 592	3 209	3 133
Russia	2 894	3 462	4 220	6 195	6 130
Slovakia	1 568	2 055	1 913	1 868	...
Spain	4 218	5 258	5 563	5 706	5 501
Sweden	5 130	4 885	5 138	4 998	5 964
Switzerland	4 084	3 669	3 764	3 757	3 869
Turkey	1 308	893	880	880	1 183
United Kingdom	16 276	20 595	42 274	30 885	35 505
Yugoslavia, Federal Republic of	...	1 269	1 240	955	1 104
Egypt	...	856	1 207	596	...
Morocco	984	739	714	474	...
Nigeria	571	715	451	956	...
South Africa	2 009	4 506	4 175	4 621	4 272
Tunisia	980	833	714	1 090	...
Canada	23 079	25 002	23 032	22 148	20 339
Costa Rica	182	186	226	142	60
El Salvador	634	1 676	762	1 120	786
Guatemala	819	1 004	980	891	337
Honduras	588	546	739	842	...
Mexico	971	2 117	3 561	5 095	...
Panama	650	534	552	620	...
USA	1 551	2 040	802	387	531
Argentina	4 665	5 382	5 793	6 669	5 848
Brazil	2 601	3 309	2 913	2 840	3 182
Chile	1 072	5 961	4 562	5 660	14 748
Colombia	3 063	2 734	2 800	4 222	3 158
Ecuador	312	268	329	231	392
Peru	1 941	2 123	2 177	2 718	...
Venezuela	732	1 336	1 385	1 310	1 500
China	3 149	5 848	9 306	3 668	3 053
Hong Kong	4 539	3 191	2 903	1 428	1 547
India (a)	2 504	2 596	2 996	2 804	...
Indonesia	3 533	4 231	2 477	2 610	3 405
Iran (b)	...	231	369	382	...
Japan	8 130	8 668	7 735	7 927	9 054
Malaysia	2 937	3 727	3 844	...	...
Philippines	3 722	2 513	714	1 318	...
Saudi Arabia	585	10 954	1 001	1 284	3 169
Singapore	2 191	1 773	1 804	2 599	3 151
Taiwan	13 140	10 964	10 287	9 784	8 316
Thailand	...	256	660	1 070	1 398
Australia	7 867	9 663	9 181	9 454	9 440
New Zealand	1 797	1 491	1 352	2 026	1 479

Note(s) :-

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

**Production of Feldspar**

tonnes

Country	1996	1997	1998	1999	2000
Czech Republic	211 000	243 000	266 000	244 000	337 000
Finland	40 265	40 000	42 740	43 827	38 609
France	546 000	621 000	620 000	640 000	642 000
Germany	359 666	455 969	333 893	...	...
Greece	60 000	68 000	71 000	78 500	*96 000
Italy	2 287 086	2 118 117	2 503 541	*2 500 000	...
Macedonia	*3 000	*8 000	8 137	11 275	*10 000
Norway	72 555	78 169	82 036	72 777	71 300
Poland	86 100	108 100	116 700	105 300	95 588
Portugal	96 955	81 597	96 854	114 685	136 730
Romania	34 975	25 962	37 010	36 627	38 361
Russia	29 330	*29 000	...	...	...
Spain	415 189	400 156	429 614	430 000	550 000
Sweden	43 167	42 308	34 363	...	...
Turkey	912 204	1 011 542	1 089 483	1 369 655	1 147 716
United Kingdom (c)	8 211	8 108	3 278	2 448	3 645
Yugoslavia, Federal Republic of	4 801	4 880	4 280	3 452	4 254
Algeria	*7 000	*7 000	8 026	2 820	707
Egypt (d)	53 783	57 335	325 654	*330 000	*330 000
Morocco	12 659	15 110	18 332	1 112	8 400
Nigeria	800	1 225	1 682	...	...
South Africa	53 644	59 688	56 761	57 736	66 774
Zimbabwe	3 248	2 254	2 241	1 915	2 059
Guatemala	11 060	11 400	17 249	17 072	17 804
Mexico	139 972	155 760	197 866	262 241	334 439
USA	890 000	*900 000	*820 000	*875 000	*790 000
Argentina	72 539	105 320	42 468	62 926	*61 000
Brazil (e)	191 462	79 399	145 783	150 492	*150 000
Chile	3 702	3 808	1 460	1 346	2 311
Colombia	78 093	66 845	*55 000	*55 000	*55 000
Ecuador	10 321	60 328	69 319	33 142	47 042
Peru	5 918	2 502	3 984	1 594	5 642
Uruguay	2 006	3 229	2 240	1 556	2 493
Venezuela	204 735	160 000	148 000	156 000	139 000
China	*2 000 000	*2 000 000	*2 000 000	*2 000 000	*2 000 000
India (a)	101 697	112 238	116 351	194 158	157 897
Indonesia	*50 000	24 399	40 434	23 236	...
Iran (b)	122 343	160 615	141 862	239 779	*240 000
Japan (f)	1 163 000	*1 050 000	*870 000	*980 000	*1 000 000
Jordan	7 500	7 340	4 008	1 000	11 112
Korea, Republic of	319 112	341 018	248 493	409 334	330 417
Malaysia	13 983	9 779	31 369	26 940	29 895
Myanmar (a)	13 295	11 960	*12 000	*12 000	*12 000
Pakistan (d)	32 572	25 169	26 360	29 235	*43 000
Philippines	44 392	12 717	2 938	16 909	3 440
Saudi Arabia	...	8 200	10 000	*21 000	21 100
Sri Lanka	23 970	25 676	25 274	26 012	28 638
Taiwan	20	----	----	171	409
Thailand	684 983	611 789	440 288	626 415	542 991
Uzbekistan	*4 000	*4 000	...	...	...
Australia (d)	65 840	68 796	65 459	74 892	94 096
World Total	11 500 000	11 500 000	11 500 000	12 500 000	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**

tonnes

Country	1996	1997	1998	1999	2000
Austria	22 180	20 668	22 547	14 943	6 295
Czech Republic	67 515	54 474	57 546	62 273	85 931
Finland	25 972	23 048	25 953	27 876	28 985
France	92 883	122 119	126 350	242 379	296 491
Germany	61 033	60 999	35 317	70 699	60 691
Greece	25 789	19 314	10 576	17 703	...
Italy	37 349	42 687	89 042	136 362	122 154
Macedonia	5 568	5 496	8 587	...	...
Netherlands	23 276	2 990	3 680	821	810
Norway	69 578	67 741	83 943	69 297	71 154
Poland	...	200	100	556	831
Portugal	1 850	2 069	2 060	1 861	2 616
Russia	70 315	8 417	9 627	8 463	12 136
Spain	29 809	22 653	29 512	40 915	57 316
Sweden	24 731	16 385	14 531	23 574	20 164
Turkey	738 156	950 140	1 283 211	1 799 854	2 114 432
United Kingdom	237	853	148	131	140
South Africa	3 454	2 468	1 439	1 381	726
Guatemala	3 648	5 044	4 760	4 596	5 957
Mexico	8 323	11 379	8 809	10 676	8 798
USA	10 169	7 224	13 193	9 882	11 449
Brazil	59	3 025	49	3 081	61
China	567 741	591 265	608 501	539 040	607 067
Hong Kong (a) (b)	139 415	164 965	134 751	128 586	60 144
India (c)	94 716	77 644	52 631	56 981	...
Iran	...	...	995	2 918	...
Japan	33 324	13 062	8 533	6 422	7 166
Korea, Republic of	37 509	34 248	14 080	5 481	3 970
Singapore of which, re-exports	(a) 6 738	105	67	321	15
	(a) 6 666	93	----	321	15
Taiwan	1 720	1 579	2 996	4 278	6 054
Thailand	284 768	290 688	241 387	282 680	294 292
Australia	47 052	42 980	27 095	33 731	54 569

Note(s):-

- (a) May include some leucite, nepheline and nepheline syenite
- (b) Re-exports
- (c) Years ended 31 March following that stated

**Imports of Feldspar**

tonnes

Country	1996	1997	1998	1999	2000
Austria	4 010	4 377	3 238	3 124	3 844
Belarus	...	...	15 806	22 511	30 186
Belgium-Luxembourg	25 405	24 836	24 363	24 396	25 329
Croatia	2 883	2 521	2 610	6 202	6 578
Czech Republic	3 923	5 685	5 474	6 317	7 658
Denmark	3 373	3 300	4 576	5 774	3 740
Finland	209	117	267	452	734
France	27 069	46 110	47 367	45 029	37 596
Germany	66 209	41 670	48 165	45 405	51 494
Greece	8 049	1 302	492	944	2 545
Irish Republic	(a) 1 577	121	130	103	50
Italy	602 980	714 234	1 023 919	1 433 174	1 566 525
Lithuania	5 479	11 625	4 155	4 178	5 563
Netherlands	50 098	14 118	12 732	9 469	9 213
Norway	889	841	466	833	8 870
Poland	34 800	35 600	40 000	57 382	81 995
Portugal	20 357	34 456	31 026	48 594	50 280
Romania	...	8 752	9 838	15 523	19 694
Russia	1 262	532	1 204	166	530
Slovakia	...	22 759	...	17 959	...
Slovenia	...	...	3 833	4 550	3 923
Spain	215 198	229 481	315 236	411 192	552 152
Sweden	10 017	6 820	7 643	6 392	7 194
Switzerland	9 101	6 248	5 696	5 281	4 550
Turkey	10 107	7 546	18 100	633	18 840
Ukraine	3 792	2 283	4 231	2 558	...
United Kingdom	28 314	24 051	18 208	25 707	25 280
Algeria	3 680	5 001	4 411	3 996	...
Egypt	23 149	28 014	50 003	24 443	...
Ghana	231	399	21	----	164
Morocco	...	4 571	8 227	16 548	...
Tunisia	4 719	7 956	4 092	10 525	...
Canada	1 291	1 612	2 297	1 872	1 704
Costa Rica	5 175	5 287	6 287	5 053	6 398
Mexico	5 789	3 485	1 195	1 789	2 551
USA	7 154	8 578	6 556	6 837	7 216
Chile	2 913	2 202	2 694	...	2 430
Ecuador	2 486	2 984	2 325	8 831	2 264
Venezuela	440	499	645	595	567
China	3 919	11 121	20 256	11 253	6 205
Hong Kong	(a) 59 094	31 140	21 217	5 369	410
Indonesia	85 469	80 514	92 374	53 984	105 271
Japan	10 864	13 004	6 613	1 805	1 781
Jordan	533	160	209	547	940
Korea, Republic of	1 288	1 024	854	1 933	1 629
Malaysia	235 751	267 457	236 281	266 454	...
Philippines	10 884	9 986	3 525	20 179	...
Saudi Arabia	877	----	----	370	528
Singapore	(a) 30 806	10 979	5 925	7 749	7 598
Syria (a) (b)	2 230	2 730	...	...	...
Taiwan	745 009	755 071	762 588	694 246	563 078
Thailand	23 062	10 306	9 111	13 592	13 423
Australia	51	138	80	78	10
New Zealand	468	431	479	405	781

Note(s) :-

- (a) May include some leucite, nepheline and nepheline syenite  
 (b) Including some fluorspar

**Production of Fluorspar**

tonnes

Country	1996	1997	1998	1999	2000
France	110 800	106 600	105 600	105 800	114 000
Germany	32 448	23 868	30 641	28 260	31 124
Italy	126 671	105 794	104 187	*110 000	*65 000
Romania	*15 000	*15 000	*15 000	*15 000	*15 000
Russia	75 000	*80 000	*100 000	*155 000	*160 000
Spain	116 526	124 987	135 568	148 000	140 466
Turkey	4 828	3 903	5 034	4 812	4 113
United Kingdom	*65 000	*64 000	*65 000	*40 000	*36 000
Egypt (c)	*700	775	140	*500	*500
Kenya	83 000	68 700	60 854	93 602	100 102
Morocco	95 900	103 800	105 000	83 100	77 800
Namibia	31 457	23 160	40 685	57 599	66 129
South Africa	201 928	206 990	236 640	217 540	212 709
Tunisia	720	1 426	1 188	520	----
Mexico	523 971	552 840	598 043	561 265	635 230
USA (d)	*8 200	----	----	----	----
Argentina	5 666	7 168	11 517	12 704	*11 200
Brazil (a)	97 749	78 032	72 085	44 926	42 962
China	*2 150 000	*2 300 000	*2 350 000	*2 250 000	*2 200 000
India (e)	19 926	11 338	48	220	3 253
Iran (b)	18 929	17 035	26 275	18 387	*20 000
Korea, Dem. P.R. of	*39 000	*39 000	*30 000	*25 000	*25 000
Kyrgyzstan	2 767	4 176	3 200	2 997	*3 000
Mongolia	165 000	174 200	168 218	153 693	198 853
Pakistan (c)	363	1 050	2 647	220	*700
Tajikistan	3 000	*3 000	...	...	...
Thailand	17 247	7 826	3 743	13 005	4 745
Uzbekistan	3 000	----	...	...	...
World Total	4 000 000	4 100 000	4 300 000	4 100 000	4 200 000

## 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): 1996: 119; 1997: 121; 1998: 118; 1999: 122; 2000: 120

(e) Years ended 31 March following that stated

**Exports of Fluorspar**

tonnes

Country	1996	1997	1998	1999	2000
Austria	...	21	117	90	233
Belarus	...	*1 500	2 077	924	...
Belgium-Luxembourg	1 270	821	1 131	1 972	1 569
Czech Republic	17 200	22 688	24 827	12 519	13 658
France	31 408	35 748	24 342	29 194	35 342
Germany	15 631	20 206	15 892	20 197	18 875
Italy	2 114	557	1 471	7 595	13 443
Netherlands	806	2 404	187	5 377	2 825
Russia	4 357	324	2 056	2 967	4 740
Spain	19 897	24 998	986	1 152	8 920
Sweden	2 320	2 102	4 400	5 967	6 451
United Kingdom	7 129	5 215	4 202	4 829	4 912
Kenya	59 175	72 300	45 618	64 094	103 944
Morocco	94 156	114 419	135 302	83 446	...
Namibia	32 624	18 307	42 135	71 011	55 948
South Africa	165 453	182 716	153 031	196 160	147 464
Mexico	252 809	317 341	335 236	365 959	407 358
USA	83 482	64 870	46 150	58 769	43 212
China	1 124 685	1 293 672	1 315 972	1 221 491	1 198 478
Hong Kong (a)	1 255	1 050	1 965	26 954	79 077
Iran	...	...	5 460	11 044	...
Japan	1 173	1 013	867	407	227
Jordan	...	...	...	400	5 046
Kyrgyzstan	...	...	...	1 977	3 064
Mongolia	158 900	147 900	121 800	164 100	197 100
Singapore	...	233	266	3	300
of which, re-exports	...	218	181	3	80
Thailand	17 432	10 760	7 740	5 515	4 290
Uzbekistan	*13 000	*15 000	*15 000	*15 000	...

Note(s):-

(a) Re-exports

**Imports of Fluorspar**

tonnes

Country	1996	1997	1998	1999	2000
Austria	7 114	7 529	5 704	3 959	1 923
Belarus	...	*1 200	2 393	1 589	588
Belgium-Luxembourg	11 230	9 774	10 690	11 095	10 246
Croatia	187	275	275	206	161
Czech Republic	42 437	51 532	41 943	30 989	31 903
Denmark	568	4 926	7 152	1 011	2 144
Finland	12 564	11 317	11 246	7 503	11 969
France	4 629	6 267	5 902	4 218	3 999
Germany	238 905	263 201	290 687	300 656	270 412
Greece	13 608	14 313	15 298	14 029	8 733
Hungary	1 700	4 500	2 500	900	545
Irish Republic	185	200	158	33	45
Italy	95 823	111 666	106 304	184 145	209 326
Netherlands	10 965	12 561	4 883	7 055	50 999
Norway	43 358	42 397	42 804	*48 000	47 415
Poland	9 800	6 100	7 800	8 411	5 387
Portugal	1 057	971	1 380	1 457	1 693
Romania	22 970	19 271	11 831	24 684	4 739
Russia	238 024	227 161	227 373	173 544	178 217
Slovakia	7 300	8 730	8 600	6 584	7 955
Slovenia	1 500	1 800	1 691	1 144	1 141
Spain	8 762	11 347	16 394	28 859	14 153
Sweden	16 082	7 968	15 972	12 381	9 386
Switzerland	222	325	554	775	664
Turkey	7 025	12 219	8 141	9 472	19 263
Ukraine	23 551	40 871	40 092	28 210	...
United Kingdom	(a) *34 000	(a) *42 000	41 610	*43 000	...
Yugoslavia, Federal Republic of	...	4 016	4 786	3 591	25
Algeria	250	117	196	216	...
Egypt	1 654	1 021	297	129	...
Tunisia	47 737	50 182	53 672	65 378	...
Canada	142 632	157 661	186 351	169 974	180 085
Mexico	95 418	13 683	37 168	55 159	54 640
USA	384 889	822 211	498 204	457 152	509 895
Brazil	7 864	15 510	34 482	7 215	31 872
Chile	479	1 103	525	579	432
Peru	366	486	480	422	...
Venezuela	756	724	1 643	672	970
Hong Kong	600	1 025	2 400	10 950	22 310
India (b)	54 666	39 136	72 352	76 295	...
Indonesia	973	706	493	854	2 002
Japan	549 239	573 738	545 726	535 413	562 021
Jordan	151	200	120	5	121
Kazakhstan	*3 000	*3 000	3 391	3 500	...
Korea, Republic of	82 804	87 918	77 928	84 022	92 257
Malaysia	4 400	3 200	1 400	13 600	...
Pakistan	3 000	----	----	----	...
Philippines	1 435	1 071	439	226	...
Singapore	100	864	826	406	660
Taiwan	41 151	46 999	54 574	55 294	54 263
Thailand	8 124	3 830	3 863	5 763	5 995
Australia	7 692	5 636	3 620	6 848	4 966

Note(s) :-

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

(b) Years ended 31 March following that stated

**Mine Production of Gold**

kilograms (metal content)

Country	1996	1997	1998	1999	2000
Armenia	244	*500	*350	*400	*400
Bulgaria	1 776	1 713	1 660	1 524	*1 500
Finland	1 670	1 900	2 370	2 770	1 600
France	5 651	4 953	3 793	3 567	2 643
Georgia	500	700	800	1 587	*1 600
Italy	...	331	1 117	894	820
Poland (d)	598	375	409	489	367
Romania	*4 000	*4 000	*4 000	*4 000	*4 000
Russia	119 856	123 937	113 807	125 870	142 500
Slovakia	492	458	340	363	306
Spain	4 241	3 343	5 791	5 081	...
Sweden	6 145	6 777	5 944	4 202	3 570
Turkey	*1 200	*1 000	*1 000	*1 200	*1 200
Yugoslavia, Federal Republic of (d)	3 250	3 014	2 684	1 260	1 121
 Burkina Faso	897	1 089	1 091	886	...
Burundi	2 256	*1 500	*1 500	*1 500	*1 500
Cameroon	*1 000	*1 000	*1 000	*1 000	*1 000
Congo, Democratic Republic	1 252	394	152	207	*300
Eritrea	98	612	573	534	264
Ethiopia (b)	199	755	...	2 928	2 330
Ghana	48 271	54 446	72 003	78 660	78 399
Guinea	6 838	3 713	7 835	12 001	13 104
Ivory Coast	1 883	2 419	3 400	2 967	3 444
Kenya	492	440	388	990	1 243
Liberia	*700	*500	*800	*1 000	*1 000
Mali	4 329	16 323	20 562	23 688	*25 000
Mauritania	189	----	----	----	----
Morocco	482	*450	*450	*450	*450
Namibia	2 145	2 417	1 882	2 005	2 456
South Africa	498 250	490 600	464 217	451 294	430 778
Sudan	*4 500	*5 000	5 671	5 565	*6 000
Tanzania	318	232	427	4 767	15 060
Uganda (e)	5 067	6 819	5 029	5 558	7 303
Zambia (c)	109	226	210	79	*100
Zimbabwe	24 699	24 225	25 175	27 114	22 007
 Canada	166 378	171 376	165 599	157 755	156 070
Costa Rica	713	733	636	*500	*500
Dominican Republic	3 659	2 350	1 421	651	...
Guatemala	...	...	...	4 449	4 500
Honduras	142	80	...	107	*100
Mexico	24 477	25 317	25 426	23 755	26 375
Nicaragua	2 058	2 563	3 834	4 448	3 672
Panama	834	1 202	1 517	*1 500	*1 500
USA	326 456	362 295	366 411	341 481	353 437
 Argentina	723	2 289	20 400	38 515	25 954
Bolivia	12 634	13 292	14 444	11 786	12 000
Brazil	55 041	52 335	46 031	51 422	52 420
Chile	53 174	49 459	44 980	48 069	54 114
Colombia	22 073	18 811	18 813	34 599	37 018
Ecuador	7 208	3 069	1 474	2 026	2 823
French Guiana	2 949	3 225	2 735	2 972	3 376
Guyana	12 007	13 577	14 146	12 905	13 528
Peru	64 885	77 940	94 214	128 486	132 585
Venezuela	11 719	22 322	6 740	5 946	7 332
 China	145 333	181 360	172 845	162 500	*170 000
India (a)	2 710	2 636	2 683	2 153	2 022
Indonesia	83 564	89 979	124 019	127 184	124 596
Iran (d)	640	684	856	930	*900
Japan	8 627	8 384	8 601	9 405	8 400
Kazakhstan (d)	10 300	9 659	8 929	9 655	11 529
Korea, Dem. P.R. of	*500	*500	*500	----	----
Korea, Republic of	995	611	4	6	13
Kyrgyzstan	1 580	16 860	21 311	20 200	*20 000
Malaysia	2 829	4 487	3 394	3 449	4 020

**Mine Production of Gold**

kilograms (metal content)

Country	1996	1997	1998	1999	2000
Mongolia	6 976	8 451	9 531	10 246	11 808
Myanmar (a) (d)	172	181	172	116	93
Oman	592	584	579	597	604
Philippines	30 180	32 199	34 049	31 050	36 513
Saudi Arabia	7 530	7 260	5 153	4 579	3 637
Taiwan	113	90	91	131	94
Tajikistan	1 450	2 550	3 200	2 700	2 800
Uzbekistan	78 300	81 700	81 000	89 000	87 000
Vietnam	2 000	1 800	1 800	1 900	1 900
Australia	289 030	314 090	310 320	299 700	296 510
Fiji	4 550	4 671	3 758	3 881	3 842
New Zealand	11 571	11 359	7 731	8 577	9 880
Papua New Guinea	51 573	48 482	61 641	65 747	74 540
Solomon Islands	4	...	1 415	3 426	1 555
World Total	2 270 000	2 420 000	2 450 000	2 500 000	2 540 000

Note(s):-

- (1) In several countries substantial amounts of gold produced in small operations are not recorded in the official statistics used when compiling this table
- (2) In addition to the countries listed, Botswana, Central African Republic, Gabon, Laos, Madagascar, Mozambique, Niger, 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	1996	1997	1998	1999	2000
Armenia					
Metal	202	79	1 123	3 435	...
Waste & scrap	2 500	2 527	201	(c) *600	(c) *300
Austria					
Metal	3 111	1 900	2 700	3 200	54 400
Waste & scrap	56 000	6 000	600	200	1 600
Belgium-Luxembourg					
Metal	27 892	29 500	32 100	3 800	5 100
Waste & scrap	£1 647 000	£2 124 000	£1 019 000	...	£770 000
Bulgaria					
Waste & scrap (c)	*4 800	...	...	...	...
Cyprus					
Metal (a)	24	...	53	1 892	10
Czech Republic					
Metal	4 693	2 489	2 806	3 486	3 573
Waste & scrap	...	4 287	8 680	1 255	811
Denmark					
Metal	1 332	2 861	982	1 212	1 297
Waste & scrap	5 851	2 690	2 602	5 764	7 028
Estonia					
Waste & scrap	...	(c) *6 700	(c) *13 100	(c) *1 000	4 389
Finland					
Metal	3 834	4 947	...	...	...
Waste & scrap	106 000	51 273	636	329	1 302
France					
Metal	50 812	42 600	24 600	24 200	17 300
Waste & scrap	148 831	66 900	56 300	39 400	47 100
Georgia					
Metal (c)	...	*100	*1 000	...	...
Germany					
Metal	94 451	73 400	67 400	68 800	80 000
Waste & scrap	29 214	228 700	160 500	313 100	646 300
Greece					
Metal	...	613	117	1 467	352
Hungary					
Metal	441	740	805	1 181	1 092
Irish Republic					
Metal	£3 000	£4 000	----	£7 000	£5 000
Waste & scrap	£2 000	£196 000	£984 000	£951 000	£2 900 000
Italy					
Metal	27 432	13 734	23 276	32 614	138 479
Waste & scrap	...	...	568	357	8
Latvia					
Waste & scrap	1 597	504	172	55	133
Lithuania					
Waste & scrap	...	...	1	4 738	9 148
Netherlands					
Metal	15 286	13 182	7 759	8 066	3 592
Waste & scrap	193 370	...	104 500	35 900	37 100
Norway					
Metal	1 643	1 714	1 823	1 854	1 621
Waste & scrap	2 083	1 280	938	899	1 215
Poland					
Metal	132	1 451	201	419	389
Portugal					
Metal	----	1 207	851	16	...
Waste & scrap	16	1 329	127	16	...
Russia					
Metal	3 600	(c) *7 100	51 619	(c) *29 200	(c) *51 100
Waste & scrap (c)	*6 500	...	...	...	...
Slovakia					
Ore	1 458 000	1 261 000	...	...	...
Slovenia					
Metal	...	...	91	58	128
Spain					
Metal	15 201	36 177	103 927	3 472	4 053
Waste & scrap	...	86	1	2 983	36 797

**Exports of Gold**

kilograms

Country	1996	1997	1998	1999	2000
Sweden					
Metal	12 724	4 000	1 000	16 907	4 000
Waste & scrap	3 519	1 000	...	14 000	6 000
Switzerland					
Metal	1 191 879	1 677 130	1 541 530	1 225 858	1 266 758
Waste & scrap	52 375	44 849	63 818	60 162	43 817
Ukraine					
Metal (c)	...	...	...	*500	*1 100
Waste & scrap (c)	*1 500	*20 500	*27 600	*37 100	*60 100
United Kingdom					
Metal	595 097	1 151 116	623 971	589 540	438 060
Waste & scrap	79 727	54 013	104 568	377 931	406 280
Yugoslavia, Federal Republic of					
Metal	...	1 000	2 254	617	----
Burkina Faso					
Metal	1 312	1 167	1 341	914	674
Burundi					
Metal	2 256	----	----	----	----
Central African Republic					
Metal	23	19	24	41	...
Ethiopia					
Metal	...	...	840	352	3 921
Ghana					
Metal	...	...	90 917	71 091	...
Waste & scrap	...	...	15 000	8 020	...
Guinea					
Metal	6 838	3 719	7 834	12 001	13 105
Kenya					
Metal	420	2 248	15 788	...	1 115
Mauritius					
Metal	...	...	96	45	43
Waste & scrap	...	...	59	388	135
Mozambique					
Metal	53	----	----	8	17
Namibia					
Metal	2 177	2 452	1 918	2 005	2 423
South Africa					
Metal	...	502 457	460 822	452 621	403 945
Sudan					
Metal	*4 500	*5 000	5 388	*5 500	*6 000
Tanzania					
Metal	£1 780 000	£1 220 000	£2 020 000	£1 843 000	...
Togo					
Metal (a)	14 947	14 374	13 798	12 816	...
Uganda					
Metal	5 067	6 819	5 029	5 558	7 303
Zimbabwe					
Metal	£192 112 000	£221 684 000	£95 159 000	£130 611 000	...
Canada					
Ores & concentrates (d)	5 465	6 010	5 656	4 450	4 429
Metal	197 287	218 346	225 273	186 430	202 590
Cuba					
Metal (c)	...	...	*800	*1 800	*50
Waste & scrap (c)	*1 300	*1 400	*1 600	*2 400	*3 200
Dominican Republic					
Metal	3 659	2 350	1 421	651	...
Nicaragua					
Metal	600	800	3 400	4 400	2 800
USA					
Metal, unrefined	71 073	87 550	91 598	86 748	105 483
Metal, refined	405 332	390 528	436 376	437 706	457 303
Metal, other	6 803	10 561	18 705	22 513	20 095
Waste & scrap	91 297	62 019	58 555	40 751	65 069

**Exports of Gold**

kilograms

Country	1996	1997	1998	1999	2000
Bolivia					
Metal	9 561	10 288	11 998	9 953	9 759
Brazil					
Metal	46 970	48 236	44 234	39 026	41 543
Chile					
Metal	32 203	54 989	30 050	27 614	34 649
Colombia					
Ore	518 427	462 656	397 788	...	...
Guyana					
Metal	9 020	11 076	12 970	12 183	...
Peru					
Metal	45 978	46 271	97 982	131 511	...
Uruguay					
Metal	550	2 400	3 600	3 400	3 900
China					
Metal (c)	*1 600	*1 700	*5 100	*1 300	*4 400
Hong Kong					
Metal	9 980	6 890	50 038	39 976	54 747
of which, re-exports	9 980	6 890	24 363	10 584	21 376
Waste & scrap	5 545	8 043	44 504	18 464	38 024
of which, re-exports	5 545	8 043	43 067	5 574	36 631
Indonesia					
Metal	7 689	26 905	49 834	42 608	67 604
Waste & scrap	...	1 040	...	920	308
Japan					
Metal	39 087	51 881	71 605	62 391	96 048
Waste & scrap	2 311	11 254	4 442	25	529
Kazakhstan					
Metal	----	8 489	16 200	24 300	...
Waste & scrap (c)	...	...	...	*300	*6 900
Korea, Dem. P.R. of					
Metal (c)	*2 900	...	*1 300	*1 400	*100
Korea, Republic of					
Metal	427 533	577 064	695 861	317 763	161 025
Waste & scrap	265	108	59 197	334	1 778
Kyrgyzstan					
Metal (c)	...	*2 500	*20 400	*14 400	*121 100
Malaysia					
Metal	£20 200 000	£87 700 000	£31 000 000	£28 600 000	...
Waste & scrap	£2 400 000	£8 700 000	£19 900 000	£15 900 000	...
Oman					
Metal	836	2 828	475	910	918
Philippines					
Ores & concentrates (b)	7 636	5 652	4 499	...	...
Metal	60 163	...	73 190	56 368	...
Saudi Arabia					
Metal	...	...	9 348	417 059	425 527
Waste & scrap	...	...	208	5 206	...
Singapore					
Metal	23 700	42 243	140 989	41 254	35 884
of which, re-exports	13 031	26 994	118 614	19 636	10 308
Waste & scrap	4 044	8 481	6 103	4 128	8 867
Taiwan					
Metal	3 258	3 056	2 678	4 200	4 912
Waste & scrap	1 385	6 113	12 592	58	4
Thailand					
Metal	44 277	42 828	44 409	18 777	7 382
Waste & scrap	6 493	5 930	78 983	38 515	3 350
Uzbekistan					
Metal (c)	*10 400	*5 800	*6 700	*12 400	*18 100

**Exports of Gold**

kilograms

Country	1996	1997	1998	1999	2000
Australia					
Ores & concentrates (b)	*1 700	*2 200	...	...	...
Metal	325 783	340 785	504 508	348 033	296 377
Waste & scrap	£1 215 000	£1 285 000	£3 276 000	£113 000	£364 000
Fiji					
Metal	4 687	4 671	3 885	3 881	3 842
New Zealand					
Metal	40 898	39 750	30 224	28 680	54 904
Papua New Guinea					
Metal (e)	51 119	45 418	64 106	64 694	74 540

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) Au content of concentrates and unrefined metal

**Imports of Gold**

kilograms

Country	1996	1997	1998	1999	2000
Armenia					
Metal	196	154	100	557	1 339
Austria					
Metal	18 365	41 500	53 200	40 700	25 700
Waste & scrap	200	1 000	600	1 600	1 400
Belarus					
Metal	(d) *300	(d) *300	(d) *100	(d) *300	1 489
Belgium-Luxembourg					
Metal	9 000	10 700	13 000	3 900	800
Waste & scrap	£22 584 000	£21 216 000	£14 616 000	...	£32 277 000
Croatia					
Metal	£60 000	£700 000	£598 000	£136 000	£58 000
Cyprus					
Metal	3 381	4 169	2 031	1 672	2 037
Czech Republic					
Metal	3 388	2 346	2 415	2 244	1 845
Waste & scrap	...	...	190	257	360
Denmark					
Metal	1 664	17 933	4 429	1 237	2 729
Waste & scrap	470	321	1 017	1 951	1 578
Estonia					
Metal	...	182	953	105	110
Finland					
Metal	828	1 060	1 577	1 408	1 294
France					
Metal	84 814	54 200	49 700	55 000	44 200
Waste & scrap	35 199	16 600	2 800	1 900	31 100
Germany					
Metal	96 541	91 500	141 200	83 700	60 400
Waste & scrap	178 025	202 000	449 300	465 400	1 309 872
Greece					
Metal	14 947	1 883	14 827	5 740	...
Waste & scrap	32	7	3 698	1 633	21 400
Hungary					
Metal	227	259	243	395	283
Iceland					
Metal	...	...	356	200	400
Irish Republic					
Metal	£8 558 000	£7 360 000	£7 921 000	£7 250 000	£9 094 000
Waste & scrap	...	...	311	46 090	12 435
Italy					
Metal	331 746	407 273	440 713	405 952	415 753
Waste & scrap	1 027	408	424	368	9 571
Lithuania					
Metal	£12 000	£103 000	£187 000	£116 000	£20 000
Macedonia					
Metal	648	545	323	...	...
Malta					
Metal	£19 900 000	£14 700 000	£12 600 000	£1 868 000	...
Netherlands					
Metal	16 990	18 895	15 542	14 549	6 574
Waste & scrap	...	...	1 600	6 800	62 000
Norway					
Metal	1 418	1 750	2 183	2 111	2 197
Waste & scrap	416	525	301	67	322
Poland					
Metal	279	440	55	33	413
Portugal					
Metal	1 001	9 736	6 442	174	2 551
Slovakia					
Metal	(d) *800	(d) *600	3 376	722	495
Slovenia					
Metal	(d) *100	(d) *200	1 076	1 322	1 399
Spain					
Metal	28 213	139 445	84 963	1 399	22 968
Waste & scrap	1 803	1 862	262	528	742

**Imports of Gold**

kilograms

Country	1996	1997	1998	1999	2000
Sweden					
Metal	£10 503 000	£6 525 000	£4 407 000	£3 632 000	£10 355 000
Waste & scrap	£22 000	£30 000	£1 000	...	£76 000
Switzerland					
Metal	1 285 661	1 592 971	1 551 295	1 402 778	1 280 545
Waste & scrap	101 740	117 973	182 026	28 426	42 648
Turkey					
Metal	517	9	15	----	----
Ukraine					
Metal (d)	*200	*900	*600	*1 300	*1 100
United Kingdom					
Metal	744 997	506 211	1 190 371	828 382	971 766
Waste & scrap	205 740	152 707	217 272	161 199	318 953
Egypt					
Metal	----	6 663	6 765	...	...
Mauritius					
Metal	...	...	3 514	964	410
South Africa					
Metal	1 432	240	361	231	402
Tunisia					
Metal	1 560	1 527	1 835	2 642	...
Zimbabwe					
Metal	32 665	117	...	4	...
Canada					
Ores & concentrates (a)	3 137	3 336	4 436	6 744	6 042
Metal	54 237	83 373	113 913	120 772	43 965
USA					
Ore (c)	4 989	3 445	3 441	689	647
Metal, unrefined	11 760	13 730	17 260	23 649	38 920
Metal, refined	143 263	192 299	256 490	195 612	183 898
Metal, other	59 650	70 310	107 460	107 386	67 233
Waste & scrap	12 995	14 055	16 727	30 379	30 210
Bolivia					
Metal	3 486	3 916	7 144	3 643	2 173
Brazil					
Metal	58	379	174	...	1 980
Abu Dhabi					
Metal	5	...	1 464	57 828	...
China					
Metal (d)	*1 700	*2 000	*8 500	*16 700	*6 700
Dubai					
Metal	68	52	10	...	...
Hong Kong					
Metal	217 535	432 931	231 139	119 460	128 127
Waste & scrap	2 701	4 678	11 808	30 075	40 275
India					
Metal (b)	52 425	265 457	455 406	471 573	...
Indonesia					
Metal	25 057	1 489	226	13 139	3 556
Waste & scrap	...	869	...	3 218	----
Israel					
Metal	£97 400 000	£80 131 000	£75 195 000	£55 853 000	£33 251 000
Waste & scrap	£600 000	£1 113 000	£1 143 000	£415 000	£549 000
Japan					
Metal	135 667	119 473	86 017	108 393	72 951
Waste & scrap	137 245	138 396	150 992	145 671	197 837
Jordan					
Metal	2 143	5 675	3 574	2 845	2 640
Kazakhstan					
Metal	...	...	900	1 800	...
Korea, Republic of					
Metal	424 381	604 881	459 244	363 757	242 757
Kuwait					
Metal	...	...	...	12 284	...

**Imports of Gold**

kilograms

Country	1996	1997	1998	1999	2000
Malaysia					
Metal	137 385	148 208	50 812	...	...
Oman					
Metal	11 550	14 072	8 858	6 518	5 321
Pakistan					
Metal	£208 600 000	£251 600 000	£122 900 000	£206 500 000	£151 700 000
Philippines					
Metal	879	3 167	10 129	18 229	...
Saudi Arabia					
Metal	88 626	194 416	167 410	148 796	180 854
Singapore					
Metal	31 380	71 860	28 201	32 572	45 261
Waste & scrap	625	2 394	6 509	7 651	2 243
Sri Lanka					
Metal	17 988	27 394	29 329	...	...
Taiwan					
Metal	93 139	103 053	64 929	83 049	83 253
Thailand					
Metal	47 911	203 057	135 480	559 357	1 216 233
Australia					
Metal	£320 814 000	£361 214 000	£1 200 405 000	£797 620 000	£631 000 000
Waste & scrap	£1 381 000	£34 000	£5 569 000	£2 076 000	...
New Zealand					
Metal	1 210	1 385	178	1 303	13 620

## Note(s) :-

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

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

## Graphite

**Production of Graphite**

tonnes

Country	1996	1997	1998	1999	2000
Austria (a)	33 122	12 582	10 738	2 635	669
Czech Republic	30 000	25 000	28 000	22 000	23 000
Germany	2 603	1 030	270	3 891	...
Norway	7 065	7 713	8 271	7 339	8 392
Romania	2 931	2 563	1 951	1 041	1 251
Russia	13 928	14 275	...	15 670	20 125
Sweden	500	1 581	3 277	4 504	5 602
Turkey	*20 000	*15 000	*15 000	*15 000	*15 000
Ukraine	5 367	4 289	5 104	7 461	7 431
Madagascar	11 295	15 397	18 690	14 516	...
Mozambique	3 283	5 125	5 889	4 007	----
Tanzania	6 776	*11 000	----	----	----
Zimbabwe	7 691	12 779	13 806	12 321	11 838
Canada	*25 000	*25 000	*25 000	*25 000	*25 000
Mexico	40 412	47 982	43 461	31 770	30 330
Brazil (b)	40 466	41 444	61 369	53 503	*70 000
China	1 950 000	1 680 400	...	...	...
India (c)	117 761	111 518	135 668	108 826	135 036
Korea, Dem. P.R. of	*40 000	*40 000	*35 000	*25 000	*25 000
Korea, Republic of	1 113	83	62	62	65
Sri Lanka	5 645	5 400	5 910	4 592	5 902
World Total	2 360 000	2 080 000	2 100 000	2 000 000	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**

tonnes

Country	1996	1997	1998	1999	2000
Austria	5 344	4 063	3 902	3 463	3 655
Belgium-Luxembourg	31	113	1 494	1 678	4 848
Czech Republic	2 722	2 831	2 670	2 501	2 712
France	977	801	349	652	614
Germany	9 494	9 108	8 843	8 549	12 120
Italy	210	129	234	91	373
Netherlands	574	536	889	937	1 798
Norway	29 340	*7 000	*7 000	*7 000	9 002
Russia	1 111	742	613	997	1 570
Spain	126	59	36	4 289	13 134
Sweden	103	515	2 311	3 262	4 042
Ukraine	4 663	2 328	1 905	2 259	...
United Kingdom	2 152	1 871	2 206	1 973	2 143
Madagascar	14 629	13 975	13 087	9 781	13 669
Mozambique	2 447	4 730	5 558	4 083	----
South Africa (a)	*1 900	*1 700	*1 200	*2 400	...
Zimbabwe	10 943	10 997	12 125	8 974	...
Canada	20 823	26 148	20 617	18 763	20 634
Mexico	14 992	16 651	16 974	15 132	17 614
USA	27 158	41 404	28 769	30 966	26 060
Brazil	11 478	12 614	13 521	11 308	17 993
China	158 368	170 022	180 752	205 891	333 440
Hong Kong (c)	219	108	151	69	97
India (b)	248	265	556	1 107	...
Japan	3 055	3 027	1 949	1 894	1 707
Korea, Dem. P.R. of (a)	*3 000	*5 900	*4 400	*3 800	*3 500
Korea, Republic of	2 371	2 019	1 255	1 430	1 380
Sri Lanka	503	6 094	5 136	5 344	...

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	1996	1997	1998	1999	2000
Austria	7 038	9 616	9 223	7 670	7 611
Belarus	*200	*200	211	337	830
Belgium-Luxembourg	1 827	2 428	5 167	5 836	9 847
Czech Republic	1 176	634	839	735	975
Denmark	405	452	381	422	613
Finland	360	344	543	549	649
France	3 934	3 756	1 702	25 371	53 643
Germany	41 345	39 272	39 190	38 228	45 517
Greece	521	674	564	119	60
Hungary	813	544	612	431	571
Irish Republic	215	705	221	430	342
Italy	10 029	9 606	11 407	9 462	12 241
Netherlands	8 604	6 566	4 296	2 611	3 622
Norway	212	54	77	3	318
Poland	2 360	2 187	3 021	2 586	3 727
Portugal	400	229	378	608	678
Russia	1 076	1 561	948	1 418	6 316
Slovakia	2 446	2 756	2 580	2 549	...
Spain	4 728	7 005	8 016	6 321	8 296
Sweden	496	578	489	707	1 062
Switzerland	440	674	523	748	445
Turkey	5 093	4 709	4 206	5 067	6 250
United Kingdom	25 349	23 740	27 885	21 204	25 998
Yugoslavia, Federal Republic of	500	639	477	210	711
Egypt	912	787	551	1 906	...
South Africa	2 364	2 155	2 055	1 928	1 818
Canada	6 836	8 489	13 496	7 634	5 775
Mexico	2 922	4 333	4 031	7 970	...
USA	53 394	58 111	61 578	55 790	60 804
Argentina	1 155	864	829	607	968
Venezuela	1 118	930	547	699	1 306
China	368	801	1 557	1 239	740
Hong Kong	298	117	43	57	107
India (c)	824	1 081	694	979	...
Indonesia	1 851	1 832	1 875	1 950	7 699
Iran (a)	...	458	1 161	1 729	...
Japan	87 029	85 249	76 205	111 615	143 906
Korea, Republic of	65 959	46 887	30 722	37 222	53 801
Malaysia	1 300	2 100	6 700	2 500	...
Pakistan (b)	2 392	2 942	2 030	2 302	2 761
Philippines	233	176	188	242	...
Saudi Arabia	943	1 410	843	5 529	12 671
Singapore	594	1 358	765	840	1 294
Taiwan	11 648	8 744	9 225	9 816	9 398
Thailand	*1 200	1 524	747	615	1 034
Australia	1 128	1 059	1 792	1 803	4 741
New Zealand	175	331	227	168	203

Note(s) :-

(1) This table excludes synthetic graphite

(a) Years ended 20 March following that stated

(b) Years ended 30 June of that stated

(c) Years ended 31 March following that stated

**Production of Gypsum**

tonnes

Country	1996	1997	1998	1999	2000
Armenia	15 000	*10 000	...	11 652	9 630
Austria					
Gypsum	887 730	894 398	872 468	898 830	825 077
Anhydrite	97 167	79 528	88 932	100 374	120 967
Azerbaijan	5 000	2 000	3 300	...	...
Bosnia & Herzegovina	*30 000	*30 000	*30 000	*30 000	*30 000
Bulgaria	168 900	156 000	183 929	148 748	169 600
Croatia	86 060	102 470	104 660	137 991	150 765
Cyprus	94 100	222 000	270 000	197 000	147 000
Czech Republic	443 000	241 000	222 000	136 000	82 000
France	4 550 000	4 500 000	*4 500 000	*4 500 000	*4 500 000
Georgia	...	3 700	5 700	9 600	...
Germany (a)	2 315 000	2 548 000	2 459 000	2 259 000	2 344 000
Greece	546 344	662 646	554 998	686 416	*750 000
Hungary (a)	185 000	192 000	185 000	203 000	251 000
Irish Republic	422 800	477 000	*500 000	*500 000	*500 000
Italy	1 274 672	1 215 767	1 237 522	*1 200 000	*1 200 000
Latvia	63 888	116 916	119 096	*100 000	*100 000
Macedonia	39 000	25 000	*30 000	*30 000	*30 000
Moldova	12 700	14 400	19 100	18 500	31 400
Poland					
Gypsum	879 800	899 958	862 820	925 707	998 628
Anhydrite	148 400	135 000	166 100	237 000	284 683
Portugal	520 722	566 517	562 380	569 519	*567 000
Romania	91 000	79 000	75 000	75 000	*75 000
Russia	1 534 000	559 200	609 400	867 200	1 013 000
Slovakia (a)	121 000	116 000	128 000	117 000	108 000
Spain	7 258 835	7 741 713	9 058 212	9 600 000	10 600 000
Switzerland	*300 000	*300 000	*300 000	*300 000	*300 000
Turkey	754 277	413 802	351 557	242 960	302 552
Ukraine	175 000	...	68 400	94 600	...
United Kingdom	*2 000 000	*2 000 000	*2 000 000	*1 800 000	*1 500 000
Yugoslavia, Federal Republic of	44 257	32 124	27 778	33 962	46 651
Algeria	*250 000	*275 000	*275 000	*275 000	*275 000
Egypt (b)	575 908	784 836	741 192	...	...
Ethiopia (d)	33 024	40 072	37 325	35 983	37 798
Libya	*175 000	*125 000	*150 000	*150 000	*175 000
Mauritania	12 500	*80 000	*100 000	*100 000	*100 000
Morocco	*450 000	*450 000	*450 000	*450 000	*450 000
Niger	*1 800	2 500	2 559	1 502	1 474
Nigeria	383 250	432 559	...	...	...
Somalia	*1 000	*1 000	*2 000	*2 000	*2 000
South Africa	340 688	396 929	485 749	513 760	413 105
Sudan	*5 000	*4 000	*3 000	*4 000	*4 000
Tanzania	55 400	46 300	59 100	40 000	60 000
Tunisia	*100 000	*100 000	*100 000	*100 000	*100 000
Canada					
Gypsum	8 289 000	8 937 000	8 827 000	9 723 000	8 824 000
Anhydrite	188 000	180 100	139 800	163 325	181 860
Cuba	112 400	133 400	134 300	110 400	...
Dominican Republic	86 848	115 261	80 016	81 249	110 400
El Salvador	*5 400	*5 500	*6 000	*6 000	*6 000
Guatemala	27 761	30 000	52 216	110 173	212 109
Honduras	*26 000	*28 000	*30 000	*30 000	*30 000
Jamaica	338 875	263 662	154 451	235 990	330 441
Mexico	6 064 682	5 869 175	7 035 369	6 953 756	*7 500 000
Nicaragua	20 242	15 820	22 660	26 880	28 170
USA	17 500 000	18 600 000	19 000 000	22 400 000	19 500 000
Argentina	633 121	729 495	650 356	571 344	*514 000
Brazil (e)	1 003 150	1 352 476	1 283 955	1 496 936	1 541 109
Chile	520 089	398 354	780 676	886 294	375 647
Colombia	522 236	564 681	*560 000	*560 000	*560 000
Ecuador	2 038	1 510	1 672	1 456	1 042
Paraguay	*4 500	*5 000	*5 000	*5 000	*5 000

**Production of Gypsum**

tonnes

Country	1996	1997	1998	1999	2000
Peru	65 446	64 863	71 018	28 355	140 630
Venezuela	56 537	80 000	72 000	42 000	25 000
Afghanistan	*3 000	*3 000	*3 000	*3 000	*3 000
Bhutan	55 000	*50 000	*53 000	*54 000	*54 000
China	*7 780 000	*9 100 000	*9 000 000	*6 700 000	*6 800 000
India (f)	2 209 937	2 195 423	2 267 240	3 247 009	2 706 855
Indonesia	*1 000	----	405	5 707	*5 000
Iran (c)	7 696 252	8 281 098	11 842 687	10 834 467	*11 000 000
Israel	161 000	121 000	56 000	140 000	130 000
Jordan	120 810	114 500	178 364	244 920	157 869
Laos	113 000	144 306	104 250	130 000	147 720
Lebanon	*3 000	*3 000	*3 000	*3 000	*3 000
Mongolia	*25 000	*25 000	*25 000	*25 000	*25 000
Myanmar (f)	37 500	40 642	40 234	43 102	52 573
Oman	113 137	122 664	165 000	180 129	131 909
Pakistan (b)	434 438	464 942	243 978	334 441	*350 000
Saudi Arabia	360 000	380 000	372 132	400 761	407 047
Syria	358 000	330 000	290 000	301 000	304 000
Taiwan	2 603	2 317	2 221	1 747	1 884
Tajikistan	1 000	1 000	...	...	...
Thailand					
Gypsum	8 934 492	8 557 584	4 333 804	5 005 173	5 830 326
Anhydrite	317 088	292 441	162 057	203 850	...
Turkmenistan	169 577	85 000	*100 000	*100 000	100 000
Uzbekistan	80 000	80 000	...	...	...
Yemen, Republic of	97 000	99 000	102 000	100 000	*100 000
Australia (b)	1 717 700	1 891 100	2 572 500	3 060 400	*3 800 000
World Total	93 700 000	96 900 000	99 300 000	103 500 000	102 300 000

Note(s):-

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

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

**Exports of Gypsum**

tonnes

Country	1996	1997	1998	1999	2000
Austria					
Crude	...	57 692	55 761	61 727	51 999
Calcined	...	90 321	88 194	102 614	87 510
Azerbaijan	10 746	...	...	2 738	1 310
Belarus					
Crude & calcined	...	...	895	11 900	2 274
Belgium-Luxembourg					
Crude	24 144	43 879	73 097	67 089	76 246
Calcined	3 067	6 751	3 567	4 846	4 859
Croatia					
Crude & calcined	854	...	5 542	8 830	23 301
Cyprus					
Crude & calcined	196 622	215 634	270 271	201 695	143 474
Czech Republic					
Crude	86 176	59 769	68 351	107 478	68 115
Calcined	...	5 855	5 570	8 426	11 083
Denmark					
Crude	40 328	60 411	58 092	15 624	23 909
Calcined	19 050	141 826	75 410	36 476	353 548
Finland					
Crude & calcined	1 408	3 492	3 721	3 485	4 177
France					
Crude	441 695	459 164	453 699	532 232	463 092
Calcined	407 573	422 105	405 544	291 434	276 847
Germany					
Crude	222 957	172 589	169 238	134 270	128 317
Calcined	888 118	680 859	828 936	636 192	693 861
Greece					
Crude	18 863	22 621	24 414	41 094	111 045
Calcined	3 199	944	4 500	4 568	470
Hungary					
Crude & calcined	373	535	758	290	412
Irish Republic					
Crude	546	528	510	566	896
Calcined	25 620	38 925	30 307	30 676	35 199
Italy					
Crude	63 190	60 425	73 382	59 426	51 791
Calcined	26 609	23 548	49 598	107 833	113 041
Latvia					
Macedonia					
Crude & calcined	4 360	7 233	7 771	...	...
Moldova					
Crude & calcined	...	...	78 802	130 403	...
Netherlands					
Crude	38 187	29 677	20 580	6 725	537
Calcined	2 955	2 363	3 339	3 971	2 885
Norway					
Crude & calcined	...	...	105	7 254	17 358
Poland					
Crude & calcined	45 100	94 700	91 100	78 600	79 661
Romania					
Crude & calcined	6 738	6 565	5 638	4 252	5 191
Russia					
Crude & calcined	2 133	1 044	1 325	4 674	7 312
Slovakia					
Crude & calcined	20 500	28 400	29 100	10 900	3 666
Spain					
Crude	2 265 735	2 920 179	3 515 903	2 939 001	3 080 386
Calcined	203 801	309 283	295 504	415 179	500 097
Sweden					
Crude & calcined	376	563	885	3 039	5 239
Switzerland					
Crude	17 998	16 816	14 930	25 593	24 560
Calcined	1 844	2 081	4 301	5 328	2 830
Turkey					
Crude & calcined	18 090	32 755	36 608	45 319	92 533
United Kingdom					
Crude	2 059	10 239	9 322	6 746	10 247
Calcined	22 113	25 113	24 352	73 865	33 222
Egypt					
Crude & calcined	23 000	57 865	32 003	14 508	...

## Gypsum

**Exports of Gypsum**

tonnes

Country	1996	1997	1998	1999	2000
Kenya	...	...	38 174	28 469	41 403
Morocco					
Crude	216 613	225 089	192 017	157 044	...
Calcined	14 794	2 794	2 933	4 715	...
Togo (c)	2	4 442	7 835	...	...
Tunisia					
Crude & calcined	15 069	19 829	17 566	17 328	...
Canada					
Crude	5 604 532	6 053 283	5 660 091	6 363 488	6 374 386
Calcined	2 910	1 350	1 530	1 835	1 009
Guatemala	14 387	15 474	33 001	28 104	44 078
Jamaica	192 178	160 972	166 038	156 947	286 672
Mexico	3 615 400	3 675 870	3 463 116	3 167 958	...
USA					
Crude	233 443	251 780	176 471	146 311	168 121
Calcined	142 593	237 885	211 499	588 606	243 751
Argentina	32 098	34 869	29 189	35 432	28 857
Colombia	6 347	3 208	...	...	6 236
Venezuela	4 553	4 542	5 722	14 689	4 305
China					
Crude	70 692	120 608	114 068	110 362	90 767
Calcined	8 626	7 898	10 850	10 830	10 757
Hong Kong (c)	213 163	47 654	18 051	140 178	156 163
India					
Crude & calcined (b)	67 105	20 198	38 734	31 765	...
Indonesia					
Crude	1	----	373	3 541	1 012
Calcined	2	...	...	13 208	50 107
Iran (a)	...	190 760	107 580	185 721	...
Japan					
Crude	1 712	1 727	1 212	1 279	848
Calcined	4 679	3 794	3 432	2 785	3 276
Kazakhstan	...	...	31 609	15 413	...
Korea, Republic of					
Crude & calcined	6 599	7 436	7 096	2 110	4 393
Kyrgyzstan					
Crude & calcined	12 035	...	105	1 088	75 022
Laos	110 740	146 230	89 298	93 039	139 288
Oman					
Crude	52 150	61 765	6 018	8 124	3 477
Philippines					
Crude	21 034	25 812	5 005	...	...
Calcined	10 201	29 322	5 506	5 487	...
Saudi Arabia					
Crude & calcined	50 625	62 762	56 141	53 825	40 305
Singapore					
Crude & calcined	20 355	12 740	17 727	6 138	12 503
of which, re-exports	2 881	2 475	800	739	459
Syria	40 836	18 823	11 893	...	...
Taiwan					
Crude	7 661	5 015	4 829	4 004	3 927
Calcined	4 819	5 373	2 242	1 718	900
Thailand					
Crude	6 425 567	6 772 085	3 973 203	4 260 735	4 165 646
Calcined	80 942	100 004	70 173	72 698	93 111
Australia					
Crude	136 209	303 417	764 832	1 133 723	827 358
Calcined	11 673	15 136	11 315	7 296	4 129

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**

tonnes

Country	1996	1997	1998	1999	2000
Albania					
Crude & calcined	5 715	2 343	314	494	3 974
Austria					
Crude	...	22 130	20 698	21 638	29 926
Calcined	...	48 817	43 945	47 614	31 735
Azerbaijan					
Crude & calcined	...	...	27 206	16 147	14 881
Belarus					
Crude & calcined	...	...	93 572	151 694	122 874
Belgium-Luxembourg					
Crude	618 907	588 067	575 917	767 694	800 514
Calcined	358 952	365 400	381 601	338 404	350 278
Croatia					
Crude & calcined	25 918	35 642	37 026	24 018	20 322
Czech Republic					
Crude	22 088	27 283	34 531	25 760	8 628
Calcined	...	25 795	29 939	23 407	22 307
Denmark					
Crude	339 249	241 900	269 006	163 438	283 266
Calcined	6 787	6 567	10 061	12 558	7 080
Estonia					
Crude & calcined	...	11 419	9 484	15 763	15 852
Finland					
Crude	145 974	210 869	263 557	277 541	281 183
Calcined	6 614	7 898	6 344	19 871	31 374
France					
Crude	198 820	177 004	245 432	264 504	200 529
Calcined	26 220	29 439	35 933	41 167	47 813
Georgia					
Germany					
Crude	177 105	159 545	180 628	273 764	208 536
Calcined	99 327	73 950	71 634	50 807	46 851
Greece					
Crude	2 958	10 033	1 229	229	1 408
Calcined	2 089	1 736	1 963	2 753	23 025
Hungary					
Crude	48 792	62 476	66 295	50 147	51 481
Iceland					
Irish Republic					
Crude	1 307	6 892	6 814	7 266	8 639
Calcined	3 793	3 886	1 678	571	561
Italy					
Crude	5 636	546	715	3 765	2 304
Calcined	18 992	19 402	18 731	20 436	25 943
Latvia					
Crude & calcined	...	...	7 540	2 991	2 852
Lithuania					
Netherlands					
Crude	284 693	230 907	182 423	196 156	175 167
Calcined	344 334	328 365	335 844	419 469	407 007
Norway					
Crude	43 157	29 482	28 015	25 521	23 851
Calcined	262 186	332 441	375 899	354 670	332 034
Poland					
Crude	4 700	5 900	55 000	65 988	78 372
Calcined	40 700	81 700	119 500	180 149	127 071
Portugal					
Crude	25 784	39 636	42 798	44 279	35 966
Calcined	134 296	169 780	233 205	310 987	374 538
Romania					
Russia					
Slovakia					
Crude & calcined	109 608	108 726	88 800	94 824	102 728
Slovenia					
Spain					
Crude	2 273	...	6 021	121	43 375
Calcined	24 968	46 213	48 781	54 677	22 248

**Imports of Gypsum**

tonnes

Country	1996	1997	1998	1999	2000
Sweden					
Crude	213 335	185 952	321 316	214 236	296 067
Calcined	109 118	92 476	57 108	137 657	59 347
Switzerland					
Crude	46 420	57 448	65 623	60 400	67 960
Calcined	62 421	67 896	71 705	69 844	71 517
Turkey	8 059	39 120	30 198	73 521	83 549
United Kingdom					
Crude	586 999	521 455	328 175	391 447	496 204
Calcined	43 466	42 859	33 227	33 818	63 338
Burkina Faso	4 278	8 121	9 876	11 682	5 343
Cameroon	...	...	27 613	...	...
Egypt					
Crude & calcined	3 353	6 494	6 660	8 111	...
Ghana					
Crude & calcined	1 038	1 524	25 470	6 726	43 649
Ivory Coast					
Crude & calcined	68 702	...	...	...	...
Kenya	...	...	24 515	22 332	8 334
Morocco					
Crude & calcined	...	4 753	1 008	1 183	...
Nigeria					
Crude & calcined	...	3 533	3 815	4 592	...
Senegal					
Crude & calcined	...	...	44 799	59 227	55 405
South Africa					
Crude & calcined	9 468	8 767	9 056	7 712	8 235
Togo					
Crude & calcined	37 786	38 306	40 056	58 933	...
Tunisia					
Crude & calcined	1 015	1 305	1 442	2 026	...
Uganda	...	...	28 448	17 024	5 714
Canada					
Crude	237 158	207 538	96 590	121 047	154 604
Calcined	33 077	31 775	38 463	28 876	22 245
Costa Rica					
Crude & calcined	59 576	36 482	77 994	57 990	59 631
El Salvador					
Crude & calcined	17 327	16 381	33 439	25 894	44 014
Guadeloupe					
Crude & calcined	13 103	10 272	12 622	18 962	...
Martinique					
Crude & calcined	7 454	10 143	7 450	18 398	10 171
Mexico					
Crude	3 376	4 942	4 694	6 595	10 085
Calcined	20 791	21 467	23 695	28 916	28 387
Panama					
Crude & Tobago	14 505	16 388	11 301	20 640	...
Trinidad & Tobago					
Crude & calcined	...	2 941	6 250	...	459
USA					
Crude	8 050 996	8 414 117	8 678 644	9 379 401	9 170 778
Ground & calcined	10 766	9 523	11 384	14 184	15 560
Colombia					
Crude	119 818	219 546	217 046	104 396	165 651
Ecuador					
Crude	33 079	71 176	116 229	37 041	64 698
Paraguay					
Crude & calcined	24 299	18 801	17 523	25 402	17 746
Uruguay					
Crude & ground	20 607	49 422	51 768	54 255	25 904
Venezuela					
Crude	207 775	194 853	230 862	231 217	159 600
Abu Dhabi					
Crude	52 272	45 311	51 254	58 893	...
Bahrain					
Crude	20 242	6 651	5 710	8 512	9 340
China					
Crude	3 870	4 416	4 398	21 243	35 153
Calcined	15 561	16 299	15 085	20 404	27 335
Dubai					
Crude & calcined	7 205	4 104	3 198	...	...

**Imports of Gypsum**

tonnes

Country	1996	1997	1998	1999	2000
Hong Kong					
Crude	57 019	70 968	10 969	26 752	26 062
Calcined	22 050	19 536	16 116	12 292	16 960
India					
Crude & calcined (a)	10 145	16 253	14 629	10 126	...
Indonesia					
Crude	...	513 604	582 127	507 791	546 721
Calcined	(b) 366 076	30 228	20 454	16 892	31 999
Japan					
Crude	4 090 538	4 814 767	2 928 552	2 539 371	2 487 726
Calcined	3 400	8 195	6 151	6 741	7 673
Jordan	9 248	8 097	7 085	4 858	3 654
Korea, Republic of					
Crude	827 230	930 201	515 582	531 892	676 503
Calcined	7 669	3 721	2 644	2 165	12 187
Kuwait					
Crude	186 903	189 795	...	...	...
Kyrgyzstan					
Crude & calcined	28 898	*29 000	28 762	15 814	13 875
Macao	21 739	27 237	12 476	25 629	9 764
Malaysia					
Crude & calcined	770 000	712 403	863 093	...	...
Oman	5 611	2 201	2 581	7 131	5 611
Philippines					
Crude	211 206	280 900	91 735	260 530	...
Calcined	10 201	12 063	10 726	13 843	...
Qatar	300	2 635	...	...	...
Saudi Arabia					
Crude & calcined	36 214	39 002	32 133	33 904	151 123
Singapore					
Crude & calcined	175 992	110 256	128 390	83 880	61 378
Sri Lanka	46 080	52 318	63 670	44 306	...
Taiwan					
Crude	684 889	810 556	600 068	498 394	471 174
Calcined	4 199	6 606	4 029	5 172	4 820
Thailand					
Crude	2 126	79 150	319	243	141
Calcined	4 414	3 100	1 607	1 584	2 564
Australia					
Crude	1 351	11 928	2 877	15 640	7 372
Calcined	3 136	2 153	2 471	4 353	3 180
New Caledonia					
Crude & calcined	5 361	6 246	5 267	5 805	5 280
New Zealand					
Crude & calcined	219 512	42 394	365 361	211 153	163 451

Note(s) :-

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

(a) Years ended 31 March following that stated

(b) Including 'crude'

**Production of Iodine**

kilograms

Country	1996	1997	1998	1999	2000
Azerbaijan	15 000	5 000	...	...	...
Russia	9 000	73 000	168 000	25 000	24 000
USA	1 270 000	1 320 000	1 490 000	1 620 000	*1 440 000
Chile (a)	6 332 255	8 832 344	9 851 673	8 637 000	9 839 000
China	*500 000	*500 000	*500 000	*500 000	*500 000
Indonesia	*75 000	83 000	65 000	74 000	...
Japan	6 178 000	6 036 000	6 142 000	6 152 000	*6 100 000
Turkmenistan	35 000	87 000	*90 000	*150 000	*150 000
Uzbekistan	-----	-----	*1 000	*2 000	*2 000
World Total	14 400 000	16 900 000	18 300 000	17 200 000	18 100 000

Note(s):-

(a) Exports

**Exports of Iodine**

kilograms

Country	1996	1997	1998	1999	2000
Azerbaijan	9 000	7 000	...	...	2 000
Belgium-Luxembourg	1 000	1 558 600	1 632 000	1 707 500	1 570 900
Czech Republic	...	1 000	8 000	2 000	1 000
France	74 000	73 900	43 700	30 200	27 100
Germany	432 700	324 200	539 600	568 300	855 900
Irish Republic	...	2 000	13 613	80	27 742
Italy	...	45 884	17 201	4 335	4 694
Lithuania	...	2 000	2 000	----	2 000
Norway	...	23	1 217	17 607	19 244
Russia	27 000	21 000	69 000	85 000	101 000
Spain	...	19 037	41 526	6 938	74 721
Sweden	...	...	----	1 000	5 000
United Kingdom	224 034	184 176	138 391	148 093	385 000
Canada	36 755	56 717	54 940	6 359	6 726
USA	2 576 096	3 257 253	3 196 101	3 026 934	1 766 884
Brazil	67 250	34 555	24 870	4 301	43 026
Chile	6 332 255	8 832 344	9 851 673	8 636 000	9 839 000
China	3 101	19 500	26 070	1 323	8 020
India (a)	14 653	10 000	150	319 350	...
Indonesia	58 000	33 459	19 000	37 092	940 285
Japan	5 572 130	5 602 646	4 994 110	4 653 202	4 788 264
Saudi Arabia	...	...	1 137 000	299 000	44 000
Singapore	...	10 525	4 378	6 373	4 504
of which, re-exports	...	10 320	3 361	5 728	4 504
Australia	302	200	250	2 000	3 534

Note(s):-

(a) Years ended 31 March following that stated

**Imports of Iodine**

kilograms

Country	1996	1997	1998	1999	2000
Austria	42 000	87 100	97 900	73 100	69 300
Belgium-Luxembourg	44 000	1 427 000	1 745 600	1 736 700	1 501 800
Cyprus	6 004	17 693	16 073	13 521	11 529
Czech Republic	...	21 000	8 000	15 000	21 000
Denmark	20 300	24 219	26 008	8 975	11 451
Finland	15 000	2 496	3 610	7 105	4 928
France	1 739 000	1 880 600	1 838 900	1 580 200	2 139 700
Germany	1 232 500	1 229 900	1 282 900	1 328 900	1 346 700
Greece	...	23 000	13 000	1 318	1 158
Irish Republic	...	...	90 707	7 136	17 582
Italy	...	944 562	841 025	834 259	749 474
Lithuania	...	3 000	3 000	900	4 000
Netherlands	...	1 373 000	1 845 000	2 051 200	2 380 900
Norway	439 000	549 692	351 791	124 711	228 029
Poland	33 000	31 000	25 000	29 000	17 773
Portugal	15 600	86 325	24 990	22 543	22 443
Romania	...	1 000	6 000	...	...
Russia	...	84 000	62 000	109 000	135 000
Spain	...	589 862	608 324	722 532	1 019 447
Sweden	...	2 000	10 000	2 000	3 000
Switzerland	65 784	62 428	8 784	3 585	18 949
Turkey	21 151	...	...	62 480	139 043
Ukraine	1 613	12 486	6 960	1 211	...
United Kingdom	3 350 534	1 353 469	1 693 418	956 976	1 301 519
Yugoslavia, Federal Republic of	...	24 000	8 000	3 000	1 000
Botswana	...	6 031	4 808	674	...
Egypt	...	206 000	99 000	330 000	...
South Africa	16 098	15 684	13 346	14 210	23 667
Tunisia	1 553	799	1 495	2 506	...
Canada	426 522	641 446	529 337	430 085	528 000
Mexico	1 490 841	...	...	...	...
USA	4 649 705	6 016 775	5 727 186	5 086 301	4 790 961
Argentina	...	37 000	35 000	37 984	37 000
Brazil	509 000	298 000	418 000	527 000	883 072
Colombia	...	27 000	26 000	22 000	24 000
Uruguay	...	1 600	2 000	2 200	2 200
Venezuela	2 622	13 000	...	10 000	10 000
China	41 258	346 284	575 456	748 671	793 731
Hong Kong	...	265 224	184 009	59 132	59 784
India (a)	483 150	477 125	606 917	700 823	...
Indonesia	8 241	170 905	18 193	25 159	34 128
Iran	...	...	23 000	30 000	...
Japan	142 800	205 206	349 110	290 195	363 364
Korea, Republic of	24 191	35 465	49 193	68 920	92 803
Pakistan (b)	14 433	21 338	27 976	19 000	31 085
Philippines	9 639	6 331	2 575	...	...
Singapore	...	3 576	8 856	20 699	1 971
Sri Lanka	1 136	422	25	1 000	...
Taiwan	32 720	28 709	28 227	21 852	27 287
Thailand	7 259	8 216	13 000	12 000	20 487
Australia	34 029	37 663	56 538	56 000	59 996
New Zealand	31 000	40 000	7 000	31 000	29 000

Note(s) :-

(a) Years ended 31 March following that stated

(b) Years ended 30 June of that stated

## Production of Iron Ore

tonnes

Country	1996	1997	1998	1999	2000
Austria	1 860 300	1 794 129	1 792 000	1 747 000	1 855 000
Bosnia & Herzegovina	*150 000	*150 000	*150 000	*150 000	*150 000
Bulgaria	1 000 000	858 000	895 300	699 400	588 800
France	1 459 900	522 700	21 000	6 000	...
Germany (b) (f)	104 280	200 940	604 912	615 165	461 525
Macedonia	*15 000	*15 000	*15 000	*15 000	*15 000
Norway	1 554 599	724 400	588 700	520 000	458 600
Portugal (f)	18 620	18 905	20 200	11 733	11 800
Romania	860 000	756 000	459 000	131 000	...
Russia	72 100 000	70 867 300	72 600 000	82 200 000	87 100 000
Slovakia	436 000	452 800	479 212	458 035	447 055
Spain	1 263 318	57 930	52 161	64 000	66 907
Sweden	21 288 000	21 893 000	20 930 000	18 853 000	20 557 000
Turkey	6 279 951	5 986 900	5 885 429	4 869 032	4 076 257
Ukraine	47 590 000	52 993 500	51 070 200	47 769 100	55 883 200
United Kingdom	1 190	1 210	1 188	*1 000	1 033
Yugoslavia, Federal Republic of	5 200	7 230	5 125	2 088	----
Algeria	2 244 000	1 637 000	1 783 000	1 338 000	1 645 000
Egypt (d)	2 429 901	2 662 447	2 941 798	3 000 000	...
Mauritania	11 363 000	11 703 000	11 411 000	11 500 000	11 500 000
Morocco	11 842	12 011	9 285	6 625	5 615
Nigeria	31 912	76 544	18 796	----	----
South Africa (c)	30 829 900	33 225 130	32 965 235	29 507 849	33 707 364
Tunisia	238 800	264 400	221 800	222 200	183 300
Zimbabwe	323 942	479 032	371 589	598 650	438 495
Canada (g)	35 689 000	37 277 000	37 808 000	31 594 000	37 459 000
Mexico	11 809 000	11 956 000	11 101 000	10 814 000	*10 500 000
USA	62 083 000	62 971 000	62 931 000	57 749 000	62 983 000
Brazil (a)	174 190 720	184 924 580	199 233 506	194 485 974	210 000 000
Chile	9 081 661	8 738 191	9 112 055	8 345 035	8 728 927
Colombia	605 716	754 772	525 825	576 414	656 632
Peru	4 467 689	4 746 070	4 905 632	4 078 186	3 944 759
Venezuela	18 454 912	18 359 509	16 784 217	14 050 827	17 352 963
China	252 282 700	268 612 000	246 891 000	237 230 100	288 300 000
India (h)	68 173 000	75 723 000	72 230 000	74 946 000	79 210 000
Indonesia	425 101	487 354	564 424	584 428	489 126
Iran (e)	7 426 606	6 217 727	8 174 657	*8 300 000	*8 300 000
Kazakhstan	12 975 100	13 132 600	9 335 800	9 616 700	16 160 500
Korea, Dem. P.R. of	*2 000 000	*2 000 000	*1 000 000	*1 000 000	*1 000 000
Korea, Republic of	221 163	295 960	238 252	187 987	163 192
Malaysia (g)	325 114	269 087	376 009	337 462	258 573
Thailand	85 880	43 840	90 700	122 633	...
Vietnam	193 000	330 000	374 000	...	...
Australia	152 138 000	156 286 000	160 731 000	150 568 000	171 507 000
New Zealand	2 333 715	2 477 728	2 224 325	2 303 376	2 691 780
World Total	1 018 000 000	1 063 000 000	1 050 000 000	1 012 000 000	1 139 000 000

Note(s):-

- (a) Including beneficiated and direct shipping ore
- (b) Used as aggregate in the construction industry
- (c) Including by-product magnetite
- (d) Years ended 30 June of that stated
- (e) Years ended 20 March following that stated
- (f) Including manganeseiferous iron ore
- (g) Including by-product iron ore
- (h) Years ended 31 March following that stated

**Exports of Iron Ore**

tonnes

Country	1996	1997	1998	1999	2000
Albania	39 780	1 243	1 737	1 679	----
Belgium-Luxembourg					
Iron ore	68 607	12 616	13 880	67 657	32 755
Burnt pyrites	-----	-----	18 190	98 522	3
France	1 293 802	584 665	37 351	20 178	21 148
Georgia (a)	*5 000	*52 600	*48 500	...	...
Germany					
Iron ore	34 034	14 176	4 461	12 222	20 659
Burnt pyrites	12 886	94 633	13 678	1 318	4 587
Italy					
Burnt pyrites	18 957	17 296	48 802	65 162	96 060
Netherlands					
Iron ore	292 784	107 663	29 344	151 475	157 229
Burnt pyrites	16 196	63 895	44 352	20 576	4
Norway					
Iron ore	610 787	270 815	50 829	19 127	17 598
Burnt pyrites	155 982	87 562	64 053	38 232	45 081
Poland	30 396	2 000	5 000	7 744	2 003
Russia	13 833 500	11 772 600	13 828 300	10 841 114	19 224 008
Slovakia	95 000	79 500	75 000	95 900	115 628
Spain					
Iron ore	975 353	43 224	55 173	36 742	26 227
Burnt pyrites	198 896	138 015	55 052	33 256	108 384
Sweden	15 172 628	17 571 842	14 631 068	13 819 605	16 323 925
Ukraine	19 108 682	20 083 455	17 703 014	13 343 939	(a) *12 002 000
Yugoslavia, Federal Republic of					
Burnt pyrites	13 000	17 219	16 157	21 367	6
Liberia	...	100 000	100 000	...	...
Mauritania	11 158 000	11 689 000	11 402 000	11 042 000	...
Morocco					
Burnt pyrites	13 140	5 300	700	...	...
South Africa	19 328 139	20 729 659	22 093 000	21 095 418	21 397 329
Tunisia	14 658	9 025	15 801	9 581	...
Canada	28 880 500	33 142 058	30 691 746	26 885 514	26 571 394
USA (b)	6 244 606	6 392 675	6 065 078	6 125 063	6 148 513
Brazil	128 989 790	134 092 571	150 210 269	139 801 476	156 892 908
Chile	6 982 429	6 726 425	7 071 147	5 735 959	6 488 297
Peru	4 100 000	3 800 000	4 600 000	3 800 000	...
Venezuela	9 579 320	9 321 862	8 603 412	6 616 973	6 834 129
Bahrain	2 900 000	3 200 000	1 900 000	2 700 000	3 852 065
China (b)	159	5 409	20 134	16 278	605
India (c)	17 627 888	19 498 132	22 273 379	15 716 166	...
Japan	37	70	103	29 042	78 832
Kazakhstan	3 503 300	8 622 565	7 353 001	3 394 300	(a) *9 176 000
Korea, Dem. P.R. of (a)	*177 000	*168 000	*83 000	*26 000	*49 000
Malaysia	12 012	9 000	160 000	147 000	...
Philippines	4 546 000	4 487 000	3 663 000	3 852 000	...
Australia	128 273 927	146 757 247	136 396 291	146 200 021	157 857 461
New Zealand	1 338 505	558 246	678 790	1 329 660	760 879

## Note(s):-

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

(b) Including burnt pyrites

(c) Years ended 31 March following that stated

**Imports of Iron Ore**

tonnes

Country	1996	1997	1998	1999	2000
Austria	4 335 000	5 101 249	5 237 875	4 349 862	...
Belgium-Luxembourg	12 996 054	11 158 528	13 493 548	12 112 181	11 830 358
Bulgaria	1 143 871	1 992 564	2 208 000	*2 600 000	...
Croatia	...	...	80	9 564	14 243
Czech Republic	8 255 000	7 383 349	7 395 000	5 356 868	6 932 742
Denmark					
Burnt pyrites	48 625	21 828	66 946	45 165	59 326
Finland	3 305 768	3 731 829	3 922 531	3 818 567	3 917 135
France					
Iron ore	18 244 000	20 212 123	19 746 303	19 999 656	19 688 773
Burnt pyrites	17 819	13 329	8 337	5 894	4 228
Germany					
Iron ore	39 303 336	41 686 890	53 595 582	38 801 838	47 502 511
Burnt pyrites	71 484	94 633	86 364	89 957	76 415
Greece					
Burnt pyrites	91 592	61 204	39 557	22 886	156 876
Hungary	2 315 584	1 467 892	2 063 600	1 744 312	2 098 145
Iceland	22 736	24 560	22 768	22 774	33 104
Italy (a)	16 047 940	16 663 374	15 717 985	15 614 537	17 619 370
Lithuania	4 367	1 951	5 541	2 868	5 150
Netherlands					
Iron ore	8 332 365	8 595 877	8 827 125	7 949 025	7 560 788
Burnt pyrites	51 781	57 481	27 794	111 119	47 175
Norway	470 188	561 474	529 789	488 582	187 630
Poland (a)	9 803 503	10 582 900	9 981 900	7 418 423	9 736 781
Portugal	454 811	558 546	590 086	538 354	580 178
Romania	5 843 451	6 625 253	6 569 462	4 171 545	5 049 180
Russia					
Iron ore	4 372 017	5 392 492	6 562 256	3 313 496	9 188 913
Burnt pyrites	7 109	3 552	8 805	...	...
Slovakia	4 180 000	4 307 000	3 975 500	4 270 146	4 741 501
Spain	6 105 975	5 858 327	6 583 581	6 283 186	6 265 454
Sweden					
Iron ore	144 669	102 638	69 083	68 929	94 483
Burnt pyrites	5 651	10 694	22 613	48 357	17 442
Switzerland (a)	18 579	14 720	14 373	13 222	15 001
Turkey	2 991 253	2 900 453	3 857 835	2 973 052	4 140 103
Ukraine	2 308 136	1 881 478	3 369 816	4 683 178	...
United Kingdom					
Iron ore	20 304 347	21 032 971	20 764 785	17 030 212	16 732 190
Burnt pyrites	3 555	18 409	25 787	21 649	17 011
Yugoslavia, Federal Republic of	987 662	1 067 222	52 515	1 254 517	302 312
Egypt	881 266	877 995	2 193 934	1 284 997	...
Libya	1 500 000	1 348 000	1 700 000	...	...
Nigeria	5 643	2 000	208	21	...
Tunisia	73 231	111 483	187 132	226 073	...
Canada	6 873 506	7 081 265	7 200 963	7 311 445	6 566 054
Mexico	1 310 474	2 885 308	3 954 913	3 732 476	3 299 479
Trinidad & Tobago	1 183 178	1 052 433	1 364 268	...	...
USA (a)	18 396 735	18 595 659	16 973 180	14 254 523	15 658 001
Argentina	4 947 040	5 054 185	5 558 631	4 142 666	5 323 026
Paraguay	43 147	48 990	40 000	21 000	...
Abu Dhabi	...	40 428	21 040	38 183	...
Bahrain	2 700 000	3 163 000	1 600 000	2 600 000	3 077 934
China					
Iron ore	43 873 023	55 067 487	51 594 678	55 272 881	69 970 779
Burnt pyrites	937	38 346	176 040	1 123	63
India (b)	851 790	371 390	149 248	132 569	...
Indonesia					
Iron ore	464 874	1 472 099	1 310 494	2 430 408	2 156 360
Burnt pyrites	2 047 762	398 536	98	11 754	308
Iran	2 600 000	3 000 000	1 479 194	1 735 675	...
Japan	119 204 779	126 600 755	120 618 050	120 107 002	131 732 578
Kazakhstan	*200 000	*220 000	242 586	250 000	...

**Imports of Iron Ore**

tonnes

Country	1996	1997	1998	1999	2000
Korea, Republic of	22 568 274	38 592 030	33 611 499	35 400 291	38 980 349
Malaysia	1 769 231	2 618 000	1 072 000	1 356 000	...
Pakistan (c)	1 935 459	1 228 993	1 928 368	1 265 693	1 566 032
Philippines	4 117 000	3 997 000	2 828 000	...	...
Qatar	909 584	725 578	...	...	...
Saudi Arabia	2 552 569	2 360 040	2 800 886	3 046 235	2 919 767
Taiwan					
Iron ore	10 074 552	14 042 963	14 042 341	13 236 522	14 859 677
Burnt pyrites	...	-----	126 281	73 474	74 190
Australia	4 081 167	5 558 851	4 926 790	4 282 000	4 426 997

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**

tonnes

Country	1996	1997	1998	1999	2000
Austria	3 429 208	3 965 864	4 034 229	3 926 094	4 300 000
Belgium	8 626 651	8 076 475	8 618 117	8 430 392	8 471 214
Bosnia & Herzegovina	*100 000	*100 000	*100 000	*100 000	*100 000
Bulgaria	1 504 000	1 643 000	1 390 000	1 152 000	1 200 000
Czech Republic	4 898 100	5 195 400	4 981 800	4 022 700	4 621 500
Finland	2 456 932	2 786 126	2 919 692	2 954 127	2 982 787
France	11 999 457	13 315 344	13 458 358	13 432 778	13 506 955
Germany	27 722 000	30 940 000	30 162 000	27 934 000	30 845 000
Hungary	1 496 370	1 139 934	1 258 851	1 309 584	1 340 353
Italy	10 320 000	11 304 000	10 770 000	10 604 000	11 200 000
Luxembourg	829 010	438 030	-----	-----	-----
Netherlands	5 543 900	5 805 000	5 562 000	5 307 000	5 000 000
Norway	70 000	70 000	70 000	70 000	70 000
Poland	6 540 100	7 295 637	6 128 484	5 233 124	6 490 456
Portugal	423 000	431 000	365 000	389 000	400 000
Romania	4 024 600	4 556 000	4 541 151	2 969 467	3 068 678
Russia	37 148 200	37 327 600	34 661 000	40 856 000	44 600 000
Slovakia	2 928 000	3 072 000	2 756 000	2 987 000	3 166 400
Spain	4 127 000	3 927 000	4 278 000	4 146 000	...
Sweden	3 129 500	3 060 100	3 149 000	3 212 200	3 054 700
Switzerland	*100 000	*100 000	*80 000	*80 000	*80 000
Turkey	5 253 000	5 565 000	5 286 000	5 181 000	5 300 000
Ukraine	17 800 000	20 600 000	20 936 000	23 009 800	25 698 700
United Kingdom	12 830 200	13 054 500	12 746 100	12 139 300	10 890 000
Yugoslavia, Federal Republic of	535 213	906 704	825 916	134 882	562 808
Algeria	855 564	525 771	740 968	782 895	750 384
Egypt	2 054 000	2 704 000	2 956 000	2 970 000	2 900 000
Libya	862 000	1 007 000	1 004 000	1 302 000	1 490 000
Morocco	*15 000	*15 000	*15 000	*15 000	*15 000
Nigeria	12 000	-----	-----	-----	-----
South Africa	6 911 000	7 307 000	7 960 000	7 592 000	7 800 000
Tunisia	145 100	152 300	122 900	180 200	195 400
Canada	8 638 007	8 669 788	8 936 802	8 856 569	8 904 044
Mexico	8 023 369	8 889 365	10 115 642	10 892 000	10 445 000
Trinidad & Tobago	954 500	1 133 800	1 023 100	1 378 700	1 488 000
USA	49 900 000	50 100 000	49 800 000	47 900 000	49 400 000
Argentina	3 388 003	3 576 039	3 659 744	2 974 208	3 608 043
Brazil	24 313 000	25 336 000	25 446 800	24 948 500	28 135 000
Chile	995 920	941 465	992 568	1 029 522	1 026 157
Colombia	286 275	323 701	255 896	264 362	284 893
Paraguay	103 562	78 615	65 545	61 281	82 018
Peru	294 840	367 795	343 341	242 952	409 303
Venezuela	5 731 614	5 607 558	5 423 881	5 071 050	6 412 467
China	107 225 000	115 114 100	118 521 000	125 329 900	131 014 800
India	25 242 000	26 211 000	25 317 000	25 429 000	26 800 000
Indonesia	1 723 000	1 535 000	1 571 000	1 736 000	1 820 000
Iran	5 630 000	6 481 000	5 626 000	6 142 000	6 700 000
Japan	74 596 833	78 519 469	74 981 000	74 519 916	81 070 748
Kazakhstan	2 535 500	3 089 300	2 594 200	3 438 100	4 010 261
Korea, Dem. P.R. of	*500 000	*500 000	*250 000	*250 000	*250 000
Korea, Republic of	23 009 717	22 712 406	23 299 189	23 329 000	24 937 000
Malaysia	1 172 000	1 486 000	878 000	950 000	1 260 000
Myanmar	40 000	40 000	*40 000	*30 000	*40 000
Pakistan	1 002 000	1 068 000	*1 000 000	*1 000 000	*1 000 000
Qatar	635 000	564 000	706 000	666 000	620 000
Saudi Arabia	2 296 000	2 107 000	2 268 000	2 343 000	3 060 000
Taiwan	6 213 000	8 870 000	9 374 000	8 890 000	9 600 000
Vietnam	52 000	41 000	48 000	66 000	...
Australia	7 381 000	7 884 000	7 724 000	7 468 000	*6 660 000
New Zealand	619 000	534 000	609 000	*600 000	*600 000
World Total	547 200 000	578 200 000	572 700 000	578 200 000	614 000 000

Note(s):-

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

**Production of Crude Steel**

tonnes

Country	1996	1997	1998	1999	2000
Austria	4 442 000	5 181 000	5 282 000	5 202 000	5 722 000
Belarus	795 000	1 110 000	1 300 000	1 448 000	1 622 000
Belgium	10 751 711	10 717 603	11 403 848	10 910 168	11 614 731
Bosnia & Herzegovina	52 000	72 000	75 000	60 000	...
Bulgaria	2 457 000	2 628 000	2 240 000	1 890 000	2 020 000
Croatia	45 752	68 733	104 854	77 213	70 999
Czech Republic	6 509 400	6 750 100	6 497 800	5 397 500	6 045 800
Denmark	739 000	787 000	800 000	727 000	803 000
Finland	3 301 436	3 734 299	3 951 589	3 955 658	4 096 389
France	17 632 984	19 767 457	20 126 200	20 199 977	20 953 667
Georgia	82 681	103 152	56 353	7 036	1 000
Germany	39 793 000	45 007 000	44 046 000	42 062 000	46 376 000
Greece	846 885	1 016 000	1 109 000	951 000	1 088 000
Hungary	2 059 942	1 818 523	1 940 110	1 919 739	1 969 344
Irish Republic	340 510	336 361	354 780	335 000	360 000
Italy	23 911 000	25 841 000	25 678 000	24 738 000	26 436 000
Latvia	293 166	464 529	470 835	*471 000	500 292
Luxembourg	2 501 487	2 580 219	2 476 909	2 600 324	2 571 000
Moldova	646 000	811 000	718 000	796 300	905 000
Netherlands	6 326 000	6 641 000	6 377 000	6 075 000	5 500 000
Norway	510 850	578 000	644 000	611 000	679 000
Poland	10 432 300	11 585 100	9 915 125	8 853 211	10 504 000
Portugal	852 000	911 000	906 000	1 038 000	1 093 000
Romania	6 083 000	6 675 000	6 335 896	4 391 746	4 770 217
Russia	49 253 000	48 502 000	43 673 000	51 518 000	59 100 000
Slovakia	3 458 000	3 484 000	3 428 000	3 533 600	3 706 200
Slovenia	314 000	372 690	405 210	405 000	450 000
Spain	12 161 000	13 770 000	14 827 000	14 882 000	15 834 000
Sweden	4 909 600	5 147 700	5 153 100	5 067 200	5 228 600
Switzerland	700 000	789 000	800 000	800 000	...
Turkey	13 382 221	13 644 093	13 165 724	13 806 898	13 571 563
Ukraine	21 948 800	25 285 700	24 105 255	27 390 000	31 780 000
United Kingdom	17 991 700	18 500 500	17 315 000	16 297 800	15 280 000
Yugoslavia, Federal Republic of	678 749	978 960	949 314	226 240	682 362
Algeria	646 001	394 718	646 621	773 696	776 183
Egypt	2 618 000	2 717 000	2 870 000	2 627 000	2 820 000
Libya	863 000	897 000	874 000	966 000	1 055 000
South Africa	7 999 000	8 311 000	7 956 000	7 341 000	8 400 000
Tunisia	187 000	195 000	171 000	231 000	230 000
Zimbabwe	212 000	214 000	212 000	255 000	269 000
Canada	14 637 476	15 458 635	15 832 839	16 136 095	16 496 339
Cuba	230 988	334 600	283 200	302 700	336 169
Dominican Republic	42 261	82 479	35 874	42 893	35 801
El Salvador	41 408	44 868	43 162	33 501	40 735
Mexico	13 171 832	14 218 339	14 181 685	15 242 737	15 659 150
Trinidad & Tobago	643 600	747 000	776 900	729 000	741 500
USA	95 535 000	98 485 000	98 658 000	97 427 000	101 824 000
Argentina	4 075 139	4 168 500	4 215 890	3 805 205	4 474 267
Brazil	25 237 000	26 152 900	25 759 900	24 996 200	27 865 000
Chile	1 178 266	1 167 492	1 171 409	1 290 512	1 352 034
Colombia	694 741	733 951	635 814	534 038	659 685
Ecuador	20 477	43 700	45 784	53 000	65 054
Paraguay	95 543	65 542	56 243	55 689	76 784
Peru	578 382	607 391	630 687	558 697	749 082
Uruguay	33 555	39 070	52 012	45 404	38 102
Venezuela	3 956 432	3 986 549	3 553 315	3 261 365	3 834 575
Bangladesh (b)	20 594	16 271	10 775	...	...
China	101 240 600	108 941 700	114 588 400	123 954 100	128 500 000
Hong Kong	*100 000	*100 000	*100 000	*100 000	*100 000
India	23 753 000	24 415 000	23 480 000	24 296 000	26 924 000
Indonesia	4 109 000	3 816 000	2 699 000	2 891 000	3 011 000
Iran (c)	5 895 965	6 059 375	5 608 000	6 276 860	6 800 000
Israel	265 000	270 000	*280 000	*280 000	...
Japan	98 800 671	104 554 086	93 547 990	94 192 400	106 444 468

**Production of Crude Steel**

tonnes

Country	1996	1997	1998	1999	2000
Kazakhstan	3 216 596	3 880 248	3 116 500	4 086 882	4 778 800
Korea, Dem. P.R. of	600 000	600 000	*300 000	*300 000	...
Korea, Republic of	39 642 629	42 554 151	39 895 839	41 042 000	43 107 000
Malaysia	3 216 000	2 962 000	1 903 000	2 260 000	2 430 000
Mongolia	19 200	22 700	16 300	13 100	13 000
Pakistan	416 000	479 000	494 000	*500 000	...
Philippines	920 000	980 000	884 000	530 000	...
Qatar	616 000	608 000	637 000	629 000	729 000
Saudi Arabia	2 683 000	2 539 000	2 356 000	2 610 000	2 973 000
Singapore	779 000	383 000	499 000	590 000	603 000
Syria	*70 000	*70 000	*70 000	*70 000	...
Taiwan	12 655 000	15 478 000	16 922 000	15 438 000	17 043 000
Thailand	2 143 000	2 101 000	1 814 000	1 532 000	2 100 000
United Arab Emirates	90 000	*90 000	*90 000	*90 000	...
Uzbekistan	444 000	379 000	351 000	344 000	420 000
Vietnam	311 000	314 000	306 000	308 000	305 000
Australia (a)	8 379 000	8 837 000	8 888 000	8 162 000	*7 160 000
New Zealand	774 736	768 631	756 000	775 000	765 000
World Total	750 000 000	796 000 000	775 000 000	787 000 000	846 000 000

Note(s):-

- (1) Unless otherwise indicated, these figures include production from scrap  
 (2) Small amounts of steel are believed to be produced in Albania, Angola, Azerbaijan, DR Congo, Estonia, Ghana, Jordan, Kenya, Lithuania, Macedonia, Mauritania, Morocco, Myanmar, Nigeria, Sri Lanka, Syria, 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**

tonnes

Country	1996	1997	1998	1999	2000
Albania					
Ferro-chrome	31 189	31 454	30 252	28 120	8 744
Austria					
Ferro-molybdenum	4 300	4 600	4 900	4 900	4 700
Ferro-nickel	3 900	3 700	3 300	2 600	3 300
Ferro-vanadium	5 600	5 900	5 900	6 400	5 900
Belgium					
Ferro-manganese	16 600	12 700	13 800	----	...
Ferro-silico-manganese	1 400	7 700	4 400	----	...
Ferro-molybdenum	11 700	8 300	9 600	5 300	...
Ferro-vanadium	2 150	2 400	2 300	1 800	...
Bosnia & Herzegovina					
Ferro-silicon	*1 000	*1 000	*1 000	*1 000	*1 000
Silicon metal	*200	*200	*200	*200	*200
Bulgaria					
Ferro-silicon	8 300	*10 000	*10 000	*10 000	...
Croatia					
Ferro-chrome	10 559	24 231	11 861	----	15 753
Finland					
Ferro-chrome & ferro-silico-chrome	225 155	236 652	230 906	256 290	260 605
France					
Ferro-manganese & spiegeleisen	402 170	434 377	438 212	419 672	409 169
Ferro-silico-manganese	61 000	63 000	57 000	55 000	32 773
Ferro-silicon	103 000	109 000	106 000	*110 000	...
Other ferro-alloys	72 000	101 000	55 000	...	...
Silicon metal	73 857	72 286	70 082	80 000	94 127
Georgia					
Ferro-manganese	7 612	3 991	10 312	6 441	*7 000
Ferro-silico-manganese	6 995	16 616	31 775	26 249	*25 000
Other ferro-alloys	1 014	39	3 446	4 856	...
Germany					
Ferro-chrome	25 303	25 856	20 879	16 960	21 600
Ferro-manganese	*10 000	...	...	...	...
Other ferro-alloys	*30 000	*30 000	*30 000	*30 000	*30 000
Silicon metal	22 232	20 599	19 200	21 400	26 400
Greece					
Ferro-nickel	71 204	72 934	62 673	59 545	81 662
Iceland					
Ferro-silicon	70 520	70 286	67 784	70 100	108 400
Italy					
Ferro-chrome	29 915	11 295	11 487	----	----
Ferro-manganese	42 727	40 000	49 000	19 000	*40 000
Ferro-silico-manganese	100 353	*100 000	70 000	67 000	*90 000
Ferro-silicon	11 741	...	19 909	...	...
Silicon metal	14 433	12 619	8 094	6 257	9 590
Macedonia					
Ferro-alloys	69 000	...	106 661	78 009	...
Silicon metal	*1 000	*1 000	*500	----	----
Norway					
Ferro-chrome	108 900	145 124	174 678	159 714	153 500
Ferro-manganese	131 217	119 318	153 089	124 000	150 585
Ferro-silico-manganese	174 273	177 409	206 749	235 000	198 671
Ferro-silicon	463 423	*420 000	357 000	354 000	...
Other ferro-alloys	25 628	31 443	38 130	49 000	54 639
Silicon metal	*110 000	*110 000	132 000	*140 000	...
Poland					
Ferro-chrome	1 100	6 249	4 212	----	----
Ferro-manganese	59 900	47 500	50 152	57	0
Ferro-silico-manganese	25 000	20 000	15 100	10 000	18 997
Ferro-silicon	71 800	77 258	74 991	62 481	55 969
Other ferro-alloys	5 800	8 500	13 300	2 700	517
Romania					
Ferro-chrome	9 650	950	873	----	----
Ferro-manganese	20 150	11 505	4 170	25	1 044
Ferro-silico-manganese	78 590	62 570	83 617	550	21 158
Ferro-silicon	23 827	9 620	5 553	----	2 542
Silicon metal	*300	*300	*150	----	----

**Production of Ferro-Alloys**

tonnes

Country	1996	1997	1998	1999	2000
Russia					
Spiegeleisen	*7 000	*7 000	*7 000	*7 000	*7 000
Ferro-chrome	135 495	248 000	218 100	266 904	*280 000
Ferro-silico-chrome	...	36 100	106 000	109 413	...
Ferro-manganese	67 000	47 100	78 800	*90 000	*71 000
Ferro-nickel	75 000	*40 000	*30 000	*33 000	...
Ferro-phosphorus	2 300	3 600	----	...	100
Ferro-silicon	496 000	498 000	496 000	601 413	...
Other ferro-alloys	*40 000	*40 000	*40 000	*40 000	...
Silicon metal	*40 000	*40 000	*40 000	*40 000	*40 000
Slovakia					
Ferro-chrome	19 900	11 394	11 715	6 986	17 702
Ferro-silico-manganese	...	45 159	46 627	37 000	52 141
Ferro-silicon	...	50 133	49 963	70 000	59 443
Other ferro-alloys	...	29 308	54 672	...	50 508
Slovenia					
Ferro-chrome	22 819	9 232	10 621	560	----
Ferro-silicon	*10 000	*10 000	*10 000	*8 000	*9 000
Spain					
Ferro-chrome	805	490	1 145	935	905
Ferro-manganese	15 701	22 788	18 360	10 000	26 815
Ferro-silico-manganese	101 840	122 199	107 952	95 000	128 197
Ferro-silicon	35 890	38 340	39 115	42 000	50 071
Silicon metal	16 936	19 220	18 424	28 000	28 215
Sweden					
Ferro-chrome	138 110	101 195	115 534	128 269	106 399
Ferro-silicon	21 287	22 410	20 356	21 440	18 948
Turkey					
Ferro-chrome	101 450	108 320	110 175	123 905	97 240
Ferro-silico-chrome	...	6 953	6 530	6 340	7 050
Ferro-silicon	4 460	4 730	4 810	620	----
Ukraine					
Spiegeleisen	800	----	----	----	5 400
Ferro-manganese	263 500	307 700	291 500	257 300	338 100
Ferro-silico-manganese	601 400	559 700	485 560	498 905	684 040
Ferro-silicon	254 400	288 200	222 511	243 600	323 417
Yugoslavia, Federal Republic of					
Ferro-nickel	6 501	6 209	1 215	----	----
Egypt					
Ferro-silicon (g)	17 430	54 080	56 703	...	...
Other ferro-alloys (g)	26 630	26 220	17 800	...	...
South Africa					
Ferro-chrome (d)	1 478 000	1 939 500	2 025 260	2 155 200	2 574 300
Ferro-manganese	548 458	498 759	542 120	527 106	(f) 907 000
Ferro-silico-manganese	294 034	326 238	308 845	307 545	...
Ferro-silicon	87 300	102 152	108 410	106 000	...
Ferro-vanadium	*1 000	*5 000	*6 000	*6 000	*15 000
Silicon metal	28 495	34 001	32 611	35 797	...
Zimbabwe					
Ferro-chrome	261 918	233 386	246 782	248 395	292 323
Ferro-silico-chrome	33 175	16 614	21 385	24 760	7 882
Canada					
Ferro-niobium	3 400	3 400	3 400	3 500	3 300
Ferro-silicon	*80 000	*80 000	*70 000	*70 000	*70 000
Silicon metal	*30 000	*30 000	*30 000	*30 000	*30 000
Dominican Republic					
Ferro-nickel	78 488	85 450	65 892	63 760	72 488
Mexico					
Ferro-manganese	69 341	69 977	86 701	79 567	90 501
Ferro-silico-manganese	92 611	105 381	104 650	113 916	107 922
USA					
Ferro-chrome (d) (e)	36 789	60 700	30 000	...	...
Ferro-nickel	30 500	32 100	8 590	...	...
Ferro-silicon	362 000	359 000	334 000	325 000	...
Other ferro-alloys	194 000	...	...	...	...
Silicon metal	171 000	183 000	188 000	186 000	*180 000

**Production of Ferro-Alloys**

tonnes

Country	1996	1997	1998	1999	2000
Argentina					
Ferro-manganese	7 115	7 672	5 000	*2 000	----
Ferro-silico-manganese	33 000	25 000	25 000	*10 000	----
Ferro-silicon	19 000	19 265	11 000	2 600	...
Other ferro-alloys	21 858	20 400	23 000	13 900	...
Silicon metal	...	...	7 000	...	...
Brazil					
Ferro-chrome	72 609	67 429	65 683	78 874	134 562
Ferro-silico-chrome	4 622	7 056	6 824	11 910	7 790
Ferro-silico-magnesium	13 399	14 076	7 717	9 882	9 658
Ferro-manganese	215 260	152 530	121 633	85 260	121 277
Ferro-silico-manganese	232 218	175 919	124 458	148 384	171 304
Ferro-nickel	29 582	32 015	26 389	19 807	19 315
Ferro-niobium	21 522	25 475	30 973	28 557	27 359
Ferro-silicon	236 838	212 183	166 278	200 833	189 935
Other ferro-alloys	----	1 046	1 170	----	----
Silicon metal	150 054	136 884	126 744	136 572	166 344
Chile					
Ferro-chrome	2 079	*2 000	*2 000	*2 000	...
Ferro-manganese	8 498	5 608	5 122	2 833	...
Ferro-silico-manganese	1 831	3 175	3 921	2 048	...
Ferro-molybdenum	4 222	3 157	1 978	2 079	...
Ferro-silicon	4 650	1 294	1 159	1 000	...
Colombia					
Ferro-nickel	53 549	58 500	65 400	65 900	64 500
Venezuela					
Ferro-manganese	...	6 010	7 671	10 694	----
Ferro-silico-manganese	53 034	57 876	48 504	47 635	*50 000
Ferro-silicon	63 131	58 000	36 277	38 886	...
Bhutan					
Ferro-silicon	*13 000	*15 000	*18 000	*18 000	...
China					
Ferro-chrome	358 000	358 700	423 825	301 300	207 523
Ferro-silico-chrome	...	59 900	69 050	50 400	47 947
Ferro-manganese	*1 150 000	*1 180 000	1 016 300	940 900	...
Ferro-silico-manganese	*840 000	*770 000	(c) ...	...	...
Ferro-silicon	*1 490 000	*1 250 000	1 276 600	1 118 900	...
Other ferro-alloys	*342 000	*425 000	*762 000	...	...
India					
Ferro-aluminium (b)	2 749	3 058	...	...	...
Ferro-chrome (b)	245 000	344 000	307 000	299 000	*350 000
Ferro-silico-chrome (b)	6 427	311	...	...	...
Ferro-silico-magnesium (b)	1 458	1 429	1 717	2 310	...
Ferro-manganese (b)	188 000	161 000	165 000	136 000	*150 000
Ferro-silico-manganese (b)	175 000	200 000	193 000	233 000	...
Ferro-molybdenum (b)	368	501	662	1 693	...
Ferro-silicon (b)	78 330	80 000	57 000	56 000	*60 000
Ferro-vanadium (b)	168	175	345	735	...
Indonesia					
Ferro-manganese	*14 000	*15 000	*13 000	*12 000	*12 000
Ferro-silico-manganese	*7 000	*7 000	*7 000	*7 000	*7 000
Ferro-nickel	48 260	49 990	42 260	*45 000	*50 000
Iran					
Ferro-chrome (a)	13 036	11 730	14 590	13 680	11 505
Ferro-silicon	*20 000	*20 000	*20 000	*20 000	*20 000
Japan					
Ferro-chrome	200 365	191 005	142 931	119 777	130 074
Ferro-manganese	343 104	376 663	334 081	315 152	337 694
Ferro-silico-manganese	75 802	78 323	70 886	65 744	72 092
Ferro-molybdenum	4 420	4 328	3 443	3 391	3 699
Ferro-nickel	328 699	352 840	345 772	332 293	367 181
Ferro-silicon	3 075	3 426	951	1 452	4 166
Ferro-tungsten	64	62	61	43	42
Ferro-vanadium	3 902	4 232	4 073	3 349	4 108
Other ferro-alloys	4 820	9 594	1 101	6 077	7 171

**Production of Ferro-Alloys**

tonnes

Country	1996	1997	1998	1999	2000
Kazakhstan					
Ferro-chrome	345 857	605 125	542 050	731 563	799 762
Ferro-silico-chrome	69 759	48 462	33 553	49 282	55 680
Ferro-silico-manganese	60 175	55 053	57 376	78 495	102 719
Ferro-silicon	118 149	133 380	92 125	140 263	133 223
Other ferro-alloys	...	...	183 054	268 040	291 622
Korea, Dem. P.R. of					
Ferro-alloys	*10 000	*10 000	*10 000	*10 000	*10 000
Korea, Republic of					
Ferro-manganese	126 135	158 755	158 418	140 000	146 000
Ferro-silico-manganese	83 375	77 078	106 997	(c) ...	(c) ...
Other ferro-alloys	4 687	2 174	2 785	120 000	108 000
Philippines					
Ferro-chrome	6 736	----	----	----	----
Taiwan					
Ferro-manganese	14 059	12 130	12 532	----	----
Ferro-silicon	2 481	3 391	3 775	...	...
Australia					
Ferro-manganese (g)	89 449	103 565	95 658	106 006	98 421
Ferro-silico-manganese (g)	99 666	85 629	89 537	101 455	115 585
Silicon metal	*30 000	31 000	*30 000	*30 000	*30 000
New Caledonia					
Ferro-nickel	150 375	159 019	157 959	157 592	151 049

## Note(s):-

- (a) Years ended 20 March 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) Including ferro-silico- manganese
- (g) Years ended 30 June of that stated

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

tonnes

Country	1996	1997	1998	1999	2000
Albania					
Ferro-chrome	(f) *32 400	(f) *22 700	(f) *26 700	(f) *33 400	21 609
Ferro-silico-manganese	15 920	...	508	25	...
Scrap	3 406	11 684	(f) *3 900	(f) *3 800	(f) *12 600
Armenia					
Scrap	65 000	234 316	186 000	55 322	...
Austria					
Pig iron	1 980	679	185	717	631
Ferro-alloys	20 802	5 889	7 595	5 518	3 310
Ingots, blooms, billets	163 078	236 630	219 382	227 262	248 303
Scrap	582 403	653 254	573 400	558 267	789 435
Azerbaijan					
Scrap	11 717	15 100	6 937	13 021	149 496
Belarus					
Ferro-alloys	417	27 994	3 417	3 246	...
Ingots, blooms, billets	341 203	450 346	592 800	708 504	774 700
Scrap	177 776	190 330	145 444	129 426	150 400
Belgium-Luxembourg					
Pig iron	87 912	91 244	130 812	124 891	180 780
Sponge & powder	1 684	1 760	2 262	2 673	3 797
Ferro-chrome	16 647	21 109	42 781	47 169	39 754
Ferro-silico-magnesium	201	371	1 625	2 633	3 271
Ferro-manganese	17 788	26 424	19 238	13 324	21 737
Ferro-silico-manganese	12 493	11 175	17 715	33 190	31 690
Ferro-nickel	584	199	----	26	70
Ferro-silicon	12 166	9 238	37 804	30 411	24 591
Ferro-titanium & Fe-Si-Ti	69	389	450	456	244
Other ferro-alloys	270	252	8 626	1 977	1 226
Silicon metal	306	136	9 251	6 668	7 741
Ingots, blooms, billets	1 167 459	955 607	804 377	491 486	615 783
Scrap	1 756 507	1 673 084	1 408 715	1 561 184	1 974 795
Bosnia & Herzegovina					
Ferro-silicon (f)	*1 200	*2 000	*10 800	*15 200	*21 000
Scrap (f)	*4 900	*25 100	*60 900	*6 700	*12 800
Bulgaria					
Ferro-alloys	3 205	2 902	(f) *10 300	(f) *4 100	(f) *2 500
Ingots, blooms, billets	213 000	246 000	...	...	...
Scrap	43 888	156 678	58 000	102 000	...
Croatia					
Ferro-chrome	12 605	23 943	12 173	2	15 468
Scrap	106 092	124 561	102 443	101 868	106 021
Cyprus					
Scrap (b)	34 373	21 344	15 944	16 744	17 341
Czech Republic					
Pig iron	168 000	230 102	161 308	42 092	32 820
Ferro-chrome	(f) *4 000	2 523	1 247	1 455	1 190
Ferro-vanadium	...	1 463	2 030	1 531	2 940
Other ferro-alloys	...	6 054	4 134	7 911	3 165
Silicon metal	...	957	1 113	433	915
Ingots, blooms, billets	324 000	431 037	245 511	257 604	262 130
Scrap	905 000	977 588	873 412	852 585	987 452
Denmark					
Ingots, blooms, billets	36 042	71 590	58 023	25 693	143 030
Scrap	470 670	580 347	479 924	511 129	658 353
Estonia					
Pig iron (b) (f)	*35 800	*128 900	*239 600	*81 800	*43 600
Ferro-chrome	(f) *29 000	(f) *15 900	(f) *700	42 515	18 804
Other ferro-alloys	...	...	...	7 483	3 639
Silicon metal	...	...	...	14 585	20 052
Ingots, blooms, billets	...	83	3 770	22 687	263
Scrap	220 740	411 098	644 816	546 117	502 495
Finland					
Ferro-chrome & ferro-silico-chrome	106 675	105 472	64 251	89 974	43 887
Ingots, blooms, billets	259 768	280 214	230 115	208 787	144 538
Scrap	228 366	365 761	269 999	212 045	394 218

## Exports of Iron, Steel and Ferro-Alloys

tonnes

Country	1996	1997	1998	1999	2000
France					
Pig iron	4 421	48 199	7 830	18 006	520
Sponge & powder	1 833	3 593	5 026	5 769	7 864
Ferro-chrome	538	702	455	426	5 965
Ferro-silico-magnesium	8 811	9 615	8 377	4 824	5 929
Ferro-manganese	35 561	54 584	46 927	35 019	19 275
Ferro-silico-manganese	41 422	61 372	56 855	44 218	15 750
Ferro-molybdenum	92	101	92	240	530
Ferro-nickel	25 407	25 813	14 256	1 563	872
Ferro-niobium	387	628	704	440	735
Ferro-silicon	30 433	33 873	41 049	48 316	50 247
Ferro-titanium & Fe-Si-Ti	1 379	1 082	1 535	1 443	1 123
Ferro-vanadium	7	32	18	22	70
Other ferro-alloys	29 336	33 062	40 983	30 331	36 008
Ingots, blooms, billets	1 328 288	1 692 045	1 804 004	2 416 133	2 447 574
Scrap	3 682 041	3 640 248	3 484 599	3 731 225	4 537 161
Georgia					
Pig iron	976	3 943	2 204	460	70
Ferro-manganese	(a) 35 109	10 155	10 430	15 069	8 410
Ferro-silico-manganese	...	16 672	31 587	28 837	18 453
Ingots, blooms, billets	14 423	59 666	27 274	6 708	4 527
Scrap	(f) *5 300	(f) *38 100	(f) *65 800	385 955	782 582
Germany					
Pig iron	91 977	127 095	65 445	81 300	116 513
Sponge & powder	20 831	29 485	21 011	16 304	27 258
Ferro-chrome	45 426	51 436	59 663	38 575	47 714
Ferro-silico-chrome	3 719	3 512	1 019	525	251
Ferro-silico-magnesium	5 543	6 470	6 875	6 896	4 894
Ferro-manganese	12 434	12 236	17 755	11 286	19 071
Ferro-silico-manganese	9 892	7 853	11 255	9 367	11 082
Ferro-molybdenum	1 309	855	681	1 153	765
Ferro-nickel	1 001	174	909	582	42
Ferro-niobium	925	590	312	853	1 066
Ferro-phosphorus	2 394	1 567	1 532	1 506	1 704
Ferro-silicon	31 849	35 707	44 943	47 426	50 904
Ferro-titanium & Fe-Si-Ti	2 476	2 106	2 304	2 500	2 585
Ferro-tungsten & Fe-Si-W	83	76	120	92	310
Ferro-vanadium	420	459	332	262	299
Other ferro-alloys	13 696	16 921	24 078	12 690	11 272
Silicon metal	8 796	9 477	7 943	8 957	10 736
Ingots, blooms, billets	2 254 291	2 240 378	1 734 789	1 842 123	2 451 015
Scrap	6 684 361	6 930 512	7 027 029	6 999 310	6 878 310
Greece					
Ferro-alloys	2 939	932	...	11 101	12 794
Ingots, blooms, billets	60 036	6 145	92	999	2 363
Scrap	55 139	88 418	72 376	55 010	35 747
Hungary					
Ferro-alloys	4 358	1 555	2 217	1 689	1 573
Ingots, blooms, billets	26 991	14 775	42 902	17 277	23 843
Scrap	614 916	646 064	552 051	468 613	631 088
Iceland					
Ferro-silicon	68 192	74 993	67 237	69 956	99 884
Scrap	11 263	25 832	20 834	21 206	28 727
Irish Republic					
Scrap	19 036	35 084	25 356	19 956	61 401

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

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Country	1996	1997	1998	1999	2000
Italy					
Pig iron	8 353	34 762	31 739	20 514	26 986
Sponge & powder	15 343	17 802	20 647	20 905	...
Ferro-chrome	2 005	4 781	1 781	1 456	2 693
Ferro-silico-magnesium	...	103	107	29	57
Ferro-manganese	7 256	8 184	13 465	13 077	20 413
Ferro-silico-manganese	2 881	10 789	5 361	3 832	6 876
Ferro-molybdenum	...	324	303	137	186
Ferro-silicon	7 956	1 930	2 427	3 336	2 248
Ferro-vanadium	...	44	269	301	1 669
Other ferro-alloys	742	1 078	536	340	340
Silicon metal	2 850	5 225	2 918	2 046	1 197
Ingots, blooms, billets	656 997	231 924	184 330	306 045	841 283
Scrap	20 012	35 682	36 590	105 191	166 125
Latvia					
Pig iron (b) (f)	138 200	*154 500	*203 300	...	*51 100
Ferro-chrome (b) (f)	*13 100	*25 800	*30 100	*50 000	*2 800
Other ferro-alloys (b) (f)	*4 700	*2 500	*8 900	...	*500
Ingots, blooms, billets (b) (f)	*12 800	*19 800	*26 200	...	...
Scrap	56 513	157 731	94 051	55 152	96 674
Lithuania					
Scrap	449 516	467 659	414 586	270 282	396 627
Macedonia					
Ferro-silicon	45 324	57 543	67 472	(f) *51 500	(f) *35 100
Other ferro-alloys	48 298	35 227	52 849	(f) *19 300	(f) *8 500
Silicon metal	2 896	4 604	1 096	...	...
Scrap	248	2 372	3 225	*3 000	...
Malta					
Scrap	10 780	14 000	41 000	13 930	...
Moldova					
Scrap	2 987	1 372	5 811	3 946	...
Netherlands					
Pig iron	19 260	11 658	51 881	86 489	62 714
Sponge & powder	69	140	446	21 821	87 650
Ferro-chrome	61 689	75 798	53 185	35 413	24 952
Ferro-silico-chrome	1 460	566	2 379	134	25
Ferro-manganese	5 716	11 512	4 729	1 259	28 383
Ferro-silico-manganese	27 780	17 215	14 678	13 027	9 105
Ferro-molybdenum	...	4 579	4 268	4 800	4 282
Ferro-nickel	459	----	5 871	7 464	12 525
Ferro-niobium	(c) ...	64	3 881	5 336	10 281
Ferro-silicon	13 538	13 270	3 501	3 111	1 351
Ferro-titanium & Fe-Si-Ti	...	1 695	214	...	...
Ferro-tungsten & Fe-Si-W	...	238	170	140	215
Ferro-vanadium	...	3 133	3 440	2 033	1 083
Other ferro-alloys	8 141	6 949	749	3 018	2 162
Silicon metal	4 963	4 984	5 892	8 093	2 098
Ingots, blooms, billets	1 511 682	1 343 578	454 945	965 500	511 537
Scrap	3 047 287	3 363 946	2 655 404	2 434 145	3 101 130
Norway					
Pig iron	91 000	70 000	65 000	...	...
Ferro-chrome (f)	*119 100	*150 000	*161 000	*158 100	*172 200
Ferro-manganese (f)	*208 000	*196 000	*203 900	*203 200	*197 200
Ferro-silico-manganese	187 244	206 103	223 406	246 923	232 125
Ferro-silicon	400 900	412 873	423 154	425 761	407 164
Other ferro-alloys	50 097	34 247	40 026	48 308	54 776
Silicon metal	97 136	109 435	119 560	142 247	154 807
Ingots, blooms, billets	155 184	131 337	143 442	140 600	177 302
Scrap	145 241	156 118	134 216	140 354	139 044
Poland					
Pig iron	74 000	157 900	135 200	74 456	137 667
Ferro-chrome	2 263	4 774	2 014	762	26
Ferro-manganese & Fe-Si-Mn	2 039	1 815	4 434	487	...
Ferro-silicon	41 872	46 438	43 852	37 655	50 497
Other ferro-alloys	954	762	1 325	835	9 272
Ingots, blooms, billets	1 076 000	1 198 000	...	825 288	1 256 739
Scrap	415 600	517 900	446 200	730 592	987 895

## Exports of Iron, Steel and Ferro-Alloys

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Country	1996	1997	1998	1999	2000
Portugal					
Ingots, blooms, billets	162 710	91 029	88 366	140 231	107 702
Scrap	56 384	127 179	122 069	78 393	172 330
Romania					
Pig iron	62 000	71 141	39 154	...	7 473
Sponge & powder	...	6 221	8 544	8 857	7 767
Ferro-alloys	86 951	56 162	47 625	8 186	61 255
Ingots, blooms, billets	1 228	72 858	148 306	237 609	59 291
Scrap	29 584	237 991	759 347	1 325 996	2 289 430
Russia					
Pig iron	2 888 200	2 419 873	2 466 100	2 795 637	3 573 816
Sponge & powder	322 671	393 548	421 164	401 263	481 896
Ferro-chrome	(c) ...	146 946	130 387	158 873	161 496
Ferro-silico-chrome	(c) ...	8 193	23 930	12 634	6 346
Ferro-manganese	(c) ...	3 809	6 226	1 884	3 062
Ferro-silico-manganese	(c) ...	78	4 620	6 235	8 164
Ferro-molybdenum	(c) ...	735	889	381	34
Ferro-nickel	(c) ...	9 690	4 549	3 414	4 681
Ferro-silicon	(c) ...	148 793	145 442	196 811	193 217
Ferro-titanium & Fe-Si-Ti	(c) ...	16 335	12 794	15 546	14 197
Ferro-tungsten & Fe-Si-W	(c) ...	2 722	1 759	1 025	443
Ferro-vanadium	(c) ...	2 314	3 134	4 631	5 902
Other ferro-alloys	357 260	2 844	1 349	1 119	864
Silicon metal	64 754	73 924	36 214	33 462	44 502
Ingots, blooms, billets	11 058 335	11 409 000	8 048 553	13 229 437	12 667 963
Scrap	2 735 206	5 250 351	7 260 386	7 546 891	6 821 377
Slovakia					
Pig iron	11 000	20 000	23 125	10 510	37 392
Ferro-silicon	66 475	(f) *61 600	(c) ...	64 144	58 041
Other ferro-alloys	46 696	(f) *85 100	149 358	82 922	116 412
Ingots, blooms, billets	128 000	120 000	(f) *114 000	(f) *49 000	*44 000
Scrap	212 688	213 000	254 000	296 198	...
Slovenia					
Ferro-alloys	26 000	16 000	16 137	20 348	25 967
Scrap	55 125	102 973	86 802	87 155	114 018
Spain					
Pig iron	1 124	1 098	1 389	1 095	2 065
Sponge & powder	----	1 224	2 285	2 236	3 074
Ferro-chrome	717	1 028	906	1 151	1 257
Ferro-manganese	22 174	36 711	61 866	61 540	42 861
Ferro-silico-manganese	54 685	59 398	51 124	45 970	27 949
Ferro-molybdenum	(c) ...	36	221	229	362
Ferro-silicon	3 278	5 711	6 814	4 411	4 666
Other ferro-alloys	603	525	724	536	304
Silicon metal	10 781	11 118	8 517	16 580	15 379
Ingots, blooms, billets	245 137	316 018	384 502	369 672	376 331
Scrap	21 381	43 285	16 745	29 812	52 770
Sweden					
Pig iron	64 296	29 850	14 528	2 443	27 611
Sponge & powder	1 432	14 626	15 196	11 601	13 929
Ferro-chrome	*85 000	*80 000	76 912	...	...
Ferro-silico-magnesium	(c) ...	281	786	5 358	2 636
Ferro-manganese & Fe-Si-Mn	2 285	2 225	1 906	1 413	1 050
Ferro-molybdenum	(c) ...	103	134	80	134
Ferro-phosphorus	(c) ...	579	474	602	565
Ferro-silicon	1 914	1 602	2 756	602	564
Ferro-vanadium	(c) ...	157	115	27	30
Other ferro-alloys	1 486	393	1 815	165	458
Silicon metal	...	...	9	565	475
Ingots, blooms, billets	105 434	149 382	267 585	121 611	92 258
Scrap	283 990	323 068	357 589	399 749	473 534
Switzerland					
Silicon metal	1 114	14 206	10 533	4	3
Scrap	341 784	432 876	377 433	346 356	401 561

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

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Country	1996	1997	1998	1999	2000
Turkey					
Pig iron	89 767	148 786	18 259	77 804	94 231
Ferro-chrome	93 852	94 360	86 457	136 643	68 597
Other ferro-alloys	849	436	825	3 902	742
Ingots, blooms, billets	1 094 825	1 332 505	796 778	658 024	1 262 574
Scrap	21 048	22 309	28 144	29 303	28 583
Ukraine					
Pig iron	775 777	722 723	2 082 673	1 881 204	*1 800 000
Ferro-manganese	(f) *101 800	(f) *169 200	172 112	121 804	(f) *179 100
Ferro-silico-manganese	379 185	446 991	353 747	342 070	(f) *394 800
Ferro-nickel	14 303	2 396	2 154	5 752	...
Ferro-silicon (f)	...	*101 700	*94 800	*87 200	*124 500
Other ferro-alloys	11 202	16 322	14 957	2 035	...
Ingots, blooms, billets	2 843 280	4 196 639	4 937 336	7 989 718	...
Scrap	679 000	1 935 000	3 281 108	4 743 490	...
United Kingdom					
Pig iron	4 616	4 411	1 632	446	679
Sponge & powder	2 745	1 584	1 349	1 895	2 095
Ferro-chrome & ferro-silico-chrome	2 950	2 641	1 854	1 047	784
Ferro-manganese	2 796	1 578	2 878	452	1 185
Ferro-silico-manganese	230	532	2 456	1 327	672
Ferro-molybdenum	9 888	9 029	10 453	8 311	7 090
Ferro-nickel	218	4 363	3 376	0	9
Ferro-niobium	22	32	32	47	114
Ferro-phosphorus	248	126	167	95	22
Ferro-silicon	4 615	4 026	2 502	2 382	1 137
Ferro-titanium & Fe-Si-Ti	13 467	18 823	20 211	18 894	19 309
Ferro-vanadium	61	201	96	77	51
Other ferro-alloys	6 634	5 917	5 049	5 033	6 275
Ingots, blooms, billets	1 193 795	954 817	561 451	407 044	521 093
Scrap	3 435 328	3 561 352	3 177 490	3 578 027	4 378 607
Yugoslavia, Federal Republic of					
Ferro-alloys	7 000	7 182	1 723	6	6 587
Scrap	3 000	3 370	8 566	16 756	42 871
Algeria					
Pig iron	298 285	206 913	49 473	93 102	...
Ingots, blooms, billets	17 607	19 352	31 055	82 857	...
Scrap	60 178	69 668	57 365	28 811	...
Botswana					
Scrap	...	7 098	7 383	...	...
of which, re-exports	...	6 843	7 292	...	...
Egypt					
Ferro-alloys	32 898	32 512	41 312	33 060	...
Scrap	...	2 654	4 424	13 168	...
Mauritius					
Scrap	13 800	20 800	12 602	11 593	18 009
Morocco					
Scrap	52 753	168 209	105 631	92 837	...
South Africa					
Pig iron	(f) *394 100	516 684	512 253	570 027	499 458
Sponge & powder	...	20 767	2 123	3 771	5 891
Ferro-chrome	1 415 000	1 633 000	1 649 874	1 897 110	2 118 600
Ferro-manganese	450 086	453 597	433 432	421 636	556 749
Ferro-silico-manganese	211 404	266 313	298 512	227 488	191 583
Ferro-silicon	30 308	47 469	48 002	46 366	...
Other ferro-alloys	...	...	4 997	9 071	65 448
Silicon metal	24 503	31 898	38 745	33 120	49 708
Ingots, blooms, billets	(f) *622 100	461 540	491 156	309 109	597 410
Scrap	(f) *397 800	585 441	449 823	593 449	1 363 045
Sudan					
Scrap	6 800	...	2 035	...	...
Tunisia					
Scrap	2 110	3 913	3 198	31 429	...

## Exports of Iron, Steel and Ferro-Alloys

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Country	1996	1997	1998	1999	2000
Zimbabwe					
Ferro-chrome	247 563	277 915	268 650	233 558	...
Ferro-silico-chrome	25 117	24 334	21 767	25 124	...
Ingots, blooms, billets	26 074	23 806	12 896	41 458	...
Scrap	...	92 291	43 641	76 696	...
Canada					
Pig iron	111 419	137 651	165 393	116 757	109 058
Sponge & powder	77 721	93 024	166 558	84 409	144 497
Ferro-chrome	1 011	860	53	215	76
Ferro-manganese	578	100	1 770	53	1 292
Ferro-silico-manganese	18	561	305	242	476
Ferro-niobium	2 062	2 387	2 060	2 200	2 479
Ferro-silicon	24 471	15 933	20 891	23 356	20 764
Other ferro-alloys	1 619	2 080	1 648	1 536	1 060
Silicon metal	29 408	38 840	37 722	43 749	59 282
Ingots, blooms, billets	355 645	376 157	324 632	369 333	357 359
Scrap	2 113 897	2 330 983	2 244 744	1 881 465	1 914 053
Cuba					
Ingots, blooms, billets (f)	*53 300	*92 000	*33 800	*57 000	*82 700
Scrap (f)	*73 000	*13 000	*2 000	*98 000	*59 000
Dominican Republic					
Ferro-nickel	77 273	84 388	69 420	62 678	71 644
Mexico					
Ferro-manganese	28 406	36 864	34 329	30 575	39 641
Ferro-silico-manganese	26 299	44 578	47 802	52 107	49 957
Other ferro-alloys	553	717	486	713	1 250
Ingots, blooms, billets	2 019 755	2 271 512	2 488 820	2 650 417	2 571 059
Scrap	198 137	232 083	155 618	148 005	...
Nicaragua					
Scrap	26 168	19 575	17 763	6 600	12 508
Trinidad & Tobago					
Sponge	163 508	362 948	223 113	...	678 073
Ingots, blooms, billets	8 200	12 700	...	...	3 119
USA					
Pig iron	72 427	100 199	97 140	106 151	76 137
Sponge & powder	40 088	60 954	69 071	44 012	38 806
Ferro-chrome & ferro-silico-chrome	27 454	16 809	15 464	15 340	51 101
Ferro-manganese	14 063	19 428	21 591	23 768	19 336
Ferro-silico-manganese	9 327	10 879	12 969	8 914	5 292
Ferro-molybdenum	1 199	1 573	1 582	1 839	1 575
Ferro-nickel	5 652	12 110	1 747	85	62
Ferro-niobium	365	59	25	166	60
Ferro-phosphorus	4 950	3 208	2 543	1 621	4 879
Ferro-silicon	59 070	56 685	52 362	49 814	47 905
Ferro-vanadium	648	619	868	497	271
Other ferro-alloys	4 721	5 625	4 590	5 344	5 106
Silicon metal	18 999	24 878	24 767	38 871	21 552
Ingots, blooms, billets	274 006	246 190	241 434	131 336	106 085
Scrap	8 431 156	8 942 513	5 928 593	5 390 686	5 938 113
Argentina					
Pig iron	174 762	145 344	185 902	63 556	...
Ferro-silico-manganese	5 306	4 854	17 364	238	...
Ferro-silicon	12 700	10 154	2 176	2 705	3 208
Other ferro-alloys	14 624	14 463	14 693	8 293	5 140
Silicon metal	26	40	5 166	3 454	4 149
Ingots, blooms, billets	6 682	25 770	21 724	97 681	30 365

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

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Country	1996	1997	1998	1999	2000
Brazil					
Pig iron	2 538 099	2 563 147	3 214 615	3 030 491	3 808 760
Ferro-chrome	11 102	16 374	3 790	227	135
Ferro-manganese	105 184	70 068	33 026	23 279	52 613
Ferro-nickel	15 205	18 483	8 516	4 431	6 656
Ferro-niobium	17 602	23 823	27 542	26 588	27 927
Fe-silico-spiegeleisen & Si-Mn	73 729	76 608	36 600	58 680	80 857
Ferro-silicon	185 793	159 796	134 664	160 061	182 197
Other ferro-alloys	33 168	40 429	37 142	29 450	29 127
Silicon metal	121 011	127 014	102 737	123 218	154 009
Ingots, blooms, billets	5 684 461	5 524 644	5 426 212	6 378 997	6 213 427
Chile					
Ferro-alloys	6 988	4 912	3 232	3 783	3 224
Ingots, blooms, billets	24 945	7 995	...	...	12 489
Scrap	2 578	13 494	16 365	4 381	4 468
Colombia					
Ferro-nickel	55 374	52 482	57 183	61 501	54 280
Ecuador					
Scrap	25 129	34 814	13 218	...	7 240
Suriname					
Scrap	26 300	40 618	*40 000	...	...
Venezuela					
Sponge & powder	1 053 899	1 143 657	1 554 276	2 239 643	2 713 829
Ferro-silico-manganese	24 786	37 293	24 129	16 077	22 777
Ferro-silicon	35 058	69 078	36 294	36 427	64 222
Ingots, blooms, billets	1 067 911	957 372	327 634	...	436 135
Scrap	99 097	138 122	129 500	29 738	55 857
Bahrain					
Scrap	33 168	51 482	45 793	33 448	...
China					
Pig iron	3 553 051	5 535 634	2 424 656	1 621 161	3 332 747
Sponge & powder	9 428	13 217	15 813	56 472	60 804
Ferro-chrome	130 847	98 069	102 083	73 813	131 160
Ferro-silico-chrome	31 079	31 296	40 725	17 465	23 628
Ferro-manganese	171 907	145 847	130 658	122 257	190 036
Ferro-silico-manganese	363 007	428 956	297 669	298 511	362 427
Ferro-molybdenum	12 188	24 458	31 739	38 586	44 370
Ferro-silicon	254 619	208 067	265 981	349 231	491 627
Ferro-titanium & Fe-Si-Ti	393	421	859	746	1 356
Ferro-tungsten & Fe-Si-W	666	2 210	3 617	4 111	5 127
Ferro-vanadium	1 446	1 949	2 308	2 125	3 073
Other ferro-alloys	65 129	121 614	84 319	57 101	60 736
Silicon metal	276 365	290 586	275 823	268 229	328 844
Ingots, blooms, billets	2 767 342	4 146 220	2 172 881	2 328 264	5 089 204
Scrap	54 711	68 251	24 922	62 873	47 280
Dubai					
Scrap	...	198 542	184 056	...	...
Hong Kong					
Ferro-manganese (b)	7 633	1 821	629	612	198
Ferro-silico-manganese (b)	4 284	3 371	604	1 819	624
Ferro-silicon (b)	28 333	18 816	6 479	2 380	721
Other ferro-alloys (b)	1 243	861	1 232	559	1 852
Silicon metal (b)	...	...	1 095	732	1 154
Ingots, blooms, billets (b)	227	40 630	20 708	984	4 227
Scrap	587 052	700 173	754 109	692 804	769 869
of which, re-exports	196 506	181 877	249 253	153 519	132 900
India					
Pig iron (d)	345 481	500 622	211 659	130 952	...
Sponge & powder (d)	42 328	45 702	26 682	2 589	...
Ferro-chrome (d)	146 889	199 948	148 672	107 389	...
Ferro-silico-chrome (d)	253	365	5 770	6 275	...
Ferro-manganese (d)	2 856	358	7 343	1 459	...
Ferro-silico-manganese (d)	28 405	34 606	34 113	35 684	...
Other ferro-alloys (d)	4 193	15 353	19 836	8 028	...
Silicon metal (d)	5 992	3 894	777	362	...
Ingots, blooms, billets (d)	285 334	298 049	57 643	62 552	...
Scrap (d)	41 948	32 747	8 607	2 240	...

## Exports of Iron, Steel and Ferro-Alloys

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Country	1996	1997	1998	1999	2000
Indonesia					
Sponge & powder	75 065	92 631	25 515	27 863	3 336
Ferro-nickel	48 639	41 222	41 342	35 590	52 674
Ingots, blooms, billets	3 409	82 988	97 364	25 087	4 140
Scrap	11 604	10 729	10 325	29 790	40 082
Iran					
Ferro-chrome (f)	*7 400	*6 900	*10 500	*11 400	*5 600
Ferro-silicon	(f) *8 500	(f) *6 600	(f) *50 700	20 109	15 446
Other ferro-alloys	(f) *1 000	(f) *1 300	(f) *800	2 378	(f) *1 500
Ingots, blooms, billets (e)	...	442 572	500 307	889 544	...
Scrap (f)	*200 400	*54 300	*48 100	*171 800	*5 000
Israel					
Scrap (f)	...	*23 800	*29 100	*9 100	*6 800
Japan					
Pig iron	953 841	250 256	2 310 635	1 734 043	223 775
Sponge & powder	22 196	22 973	24 345	35 842	44 058
Ferro-chrome	1 191	915	700	1 462	2 544
Ferro-manganese	37 503	45 557	26 814	19 400	44 249
Ferro-silico-manganese	163	122	217	3 104	4 928
Ferro-nickel	35 505	69 663	74 018	111 311	114 829
Ferro-silicon	9 619	5 305	4 065	5 065	4 888
Other ferro-alloys	4 186	3 418	2 762	3 625	3 625
Silicon metal	1 855	2 284	2 447	2 768	3 269
Ingots, blooms, billets	428 106	574 508	1 196 176	2 256 797	1 499 028
Scrap	1 992 562	2 313 259	3 821 597	4 315 228	2 895 444
Jordan					
Scrap	*11 000	16 065	16 332	20 411	16 749
Kazakhstan					
Pig iron	36 881	6 010	866	409	...
Ferro-chrome	282 229	444 072	443 035	563 505	(f) *542 300
Ferro-silico-chrome	51 733	27 451	14 119	18 916	(f) *10 400
Ferro-manganese	119	1 040	131	60	(f) *700
Ferro-silico-manganese	47 239	49 394	47 577	65 207	(f) *90 900
Ferro-phosphorus	...	1 408	1 140	2 801	...
Ferro-silicon	84 856	78 487	66 107	71 714	(f) *78 500
Ingots, blooms, billets	(f) *1 200	(f) *117 700	8 846	170 358	*100 000
Scrap	152 000	267 426	515 198	1 270 559	(f) *2 025 200
Korea, Dem. P.R. of					
Pig iron (f)	*41 000	*60 100	*65 600	*42 700	*100 000
Ferro-alloys (f)	*5 200	*8 900	*3 600	*3 100	*1 700
Ingots, blooms, billets (f)	*24 800	*68 300	*54 900	*53 700	*369 000
Scrap (f)	*58 400	*163 100	*33 200	*51 700	*30 000
Korea, Republic of					
Ferro-manganese	3 700	9 746	22 928	11 996	17 033
Ferro-silico-manganese	5 117	19 802	15 573	7 453	15 490
Ferro-vanadium	91	203	124	355	458
Other ferro-alloys	603	516	729	...	6 493
Silicon metal	1 297	645	443	1 151	9 394
Ingots, blooms, billets	434 240	714 951	636 250	218 644	124 125
Scrap	12 159	38 734	41 819	26 341	37 235
Kuwait					
Scrap	184 434	34 072	162 132	194 504	...
Kyrgyzstan					
Scrap	25 606	26 000	16 543	12 779	40 538
Macao					
Scrap	8 495	5 563	3 563	8 466	16 221
Malaysia					
Sponge & powder	1 057 000	825 000	...	...	...
Ingots, blooms, billets	23 000	36 000	...	...	...
Scrap	11 900	10 000	9 800	9 900	...
Mongolia					
Ingots, blooms, billets	16 000	14 500	10 200	5 600	7 800
Scrap	71 913	*72 000	...	...	...
Oman					
Scrap	60 298	39 241	100 861	24 739	28 433
Philippines					
Ferro-chrome	16 725	5 985	-----	394	...
Scrap	8 372	32 724	38 547	21 610	...

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

tonnes

Country	1996	1997	1998	1999	2000
Saudi Arabia					
Silicon metal	...	...	1 934	32 861	8 938
Scrap	*6 000	3 898	2 330	3 417	1 635
Singapore					
Ferro-alloys	2 896	1 919	1 205	720	340
of which, re-exports	2 819	1 797	1 029	681	311
Ingots, blooms, billets	3 425	1 996	3 065	...	18 558
of which, re-exports	1 121	374	2 604	...	6 546
Scrap	245 019	331 733	474 047	339 241	517 024
Sri Lanka					
Scrap	47 370	52 141	...	41 749	...
Taiwan					
Pig iron	1 313	1 776	1 943	4 477	6 103
Ferro-silicon	1 380	1 155	1 147	1 801	1 805
Other ferro-alloys	939	1 272	1 620	1 529	813
Silicon metal	268	463	731	1 159	1 476
Ingots, blooms, billets	13 808	15 255	32 598	37 300	92 779
Scrap	92 318	123 154	94 857	107 331	149 695
Thailand					
Scrap	33 357	*48 000	96 161	76 003	99 960
Australia					
Sponge & powder	520	4 440	591	253 531	268 047
Ferro-manganese	59 076	41 087	57 316	27 470	...
Ferro-silico-manganese	92 713	86 129	81 313	70 188	...
Other ferro-alloys	222	1 009	800	478	1 203
Silicon metal	26 977	26 742	28 244	36 954	28 886
Ingots, blooms, billets	1 245 214	1 458 304	1 826 387	1 545 831	678 743
Scrap	678 186	764 775	576 772	758 865	767 223
New Caledonia					
Ferro-nickel	151 612	158 224	158 929	156 843	154 103
New Zealand					
Ingots, blooms, billets	8 197	10 040	10 032	12 261	4 936
Scrap	29 917	26 199	96 062	86 396	...

## Note(s):-

(1) In this table the term 'ingots, blooms, billets' corresponds to items 7206, 7207, 7218 and 7224 of the Harmonised System which includes those of alloy and high carbon steel

- (a) Including ferro-silico- manganese
- (b) Re-exports
- (c) Included with 'other ferro-alloys'
- (d) Years ended 31 March following that stated
- (e) Years ended 20 March following that stated
- (f) BGS estimates, based on known imports into certain countries

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

tonnes

Country	1996	1997	1998	1999	2000
Albania					
Ingots, blooms, billets	3 420	1 306	2 261	4 570	29 974
Austria					
Pig iron	18 614	17 428	24 618	22 503	29 401
Sponge & powder	8 001	10 066	10 648	10 519	11 258
Ferro-chrome	22 895	26 550	24 032	19 629	31 129
Ferro-silico-chrome	639	748	1 012	340	26
Ferro-silico-magnesium	860	968	1 248	1 239	969
Ferro-manganese	15 596	20 357	21 744	20 115	18 565
Ferro-silico-manganese	16 051	16 505	17 155	8 933	3 615
Ferro-molybdenum	1 000	1 068	942	683	1 524
Ferro-niobium & ferro-niobium-tantalum	305	369	620	388	361
Ferro-phosphorus	952	817	964	955	1 876
Ferro-silicon	12 317	16 575	21 433	17 623	18 929
Ferro-titanium & Fe-Si-Ti	492	684	1 156	681	865
Ferro-tungsten & Fe-Si-W	443	422	589	483	868
Ferro-vanadium	536	612	1 025	1 285	1 575
Other ferro-alloys	1 340	1 187	3 504	1 371	1 790
Silicon metal	6 771	16 749	6 728	6 298	6 659
Ingots, blooms, billets	121 689	110 803	272 943	167 328	183 202
Scrap	400 628	682 250	685 810	578 309	695 834
Belarus					
Pig iron	(f) 89 261	(f) 159 502	132 842	128 122	118 195
Sponge & powder	...	...	2 625	26 040	48 037
Ferro-alloys	(f) 49 809	(f) 48 239	33 474	31 815	41 910
Ingots, blooms, billets	...	...	21 579	19 835	23 426
Scrap	400 804	724 923	767 280	732 835	1 139 800
Belgium-Luxembourg					
Pig iron	70 321	91 304	203 699	200 890	334 225
Sponge & powder	31 882	30 765	4 778	31 988	47 970
Ferro-chrome	112 788	113 044	146 391	146 100	178 130
Ferro-silico-chrome	3 240	3 335	4 032	4 296	2 393
Ferro-silico-magnesium	818	927	2 310	2 782	3 424
Ferro-manganese	46 646	43 122	47 039	52 600	63 097
Ferro-silico-manganese	52 007	36 909	57 422	52 669	58 256
Ferro-molybdenum	2 150	2 264	3 248	2 850	2 748
Ferro-nickel	23 775	24 508	32 099	28 692	32 285
Ferro-niobium	693	656	719	535	701
Ferro-phosphorus	277	246	613	691	816
Ferro-silicon	51 024	44 760	69 163	60 179	59 406
Ferro-titanium & Fe-Si-Ti	604	1 019	1 323	1 347	1 851
Ferro-vanadium	154	236	310	198	241
Other ferro-alloys	2 280	1 281	9 478	1 710	1 524
Silicon metal	2 591	1 985	13 901	16 559	14 238
Ingots, blooms, billets	1 767 032	2 881 218	2 809 762	2 905 305	3 530 375
Scrap	3 960 595	4 024 388	3 938 147	2 474 180	2 727 227
Bulgaria					
Pig iron	16 016	16 577	21 600	...	...
Ferro-manganese	3 596	5 744	(d) ...	...	...
Other ferro-alloys	8 708	10 916	10 000	...	...
Ingots, blooms, billets	7 693	65 045	...	...	...
Scrap	18 564	66 152	143 000	50 000	...
Croatia					
Pig iron	13 306	13 371	10 696	10 329	10 449
Ferro-alloys	26 329	2 935	3 077	2 199	2 313
Silicon metal	...	...	427	451	357
Ingots, blooms, billets	29 979	20 128	27 390	26 718	23 638
Scrap	2 102	5 554	16 531	6 368	8 099

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

tonnes

Country	1996	1997	1998	1999	2000
Czech Republic					
Pig iron	139 000	143 000	161 000	62 465	66 334
Ferro-chrome	(d) ...	27 340	36 114	31 425	44 880
Ferro-manganese	(d) ...	32 463	25 430	19 517	17 569
Ferro-silico-manganese	(d) ...	18 818	22 924	16 777	22 291
Ferro-molybdenum	(d) ...	465	695	563	898
Ferro-silicon	(d) ...	25 263	24 923	18 948	20 666
Ferro-vanadium	(d) ...	100	131	205	283
Other ferro-alloys	105 000	4 511	5 982	5 327	6 638
Silicon metal	...	4 098	4 510	3 151	4 099
Ingots, blooms, billets	...	206 223	313 838	184 221	188 542
Scrap	84 000	39 923	114 108	134 543	182 992
Denmark					
Pig iron	100 754	97 192	133 126	121 314	148 640
Sponge & powder	1 994	3 942	2 594	2 408	1 436
Ferro-manganese	2 420	3 117	3 889	3 112	3 735
Ferro-silico-manganese	4 475	5 177	6 879	6 291	5 284
Ferro-silicon	2 593	3 520	3 010	2 272	2 768
Other ferro-alloys	1 652	1 920	4 110	946	2 522
Silicon metal	1 403	1 519	2 123	2 323	2 410
Ingots, blooms, billets	22 380	43 609	83 489	7 541	4 351
Scrap	330 509	357 694	273 910	235 598	279 695
Estonia					
Pig iron	...	242	8 764	886	841
Ferro-alloys	...	8 992	40 558	44 456	16 033
Silicon metal	...	...	75	15 799	19 378
Scrap	35 000	210 201	401 586	339 645	265 312
Finland					
Pig iron	67 924	31 744	30 498	22 009	32 759
Sponge & powder	2 624	14 003	18 644	33 587	16 983
Ferro-chrome	4 838	5 055	9 685	4 314	3 828
Ferro-manganese	8 875	10 837	12 377	11 726	12 840
Ferro-silico-manganese	26 929	26 197	34 270	31 005	28 682
Ferro-molybdenum	1 539	1 581	1 646	1 673	1 764
Ferro-nickel	53 096	53 783	44 569	44 635	51 634
Ferro-niobium	323	358	449	423	469
Ferro-phosphorus	170	145	190	288	217
Ferro-silicon	17 537	18 024	15 113	14 411	15 500
Ferro-titanium & Fe-Si-Ti	671	536	852	735	833
Ferro-vanadium	263	141	207	240	171
Other ferro-alloys	2 897	3 422	6 303	3 026	2 521
Silicon metal	2 055	2 411	2 942	3 077	3 622
Ingots, blooms, billets	461 912	224 157	209 121	331 409	323 548
Scrap	226 200	348 080	449 640	345 704	465 528
France					
Pig iron	185 124	189 127	213 188	228 303	294 402
Sponge & powder	15 325	18 734	25 713	25 642	23 054
Ferro-chrome	206 897	266 349	283 292	283 009	314 783
Ferro-silico-chrome	182	143	108	196	87
Ferro-silico-magnesium	2 817	3 084	2 702	2 789	2 167
Ferro-manganese	51 833	49 156	59 532	50 040	47 814
Ferro-silico-manganese	46 725	57 786	59 597	45 014	69 823
Ferro-molybdenum	4 595	5 098	4 835	4 709	5 885
Ferro-nickel	63 162	57 202	41 604	19 050	25 071
Ferro-niobium	1 586	1 745	1 983	1 632	2 044
Ferro-phosphorus	2 801	2 431	3 437	3 174	3 136
Ferro-silicon	49 630	47 952	60 877	53 961	74 807
Ferro-titanium & Fe-Si-Ti	4 925	4 459	5 478	5 119	4 706
Ferro-tungsten & Fe-Si-W	411	568	769	299	569
Ferro-vanadium	858	909	1 154	1 059	1 008
Other ferro-alloys	8 653	10 133	22 355	11 864	13 234
Silicon metal	18 894	20 136	20 336	16 105	19 555
Ingots, blooms, billets	801 104	890 109	1 404 233	1 386 584	1 765 134
Scrap	1 632 170	2 402 691	2 748 147	2 948 480	3 236 091

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

tonnes

Country	1996	1997	1998	1999	2000
Germany					
Pig iron	242 049	296 685	339 177	257 567	256 621
Sponge & powder	46 172	58 410	57 330	61 791	140 416
Ferro-chrome	339 641	396 657	449 711	417 825	420 503
Ferro-silico-chrome	18 711	22 121	19 592	9 003	8 144
Ferro-silico-magnesium	4 600	4 066	3 831	3 613	11 926
Ferro-manganese	152 092	175 233	180 041	131 569	197 356
Ferro-silico-manganese	121 775	144 301	101 243	134 131	133 257
Ferro-molybdenum	6 757	8 449	9 828	8 811	11 119
Ferro-nickel	77 681	88 858	56 098	29 629	58 291
Ferro-niobium	3 395	3 664	3 359	2 603	3 236
Ferro-phosphorus	7 266	5 540	4 612	5 662	6 176
Ferro-silicon	179 525	173 056	175 323	187 994	196 017
Ferro-titanium & Fe-Si-Ti	7 586	7 056	8 380	7 556	7 921
Ferro-tungsten & Fe-Si-W	529	455	645	549	403
Ferro-vanadium	3 861	5 423	5 506	4 075	5 263
Other ferro-alloys	21 224	20 138	27 124	9 872	14 481
Silicon metal	95 897	121 559	117 776	85 384	98 318
Ingots, blooms, billets	998 882	1 141 721	1 593 375	1 165 465	1 778 789
Scrap	1 334 691	1 862 205	2 678 292	2 863 594	3 523 681
Greece					
Pig iron	14 439	13 132	11 561	7 706	4 864
Ferro-manganese	2 667	2 349	*1 800	1 025	2 971
Ferro-silico-manganese	8 503	8 738	7 607	4 763	8 827
Ferro-silicon	2 427	5 754	3 048	2 212	1 987
Other ferro-alloys	353	489	800	436	649
Silicon metal	582	563	963	911	915
Ingots, blooms, billets	455 454	464 809	145 225	402 216	711 253
Scrap	543 799	762 235	491 145	278 010	309 235
Hungary					
Pig iron	31 737	32 281	45 615	25 644	25 167
Ferro-manganese	7 262	9 316	10 369	11 082	11 584
Ferro-silicon	6 710	6 570	6 415	6 213	5 830
Other ferro-alloys	7 882	5 230	4 556	4 046	4 309
Ingots, blooms, billets	166 791	233 838	282 161	292 283	210 739
Scrap	1 829	13 575	57 710	22 479	40 299
Irish Republic					
Pig iron	320	2 964	3 804	3 074	5 475
Ferro-alloys	2 256	1 117	2 325	2 821	626
Silicon metal	...	...	434	1 160	1 366
Ingots, blooms, billets	3 315	1 775	1 558	1 331	1 222
Scrap	51 870	5 000	12 661	94 958	88 914
Italy					
Pig iron	1 351 649	1 310 196	1 711 795	1 249 505	1 103 642
Sponge & powder	18 581	48 362	161 618	107 120	202 669
Ferro-chrome	184 552	230 009	259 357	299 033	294 176
Ferro-silico-chrome	293	532	172	393	347
Ferro-silico-magnesium	(d) ...	5 537	5 855	8 375	6 628
Ferro-manganese	55 184	68 961	68 274	77 851	72 812
Ferro-silico-manganese	70 452	71 842	81 050	90 136	83 192
Ferro-molybdenum	(d) ...	4 397	5 735	4 869	4 886
Ferro-nickel	37 603	39 560	40 062	26 998	23 913
Ferro-niobium	(d) ...	1 407	1 395	1 140	1 285
Ferro-phosphorus	(d) ...	1 219	1 492	1 278	1 653
Ferro-silicon	100 594	112 822	112 673	129 115	118 396
Ferro-titanium & Fe-Si-Ti	(d) ...	3 651	3 296	3 410	3 735
Ferro-tungsten & Fe-Si-W	(d) ...	168	146	114	180
Ferro-vanadium	(d) ...	1 493	1 296	1 566	1 380
Other ferro-alloys	23 803	8 819	16 523	7 189	8 562
Silicon metal	19 889	32 053	33 896	31 667	44 411
Ingots, blooms, billets	1 155 267	1 649 167	2 111 264	2 684 986	2 070 840
Scrap	4 935 364	4 303 774	5 112 063	4 255 639	4 056 830
Latvia					
Ferro-alloys	...	...	9 042	11 030	14 474
Silicon metal	...	...	471	1 309	1 793
Ingots, blooms, billets	11 000	1 000	44 455	41 995	64 766
Scrap	65 650	280 169	216 098	174 691	214 024

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

tonnes

Country	1996	1997	1998	1999	2000
Lithuania					
Scrap	49 217	82 817	63 050	5 921	8 286
Macedonia					
Ferro-alloys	14 731	585	154	...	...
Ingots, blooms, billets	65 730	61 804	11 317	...	...
Scrap	4 081	889	11 611	...	...
Netherlands					
Pig iron	156 013	176 940	196 800	79 328	127 682
Sponge & powder	1 722	2 280	2 956	19 458	95 375
Ferro-chrome	194 728	150 790	176 092	204 088	132 868
Ferro-silico-chrome	148	5 408	2 731	1 751	3 545
Ferro-silico-magnesium	(d) ...	(d) ...	1 891	1 020	502
Ferro-manganese	23 416	39 020	55 750	32 599	59 362
Ferro-silico-manganese	50 575	37 709	39 946	38 231	26 395
Ferro-molybdenum	(d) ...	6 971	4 735	6 279	7 956
Ferro-nickel	3 428	2 977	23 309	27 420	29 130
Ferro-niobium	(d) ...	466	4 263	6 049	6 575
Ferro-phosphorus	(d) ...	(d) ...	2 165	2 459	1 520
Ferro-silicon	38 326	63 684	75 765	74 596	81 450
Ferro-titanium & Fe-Si-Ti	(d) ...	3 217	1 380	2 588	2 389
Ferro-tungsten & Fe-Si-W	(d) ...	711	750	670	2 380
Ferro-vanadium	(d) ...	2 380	1 266	1 572	2 477
Other ferro-alloys	13 144	5 377	2 256	2 205	2 330
Silicon metal	13 410	23 258	26 156	44 396	42 360
Ingots, blooms, billets	32 245	71 199	123 650	85 602	279 573
Scrap	2 816 539	2 073 111	1 396 827	1 354 536	1 167 772
Norway					
Pig iron	9 227	8 179	10 216	17 924	15 874
Sponge & powder	967	37 973	900	37 267	42 414
Ferro-chrome	660	688	712	366	844
Ferro-manganese	6 079	15 181	22 231	37 484	17 467
Ferro-silico-manganese	49	3 933	294	52	438
Ferro-silicon	5 207	9 161	7 825	3 408	7 057
Other ferro-alloys	728	975	844	1 690	1 152
Silicon metal	5 360	13 203	8 235	10 456	7 898
Ingots, blooms, billets	124 334	166 505	178 746	117 345	176 632
Scrap	215 747	290 278	346 976	331 948	368 454
Poland					
Pig iron	39 500	30 700	26 300	22 338	11 745
Ferro-chrome	9 362	8 332	8 929	7 225	10 388
Ferro-silico-magnesium	2 362	2 151	1 672	1 725	2 313
Ferro-manganese	4 546	12 324	20 858	35 376	63 562
Ferro-silico-manganese	16 181	14 673	12 345	18 173	33 705
Ferro-molybdenum	584	610	794	586	795
Ferro-phosphorus	941	1 020	1 086	1 184	1 104
Ferro-silicon	11 568	13 047	9 858	14 345	25 762
Ferro-vanadium	280	259	246	361	541
Other ferro-alloys	877	1 397	2 530	2 879	3 500
Silicon metal	4 583	5 150	6 049	6 708	6 764
Ingots, blooms, billets	146 000	133 000	...	47 777	43 331
Scrap	400	14 400	19 300	86 886	170 108
Portugal					
Pig iron	20 671	23 285	27 032	18 969	24 253
Ferro-manganese	1 239	1 108	1 304	1 203	1 180
Ferro-silico-manganese	7 177	7 553	6 310	7 252	6 877
Ferro-silicon	4 087	4 658	4 360	4 017	3 749
Other ferro-alloys	1 619	2 626	4 576	5 353	5 922
Ingots, blooms, billets	3 277	14 126	22 860	53 177	46 558
Scrap	34 555	39 749	173 559	288 200	227 168
Romania					
Ferro-alloys	47 740	80 566	85 521	56 083	61 774
Silicon metal	...	708	2 044	1 979	2 460
Ingots, blooms, billets	343 965	340 439	346 160	238 673	512 266

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

tonnes

Country	1996	1997	1998	1999	2000
Russia					
Pig iron	161 789	53 894	24 127	4 174	2 051
Sponge & powder	3 907 416	584 588	55 495	3 515	5 265
Ferro-chrome	20 008	8 247	8 734	7 449	9 057
Ferro-silico-chrome	1 026	----	----	----	----
Ferro-manganese	125 778	144 674	150 344	105 338	162 166
Ferro-silico-manganese	210 725	154 570	114 641	121 292	189 994
Ferro-molybdenum	(d) ...	311	1 124	2 141	3 701
Ferro-niobium	(d) ...	139	362	224	396
Ferro-silicon	54 950	40 534	15 249	4 464	18 634
Ferro-titanium & Fe-Si-Ti	(d) ...	120	1 437	387	2 310
Ferro-vanadium	(d) ...	104	219	233	817
Other ferro-alloys	4 549	882	1 465	2 367	2 485
Silicon metal	2 170	1 824	2 245	4 436	8 589
Ingots, blooms, billets	235 835	19 912	17 731	16 544	15 261
Scrap	124 952	92 841	77 093	301 901	312 433
Slovakia					
Pig iron	27 000	18 000	24 341	17 317	17 889
Sponge & powder	...	425	2 095	3 677	8 483
Ferro-alloys	13 000	13 000	15 508	12 408	18 946
Silicon metal	...	3 165	...	4 589	...
Ingots, blooms, billets	11 000	13 081	...	17 318	*13 800
Scrap	158 000	115 000	188 586	134 405	219 213
Slovenia					
Pig iron	14 615	9 847	8 387	10 632	14 265
Ferro-alloys	13 671	22 176	25 332	26 458	28 058
Silicon metal	...	...	2 020	2 262	2 564
Ingots, blooms, billets	2 103	2 533	3 166	2 315	4 057
Scrap	142 673	203 099	261 088	179 747	250 090
Spain					
Pig iron	373 164	255 342	350 118	324 990	387 778
Sponge & powder	225 759	342 934	567 763	771 805	860 410
Ferro-chrome	146 344	188 775	192 914	218 710	215 228
Ferro-silico-chrome	5 718	5 949	5 351	4 151	4 186
Ferro-silico-magnesium	(d) ...	4 065	3 527	2 632	2 493
Ferro-manganese	18 364	13 967	13 514	20 919	32 615
Ferro-silico-manganese	21 563	24 976	25 312	31 338	15 121
Ferro-molybdenum	(d) ...	3 260	2 266	2 114	2 186
Ferro-nickel	28 043	25 806	32 235	34 987	43 770
Ferro-niobium	(d) ...	368	387	220	221
Ferro-phosphorus	(d) ...	1 968	1 990	1 649	1 841
Ferro-silicon	33 346	42 561	43 300	39 520	39 884
Ferro-titanium & Fe-Si-Ti	(d) ...	488	561	745	1 044
Ferro-tungsten & Fe-Si-W	(d) ...	57	50	40	86
Ferro-vanadium	(d) ...	531	343	563	567
Other ferro-alloys	12 661	3 897	11 667	16 719	9 929
Silicon metal	3 649	3 655	4 953	3 045	3 328
Ingots, blooms, billets	412 996	474 682	438 176	848 086	772 207
Scrap	4 479 581	5 249 904	5 998 402	5 677 123	6 127 787

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

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Country	1996	1997	1998	1999	2000
Sweden					
Pig iron	39 062	31 011	59 364	54 919	100 988
Sponge & powder	4 239	5 357	7 650	7 604	12 168
Ferro-chrome	64 878	71 078	76 916	80 231	85 046
Ferro-silico-chrome	2 397	2 334	3 458	2 642	5 244
Ferro-silico-magnesium	(d) ...	1 270	1 919	7 377	3 977
Ferro-manganese	24 501	22 952	28 899	31 463	29 280
Ferro-silico-manganese	18 163	16 127	19 347	20 701	28 840
Ferro-molybdenum	(d) ...	2 508	4 013	3 354	3 269
Ferro-nickel	16 657	17 979	15 090	5 195	12 756
Ferro-niobium	(d) ...	376	611	595	671
Ferro-phosphorus	(d) ...	991	969	987	1 114
Ferro-silicon	30 978	31 064	36 840	31 381	35 802
Ferro-titanium & Fe-Si-Ti	(d) ...	1 813	2 264	2 285	2 340
Ferro-tungsten & Fe-Si-W	(d) ...	722	601	402	510
Ferro-vanadium	(d) ...	1 070	1 575	1 487	1 209
Other ferro-alloys	9 555	1 415	4 947	2 729	2 257
Silicon metal	2 487	2 101	2 413	3 808	4 416
Ingots, blooms, billets	335 334	393 046	305 002	389 416	477 366
Scrap	333 059	492 324	612 175	454 865	490 184
Switzerland					
Pig iron	30 921	22 268	36 101	27 870	30 806
Sponge & powder	4 855	6 381	8 038	9 033	9 073
Ferro-aluminium	1 860	333	28	1	4
Ferro-chrome	522	732	1 012	913	1 412
Ferro-manganese	3 617	5 518	3 824	3 302	5 927
Ferro-silico-manganese	3 830	4 413	5 615	5 145	5 786
Ferro-silicon	4 702	5 850	6 042	5 741	5 944
Other ferro-alloys	947	1 185	1 276	1 153	1 971
Silicon metal	1 397	16 579	12 023	1 120	696
Ingots, blooms, billets	59 664	93 321	90 596	52 522	69 174
Scrap	76 086	165 862	217 924	208 365	239 387
Turkey					
Pig iron	393 343	244 247	194 160	153 706	226 951
Sponge & powder	2 363	3 221	14 088	8 634	20 281
Ferro-manganese	33 940	32 459	24 323	29 364	43 147
Ferro-silico-manganese	93 835	102 756	91 245	90 684	97 763
Ferro-silicon	45 023	41 466	48 971	51 768	58 630
Other ferro-alloys	4 715	5 232	6 554	9 308	11 385
Silicon metal	...	...	1 841	2 005	1 985
Ingots, blooms, billets	1 311 824	1 219 268	1 484 361	1 607 637	1 923 083
Scrap	7 085 308	7 747 674	6 550 614	7 877 831	7 457 315
Ukraine					
Ferro-alloys	...	20 280	18 096	...	...
Scrap	89 836	90 061	26 250	...	...
United Kingdom					
Pig iron	240 886	210 112	225 303	156 325	133 729
Sponge & powder	21 414	25 690	33 529	23 005	39 472
Ferro-chrome & ferro-silico-chrome	133 540	118 915	114 275	120 393	107 116
Ferro-silico-magnesium	11 508	11 374	9 671	8 565	6 978
Ferro-manganese	131 528	135 902	111 500	90 301	92 489
Ferro-silico-manganese	35 098	38 261	49 448	53 965	66 354
Ferro-molybdenum	392	773	599	792	426
Ferro-nickel	35 416	20 251	11 909	4 470	2 439
Ferro-niobium	921	856	1 086	952	1 556
Ferro-phosphorus	3 227	3 025	2 980	2 630	2 200
Ferro-silicon	96 025	96 005	82 802	80 753	67 814
Ferro-titanium & Fe-Si-Ti	7 591	5 161	4 887	4 054	2 489
Ferro-tungsten & Fe-Si-W	44	112	56	66	52
Ferro-vanadium	291	378	378	648	1 453
Other ferro-alloys	1 806	3 108	4 475	4 717	4 089
Silicon metal	45 831	46 675	45 285	58 164	77 852
Ingots, blooms, billets	373 414	458 875	549 465	412 482	519 909
Scrap	242 588	211 827	179 204	164 757	202 275

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

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Country	1996	1997	1998	1999	2000
Yugoslavia, Federal Republic of					
Pig iron	1 624	2 100	800	570	415
Ferro-chrome	1 900	2 100	779	583	773
Ferro-manganese	5 200	(d) ...	(d) ...	5 633	1 261
Ferro-silicon	...	(d) ...	(d) ...	3 521	63
Other ferro-alloys	...	11 351	6 626	596	4 490
Ingots, blooms, billets	92 000	124 152	34 804	220 158	88 373
Scrap	78 000	37 577	42 372	82 104	42 871
Algeria					
Ferro-manganese	402	1 931	1 951	1 786	...
Other ferro-alloys	262	1 758	3 202	1 740	...
Botswana					
Ferro-alloys	...	7 752	5 571	...	...
Scrap	...	4 299	5 294	...	...
Egypt					
Pig iron	881 266	94 208	32 122	42 259	...
Ferro-alloys	25 792	22 300	20 322	15 004	...
Ingots, blooms, billets	642 562	1 209 431	1 910 852	1 246 300	...
Scrap	121 382	54 909	277 279	518 218	...
Ethiopia					
Ingots, blooms, billets	...	3 122	3 321	1 583	5 721
Scrap (g)	...	310	60 435	75 761	...
Kenya					
Ingots, blooms, billets	2 810	495	43 426	74 089	65 712
Mauritius					
Ingots, blooms, billets	31 116	34 587	37 331	40 679	32 308
Morocco					
Pig iron	2 600	1 448	2 383	2 574	...
Ingots, blooms, billets	523 064	587 408	557 876	527 763	...
Nigeria					
Ferro-alloys	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	494 049
Ferro-chrome	626	465	628	9 080	580
Ferro-silico-magnesium	814	220	457	218	351
Ferro-silico-manganese	253	196	5 338	571	0
Ferro-molybdenum	1 104	1 258	1 040	1 419	845
Ferro-nickel	5 251	2 263	4 508	2 159	...
Ferro-niobium	91	87	223	79	119
Ferro-phosphorus	...	1 882	168	...	...
Ferro-silicon	16 617	3 100	2 844	3 564	7 887
Ferro-titanium & Fe-Si-Ti	925	417	537	562	605
Other ferro-alloys	1 137	222	1 428	1 696	3 073
Silicon metal	1 658	2 895	9 609	4 078	4 427
Scrap	67 077	50 048	43 066	47 454	65 447
Tanzania					
Ingots, blooms, billets	510	8 104	9 330	5 413	...
Tunisia					
Ferro-alloys	2 564	2 808	2 216	2 709	...
Ingots, blooms, billets	68 343	108 477	106 408	192 070	...
Scrap	900	1 304	3 110	550	...
Zimbabwe					
Ferro-manganese	10 091	1 100	772	1 439	...
Ferro-silicon	49 475	45 341	3 201	3 320	...

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

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Country	1996	1997	1998	1999	2000
Canada					
Pig iron	32 245	130 002	124 430	168 225	67 706
Sponge & powder	32 498	52 411	35 831	15 050	...
Ferro-calcium-silicon	1 785	2 042	1 918	1 944	2 347
Ferro-chrome	64 545	58 333	50 502	45 329	43 755
Ferro-silico-chrome	665	594	487	697	501
Ferro-manganese	83 002	70 568	70 021	73 045	72 363
Ferro-silico-manganese	54 426	43 979	52 200	37 156	38 028
Ferro-molybdenum	1 283	1 664	1 846	1 838	1 885
Ferro-nickel	64	----	4	29	53
Ferro-niobium	1 266	1 683	1 885	1 855	1 820
Ferro-phosphorus	1 067	1 247	1 270	1 175	861
Ferro-silicon	42 477	43 877	50 924	46 795	45 356
Ferro-titanium & Fe-Si-Ti	902	1 134	1 465	1 439	1 639
Ferro-vanadium	576	793	1 018	696	600
Other ferro-alloys	1 869	2 536	2 215	2 636	2 614
Silicon metal	25 465	20 106	19 522	20 873	27 597
Ingots, blooms, billets	1 053 550	821 685	835 063	392 208	531 258
Scrap	1 264 712	1 531 652	1 482 266	1 568 817	1 326 647
Costa Rica					
Ingots, blooms, billets	53 313	80 212	69 651	58 852	37 122
El Salvador					
Ingots, blooms, billets	17 101	38 595	69 711	59 259	29 825
Scrap	47 725	17 774	24 184	11 663	11 929
Guatemala					
Ingots, blooms, billets	40 677	43 341	182 242	130 362	34 552
Scrap	57 499	50 282	31 613	10 001	92 213
Mexico					
Pig iron	306 638	493 510	514 741	299 954	935 963
Sponge & powder	1 233 530	411 611	212 839	353 500	506 961
Ferro-chrome	7 519	9 301	8 154	9 785	10 136
Ferro-manganese	23 164	16 313	15 151	11 506	13 044
Ferro-silico-manganese	14 849	15 539	25 967	13 081	18 374
Ferro-silicon	23 104	27 717	31 062	51 257	48 766
Other ferro-alloys	4 291	6 797	8 811	8 936	11 902
Ingots, blooms, billets	389 983	399 660	773 613	432 820	740 852
Scrap	1 294 771	1 895 475	1 280 083	1 150 000	1 899 783
Panama					
Ingots, blooms, billets	27 008	51 713	29 000	33 598	...
Trinidad & Tobago					
Ferro-alloys	8 030	11 397	6 102	...	9 713
USA					
Pig iron	2 657 503	3 153 082	5 145 121	4 989 059	4 969 628
Sponge & powder	1 181 377	1 223 391	1 170 294	1 338 542	1 582 218
Ferro-chrome	419 647	388 858	418 492	603 794	576 691
Ferro-silico-chrome	49 396	36 502	24 946	35 947	19 230
Ferro-manganese	375 368	302 996	336 097	314 929	312 237
Ferro-silico-manganese	324 957	303 109	345 044	299 997	378 929
Ferro-molybdenum	7 929	5 891	7 720	8 540	8 333
Ferro-nickel	43 405	38 218	35 918	37 840	40 044
Ferro-niobium	4 801	6 957	8 076	7 380	7 163
Ferro-phosphorus	10 556	11 457	13 651	10 598	13 049
Ferro-silicon	210 937	195 209	203 804	248 905	326 122
Ferro-titanium & Fe-Si-Ti	7 758	6 233	7 335	4 747	6 053
Ferro-tungsten & Fe-Si-W	702	1 087	825	895	630
Ferro-vanadium	2 481	2 535	2 455	2 730	3 480
Other ferro-alloys	37 778	40 090	39 356	31 897	34 330
Silicon metal	83 936	125 087	106 929	118 500	136 185
Ingots, blooms, billets	6 848 093	5 771 636	6 220 275	7 565 441	7 749 318
Scrap	2 560 969	2 833 522	3 024 556	3 686 289	3 229 893

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

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Country	1996	1997	1998	1999	2000
Argentina					
Pig iron	2 900	1 322	1 580	975	2 550
Ferro-chrome	3 339	3 164	3 715	2 097	3 730
Ferro-manganese	5 571	6 289	8 649	8 212	12 146
Ferro-silico-manganese	7 064	21 550	4 344	17 187	22 732
Ferro-silicon	161	974	3 174	3 196	5 627
Other ferro-alloys	1 357	1 632	2 226	1 897	2 950
Silicon metal	2 718	5 119	4 214	5 292	8 535
Ingots, blooms, billets	270 655	528 367	413 903	151 337	87 203
Scrap	12 831	7 743	9 827	900	184
Brazil					
Sponge & powder	10 345	8 491	5 430	4 463	29 516
Ferro-chrome	6 890	6 842	5 676	4 970	10 649
Ferro-manganese	8 683	9 346	10 131	28 453	8 158
Other ferro-alloys	8 817	7 428	7 277	4 596	6 157
Chile					
Ferro-alloys	5 701	11 542	11 921	12 044	15 952
Colombia					
Ferro-chrome	623	290	331	135	595
Ferro-manganese	4 515	5 857	5 382	4 145	6 159
Ferro-silico-manganese	3 104	4 494	2 447	1 754	2 680
Ferro-silicon	2 627	3 040	2 233	1 896	2 830
Other ferro-alloys	687	928	853	916	1 054
Ingots, blooms, billets	115 889	173 515	171 523	87 543	116 296
Scrap	116 036	142 511	119 033	20 500	96 455
Ecuador					
Ingots, blooms, billets	191 701	160 715	177 712	129 394	210 869
Peru					
Sponge	62 830	...	22 113	36 649	...
Ferro-chrome	438	971	1 210	849	...
Ferro-manganese	2 156	2 162	2 320	3 927	...
Ferro-silico-manganese	4 262	7 030	8 375	3 050	...
Ferro-silicon	1 776	1 280	1 708	863	...
Ingots, blooms, billets	47 075	91 284	117 554	46 851	...
Scrap	...	19 581	18 883	...	...
Uruguay					
Ferro-alloys	1 107	778	666	706	649
Ingots, blooms, billets	509	200	3 004	...	...
Venezuela					
Sponge & powder	3 363	3 025	...	1 690	1 341
Ferro-chrome	281	358	209	93	253
Ferro-manganese	15 794	20 180	15 209	6 904	15 661
Other ferro-alloys	1 480	1 686	3 250	1 376	2 496
Silicon metal	1 031	2 119	...	1 560	1 945
Ingots, blooms, billets	4 670	24 967	...	12 933	8 375
Scrap	250 110	66 254	98 300	23 003	...
Bangladesh					
Pig iron (a)	43 934	15 493	...	...	...
Ferro-alloys (a)	3 400	103 635	...	...	...
Scrap (a)	405	13 127	...	...	...
China					
Pig iron	42 491	24 013	23 972	58 811	17 514
Sponge & powder	6 989	31 181	12 811	43 922	145 860
Ferro-alloys	6 234	28 999	6 975	9 003	9 310
Silicon metal	405	1 876	2 468	924	1 176
Ingots, blooms, billets	398 005	394 774	690 829	2 134 955	4 901 163
Scrap	1 283 322	1 828 759	2 018 655	3 339 073	5 099 105
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	1996	1997	1998	1999	2000
Hong Kong					
Sponge & powder	1 073	1 717	2 378	3 122	11 945
Ferro-manganese	9 073	2 353	643	645	339
Ferro-silico-manganese	2 008	5 034	406	1 443	216
Ferro-silicon	21 445	12 566	2 682	2 298	742
Other ferro-alloys	4 941	633	731	302	315
Silicon metal	7 145	3 856	1 008	811	1 239
Ingots, blooms, billets	319 684	143 730	237 749	360 476	441 876
Scrap	243 392	255 113	249 397	204 829	213 596
India					
Pig iron (e)	17 809	2 666	2 247	3 417	...
Sponge & powder (e)	3 258	2 903	3 209	2 625	...
Ferro-chrome & ferro-silico-chrome (e)	8 131	14 185	3 510	7 442	...
Ferro-manganese & Fe-Si-Mn (e)	20 546	14 993	7 117	10 727	...
Ferro-molybdenum (e)	217	245	153	60	...
Ferro-nickel (e)	8 635	9 469	4 924	5 412	...
Ferro-silicon (e)	17 901	14 112	7 898	33 350	...
Other ferro-alloys (e)	2 879	4 689	3 522	3 622	...
Silicon metal (e)	15 195	13 823	8 725	10 918	...
Ingots, blooms, billets (e)	392 234	414 223	607 764	579 883	...
Scrap (e)	1 975 667	1 658 894	1 494 745	1 924 390	...
Indonesia					
Pig iron	372 572	220 848	75 138	135 489	154 603
Sponge & powder	203 761	228 625	57 543	91 208	278 036
Ferro-manganese	11 964	36 009	7 482	10 274	16 609
Ferro-silico-manganese	30 103	32 545	16 085	10 937	21 340
Ferro-silicon	9 800	9 158	8 480	10 167	10 747
Other ferro-alloys	1 507	2 407	996	1 385	2 672
Silicon metal	1 769	1 658	785	1 242	1 165
Ingots, blooms, billets	1 376 411	1 718 583	268 109	434 099	1 251 167
Scrap	788 561	869 730	399 964	690 945	1 263 506
Iran					
Ferro-manganese	*20 000	31 300	18 137	43 716	...
Other ferro-alloys	...	...	4 018	2 160	...
Silicon metal	...	...	935	1 409	...
Ingots, blooms, billets (c)	...	89 291	33 553	48 433	...
Scrap	*45 000	50 200	43 878	10 100	...
Israel					
Ingots, blooms, billets	211 000	...	...	...	...
Japan					
Pig iron	791 976	1 052 218	184 396	143 294	850 765
Sponge & powder	156 601	227 821	113 446	92 788	63 099
Ferro-chrome	718 567	811 555	628 345	599 839	776 333
Ferro-silico-chrome	10 142	4 729	3 414	3 171	5 817
Ferro-manganese	110 917	95 240	109 853	89 570	69 682
Ferro-silico-manganese	233 277	257 536	201 284	227 218	223 759
Ferro-molybdenum	2 585	3 167	2 214	2 193	3 345
Ferro-nickel	58 460	49 752	41 069	34 284	37 635
Ferro-niobium	4 758	4 977	6 516	6 889	5 566
Ferro-phosphorus	5 881	7 639	7 324	6 827	8 892
Ferro-silicon	517 618	556 735	401 939	440 152	504 764
Ferro-titanium & Fe-Si-Ti	3 122	6 276	4 792	3 979	3 537
Ferro-tungsten & Fe-Si-W	415	775	974	560	1 101
Ferro-vanadium	1 281	1 770	1 915	1 985	2 775
Other ferro-alloys	10 409	14 099	11 065	11 611	...
Silicon metal	191 494	166 312	163 202	184 596	200 369
Ingots, blooms, billets	299 397	274 082	45 554	8 042	12 195
Scrap	375 078	414 555	176 907	282 019	321 424
Jordan					
Ferro-alloys	...	259	610	1 076	1 267
Ingots, blooms, billets	350 369	252 480	299 418	332 755	295 651
Scrap	3 003	1 661	939	3 418	8 535
Kazakhstan					
Ferro-manganese	(d) ...	(d) ...	14 969	18 857	...
Other ferro-alloys	(f) 18 807	(f) 20 373	4 048	5 410	...
Scrap	8 000	78 000	1 884	4 706	...

## Imports of Iron, Steel and Ferro-Alloys

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Country	1996	1997	1998	1999	2000
Korea, Dem. P.R. of					
Ferro-manganese (b)	*2 700	*1 800	*2 300	*5 400	*5 400
Other ferro-alloys (b)	*7 200	*16 400	*8 300	*10 500	*2 600
Korea, Republic of					
Pig iron	2 426 685	3 691 551	2 481 263	2 752 486	2 271 671
Sponge & powder	850 124	911 933	607 926	742 820	604 926
Ferro-chrome	204 707	299 313	287 466	384 336	359 491
Ferro-silico-chrome	15 198	12 311	17 063	14 492	14 002
Ferro-manganese	43 650	41 085	36 445	33 766	54 318
Ferro-silico-manganese	99 513	120 438	89 959	84 002	108 763
Ferro-molybdenum	1 018	1 785	1 423	2 149	2 759
Ferro-nickel	62 551	85 172	86 594	85 779	98 032
Ferro-niobium	396	634	779	1 099	682
Ferro-phosphorus	3 340	3 392	3 681	4 271	3 921
Ferro-silicon	118 423	128 241	118 983	133 739	149 828
Ferro-titanium & Fe-Si-Ti	491	764	462	579	618
Ferro-tungsten & Fe-Si-W	184	74	90	122	143
Ferro-vanadium	863	728	762	632	414
Other ferro-alloys	2 605	----	6 465	...	4 912
Silicon metal	19 516	19 325	12 592	22 623	32 311
Ingots, blooms, billets	4 176 046	3 631 133	1 579 493	2 638 634	3 443 612
Scrap	5 054 668	6 532 716	5 566 790	6 583 505	6 851 903
Malaysia					
Pig iron	169 910	...	...	...	...
Sponge & powder	3 459	5 897	4 934	...	...
Ferro-manganese	36 091	19 597	4 791	13 800	...
Ferro-silicon	12 410	8 211	4 125	...	...
Ferro-vanadium	274	314	48	...	...
Other ferro-alloys	1 048	947	341	...	...
Ingots, blooms, billets	944 411	...	...	...	...
Scrap	1 089 543	991 000	417 000	1 075 000	...
Oman					
Ingots, blooms, billets	8	4 007	24 501	9 900	35
Pakistan					
Pig iron (a)	36	6 109	8 457	----	135 598
Ferro-chrome	1 125	1 600	1 200	1 300	...
Ferro-manganese (a)	20 090	8 263	7 582	6 828	12 473
Ferro-silicon (a)	...	...	...	6 515	9 156
Ingots, blooms, billets (a)	48 340	48 336	32 504	...	...
Scrap (a)	90 576	121 263	65 790	...	190 375
Philippines					
Pig iron	69 145	24 536	12 574	...	...
Ferro-manganese	5 190	2 857	3 262	3 200	...
Ferro-silico-manganese	1 234	540	918	695	...
Ferro-silicon	4 908	3 670	5 255	2 644	...
Other ferro-alloys	265	296	164	257	...
Ingots, blooms, billets	1 951 019	1 799 813	983 318	1 310 206	...
Scrap	109 516	60 488	51 961	4 642	...
Saudi Arabia					
Pig iron	44 848	11 893	46 486	96 906	49 136
Ferro-alloys	4 282	6 324	2 837	9 497	5 899
Silicon metal	...	664	778	599	399
Ingots, blooms, billets	196 330	149 110	321 101	108 426	50 063
Scrap	...	37 004	23 853	12 124	35 889
Singapore					
Pig iron	75 870	21 500	26 510	63 399	21 891
Sponge & powder	29	1 714	1 507	2 111	2 569
Ferro-manganese	962	904	682	953	1 207
Ferro-silico-manganese	...	4 204	4 204	4 939	4 350
Ferro-silicon	12 439	1 901	1 420	3 484	2 057
Other ferro-alloys	1 704	3 568	406	349	464
Silicon metal	...	...	865	578	2 120
Ingots, blooms, billets	275 172	422 065	116 968	316 183	292 939
Scrap	83 557	63 521	68 633	141 027	233 888
Sri Lanka					
Ingots, blooms, billets	99 609	121 798	132 766	131 922	...

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

tonnes

Country	1996	1997	1998	1999	2000
Syria					
Ingots, blooms, billets	25 296	22 350	51 209	...	...
Scrap	9 119	1 789	909	...	...
Taiwan					
Pig iron	850 315	1 112 462	955 323	951 797	847 323
Sponge & powder	24 373	24 957	22 969	24 836	28 633
Ferro-chrome	196 389	285 664	309 496	397 972	395 171
Ferro-manganese	38 225	51 793	42 990	67 161	69 468
Ferro-silico-manganese	51 311	77 702	79 780	71 212	77 001
Ferro-molybdenum	1 920	2 234	2 974	2 876	1 812
Ferro-nickel	56 118	81 818	90 978	110 969	117 094
Ferro-niobium	245	164	345	189	336
Ferro-silicon	58 713	63 313	64 723	66 445	74 432
Ferro-tungsten & Fe-Si-W	...	122	230	106	225
Ferro-vanadium	453	490	468	575	1 121
Other ferro-alloys	3 205	6 558	6 421	4 846	5 641
Silicon metal	20 163	25 275	19 434	18 092	17 321
Ingots, blooms, billets	5 941 500	7 013 973	7 528 921	9 121 332	9 026 461
Scrap	1 048 932	1 960 652	2 398 392	1 800 846	1 957 909
Thailand					
Pig iron	227 771	219 603	118 441	135 430	306 043
Sponge & powder	1 557	1 325	1 638	2 752	4 737
Ferro-chrome	3 117	3 095	3 398	3 977	7 188
Ferro-manganese	8 457	7 744	7 675	5 526	7 211
Ferro-silico-manganese	29 218	21 947	17 553	19 148	20 859
Ferro-silicon	16 751	15 645	12 569	14 910	17 506
Other ferro-alloys	915	775	2 418	1 614	1 853
Silicon metal	2 614	3 536	2 735	3 828	4 919
Ingots, blooms, billets	3 995 668	3 256 499	3 260 000	3 190 960	2 736 852
Scrap	899 238	728 218	320 014	629 698	741 332
Australia					
Pig iron	5 579	26 729	97 178	41 115	6 230
Sponge & powder	4 095	13 388	9 257	4 539	4 110
Ferro-chrome	7 616	11 707	8 438	11 871	8 127
Ferro-manganese & Fe-Si-Mn	15 084	8 075	11 933	6 600	5 024
Ferro-molybdenum	262	334	294	283	435
Ferro-niobium	364	150	100	91	41
Ferro-silicon	49 999	35 825	33 952	32 604	28 832
Ferro-titanium & Fe-Si-Ti	363	356	361	412	364
Ferro-vanadium	31	700	232	295	99
Other ferro-alloys	1 441	1 934	1 629	8 790	1 848
Silicon metal	4 804	2 948	3 771	4 076	5 611
Ingots, blooms, billets	34 423	124 113	37 217	...	14 984
Scrap	28 094	2 216	10 363	5 000	21 319
New Zealand					
Ferro-manganese	1 953	2 074	2 981	1 816	2 088
Ferro-silicon	2 767	2 519	1 892	2 234	2 486
Other ferro-alloys	2 440	2 555	2 045	2 419	3 117
Silicon metal	3 045	2 188	1 553	3 661	4 239

Note(s) :-

(1) In this table the term 'ingots, blooms, billets' corresponds to items 7206, 7207, 7218 and 7224 of the Harmonised System 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

tonnes

Country	1996	1997	1998	1999	2000
Austria	31 833	42 654	39 666	30 759	*25 000
Belgium	*300 000	*300 000	*300 000	*300 000	*300 000
Bosnia & Herzegovina	*3 000	*3 000	*3 000	*3 000	*3 000
Bulgaria	189 000	158 000	154 760	144 341	...
Czech Republic (h)	724 053	822 394	1 101 312	1 049 225	1 242 158
Finland	14 204	...	...	...	...
France	326 000	332 000	333 000	328 000	385 000
Germany (g)	700 000	721 000	736 000	*700 000	...
Greece	60 453	56 459	46 388	64 931	*65 000
Italy	126 000	180 570	247 970	...	...
Poland (k)	59 400	69 700	69 200	80 300	*80 000
Portugal	177 423	216 075	271 296	221 296	127 581
Romania	45 199	29 169	24 742	25 456	19 007
Russia	40 000	48 400	40 600	82 300	...
Slovakia	23 240	22 720	14 580	22 930	21 000
Spain (k)	317 918	296 015	312 539	350 000	450 000
Turkey	449 559	472 646	403 733	449 954	595 415
Ukraine	249 300	237 900	201 670	221 526	...
United Kingdom (a) (l)	2 281 438	2 359 676	2 391 595	2 303 602	2 376 057
Yugoslavia, Federal Republic of	68 460	65 724	75 092	40 321	39 475
Algeria	23 332	18 533	13 640	16 833	11 616
Burundi	3 979	3 539	3 500	1 597	1 500
Egypt (d)	115 409	112 657	138 184	...	...
Eritrea	2 620	4 670	3 809	*600	*500
Ethiopia (m)	1 428	3 512	378	681	1 654
Madagascar	*1 500	*1 500	*1 500	*1 500	*1 500
Nigeria	102 078	125 219	*100 000	*100 000	...
South Africa	150 597	122 798	138 304	122 413	98 897
Tanzania	1 332	1 375	*1 300	*1 300	...
Mexico	253 602	235 278	339 013	489 993	532 268
USA (e)	9 180 000	9 280 000	9 640 000	9 160 000	*8 870 000
Argentina	64 241	47 365	46 832	52 665	*50 000
Brazil (b)	1 251 603	1 348 562	1 499 381	1 652 997	*1 900 000
Chile	13 452	14 238	11 530	4 361	6 445
Ecuador	86 541	7 348	5 600	20 652	11 022
Paraguay	*66 500	*66 700	*66 700	*66 500	...
Peru	14 295	7 875	4 968	1 332	6 165
Venezuela	7 542	5 000	4 000	12 000	...
Bangladesh (d)	6 855	8 849	7 731	*7 700	...
China	950 000	950 000	1 000 000	*1 000 000	*1 000 000
India (i) (j)	183 072	166 453	159 493	168 618	160 933
Indonesia	*15 000	1 956	8 567	21 389	...
Iran (c)	364 506	484 785	451 807	...	...
Israel	14 000	16 000	27 000	20 000	13 000
Japan	141 230	110 915	83 257	53 092	25 739
Jordan	37 832	34 550	50 531	34 040	36 795
Kazakhstan	20 000	*20 000	...	...	...
Korea, Republic of	852 457	898 347	627 360	672 824	705 845
Malaysia	324 578	221 769	198 930	213 972	288 513
Pakistan (d)	45 446	66 235	66 672	64 692	...
Philippines	1 149	1 440	1 783	5 465	1 510
Saudi Arabia	6 800	7 100	7 100	7 500	7 500
Sri Lanka	19 473	20 126	11 110	12 573	12 230
Taiwan	25 083	27 491	72 188	75 784	38 606
Thailand (h)	557 604	315 098	262 859	127 770	221 062
Uzbekistan (i)	...	...	*10 000	*15 000	...
Vietnam	*1 000	*1 100	*1 100	*1 100	*1 100

**Production of Kaolin**

tonnes

Country	1996	1997	1998	1999	2000
Australia (d) (f)	239 000	217 000	182 000	201 000	223 000
New Zealand	26 325	21 874	16 965	16 686	16 310
World Total	21 400 000	21 400 000	22 100 000	21 700 000	22 300 000

## Note(s):-

(1) In addition to the countries listed, Colombia, Denmark, Dem. P. R. of Korea and Lebanon are believed to produce kaolin

- (a) Sales
- (b) Including beneficiated and directly shipped material
- (c) Years ended 20 March following that stated
- (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 31 March following that stated
- (k) Washed
- (l) Dry weight
- (m) Years ended 7 July of that stated

**Exports of Kaolin**

tonnes

Country	1996	1997	1998	1999	2000
Albania	10 060	*10 000	54	0	-----
Austria	4 900	5 037	2 965	2 743	3 235
Belgium-Luxembourg	250 271	308 573	324 359	248 829	324 267
Bulgaria	97 024	110 954	(a) *73 700	(a) *97 500	(a) *108 100
Croatia	...	...	3 605	3 143	3 080
Czech Republic	361 858	397 720	418 948	428 342	442 934
Denmark	517	912	1 436	1 003	1 045
Finland	1 829	2 333	3 572	5 466	6 915
France	260 426	260 812	330 616	307 307	348 868
Germany	196 066	178 366	194 610	387 173	367 230
Greece	26 464	15 733	8 952	3 811	4 252
Hungary	4 403	1 866	1 814	1 539	2 229
Italy	30 811	42 537	56 878	60 852	56 689
Netherlands	102 372	85 534	138 731	185 784	233 688
Poland	10 500	4 800	...	3 342	1 903
Portugal	1 008	4 951	2 741	9 701	10 287
Russia	3 003	574	302	1 233	1 050
Slovakia	1 694	819	-----	290	162
Slovenia	1 160	198	295	95	21
Spain	137 994	144 343	104 342	103 831	130 290
Sweden	13 753	25 476	35 697	13 507	11 491
Turkey	190 761	158 642	185 431	262 211	272 128
Ukraine	236 053	291 161	230 888	246 565	...
United Kingdom (d)	1 957 761	2 052 914	2 093 460	2 018 969	2 074 548
Egypt	3 250	64 456	46 205	2 806	...
South Africa	...	1 503	4 962	5 199	3 986
USA	3 246 749	3 395 222	3 585 990	3 349 793	3 727 982
Argentina	4 513	8 242	9 620	8 158	11 646
Brazil	602 150	764 743	964 268	1 156 593	1 390 636
Colombia	3 432	4 994	5 530	6 255	7 107
China	882 146	820 520	882 169	892 785	871 042
Hong Kong (c)	261 578	396 008	284 962	205 996	147 159
India (b)	10 469	10 138	7 810	9 335	...
Indonesia	148 380	126 462	90 976	128 923	114 138
Iran	...	...	31 126	12 920	...
Israel (a)	*7 500	*16 100	...	*15 500	*17 800
Japan	8 108	9 139	12 475	13 628	7 554
Jordan	744	1 155	768	11 526	15 018
Kazakhstan	12 000	10 000	8 020	(a) *2 900	(a) *600
Korea, Dem. P.R. of (a)	*2 600	*6 000	*7 500	*4 800	*4 400
Korea, Republic of	53 579	23 623	24 504	22 926	20 840
Malaysia	68 200	68 900	59 400	62 200	...
Singapore	2 300	927	539	1 471	618
of which, re-exports	...	918	525	1 408	509
Taiwan	12 044	21 344	19 262	17 129	13 033
Thailand	20 624	12 184	10 454	15 237	13 162
Australia	154 326	25 141	24 796	24 150	15 936
New Zealand	22 408	22 761	14 925	11 213	...

## Note(s):-

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

(b) Years ended 31 March following that stated

(c) Re-exports

(d) Dry weight

**Imports of Kaolin**

tonnes

Country	1996	1997	1998	1999	2000
Austria	227 000	227 663	216 307	222 559	250 552
Belarus	*15 000	*15 000	21 909	33 581	30 966
Belgium-Luxembourg	682 224	690 593	596 714	556 417	470 979
Croatia	14 193	21 410	4 849	5 636	5 513
Cyprus	16 361	421	4 020	5 197	3 712
Czech Republic	5 846	10 087	16 028	13 412	17 649
Denmark	16 037	28 862	20 210	19 910	18 505
Finland	1 198 212	1 402 209	1 357 735	1 249 452	1 493 786
France	396 785	439 674	368 970	400 812	379 697
Germany	633 467	729 379	739 660	719 302	809 665
Greece	73 542	57 688	44 061	44 968	43 835
Hungary	34 027	38 726	37 509	33 601	28 869
Irish Republic	13 978	11 774	11 627	12 980	12 539
Italy	868 006	834 122	930 913	989 397	1 108 281
Latvia	3 000	1 300	2 303	3 630	2 608
Macedonia	5 383	8 965	9 895	...	...
Moldova	...	...	4 924	3 066	6 400
Netherlands	509 753	360 327	393 780	460 095	560 760
Norway	224 811	241 707	250 210	263 832	274 484
Poland	62 900	60 100	55 000	54 656	53 027
Portugal	95 805	109 909	121 639	128 709	140 863
Romania	54 330	58 851	49 338	53 812	68 404
Russia	159 884	131 238	101 940	133 106	190 328
Slovakia	52 500	60 800	74 800	76 847	...
Slovenia	20 800	22 300	24 816	24 934	28 703
Spain	434 099	470 225	585 468	2 408 337	797 987
Sweden	342 964	386 758	371 589	402 204	548 460
Switzerland	74 682	56 975	59 144	46 985	45 273
Turkey	85 789	116 727	139 326	114 965	198 837
United Kingdom	39 194	88 946	47 272	28 502	39 065
Yugoslavia, Federal Republic of	8 000	7 702	9 075	8 778	25 637
Algeria	6 073	5 813	10 684	3 556	...
Egypt	55 829	85 127	120 712	87 720	...
Ethiopia	...	1 500	270	91	137
Ghana	23	2 920	3 597	3 208	3 116
Kenya	3 900	4 100	3 100	2 759	3 014
Mauritius	...	...	937	855	639
Morocco	14 700	16 005	25 541	25 520	...
South Africa	17 360	22 054	24 753	17 509	16 353
Tunisia	51 575	50 058	57 353	65 454	...
Zimbabwe	24 166	1 747	1 528	5 941	...
Canada	599 842	717 103	860 450	917 129	906 761
Guatemala	6 175	4 378	2 682	4 306	7 257
Mexico	221 292	300 139	338 176	377 341	362 624
USA	13 728	30 384	52 943	57 255	62 656
Argentina	26 528	21 548	25 684	19 129	17 457
Brazil	7 001	4 305	4 941	3 746	5 367
Chile	16 463	24 196	16 002	20 728	22 118
Colombia	10 486	11 402	8 967	7 763	11 259
Ecuador	3 447	13 166	13 911	8 589	22 217
Peru	2 998	1 509	2 704	1 907	...
Uruguay	7 331	10 334	13 333	9 026	9 416
Venezuela	31 729	27 772	21 987	24 181	23 338
Bangladesh (b)	7 148	65 102	...	...	...
China	37 211	54 295	64 326	105 182	182 763
Dubai	7 603	9 847	32 228	...	...
Hong Kong	175 803	172 105	139 015	56 287	30 412
India (c)	1 428	3 103	4 825	6 690	...
Indonesia	125 343	144 964	134 903	101 232	145 253
Iran (a)	...	11 195	19 975	23 845	...
Israel	*15 000	*15 000	*17 000	*16 500	...
Japan	1 399 224	1 333 036	1 393 293	1 347 092	1 400 969
Jordan	4 337	4 276	4 486	3 515	5 003
Korea, Republic of	264 587	274 430	211 674	255 206	259 975

**Imports of Kaolin**

tonnes

Country	1996	1997	1998	1999	2000
Malaysia	37 500	34 300	32 000	50 800	...
Pakistan (b)	8 940	8 252	10 138	8 270	8 718
Philippines	45 854	50 050	59 000	67 063	...
Saudi Arabia	5 563	5 571	4 790	6 513	9 218
Singapore	22 000	10 451	9 613	10 907	8 846
Sri Lanka	...	...	8 358	3 474	...
Taiwan	1 141 070	1 146 106	988 891	994 472	834 904
Thailand	65 400	64 141	38 281	53 087	64 154
Australia	14 595	20 753	16 578	8 892	10 482
New Zealand	8 039	6 450	8 206	12 817	11 105

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	1996	1997	1998	1999	2000
Bulgaria	28 500	28 000	24 200	13 800	10 900
Finland	1 200	2 200	1 800	130	380
Greece	8 383	19 335	22 632	19 699	15 554
Irish Republic	45 300	45 000	35 900	39 200	57 500
Italy	13 900	11 800	6 800	----	----
Macedonia	26 900	28 000	30 000	27 000	26 000
Norway	2 083	2 231	----	----	----
Poland	58 700	54 729	59 533	68 358	58 442
Romania	21 356	19 447	15 128	17 489	18 744
Russia	23 000	16 000	13 000	14 000	14 000
Spain	23 732	19 925	21 422	28 000	51 187
Sweden	98 812	108 624	114 430	116 393	106 584
Turkey	11 736	13 113	14 603	14 225	17 270
United Kingdom	*1 800	*1 600	*1 600	1 000	*1 000
Yugoslavia, Federal Republic of	16 005	14 029	16 700	8 631	3 790
Algeria	600	840	730	760	510
Morocco	75 253	78 228	81 000	80 000	82 000
Namibia	20 300	18 300	13 500	9 886	12 115
South Africa	88 613	83 114	84 128	80 191	75 262
Tunisia	4 765	1 424	4 274	6 300	6 200
Canada	257 253	186 234	189 752	162 180	148 769
Honduras	4 669	5 930	4 329	5 226	4 805
Mexico	173 831	174 661	166 060	125 656	137 975
USA	435 945	458 536	493 094	520 165	468 400
Argentina	11 272	13 760	15 004	14 256	14 115
Bolivia	16 538	18 608	13 848	10 153	9 523
Brazil	7 894	8 729	7 567	10 281	8 832
Chile	1 374	1 264	337	608	785
Peru	248 929	262 466	257 713	271 782	270 576
China	643 400	711 900	580 500	548 900	569 600
India	35 000	32 900	37 700	37 700	36 000
Iran (a)	15 700	18 200	14 400	14 400	15 000
Japan	7 753	5 227	6 198	6 074	8 835
Kazakhstan	29 000	28 400	30 200	34 200	39 200
Korea, Dem. P.R. of	*40 000	*35 000	*30 000	*26 000	*22 000
Korea, Republic of	5 131	3 632	3 559	1 822	2 724
Myanmar	2 200	2 800	2 200	3 500	2 000
Tajikistan	*2 500	*2 000	*2 000	*2 000	*2 000
Thailand	19 500	5 000	6 100	9 500	9 900
Uzbekistan	*10 000	*1 800	*1 000	----	----
Australia	527 000	531 000	619 000	681 000	651 000
<b>World Total</b>	<b>3 100 000</b>	<b>3 100 000</b>	<b>3 000 000</b>	<b>3 000 000</b>	<b>3 000 000</b>

Note(s):-

(a) Years ended 20 March following that stated

## Production of Refined Lead

tonnes

Country	1996	1997	1998	1999	2000
Austria	22 188	21 941	23 248	23 773	*24 000
Belgium (a)	142 178	142 901	...	125 843	...
Bulgaria	74 700	72 600	77 084	81 600	84 100
Czech Republic	21 823	21 843	24 327	27 017	28 700
France	301 100	283 400	290 200	274 000	263 000
Germany	238 100	329 203	352 885	352 772	386 662
Greece	*5 000	*6 000	*6 000	*6 000	*6 000
Irish Republic	11 900	12 600	13 000	13 000	8 500
Italy	209 800	211 600	199 300	215 300	230 500
Macedonia	23 600	26 046	28 415	19 738	22 900
Netherlands	22 000	19 500	17 200	*18 000	21 000
Poland	65 983	64 732	64 333	63 985	55 900
Portugal	5 900	*6 000	*6 000	*6 000	*6 000
Romania	19 370	17 686	19 872	17 462	23 555
Russia	27 300	46 700	33 100	55 260	51 501
Slovenia	5 600	15 000	14 000	15 000	15 300
Spain	90 960	88 000	90 000	96 000	120 000
Sweden	84 494	89 350	91 631	83 927	82 375
Switzerland	7 550	8 870	8 572	9 173	10 085
Turkey	12 000	9 000	8 800	9 000	*9 000
Ukraine	21 000	11 000	7 340	9 902	15 034
United Kingdom	351 351	384 112	349 704	347 600	324 451
Yugoslavia, Federal Republic of	30 317	23 632	23 756	----	1 242
Algeria	6 200	7 100	6 300	6 200	*5 700
Kenya	*2 200	*1 000	*1 000	*1 000	*1 000
Morocco	65 200	64 202	61 953	65 209	66 812
Namibia	18 845	1 530	236	----	----
Nigeria	*5 000	*5 000	*5 000	*5 000	*5 000
South Africa	32 200	43 000	50 000	52 000	52 000
Zimbabwe	3 400	*2 000	*2 000	*2 000	*1 000
Canada	310 791	271 395	265 487	266 415	283 763
Mexico	216 400	255 200	250 200	199 000	232 900
Trinidad & Tobago	*2 000	*1 000	*1 000	*1 000	*1 000
USA (b)	1 372 000	1 417 100	1 390 600	1 447 000	1 457 000
Argentina	28 101	32 116	30 357	25 695	29 700
Brazil (c)	45 000	44 500	48 000	52 000	50 000
Colombia	*10 000	*10 000	*12 000	*11 000	*11 000
Peru	94 324	86 015	109 492	111 276	116 412
Venezuela	25 000	25 000	25 000	25 000	25 000
China	715 500	707 500	756 900	918 400	1 099 900
India	67 000	59 900	63 700	51 700	67 000
Indonesia	*30 000	*30 000	22 000	18 000	18 000
Iran	46 900	49 400	47 000	*47 000	*55 000
Israel	12 000	12 000	12 000	13 000	13 000
Japan	287 373	296 764	302 064	293 525	311 562
Kazakhstan	67 259	81 975	118 634	158 890	207 725
Korea, Dem. P.R. of	*40 000	*30 000	*25 000	*22 000	*19 000
Korea, Republic of	140 800	182 000	180 100	190 300	220 000
Malaysia	36 000	35 900	29 000	33 000	35 000
Myanmar (d)	1 986	1 585	1 855	1 717	775
Pakistan	*3 000	*3 000	*3 000	*3 000	*3 000
Philippines	25 000	25 000	22 000	24 000	25 000
Saudi Arabia	15 500	17 000	18 000	20 000	20 000
Taiwan	28 500	36 200	38 700	44 400	41 800
Thailand	17 711	19 080	22 125	26 766	27 193
United Arab Emirates	4 100	2 200	2 000	2 000	2 000
Australia	228 000	235 000	204 000	273 000	252 000
New Zealand	10 000	10 000	10 000	10 000	10 000
World Total	5 800 000	6 000 000	6 000 000	6 300 000	6 700 000

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	1996	1997	1998	1999	2000
Albania					
Scrap	(f) *100	(f) *500	(f) *500	(f) *400	96
Austria					
Unwrought	5 999	5 434	6 380	5 066	4 519
Belarus					
Unwrought	...	3 702	2 909	19	182
Scrap	*3 000	*4 500	5 268	4 623	3 865
Belgium-Luxembourg					
Ore	8 163	81 019	106 868	96 153	126 905
Unwrought	105 013	97 588	83 399	90 857	122 509
Scrap	10 472	7 127	5 100	6 984	8 979
Bulgaria					
Unwrought	60 324	66 700	(f) *55 400	(f) *62 100	(f) *62 900
Scrap (f)	*200	*300	*900	*1 600	...
Croatia					
Unwrought	380	1 200	1 341	1 027	115
Scrap	4 420	315	485	480	590
Cyprus					
Scrap	1 300	1 255	1 211	1 958	2 371
of which, re-exports	983	974	887	1 832	2 371
Czech Republic					
Unwrought	10 600	4 858	2 784	6 704	9 200
Scrap	100	1 585	3 039	3 313	4 152
Denmark					
Unwrought	1 203	658	645	13 859	2 186
Scrap	2 612	2 009	5 987	1 306	1 959
Estonia					
Scrap	(f) *5 200	618	282	1 059	278
Finland					
Unwrought	499	2 707	425	495	----
Scrap	11 485	5 735	1 160	12 366	12 653
France					
Unwrought	105 735	87 499	89 483	77 916	76 757
Scrap	12 392	6 357	3 024	5 101	20 275
Germany					
Ore	----	----	5 170	16 443	27 765
Unwrought	53 785	72 818	88 922	83 669	117 138
Scrap	13 598	13 866	14 910	15 561	13 112
Greece					
Unwrought	4 761	2 924	2 594	5 885	3 671
Hungary					
Scrap	18 742	2 215	2 509	2 315	1 718
Irish Republic					
Ores & concentrates	73 440	50 561	36 158	33 400	48 056
Scrap	1 404	123	61	971	113
Italy					
Ore	11 856	9 000	4 850	5 000	...
Unwrought	15 894	58 334	21 132	26 381	24 103
Scrap	2 268	191	1 423	4 589	5 595
Lithuania					
Scrap	2 400	2 676	417	650	779
Macedonia					
Ore	13 679	17 485	17 642	*18 000	...
Unwrought	17 861	18 478	20 837	*19 000	...
Netherlands					
Unwrought	11 021	10 770	1 966	2 919	3 532
Scrap	14 621	21 557	21 856	20 227	24 706
Norway					
Scrap	10 075	8 122	10 660	13 494	15 329
Poland					
Ores & concentrates	61 305	59 436	59 992	76 115	59 977
Unwrought	21 900	27 700	36 800	45 838	41 381
Scrap	222	333	391	489	1 501
Portugal					
Unwrought	2 936	1 279	5	202	60
Scrap	1 692	714	1 541	3 556	2 827

**Exports of Lead**

tonnes

Country	1996	1997	1998	1999	2000
Romania					
Unwrought	5 849	3 598	3 348	3 788	18 260
Scrap	...	...	1 456	5 224	6 083
Russia					
Ores & concentrates	23 613	32 598	21 754	21 006	19 321
Unwrought (f)	*41 800	*31 900	*27 700	*24 600	*55 900
Scrap	27 032	16 355	14 796	4 410	3 076
Slovakia					
Unwrought (f)	*600	*3 500	*3 600	*2 000	...
Scrap (f)	*2 200	*1 100	*500	...	...
Slovenia					
Unwrought	6 706	9 200	6 095	7 014	6 392
Spain					
Ore	41 501	24 727	41 230	34 760	113 715
Unwrought	5 055	767	2 073	6 217	5 842
Scrap	1 734	823	1 465	1 073	2 706
Sweden					
Ore	79 738	75 552	114 854	124 500	127 922
Unwrought	51 892	51 227	57 865	57 377	67 565
Scrap	420	151	680	221	73
Switzerland					
Unwrought	5 344	6 100	3 155	2 849	5 730
Scrap	9 400	7 002	6 607	6 032	4 883
Turkey					
Ore (e)	7 220	9 856	10 135	12 836	20 915
Ukraine					
Unwrought (f)	*10 400	*5 400	*6 600	*5 300	*8 300
Scrap (f)	...	*1 400	*3 500	*900	*1 000
United Kingdom					
Unwrought	65 697	85 007	104 327	82 887	80 554
Unwrought alloys	36 958	31 909	33 096	31 460	35 723
Scrap	10 068	10 618	6 178	11 577	7 472
Yugoslavia, Federal Republic of					
Concentrates	...	5 318	4 510	3 585	-----
Unwrought	25 600	18 646	5 335	2 220	5 102
Algeria					
Unwrought	1 539	1 682	1 595	971	1 010
Scrap	1 362	3 023	1 798	690	...
Morocco					
Ore	45 720	47 500	48 195	47 803	...
Unwrought	54 057	50 758	59 017	53 588	...
Scrap	...	3 015	4 205	2 412	...
Namibia					
Concentrates (b)	----	11 407	11 999	5 360	12 775
Unwrought	24 416	1 354	283	----	----
South Africa					
Concentrates (b)	86 642	85 836	77 029	65 832	74 159
Unwrought	(f) *600	2 355	2 701	1 721	787
Tunisia					
Ore	8 674	5 917	3 684	7 885	...
Scrap	2 954	1 023	2 121	546	...
Canada					
Ores & concentrates (b) (g)	179 433	111 703	52 249	58 831	72 546
Unwrought	214 356	208 319	206 103	220 965	226 232
Scrap	9 692	12 973	7 632	6 465	4 047
Honduras					
Ores & concentrates (b)	4 669	5 930	4 329	5 226	...
Mexico					
Ores & concentrates	16 430	10 836	12 238	39 699	62 058
Unwrought	82 384	102 678	71 834	30 182	29 836
Scrap	3 560	2 290	1 292	1 790	2 461

**Exports of Lead**

tonnes

Country	1996	1997	1998	1999	2000
USA					
Ores & concentrates (b)	129 789	82 190	87 938	93 504	116 678
of which, re-exports	69 780	39 721	15 516	-----	-----
Unwrought	82 265	70 429	70 417	84 599	49 893
Unwrought alloys	5 647	5 635	6 642	6 054	6 116
Scrap	85 376	89 417	101 667	115 030	72 469
Argentina					
Ores & concentrates	13 420	15 413	18 976	13 406	10 269
Bolivia					
Ore	29 417	35 812	34 937	24 925	27 253
Brazil					
Ores & concentrates	13 696	10 604	11 228	9 723	20 677
Peru					
Ores & concentrates	210 149	218 882	200 695	225 555	301 825
Unwrought	84 138	91 286	96 721	98 675	...
China					
Ore	14 572	25 681	34 371	22 906	2 766
Unwrought	260 515	184 569	250 940	468 368	467 810
Scrap	152	61	1 751	1 060	37
Dubai					
Scrap	...	6 201	2 871	...	...
Hong Kong					
Unwrought	7 799	10 848	13 039	12 506	14 008
of which, re-exports	7 415	10 626	12 860	12 403	13 954
Scrap	285	93	429	1 195	1 368
India					
Unwrought (a)	3 312	2 034	411	171	...
Indonesia					
Unwrought	15 134	8 172	15 358	5 929	8 989
Scrap	49	109	3 791	139	198
Iran					
Ore (c)	...	10 850	9 644	9 810	...
Israel					
Unwrought (f)	*500	*1 900	*3 600	*5 400	*6 900
Scrap (f)	*1 300	*800	*700	*1 500	*800
Japan					
Unwrought	7 279	5 980	6 416	6 858	6 478
Scrap	9 562	15 614	8 575	9 368	5 166
Jordan					
Scrap	682	1 670	937	1 527	2 359
Kazakhstan					
Unwrought	60 979	77 823	85 170	109 968	155 452
Scrap	1 650	852	167	120	...
Korea, Dem. P.R. of					
Unwrought (f)	*9 000	*8 100	*2 600	*3 400	*2 800
Korea, Republic of					
Unwrought	10 018	25 563	45 217	30 949	36 063
Malaysia					
Unwrought	3 000	1 500	18 000	35 900	...
Scrap	1 300	2 700	800	700	...
Oman					
Unwrought	3 800	3 894	...	...	...
Saudi Arabia					
Unwrought	12 400	*15 000	10 008	7 631	5 895
Scrap	1 889	4 085	1 211	4 681	2 684
Singapore					
Unwrought	13 913	23 610	30 946	18 022	68 254
of which, re-exports	13 794	23 610	30 469	17 916	68 156
Scrap	3 787	2 234	4 161	2 475	2 488
of which, re-exports	151	2 234	891	129	201
Taiwan					
Unwrought	15 513	12 615	11 496	17 976	24 626
Thailand					
Ore	10 000	14 500	18 502	19 500	6 300
Unwrought	39	811	4 313	15	169
Scrap	47	276	519	775	788

**Exports of Lead**

tonnes

Country	1996	1997	1998	1999	2000
<b>Australia</b>					
Ores & concentrates	165 029	194 456	350 755	408 968	430 000
Unwrought , base bullion (d)	168 225	171 511	134 897	150 809	109 000
Unwrought, refined	186 089	199 864	170 416	244 972	218 000
Scrap	13 015	4 472	2 438	4 872	4 600
<b>New Zealand</b>					
Unwrought	9 880	8 992	11 745	9 025	6 274
Scrap	280	56	169	48	...

## Note(s):-

- (1) In this table the term 'unwrought' lead corresponds to item 7801 of the Harmonised System and comprises base bullion, pigs, unwrought bars, etc.
- (2) The term 'unwrought' as used here includes alloys unless these are separately specified

- (a) Years ended 31 March following that stated
- (b) Pb content
- (c) Years ended 20 March following that stated
- (d) Includes a substantial precious metal content, mainly silver
- (e) Complex lead-zinc ore
- (f) BGS estimates, based on known imports into certain countries
- (g) Including Pb content of zinc concentrates

**Imports of Lead**

tonnes

Country	1996	1997	1998	1999	2000
Austria					
Unwrought	40 425	44 295	50 910	36 534	40 438
Scrap	6 395	4 469	2 314	2 351	2 538
Belarus					
Unwrought	(a) 3 857	(a) 4 146	3 659	484	633
Scrap	*200	*500	931	607	13
Belgium-Luxembourg					
Ore	100 450	62 349	95 581	96 710	117 528
Unwrought	29 696	44 941	52 659	62 275	28 653
Scrap	30 612	20 882	19 611	28 612	32 043
Bulgaria					
Ore	56 404	60 739	*68 000	*84 000	...
Croatia					
Unwrought	3 391	4 054	2 949	827	2 365
Cyprus					
Unwrought	2 463	3 002	2 888	2 105	1 927
Czech Republic					
Unwrought	14 100	18 821	28 816	34 306	52 886
Denmark					
Unwrought	6 142	5 233	3 876	2 531	3 364
Scrap	1 148	2 620	1 611	1 895	2 032
Finland					
Unwrought	1 356	2 051	1 830	2 133	3 425
Scrap	790	821	542	81	181
France					
Ore	205 016	205 411	201 999	192 078	222 259
Unwrought	57 104	52 085	50 393	74 128	87 602
Scrap	35 139	37 609	43 194	51 764	48 198
Germany					
Ore	48 673	60 804	135 270	191 178	209 758
Unwrought	126 582	119 047	122 657	113 501	134 230
Scrap	8 707	14 500	13 735	16 738	18 724
Greece					
Unwrought	5 426	6 214	2 982	5 420	3 764
Scrap	1 931	8 100	10 861	4 897	1 350
Hungary					
Unwrought	13 799	13 876	12 387	9 867	11 577
Irish Republic					
Unwrought	25 502	21 325	27 329	20 761	21 083
Scrap	9 977	6 684	5 066	7 889	5 974
Italy					
Ore	104 483	92 300	97 969	182 670	158 478
Unwrought	104 126	105 457	82 108	98 155	88 093
Scrap	8 449	7 369	2 843	2 157	1 965
Macedonia					
Unwrought	329	3 363	1 024	*1 000	...
Netherlands					
Unwrought	48 243	49 767	31 942	19 212	12 184
Scrap	10 095	10 302	9 787	10 821	11 164
Norway					
Unwrought	4 304	3 146	2 322	2 483	4 111
Poland					
Unwrought	5 900	10 400	8 900	14 788	33 525
Portugal					
Unwrought	18 596	22 934	28 072	19 615	18 053
Romania					
Ores & concentrates	3 001	5 182	7 449	12 966	32 615
Unwrought	200	293	2 355	6 537	4 377
Russia					
Ore	17 490	...	(f) *28 000	(f) *45 000	...
Unwrought	45 071	30 054	19 536	27 242	52 668
Scrap	1 358	820	247	20	...
Slovakia					
Unwrought	1 500	1 000	1 053	957	885
Slovenia					
Unwrought	8 300	9 200	10 233	9 025	10 923
Scrap	2 700	-----	49	101	91

**Imports of Lead**

tonnes

Country	1996	1997	1998	1999	2000
Spain					
Unwrought	63 436	81 060	95 983	101 293	106 245
Scrap	3 532	9 635	12 394	13 972	8 903
Sweden					
Unwrought	9 368	2 433	5 902	5 208	6 940
Scrap	11 153	4 717	1 857	3 055	2 152
Switzerland					
Unwrought	5 726	6 966	4 468	6 237	6 976
Turkey					
Unwrought	39 058	41 324	50 713	40 283	56 168
United Kingdom					
Ores & concentrates (b)	44 654	40 569	34 276	34 080	...
Unwrought, base bullion (h)	152 499	189 508	169 839	174 757	140 344
Unwrought, other	33 802	22 777	30 015	39 284	103 926
Scrap	8 882	5 120	5 537	7 704	10 854
Algeria					
Unwrought	7 235	4 290	7 280	6 273	...
Egypt					
Unwrought	8 318	16 548	13 079	8 960	...
Scrap	243	14 380	5 256	...	...
Kenya					
Unwrought	900	600	786	1 022	587
Morocco					
Ore	29 476	14 403	20 585	26 681	...
Namibia					
Concentrates (b)	7 662	----	5	----	----
South Africa					
Unwrought	10 397	20 581	16 914	11 774	13 386
Scrap	1 901	4 688	7 126	3 253	495
Tunisia					
Unwrought	5 094	4 767	5 650	4 642	...
Canada					
Ores & concentrates (b) (g)	89 498	53 194	36 855	58 980	52 041
Unwrought	28 151	36 424	34 140	13 575	17 534
Scrap	76 992	85 293	93 476	110 918	65 669
Cuba					
Unwrought	*2 000	*2 000	*2 000	*2 000	...
El Salvador					
Scrap	2 466	2 604	3 231	2 697	1 046
Mexico					
Ores & concentrates	29 164	16 478	26 615	28 304	40 726
Unwrought	11 348	15 788	14 372	58 176	43 081
USA					
Ores & concentrates (b)	369 179	130 667	90 018	40 896	66 392
Unwrought	238 389	237 107	234 350	276 398	316 324
Unwrought alloys	30 217	29 305	34 339	36 972	33 964
Scrap	17 543	16 453	12 184	16 171	17 547
Argentina					
Unwrought	2 825	7 649	8 755	4 306	3 212
Brazil					
Unwrought	33 346	60 633	59 956	56 013	70 723
Scrap	5 034	*5 000	*5 000	*4 000	...
Chile					
Unwrought	6 119	8 666	3 995	3 719	6 439
Colombia					
Unwrought	2 993	6 938	9 800	7 644	8 522
Venezuela					
Unwrought	5 935	6 354	5 892	5 201	6 255
Scrap	2 031	1 860	1 338	517	347
China					
Ores & concentrates	69 958	118 330	236 034	169 669	311 395
Unwrought	7 038	6 985	15 413	15 774	16 261
Scrap	820	204	7	----	5

**Imports of Lead**

tonnes

Country	1996	1997	1998	1999	2000
Dubai					
Unwrought	2 150	2 248	4 042	...	...
Scrap	2 837	1 354	351	...	...
Hong Kong					
Unwrought	8 459	8 287	20 502	13 790	13 150
Scrap	727	77	13	46	49
India					
Ore (c)	52 428	40 287	10 678	12 270	...
Unwrought (c)	33 542	47 790	65 147	64 186	...
Scrap (c)	9 654	16 346	16 373	13 657	...
Indonesia					
Unwrought	74 029	91 453	32 819	27 575	46 939
Scrap	2 507	968	0	0	65
Iran					
Unwrought (d)	...	8 578	9 892	780	...
Scrap	...	100	1 024	263	...
Israel					
Unwrought	(f) *1 600	(f) *1 600	1 383	(f) *600	3 040
Japan					
Ore	151 797	154 470	183 272	167 880	185 484
Unwrought	51 819	53 446	35 693	21 087	31 385
Jordan					
Unwrought	...	1 518	2 496	2 447	1 899
Kazakhstan					
Ore	6 053	31 976	57 382	98 989	117 933
Scrap	*7 000	*8 000	9 337	8 581	...
Korea, Republic of					
Ores & concentrates	96 026	104 468	164 829	178 010	251 644
Unwrought	177 300	170 356	118 535	116 563	122 517
Scrap	4 779	4 168	972	6 359	1 187
Malaysia					
Unwrought	91 100	60 600	61 800	101 000	...
Oman					
Unwrought	335	3 430	4 916	4 608	4 580
Pakistan					
Unwrought (e)	6 985	5 747	6 594	237	7 176
Philippines					
Unwrought	10 800	8 166	5 872	19 479	...
Saudi Arabia					
Unwrought	260	1 000	1 390	3 791	3 355
Singapore					
Unwrought	44 063	27 291	35 457	101 716	84 681
Scrap	3 041	2 047	2 281	2 236	2 504
Taiwan					
Unwrought	109 569	114 177	111 118	138 247	139 360
Thailand					
Unwrought	61 976	38 510	23 762	166 180	69 106
Scrap	628	97	7	49	372
Australia					
Ores & concentrates	49 573	50 014	*50 000	*43 000	...
Unwrought	7 462	6 771	11 251	10 417	14 839
New Zealand					
Unwrought	1 511	1 749	...	1 757	737
Scrap	11 618	9 035	7 108	4 164	925

## Note(s) :-

- (1) In this table the term 'unwrought' lead corresponds to item 7801 of the Harmonised System and comprises base bullion, pigs, unwrought bars, etc.
- (2) The term 'unwrought' as used here includes alloys unless these are separately specified

- (a) Imports from CIS only
- (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) Includes a substantial precious metal content, mainly silver

**Production of Lithium Minerals**

tonnes

Country	1996	1997	1998	1999	2000
Portugal					
Lepidolite	7 626	6 838	13 306	14 862	9 352
Namibia	1 971	632	247	----	----
Zimbabwe	30 929	49 833	28 055	36 671	37 914
Canada	*22 000	*22 500	*22 500	*22 500	*22 500
USA (a) (b)	*4 000	*4 000	...	...	...
Argentina (c) (e)	----	1 876	8 583	4 387	5 276
Brazil					
Amblygonite	41	24	----	----	----
Petalite	30	386	260	442	1 077
Spodumene	6 500	6 499	9 035	10 629	9 796
Chile (c)	14 180	24 246	28 377	30 231	35 869
China	40 640	66 909	43 122	46 198	...
Australia					
Spodumene (d)	92 462	114 934	62 948	75 824	64 983
World Total (Li content)	*9 800	*13 200	*11 800	*10 800	*11 900

Note(s):-

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

- (a) Li content
- (b) Mostly spodumene
- (c) Carbonate
- (d) Years ended 30 June of that stated
- (e) Chloride

**Exports of Lithium**

tonnes

Country	1996	1997	1998	1999	2000
Belgium-Luxembourg					
Oxides	8	161	273	406	406
Carbonate	12	2 563	2 804	3 951	3 549
France					
Oxides	108	93	131	88	90
Carbonate	1 772	2 163	2 528	2 563	2 819
Germany					
Oxides	802	819	644	650	740
Carbonate	2 978	1 439	989	1 403	1 690
Italy					
Carbonate	...	41	88	51	124
Netherlands					
Oxides	...	493	299	220	380
Carbonate	...	634	156	281	142
Russia					
Oxides	710	914	868	627	1 033
Carbonate	76	17	2	12	...
Spain					
Carbonate	...	231	14	301	6 754
Switzerland					
Oxides	...	33	117	63	9
United Kingdom					
Oxides	171	103	134	85	122
Carbonate	638	342	397	308	288
Namibia					
Lithium minerals	323	381	----	----	----
Zimbabwe					
Lithium minerals	30 315	11 223	8 872	16 480	...
USA					
Oxides	4 432	5 739	4 365	5 027	5 045
Carbonate	7 883	5 119	3 295	2 789	2 847
Argentina					
Carbonate	...	515	5 082	1 280	1 259
Chile					
Carbonate	13 694	21 597	24 699	32 011	34 912
China					
Oxides	1 131	992	1 913	2 195	2 302
Carbonate	3 102	937	932	602	861
Australia					
Lithium minerals	46 770	...	...	...	...
New Zealand					
Carbonate	...	45	75	95	404

**Imports of Lithium**

tonnes

Country	1996	1997	1998	1999	2000
Austria					
Carbonate	46	61	280	106	118
Belgium-Luxembourg					
Oxides	154	325	603	643	793
Carbonate	860	2 241	3 500	4 020	5 542
France					
Oxides	512	346	429	482	432
Carbonate	1 050	1 026	1 203	1 293	1 333
Germany					
Oxides	4 051	4 975	4 563	3 903	5 529
Carbonate	5 891	7 286	2 429	4 034	4 026
Italy					
Oxides	...	167	278	274	165
Carbonate	...	1 720	1 937	1 057	1 662
Netherlands					
Oxides	...	171	298	249	332
Carbonate	...	711	673	754	952
Poland					
Oxides	99	130	97	111	87
Carbonate	27	46	27	31	44
Russia					
Oxides	...	140	55	517	856
Carbonate	...	297	1 647	1 793	1 787
Slovenia					
Oxides	...	...	80	100	82
Spain					
Oxides	...	188	238	257	243
Carbonate	...	546	421	633	469
Sweden					
Oxides	...	54	156	160	126
Carbonate	...	280	103	208	126
Turkey					
Oxides	...	...	...	83	113
Carbonate	...	...	...	109	107
United Kingdom					
Oxides	763	602	589	389	392
Carbonate	1 963	2 070	1 925	818	763
South Africa					
Oxides	6 094	228	152	199	168
Carbonate	...	127	146	133	51
Canada					
Carbonate	1 419	1 109	1 151	1 086	1 046
USA					
Carbonate	4 587	5 090	14 005	13 927	14 629
Venezuela					
Carbonate	...	413	...	680	600
China					
Oxides	86	----	300	182	15
Carbonate	68	1 397	2 956	3 543	4 479
Hong Kong					
Oxides	...	123	302	40	6
India					
Oxides (a)	672	1 230	784	1 070	...
Carbonate (a)	192	262	152	237	...
Indonesia					
Oxides	82	90	63	152	85
Carbonate	130	...	42	76	278
Iran					
Oxides	...	...	36	81	...
Japan					
Oxides	1 538	1 360	1 343	1 572	1 558
Carbonate	5 584	5 927	4 768	6 655	7 194

**Imports of Lithium**

tonnes

Country	1996	1997	1998	1999	2000
Korea, Republic of					
Oxides	376	288	249	...	313
Carbonate	1 232	1 031	713	983	1 037
Taiwan					
Oxides	...	...	183	280	39
Carbonate	129	127	437	115	180
Thailand					
Oxides	167	165	50	120	172
Australia					
Oxides	213	245	230	271	218
Carbonate	104	164	162	127	8
New Zealand					
Oxides	55	352	48	206	787

Note(s) :-

(a) Years ended 31 March following that stated

**Production of Magnesite**

tonnes

Country	1996	1997	1998	1999	2000
Austria	710 620	790 297	722 876	748 635	725 832
Greece	682 346	623 030	698 049	495 144	*500 000
Netherlands (f)	185 000	198 000	216 000	220 000	233 000
Poland	20 800	29 600	33 700	38 800	39 000
Russia	3 181 000	2 700 000	2 200 000	2 400 000	2 500 000
Slovakia	824 800	863 600	877 842	826 902	1 000 211
Spain	483 726	409 835	482 295	435 000	380 000
Turkey	2 341 922	2 063 975	2 703 720	1 724 744	2 672 089
Yugoslavia, Federal Republic of	88 696	98 384	80 923	30 642	40 925
Egypt (d)	12 627	7 536	2 806	...	...
South Africa	71 358	76 699	74 375	74 000	*75 000
Zimbabwe	10 659	13 050	4 321	5 356	4 029
Canada (b)	*165 000	*165 000	*165 000	*165 000	*165 000
Brazil (c)	326 538	294 629	342 485	282 145	279 876
Colombia	12 634	*10 500	*10 500	*10 500	*10 500
China	*8 000 000	*8 000 000	*8 500 000	*8 500 000	*9 000 000
India (e)	377 510	373 520	349 852	325 764	317 255
Iran (a)	110 554	115 758	121 529	141 081	*140 000
Korea, Dem. P.R. of	*1 600 000	*1 600 000	*800 000	*800 000	*650 000
Pakistan (d)	13 876	4 057	3 157	2 125	4 513
Philippines	*700	*700	*700	*700	*700
Australia	237 707	245 192	360 113	280 363	349 538
<b>World Total</b>	<b>19 500 000</b>	<b>18 700 000</b>	<b>18 800 000</b>	<b>17 500 000</b>	<b>19 100 000</b>

## 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 Magnesia**

tonnes

Country	1996	1997	1998	1999	2000
Austria					
Magnesite	100	89	80	880	...
Magnesia	94 754	132 283	95 145	18 437	...
Belgium-Luxembourg					
Magnesite	486	212	384	364	883
Magnesia	44 485	64 508	82 040	51 821	47 634
Czech Republic (a)	*4 000	*2 400	*3 800	*300	*4 400
Denmark	447	1 058	1 427	976	363
France					
Magnesia	22 316	20 926	16 809	12 889	11 743
Germany					
Magnesite	3 391	1 211	602	119	217
Magnesia	69 347	70 206	71 504	41 274	56 707
Greece					
Magnesite	21 023	13 728	16 205	19 027	19 205
Magnesia	158 423	168 398	149 459	138 019	135 809
Irish Republic	584	3 696	554	707	1 177
Italy					
Magnesite	4 836	12 653	7 393	4 505	3 016
Magnesia	71 531	37 841	54 927	38 418	68 596
Netherlands					
Magnesite	10 980	10 413	476	636	562
Magnesia	80 215	319 723	95 637	113 402	69 044
Norway	3 504	*3 500	*3 500	----	6 361
Russia	267 275	299 395	204 662	161 814	200 888
Slovakia	249 100	236 700	310 400	375 100	385 032
Spain					
Magnesite	1 385	1 400	397	24 080	23 270
Magnesia	132 013	136 560	139 567	153 600	151 712
Turkey					
Magnesite	37 206	27 115	39 135	36 089	28 266
Magnesia	124 944	165 794	173 115	188 931	207 486
United Kingdom					
Magnesite	340	175	234	53	89
Magnesia	64 564	58 774	46 754	37 010	44 404
Yugoslavia, Federal Republic of					
Magnesia	9 600	6 428	4 338	259	9 558
Zimbabwe	6 389	501	2 189	3 001	...
Canada					
Magnesia	54 250	54 167	57 102	61 944	68 187
Mexico					
Magnesia	39 422	47 607	30 872	35 901	36 005
USA					
Magnesite	33 192	51 797	54 398	29 589	31 127
Magnesia	111 038	102 628	94 948	92 868	100 013
Brazil					
Magnesia	94 181	92 403	88 092	67 173	79 930
China					
Magnesite	206 576	166 536	108 535	33 131	43 807
Magnesia	1 724 195	2 122 125	1 945 208	2 068 708	1 993 826
Hong Kong (c)	13 076	8 495	9 284	31 088	24 273
India					
Magnesite (b)	830	80	319	761	...
Magnesia (b)	1 397	535	1 350	3 100	...
Indonesia					
Magnesite	567	...	...	...	1 650
Magnesia	34 138	...	...	2 200	1 255
Israel					
Magnesia	*9 000	*7 000	*11 000	*7 500	...
Japan					
Magnesite	393	418	285	174	83
Magnesia	59 725	55 350	37 054	38 354	40 946
Korea, Dem. P.R. of (a)	*94 500	*86 100	*31 500	*67 500	*121 700

**Exports of Magnesite and Magnesia**

tonnes

Country	1996	1997	1998	1999	2000
Korea, Republic of					
Magnesia	50	-----	2 607	5 190	5 809
Singapore	655	987	1 259	197	211
Taiwan					
Magnesia	2 600	2 553	327	2 171	10 441
Australia					
Magnesite	155	604	811	163	166
Magnesia	73 540	89 737	139 568	123 655	186 165

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 Magnesia**

tonnes

Country	1996	1997	1998	1999	2000
Austria					
Magnesite	132 700	176 566	136 780	108 884	135 281
Magnesia	29 900	49 691	53 684	32 182	30 013
Belarus	*1 100	*2 100	2 846	4 007	9 837
Belgium-Luxembourg					
Magnesite	1 178	1 274	1 585	1 738	8 732
Magnesia	82 493	68 013	82 172	61 148	67 637
Bulgaria	11 313	8 753	*9 000	*9 000	...
Croatia	688	677	836	405	666
Czech Republic					
Magnesite	2 300	972	885	1 810	1 522
Magnesia	40 200	41 237	40 207	36 544	34 156
Denmark					
Magnesite	1 074	1 143	1 077	639	2 841
Magnesia	4 809	7 045	5 178	3 509	4 803
Finland					
Magnesia	12 653	8 032	12 834	12 536	14 770
France					
Magnesite	4 080	7 544	9 615	21 054	23 738
Magnesia	192 423	186 512	199 802	145 692	164 453
Germany					
Magnesite	26 105	10 547	8 371	15 190	17 337
Magnesia	523 866	496 025	471 106	385 102	493 512
Greece					
Magnesite	11 032	1 508	9 851	8 275	5 505
Magnesia	1 420	381	541	814	1 358
Hungary	20 200	12 849	12 163	9 787	11 963
Irish Republic					
Magnesite	337	232	252	3 531	296
Magnesia	47 152	42 419	45 694	44 757	56 551
Italy					
Magnesite	27 136	21 130	31 542	30 695	29 864
Magnesia	103 752	121 772	111 329	98 192	106 661
Latvia					
Lithuania					
Magnesite	1 300	1 393	1 182	2 167	444
Netherlands					
Magnesite	5 136	1 823	2 890	13 228	5 562
Magnesia	129 955	67 510	210 890	235 603	286 232
Norway					
Magnesite	243	187	5 302	5 469	6 594
Magnesia	4 833	5 833	386	222	368
Poland	95 100	110 100	98 400	79 277	95 007
Portugal					
Magnesite	1 590	2 530	1 762	1 869	2 892
Magnesia	2 850	2 699	2 597	3 203	2 288
Romania	37 842	28 322	27 905	21 960	23 280
Russia	20 422	76 993	32 524	42 092	90 238
Slovakia	20 500	24 300	18 600	21 518	34 249
Slovenia	4 200	5 900	7 117	7 993	7 584
Spain					
Magnesite	3 098	7 683	5 548	4 421	6 924
Magnesia	82 845	89 628	103 699	95 497	104 268
Sweden					
Magnesite	145	52	52	169	175
Magnesia	32 622	24 478	37 095	39 854	34 884
Switzerland					
Magnesite	619	289	1 114	306	547
Magnesia	3 606	4 001	3 867	3 538	4 278
Turkey					
Magnesia	15 654	19 627	15 164	18 288	30 964
Ukraine	343 745	509 873	357 850	484 823	...
United Kingdom					
Magnesite	17 600	11 190	12 176	38 325	24 465
Magnesia	155 458	153 388	147 167	122 870	104 793
Yugoslavia, Federal Republic of					
Magnesite	6 500	5 468	5 617	1 054	3 030
Magnesia	5 300	2 400	...	122	6 528

**Imports of Magnesite and Magnesia**

tonnes

Country	1996	1997	1998	1999	2000
Egypt	27 774	16 706	11 748	10 937	...
South Africa					
Magnesite	6 737	1 917	3 965	3 441	2 687
Magnesia	85 974	70 144	69 005	54 229	55 844
Canada					
Magnesite	220 375	190 355	120 294	25 914	88 883
Magnesia	130 375	84 378	103 898	112 090	92 210
Mexico					
Magnesite	1 177	1 113	1 023	522	589
Magnesia	50 613	40 631	38 693	36 609	83 659
USA					
Magnesite	9 185	10 863	4 645	7 822	14 574
Magnesia	397 203	446 748	568 382	532 292	655 845
Argentina					
Magnesia	21 015	23 286	22 385	14 879	22 767
Brazil					
Magnesia	12 766	9 874	7 844	...	...
Chile					
Magnesia	15 235	13 201	18 688	...	...
Colombia					
Magnesia	7 032	10 024	11 960	8 616	12 438
Peru					
Magnesia	4 181	2 148	5 067	2 274	...
Venezuela					
Magnesite	18 525	20 537	13 487	8 888	17 184
Magnesia	26 717	44 289	16 600	12 640	7 875
China					
Hong Kong					
India					
Magnesite (a)	2 070	2 284	5 074	9 755	...
Magnesia (a)	64 883	54 906	37 026	47 453	...
Indonesia					
Magnesite	567	313	217	3 049	3 328
Magnesia	34 138	30 012	27 163	28 200	36 890
Iran					
Israel					
Japan					
Magnesite	6 129	2 738	1 828	1 607	2 244
Magnesia	506 740	577 942	499 443	486 827	632 117
Kazakhstan					
Korea, Republic of					
Magnesite	466	5 088	1 240	1 237	923
Magnesia	182 780	186 167	175 726	177 116	203 145
Malaysia					
Magnesite	7 400	14 200	4 500	15 200	...
Magnesia	3 400	2 000	8 200	26 400	...
Philippines					
Magnesite	6 033	4 936	1 971	133	...
Magnesia	8 583	12 119	2 653	1 535	...
Singapore					
Taiwan					
Magnesite	6 584	703	2 209	273	470
Magnesia	146 904	194 721	195 145	211 222	235 169
Thailand					
Magnesite	24 156	26 923	16 544	24 144	25 965
Magnesia	5 175	4 993	4 976	4 043	5 749
Australia					
Magnesite	1 151	776	2 428	2 391	293
Magnesia	8 503	8 755	4 469	3 990	4 807
New Zealand					
Magnesite	522	2 465	3 209	3 160	7 687
Magnesia	32 677	26 544	20 016	29 197	21 884

Note(s) :-

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

(a) Years ended 31 March following that stated

**Production of Manganese Ore**

tonnes

Country	1996	1997	1998	1999	2000
Austria (a)	35 255	33 909	33 869	33 018	35 060
Bosnia & Herzegovina	*2 000	*2 000	*2 000	*2 000	*2 000
Bulgaria	44 270	47 430	55 600	----	----
Georgia (f)	101 900	14 200	16 000	47 900	...
Greece	2 572	2 542	1 898	345	*350
Hungary	47 000	49 000	34 000	41 000	41 000
Italy	6 523	2 128	974	...	...
Romania	*150 000	*100 000	*100 000	*60 000	...
Turkey	37 500	31 160	53 283	29 000	23 300
Ukraine (f)	3 070 000	3 039 500	2 217 000	1 984 800	2 740 600
Gabon	1 983 000	1 904 000	2 092 000	1 908 000	1 743 000
Ghana	447 900	333 400	384 406	638 937	895 669
Morocco	29 466	30 806	28 332	29 150	25 830
Namibia	92 647	39 671	----	----	----
South Africa					
Metallurgical	3 240 069	3 087 775	3 012 827	3 092 784	3 613 154
Chemical	(e) ...	32 886	31 294	29 210	22 273
Mexico	485 243	533 783	510 062	458 946	418 300
Brazil (b)	2 735 746	2 042 435	2 107 219	1 699 618	*2 200 000
Chile	62 887	63 673	48 931	40 505	41 716
China	7 663 300	5 975 600	5 283 000	3 186 000	*4 000 000
India (c) (g)	1 870 783	1 641 963	1 537 693	1 585 726	1 556 430
Iran (d)	82 694	86 523	101 390	104 096	*80 000
Kazakhstan	472 900	402 400	634 100	944 000	1 135 900
Malaysia	13 000	----	----	----	...
Thailand	3 095	499	52	721	225
Australia	2 109 000	2 136 000	1 501 000	1 900 000	1 614 000
World Total	24 800 000	21 600 000	19 800 000	17 800 000	20 300 000

## 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	1996	1997	1998	1999	2000
Austria					
Metal	752	311	58	2 517	21 614
Belgium-Luxembourg					
Ore	20 196	20 899	16 648	18 734	21 966
Metal	2 217	2 489	2 247	1 347	1 652
Bulgaria					
Ore	39 508	29 034	*30 000	*30 000	...
Czech Republic					
Metal	...	...	20	157	26
Estonia					
Metal	...	...	41	437	820
France					
Ore (a)	160 742	107 499	116 556	198 347	303 274
Metal	777	811	610	120	431
Georgia					
Metal	...	...	(e) *200	(e) *200	1 440
Germany					
Metal	6 798	8 859	8 243	6 654	11 747
Italy					
Metal	506	166	103	623	84
Netherlands					
Ore	19 065	14 660	14 075	12 125	13 617
Metal	5 543	3 560	5 160	5 806	6 503
Norway					
Metal	116	68	35	...	0
Russia					
Metal (e)	*1 600	*1 700	*5 400	*2 200	*5 300
Spain					
Ore	2 854	1 459	1 414	1 844	3 588
Metal	1 563	2 347	2 334	2 924	5 331
Sweden					
Ore	...	...	...	12 575	12 524
Metal	...	145	115	105	116
Turkey					
Metal	----	5	25	107	3
Ukraine					
Ore	201 621	232 767	286 622	172 377	...
Metal	(e) *5 800	(e) *4 900	(e) *26 200	34 950	(e) *45 300
United Kingdom					
Metal	*2 400	*3 400	4 742	*3 800	*3 900
Gabon					
Ore	1 977 000	1 789 900	2 063 800	1 883 800	...
Ghana					
Ore	266 440	...	387 179	479 437	...
Morocco					
Ore	28 770	31 063	23 485	22 512	...
Namibia					
Ore	92 647	34 400	----	----	----
South Africa					
Ore	1 648 053	1 772 801	1 679 975	1 568 560	1 845 247
Metal	(e) *23 300	36 234	35 362	29 960	13 386
Canada					
Metal	274	260	484	223	438
Mexico					
Ore	57 629	89 307	48 713	31 325	20 468
USA					
Ore	32 324	84 294	8 406	4 240	20 108
Metal	5 843	8 005	5 837	3 575	2 369
Brazil					
Ore	987 877	981 810	1 089 946	506 640	1 026 253
China					
Ore	4 191	579	1 616	7 206	5 196
Metal	49 934	63 471	73 214	80 626	97 200

**Exports of Manganese**

tonnes

Country	1996	1997	1998	1999	2000
Hong Kong					
Metal (c)	279	121	38	130	0
India					
Ore (b) (d)	309 846	259 194	166 963	75 685	...
Indonesia					
Ore (a)	13 043	8 500	10 000	1	0
Japan					
Metal	532	485	391	35	44
Kazakhstan					
Ore	*250 000	*300 000	421 832	547 877	...
Metal (e)	*300	*100	*900	*200	*100
Korea, Republic of					
Metal	22	...	...	36	710
Singapore					
Ore	6 422	17 218	19 825	19 319	17 253
of which, re-exports	4 972	3 952	3 781	4 988	4 726
Australia					
Ore	*1 740 000	*1 541 000	*1 066 000	*1 312 000	*1 408 000
Metal	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	1996	1997	1998	1999	2000
Austria					
Metal	1 706	1 882	2 143	8 287	14 288
Belgium-Luxembourg					
Ore	164 757	139 130	127 521	83 407	78 179
Metal	4 323	4 076	3 728	4 823	5 884
Bulgaria					
Ore	967	1 918	*2 000	*2 000	...
Croatia					
Metal	72	54	51	14	49
Czech Republic					
Ore	18 515	18 231	3 507	3 505	10 436
Metal	200	198	207	155	244
Denmark					
Ore	218	500	207	129	142
Metal	55	31	29	129	79
Estonia					
Metal	...	...	41	437	847
Finland					
Ore	9 424	24 339	22 184	18 681	25 093
Metal	98	140	1 375	774	4 896
France					
Ore (b)	1 111 060	998 570	1 204 454	950 913	1 618 372
Metal	5 897	6 352	8 251	6 396	10 132
Germany					
Ore (b)	12 717	26 234	23 108	21 711	8 644
Metal	18 666	18 324	42 939	27 449	47 498
Greece					
Ore	12 720	27 130	22 396	23 050	20 853
Metal	392	399	500	474	546
Hungary					
Metal	200	328	357	361	453
Irish Republic					
Ore (b)	39 259	47 339	37 408	39 799	54 840
Metal	25	16	64	55	59
Italy					
Ore (b)	201 200	166 266	283 914	135 299	253 215
Metal	3 445	2 665	2 791	2 708	3 466
Macedonia					
Ore	16 000	40 453	12 625	...	...
Netherlands					
Ore	25 792	18 057	24 485	19 833	11 984
Metal	9 232	6 128	8 270	8 156	14 471
Norway					
Ore	676 573	730 758	721 529	650 379	608 216
Metal	1 540	1 648	2 224	1 783	2 284
Poland					
Ore	200 200	155 600	109 600	9 950	38 975
Metal	408	319	310	337	345
Romania					
Ore	197 862	98 943	46 763	35 545	127 114
Metal	200	2 800	115	153	137
Russia					
Ore	270 777	177 539	479 117	738 422	621 078
Metal	310	64	1 320	2 832	4 345
Slovakia					
Ore	120 870	113 852	148 434	185 765	132 601
Slovenia					
Metal	500	100	137	112	70
Spain					
Ore	402 092	275 957	486 951	332 673	420 908
Metal	2 054	4 101	5 147	4 227	6 913
Sweden					
Ore	172	93	1 735	3 071	6 298
Metal	2 299	2 669	3 257	8 059	8 164
Switzerland					
Metal	633	627	483	480	553
Turkey					
Metal	175	106	78	50	85

**Imports of Manganese**

tonnes

Country	1996	1997	1998	1999	2000
United Kingdom					
Ore (b)	40 306	71 233	28 300	8 234	2 956
Metal	7 477	7 225	8 796	7 284	8 360
Cameroon					
Ore	1 900	*2 000	2 041	*2 000	...
Egypt					
Ore	12 617	953	674	483	...
South Africa					
Ore	5 180	14 797	4 023	5 017	19 416
Metal	500	200	83	322	23
Canada					
Ore (a)	6 736	3 974	24 967	59 301	26 302
Metal	4 853	5 087	5 580	5 853	3 765
Mexico					
Ore	62 773	109 022	78 176	75 431	103 300
USA					
Ore	461 525	356 903	345 645	471 706	434 349
Metal	11 750	15 062	16 026	15 335	16 706
Argentina					
Ore	63 615	74 093	64 419	20 345	20 396
Brazil					
Metal	2 658	3 353	2 247	2 161	3 075
Colombia					
Ore	12 492	13 134	18 036	1 816	22 027
Venezuela					
Ore	109 000	104 011	99 800	47 785	102 362
China					
Ore	1 585 287	1 316 784	1 179 052	1 056 874	1 202 466
Metal	278	532	122	79	75
Dubai					
Metal	23	88	29	...	...
Hong Kong					
Metal	399	319	254	354	377
India					
Ore (c)	2 760	5 065	4 343	5 102	...
Metal (c)	1 333	1 298	1 565	1 910	...
Indonesia					
Ore (b)	13 052	15 488	24 724	5 566	3 463
Metal	149	100	37	131	147
Iran					
Metal	100	100	98	40	...
Israel					
Ore	*2 700	*3 500	*1 800	*200	...
Japan					
Ore (b)	1 261 623	1 363 516	1 207 907	1 227 064	1 148 008
Metal	36 846	40 565	39 197	39 936	43 270
Korea, Republic of					
Ore	392 179	482 797	494 333	503 337	546 970
Metal	2 650	3 337	5 539	10 580	11 931
Philippines					
Ore (b)	15 362	13 559	800	2 758	...
Saudi Arabia					
Ore	48 586	8 459	93 219	115 806	167 115
Metal	...	1 773	...	904	185
Singapore					
Ore	37 861	38 600	----	----	----
Metal	100	111	134	1 112	1 541
Taiwan					
Ore	62 305	65 971	57 714	29 028	32 418
Metal	440	590	886	841	1 027
Thailand					
Metal	152	147	148	114	150

**Imports of Manganese**

tonnes

Country	1996	1997	1998	1999	2000
Australia					
Ore	130	26	2 034	11 138	44 066
Metal	1 206	1 783	2 121	1 921	1 743

Note(s) :-

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

- (a) Mn content
- (b) Including manganeseiferous iron ore
- (c) Years ended 31 March following that stated

**Production of Mercury**

kilograms

Country	1996	1997	1998	1999	2000
Finland	88 120	63 000	54 000	55 000	77 100
Slovakia	----	----	----	----	24 000
Slovenia	5 000	5 000	5 000	----	----
Spain	861 825	389 229	672 681	433 000	236 600
Ukraine	*30 000	----	----	----	----
Algeria	368 081	490 383	224 077	240 327	215 625
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)	5 000	4 000	5 000	6 500	*7 000
China	508 000	835 000	225 000	195 000	203 000
Kyrgyzstan	642 000	611 000	637 600	645 900	*630 000
Tajikistan	*45 000	*40 000	*35 000	*35 000	*40 000
World Total	2 600 000	2 500 000	1 900 000	1 600 000	1 500 000

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	1996	1997	1998	1999	2000
Austria	1 000	8 400	67 100	2 100	8 400
Belgium-Luxembourg	35 000	10 400	22 300	52 500	...
Czech Republic	...	8 000	3 000	3 000	19 000
Denmark	100	4 414	399	245	126
Estonia	...	35 000	17 000	...	...
Finland	85 000	138 780	115 238	36 918	82 808
France	114 000	15 900	34 000	94 600	11 400
Germany	99 500	95 600	136 400	152 300	567 400
Italy	58 000	43 773	12 011	1 164	28 325
Netherlands	250 000	580 000	199 700	90 600	426 300
Norway	...	52 647	32 008	14 525	...
Poland	4 000	...	...	7 000	94 317
Russia (a)	*345 900	*133 000	*70 000	...	*135 000
Slovenia	6 289	673	16 097	545	831
Spain	549 000	594 295	312 578	511 305	956 655
Sweden	1 000	...	2 000	1 000	----
Switzerland	3 507	6 908	21 679	41 153	60 114
Ukraine	40	28 290	5 028	----	...
United Kingdom	109 770	16 628	34 528	5 413	2 977
Algeria	245 000	394 715	376 913	100 050	142 140
Morocco	...	9 000	9 000	...	...
Canada	137 065	4 264	8 037	1 778	4 108
USA	64 097	133 794	63 155	203 230	221 984
Chile	4 761	4 244	5 382	6 500	*7 000
China	16 579	15 749	88 442	2 088	4 242
Hong Kong (b)	389 353	710 230	352 114	141 700	14 728
Indonesia	20 897	11 750	...	...	100 000
Japan	44 606	6 213	4 924	7 074	38 851
Korea, Republic of	516	1 568	598	1 903	1 140
Kyrgyzstan	628 000	692 000	623 000	...	(a) *514 000
Singapore (b)	1 147	1 752	3 872	4 254	5 105
Taiwan	9 599	36 381	1 728	----	----
Australia	1 453	848	14 946	3 000	33 936

Note(s):-

- (a) BGS estimates, based on known imports into certain countries  
 (b) Re-exports

**Imports of Mercury**

kilograms

Country	1996	1997	1998	1999	2000
Austria	1 100	9 900	900	1 500	300
Azerbaijan	...	...	1 000	...	15 000
Belgium-Luxembourg	53 000	70 000	72 600	102 600	21 000
Czech Republic	...	5 000	4 000	3 000	3 000
Denmark	1 100	1 405	856	1 070	587
Finland	...	4 730	9 070	12 659	77
France	65 000	23 100	36 000	206 700	31 400
Germany	90 000	77 700	41 400	27 600	59 300
Greece	4 000	5 000	4 000	4 001	20 940
Hungary	5 000	...	...	...	1 000
Irish Republic	1 600	122	429	103 960	1 298
Italy	19 000	29 194	11 268	17 341	48 484
Netherlands	1 041 000	495 000	424 300	59 900	560 000
Norway	3 000	304	585	314	180
Poland	4 000	16 000	3 000	4 000	5 287
Portugal	----	8 126	933	869	749
Romania	98 000	1 000	...	----	1 000
Russia	...	30 000	46 000	11 000	110 000
Slovakia	...	3 000	771	8 000	...
Spain	299 000	148 980	224 706	132 400	143 032
Sweden	26 000	38 000	15 000	17 000	1 000
Switzerland	13 185	28 231	11 333	7 895	27 379
Turkey	31 638	41 853	40 830	38 032	3 981
United Kingdom	4 046	44 387	7 935	8 337	18 631
Yugoslavia, Federal Republic of	...	12 000	2 000	4 000	----
Botswana	...	...	101 114	...	...
Egypt	28 000	1 000	2 000	4 000	...
Kenya	...	...	3 000	16 000	...
Nigeria	21 095	2 000	15 000	4 000	...
Togo	4 000	1 000	2 000	...	...
Canada	5 429	7 116	11 383	9 434	12 000
Mexico	7 726	8 207	19 800	26 382	...
USA	339 814	163 535	128 344	61 599	135 695
Argentina	15 000	14 000	13 000	37 284	49 000
Brazil	75 000	57 000	82 000	49 720	40 537
Chile	9 788	5 064	2 538	1 000	1 000
Colombia	88 000	25 000	97 000	26 000	68 000
Ecuador	18 000	5 000	9 480	11 460	8 200
Peru	26 000	42 000	45 000	42 000	...
Uruguay	1 000	----	----	----	3 500
Venezuela	924	3 000	...	3 000	7 000
Bangladesh (a)	9 594	300	...	...	...
China	29 061	481 285	523 664	883 201	774 820
Hong Kong	434 299	772 866	861 554	174 154	73 816
India (b)	253 738	267 797	124 823	207 384	...
Indonesia	5 151	26 771	16 281	61 620	48 686
Iran	...	...	66 000	122 000	...
Japan	8 639	13 812	6 911	10 351	6 901
Korea, Republic of	39 996	36 808	17 804	25 533	11 459
Malaysia	6 080	7 705	2 987	...	...
Pakistan (a)	55 210	68 156	60 516	121 452	79 832
Philippines	118 107	5 004	39 396	64 000	...
Singapore	62 458	93 142	64 938	319 035	129 542
Sri Lanka	1 435	22 148	889	1 000	...
Taiwan	9 384	9 528	7 173	6 317	4 500
Thailand	30 405	10 547	13 000	13 000	12 077
Australia	45 737	66 834	39 901	27 000	34 439

Note(s) :-

(a) Years ended 30 June of that stated

(b) Years ended 31 March following that stated

**Production of Mica**

tonnes

Country	1996	1997	1998	1999	2000
Finland	4 592	5 630	7 241	8 470	10 035
France (e)	*10 000	14 100	*17 000	...	...
Russia	*10 000	*10 000	*10 000	*10 000	*10 000
Spain (e)	10 747	12 397	10 278	*13 000	...
Yugoslavia, Federal Republic of	16 596	420	247	229	1 727
Madagascar	317	1 138	1 232	54	...
Morocco	...	...	----	210	1 897
South Africa	1 515	1 423	1 556	1 010	708
Zimbabwe	42	30	1 309	499	273
Canada	*23 000	*23 000	*25 000	*25 000	*25 000
Mexico	4 273	975	890	971	1 658
USA (d) (e)	94 700	112 000	87 000	95 400	101 000
Argentina	2 137	3 528	3 480	3 097	*3 100
Brazil	*7 000	*4 000	*4 000	*5 000	*4 000
China (c)	*42 200	*47 500	*40 200	*40 700	*43 300
India (b)	3 063	2 604	2 551	3 386	2 378
Iran (f)	5 444	1 086	1 200	1 425	*2 000
Korea, Republic of (a)	35 923	34 489	38 459	24 734	65 295
Malaysia (g)	5 501	5 708	3 642	3 675	3 835
Sri Lanka	2 400	3 700	2 784	1 425	1 491
Taiwan	8 511	7 806	7 750	6 966	6 862
Australia	1 015	1 085	639	1 016	749
World Total	290 000	290 000	270 000	260 000	320 000

## 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**

tonnes

Country	1996	1997	1998	1999	2000
Austria	2 500	2 870	3 431	3 634	2 629
Belgium-Luxembourg	----	----	304	61	416
Finland	4 328	4 576	5 592	7 969	8 331
France	9 383	10 593	12 108	12 567	4 649
Germany	1 855	1 972	2 028	1 630	2 173
Italy	158	316	374	451	352
Netherlands	807	1 527	1 362	1 913	4 589
Norway	1 795	1 942	2 051	2 172	1 833
Russia	1 657	1 007	837	730	828
Spain	1 218	1 028	460	1 745	1 925
Sweden	112	113	983	60	87
Turkey	95	365	575	308	296
United Kingdom					
Unmanufactured	10	78	24	120	68
Ground	5 001	5 056	4 686	3 913	3 659
Waste	209	270	474	254	56
Madagascar	*450	603	212	511	796
South Africa	488	387	334	262	263
Zimbabwe	787	723	1 109	535	...
Canada	17 297	15 560	18 099	24 435	25 195
USA					
Unmanufactured	2 160	2 404	1 660	4 422	1 664
Ground	6 368	6 476	6 901	7 753	9 380
Brazil	1 522	1 629	498	1 009	1 205
China	42 222	47 542	40 178	40 714	43 332
Hong Kong (a)	583	116	92	11	26
India					
Block (b)	648	1 652	997	1 227	...
Splittings (b)	1 290	1 906	644	881	...
Condenser films (b)	3 365	23	10	----	...
Ground (b)	19 687	39 319	41 991	38 926	...
Waste (b)	3 604	4 253	6 040	5 000	...
Japan	910	915	626	862	951
Korea, Republic of	47	54	6 859	40	34
Malaysia	5 785	6 503	4 199	4 435	...
Singapore	1 400	501	517	207	392
of which, re-exports	1 372	471	305	186	388
Sri Lanka	2 569	3 051	2 433	1 347	...
Taiwan	914	636	2 079	1 861	1 955

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	1996	1997	1998	1999	2000
Austria	282	597	604	696	483
Belgium-Luxembourg					
Ground	----	...	729	844	1 138
Czech Republic	...	540	657	699	707
Denmark	251	353	298	226	254
Finland	675	1 002	1 273	768	1 118
France					
Ground (b)	1 190	1 161	1 151	1 320	1 596
Waste	3 305	3 044	2 039	2 025	2 470
Germany					
Unmanufactured	904	868	878	1 485	1 453
Ground	23 447	22 661	26 492	18 735	19 428
Greece	110	129	61	201	119
Irish Republic	6 808	864	557	582	657
Italy					
Unmanufactured	...	290	230	326	121
Ground	2 201	2 259	2 220	4 442	2 741
Netherlands	4 284	3 199	3 476	3 742	4 005
Norway	2 553	3 399	2 998	3 150	2 051
Poland	741	594	891	826	883
Portugal	129	45	110	144	57
Russia	1 458	203	1 853	126	34
Spain	1 880	2 314	2 351	2 129	1 287
Sweden	723	862	963	475	713
Switzerland	286	307	476	665	297
Turkey	408	129	81	56	117
United Kingdom					
Unmanufactured	179	12	29	125	173
Ground	6 367	9 036	7 961	6 977	5 426
Waste	9 532	8 342	10 379	5 854	8 119
Botswana	...	419	545	...	...
South Africa	611	...	...	...	214
Canada	4 188	4 058	4 861	5 073	6 507
Jamaica	224	213	202	267	...
Mexico	984	1 553	1 435	1 792	...
USA					
Block	102	47	73	37	107
Splittings	4 998	3 967	2 630	2 659	4 017
Ground	13 563	12 959	15 492	20 626	22 111
Other unmanufactured	4 979	10 380	7 637	5 143	6 458
Colombia	177	280	254	318	317
Venezuela	939	420	250	333	301
China	398	1 029	1 213	1 090	5 400
Dubai	539	389	195	...	...
Hong Kong	2 164	131	51	192	198
Indonesia	1 446	1 367	773	1 075	1 009
Iran (a)	...	20	258	439	...
Japan					
Unmanufactured	5 882	6 529	7 581	7 863	11 060
Ground	39 097	40 481	32 436	34 496	32 717
Waste	4 819	2 695	3 572	2 609	1 591
Korea, Republic of	6 166	7 675	4 379	6 117	6 147
Malaysia	1 690	...	5 223	4 111	...
Philippines	310	236	223	504	...
Saudi Arabia	1 075	1 386	1 123	1 597	1 430
Singapore	1 574	1 684	933	817	1 206
Taiwan					
Unmanufactured	414	448	499	760	758
Ground	1 414	1 901	1 683	2 592	2 848
Thailand	1 053	1 089	590	860	889

**Imports of Mica**

tonnes

Country	1996	1997	1998	1999	2000
Australia	1 766	1 483	1 879	2 172	2 286
New Zealand	£284 000	£186 000	£149 000	£132 000	£144 000

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) Years ended 20 March following that stated
- (b) Including unmanufactured

**Mine Production of Molybdenum**

tonnes (metal content)

Country	1996	1997	1998	1999	2000
Armenia	*1 800	*1 800	*2 600	2 756	3 082
Bulgaria	*400	*400	*400	*400	*400
Russia	4 800	4 800	4 800	4 800	3 700
Canada	8 097	8 223	8 469	5 932	7 458
Mexico	4 211	4 842	5 949	7 961	6 886
USA	56 000	60 100	53 300	42 400	41 100
Chile	17 415	21 339	25 298	27 270	33 639
Peru	3 968	4 261	4 336	5 472	7 205
China	29 600	33 300	30 015	29 745	28 950
Iran (a)	1 200	1 600	2 400	2 700	...
Kazakhstan	44	81	100	155	215
Kyrgyzstan	...	...	148	242	*250
Mongolia	2 201	1 992	1 848	1 954	1 336
Uzbekistan	*500	*500	*350	*350	*350
World Total	130 000	143 000	140 000	132 000	137 000

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**

tonnes

Country	1996	1997	1998	1999	2000
Austria					
Metal	1 651	1 747	1 684	1 700	1 864
Oxides	654	81	85	1	36
Belgium-Luxembourg					
Ores & concentrates	13 329	13 466	17 437	12 615	11 951
Metal	201	296	104	143	802
Oxides	52	150	216	242	132
Estonia					
Metal	...	5	18	49	106
France					
Ores & concentrates	49	873	118	89	6
Metal	83	61	65	57	161
Germany					
Ores & concentrates	365	111	36	206	39
Metal	1 042	1 368	1 070	1 132	1 337
Oxides	885	731	770	17	3 863
Italy					
Metal	32	65	197	94	34
Netherlands					
Ores & concentrates	4 347	5 662	6 106	4 869	7 303
Metal	299	408	249	167	380
Oxides	...	161	96	246	2 109
Russia					
Ores & concentrates	4 281	4 645	7 368	10 941	9 297
Metal	654	901	932	569	355
United Kingdom					
Ores & concentrates	2 003	3 717	2 401	998	319
Metal	247	143	248	104	236
Oxides	20	30	20	32	8
South Africa					
Metal	...	9	1	173	260
Canada					
Ores & concentrates (a)	8 512	11 235	10 748	10 558	10 640
Mexico					
Ores & concentrates	10 496	12 347	10 702	10 774	10 140
USA					
Ores & concentrates (a)	45 166	58 531	42 480	28 527	23 740
Metal	1 412	916	1 127	976	1 056
Oxides	1 830	1 262	1 149	1 155	1 279
Chile					
Ores & concentrates	29 302	36 266	43 323	44 721	53 511
Oxides	3 164	2 947	3 618	2 064	2 997
Peru					
Ores & concentrates	7 782	8 452	7 991	9 800	...
China					
Ores & concentrates	1 441	2 819	4 567	9 300	14 172
Metal	453	531	849	1 029	1 639
Oxides	13 933	21 983	17 147	7 976	4 221
Iran					
Ores & concentrates	...	...	809	4 974	...
Japan					
Metal	264	110	126	121	171
Oxides	114	92	106	24	108
Korea, Republic of					
Ores & concentrates	277	491	339	855	1 109
Metal	4	9	107	153	444
Mongolia					
Ores & concentrates	5 081	4 109	4 131	4 164	3 028
Taiwan					
Metal	63	142	254	122	13
Oxides	106	130	86	55	4

Note(s):-

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

(a) Mo content

**Imports of Molybdenum**

tonnes

Country	1996	1997	1998	1999	2000
Austria					
Ores & concentrates	3 665	5 566	232	...	...
Metal	182	255	289	163	198
Oxides	2 681	2 378	2 761	2 139	...
Belgium-Luxembourg					
Ores & concentrates	19 341	22 075	22 613	13 339	19 268
Metal	163	207	208	156	374
Oxides	702	969	529	605	388
Czech Republic					
Metal	43	448	60	37	39
Estonia					
Metal	...	6	38	34	128
Finland					
Ores & concentrates	2 596	3 172	2 959	3 258	3 591
France					
Ores & concentrates	2 378	2 539	2 354	3 273	2 384
Metal	429	627	...	526	817
Oxides	148	96	57	73	104
Germany					
Ores & concentrates	9 167	8 437	12 976	10 331	10 866
Metal	1 492	1 465	1 922	1 993	2 159
Oxides	1 197	1 085	703	378	311
Greece					
Metal	2	68	97	26	1
Hungary					
Metal	97	95	124	122	150
Italy					
Ores & concentrates	2 864	3 725	4 629	3 575	3 140
Metal	300	164	173	159	241
Oxides	...	248	94	90	92
Netherlands					
Ores & concentrates	17 247	17 660	18 706	18 939	25 656
Metal	337	691	340	346	530
Oxides	...	1 004	814	1 153	1 758
Poland					
Ores & concentrates	222	230	152	173	144
Metal	37	32	48	102	75
Portugal					
Metal	10	16	16	14	17
Russia					
Ores & concentrates	759	626	1 491	1 202	939
Metal	71	52	41	292	253
Spain					
Ores & concentrates	2 489	3 238	3 129	3 050	3 578
Metal	52	119	81	50	45
Sweden					
Ores & concentrates	5 504	7 451	6 271	5 173	5 742
Metal	121	1 168	186	205	208
Oxides	...	371	448	626	784
Switzerland					
Metal	52	28	37	25	30
Turkey					
Metal	67	7	10	42	5
United Kingdom					
Ores & concentrates	16 899	18 898	17 495	13 872	12 489
Metal	861	859	903	1 374	839
Oxides	237	89	110	65	26
Nigeria					
Metal	99	121	...	...	...
South Africa					
Ores & concentrates	1 000	866	1 815	1 107	2 138
Metal	4	16	11	...	12
Oxides	121	619	465	742	550
Canada					
Metal	94	80	92	92	84
Oxides	884	648	664	1 074	1 029

**Imports of Molybdenum**

tonnes

Country	1996	1997	1998	1999	2000
USA					
Ores & concentrates	8 105	10 513	10 736	10 325	10 043
Metal	1 011	1 040	662	688	744
Oxides	1 161	1 420	1 182	842	1 211
Brazil					
Ores & concentrates	2 581	3 316	3 479	3 932	4 384
Metal	385	267	164	199	135
Oxides	7	156	44	42	414
Chile					
Ores & concentrates	12 253	11 794	11 252	8 668	31 647
China					
Ores & concentrates	7 689	6 992	10 843	15 680	18 769
Metal	221	624	410	189	178
Oxides	182	904	261	166	781
India					
Ores & concentrates (a)	2 264	2 866	2 682	2 967	...
Metal (a)	80	111	111	97	...
Indonesia					
Ores & concentrates	----	19	751	68	8
Metal	----	----	16	77	287
Japan					
Ores & concentrates	26 061	31 262	30 540	26 477	32 402
Metal	699	713	517	484	833
Oxides	1 342	1 698	1 816	1 147	1 167
Korea, Republic of					
Ores & concentrates	4 658	4 072	5 379	6 402	5 482
Metal	131	120	100	278	200
Kyrgyzstan					
Metal	197	...	18	14	...
Malaysia					
Metal	137	106	163	...	...
Philippines					
Metal	24	11	----	...	...
Singapore					
Metal	57	8	18	4	4
Taiwan					
Ores & concentrates	----	----	----	517	1 216
Metal	208	211	240	297	195
Oxides	303	188	249	240	449
Australia					
Ores & concentrates	522	596	434	381	17 785
Metal	159	82	69	141	343
Oxides	152	106	587	46	131

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	1996	1997	1998	1999	2000
Finland	3 872	3 252	1 967	730	3 300
Greece	20 558	20 996	18 544	16 556	20 700
Macedonia	*3 000	5 300	5 800	100	----
Norway	3 119	2 725	3 219	2 965	2 536
Russia	232 000	235 000	235 000	235 000	235 000
Ukraine	1 700	-----	-----	-----	-----
Yugoslavia, Federal Republic of	3 000	2 700	800	-----	-----
Botswana	22 095	20 157	22 851	22 898	24 218
South Africa (a)	33 861	34 849	36 679	35 798	36 616
Zimbabwe	11 600	11 000	10 400	9 593	8 300
Canada	192 649	190 529	208 302	186 236	190 727
Cuba	51 300	59 100	65 100	63 900	68 500
Dominican Republic	43 560	47 730	40 311	39 997	39 943
USA	1 330	-----	-----	-----	-----
Brazil	25 245	31 936	36 764	43 784	45 317
Colombia	27 154	31 230	29 422	39 274	58 900
China	43 800	46 600	48 700	49 500	51 100
Indonesia	87 900	71 100	74 100	89 100	98 200
Kazakhstan	3 500	4 000	3 600	3	284
Philippines	15 003	18 133	20 685	12 389	16 218
Australia	113 000	123 400	143 900	119 000	166 000
New Caledonia	122 486	136 459	124 729	109 509	126 044
World Total	1 062 000	1 096 000	1 131 000	1 076 000	1 192 000

Note(s):-

(a) Includes metal and metal content of sulphate and concentrates

**Smelter/Refinery Production of Nickel**

tonnes

Country	1996	1997	1998	1999	2000
Austria	2 000	2 000	1 800	1 500	1 300
Finland	29 141	35 285	43 379	52 800	54 300
France	11 171	10 702	11 778	11 700	13 400
Greece	17 801	17 610	15 004	13 462	17 125
Macedonia	*3 000	5 300	5 800	100	...
Norway	61 582	62 700	70 150	74 100	58 700
Russia	195 900	240 900	233 900	245 800	263 000
Ukraine	*900	----	----	----	----
United Kingdom	38 561	36 091	39 050	38 086	38 000
Yugoslavia, Federal Republic of	2 556	2 440	466	----	----
South Africa	33 861	34 849	36 410	29 100	36 600
Zimbabwe	17 100	19 100	19 300	19 800	19 300
Canada	130 136	131 639	146 755	124 260	134 225
Cuba	26 730	33 571	38 192	37 510	39 500
Dominican Republic	30 384	32 554	25 222	24 456	27 829
USA	15 100	15 996	4 290	----	----
Brazil	16 432	18 199	21 083	22 931	23 253
Colombia	22 933	25 170	28 140	28 341	27 737
China	44 600	43 300	40 100	44 400	50 900
Indonesia	9 600	9 999	8 500	9 225	10 111
Japan	130 500	128 400	126 500	134 700	160 700
Australia	74 000	73 700	79 600	83 600	113 000
New Caledonia	42 174	44 312	44 491	45 289	43 914
World Total	956 000	1 024 000	1 040 000	1 041 000	1 133 000

Note(s):-

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

**Exports of Nickel**

tonnes

Country	1996	1997	1998	1999	2000
Austria					
Matte, sinters etc.	1 395	77	109	49	99
Unwrought (a)	339	1 069	524	586	908
Scrap	166	398	219	471	307
Belgium-Luxembourg					
Unwrought	12 168	16 519	11 566	12 324	12 143
Unwrought alloys	1 530	1 796	1 920	1 936	1 978
Scrap	834	1 245	770	1 126	1 021
Czech Republic					
Unwrought (a)	500	1 776	125	353	71
Scrap	4 400	5 355	751	899	218
Oxides	...	...	93	157	231
Denmark					
Scrap	338	367	912	1 343	322
Estonia					
Matte, sinters etc.	...	...	13	1 020	1 011
Unwrought (a)	(b) *100	142	324	198	412
Scrap	(b) *300	90	341	408	224
Finland					
Ores & concentrates	36 675	53 974	11 480	14 868	25 804
Unwrought	21 474	23 650	26 409	29 457	28 504
Scrap	133	26	454	76	218
Oxides	884	1 163	1 399	1 106	1 664
France					
Unwrought	6 736	7 842	7 347	6 884	9 950
Unwrought alloys	735	907	707	707	1 187
Scrap	4 457	4 499	10 420	5 674	7 190
Germany					
Unwrought	7 184	8 545	17 087	13 553	7 346
Unwrought alloys	4 315	3 572	4 678	4 573	7 190
Scrap	7 203	9 236	6 674	12 308	26 627
Oxides	122	141	46	19	77
Irish Republic					
Scrap	515	512	662	935	833
Italy					
Unwrought (a)	4 650	2 217	2 985	1 443	2 472
Scrap	617	395	1 162	805	1 354
Latvia					
Scrap	1 222	1 828	2 651	2 412	4 303
Lithuania					
Scrap	580	241	51	65	711
Netherlands					
Matte, sinters etc.	(b) *10 600	6 530	27 745	(b) *6 400	(b) *7 700
Unwrought (a)	5 287	37 258	23 450	26 234	27 901
Scrap	3 051	2 810	2 017	1 204	2 042
Oxides	1 120	1 437	1 384	1 126	1 817
Norway					
Ore	34 880	30 512	34 016	26 546	24 999
Unwrought	60 919	62 295	70 153	73 328	59 956
Scrap	294	145	176	399	173
Russia					
Ore	84 552	64	----	250	...
Matte, sinters etc. (b)	*8 700	*9 800	*12 000	*16 200	*17 400
Unwrought	166 214	218 722	212 186	207 448	188 484
Unwrought alloys	988	3 135	1 948	3 837	8 469
Scrap (b)	*15 000	*16 900	*10 700	*5 400	*7 400
Oxides	610	544	845	350	33
Slovenia					
Unwrought	100	600	352	435	850
Spain					
Unwrought (a)	41	917	2 252	8 013	3 743
Scrap	302	512	143	584	190
Sweden					
Unwrought (a)	245	93	103	301	1 040
Scrap	248	198	166	532	696
Switzerland					
Unwrought (a)	128	120	50	469	103
Scrap	356	661	445	606	917

**Exports of Nickel**

tonnes

Country	1996	1997	1998	1999	2000
Ukraine					
Unwrought	----	----	2 535	121	...
Scrap	----	134	57	(b) *300	(b) *700
United Kingdom					
Mattes, sinters etc.	218	146	58	197	1 634
Unwrought	22 761	18 887	20 502	20 728	21 695
Unwrought alloys	3 290	3 558	4 271	3 733	5 195
Scrap	4 361	4 367	5 109	5 432	8 602
Botswana					
Mattes, sinters etc. (d)	18 992	14 691	16 516	16 342	19 041
South Africa					
Unwrought (g)	21 352	20 365	22 570	16 195	14 575
Scrap (b)	*2 600	*3 200	*3 000	*900	...
Tunisia					
Scrap	257	1 221	356	480	...
Zimbabwe					
Unwrought	11 950	13 609	10 324	11 462	...
Canada					
Mattes, sinters etc.	96 242	86 696	107 817	103 250	73 208
Unwrought (a)	97 155	101 075	107 257	87 135	99 395
Scrap	2 595	4 159	2 322	3 200	5 682
Cuba					
Oxide, sinter & sulphide (e)	*55 500	*59 900	*68 800	*67 600	*70 500
USA					
Mattes, sinters etc.	5 479	3 104	1 690	1 991	2 556
Unwrought (a)	6 677	5 754	7 394	10 517	12 683
Scrap	21 790	25 056	25 952	24 191	29 983
Oxides	311	404	1 157	569	790
Brazil					
Mattes, sinters etc.	----	180	8 724	19 015	16 330
Unwrought	5 582	5 907	7 933	13 008	11 927
China					
Unwrought (a)	309	4 748	15 051	14 455	9 218
Scrap	77	905	779	861	444
Oxides	146	830	251	325	443
Hong Kong					
Unwrought (a) (f)	5 605	5 177	5 682	6 184	13 340
Scrap	179	62	316	911	398
India					
Oxides (c)	...	...	60	100	...
Indonesia					
Ore	1 791 190	1 899 153	2 214 986	1 675 375	1 444 436
Mattes, sinters etc.	45 373	41 164	34 881	54 429	47 997
Israel					
Scrap (b)	*1 700	*1 900	*1 400	*2 700	*3 400
Japan					
Mattes, sinters etc.	5 182	1 468	6 129	7 905	23 072
Unwrought (a)	897	1 385	393	501	1 223
Scrap	2 557	8 563	954	489	683
Oxides	1 025	3 026	3 312	4 580	3 873
Kazakhstan					
Unwrought	635	253	0	5	...
Korea, Republic of					
Unwrought (a)	21	935	16	29	32
Scrap	1 054	1 813	1 568	1 096	1 730
Philippines					
Ores & concentrates	1 249 197	780 432	1 249 923	1 417 406	...
Scrap	21	965	2 447	385	...
Saudi Arabia					
Unwrought	...	...	2 246	584	69
Scrap	...	...	1 063	3 154	5 542

**Exports of Nickel**

tonnes

Country	1996	1997	1998	1999	2000
Singapore					
Unwrought (f)	4 327	7 250	5 901	9 229	13 325
Scrap	1 069	1 517	971	1 303	1 734
Oxides	...	...	409	315	246
Taiwan					
Unwrought (a)	63	91	118	575	269
Scrap	1 553	1 366	934	1 681	1 953
Oxides	17	79	77	215	401
Australia					
Ore	155 747	181 099	216 731	225 750	229 172
Mattes, sinters etc.	*55 000	*60 000	70 171	38 604	53 129
Unwrought	44 469	43 292	53 007	71 146	86 441
Unwrought alloys	3 078	1 884	1 371	1 794	2 002
Scrap (b)	*500	*600	*500	*400	*700
New Caledonia					
Ores	4 773 883	5 391 000	4 237 400	3 790 066	4 108 676
Mattes, sinters etc.	15 354	14 857	16 813	15 808	18 158

## Note(s):-

- (1) In this table the term 'unwrought' nickel corresponds to item 7502 of the Harmonised System which excludes all electro-plating anodes  
(2) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

- (a) Including alloys
- (b) BGS estimates, based on known imports into certain countries
- (c) Years ended 31 March following that stated
- (d) Ni content
- (e) Ni-Co content (mainly nickel)
- (f) Re-exports
- (g) Includes Ni content of metal, sulphate and concentrate

**Imports of Nickel**

tonnes

Country	1996	1997	1998	1999	2000
Austria					
Mattes, sinters etc.	126	164	334	245	197
Unwrought (a)	3 419	3 503	3 618	3 742	7 296
Scrap	754	176	84	73	620
Oxides	18	49	24	151	765
Belgium-Luxembourg					
Mattes, sinters etc.	179	313	13	448	213
Unwrought	32 621	32 253	27 872	36 987	31 107
Unwrought alloys	121	1 721	2 054	559	460
Scrap	2 574	3 277	719	694	835
Oxides	187	145	234	207	341
Czech Republic					
Unwrought (a)	1 300	934	1 475	1 077	1 758
Oxides	...	...	206	214	251
Denmark					
Unwrought (a)	113	131	160	84	157
Estonia					
Unwrought	...	165	367	211	427
Scrap	...	85	284	352	289
Finland					
Ore	200 610	163 962	247 276	249 028	217 154
Mattes, sinters etc.	9 843	7 314	21 701	24 266	26 654
Unwrought (a)	6 316	9 511	7 976	6 558	5 880
Scrap	821	247	289	183	379
Oxides	292	346	540	2	0
France					
Mattes, sinters etc.	16 365	16 744	16 697	15 985	16 638
Unwrought	26 480	32 807	39 221	36 956	40 991
Unwrought alloys	4 851	6 740	6 658	6 652	5 491
Scrap	1 507	1 379	2 199	2 040	3 351
Oxides	222	216	537	397	317
Germany					
Mattes, sinters etc.	9 317	8 629	11 560	8 436	10 701
Unwrought	57 564	62 752	77 030	79 030	94 153
Unwrought alloys	3 859	1 488	1 502	1 705	4 335
Scrap	10 474	11 723	7 486	9 103	12 599
Oxides	343	411	472	779	701
Greece					
Unwrought	90	108	127	144	226
Irish Republic					
Unwrought (a)	1 141	1 129	1 487	1 170	1 154
Italy					
Mattes, sinters etc.	3 022	2	171	14	77
Unwrought	30 370	41 065	46 414	45 687	46 241
Unwrought alloys	1 718	940	1 112	1 036	1 640
Scrap	70	1 415	1 808	1 964	5 970
Netherlands					
Mattes, sinters etc.	...	36 543	18 593	...	...
Unwrought	5 924	15 384	42 306	75 302	65 684
Unwrought alloys	92	63	211	643	59
Scrap	4 642	3 307	1 881	1 995	2 368
Oxides	...	825	570	544	752
Norway					
Mattes, sinters etc.	141 942	132 146	139 094	151 010	118 719
Unwrought (a)	204	79	168	154	175
Poland					
Unwrought	1 712	1 421	1 925	1 488	2 052
Portugal					
Unwrought (a)	281	290	356	265	282
Romania					
Unwrought	626	563	593	391	467
Russia					
Ore	516 139	628 682	129 544	17 729	307 322
Unwrought	305	1 246	2 096	412	1 837
Scrap	3 271	2 903	3 158	4 021	3 971
Slovenia					
Unwrought (a)	1 942	4 375	3 916	4 275	3 718

**Imports of Nickel**

tonnes

Country	1996	1997	1998	1999	2000
Spain					
Mattes, sinters etc.	86	584	43	22	42
Unwrought (a)	10 796	21 567	18 222	25 979	20 849
Oxides	86	122	149	213	231
Sweden					
Mattes, sinters etc.	5 442	4 372	6 289	5 700	5 756
Unwrought	14 387	14 113	20 039	21 667	28 583
Unwrought alloys	749	661	1 546	1 185	687
Scrap	24 811	21 064	17 967	9 570	12 901
Switzerland					
Unwrought (a)	1 055	964	1 596	1 068	1 511
Scrap	403	401	234	161	122
Turkey					
Unwrought (a)	1 453	1 677	1 815	1 493	1 459
Oxides	...	...	...	90	94
United Kingdom					
Mattes, sinters etc.	63 833	54 534	59 263	57 457	54 805
Unwrought	17 469	17 706	12 538	15 669	23 915
Unwrought alloys	1 248	3 424	4 182	7 355	2 167
Scrap	14 631	13 181	11 884	15 731	22 932
Oxides	149	155	98	199	164
Egypt					
Unwrought	...	311	328	351	...
South Africa					
Unwrought (a)	3 943	5 319	9 579	8 460	8 695
Canada					
Ores & concentrates (b)	2 118	2 524	1 138	934	1 152
Mattes, sinters etc.	56 741	49 902	51 363	61 173	65 750
Unwrought (a)	6 448	2 599	1 946	3 319	3 255
Scrap	16 051	16 572	16 641	20 448	20 507
Oxides	188	957	2 774	2 116	3 722
Mexico					
Unwrought (a)	1 533	2 102	2 277	1 656	4 477
USA					
Ores & concentrates (b)	21 505	43 029	3 110	...	193
Slurry, mattes, sinters etc.	693	2 480	2 762	4 260	3 388
Unwrought (a)	116 028	122 832	122 517	108 758	123 279
Scrap	8 545	12 397	8 430	9 037	13 215
Oxides	1 318	1 532	2 176	1 859	2 109
Argentina					
Unwrought	281	532	529	420	460
Brazil					
Unwrought (a)	7 772	7 129	6 277	8 870	10 524
Colombia					
Unwrought	185	175	148	86	180
Venezuela					
Unwrought (a)	110	153	190	81	81
China					
Ore	237	2 662	1 813	79	1 232
Mattes, sinters etc.	489	40	560	640	2 672
Unwrought (a)	916	1 117	4 983	4 498	11 951
Scrap	43	36	70	138	34
Oxides	1 701	2 272	1 642	2 154	3 281
Hong Kong					
Mattes, sinters etc.	----	7 342	157 378	86	453
Unwrought (a)	10 937	8 977	13 122	10 760	18 721
Oxides	...	1 321	1 424	1 747	2 524
India					
Mattes, sinters etc. (c)	1 417	2 015	1 055	368	...
Unwrought (a) (c)	9 123	11 814	11 526	9 820	...
Scrap (c)	1 049	1 845	1 347	925	...
Indonesia					
Unwrought (a)	259	211	880	224	491

**Imports of Nickel**

tonnes

Country	1996	1997	1998	1999	2000
Iran					
Unwrought	*500	*500	1 143	515	...
Japan					
Ore	4 061 516	4 362 374	4 086 149	3 905 809	4 579 118
Mattes, sinters etc.	83 632	76 715	80 563	87 820	113 263
Unwrought	46 501	57 096	39 003	48 282	57 822
Unwrought alloys	500	747	1 050	624	431
Scrap	7 711	12 836	10 273	11 736	15 657
Oxides	80	221	129	103	131
Korea, Republic of					
Mattes, sinters etc.	14 818	20 772	24 281	24 504	37 717
Unwrought (a)	14 667	19 069	21 374	38 782	24 704
Scrap	2 786	12 509	61	545	558
Oxides	317	256	207	168	245
Malaysia					
Unwrought (a)	404	759	529	1 100	...
Pakistan					
Unwrought (a) (d)	477	373	555	373	406
Philippines					
Scrap	400	9 000	5 000	600	...
Singapore					
Mattes, sinters etc.	344	13	2	1	5
Unwrought	4 351	9 026	6 775	9 227	14 141
Scrap	389	329	605	664	523
Oxides	...	493	449	453	430
Taiwan					
Mattes, sinters etc.	7 679	4 797	10 928	10 784	11 586
Unwrought (a)	33 358	41 888	38 803	55 578	55 588
Scrap	286	232	155	534	645
Oxides	837	1 265	1 156	1 147	1 381
Thailand					
Unwrought (a)	1 664	1 325	1 002	7 056	1 872
Australia					
Unwrought (a)	809	1 290	1 545	1 196	924
Scrap	1 023	256	----	131	51

Note(s) :-

(1) In this table the term 'unwrought' nickel corresponds to item 7502 of the Harmonised System 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

**Production of Crude Petroleum**

tonnes

Country	1996	1997	1998	1999	2000
Albania	488 214	359 666	309 000	268 000	213 000
Austria	992 398	972 340	959 285	962 393	970 513
Azerbaijan	9 100 300	9 100 000	11 400 000	13 800 000	14 100 000
Belarus	1 860 300	1 822 000	1 830 000	1 840 000	1 841 000
Bulgaria	32 000	27 750	31 700	38 700	40 900
Croatia	1 469 052	1 496 223	1 389 408	1 292 665	907 154
Czech Republic	155 000	159 000	172 000	176 000	168 000
Denmark	10 286 000	11 375 000	11 752 000	14 775 000	17 965 000
France	2 107 486	1 779 728	1 708 883	1 539 131	1 417 565
Georgia	127 900	133 800	119 200	91 300	100 000
Germany	2 851 925	2 820 398	2 894 526	2 740 073	3 119 592
Greece	517 001	467 000	315 000	*300 000	256 000
Hungary	1 476 600	1 355 420	1 241 380	1 272 140	1 130 850
Italy	5 368 971	5 892 055	5 560 072	4 993 000	4 600 000
Lithuania	180 000	160 000	160 000	...	...
Netherlands	2 221 028	2 068 906	1 714 000	1 594 000	1 452 000
Norway	156 788 000	156 215 000	150 006 000	148 728 000	158 625 000
Poland	317 304	289 139	360 000	424 806	652 696
Romania	6 626 000	6 517 000	6 309 043	6 140 000	*6 000 000
Russia	300 400 000	306 000 000	303 283 000	305 000 000	323 000 000
Slovakia	68 000	63 136	60 000	60 270	56 940
Spain	513 451	379 563	535 140	306 000	233 105
Turkey	3 499 635	3 454 021	3 226 873	2 938 479	2 747 630
Ukraine	4 097 800	4 128 100	3 899 900	3 797 900	3 692 900
United Kingdom	121 930 000	120 321 000	124 080 000	128 286 000	117 882 000
Yugoslavia, Federal Republic of	1 030 441	979 081	913 029	704 838	804 768
Algeria	54 401 000	54 234 000	54 922 800	54 680 000	58 000 000
Angola	35 400 000	36 500 000	36 000 000	36 800 000	36 400 000
Benin	*200 000	*150 000	*150 000	*150 000	...
Cameroon	5 600 000	6 300 000	5 300 000	4 800 000	4 500 000
Congo	10 229 417	11 471 847	12 288 822	12 775 737	12 667 606
Congo, Democratic Republic	1 500 000	1 400 000	1 300 000	1 250 000	1 250 000
Egypt (b)	44 119 000	41 800 000	40 700 000	*40 000 000	37 000 000
Equatorial Guinea	1 000 000	3 000 000	4 100 000	4 500 000	5 300 000
Eritrea	685 234	...	...	...	...
Gabon	18 300 000	18 200 000	16 900 000	17 000 000	16 400 000
Ghana	*250 000	*250 000	*250 000	*250 000	...
Ivory Coast	1 400 000	*1 500 000	*500 000	*750 000	...
Libya	69 600 000	71 100 000	70 700 000	68 000 000	70 600 000
Morocco	...	...	...	11 300	13 000
Nigeria	105 400 000	113 400 000	106 500 000	99 900 000	103 900 000
South Africa	----	*600 000	*1 200 000	*1 100 000	*1 200 000
Sudan	...	...	600 000	3 500 000	6 300 000
Tunisia	4 191 000	3 806 000	3 895 300	3 938 000	3 700 000
Barbados	49 810	45 004	79 143	97 113	76 895
Canada	98 290 500	103 172 000	107 213 800	101 744 300	106 985 300
Cuba	1 475 900	1 461 500	1 678 200	2 136 300	*2 200 000
Guatemala	739 206	989 463	1 280 739	1 177 413	1 050 092
Mexico	153 083 000	161 251 000	163 630 000	155 047 000	160 683 000
Trinidad & Tobago	6 658 800	6 379 200	6 337 500	6 448 600	6 153 700
USA	321 795 000	321 148 000	311 193 000	292 727 000	289 790 000
Argentina	41 575 471	44 174 851	44 834 345	42 423 518	40 901 240
Bolivia	1 355 452	1 398 500	1 602 357	1 355 157	1 355 000
Brazil	41 851 471	44 545 677	51 620 023	58 310 277	65 540 000
Chile	485 950	446 117	427 553	335 558	297 065
Colombia	32 286 570	33 622 738	38 885 956	42 041 092	35 527 000
Ecuador	19 594 002	19 766 766	19 121 078	19 011 567	20 390 618
Peru	5 928 066	5 826 583	5 696 200	5 219 862	4 902 588
Suriname	457 000	620 000	600 000	700 000	700 000
Venezuela	160 000 000	170 000 000	170 000 000	160 000 000	*170 000 000

**Production of Crude Petroleum**

tonnes

Country	1996	1997	1998	1999	2000
Abu Dhabi	95 300 000	91 400 000	93 300 000	83 000 000	90 300 000
Bahrain	1 930 000	1 934 000	1 879 000	1 870 000	1 870 000
Brunei	8 300 000	8 100 000	7 800 000	9 000 000	10 200 000
China (a)	157 333 900	160 741 400	162 603 300	160 215 400	163 000 000
Dubai	13 100 000	15 100 000	15 300 000	14 600 000	16 200 000
India (d)	32 900 000	33 772 000	32 722 000	31 949 000	32 426 000
Indonesia	73 000 000	72 400 000	71 300 000	73 100 000	68 800 000
Iran	183 800 000	184 100 000	187 800 000	175 200 000	186 600 000
Iraq	29 900 000	58 000 000	105 200 000	125 600 000	128 100 000
Israel	8 459	13 564	5 630	4 100	3 400
Japan	764 000	768 000	722 000	666 000	675 000
Jordan	1 700	2 097	2 100	1 500	1 686
Kazakhstan	22 960 100	25 778 200	25 945 100	30 130 400	35 316 800
Kuwait (c)	105 800 000	105 700 000	108 100 000	99 300 000	105 600 000
Kyrgyzstan	84 000	84 800	78 300	76 900	77 000
Malaysia	34 190 000	34 100 000	34 630 000	33 000 000	33 100 000
Mongolia	----	----	6 000	10 000	9 000
Myanmar	551 000	590 000	480 000	490 000	580 000
Oman	44 100 000	45 100 000	44 748 000	45 049 000	47 675 000
Pakistan (b)	2 825 730	2 853 565	2 739 000	2 665 000	2 719 000
Philippines	160 000	*150 000	41 000	43 000	57 000
Qatar	26 400 000	32 500 000	35 000 000	33 700 000	37 000 000
Ras al Khaimah	*50 000	*50 000	*50 000	*50 000	*50 000
Saudi Arabia (c)	434 600 000	442 100 000	442 800 000	410 300 000	441 200 000
Sharjah	*3 400 000	*3 400 000	*3 400 000	*3 400 000	*3 400 000
Syria	30 600 000	30 100 000	30 100 000	30 300 000	28 100 000
Taiwan	51 900	46 200	49 200	43 000	33 900
Tajikistan	30 000	30 000	20 000	20 000	18 427
Thailand	2 813 000	3 231 000	3 396 000	3 767 000	5 216 000
Turkmenistan	4 400 000	6 000 000	6 500 000	7 000 000	7 400 000
Uzbekistan	7 600 000	7 900 000	8 100 000	8 100 000	7 500 000
Vietnam	8 803 000	10 100 000	12 500 000	15 520 000	16 220 000
Yemen, Republic of	16 556 000	17 338 000	17 600 000	18 770 000	20 720 000
Australia	28 406 671	30 000 000	28 000 000	27 000 000	37 000 000
New Zealand	1 950 100	2 586 800	2 054 300	1 811 300	1 607 800
Papua New Guinea	5 000 000	3 600 000	3 800 000	4 100 000	3 300 000
<b>World Total</b>	<b>3 251 000 000</b>	<b>3 348 000 000</b>	<b>3 403 000 000</b>	<b>3 331 000 000</b>	<b>3 460 000 000</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	1996	1997	1998	1999	2000
Albania	23	18	16	13	11
Austria	1 492	1 428	1 568	1 741	1 805
Azerbaijan	6 305	5 960	5 590	5 997	5 643
Belarus	249	246	252	256	257
Bulgaria	19	13	*10	*10	*5
Croatia	1 786	1 717	1 570	1 567	1 768
Czech Republic	146	118	137	143	118
Denmark	6 254	7 694	7 348	7 741	7 978
France	2 901	2 586	2 183	1 940	1 883
Georgia	3	----	----	----	100
Germany	23 211	22 615	21 967	23 072	21 720
Greece	38	38	33	...	36
Hungary	4 757	4 513	3 958	3 562	3 349
Irish Republic	2 740	2 359	1 742	1 366	1 187
Italy	20 048	19 123	18 981	17 624	16 299
Netherlands	90 630	80 282	76 331	71 702	69 180
Norway	41 971	46 726	48 146	51 582	53 018
Poland	4 754	4 836	4 852	4 757	4 956
Romania	18 162	15 916	14 441	14 617	15 304
Russia	575 000	544 000	564 000	563 000	555 000
Slovakia	307	284	260	219	203
Slovenia	12 840	12 100	12 500	12 500	12 500
Spain	467	174	114	112	179
Turkey	204	199	202	...	493
Ukraine	18 408	18 131	17 967	18 092	17 847
United Kingdom	89 896	91 558	95 506	105 071	115 033
Yugoslavia, Federal Republic of	671	688	731	679	729
Algeria	62 130	71 800	76 600	85 200	89 300
Angola	600	600	600	600	600
Egypt	13 400	13 500	13 860	13 500	13 300
Equatorial Guinea	----	44	78	...	...
Gabon	100	100	100	100	100
Ivory Coast	547	879	*1 000	*800	...
Libya	6 420	6 570	6 360	6 000	6 100
Morocco	20	52	...	44	50
Nigeria	5 400	5 100	5 100	6 000	11 000
South Africa	...	*1 500	*1 500	*2 000	*2 000
Tunisia	300	300	300	300	2 000
Canada	182 211	184 181	188 984	195 733	201 752
Mexico	29 300	31 700	34 330	36 200	*35 000
Trinidad & Tobago	7 100	7 380	8 642	9 423	...
USA (b)	533 900	535 200	529 800	527 300	540 200
Argentina	28 473	30 319	32 832	37 616	41 217
Bolivia	3 329	3 016	3 106	2 612	3 597
Brazil	5 500	6 000	6 300	7 100	7 700
Chile	3 632	3 211	3 218	2 957	2 702
Colombia	4 700	5 900	6 300	5 200	5 900
Peru	984	1 067	1 417	*1 400	...
Venezuela	29 731	30 800	32 300	26 800	27 200
Abu Dhabi	23 300	25 300	26 200	27 200	29 000
Afghanistan	*2 300	*2 300	*2 200	...	...
Bahrain	7 929	8 070	8 552	8 778	8 976
Bangladesh (d)	7 520	7 390	7 955	*8 300	*10 300
Brunei	11 097	11 099	10 700	11 300	13 200
China	20 114	22 703	22 297	25 198	27 200
Dubai	1 900	1 900	1 600	1 600	1 600
India (c)	21 262	19 703	25 706	26 885	27 860
Indonesia	89 669	90 293	84 370	86 887	82 354
Iran	40 210	47 000	50 000	51 000	57 000
Iraq	3 500	4 300	6 500	7 600	6 900
Japan	2 230	2 279	2 301	2 280	2 453
Jordan	235	291	300	250	283
Kazakhstan	6 100	5 569	4 878	6 585	8 112
Kuwait (a)	9 300	9 250	9 260	8 700	9 600

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

Country	1996	1997	1998	1999	2000
Kyrgyzstan	26	24	18	25	32
Malaysia	35 166	40 582	38 474	40 851	44 200
Myanmar	1 625	1 781	*1 750	1 674	...
Oman	4 400	5 000	5 100	5 400	8 500
Pakistan (d)	18 878	19 761	19 814	21 095	*23 000
Qatar	13 700	17 400	19 580	24 000	28 500
Ras al Khaimah	40	40	40	40	40
Saudi Arabia (a)	41 340	45 800	46 820	46 200	47 000
Sharjah	8 600	9 000	9 200	9 200	9 200
Syria	4 400	4 400	4 000	3 900	3 900
Taiwan	871	849	879	856	747
Tajikistan	50	40	30	40	40
Thailand	13 274	16 168	17 598	19 195	20 194
Turkmenistan	35 180	17 500	14 000	22 800	47 000
Uzbekistan	49 000	51 200	54 790	55 600	56 400
Vietnam	830	700	1 100	1 100	1 600
Australia	29 799	29 876	30 361	30 755	31 165
New Zealand	5 089	5 424	4 767	5 559	5 870
Papua New Guinea	140	125	138	128	...
World Total	2 350 000	2 346 000	2 384 000	2 438 000	2 524 000

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) Dry gas

(c) Years ended 31 March following that stated

(d) Years ended 30 June of that stated

**Exports of Crude Petroleum**

tonnes

Country	1996	1997	1998	1999	2000
Austria	...	48 276	51 392	52 941	57 085
Azerbaijan	...	292 669	2 149 337	4 268 465	5 511 642
Belarus	300 000	400 000	381 500	300 000	350 600
Belgium-Luxembourg	71 488	55 597	3 423	56 242	359 206
Croatia	117 526	296 338	30 874	6 502	5 685
Czech Republic	84 000	90 000	103 504	109 319	110 672
Denmark	4 616 379	6 507 328	8 061 369	8 873 887	11 393 325
Estonia (a) (b)	*63 000	*70 000	*394 000	*465 000	*563 000
France	24 597	41 785	400 408	453 634	134 324
Georgia	70 352	137 810	61 528	52 205	79 571
Germany	1 089 862	1 008 553	156 975	168 289	313 476
Greece	894 507	700 026	740 109	1 216 076	695 163
Italy	317 706	321 595	208 758	265 456	167 922
Latvia (a) (b)	*2 582 000	*2 560 000	*2 165 000	...	...
Lithuania	122 963	201 316	264 790	227 079	311 983
Netherlands	693 411	229 487	14 164	11 620	17 545
Norway	136 799 832	136 909 684	131 818 902	128 179 516	139 954 502
Russia	122 336 100	127 271 000	137 234 000	124 644 350	132 488 847
Slovakia	15 000	24 000	23 000	...	14 668
Slovenia	127 834	163 870	82 082	----	----
Ukraine	----	5 139	87 910	1 479 484	...
United Kingdom	77 654 502	71 795 525	73 428 795	75 473 136	76 017 787
Algeria	33 934 000	33 734 000	34 297 945	36 504 727	...
Benin	*82 000	...	...	...	...
Cameroon	4 982 805	...	...	...	...
Congo	10 195 754	...	11 268 439	12 637 482	12 354 000
Egypt	6 684 826	6 147 800	2 791 380	2 819 200	...
Gabon	18 571 000	...	...	...	...
Libya	54 100 000	53 700 000	55 900 000	*53 200 000	...
Nigeria	88 800 000	89 800 000	92 100 000	93 700 000	...
Tunisia	3 147 701	2 795 499	2 920 270	3 276 844	...
Canada	60 373 811	64 915 842	67 517 536	61 450 668	72 703 029
Guatemala	530 434	893 216	1 218 743	991 100	1 116 994
Mexico	79 658 127	88 975 000	90 009 000	80 290 000	78 159 449
Trinidad & Tobago	2 807 397	2 835 482	2 436 048	3 186 000	2 483 262
USA	3 427 197	7 327 812	6 839 731	5 876 075	2 555 849
Argentina	17 229 682	17 632 260	17 501 194	14 192 646	14 359 337
Bolivia	218 032	222 708	338 698	253 961	181 752
Colombia	16 633 000	17 769 000	23 500 000	26 573 000	20 648 539
Ecuador	11 801 032	12 780 207	11 999 416	11 839 541	12 055 515
Peru	1 800 000	2 200 000	2 100 000	1 400 000	...
Suriname	190 000	160 000	180 000	270 000	166 000
Venezuela	103 503 000	115 700 000	117 500 000	144 321 848	...
Brunei	7 420 268	7 091 923	68 616 000	7 997 406	8 026 203
China	20 402 546	19 828 882	15 600 712	7 167 271	10 437 779
Indonesia	38 841 706	39 363 253	37 097 731	36 049 287	29 225 946
Iran	*130 600 000	*128 500 000	*124 700 000	*125 700 000	...
Iraq	*4 300 000	35 500 000	*76 300 000	*99 500 000	...
Israel (a)	...	...	*98 000	*95 000	...
Japan	----	188 453	132 283	----	16
Kazakhstan	14 502 982	16 381 784	20 429 000	20 606 434	...
Kuwait	61 600 000	57 299 847	60 134 435	47 722 869	...
Kyrgyzstan	21 100	...	...	...	...
Malaysia	17 494 100	15 872 000	18 013 000	17 724 800	...
Oman	40 498 000	41 661 000	41 100 000	42 125 000	44 590 000
Pakistan (c)	331 749	406 041	168 579	352 482	295 746
Qatar	17 004 283	22 600 000	27 900 000	28 300 000	...
Saudi Arabia	304 500 000	314 406 535	318 291 013	284 885 017	...
Singapore	63 180	15 360	934	----	20
Syria	17 443 170	16 758 000	16 672 750	...	...
Thailand	84 602	670 914	695 038	819 950	11 134 798
Turkmenistan (a)	...	*54 000	*132 000	*529 000	*175 000
United Arab Emirates	94 800 000	95 100 000	99 500 000	93 600 000	...

**Exports of Crude Petroleum**

tonnes

Country	1996	1997	1998	1999	2000
Vietnam	8 705 000	9 638 000	12 145 000	14 882 000	15 500 000
Yemen, Republic of	12 394 000	15 628 000	13 706 000	15 657 000	*17 000 000
Australia	9 237 000	11 664 000	12 238 000	10 122 296	...
New Zealand	1 312 227	1 082 982	1 635 922	1 219 763	932 552
Papua New Guinea	5 215 951	3 754 855	3 848 126	4 206 754	3 243 542

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**

tonnes

Country	1996	1997	1998	1999	2000
Austria	...	8 467 771	8 396 114	7 684 052	7 314 935
Azerbaijan	...	260 879	90 561	...	...
Belarus	10 644 670	10 460 800	10 054 600	9 899 905	11 924 686
Belgium-Luxembourg	29 307 612	32 327 044	33 613 385	31 741 912	32 114 347
Bulgaria	6 893 796	5 832 748	...	...	...
Croatia	4 098 141	4 008 271	3 446 481	4 608 832	3 835 167
Cyprus	748 947	1 039 834	1 128 541	1 184 607	1 154 746
Czech Republic	7 671 000	7 023 306	6 947 928	5 997 039	5 819 443
Denmark	5 174 129	4 768 350	4 605 084	4 752 381	5 664 799
Finland	9 498 391	9 476 213	11 426 549	11 180 897	11 616 731
France	83 237 071	86 964 817	91 356 469	81 273 805	83 394 974
Germany	103 541 602	100 737 953	108 124 652	103 753 381	105 292 890
Greece	17 850 000	10 753 000	16 532 000	9 269 870	18 301 453
Hungary	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	2 128 504
Italy	74 542 000	78 030 889	85 432 822	79 784 467	83 272 202
Lithuania	3 672 207	5 033 453	6 339 260	4 527 321	4 690 243
Macedonia	656 235	378 118	787 653	(c) *1 216 000	...
Netherlands	61 489 000	61 200 000	62 244 603	59 563 859	55 718 885
Norway	1 332 752	1 559 657	1 921 796	2 186 298	915 314
Poland	13 350 838	14 713 000	15 367 000	15 272 026	18 039 804
Portugal	11 131 892	12 701 350	13 372 594	13 084 461	11 422 174
Romania	7 155 735	6 244 782	5 973 527	4 294 300	4 641 598
Russia	8 983 372	7 905 006	7 884 624	6 015 437	5 891 728
Slovakia	5 443 068	5 335 000	5 446 000	5 351 444	5 329 492
Slovenia	2 673 170	2 715 086	2 331 808	271 555	128 439
Spain	51 955 000	53 471 773	59 116 315	52 380 984	57 954 412
Sweden	21 342 000	21 005 871	20 264 108	18 787 590	20 723 480
Switzerland	5 290 311	4 832 714	5 015 516	5 034 861	4 578 217
Turkey	22 767 000	...	23 791 392	...	...
Ukraine	...	8 977 000	9 884 000	...	...
United Kingdom	41 265 377	41 382 610	36 135 627	29 923 937	37 007 490
Yugoslavia, Federal Republic of	1 321 098	...	...	518 512	157 823
Algeria	...	...	...	330 205	...
Cameroon	895 366	...	1 456 063	...	...
Egypt	...	...	5 816 132	4 851 002	...
Ethiopia (d)	417 100	84 458	16 280	24	1
Ghana	...	...	4 318 727	9 325 081	...
Ivory Coast	3 025 748	...	...	...	...
Kenya	1 412 947	1 833 744	2 157 695	810 782	1 251 637
Madagascar	545 007	447 449	374 330	389 815	460 755
Morocco	5 743 316	6 014 215	6 004 075	7 183 023	...
Senegal	...	...	893 394	853 799	1 449 449
Sierra Leone	98 898	69 670	...	...	...
South Africa	6 807 470	3 864 487	...	...	...
Tanzania	272 116	...	375 320	429 489	...
Tunisia	757 987	935 168	821 651	1 092 637	...
Barbados	...	303 100	...	...	...
Canada	39 442 330	47 298 401	48 264 579	41 840 219	45 603 695
Costa Rica	675 988	636 191	...	...	...
Cuba	5 354 000	5 900 000	6 100 000	...	...
Dominican Republic	2 324 000	...	...	...	...
El Salvador	720 862	789 345	877 392	977 055	995 795
Guatemala	738 980	778 628	779 972	748 252	726 348
Jamaica	649 083	745 802	755 738	466 858	...
Martinique	798 713	717 032	612 249	513 027	261 105
Netherlands Antilles	*10 000 000	*10 000 000	12 572 075	9 946 620	...
Nicaragua	653 883	773 945	913 718	863 426	980 003
Panama	2 040 500	2 091 063	2 314 953	2 525 709	2 255 000
Trinidad & Tobago	2 923 174	2 452 317	3 914 587	4 947 000	5 309 036
USA	394 606 231	418 577 642	442 208 021	440 214 413	463 553 662
Argentina	780 149	1 166 567	1 269 436	948 079	1 498 715
Brazil	24 986 296	24 341 816	21 970 247	18 207 522	15 123 678
Chile	8 437 850	8 554 579	9 516 634	9 835 320	...
Paraguay	149 128	187 068	218 921	88 377	37 613

**Imports of Crude Petroleum**

tonnes

Country	1996	1997	1998	1999	2000
Peru	2 909 915	3 977 618	4 767 658	3 097 123	...
Uruguay	1 505 118	1 503 635	1 090 000	1 705 449	1 761 659
Bangladesh (a)	1 241 197	1 505 082	...	...	...
China	22 616 949	35 469 702	27 322 633	36 613 687	70 134 276
India (b)	33 710 000	34 399 000	68 904 365	58 384 523	...
Indonesia	9 424 156	9 508 614	10 507 985	11 497 497	11 473 486
Israel	10 257 000	...	6 771 000	...	...
Japan	219 942 965	226 878 133	214 850 343	212 049 133	211 981 493
Jordan	3 272 680	3 440 862	3 555 855	3 497 279	3 763 383
Kazakhstan	...	1 725 962	2 073 726	714 503	...
Korea, Dem. P.R. of (c)	*936 000	*506 000	*504 000	*584 000	*389 000
Korea, Republic of	81 333 520	116 681 048	110 606 443	118 024 367	120 651 683
Kyrgyzstan	12 102	70 150	62 390	64 766	20 672
Malaysia	1 398 010	1 255 925	1 928 586	...	...
Pakistan (a)	3 992 005	3 844 271	4 048 453	4 476 093	4 453 104
Philippines	17 065 409	17 446 853	15 856 000	16 157 651	...
Singapore	55 473 463	55 507 008	52 014 065	44 434 723	41 831 652
Sri Lanka	1 870 000	1 600 174	2 179 278	1 049 120	...
Taiwan	33 396 747	34 477 160	34 983 693	36 521 001	38 909 906
Thailand	29 209 836	31 190 196	23 090 320	28 855 806	27 946 040
Australia	19 333 000	20 427 000	22 926 000	24 220 854	...
New Zealand	3 576 302	3 452 007	4 494 640	4 269 973	4 555 000

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	1996	1997	1998	1999	2000
Finland	651 463	689 053	715 705	734 068	751 291
Russia	8 515 000	9 540 000	9 480 000	10 560 000	10 540 000
Algeria	1 051 000	1 062 600	1 155 000	1 095 000	877 000
Egypt	808 200	1 067 000	1 076 100	1 017 900	1 095 900
Morocco	20 792 000	23 084 000	22 644 000	22 163 000	21 459 000
Senegal					
Phosphate rock	1 376 800	1 584 405	1 519 210	1 797 152	1 782 500
Aluminium phosphate (a)	77 508	8 680	21 230	64 356	23 710
South Africa	2 655 200	2 732 000	2 739 000	2 956 806	2 777 700
Tanzania	28 000	3 000	2 000	*2 000	*2 000
Togo	2 730 700	2 631 400	2 253 400	1 714 500	1 370 100
Tunisia	7 150 900	7 222 100	7 950 800	8 006 300	8 301 200
Zimbabwe	122 631	93 849	91 433	84 763	77 662
Mexico	682 079	713 662	756 349	926 987	1 052 464
USA	45 400 000	45 900 000	44 200 000	40 600 000	38 600 000
Brazil (d)	3 830 301	4 257 391	4 437 818	4 343 638	4 725 106
Chile	17 356	12 605	31 405	20 408	*20 000
Colombia	40 484	44 517	*73 000	*75 000	*75 000
Peru	65 436	52 174	46 821	9 038	5 581
Venezuela	147 850	291 000	322 000	366 000	*375 000
China	31 040 200	25 093 700	19 664 100	29 117 700	30 000 000
Christmas Island (b) (c) (e)	542 800	567 860	587 660	699 828	*600 000
India (f)	1 349 983	1 623 190	1 276 269	1 203 282	1 264 035
Iraq	*1 000 000	*1 000 000	*1 000 000	*1 000 000	*1 000 000
Israel	2 616 000	2 708 000	2 940 000	3 836 000	3 914 000
Jordan	5 355 100	5 895 581	5 923 000	6 013 610	5 458 260
Kazakhstan	*1 170 000	720 000	812 000	650 000	610 000
Korea, Dem. P.R. of	*70 000	*70 000	*70 000	*70 000	*140 000
Pakistan (e)	...	11 045	...	3 456	5 208
Sri Lanka	34 044	29 635	37 598	30 258	34 443
Syria	2 189 000	2 392 000	2 496 000	2 084 000	2 166 000
Thailand	3 528	3 818	3 029	3 880	3 260
Uzbekistan	----	----	105 500	139 200	169 800
Vietnam	613 000	581 000	576 000	710 000	791 000
Australia	585	419	813	1 250	805 000
Nauru (b) (e)	551 320	541 050	...	...	...
<b>World Total</b>	<b>143 000 000</b>	<b>142 000 000</b>	<b>136 000 000</b>	<b>143 000 000</b>	<b>141 000 000</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**

tonnes

Country	1996	1997	1998	1999	2000
Austria	...	196	3 086	1 452	1 397
Belgium-Luxembourg	8 251	12 675	40 624	35 678	39 501
France	7 001	1 149	4 538	8 414	1 523
Germany	217	81	1 646	890	678
Italy	1 644	30 205	2 391	1 411	820
Netherlands	128 266	99 188	174 733	71 146	120 824
Poland	45 000	46 000	19 000	20 607	14 989
Russia	3 571 910	4 258 900	4 329 320	4 470 414	3 799 360
Spain	49	1 431	78 253	189	22
Switzerland	9 704	9	4 289	----	----
United Kingdom	2 441	425	321	261	1 296
Algeria	992 800	1 103 000	1 151 000	1 062 900	879 000
Egypt	64 800	180 700	222 000	206 000	315 800
Morocco	10 139 919	11 669 340	11 730 653	11 382 500	10 488 000
Senegal	725 096	616 700	448 753	523 986	513 903
South Africa	953 000	902 600	830 000	1 031 199	756 200
Togo	2 685 500	2 686 600	2 242 600	1 617 000	1 219 900
Tunisia	1 205 749	1 247 043	937 165	978 676	...
USA	1 570 000	335 000	378 000	272 000	299 000
Peru	14 820	69 471	23 032	15 402	...
China	1 368 667	1 660 379	2 150 227	2 503 019	3 448 985
Christmas Island (a) (b)	542 800	567 860	587 660	699 828	...
Indonesia	10 167	1 600	175	2 280	9 062
Israel	2 007 900	1 472 500	1 546 000	1 546 000	1 165 022
Jordan	4 307 726	4 367 215	4 563 421	3 632 679	3 196 398
Kazakhstan	195	167 044	667 060	430 000	540 000
Malaysia	2 000	5 800	900	...	...
Syria	1 361 405	1 658 705	1 838 942	1 627 000	1 595 000
Australia	13 086	8 348	5 199	7 600	7 790
Nauru	551 320	541 050	*535 000	*750 000	*550 000

Note(s):-

(a) Including phosphate dust

(b) Years ended 30 June of that stated

**Imports of Phosphate Rock**

tonnes

Country	1996	1997	1998	1999	2000
Albania	13 300	10 700	...	35	39
Austria	207 200	238 676	295 555	299 372	...
Belarus	*300 000	371 600	373 677	331 601	256 192
Belgium-Luxembourg	1 626 789	1 866 679	1 817 279	1 734 417	1 304 103
Bulgaria	437 052	521 792	316 800	204 700	341 800
Croatia	239 512	279 807	226 811	173 853	233 427
Czech Republic	74 300	78 835	58 305	47 753	45 473
Denmark	83 900	93 200	72 800	68 361	76 537
Finland	112 500	59 444	101 365	85 396	72 966
France	1 706 019	1 557 341	1 471 321	1 356 181	1 072 594
Germany	257 521	284 812	252 950	142 779	140 251
Greece	626 328	525 614	437 066	361 710	264 934
Hungary	36 393	21 704	15 481	8 043	23 144
Irish Republic	12 191	7 214	11 115	1 828	2 227
Italy	231 734	142 211	167 485	197 727	198 434
Lithuania	468 682	539 771	666 384	852 808	836 797
Macedonia	47 452	57 983	84 735	44 100	8 100
Netherlands	1 998 529	1 944 971	1 922 476	1 711 205	1 178 614
Norway	680 521	667 801	628 205	671 668	615 940
Poland	1 790 000	1 752 000	1 684 000	1 528 188	1 472 050
Portugal	132 483	137 590	183 954	156 689	141 161
Romania	683 211	480 297	272 912	340 340	344 152
Russia	37 833	84 365	59 098	106 025	60 332
Spain	2 107 936	2 207 570	2 105 369	2 210 185	1 862 774
Sweden	61 024	55 138	74 048	73 942	67 416
Turkey	604 869	1 117 910	1 041 910	873 875	667 998
Ukraine	823 768	879 867	704 576	755 133	...
United Kingdom	27 455	38 103	23 410	19 831	13 848
Yugoslavia, Federal Republic of	165 800	200 312	164 488	72 259	110 093
Egypt	29 100	74 000	30 084	33	...
Ivory Coast	3 133	1 600	2 100	1 500	...
Mauritius					
Guano	1 286	2 001	1 000	1 800	20
Nigeria	...	14 004	451	1 000	...
South Africa	495 625	556 506	424 235	280 807	330 568
Canada	1 006 913	1 083 389	1 161 024	612 478	145 454
Cuba	*5 000	*5 000	*5 000	*6 000	...
Mexico	1 757 003	1 729 588	2 138 524	1 862 153	2 504 886
USA	575 588	904 221	807 333	744 739	672 982
Brazil	653 787	675 561	780 896	619 022	...
Chile	34 319	19 791	13 459	5 442	1 292
Colombia	50 478	80 225	88 276	12 200	...
Uruguay	30 850	17 955	56 587	40 348	45 700
Venezuela	44 025	71 516	72 755	163 320	111 070
Bangladesh (b)	84 563	138 110	188 900	200 000	...
India (c)	2 038 253	2 667 811	3 099 453	3 137 653	...
Indonesia	955 842	680 023	787 528	731 329	391 102
Iran (a)	387 000	346 253	393 494	409 550	...
Israel	...	...	5 500	12 800	51 500
Japan	1 178 028	1 030 763	976 372	932 946	899 269
Kazakhstan	...	73 900	7 800	27 710	...
Korea, Dem. P.R. of	5 500	9 300	...	...	...
Korea, Republic of	1 630 534	1 640 561	1 517 860	1 481 853	1 420 228
Lebanon	375 000	261 843	406 731	377 221	768 444
Malaysia					
Phosphate rock	586 900	602 900	560 200	728 900	635 900
Guano	5 118	5 122	1 645	2 368	...
Pakistan (b)	240 487	154 000	143 950	159 346	...
Philippines	707 262	331 258	557 645	547 526	...
Saudi Arabia	6 077	4 030	6 330	1 007	2 465
Sri Lanka	1 122	1 380	6 653	6 521	...
Taiwan	313 517	265 234	235 394	224 137	178 245
Thailand	16 000	120 400	250 347	194 752	216 268
Uzbekistan	...	530 000	400 000	650 000	340 000

## Phosphates

**Imports of Phosphate Rock**

tonnes

Country	1996	1997	1998	1999	2000
Australia	828 223	999 006	1 100 805	673 812	764 385
New Zealand	720 381	845 581	836 591	917 227	1 024 403

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	1996	1997	1998	1999	2000
Russia					
Platinum (a)	37 300	27 300	37 300	14 000	35 800
Palladium (a)	171 100	160 800	168 000	171 100	161 700
Other platinum metals	*3 500	*3 500	*3 500	*3 700	*4 100
South Africa					
Platinum	(b) 188 636	115 861	116 483	130 745	114 459
Palladium	...	55 675	56 608	63 600	55 818
Other platinum metals	...	24 930	27 052	*30 300	36 493
Zimbabwe					
Platinum	7	345	2 730	390	504
Palladium	*12	245	1 855	278	360
Other platinum metals	----	27	189	30	40
Canada					
Platinum	5 400	4 600	5 500	5 400	6 000
Palladium	8 500	7 200	8 600	8 500	9 400
Other platinum metals	700	600	700	700	800
USA					
Platinum	*1 840	*2 610	*3 240	*2 920	*3 110
Palladium	*6 100	*8 430	*10 580	*9 800	*10 260
Colombia	672	406	437	488	*500
Australia					
Platinum	119	315	155	90	171
Palladium	559	429	827	816	785
World Total	424 000	413 000	444 000	443 000	440 000

## 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  
 (b) Platinum group metals; all forms

**Exports of Platinum Group Metals**

kilograms

Country	1996	1997	1998	1999	2000
Austria					
Platinum & platinum metals	1 741	600	700	1 200	100
Waste & scrap	1 300	400	600	600	100
Azerbaijan					
Waste & scrap (a)	...	*24 300	*50	...	...
Belarus					
Waste & scrap (a)	...	*50	*3 900	*1 400	*56 700
Belgium-Luxembourg					
Platinum	9 612	12 087	10 200	4 500	2 800
Platinum metals	41 061	34 533	22 700	18 000	10 000
Waste & scrap	£1 995 000	£1 502 000	£2 655 000	£7 859 000	£16 486 000
Bulgaria					
Waste & scrap (a)	*600	*400	*25 900	*58 400	*34 400
Croatia					
Platinum & platinum metals	£638 000	£499 000	£74 000	£108 000	£78 000
Czech Republic					
Waste & scrap (a)	*500	*300	*11 500	*12 100	*34 000
Denmark					
Platinum & platinum metals	142	134	330	38	295
Estonia					
Waste & scrap	(a) *14 300	129 705	154 786	133 252	176 743
France					
Platinum	8 888	5 900	5 500	5 600	5 800
Platinum metals	11 180	11 180	13 900	9 000	14 400
Waste & scrap	2 816	15 900	12 300	18 806	76 100
Georgia					
Waste & scrap	(a) *100	(a) *900	(a) *100	(a) *400	54 975
Germany					
Platinum	17 347	20 300	21 300	22 000	23 500
Palladium	16 105	17 800	21 000	21 900	19 900
Other platinum metals	3 593	1 600	2 800	3 200	4 300
Waste & scrap	31 588	329 400	620 300	671 500	575 900
Irish Republic					
Platinum & platinum metals	271	1 643	2 719	303	234
Waste & scrap	...	688	2 828	4 572	3 559
Italy					
Platinum	...	1 113	739	3 604	3 443
Platinum metals	...	2 522	3 107	3 863	6 159
Waste & scrap	...	237	671	932	2 167
Latvia					
Waste & scrap	470	270	-----	582	550
Lithuania					
Waste & scrap	...	91	45	7 164	6 750
Macedonia					
Waste & scrap	33	15	9 085	...	...
Netherlands					
Platinum	(f) £23 941 000	£25 168 000	£20 204 000	£21 255 000	£25 074 000
Platinum metals	...	£1 224 000	£1 692 000	£2 159 000	£2 069 000
Waste & scrap	...	1 243	6 200	8 600	46 500
Norway					
Platinum & platinum metals	4 823	5 943	6 049	6 853	5 668
Poland					
Platinum & platinum metals	8	45	139	42	795
Russia					
Platinum (d)	37 300	27 300	37 300	14 000	35 800
Palladium (d)	171 100	160 800	168 000	171 000	161 700
Waste & scrap (a)	*92 000	*335 600	*452 000	*17 900	*25 900
Slovenia					
Platinum & platinum metals	...	...	996	382	201
Spain					
Platinum & platinum metals	...	1 447	5 943	22	4 617
Waste & scrap	737	549	184	471	216
Sweden					
Platinum & platinum metals	£644 000	£700 000	£1 300 000	£1 939 000	£897 000

## Exports of Platinum Group Metals

kilograms

Country	1996	1997	1998	1999	2000
Switzerland					
Platinum	44 663	63 863	73 859	66 473	61 609
Palladium	20 537	81 953	67 180	108 573	100 220
Other platinum metals	430	533	438	364	257
Waste & scrap	5 408	32 302	19 367	17 305	57 207
Ukraine					
Waste & scrap (a)	*10 300	*37 400	*35 200	*66 500	*117 400
United Kingdom					
Platinum	29 155	66 576	22 838	24 122	31 667
Palladium	25 248	21 113	59 018	13 388	17 023
Other platinum metals	7 018	16 170	17 057	5 356	7 964
Waste & scrap	58 505	203 889	953 343	924 221	1 344 876
South Africa					
Platinum	(f) 183 962	(f) 187 167	(f) 193 502	(f) 198 713	113 861
Palladium	...	...	...	...	47 832
Other platinum metals	...	...	...	...	37 251
Waste & scrap (a)	*118 900	*105 700	*174 400	*112 500	...
Canada					
Ores & concentrates (b)	8 686	8 934	8 884	6 957	12 081
Platinum metals	5 050	6 927	7 112	6 291	5 757
USA					
Ores & concentrates (b)	486	710	748	240	476
Platinum	20 648	31 511	27 367	27 710	30 847
of which, re-exports	7 937	8 510	13 077	8 365	5 884
Palladium	33 605	61 127	70 841	68 727	76 345
of which, re-exports	6 906	18 632	34 600	23 901	23 665
Other platinum metals	407	1 403	3 885	4 548	5 439
of which, re-exports	96	547	2 167	3 584	3 157
Waste & scrap	8 640	13 251	19 744	42 803	21 503
China					
Platinum & platinum metals	1 775	3 363	2 911	2 443	6 473
Hong Kong					
Platinum & platinum metals (c)	1 554	1 946	2 733	3 594	2 740
Waste & scrap (c)	838	1 203	979	1 942	1 484
India					
Platinum & platinum metals (e)	449	3 666	2 910	12 079	...
Indonesia					
Platinum & platinum metals	30	65	110	284	11 279
Israel					
Platinum & platinum metals	£97 000	£150 000	£73 000	£117 000	£203 000
Waste & scrap (a)	*3 300	*10 300	*7 500	*1 700	*45 200
Japan					
Platinum	6 808	9 002	8 492	8 005	8 905
Platinum metals	28 043	20 472	17 967	16 355	20 909
Waste & scrap	4 382	13 822	41 546	4 862	77 168
Kazakhstan					
Waste & scrap (a)	*100	...	*42 800	*8 100	*40 100
Korea, Republic of					
Platinum & platinum metals	4 050	13 805	51 746	2 399	1 734
Waste & scrap	----	8 597	4 891	95 683	139 669
Singapore					
Platinum & platinum metals (c)	1 495	9 130	2 069	800	344
Waste & scrap	...	...	960	1 894	1 666
Taiwan					
Platinum & platinum metals	276	307	167	123	9 521
Waste & scrap	1 500	18 619	1 323	205	0
Uzbekistan					
Waste & scrap (a)	...	*31 500	*400	*1 400	*600

**Exports of Platinum Group Metals**

kilograms

Country	1996	1997	1998	1999	2000
Australia					
Platinum & platinum metals	212	1 165	1 616	...	1 794
Waste & scrap	£396 000	£3 322 000	£602 157	£956 000	£680 000
New Zealand					
Platinum & platinum metals	2 000	12 000	...	17 000	4 935

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) Years ended 31 March following that stated
- (f) Platinum and platinum metals

**Imports of Platinum Group Metals**

kilograms

Country	1996	1997	1998	1999	2000
Austria					
Platinum & platinum metals	5 506	7 100	4 000	4 400	1 600
Belarus					
Platinum & platinum metals (d)	*200	*50	*100	*100	...
Belgium-Luxembourg					
Platinum	4 587	4 900	8 400	100	...
Platinum metals	24 094	108 900	11 300	...	...
Waste & scrap	£1 003 000	£9 466 000	£19 060 000	...	£54 153 000
Croatia					
Platinum & platinum metals	...	511	...	415	649
Cyprus					
Platinum & platinum metals	4 492	1 447	316	513	415
Czech Republic					
Platinum & platinum metals (d)	*1 200	*400	*100	*100	...
Denmark					
Platinum & platinum metals	559	1 612	1 325	232	740
Waste & scrap	12	13	1 194	755	4
Estonia					
Waste & scrap	...	...	13 219	...	5 040
Finland					
Platinum & platinum metals	451	99	175	110	425
France					
Platinum	13 868	16 900	12 700	19 500	11 400
Platinum metals	12 535	19 400	26 400	21 000	27 300
Waste & scrap	19 706	2 100	7 500	4 700	28 800
Germany					
Platinum	22 775	26 900	21 700	29 100	38 900
Palladium	24 790	31 700	29 400	22 400	34 400
Other platinum metals	6 791	4 300	4 300	4 200	5 100
Waste & scrap	1 347 887	2 238 400	2 687 900	3 185 800	3 957 300
Greece					
Platinum & platinum metals	...	...	...	709	372
Hungary					
Platinum & platinum metals	104	123	50	87	88
Irish Republic					
Platinum & platinum metals	27 729	83 046	46 402	3 192	...
Italy					
Platinum	...	5 772	7 158	7 594	10 925
Platinum metals	...	26 070	32 112	31 738	34 483
Waste & scrap	530	980	792	938	255
Netherlands					
Platinum	(b) £17 602 000	£28 298 000	£9 954 000	£9 329 000	£13 510 000
Platinum metals	...	£11 828 000	£1 605 000	£14 225 000	£12 436 000
Waste & scrap	574	657	400	300	300
Norway					
Platinum & platinum metals	622	633	863	1 248	1 138
Waste & scrap	1 489	1 651	1 376	1 073	1 327
Poland					
Platinum & platinum metals	2 086	85	3 497	206	1 550
Waste & scrap	...	...	...	17 750	2 609
Portugal					
Waste & scrap	...	130	6	4 301	1 804
Slovenia					
Platinum & platinum metals	...	...	140	646	656
Spain					
Platinum & platinum metals	...	15 629	15 986	2 902	4 186
Waste & scrap	130	104	62	250	2 742
Sweden					
Platinum & platinum metals	£6 864 000	£5 094 000	£7 553 000	£5 721 000	£5 196 000
Waste & scrap	...	...	...	7 000	6 000
Switzerland					
Platinum	27 977	56 369	61 421	32 678	59 331
Palladium	38 047	65 435	78 486	93 200	87 714
Other platinum metals	545	429	384	285	521
Waste & scrap	2 815	5 957	5 628	9 801	34 405
Turkey					
Platinum & platinum metals	17 257	399	582	72	259
Ukraine					
Platinum & platinum metals (d)	*1 000	*600	*600	*500	...

**Imports of Platinum Group Metals**

kilograms

Country	1996	1997	1998	1999	2000
United Kingdom					
Platinum	16 432	15 809	17 407	24 785	35 989
Palladium	40 909	25 190	27 272	21 775	34 045
Other platinum metals	4 808	6 967	8 829	5 722	9 751
Waste & scrap	651 881	705 721	384 379	432 493	593 678
South Africa					
Platinum & platinum metals	...	6 735	27 683	13 895	...
Waste & scrap	2 877 877	2 720 501	2 762 116	1 014 431	9 321
Canada					
Platinum & platinum metals (c)	12 196	12 670	10 357	8 856	...
USA					
Platinum	76 097	76 300	97 013	106 288	77 211
Palladium	145 982	148 377	174 615	197 001	172 796
Rhodium	9 602	14 643	13 281	15 535	13 137
Other platinum metals	17 750	13 492	11 338	13 984	23 611
Waste & scrap	5 065	5 382	5 419	...	7 654
Brazil					
Platinum	902	2 168	2 136	2 717	6 645
Palladium	2 259	3 636	2 286	3 446	3 451
Other platinum metals	389	715	334	629	854
Venezuela					
Platinum & platinum metals	390	...	...	...	...
China					
Platinum & platinum metals	3 455	4 117	3 720	6 476	7 041
Dubai					
Platinum & platinum metals	129	37	749	...	...
Hong Kong					
Platinum & platinum metals	18 379	20 650	29 389	42 763	43 200
Waste & scrap	466	584	535	893	1 036
India					
Platinum & platinum metals (a)	436	1 105	1 693	2 607	...
Indonesia					
Platinum & platinum metals	...	...	1 498	257	426
Israel					
Platinum & platinum metals	£800 000	£1 697 000	£1 329 000	£1 447 000	£2 933 000
Japan					
Platinum	72 806	66 187	72 323	69 295	56 059
Palladium	77 735	103 376	80 976	87 885	87 189
Rhodium	1 739	2 129	2 431	3 611	6 118
Other platinum metals	6 253	6 774	7 314	7 321	8 174
Waste & scrap	25 152	256 613	538 538	390 992	480 021
Korea, Republic of					
Platinum & platinum metals	51 890	20 824	8 939	14 125	17 234
Waste & scrap	1	...	22	24 234	740
Malaysia					
Platinum & platinum metals	133 096	11 491	5 897	...	...
Singapore					
Platinum & platinum metals	11 044	16 932	6 343	10 251	21 114
Taiwan					
Platinum & platinum metals	11 672	10 171	4 172	4 335	4 608
Thailand					
Platinum & platinum metals	4 891	16 430	...	10 068	16 008
Australia					
Platinum & platinum metals	2 235	5 507	8 658	...	2 489
Waste & scrap	£33 000	£1 000	£36 000	£81 000	...
New Zealand					
Platinum & platinum metals	140 000	155 000	133 000	147 000	...

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	1996	1997	1998	1999	2000
Belarus	...	4 202 000	4 481 000	4 553 000	3 786 000
France					
Potassic salts	751 000	665 300	417 100	311 300	321 000
Germany					
Potassic salts	3 331 785	3 443 600	3 580 347	3 543 360	3 407 467
Russia	2 685 000	3 596 000	3 461 000	4 312 000	3 079 000
Spain					
Chloride	680 472	638 835	494 166	549 000	522 049
Ukraine	55 200	52 200	33 600	11 800	*10 000
United Kingdom					
Chloride	618 000	564 500	608 400	494 700	600 800
Canada					
Chloride	7 992 034	8 989 000	9 201 000	8 304 000	9 409 000
USA					
Potassic salts	1 390 000	1 400 000	1 300 000	1 200 000	1 300 000
Brazil					
Chloride	235 000	271 000	316 000	337 000	340 000
Chile					
Chloride	*212 700	*245 000	*285 000	*345 000	*350 000
Nitrate	*43 000	*45 000	*47 000	*49 000	*53 000
China					
Israel					
Chloride	218 200	286 000	332 900	300 000	300 000
Jordan	1 500 000	1 488 000	1 668 000	1 701 600	1 747 800
World Total	25 000 000	26 700 000	27 100 000	27 100 000	26 400 000

**Exports of Potash**

tonnes

Country	1996	1997	1998	1999	2000
Belarus					
Chloride (a)	2 244 737	2 878 300	2 911 700	3 022 700	2 840 000
Belgium-Luxembourg					
Fertiliser salts	9 381	4 020	4 989	3 923	7 299
Sulphate (b)	*282 000	*349 000	*335 000	*297 000	...
Chloride	164 274	191 480	177 146	138 232	183 220
Other potassic fertilisers	6 389	7 428	6 503	4 909	4 537
Finland					
Sulphate (b)	*46 000	*17 500	*47 400	*66 300	...
France					
Sulphate	4 624	1 806	1 962	729	576
Chloride	283 693	261 541	177 019	138 839	97 419
Other potassic fertilisers	387	1 583	1 153	18 196	44 925
Germany					
Fertiliser salts (a) (d)	2 648 218	2 873 050	2 916 848	2 898 276	2 856 180
Hungary					
Potassic fertilisers	13 154	14 417	11 832	2 073	2 776
Italy					
Potassic fertilisers	934	9 382	38 095	2 060	1 965
Latvia					
Chloride (b) (c)	*144 000	*149 000	*125 000	...	...
Lithuania					
Potassic fertilisers	16 175	15 855	35 296	10 993	9 386
Netherlands					
Potassic fertilisers	92 100	94 800	105 000	74 000	43 552
Poland					
Potassic fertilisers	3 800	6 000	1 000	1 135	270
Russia					
Fertiliser salts	17 000	1 000	5 156	5 622	...
Sulphate (b)	*21 000	*26 000	*58 000	*77 000	*77 000
Chloride	3 590 036	4 909 164	5 031 735	5 496 356	...
Other potassic fertilisers (b)	*236 000	*192 000	*278 000	*213 000	...
Spain					
Sulphate	72 249	63 136	74 346	54 473	62 178
Chloride	643 490	667 967	427 674	464 464	542 664
Sweden					
Sulphate	137 876	110 894	92 095	78 326	78 362
Ukraine					
Chloride (b)	*48 000	*179 000	*201 000	*225 200	...
Other potassic fertilisers (b)	*31 200	*4 500	*35 000	*8 500	*28 100
United Kingdom					
Chloride	*540 000	*540 000	570 681	*420 000	...
Other potassic fertilisers	2 505	4 164	1 200	1 112	1 143
Canada					
Fertiliser salts	13 535	32 516	8 463	8 451	4 205
Chloride	12 922 578	14 545 380	14 252 452	14 322 978	15 109 200
Other potassic fertilisers	14 737	20 260	16 803	30 207	26 840
USA					
Sulphate	694 000	692 000	746 000	600 000	608 000
Chloride	393 000	365 000	364 000	462 000	296 000
Chile					
Fertiliser salts	147 829	164 257	169 181	...	...
Sulphate	8	-----	32 221	97 011	153 323
Chloride	9 810	72 684	112 259	202 830	177 610
China					
Fertiliser salts	132 440	-----	10	...	19
Sulphate	278	10 755	21 473	1 397	5 709
Chloride	525 701	587 010	452 094	860 051	590 258
Israel					
Chloride (a)	1 033 200	1 471 800	1 450 200	1 341 600	1 513 200
Other potassic fertilisers (b)	*48 300	*91 800	*128 400	*10 900	*7 000
Jordan					
Fertiliser salts	1 753 702	1 419 101	1 486 194	1 664 886	1 881 049
Chloride	7 870	15 206	8 781	6 964	21 443

**Exports of Potash**

tonnes

Country	1996	1997	1998	1999	2000
Korea, Republic of					
Sulphate	105 363	92 878	53 283	25 835	26 742
Singapore					
Chloride (c)	29 438	35 282	37 193	144 298	...
Other potassic fertilisers (c)	5 992	6 793	3 571	3 707	...
Taiwan					
Sulphate	86 700	104 133	63 939	61 112	74 548

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

**Imports of Potash**

tonnes

Country	1996	1997	1998	1999	2000
Austria					
Fertiliser salts (a)	2 049	5 098	8 781	5 281	...
Sulphate (a)	5 688	4 453	5 591	6 118	...
Chloride (a)	141 533	57 371	60 691	64 807	...
Other potassic fertilisers (a)	726	1 215	1 508	1 418	...
Belgium-Luxembourg					
Fertiliser salts	23 051	28 948	33 135	29 987	33 302
Sulphate	134 136	154 895	111 311	138 679	179 570
Chloride	1 153 987	1 288 361	1 087 291	1 122 857	1 105 179
Other potassic fertilisers	23 511	19 777	17 384	17 478	20 398
Bulgaria					
Potassic fertilisers	35 600	54 700	*55 000	*55 000	...
Croatia					
Chloride	163 127	182 206	136 730	103 534	168 656
Czech Republic					
Potassic fertilisers	109 600	106 364	93 279	78 380	98 553
Denmark					
Sulphate	7 190	30 816	22 042	15 642	15 981
Chloride	125 870	154 139	152 495	189 877	160 991
Other potassic fertilisers	14 967	9 881	7 062	15 330	11 746
Estonia					
Potassic fertilisers	...	2 852	2 857	3 500	16 660
Finland					
Chloride (a)	101 400	97 200	101 200	91 300	149 400
France					
Fertiliser salts	40 346	12 715	1 045	1 622	1 916
Sulphate	101 484	101 910	90 079	93 584	95 023
Chloride	1 485 627	1 686 159	2 028 433	1 778 253	1 682 073
Other potassic fertilisers	34 777	33 015	30 028	27 100	25 318
Germany					
Chloride (a)	64 319	67 527	66 333	53 632	47 925
Other potassic fertilisers (a)	2 145	1 617	2 237	1 872	2 386
Greece					
Sulphate	144 232	164 451	102 220	82 587	109 584
Chloride	27 312	12 472	42 680	22 835	23 925
Other potassic fertilisers	7 916	8 400	10 986	11 075	...
Hungary					
Potassic fertilisers	112 821	116 522	96 263	70 417	108 643
Iceland					
Sulphate	21	701	6 877	38	7
Chloride	7 881	2 707	6 987	7 267	24
Irish Republic					
Chloride	311 191	184 488	186 347	105 305	76 443
Other potassic fertilisers	1 911	3 506	3 406	1 336	1 485
Italy					
Sulphate	98 508	79 936	94 700	95 951	90 920
Chloride	405 292	524 284	508 389	420 286	448 256
Other potassic fertilisers	16 080	23 545	19 055	21 943	19 572
Latvia					
Potassic fertilisers	24 658	11 698	12 697	13 055	18 747
Lithuania					
Fertiliser salts	3 300	3 023	8 643	10 494	12 989
Chloride	67 343	71 555	67 304	76 275	77 322
Other potassic fertilisers	...	10 445	3 256	4 516	8 460
Macedonia					
Potassic fertilisers	8 845	9 442	12 307	*12 000	...
Netherlands					
Potassic fertilisers	570 600	551 200	550 000	462 500	...
Norway					
Sulphate	169 303	187 970	234 934	182 419	204 059
Chloride	372 793	342 143	353 059	355 237	335 274
Other potassic fertilisers	524	658	311	534	300
Poland					
Chloride (c)	826 000	824 000	761 000	706 564	770 508
Portugal					
Sulphate	1 198	2 370	2 423	799	6 133
Chloride	79 072	87 941	67 242	72 648	55 774

**Imports of Potash**

tonnes

Country	1996	1997	1998	1999	2000
Romania					
Potassic fertilisers	84 858	83 763	60 987	82 029	71 909
Russia					
Potassic fertilisers	959	1 340	1 352	878	1 140
Slovakia					
Potassic fertilisers	112 700	66 098	49 900	22 913	...
Spain					
Sulphate	8 146	14 812	20 244	23 631	21 804
Chloride	348 434	337 638	414 794	333 473	313 204
Other potassic fertilisers	762	1 329	1 072	8 525	5 378
Sweden					
Sulphate	...	...	...	20 071	5 380
Chloride	7 479	11 808	10 825	65 185	87 518
Other potassic fertilisers	4 589	4 747	4 676	4 678	5 150
Switzerland					
Sulphate	3 152	2 365	2 240	3 767	2 844
Chloride	19 193	18 607	18 616	17 748	21 100
Other potassic fertilisers	4 997	5 052	2 988	3 204	2 738
Turkey					
Sulphate	21 385	19 554	27 796	23 429	15 152
Chloride	115 971	100 000	125 183	116 065	101 485
Ukraine					
Potassic fertilisers	41 077	61 316	39 868	55 053	...
United Kingdom					
Fertiliser salts	26 017	25 038	18 325	20 628	18 153
Chloride	462 630	331 300	209 519	232 983	256 841
Other potassic fertilisers	9 129	12 066	12 308	6 236	10 535
Yugoslavia, Federal Republic of					
Potassic fertilisers	...	55 570	58 057	30 693	82 169
Algeria					
Potassic fertilisers	*70 000	31 268	58 389	62 841	...
Cameroon					
Potassic fertilisers (a)	----	----	5 000	6 900	...
Congo					
Potassic fertilisers	...	...	1 132	670	1 238
Egypt					
Potassic fertilisers (a)	12 600	10 500	52 746	6 700	...
Ivory Coast					
Potassic fertilisers (a)	7 200	50 000	----	29 900	...
Kenya					
Potassic fertilisers	1 362	3 306	25 683	2 789	2 625
Mauritius					
Potassic fertilisers	28 801	31 814	24 520	27 208	29 830
Morocco					
Sulphate	37 172	29 331	49 526	48 101	...
Chloride	51 659	48 057	64 215	36 130	...
Nigeria					
Potassic fertilisers	56 278	9 813	15 446	1 403	...
Reunion					
Potassic fertilisers (a)	1 800	----	900	1 600	900
Senegal					
Potassic fertilisers (a)	12 000	29 200	21 000	26 000	22 000
South Africa					
Sulphate	25 293	33 734	29 495	16 163	18 618
Chloride	282 244	227 503	238 069	256 629	299 643
Other potassic fertilisers	...	11 832	8 124	6 221	448
Tunisia					
Potassic fertilisers	16 571	12 121	8 063	8 064	...
Zimbabwe					
Sulphate	18 534	38 925	...	21 281	...
Chloride	35 689	59 018	...	45 261	...

## Potash

## Imports of Potash

tonnes

Country	1996	1997	1998	1999	2000
Belize					
Potassic fertilisers	978	346	543	100	...
Canada					
Sulphate	73 518	75 905	78 484	64 728	52 627
Chloride	12 318	4 851	4 854	4 256	6 558
Other potassic fertilisers	2 291	5 711	8 884	10 906	46 528
Costa Rica					
Sulphate	19 679	19 897	9 513	6 526	8 677
Chloride	58 841	74 262	81 474	90 823	67 851
Other potassic fertilisers	12 091	28 001	45 150	50 039	41 385
Cuba					
Sulphate	19 000	17 700	11 902	...	...
Chloride	145 000	89 475	50 307	*50 000	...
Dominican Republic					
Potassic fertilisers	28 300	31 300	27 500	24 000	...
El Salvador					
Potassic fertilisers	16 350	12 461	14 803	14 899	16 907
Guatemala					
Potassic fertilisers	54 753	69 156	66 494	63 405	61 251
Honduras					
Potassic fertilisers	8 029	26 182	27 453	18 521	...
Jamaica					
Potassic fertilisers	12 744	14 274	10 675	17 081	*12 000
Martinique					
Potassic fertilisers	23 674	10 231	17 548	12 188	12 074
Mexico					
Sulphate	34 475	57 248	65 261	59 439	64 349
Chloride	194 579	215 677	215 751	220 454	186 131
Nicaragua					
Fertiliser salts	3 112	9 425	11 408	4 886	6 210
Potassic fertilisers	3 303	3 693	3 591	2 197	1 947
Panama					
Potassic fertilisers	18 906	17 625	11 308	4 281	...
USA					
Fertiliser salts	33 331	30 516	8 820	8 991	6 011
Sulphate	60 370	56 235	94 574	85 986	74 930
Chloride	8 127 007	9 037 671	9 139 970	8 816 574	9 215 383
Other potassic fertilisers	41 698	33 751	42 024	28 436	33 282
Argentina					
Sulphate	17 942	11 523	10 656	5 268	11 219
Chloride	37 879	37 765	27 988	20 263	29 211
Other potassic fertilisers	9 468	12 170	12 100	13 010	15 750
Brazil					
Sulphate	45 923	60 118	54 907	42 979	29 240
Chloride	3 015 165	3 558 455	3 270 975	3 190 826	4 341 812
Chile					
Sulphate	12 472	7 309	11 603	3 107	360
Chloride	74 732	63 086	83 033	64 194	66 958
Other potassic fertilisers	33 488	22 349	40 572	38 964	28 344
Colombia					
Sulphate	16 542	28 248	30 513	28 337	30 803
Chloride	247 888	256 845	332 912	312 743	334 335
Ecuador					
Chloride	59 490	60 306	69 212	80 153	92 076
Other potassic fertilisers	5 511	6 204	11 320	15 010	24 986
Peru					
Chloride	17 812	28 226	36 448	30 266	...
Other potassic fertilisers	21 904	22 061	22 087	22 316	...
Uruguay					
Potassic fertilisers	13 331	18 930	17 162	12 838	21 244
Venezuela					
Sulphate	25 846	1 400	...	12 729	18 702
Chloride	64 538	31 428	(e) 58 400	69 270	94 122
Bangladesh					
Potassic fertilisers (d)	99 513	220 419	264 000	310 000	...

**Imports of Potash**

tonnes

Country	1996	1997	1998	1999	2000
China					
Fertiliser salts	172 548	*110 000	*65 000	*50 000	...
Sulphate	416 504	628 128	534 354	197 238	190 791
Chloride	3 438 962	4 625 909	5 120 377	5 195 481	5 991 550
Other potassic fertilisers	...	20 039	39	1	2
Dubai					
Chloride	3 906	3 800	2 814	...	...
India					
Sulphate (b)	6 341	18 691	20 904	13 632	...
Chloride (b)	830 649	1 613 979	1 946 072	2 686 028	...
Other potassic fertilisers (b)	21 052	135 829	392 120	54 344	...
Indonesia					
Sulphate	6 330	7 471	5 560	...	4 984
Chloride	478 840	610 172	217 011	...	359 454
Other potassic fertilisers	6 330	6 001	26 296	...	29 540
Iran					
Potassic fertilisers (a)	13 800	29 600	51 700	90 100	...
Japan					
Sulphate	238 567	195 075	186 179	154 310	154 262
Chloride	909 857	926 442	794 725	747 781	731 893
Other potassic fertilisers	83 752	78 079	83 926	66 032	67 680
Jordan					
Potassic fertilisers	...	792	2 000	1 256	3 939
Korea, Republic of					
Chloride	712 505	688 715	573 396	595 954	622 006
Other potassic fertilisers	10 498	13 131	14 868	32 444	11 604
Malaysia					
Sulphate	11 552	5 960	6 206	...	...
Other potassic fertilisers	919 947	1 093 398	1 161 863	...	...
Oman					
Potassic fertilisers	587	3 257	2 895	3 808	6 827
Pakistan					
Potassic fertilisers (a)	46 400	400	16 600	12 600	...
Philippines					
Sulphate	1 107	4 554	1 398	17	...
Chloride	285 291	209 692	201 882	218 974	...
Saudi Arabia					
Sulphate	12 424	9 152	8 266	36 920	24 514
Other potassic fertilisers	11 231	7 153	7 727	9 159	6 601
Singapore					
Chloride	27 704	27 868	33 551	67 355	15 054
Other potassic fertilisers	5 229	6 093	17 379	4 144	3 125
Sri Lanka					
Chloride	40 801	46 525	78 773	53 129	...
Other potassic fertilisers	75 256	31 445	11 887	32 541	...
Syria					
Potassic fertilisers	17 852	...	7 350	...	...
Taiwan					
Chloride	287 285	328 237	321 719	278 542	311 033
Thailand					
Sulphate	11 738	16 787	6 819	7 551	6 578
Chloride	206 032	230 282	240 385	289 250	258 519
Vietnam					
Potassic fertilisers (a)	27 100	51 700	135 200	211 700	332 300
Australia					
Sulphate	15 385	23 793	46 969	19 062	33 716
Chloride	286 294	363 813	324 797	339 328	297 548
Other potassic fertilisers	3 573	6 394	10 145	17 873	4 249
New Zealand					
Sulphate	672	8 241	21 212	9 573	10 812
Chloride	236 234	229 895	147 620	196 912	257 368

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

(e) Including sulphate

**Production of Rare Earth Minerals**

tonnes

Country	1996	1997	1998	1999	2000
Congo, Democratic Republic					
Monazite	*10	----	----	----	----
USA					
Bastnaesite (a)	20 400	*10 000	*5 000	*5 000	*5 000
China (a)	55 373	53 250	65 000	70 000	75 500
India					
Monazite	*5 000	*5 000	*5 000	*5 000	*5 000
Malaysia					
Monazite	618	688	517	1 147	818
Xenotime	----	79	----	----	----

## 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

## Exports of Rare Earths

tonnes

Country	1996	1997	1998	1999	2000
Austria					
Cerium compounds	553	485	416	1 169	...
Other rare earth compounds	1 651	1 260	1 111	1 767	...
Metals	278	619	725	643	...
Belgium-Luxembourg					
Rare earth compounds	106	217	385	97	260
Ferro-cerium & other pyrophoric alloys	6	14	17	18	37
Metals	10	131	310	107	264
Estonia					
Rare earth compounds	(b) *3 100	(b) *800	(b) *500	2 855	27
France					
Rare earth compounds	3 430	1 252	1 521	...	1 151
Ferro-cerium & other pyrophoric alloys	258	192	...	164	129
Metals	184	163	201	212	33
Germany					
Rare earth compounds	151	144	112	98	106
Ferro-cerium & other pyrophoric alloys	9	6	0	2	4
Metals	30	29	20	15	31
Irish Republic					
Rare earth compounds	129	21	92	443	87
Ferro-cerium & other pyrophoric alloys	...	...	...	61	100
Italy					
Metals	...	12	31	5	11
Netherlands					
Metals	...	69	89	43	63
Russia					
Rare earth compounds	2 879	...	...	...	...
Turkey					
Ferro-cerium & other pyrophoric alloys	32	78	184	54	...
United Kingdom					
Cerium compounds	473	407	463	374	304
Other rare earth compounds	933	595	261	254	356
Ferro-cerium & other pyrophoric alloys	11	11	15	23	26
Metals	44	70	70	352	60
USA					
Cerium compounds	6 148	6 010	4 912	4 169	3 962
Other rare earth compounds	2 221	1 660	1 725	1 684	1 759
Metals	211	826	737	1 211	1 372
China					
Ores & concentrates	1 405	300	----	38	...
Cerium compounds	9 994	13 826	16 694	17 534	19 861
Other rare earth compounds	33 522	31 275	48 922	38 129	36 648
Ferro-cerium & other pyrophoric alloys	288	294	117	523	...
Metals	5 055	8 207	6 097	8 293	12 537
Hong Kong					
Cerium compounds	...	----	356	455	96
India					
Rare earth compounds (a)	98	299	155	5	...
Japan					
Cerium compounds	658	849	656	1 230	1 429
Other rare earth compounds	417	532	348	329	1 038
Metals	408	403	383	289	199
Kazakhstan					
Metals	(b) *50	110	11	1	(b) *10
Korea, Republic of					
Rare earth compounds	11	40	202	...	193
Malaysia					
Ores & concentrates	1 033	1 170	564	4 245	...
Ferro-cerium & other pyrophoric alloys	...	301	365	722	...
Metals	5	117	127	142	...
Singapore					
Rare earth compounds	...	...	98	134	460
Ferro-cerium & other pyrophoric alloys	...	142	116	101	170
of which, re-exports	...	131	78	71	152
Metals	...	...	144	156	156

**Exports of Rare Earths**

tonnes

Country	1996	1997	1998	1999	2000
Taiwan					
Rare earth compounds	172	430	85	304	305
Metals	24	103	2	6	4
Thailand					
Ores & concentrates	100	-----	120	1 311	60
Ferro-cerium & other pyrophoric alloys	50	157	...	1 687	1 721
Australia					
Cerium compounds	1	9	89	...	51

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**

tonnes

Country	1996	1997	1998	1999	2000
Austria					
Cerium compounds	484	780	192	1 169	1 781
Other rare earth compounds	810	715	1 505	1 767	3 188
Metals	276	673	769	643	929
Belgium-Luxembourg					
Cerium compounds	419	424	574	606	572
Other rare earth compounds	24	64	67	...	78
Ferro-cerium & other pyrophoric alloys	12	17	16	2	55
Metals	207	376	551	353	287
France					
Cerium compounds	6 658	11 028	19 647	16 540	18 159
Other rare earth compounds	15 752	906	1 369	...	679
Ferro-cerium & other pyrophoric alloys	37	61	...	26	8
Metals	406	412	430	281	382
Germany					
Cerium compounds	1 704	2 178	2 593	1 928	1 390
Other rare earth compounds	1 027	726	463	2 921	4 674
Ferro-cerium & other pyrophoric alloys	4	4	4	19	6
Metals	500	530	522	625	895
Hungary					
Rare earth compounds	192	194	163	198	188
Irish Republic					
Metals	...	...	2	61	66
Italy					
Rare earth compounds	...	505	518	...	755
Metals	...	19	8	23	27
Netherlands					
Cerium compounds	...	...	78	55	93
Other rare earth compounds	...	...	518	...	2 972
Ferro-cerium & other pyrophoric alloys	...	...	...	23	490
Metals	...	68	200	79	105
Norway					
Rare earth compounds	97	46	96	...	10
Metals	367	414	506	734	751
Poland					
Rare earth compounds	69	77	82	70	79
Metals	125	45	5	4	23
Spain					
Rare earth compounds	...	370	385	407	456
Ferro-cerium & other pyrophoric alloys	...	59	...	40	27
Metals	...	14	7	34	14
Sweden					
Metals	...	31	61	18	18
Turkey					
Rare earth compounds	140	289	225	125	170
Ferro-cerium & other pyrophoric alloys	14	193	140	20	7
United Kingdom					
Cerium compounds	1 233	1 916	2 039	2 265	2 405
Other rare earth compounds	683	398	378	543	464
Ferro-cerium & other pyrophoric alloys	9	3	85	9	13
Metals	168	323	136	107	227
South Africa					
Rare earth compounds	270	262	418	557	497
Canada					
Cerium compounds	563	553	418	310	...
Other rare earth compounds	381	191	241	174	...

## Rare Earths

**Imports of Rare Earths**

tonnes

Country	1996	1997	1998	1999	2000
USA					
Cerium compounds	4 816	2 768	6 798	5 984	6 472
Other rare earth compounds	18 538	13 493	13 599	17 935	20 174
Ferro-cerium & other pyrophoric alloys	119	136	131	136	135
Metals	368	426	794	1 485	2 059
Brazil					
Cerium compounds	338	408	287	360	355
Other rare earth compounds	1 001	850	1 190	859	1 537
Metals	432	747	533	703	958
China					
Ores & concentrates	10 673	22	4	2 854	...
Rare earth compounds	780	855	992	1 415	1 030
Ferro-cerium & other pyrophoric alloys	281	97	84	493	...
Metals	24	226	277	162	384
Hong Kong					
Rare earth compounds	601	540	525	608	246
Metals	...	329	340	174	116
India					
Metals (a)	50	36	46	95	...
Indonesia					
Rare earth compounds	140	194	...	526	338
Ferro-cerium & other pyrophoric alloys	16	21	24	72	...
Japan					
Cerium compounds	7 756	8 405	8 207	8 757	10 537
Other rare earth compounds	8 997	10 215	10 424	1 948	9 596
Metals	2 395	2 696	3 727	4 659	7 077
Jordan					
Ferro-cerium & other pyrophoric alloys	...	54	8	60	89
Korea, Republic of					
Cerium compounds	697	749	731	1 249	2 071
Other rare earth compounds	1 500	336	677	...	1 854
Metals	67	72	7	12	14
Oman					
Rare earth compounds	112	32	----	----	----
Singapore					
Rare earth compounds	...	824	635	914	1 287
Ferro-cerium & other pyrophoric alloys	...	731	728	906	948
Taiwan					
Ores & concentrates	147	72	63	37	19
Rare earth compounds	3 197	2 808	2 678	2 751	3 711
Ferro-cerium & other pyrophoric alloys	19	71	66	11	1
Metals	80	764	1 077	1 288	2 077
Thailand					
Rare earth compounds	288	206	...	209	626
Ferro-cerium & other pyrophoric alloys	84	94	...	...	...
Metals	69	2	6	63	104
Australia					
Rare earth compounds	156	97	103	...	77
Metals	9	12	9	5	2

Note(s) :-

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

(a) Years ended 31 March following that stated

## Production of Salt

tonnes

Country	1996	1997	1998	1999	2000
Albania					
Sea salt	7 000	22 732	15 865	24 689	20 596
Armenia	26 428	22 642	24 911	26 955	30 030
Austria					
Rock salt	923	1 103	1 343	1 481	1 280
Salt in brine	755 000	704 000	734 000	808 000	939 000
Azerbaijan	10 000	2 500	3 518	2 978	3 801
Belarus (i)	913 313	1 203 162	798 000	529 100	437 400
Bosnia & Herzegovina	*50 000	*50 000	*50 000	*50 000	*50 000
Bulgaria	1 600 000	1 600 000	2 400 000	1 300 000	1 700 000
Croatia	18 820	16 620	31 062	18 477	33 668
Denmark	590 000	540 000	463 000	548 000	586 500
Finland	4 311	...	...	...	...
France					
Rock salt	308 000	315 000	470 000	634 000	536 000
Brine salt	1 414 000	1 368 000	1 313 000	1 438 000	1 476 000
Salt in brine	4 295 000	4 051 000	4 482 000	4 051 000	3 762 000
Sea salt	988 000	1 199 000	1 262 000	1 115 000	1 294 000
Other salt	583 000	417 000	211 000	270 000	----
Germany					
Rock salt	7 837 000	6 306 000	5 548 000	7 221 000	5 360 000
Brine salt	999 000	1 128 000	1 123 000	1 184 000	1 206 000
Salt in brine	5 015 000	5 420 000	5 440 000	5 589 000	6 023 000
Greece	138 239	173 886	207 060	176 867	244 709
Italy					
Rock salt & brine salt	3 528 120	3 594 549	3 413 522	...	...
Sea salt	*1 000 000	...	...	...	...
Netherlands	5 348 000	5 601 000	5 573 000	5 400 000	5 564 000
Poland					
Rock salt	922 700	790 700	748 100	923 200	841 340
Brine salt	2 449 200	2 468 700	2 535 700	2 487 700	2 652 042
Portugal					
Rock salt	604 396	595 997	597 065	558 807	584 516
Sea salt	91 049	73 987	79 033	90 675	74 027
Romania	2 688 900	2 612 000	2 220 114	2 196 915	2 267 675
Russia	2 100 000	2 060 000	2 220 000	3 180 000	3 170 000
Slovakia	106 800	100 500	100 471	119 000	121 700
Slovenia	*5 000	*5 000	*5 000	*5 000	*2 000
Spain					
Rock salt	2 216 482	2 305 062	2 286 230	(k) 3 620 000	(k) 5 500 000
Sea salt	1 119 796	1 192 935	1 321 059	...	...
Other salt	100 369	95 708	92 408	...	...
Switzerland	530 000	430 000	374 000	541 000	451 000
Turkey					
Rock salt	55 924	85 743	93 931	89 377	84 080
Sea salt	519 866	532 003	438 864	618 856	592 283
Other salt	1 403 624	1 726 253	1 636 831	1 437 894	1 450 008
Ukraine	2 847 800	2 622 900	2 310 970	2 185 300	2 286 500
United Kingdom					
Rock salt	*2 200 000	*1 800 000	*700 000	*1 500 000	*1 700 000
Brine salt	*1 300 000	*1 300 000	*1 200 000	*1 200 000	*1 200 000
Salt in brine (a)	3 512 000	3 561 000	*3 500 000	*3 000 000	*3 000 000
Yugoslavia, Federal Republic of					
Rock salt	...	...	8 539	8 444	10 182
Sea salt	21 646	28 000	19 305	17 066	32 246
Algeria					
Brine salt & sea salt	154 115	136 357	172 025	163 748	182 000
Angola	*30 000	*30 000	*30 000	*30 000	*30 000
Benin	...	----	----	*15 000	*15 000
Botswana	93 886	184 533	214 700	233 069	184 755
Burkina Faso	*7 000	*5 000	*5 000	*5 000	*5 000
Cape Verde	1 710	3 957	...	*2 000	*2 000
Djibouti	...	272	82 876	127 283	135 933
Egypt (j)	1 148 200	1 232 000	1 380 000	...	...
Eritrea	200 412	252 072	114 136	9 368	47 498
Ethiopia (d)	*5 000	*1 000	*1 000	*1 000	*1 000
Ghana	*50 000	*50 000	*50 000	*50 000	*50 000

## Production of Salt

tonnes

Country	1996	1997	1998	1999	2000
Guinea	----	----	----	*15 000	*15 000
Kenya (b)	41 000	6 280	21 742	44 886	16 359
Libya	*30 000	*30 000	*30 000	*30 000	*40 000
Madagascar	41 750	36 762	26 746	*25 000	*25 000
Mali	*6 000	*5 000	*6 000	*6 000	*6 000
Mauritania	*6 000	*6 000	*6 000	*6 000	*6 000
Mauritius (c)	6 500	6 000	6 200	7 435	6 000
Morocco	165 393	257 500	126 571	156 158	147 960
Mozambique	*60 000	*60 000	*60 000	*60 000	*60 000
Namibia	356 868	492 780	536 080	503 479	542 948
Niger	*3 000	*3 000	*2 000	*2 000	*2 000
Senegal	1 624 900	1 705 900	1 700 400	...	...
Sierra Leone	5 519	1 345	2 325	1 300	4 100
Somalia	*1 000	*1 000	*1 000	*1 000	*1 000
South Africa	289 859	326 803	352 490	358 584	346 447
Sudan	*50 000	*50 000	72 211	117 148	...
Tanzania	86 700	72 500	75 000	35 000	70 000
Tunisia (c)	557 000	437 000	466 000	455 000	620 000
Uganda	*10 000	*10 000	*5 000	*5 000	*5 000
Bahamas (i)	*1 000 000	1 029 000	1 077 000	828 000	...
Canada					
Rock salt	9 550 261	10 948 027	10 783 788	9 997 353	9 298 616
Other salt (e)	2 745 328	2 586 181	2 511 758	2 680 416	2 740 366
Costa Rica	37 000	*37 000	*37 000	*37 000	*37 000
Cuba	159 800	163 600	134 600	159 100	...
Dominican Republic					
Rock salt	11 330	*12 000	*12 000	10 000	12 221
Sea salt	49 719	*50 000	*50 000	*50 000	*50 000
El Salvador (c)	*50 000	43 243	40 346	33 634	32 444
Guatemala (c)	*50 000	*50 000	*50 000	*50 000	*50 000
Honduras	*25 000	*25 000	*25 000	*25 000	*25 000
Mexico	8 508 148	7 932 772	8 412 063	8 235 621	8 884 370
Netherlands Antilles (i)	366 265	432 225	487 373	*500 000	*500 000
Nicaragua (c)	*15 000	13 619	15 132	15 619	16 100
Panama (c)	21 425	29 349	24 914	6 312	11 392
USA					
Rock salt (f)	14 500 000	12 200 000	12 700 000	14 700 000	13 600 000
Salt in brine (f)	21 500 000	21 400 000	21 100 000	22 700 000	22 500 000
Evaporated salt (f)	6 870 000	6 960 000	6 980 000	6 980 000	7 140 000
Argentina	1 096 321	841 029	751 695	1 263 423	*1 000 000
Brazil					
Rock salt	1 514 153	1 452 000	1 484 257	1 430 041	1 448 000
Sea salt	3 870 000	5 064 000	5 288 000	4 528 000	4 626 000
Chile	4 042 796	5 488 135	6 207 266	6 074 426	*6 000 000
Colombia					
Rock salt	152 642	141 923	165 699	156 933	177 687
Sea salt	423 513	232 085	330 404	304 433	282 189
Peru	293 308	79 492	220 310	230 393	247 619
Venezuela (c)	*350 000	*350 000	*350 000	*350 000	*350 000
Afghanistan	*13 000	*13 000	*13 000	*13 000	*13 000
Bangladesh (j)	42 984	31 874	33 986	...	...
Cambodia	*40 000	*40 000	*40 000	*40 000	*40 000
China	29 035 700	30 826 600	22 425 200	28 123 600	31 280 000
India					
Rock salt	2 500	3 100	2 400	3 000	2 600
Sea salt	10 149 400	10 751 500	8 471 100	9 775 700	11 219 100
Other salt	4 314 200	3 496 500	3 390 900	4 674 000	4 428 700
Indonesia	*670 000	*680 000	*650 000	*680 000	*680 000
Iran (g)	1 410 644	1 382 753	1 501 704	1 600 000	*1 600 000
Iraq	*250 000	*250 000	*250 000	*300 000	*300 000
Israel					
Rock salt	512 000	573 000	292 000	...	...
Sea salt	253 000	311 000	326 000	(k) 538 000	(k) 526 000
Japan (h)	1 350 000	1 329 000	1 293 000	1 327 000	1 374 000
Jordan (b)	21 000	61 000	290 204	304 004	310 355

## Production of Salt

tonnes

Country	1996	1997	1998	1999	2000
Kazakhstan	229 700	35 911	179 931	36 534	11 852
Korea, Dem. P.R. of	*590 000	*590 000	*550 000	*500 000	*500 000
Korea, Republic of	*770 000	*770 000	*780 000	*800 000	*800 000
Kuwait	33 537	...	41 006	38 745	...
Laos	14	18	3 894	1 759	1 542
Lebanon	*4 000	*4 000	*4 000	*4 000	*4 000
Mongolia	696	1 354	103	1 516	1 293
Myanmar (b) (c)	*35 000	*35 000	*35 000	*35 000	*35 000
Oman	12 429	13 048	13 778	11 230	11 700
Pakistan					
Rock salt (j)	975 490	1 010 605	1 037 951	1 019 044	(k) 1 357 815
Sea salt (j)	----	19 821	14 712	16 427	...
Philippines	618 481	686 514	727 754	704 347	589 528
Saudi Arabia					
Rock salt & brine salt	144 000	260 000	387 000	484 000	409 000
Sri Lanka	89 500	103 731	82 483	96 709	70 107
Syria	72 000	*70 000	163 392	*150 000	*150 000
Taiwan	233 321	62 484	7 425	76 916	69 521
Tajikistan	50 000	*40 000	...	...	...
Thailand					
Rock salt	529 674	554 891	546 096	739 502	792 250
Other salt	*100 000	*100 000	*100 000	*100 000	*100 000
Turkmenistan	255 788	216 500	*215 000	*215 000	*215 000
Uzbekistan	60 000	*60 000	...	...	...
Vietnam	709 000	743 000	717 000	*720 000	*730 000
Yemen, Republic of	135 000	136 000	*140 000	*140 000	*140 000
Australia (l)	7 993 000	8 883 000	9 034 000	10 022 000	8 778 000
New Zealand	*67 000	70 000	130 000	29 000	130 350
World Total	204 200 000	206 400 000	195 800 000	208 900 000	212 300 000

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 7 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	1996	1997	1998	1999	2000
Albania	13 830	1 925	251	20	273
Armenia	...	3 863	2 000	1 515	...
Belarus	913 313	1 203 162	797 847	529 132	437 400
Belgium-Luxembourg	234 927	420 425	30 165	45 977	40 176
Bosnia & Herzegovina (a)	*6 700	*10 100	*11 500	*32 100	*7 000
Bulgaria	17 500	4 900	*5 000	*4 500	...
Croatia	3 326	9 141	2 493	2 283	1 508
Cyprus	2	926	5 699	2 941	530
Czech Republic	17 800	17 046	16 031	13 967	13 252
Denmark	335 686	327 368	275 254	347 207	367 871
France	796 564	673 761	591 511	693 027	452 653
Germany	2 852 410	2 576 659	2 750 863	2 984 868	2 753 620
Greece	25 683	21 649	29 445	41 469	40 445
Hungary	3 069	1 839	437	236	446
Iceland	3 985	3 314	2 437	1 929	4 068
Italy	292 480	186 050	265 377	307 128	168 498
Lithuania	2 500	3 620	4 928	2 061	1 496
Netherlands	3 340 723	3 059 922	2 039 700	2 910 915	2 863 204
Norway	5 511	5 118	9 567	7 929	4 114
Poland	513 300	390 700	337 700	422 351	426 860
Portugal	16 085	25 600	13 048	3 362	1 892
Romania	565 510	585 665	439 530	492 524	465 106
Russia	14 343	15 577	13 108	23 109	23 430
Slovakia	51 173	50 938	52 000	46 826	39 930
Slovenia	1 100	3 300	4 769	4 817	3 957
Spain	896 043	714 877	669 534	732 727	845 033
Sweden	1 774	1 884	1 989	1 829	8 420
Switzerland	73 243	38 160	35 844	22 002	15 388
Turkey	10 706	13 061	17 674	20 778	36 334
Ukraine	1 424 393	1 367 601	1 012 089	928 343	(a) *862 000
United Kingdom	447 154	284 571	485 815	276 402	289 647
Algeria	3 420	9 520	25 803	41 900	29 333
Botswana	...	107 291	18 512	171 926	...
Cameroon	...	...	23 155	...	...
Djibouti	...	272	82 876	127 283	135 933
Egypt	298 527	269 661	294 096	268 218	...
Ghana	*25 000	*25 000	28 540	36 960	...
Kenya	109 474	109 375	123 796	97 578	161 204
Madagascar	2 331	827	----	2 136	60
Morocco	64 601	11 189	2 737	20 190	...
Namibia	38 454	37 276	62 384	12 074	16 513
Senegal	155 543	83 588	81 903	124 400	119 914
South Africa	1 294	2 639	1 826	2 138	1 136
Tanzania	*3 000	8 426	14 695	7 313	...
Tunisia	428 104	347 679	394 410	391 352	...
Uganda	1 039	451	1 806	614	287
Bahamas	*1 000 000	1 029 000	1 077 000	828 000	...
Canada	3 818 652	3 635 862	4 190 782	3 849 203	3 495 106
Dominican Republic	27 600	41 300	*42 000	41 251	...
Jamaica	3 930	3 209	2 139	5 184	...
Mexico	7 609 782	6 105 698	6 442 297	6 842 605	7 651 383
Netherlands Antilles	366 265	432 225	487 373	*500 000	*500 000
Trinidad & Tobago	10 181	6 639	6 981	7 000	4 600
USA	898 502	771 095	728 642	893 571	643 169
Argentina	44 226	50 455	40 503	36 676	34 826
Brazil	163 791	273 469	444 608	516 331	760 770
Chile	3 922 438	3 037 461	2 059 050	2 828 208	2 560 137
Colombia	94 732	61 681	76 007	34 672	17 349
Peru	155 338	539 441	294 484	653 103	...
Venezuela	11 809	20 454	38 339	4 527	3 134
China	365 417	235 058	332 649	392 355	552 033
Hong Kong (c)	4 306	13 311	1 495	1 454	2 725
India (b)	392 421	244 359	190 651	315 913	...
Indonesia	28 673	15 081	23 252	849	3 218

**Exports of Salt**

tonnes

Country	1996	1997	1998	1999	2000
Iran (e)	...	88 966	112 756	97 666	...
Israel (a)	*56 000	*125 000	*133 000	*98 000	*42 000
Japan	2 225	2 046	1 925	2 044	1 337
Jordan	2 064	18 333	144 749	256 126	112 226
Kazakhstan	37 000	(a) *31 000	19 237	13 149	...
Korea, Republic of	29 448	34 734	19 483	16 852	17 313
Kuwait	1 490	3 182	4 264	180	...
Malaysia	6 500	9 100	14 600	11 000	...
Pakistan (d)	32 999	40 042	145 315	60 116	70 760
Saudi Arabia	11 082	10 062	12 294	12 024	11 952
Singapore of which, re-exports	6 217	5 990	3 497	2 644	2 872
Syria	5 842	5 572	3 381	2 318	2 694
Thailand	...	12 124	3 542	...	...
Turkmenistan (a)	63 806	60 608	91 016	94 222	83 613
Yemen, Republic of	...	...	*36 000	*37 000	*40 000
Australia	999	6 652	58 139	14 931	24 957
New Zealand	7 651 312	8 187 274	8 700 065	8 472 082	8 230 814
	14 092	18 969	23 396	27 188	23 946

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	1996	1997	1998	1999	2000
Albania	3 104	3 179	6 028	9 298	8 796
Austria	210 100	83 561	82 949	146 444	122 300
Azerbaijan	53 500	44 000	61 512	58 141	57 213
Belarus	63 671	53 000	54 374	21 196	26 648
Belgium-Luxembourg	3 570 812	3 614 738	3 602 237	3 373 286	3 675 526
Bulgaria	120 119	106 200	145 000	177 500	...
Croatia	102 138	110 510	79 927	121 907	85 873
Cyprus	8 099	6 699	13 318	9 888	9 002
Czech Republic	724 600	628 270	552 813	814 794	649 768
Denmark	444 177	273 186	249 388	379 402	245 086
Estonia	65 000	68 975	69 177	76 817	71 313
Faeroe Islands	22 623	18 235	16 284	18 622	22 471
Finland	342 313	413 004	404 295	371 534	427 247
France	462 937	599 152	559 453	581 948	533 225
Georgia	...	...	...	11 587	18 583
Germany	1 673 685	1 792 547	1 583 346	1 514 180	2 062 758
Greece	140 162	144 966	149 344	102 191	131 417
Greenland	2 422	4 071	3 042	4 188	3 352
Hungary	627 424	551 789	418 601	551 648	527 154
Iceland	90 996	87 194	94 408	88 912	104 726
Irish Republic	96 700	100 635	90 066	110 287	82 940
Italy	648 456	673 571	656 656	581 887	565 098
Latvia	76 002	81 501	91 179	108 065	88 877
Lithuania	139 579	167 029	168 245	176 715	142 384
Macedonia	42 077	29 153	26 523	*23 000	...
Malta	1 810	1 682	3 132	1 919	...
Moldova	48 849	52 164	39 151	44 054	38 941
Netherlands	499 651	452 393	324 111	502 862	98 806
Norway	675 715	683 521	703 443	753 514	691 422
Poland	81 800	81 700	74 200	116 447	113 806
Portugal	40 819	90 057	105 823	75 053	104 476
Romania	2 176	1 236	644	774	6 242
Russia	902 966	840 626	625 397	479 981	570 447
Slovakia	199 200	129 300	160 100	186 687	193 174
Slovenia	129 811	120 618	91 314	143 054	98 702
Spain	21 906	25 460	37 542	60 771	44 723
Sweden	1 095 521	808 890	947 996	1 072 731	910 232
Switzerland	4 000	4 685	5 114	16 756	9 040
Turkey	3 504	4 660	7 643	10 706	26 341
United Kingdom	316 796	242 368	237 284	261 434	...
Yugoslavia, Federal Republic of	200 191	268 677	217 349	174 945	179 426
Benin	26 000	25 200	24 000	*24 000	...
Botswana	...	2 138	2 167	2 281	...
Burkina Faso	28 133	36 996	39 941	31 207	34 967
Burundi	*10 000	*10 000	*10 000	*10 000	...
Cameroon	38 756	*38 800	60 864	...	...
Central African Republic	3 288	*3 300	*3 300	*3 300	...
Congo	26 134	6 275	10 860	2 178	5 364
Egypt	1 800	2 369	2 860	3 849	...
Ethiopia (d)	...	786	120 062	77 402	*70 000
Gabon	*3 800	*3 800	*3 800	*3 800	...
Ghana	100	358	618	522	576
Ivory Coast	60 675	*70 000	77 000	85 000	...
Kenya	14 000	6 800	150 200	27 803	36 418
Malawi	26 000	22 000	21 000	*21 000	...
Mauritius	1 700	1 400	1 667	3 292	6 298
Morocco	778	6 781	13 873	8 820	...
Niger	32 800	30 500	32 582	32 000	...
Nigeria	330 235	358 403	375 491	307 042	...
Reunion	2 900	*2 900	*2 900	*2 900	...
Rwanda	...	16 609	16 388	...	...
South Africa	170 360	84 602	119 775	60 596	59 777
Tanzania	2 877	8 779	22 240	26 593	...
Togo	29 469	11 128	6 079	2 166	...
Uganda	61 092	41 913	108 080	59 299	59 944
Zimbabwe	69 662	80 155	81 293	79 292	...

**Imports of Salt**

tonnes

Country	1996	1997	1998	1999	2000
Barbados	2 053	2 180	1 848	2 101	1 693
Belize	921	1 031	1 261	1 166	...
Canada	1 137 699	1 269 550	978 145	1 375 423	1 141 593
Costa Rica	19 555	15 057	23 442	34 581	28 642
Dominica	713	825	*550	949	545
El Salvador	6 591	4 984	3 581	2 554	8 334
Guadeloupe	2 419	2 259	2 577	2 471	...
Guatemala	3 970	7 265	4 902	6 634	4 238
Honduras	1 923	2 122	1 915	3 312	...
Jamaica	28 351	11 784	23 201	29 248	...
Martinique	2 590	2 365	2 196	2 467	2 425
Mexico	46 280	63 715	64 858	85 623	...
Netherlands Antilles	*500	*500	424	355	...
Nicaragua	3 702	1 323	1 210	7 325	4 076
Panama	1 753	6 661	3 186	3 594	...
St. Lucia	771	645	704	621	649
St. Pierre & Miquelon	542	1 183	1 141	1 105	1 941
Trinidad & Tobago	7 400	24 525	23 472	26 000	19 663
USA	10 625 971	9 166 803	8 815 490	8 854 293	8 947 914
 Brazil	 62 894	 363 730	 207 418	 215 593	 191 348
Colombia	85 495	79 569	73 563	57 326	45 413
French Guiana	474	571	*500	*500	...
Paraguay	13 007	19 480	13 895	9 271	20 135
Suriname	1 706	2 088	2 306	1 607	...
Uruguay	92 117	85 565	87 424	70 392	73 338
Venezuela	148 938	147 293	211 518	97 836	115 580
 Abu Dhabi	 2 604	 3 211	 3 386	 7 360	 ...
Bahrain	*3 500	10 295	12 366	22 882	5 263
Bangladesh (b)	*50 000	56 568	17 500	19 000	...
China	3 671	6 299	4 432	3 532	2 660
Dubai	12 880	10 974	12 746	...	...
Hong Kong	81 282	64 086	60 345	58 640	57 796
India (c)	22 051	1 236	88	13 250	...
Indonesia	633 984	748 440	907 997	1 867 271	1 445 967
Japan	7 725 601	7 917 873	7 914 304	8 236 050	7 972 374
Kazakhstan	*10 000	*10 000	9 746	18 019	...
Korea, Dem. P.R. of (a)	*136 000	*61 000	*78 000	*35 000	*35 000
Korea, Republic of	1 841 069	1 874 890	2 144 680	2 356 280	2 370 352
Kuwait	10 502	10 482	11 191	10 965	...
Kyrgyzstan	14 559	*14 600	8 602	4 766	9 761
Laos	28 770	31 877	...	...	...
Macao	2 349	2 119	2 385	2 185	2 256
Malaysia	218 900	390 900	341 300	405 000	...
Oman	9 345	3 335	4 248	14 254	14 596
Philippines	336 027	352 914	110 629	396 684	...
Qatar	5 143	5 852	...	...	...
Saudi Arabia	10 620	11 530	18 194	17 119	16 974
Singapore	65 382	139 094	55 711	85 621	114 252
Sri Lanka	...	...	6 354	6 020	...
Taiwan	851 495	991 491	1 301 310	1 129 618	1 733 219
Thailand	33 587	55 242	1 137	67 978	67 906
 Australia	 10 936	 12 522	 12 310	 14 071	 14 988
Fiji	*5 000	*5 000	*5 000	*5 000	...
New Caledonia	877	1 199	972	1 187	1 085
New Zealand	89 683	118 865	65 071	71 692	118 532
Papua New Guinea	8 660	21 895	6 639	6 000	...
Solomon Islands	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

## Sillimanite

**Production of Sillimanite Minerals**

tonnes

Country	1996	1997	1998	1999	2000
France					
Andalusite	81 000	67 200	79 000	...	...
Spain					
Andalusite	*250	*220	*250	...	...
South Africa					
Andalusite	233 728	236 990	232 646	136 949	182 674
Sillimanite	497	----	65	----	----
Zimbabwe					
Kyanite	140	1 113	3 780	5 038	10 970
USA					
Kyanite (b)	*90 000	*90 000	90 000	90 000	90 000
Brazil					
Kyanite (a)	705	...	47	171	...
China	...	...	113 000	129 600	...
India					
Kyanite (c)	7 055	6 068	6 134	6 191	4 385
Sillimanite (c)	8 528	12 458	12 123	14 933	15 492
Australia					
Kyanite	*800	*800	*800	*1 000	*1 000
Sillimanite	20	----	26	274	110

## 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) Including beneficiated and directly shipped material

(b) Including related minerals

(c) Years ended 31 March following that stated

**Exports of Sillimanite Minerals**

tonnes

Country	1996	1997	1998	1999	2000
Belgium-Luxembourg	402	941	2 663	4 357	6 081
France	62 842	56 347	51 279	42 872	48 687
Germany	6 492	7 440	8 081	4 779	7 026
Italy	...	352	487	147	100
Netherlands	...	2 669	6 787	12 293	7 318
United Kingdom	8 356	7 442	6 677	6 896	6 858
South Africa					
Andalusite	158 526	156 810	144 277	108 574	129 621
Canada					
Mullite	6 395	4 703	4 332	4 660	5 185
USA					
Sillimanite minerals	35 003	36 234	30 143	29 499	22 619
Mullite	20 465	20 100	37 918	32 000	28 870
China	8 513	9 675	7 687	12 463	14 506
India (a)	794	545	679	311	...
Japan	6 529	4 577	2 474	3 347	3 625
Taiwan	929	510	732	622	481

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

## Sillimanite

**Imports of Sillimanite Minerals**

tonnes

Country	1996	1997	1998	1999	2000
Austria	3 256	2 414	11 483	2 447	1 471
Belgium-Luxembourg	8 830	6 430	9 199	10 059	13 899
Czech Republic	...	2 767	3 281	2 557	4 049
Denmark	1 235	1 658	3 306	1 250	2 842
Finland	165	108	62	62	168
France	5 141	3 286	3 091	3 339	2 864
Germany	47 939	43 196	58 525	52 924	56 898
Irish Republic	6 622	1 800	3 809	3 820	8 829
Italy	...	50 912	70 741	77 567	28 898
Netherlands	...	7 622	28 365	17 799	25 485
Norway	3 598	3 017	2 314	2 542	2 609
Poland	16 461	15 643	14 519	8 404	10 173
Portugal	631	616	716	491	568
Slovakia	...	1 785	...	2 910	3 668
Spain	...	14 865	17 956	16 687	20 724
Sweden	...	7 557	7 363	4 334	11 519
Switzerland	452	352	440	366	456
Turkey	2 063	3 523	...	2 622	1 343
United Kingdom					
Sillimanite minerals	52 229	53 877	47 985	37 870	29 400
Mullite	17 765	12 922	8 417	7 432	5 215
Canada	15 103	*20 000	22 181	19 057	25 012
Mexico					
Sillimanite minerals	2 962	2 810	2 300	1 995	2 275
Mullite	2 666	3 207	3 785	4 941	6 235
USA	18 682	14 006	15 596	11 877	12 818
China	861	1 643	1 096	4 115	1 519
Hong Kong	20 918	27 304	15 770	44 695	45 562
India (a)	1 585	1 364	1 424	3 342	...
Indonesia	1 248	240	1 742	379	1 317
Japan					
Sillimanite minerals	25 316	27 722	24 879	12 590	21 407
Mullite	4 049	6 464	4 826	5 041	6 560
Korea, Republic of					
Sillimanite minerals	11 646	12 160	10 784	10 470	10 681
Mullite	7 098	5 462	2 670	3 489	4 191
Taiwan					
Sillimanite minerals	7 539	8 400	7 810	5 782	5 996
Mullite	684	547	538	879	762
Thailand					
Mullite	...	7 177	832	1 370	1 483
Australia					
Sillimanite minerals	6 696	6 679	4 265	2 496	3 543
Mullite	86	109	141	57	117

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

**Mine Production of Silver**

kilograms (metal content)

Country	1996	1997	1998	1999	2000
Bulgaria	48 770	31 530	23 790	*25 000	*25 000
France	2 718	2 402	1 027	1 140	723
Greece	16 700	37 300	44 000	39 000	30 644
Irish Republic	14 700	13 300	10 800	10 400	16 700
Italy	9 100	4 400	2 500	100	100
Macedonia	*10 000	*10 000	*10 000	*10 000	*10 000
Poland	1 107 300	1 084 200	1 143 690	1 160 355	1 164 700
Portugal	33 700	33 900	31 880	26 450	20 430
Romania	*18 000	*18 000	*18 000	*18 000	*18 000
Russia (a)	400 000	395 000	353 000	380 000	*400 000
Spain	204 015	142 520	99 910	66 000	...
Sweden	271 866	304 048	299 051	341 584	328 737
Turkey	71 000	90 000	87 000	*90 000	*90 000
Yugoslavia, Federal Republic of (a)	68 805	42 640	34 474	7 643	9 068
Algeria	1 600	*1 500	*1 500	*1 500	*1 500
Ghana	*1 200	*1 300	*1 400	*1 400	*1 400
Morocco	199 000	261 000	307 000	277 900	289 000
Namibia	42 300	41 000	13 980	-----	8 790
South Africa	168 689	144 005	144 482	151 959	144 232
Tunisia	1 500	100	2 500	4 000	3 700
Zambia	9 643	7 219	6 936	6 076	*6 000
Zimbabwe	9 982	5 923	6 681	5 396	3 799
Canada	1 308 758	1 223 953	1 195 943	1 246 357	1 203 744
Dominican Republic	17 018	12 407	7 409	3 140	...
Honduras	36 378	42 809	42 898	46 473	52 485
Mexico	2 527 875	2 674 979	2 686 021	2 466 981	2 620 495
Nicaragua	790	1 077	1 946	1 780	1 589
Panama	1 307	2 178	*2 000	*2 000	*2 000
USA	1 570 200	2 181 600	2 064 600	1 951 000	2 060 000
Argentina	50 399	52 550	35 768	73 785	78 271
Bolivia	384 384	387 200	403 961	422 500	433 600
Brazil	12 000	10 000	10 000	10 000	10 000
Chile	1 147 002	1 091 311	1 340 199	1 380 711	1 245 186
Colombia	6 407	3 515	5 218	7 593	7 970
Peru	1 976 536	2 090 311	2 024 571	2 231 390	2 437 706
China	1 140 000	1 300 000	1 299 000	1 378 714	*1 600 000
India (a) (b)	39 689	53 925	55 409	53 641	64 684
Indonesia	255 404	279 161	348 974	292 331	314 032
Iran	*20 000	*20 000	18 800	21 400	*20 000
Japan	85 115	87 180	94 472	94 004	103 781
Kazakhstan (a)	414 310	389 576	535 987	645 609	855 000
Korea, Dem. P.R. of	*50 000	*50 000	*50 000	*50 000	*50 000
Malaysia	9 720	9 647	7 285	2 744	4
Mongolia	*21 000	*21 000	*21 000	*21 000	*21 000
Myanmar (a) (b)	3 670	4 040	3 643	2 159	1 432
Philippines	23 987	20 744	18 220	18 214	23 534
Saudi Arabia	16 608	17 200	13 843	10 472	9 390
Uzbekistan	*50 000	*50 000	50 500	61 100	*60 000
Australia	1 013 000	1 106 000	1 474 000	1 720 000	2 059 000
Fiji	1 984	2 654	1 787	2 159	1 475
New Zealand	29 340	31 684	22 681	24 308	22 886
Papua New Guinea	59 036	49 165	59 294	66 542	79 197
Solomon Islands	1	...	1 466	2 138	*700
World Total	14 983 000	15 937 000	16 540 000	16 934 000	18 081 000

Note(s):-

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

(a) Smelter and/or refinery production

(b) Years ended 31 March following that stated

**Exports of Silver**

kilograms

Country	1996	1997	1998	1999	2000
Austria					
Metal	52 016	54 900	57 500	133 700	50 900
Belgium-Luxembourg					
Ores & concentrates	44 000	500	239 000	22 500	18 000
Metal	1 313 552	1 229 800	773 400	53 900	8 600
Bulgaria					
Metal (d)	*22 700	*14 300	*18 800	*27 000	...
Denmark					
Metal	56 957	60 194	97 904	20 456	12 445
Finland					
Metal	24 000	25 785	7 447	8 300	12 708
France					
Metal	1 072 677	908 700	725 000	615 700	532 500
Waste & scrap	827 476	1 098 369	612 503	...	...
Germany					
Metal	1 020 727	1 168 100	2 022 300	2 252 100	2 306 500
Greece					
Metal	...	...	...	2 741	3 047
Hungary					
Metal	...	456	489	457	746
Italy					
Metal	...	453 461	569 198	447 420	478 031
Latvia					
Metal	495	----	----	----	----
Lithuania					
Metal	£20 000	£1 000	£6 000	£1 000	£3 000
Macedonia					
Metal (d)	*10 100	*11 000	*9 300	*6 200	...
Norway					
Metal	106 519	102 917	92 509	122 387	112 502
Poland					
Metal	891 000	929 000	1 032 000	1 054 000	1 041 874
Portugal					
Metal	86	4 687	416	277	5
Russia					
Metal	547 600	...	(d) *1 217 100	(d) *420 000	...
Waste & scrap	69 400	...	...	...	...
Slovakia					
Metal (d)	...	*2 900	*3 100	...	...
Slovenia					
Metal	...	...	39 716	38 866	1 020
Spain					
Metal	...	360 915	423 041	27 952	369 220
Sweden					
Metal	...	260 000	282 000	308 000	315 000
Switzerland					
Metal	3 025 378	2 440 242	3 124 694	2 028 365	2 480 600
Turkey					
Metal	401	...	647	352	45
United Kingdom					
Metal	3 155 901	3 187 801	2 053 193	1 405 307	3 461 961
Yugoslavia, Federal Republic of					
Metal	...	36 000	7 106	661	0
Morocco					
Metal	205 000	270 741	...	...	...
Namibia					
Metal	42 704	40 188	13 980	----	16 527
South Africa (f)	137 558	179 321	130 614	154 349	155 819
Canada					
Ores & concentrates (e)	224 056	216 990	149 445	108 608	182 634
Metal	1 450 625	1 262 953	1 625 501	1 708 630	1 614 447
Dominican Republic					
Metal	17 018	12 407	7 409	3 140	...
Honduras					
Concentrates (e)	36 378	42 809	42 898	46 473	...
Mexico					
Ores & concentrates	774 000	1 378 586	3 496 444	6 540 820	4 940 055
Metal	1 800 451	...	2 345 477	3 594 800	...

**Exports of Silver**

kilograms

Country	1996	1997	1998	1999	2000
USA					
Ores & concentrates (b)	1 544	35 003	13 917	91 749	70 400
Metal	3 534 291	4 044 085	3 055 422	1 074 903	959 469
Waste & scrap	1 273 699	1 021 496	1 064 176	1 314 128	1 661 260
Bolivia					
Ores & concentrates	3 742 531	2 307 449	1 641 817	1 737 576	2 175 434
Metal	69 882	72 310	79 256	73 206	55 692
Brazil					
Metal	57 024	58 534	48 772	35 385	37 249
Chile					
Metal	729 475	731 261	779 744	...	...
Peru					
Metal	710 930	686 932	792 233	1 008 168	1 118 200
China					
Metal	6 418	26 688	88 574	308 335	191 399
Hong Kong					
Metal	43 121	50 419	345 428	1 399 377	1 449 748
of which, re-exports	42 781	50 359	250 087	672 083	628 221
India					
Metal (c)	1 040	5 149	2 775	67	...
Indonesia					
Metal	61 133	55 788	164 350	170 468	213 618
Israel					
Metal (d)	*2 200	*8 500	*1 600	...	...
Japan					
Metal	217 256	316 901	368 422	456 783	844 270
Waste & scrap	110	164 140	187 317	252 129	359 419
Kazakhstan					
Metal	132 154	254 209	582 600	636 300	...
Korea, Dem. P.R. of					
Metal (d)	...	...	*7 300	*19 100	...
Korea, Republic of					
Metal	389 495	249 024	454 500	426 346	535 973
Kyrgyzstan					
Metal	...	...	(d) *2 500	2 919	6 014
Malaysia					
Metal	12 338	1 833	1 050	1 034	...
Oman					
Metal	3 702	3 471	617	----	62
Philippines					
Ores & concentrates (b)	9 821	7 803	6 640	8 680	...
Metal	2 541	5 470	6 868	...	...
Singapore					
Metal	1 790 424	1 290 904	827 385	695 506	732 643
of which, re-exports	1 705 454	1 257 720	768 599	681 321	719 973
Taiwan					
Metal	8 540	12 206	2 867	6 008	6 897
Thailand					
Metal	5 667	30 298	...	8 800	599 806
Uzbekistan					
Metal (d)	*300	*32 800	*1 300	...	...
Australia					
Ores & concentrates	13 834	1	----	4 160	...
Metal (g)	320 539	215 817	374 792	428 000	450 943
New Zealand					
Metal (a)	1 413	3 563	2 704	...	...
Papua New Guinea					
Metal	58 131	45 426	65 247	64 500	79 197

## 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, Ag in copper and lead concentrates, anode slimes, in blister copper

(g) Silver content of refined bullion and welding or brazing rods

**Imports of Silver**

kilograms

Country	1996	1997	1998	1999	2000
Austria					
Metal	80 321	88 100	125 200	254 500	136 700
Belgium-Luxembourg					
Ores & concentrates	3 160 000	13 800	16 900	1 188 000	1 970 200
Metal	2 717 000	2 544 300	2 366 500	1 558 500	928 500
Bulgaria					
Metal (c)	*300	*100	*900	...	...
Croatia					
Metal	...	5 527	...	2 560	4 292
Cyprus					
Metal	13 640	10 512	11 168	8 312	11 631
Czech Republic					
Metal (c)	*23 000	*48 200	*80 700	*86 700	...
Denmark					
Metal	135 017	143 604	109 846	18 075	23 506
Estonia					
Metal	(c) *5 100	(c) *10 400	(c) *4 000	7 513	8 175
Faeroe Islands					
Metal	175	224	275	243	328
Finland					
Metal	113 000	91 170	72 799	74 314	87 460
France					
Metal	1 933 921	1 786 800	1 326 300	1 223 400	1 439 100
Waste & scrap	482 889	241 900	682 847	...	...
Germany					
Ores & concentrates	----	1 041 400	5 027 600	4 540 700	2 005 800
Metal	1 074 428	1 233 100	1 728 800	1 481 600	1 584 400
Greece					
Metal	...	...	...	52 252	39 023
Hungary					
Metal	11 177	1 641	8 132	12 908	17 843
Iceland					
Metal	633	600	700	400	700
Irish Republic					
Metal	5 903	37 893	15 907	3 307	3 053
Italy					
Metal	...	1 245 426	1 171 220	1 453 167	2 226 980
Lithuania					
Metal	£88 000	£130 000	£128 000	£109 000	£129 000
Malta					
Metal	2 242	...	...	480	...
Netherlands					
Metal	£8 721 000	£13 305 000	£18 131 000	£25 764 000	£13 873 000
Norway					
Metal	119 114	104 085	128 173	147 328	128 551
Poland					
Metal	1 000	...	1 000	1 000	22 562
Portugal					
Metal	1 497	98 115	81 514	540	...
Slovakia					
Metal	(c) *5 700	(c) *8 000	22 226	11 349	13 002
Slovenia					
Metal	9 152	11 325	61 000	58 000	36 769
Spain					
Ores & concentrates	28 512	28 165	33 340	35 452	31 406
Metal	...	702 290	813 653	187 098	941 883
Sweden					
Metal	...	145 000	176 000	239 000	148 000
Switzerland					
Metal	3 714 520	1 836 921	1 569 782	1 972 530	2 748 848
Turkey					
Metal	43 586	38 757	53 677	52 101	136 321
Ukraine					
Metal (c)	*1 300	*500	*1 100	...	...
United Kingdom					
Metal	2 876 985	3 310 292	6 772 335	2 589 012	2 542 811

**Imports of Silver**

kilograms

Country	1996	1997	1998	1999	2000
South Africa					
Metal	25 995	20 436	17 737	19 986	47 487
Tunisia					
Metal	11 262	14 702	12 772	15 932	...
Canada					
Ores & concentrates (b)	393 683	276 855	242 298	339 075	421 860
Metal	97 148	302 593	235 852	138 654	...
Costa Rica					
Metal	445	148	1 920	281	392
Jamaica					
Metal	1 263	260	856	112	...
Panama					
Metal	3 235	3 303	2 318	1 603	...
USA					
Ores & concentrates (b)	517 637	413 663	425 900	254 929	184 249
Metal	3 011 695	2 702 658	3 630 615	3 524 227	4 595 230
Waste & scrap	1 808 928	1 528 969	1 783 572	1 650 424	1 122 018
Argentina					
Metal	...	25 922	...	54 454	...
Brazil					
Metal	198 508	226 606	176 853	193 437	218 466
Chile					
Metal	826	1 130	1 059	...	...
Uruguay					
Metal	...	8 400	8 100	7 900	...
Venezuela					
Metal	12 245	...	...	...	...
Abu Dhabi					
Metal	5 306	283	----	403	...
China					
Ores & concentrates	59 000	47 067	1 513 479	551 020	290 645
Metal	87 086	125 421	156 479	299 830	283 739
Dubai					
Metal	1 497 172	2 624 906	986 627	...	...
Hong Kong					
Metal	190 362	250 072	204 899	406 976	464 657
India					
Metal (a)	1 888 255	2 659 959	3 586 416	3 553 069	...
Indonesia					
Metal	7 736	8 752	...	7 408	43 557
Israel					
Metal (c)	*87 500	*93 700	*85 300	...	...
Japan					
Ores & concentrates	14 918 000	21 143 000	12 401 000	14 076 000	14 189 000
Metal	1 493 522	1 787 141	1 098 083	1 427 911	2 051 348
Waste & scrap	15 125 733	18 296 905	17 679 525	11 692 212	10 977 147
Jordan					
Metal	17	106	403	1 740	248
Kazakhstan					
Metal	...	...	14 100	2 400	...
Korea, Republic of					
Metal	451 261	340 196	73 322	217 691	264 421
Kuwait					
Metal	...	250 000	225 000	...	...
Malaysia					
Metal	66 461	165 550	321 964	464 699	...
Oman					
Metal	76 504	79 609	478 219	767 388	1 043 264
Pakistan					
Metal	£7 097 000	£5 200 000	£200 000	£206 000	£149 000
Philippines					
Metal	10 684	6 717	2 251	...	...
Saudi Arabia					
Metal	19 505	7 214	2 067	4 655	6 000

**Imports of Silver**

kilograms

Country	1996	1997	1998	1999	2000
Singapore					
Metal	938 284	728 498	450 818	349 299	637 232
Taiwan					
Metal	256 352	481 051	262 574	315 240	480 119
Thailand					
Metal	459 887	526 308	...	893 520	1 911 529
Australia					
Metal	£5 628 000	£4 262 000	£15 603 000	£19 834 000	£1 503 000
New Zealand					
Metal	1 044 000	1 071 000	96 000	933 000	...

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) Ag content of all ores and concentrates  
 (c) BGS estimates, based on known exports from certain countries

## Production of Sulphur and Pyrites

tonnes (sulphur content)

Country	1996	1997	1998	1999	2000
Austria					
Recovered (d)	36 052	49 494	52 862	49 753	50 377
Belarus					
Recovered (d)	25 000	20 000	20 000	20 000	20 000
Belgium					
Recovered (c) (d)	406 000	430 000	428 000	408 000	410 000
Bulgaria					
Pyrites	25 000	25 000	30 000	20 000	----
Recovered (c)	120 000	128 000	134 000	131 000	183 000
Recovered (d)	27 000	25 000	25 000	30 000	30 000
Croatia					
Recovered (d)	15 000	15 000	15 000	15 000	9 000
Czech Republic					
Recovered	35 593	33 874	...	...	...
Denmark					
Recovered (d)	7 461	3 875	3 312	3 729	4 041
Finland					
Pyrites	357 646	325 000	340 000	370 000	360 000
Recovered (c)	291 000	307 000	296 000	299 000	301 000
Recovered (d)	48 675	50 000	45 000	42 000	46 000
France					
Recovered (d)	989 700	958 800	868 800	822 000	801 600
Recovered (e)	99 000	*100 000	261 000	*250 000	...
Germany					
Recovered (c)	83 800	79 800	90 191	84 400	80 128
Recovered (d)	1 463 400	1 497 500	1 612 143	1 696 353	1 611 792
Recovered (e)	43 400	45 000	48 528	42 440	42 518
Greece					
Pyrites	4 437	...	...	...	...
Recovered (d)	127 000	145 000	150 000	148 000	150 000
Hungary					
Recovered (d)	30 886	33 906	38 332	*36 000	*34 000
Italy					
Recovered (d)	335 000	380 000	425 000	485 000	490 000
Lithuania					
Recovered (d)	...	...	...	25 000	28 000
Macedonia					
Recovered (c)	20 000	20 000	20 000	29 000	26 000
Netherlands					
Recovered (c)	119 000	127 000	131 000	129 000	84 000
Recovered (d)	380 000	450 000	432 000	445 000	428 000
Norway					
Recovered (c)	*90 000	*90 000	*90 000	*95 000	*90 000
Recovered (d)	18 000	18 000	14 000	12 000	18 000
Poland					
Frasch	1 732 500	1 676 000	1 348 000	1 175 000	1 369 259
Recovered (c)	242 000	256 400	*260 000	277 800	*285 000
Recovered (d)	37 400	43 900	56 600	73 500	16 483
Portugal					
Pyrites	*5 000	*5 000	*5 000	...	...
Recovered	*4 000	*3 000	*3 000	...	...
Romania					
Pyrites	49 116	52 000	50 073	48 127	9 369
Recovered	68 000	43 000	46 000	41 000	35 000
Russia					
Pyrites	400 000	417 000	254 000	307 000	357 000
Recovered (d)	2 504 483	2 973 652	3 972 852	4 443 284	4 948 298
Recovered (e)	324 000	344 000	411 000	510 000	588 000
Sulphur ore	9 564	9 410	...	6 151	9 630
Slovakia					
Recovered (c)	6 000	7 000	6 000	5 000	5 000
Recovered (d)	----	20 000	21 000	24 000	51 000
Spain					
Pyrites	479 063	445 201	405 373	340 000	94 564
Recovered (c)	419 942	456 000	461 000	455 000	454 000
Recovered (d)	249 694	...	...	...	...

**Production of Sulphur and Pyrites**

tonnes (sulphur content)

Country	1996	1997	1998	1999	2000
Sweden					
Recovered (c)	67 000	71 000	73 000	65 000	*95 000
Recovered (d)	53 104	63 408	57 551	56 989	58 521
Sulphur ore	49 982	57 773	...	...	...
Turkey					
Pyrites	126 000	63 000	...	91 000	45 000
Recovered (d) (e)	76 000	137 000	145 000	122 000	118 000
Ukraine					
Sulphur ore	168 100	99 700	96 949	79 979	88 000
United Kingdom					
Recovered (c)	44 700	39 200	40 500	26 600	51 400
Recovered (d)	132 000	177 000	184 000	136 000	140 000
Yugoslavia, Federal Republic of					
Recovered (c)	21 000	33 000	46 000	46 000	46 000
Algeria					
Recovered (d)	20 000	20 000	20 000	16 000	12 000
Egypt					
Recovered (d)	4 000	3 000	2 000	...	...
Libya					
Recovered (d)	*13 000	*13 000	*13 000	...	...
Namibia					
Pyrites	45 338	47 300	14 100	----	6 000
South Africa					
Pyrites	184 000	167 253	152 379	141 427	145 650
Recovered (a) (c) (d)	342 000	351 000	299 514	264 209	302 819
Zambia					
Pyrites	33 000	31 000	29 000	26 000	...
Recovered (c)	41 000	52 000	52 000	52 000	52 000
Zimbabwe					
Pyrites	25 100	20 200	22 200	23 300	29 000
Recovered	*5 000	*5 000	...	...	...
Canada					
Recovered (c)	1 043 847	1 073 128	1 152 726	1 156 276	*1 160 000
Recovered (d)	8 445 949	8 407 686	8 541 291	8 960 065	8 728 000
Cuba					
Recovered (d)	*5 000	*5 000	*5 000	*5 000	*5 000
Mexico					
Recovered (c)	359 000	417 000	474 000	474 000	474 000
Recovered (d)	921 000	923 000	912 000	860 000	851 000
Netherlands Antilles					
Recovered (d)	23 921	28 616	35 000	34 000	38 000
Trinidad & Tobago					
Recovered (d)	*5 000	*15 000	*15 000	8 400	14 900
USA					
Frasch	*2 900 000	*2 820 000	*1 800 000	1 780 000	*1 000 000
Recovered (c)	1 430 000	1 550 000	1 610 000	1 320 000	*1 000 000
Recovered (d)	7 480 000	7 650 000	8 220 000	8 220 000	*8 400 000
Argentina					
Recovered (c)	23 000	23 000	23 000	23 000	23 000
Brazil					
Pyrites	29 477	22 783	25 719	23 232	23 720
Recovered (c)	175 121	175 511	186 806	217 119	217 238
Recovered (d)	33 424	33 823	36 973	57 962	81 762
Chile					
Recovered (c)	587 000	768 000	899 000	1 037 000	1 096 000
Colombia					
Recovered (d)	16 000	14 872	*15 000	*16 000	...
Sulphur ore	49 425	53 541	*48 000	*48 000	...
Ecuador					
Recovered (d)	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)	250 000	319 000	425 000	350 000	410 000

## Production of Sulphur and Pyrites

tonnes (sulphur content)

Country	1996	1997	1998	1999	2000
Abu Dhabi					
Recovered (d)	259 000	...	967 000	1 089 000	1 122 000
Bahrain					
Recovered (d)	74 338	66 202	61 873	67 230	73 060
China					
Pyrites	6 398 000	6 043 520	3 654 490	7 453 080	...
Recovered	1 215 000	1 424 430	1 556 000	1 716 000	1 797 000
Sulphur ore	239 000	*300 000	228 000	240 000	250 000
India					
Pyrites (f)	31 600	27 600	19 500	2 100	----
Recovered (c)	98 000	131 000	196 000	261 000	359 000
Recovered (d) (e)	40 000	51 000	60 000	101 000	376 000
Indonesia					
Recovered (c)	----	----	----	154 000	212 000
Recovered (d)	5 000	5 000	5 000	10 000	40 000
Sulphur ore	*3 500	*3 500	*3 400	3 450	...
Iran					
Recovered (d)	850 000	815 000	889 000	963 000	963 000
Iraq					
Recovered (d)	250 000	285 000	325 000	300 000	300 000
Israel					
Recovered (d)	24 000	30 000	32 000	31 000	38 000
Japan					
Pyrites	45 000	39 000	23 000	41 000	----
Recovered (c) (g)	1 409 000	1 424 000	1 410 000	1 513 000	1 567 000
Recovered (d)	1 791 000	2 013 000	2 083 000	2 060 000	2 072 000
Kazakhstan					
Pyrites	*71 000	----	----	----	----
Recovered (c)	139 000	139 000	212 000	245 000	294 000
Recovered (d)	515 000	778 000	935 500	1 111 000	1 244 700
Korea, Dem. P.R. of					
Pyrites	86 000	45 000	40 000	21 000	21 000
Recovered (c)	18 000	18 000	20 000	16 000	16 000
Korea, Republic of					
Recovered (c)	319 000	338 000	476 000	528 000	572 000
Recovered (d)	415 000	613 000	656 000	630 000	679 000
Kuwait					
Recovered (d)	595 000	664 000	665 000	639 000	512 000
Oman					
Recovered (d)	*30 000	*30 000	*30 000	*30 000	...
Pakistan					
Recovered (b)	*27 000	22 002	18 988	21 166	22 812
Philippines					
Recovered (c)	163 000	103 000	132 000	133 000	134 000
Recovered (d)	20 000	20 000	20 000	20 000	20 000
Qatar					
Recovered (d)	46 000	73 000	146 000	155 000	190 000
Saudi Arabia					
Recovered (d)	1 741 900	1 700 543	1 880 105	1 939 758	2 101 391
Singapore					
Recovered (d)	185 000	220 000	180 000	261 000	265 000
Syria					
Recovered (d)	30 000	30 000	30 000	30 000	30 000
Taiwan					
Recovered	181 600	163 964	184 325	194 811	205 588
Thailand					
Recovered (c)	46 000	46 000	46 000	46 000	...
Recovered (d)	100 000	130 000	180 000	180 000	...
Turkmenistan					
Sulphur ore	8 112	9 227	*9 000	*10 000	...
Uzbekistan					
Recovered (c)	147 000	163 000	163 000	163 000	163 000
Recovered (d)	251 000	250 000	270 000	283 000	285 000

**Production of Sulphur and Pyrites**

tonnes (sulphur content)

Country	1996	1997	1998	1999	2000
<b>Australia</b>					
Recovered (c)	327 000	474 000	507 000	441 000	654 000
Recovered (d)	27 000	22 000	22 000	25 000	30 000
Total Pyrites	8 400 000	7 800 000	5 100 000	8 900 000	8 600 000
Total Frasch	4 600 000	4 500 000	3 100 000	3 000 000	2 400 000
Total Recovered	41 700 000	44 400 000	48 700 000	50 400 000	51 900 000
Total Sulphur Ore	500 000	500 000	500 000	400 000	500 000

Note(s):-

- (a) Including production from synthetic fuels
- (b) Years ended 30 June of that stated
- (c) From metal sulphide processing
- (d) From petroleum refining and/or natural gas
- (e) Other
- (f) Years ended 31 March following that stated
- (g) Including S content of sulphur ore

## Exports of Sulphur and Pyrites

tonnes

Country	1996	1997	1998	1999	2000
Austria					
Sulphur, sublimed & precipitated	12 679	6 064	3 012	4 907	5 998
Belgium-Luxembourg					
Pyrites	1 702	1 695	1 880	1 832	2 392
Sulphur	16 691	10 582	13 424	8 493	12 427
Sulphur, sublimed & precipitated	73	103	208	171	240
Croatia					
Sulphur, crude	...	1 700	3 322	3 375	7 152
Czech Republic					
Sulphur	3 900	2 102	2 549	1 835	4 294
Sulphur, sublimed & precipitated	...	6 227	6 465	1 546	5 875
Denmark					
Sulphur	3 958	4 654	3 517	4 717	2 406
Finland					
Pyrites (c)	*443 800	*499 500	*501 900	*337 200	*288 100
France					
Sulphur, crude	645 790	540 537	503 616	475 879	444 447
Sulphur, refined	7 613	9 199	10 792	3 082	4 959
Sulphur, sublimed & precipitated	814	860	694	3 060	818
Germany					
Pyrites	614	495	375	480	457
Sulphur, crude	940 867	924 574	1 059 498	1 113 801	1 013 806
Sulphur, refined	28 542	22 143	22 936	18 278	31 354
Sulphur, sublimed & precipitated	380	319	367	342	18 962
Greece					
Sulphur	4 999	331	471	267	436
Hungary					
Sulphur, sublimed & precipitated	9 330	10 975	18 742	...	25
Italy					
Pyrites	8 361	8 667	9 237	6 616	22 810
Sulphur	64 883	74 497	50 376	69 344	107 740
Sulphur, sublimed & precipitated	309	230	278	136	176
Lithuania					
Sulphur	8 800	11 348	8 985	2 158	354
Netherlands					
Pyrites	2 729	98 621	64 161	85 665	119 675
Sulphur, crude	230 678	207 261	132 707	150 612	52 565
Sulphur, refined	(a) ...	(a) ...	80 293	69 659	84 609
Sulphur, sublimed & precipitated	137	38	181	50	46
Norway					
Sulphur, sublimed & precipitated	10 264	12 139	10 355	10 827	10 694
Poland					
Sulphur	1 302 430	1 127 300	832 700	801 354	1 023 400
Portugal					
Sulphur	7 332	5 056	11 349	16 837	7 367
Romania					
Sulphur	3 308	6 810	2 388	3 350	320
Russia					
Pyrites	43 297	18 518	28 044	16 221	14 113
Sulphur	1 008 260	1 723 936	1 773 308	2 642 574	3 110 639
Sulphur, sublimed & precipitated	519	142	1	...	71
Slovakia					
Sulphur	...	14 700	17 100	...	...
Spain					
Pyrites	26 089	37	51 795	57	25
Sulphur, crude	29 533	27 454	43 139	45 887	40 984
Sulphur, refined	...	10 618	9 295	12 640	20 960
Sulphur, sublimed & precipitated	652	612	366	465	474
Sweden					
Sulphur	568	14 857	3 938	934	2 056
Sulphur, sublimed & precipitated	...	85	85	73	----
Switzerland					
Sulphur	1 314	3 860	45	202	----
Turkey					
Sulphur, sublimed & precipitated	294	2 072	2 673	1 108	434
Ukraine					
Sulphur	39 084	24 789	24 879	23 163	...

## Sulphur and Pyrites

## Exports of Sulphur and Pyrites

tonnes

Country	1996	1997	1998	1999	2000
United Kingdom					
Sulphur, crude	1 816	22 423	51 809	50 897	10 334
Sulphur, sublimed & precipitated	3 532	14 624	140	277	379
Yugoslavia, Federal Republic of					
Pyrites	...	16 453	18 228	752	----
Egypt					
Sulphur, crude	1 300	1 679	1 312	1 552	...
Morocco					
Sulphur, crude	...	6 709	3 001	...	...
Namibia					
Pyrites	3 105	956	73	----	----
South Africa					
Sulphur	35 742	24 492	46 717	57 813	37 000
Canada					
Sulphur	6 026 287	6 465 467	5 145 955	5 024 568	4 841 305
Mexico					
Sulphur	509 274	482 188	586 645	513 285	507 366
Netherlands Antilles					
Sulphur	23 921	28 616	35 000	34 000	...
USA					
Pyrites	5 261	5 580	2 160	55 904	48 646
Sulphur, crude	496 566	651 088	853 250	656 372	692 791
Sulphur, refined	102 897	131 974	52 898	58 808	62 827
Sulphur, sublimed & precipitated	168 335	45 137	36 887	26 042	24 986
Colombia					
Sulphur	1 414	968	2 181	977	1 107
Venezuela					
Sulphur	231	1 747	3 105	...	35
Bahrain					
Sulphur	79 700	24 293	55 796	60 069	...
China					
Pyrites	30 317	20 056	36 759	6 229	9 107
Sulphur	1 380	324	5 206	3 120	5 065
Sulphur, sublimed & precipitated	503	807	1 156	935	1 713
India					
Sulphur, sublimed & precipitated (b)	946	1 710	2 837	3 045	...
Iran					
Sulphur	581 100	473 000	634 700	634 000	651 100
Japan					
Sulphur, crude	716 155	983 480	1 080 709	1 057 959	1 053 536
Sulphur, sublimed & precipitated	1 232	1 054	915	812	468
Jordan					
Sulphur, crude	...	93 448	157 254	249 135	49 755
Kazakhstan					
Sulphur	(c) *94 000	(c) *205 000	222 315	146 818	...
Korea, Republic of					
Sulphur, crude	103 412	200 704	255 023	253 900	280 846
Sulphur, sublimed & precipitated	6	1 115	1 275	1 338	1 562
Kuwait					
Sulphur	630 739	579 000	596 000	613 000	...
Qatar					
Sulphur	33 203	58 447	146 300	145 000	190 000
Saudi Arabia					
Sulphur	1 800 900	1 634 800	1 854 400	2 025 600	2 220 400
Singapore					
Sulphur, crude	74 178	57 519	80 464	66 939	92 517
Sulphur, sublimed & precipitated	57 845	79 337	52 194	65 459	54 703
Taiwan					
Sulphur	779	423	573	3 199	537
Sulphur, sublimed & precipitated	547	562	625	616	583
Thailand					
Sulphur	525	6 361	295	444	623
Sulphur, sublimed & precipitated	31	66	16	404	481

**Exports of Sulphur and Pyrites**

tonnes

Country	1996	1997	1998	1999	2000
Australia					
Sulphur	3 072	2 206	1 663	1 219	...
Sulphur, sublimed & precipitated	196	117	342	125	140
New Zealand					
Sulphur, crude	1 327	2 205	3 298	1 228	2 059

Note(s):-

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

## Sulphur and Pyrites

## Imports of Sulphur and Pyrites

tonnes

Country	1996	1997	1998	1999	2000
Austria					
Pyrites	570	546	1 096	373	731
Sulphur, crude	42 000	45 600	60 091	45 155	...
Sulphur, refined	...	4 151	5 157	8 328	15 346
Sulphur, sublimed & precipitated	26 989	1 546	5 306	4 477	3 642
Azerbaijan					
Sulphur	*8 000	*6 000	8 474	7 914	18 500
Belarus					
Sulphur	*150 000	*180 000	196 705	183 680	168 304
Belgium-Luxembourg					
Sulphur, crude	179 782	203 751	186 424	213 641	182 044
Sulphur, refined	130 316	158 558	192 737	214 285	207 656
Sulphur, sublimed & precipitated	2 049	2 033	1 974	5 699	16 252
Bulgaria					
Sulphur	3 922	6 165	2 400	----	...
Croatia					
Sulphur, crude	82 022	71 669	49 409	41 367	65 234
Sulphur, sublimed & precipitated	162	397	173	141	278
Cyprus					
Sulphur	1 491	1 301	1 728	1 583	1 300
Czech Republic					
Sulphur	105 838	91 456	75 514	57 111	68 252
Sulphur, sublimed & precipitated	...	20 768	26 279	53 084	46 615
Denmark					
Sulphur	21 867	15 140	9 564	10 963	8 000
Finland					
Sulphur	11 662	5 863	27 597	22 605	38 785
France					
Pyrites	4 891	1 701	2 474	3 260	12 396
Sulphur, crude	104 022	134 934	117 946	113 106	97 992
Sulphur, refined	18 484	39 964	16 355	12 456	75 859
Sulphur, sublimed & precipitated	17 825	6 072	11 152	18 845	25 216
Germany					
Pyrites	163 293	206 363	163 625	87 902	84 043
Sulphur	29 552	58 912	46 141	8 626	21 207
Sulphur, sublimed & precipitated	883	1 196	1 639	2 248	2 133
Greece					
Sulphur, crude	163 888	162 421	153 871	196 341	127 790
Sulphur, sublimed & precipitated	445	139	5	28	0
Hungary					
Sulphur	11 483	7 104	2 479	1 208	7 270
Sulphur, sublimed & precipitated	58	96	129	97	289
Italy					
Pyrites	12 003	13 960	18 791	5 022	13 177
Sulphur, crude	189 108	173 701	194 008	56 043	123 667
Sulphur, refined	2 120	4 305	4 524	9 565	5 887
Sulphur, sublimed & precipitated	915	217	2 316	355	770
Lithuania					
Sulphur	143 933	132 900	178 045	227 009	263 058
Moldova					
Sulphur, sublimed & precipitated	...	...	533	412	300
Netherlands					
Pyrites	212	...	69 520	41 736	73 366
Sulphur	94 201	61 199	24 989	52 231	21 193
Sulphur, sublimed & precipitated	756	10 120	16 712	5 094	27 801
Norway					
Pyrites	245 043	206 857	254 119	213 347	216 882
Sulphur	399	4 353	911	927	----
Sulphur, sublimed & precipitated	8	965	68	1	2
Poland					
Sulphur	1 274	100	8 300	46 014	49 273
Sulphur, sublimed & precipitated	...	...	...	505	560
Portugal					
Sulphur	7 322	2 644	2 469	2 378	2 302
Sulphur, sublimed & precipitated	10	703	4 576	1 709	7
Romania					
Sulphur, crude	60 166	41 736	43 195	27 314	54 047
Sulphur, sublimed & precipitated	2	25	824	80	69

**Imports of Sulphur and Pyrites**

tonnes

Country	1996	1997	1998	1999	2000
Russia					
Sulphur	155 504	244 862	159 698	147 694	9 870
Sulphur, sublimed & precipitated	1 300	340	271	186	221
Slovakia					
Sulphur	34 641	34 515	39 078	18 057	15 022
Slovenia					
Sulphur	32 169	44 119	49 628	44 682	47 621
Spain					
Sulphur, crude	62 222	54 908	41 258	39 836	174 499
Sulphur, refined	...	9 504	4 359	1 654	8 261
Sulphur, sublimed & precipitated	271	261	167	186	209
Sweden					
Pyrites	293	346	3 526	376	389
Sulphur	90 214	96 511	91 838	92 577	70 113
Sulphur, sublimed & precipitated	1 074	2 323	1 855	2 224	5 600
Switzerland					
Pyrites	214	275	301	304	220
Sulphur	38 563	39 107	40 601	39 081	40 195
Sulphur, sublimed & precipitated	75	73	52	46	67
Turkey					
Pyrites	26 210	34 644	17 437	87	12
Sulphur, crude	116 619	170 473	126 446	133 554	107 173
Sulphur, sublimed & precipitated	94	116	93	71	96
Ukraine					
Sulphur	428 250	332 662	371 493	348 423	253 400
United Kingdom					
Sulphur, crude	245 934	371 962	196 327	190 439	183 653
Sulphur, sublimed & precipitated	549	495	2 420	213	93
Yugoslavia, Federal Republic of					
Sulphur, crude	1 900	1 808	1 429	703	1 534
Algeria					
Sulphur	652	849	2 759	3 243	...
Egypt					
Sulphur	322 138	302 774	211 856	91 682	...
Sulphur, sublimed & precipitated	541	17 876	540	404	...
Ethiopia					
Sulphur	...	687	8	852	88
Sulphur, sublimed & precipitated	...	500	32	70	...
Gabon					
Sulphur	2 000	4 000	1 500	1 300	----
Kenya					
Sulphur	602	900	840	8 069	11 575
Sulphur, sublimed & precipitated	...	...	429	639	621
Morocco					
Sulphur	2 600 662	2 962 609	2 639 586	2 854 275	2 455 200
Namibia					
Sulphur	----	20 000	57 200	45 000	----
Niger					
Sulphur	...	17 362	14 483	15 414	10 930
Nigeria					
Sulphur	...	10 700	10 000	20 300	16 700
Sulphur, sublimed & precipitated	10 502	15 908	9 120	173	...
Senegal					
Sulphur	312 000	324 100	378 068	246 769	207 425
South Africa					
Sulphur, crude	525 579	539 704	531 432	696 552	699 867
Sulphur, sublimed & precipitated	658	659	291	244	228
Tunisia					
Sulphur	1 443 453	1 692 993	1 529 990	1 570 351	...
Sulphur, sublimed & precipitated	693	1 018	1 001	1 339	...
Zimbabwe					
Sulphur	116 817	10 676	14 568	32 480	...
Canada					
Pyrites	14 382	13 870	28 452	25 434	30 339
Sulphur, crude	24 386	46 518	51 368	48 554	48 099
Sulphur, sublimed & precipitated	1 040	485	1 207	610	813

## Sulphur and Pyrites

**Imports of Sulphur and Pyrites**

tonnes

Country	1996	1997	1998	1999	2000
Cuba					
Sulphur	109 910	259 836	177 989	151 100	...
El Salvador					
Sulphur	5 392	5 389	2 849	2 357	4 731
Guatemala					
Sulphur	3 191	2 707	3 194	2 394	4 157
Jamaica					
Sulphur	...	6 374	6 271	6 566	...
Mexico					
Sulphur, crude	798 971	669 104	645 476	731 586	717 486
Sulphur, sublimed & precipitated	310	1 463	1 044	1 395	839
USA					
Sulphur, crude	1 624 295	1 507 026	1 292 188	1 249 239	1 004 545
Sulphur, sublimed & precipitated	252	1 585	2 198	4 182	502
Argentina					
Sulphur	96 192	105 193	86 711	95 759	112 850
Brazil					
Sulphur	1 306 963	1 509 913	1 325 069	1 419 409	1 583 840
Chile					
Sulphur	20 375	14 493	16 719	...	68 053
Colombia					
Sulphur	68 235	81 278	81 531	65 293	67 406
Ecuador					
Sulphur	677	456	2 401	2 120	4 403
Paraguay					
Sulphur	3 100	3 000	3 000	2 000	1 700
Peru					
Sulphur	...	4 139	4 838	4 789	...
Suriname					
Sulphur	*1 000	*1 000	*1 000	...	...
Uruguay					
Sulphur	15 896	22 455	19 471	19 565	14 018
Bangladesh					
Sulphur (b)	13 700	43 545	30 000	35 000	...
China					
Sulphur	467 293	356 964	941 076	1 979 401	2 732 944
Sulphur, sublimed & precipitated	342 994	384 070	241 132	154 811	89 474
Hong Kong					
Sulphur, sublimed & precipitated	561	710	529	204	500
India					
Sulphur, crude (a)	1 543 187	1 617 256	1 583 023	2 024 090	...
Sulphur, sublimed & precipitated (a)	780	1 144	1 098	841	...
Indonesia					
Sulphur, crude	389 631	327 545	356 042	286 160	257 110
Sulphur, sublimed & precipitated	392	15 840	11 315	44 230	27 169
Israel					
Sulphur	432 100	467 500	595 000	575 500	561 100
Japan					
Pyrites	48 469	42 019	44 477	4 166	6 243
Sulphur	705	572	389	34	535
Sulphur, sublimed & precipitated	701	1 433	1 225	1 133	1 298
Jordan					
Sulphur, crude	337 365	340 266	410 723	799 577	533 003
Sulphur, sublimed & precipitated	348	...	24	----	50
Korea, Republic of					
Pyrites	22 112	22 296	36 762	14 086	639
Sulphur	343 058	226 600	243 888	225 321	217 491
Sulphur, sublimed & precipitated	232	207	171	117	130
Kuwait					
Pyrites	...	...	10 503	38 192	...
Lebanon					
Sulphur	42 400	79 631	121 724	101 244	142 229
Malaysia					
Sulphur, crude	52 900	20 200	84 900	87 200	...
Sulphur, sublimed & precipitated	2 919	2 262	9 214	...	...

**Imports of Sulphur and Pyrites**

tonnes

Country	1996	1997	1998	1999	2000
Pakistan					
Sulphur (b)	28 347	25 036	20 071	16 107	41 471
Philippines					
Sulphur, crude	176 909	90 395	111 550	137 350	...
Sulphur, sublimed & precipitated	147	6 435	56	288	...
Saudi Arabia					
Pyrites	...	9 691	----	2 346	44
Singapore					
Sulphur, crude	6 582	83	1 311	71	92
Sulphur, sublimed & precipitated	81	77	24	28	5
Sri Lanka					
Sulphur, crude	1 091	1 123	1 352	1 331	...
Sulphur, sublimed & precipitated	717	54	86	137	...
Syria					
Sulphur, crude	...	32 029	10 306	...	...
Taiwan					
Sulphur	531	301	407	450	151
Sulphur, sublimed & precipitated	159 488	182 328	144 490	132 529	152 530
Thailand					
Sulphur, refined	81 079	46 648	95 994	73 210	144 482
Sulphur, sublimed & precipitated	222	276	157	5 674	4 837
Australia					
Pyrites	1 079	1 122	1 828	168	194
Sulphur	118 831	158 739	230 408	244 825	...
Sulphur, sublimed & precipitated	123	171	283	599	1 418
New Zealand					
Sulphur, crude	197 893	191 575	180 091	178 045	255 211
Sulphur, sublimed & precipitated	640	763	554	510	529

Note(s) :-

(a) Years ended 31 March following that stated

(b) Years ended 30 June of that stated

**Production of Talc**

tonnes

Country	1996	1997	1998	1999	2000
Austria	129 748	141 984	137 114	129 576	133 060
Finland	418 000	435 000	495 000	509 000	502 000
France	349 300	362 200	391 200	405 300	409 000
Germany	10 005	13 035	15 473	*15 000	*15 000
Greece	180	100	150	2 860	*3 000
Italy	132 647	140 816	133 557	*140 000	*140 000
Macedonia	*10 000	*10 000	*10 000	*10 000	*10 000
Norway	28 140	*28 000	*26 000	*26 000	*27 000
Portugal	8 277	8 236	9 882	9 554	7 407
Romania	10 248	7 578	8 134	8 229	7 850
Russia	79 793	97 561	78 956	107 690	105 549
Slovakia	5 000	6 100	2 820	1 900	1 800
Spain	109 756	118 355	110 150	110 430	121 000
Sweden	25 000	25 000	24 000	19 000	20 000
Turkey					
Talc	*4 000	*4 000	*5 000	*5 000	*5 000
Pyrophyllite	...	38 000	37 000	48 358	54 278
United Kingdom	5 338	5 749	4 937	6 256	4 832
Egypt (d)	33 649	30 282	35 119	...	...
Morocco					
Talc	...	3 060	3 324	2 975	2 171
Pyrophyllite	...	16 790	22 565	11 680	10 351
South Africa					
Talc	9 700	12 600	11 300	7 900	5 600
Pyrophyllite	8 837	10 610	11 500	13 277	11 989
Zambia	333	44	...	...	...
Zimbabwe	1 076	1 023	1 039	1 081	989
Canada	76 000	73 000	71 000	78 000	88 000
Mexico	10 100	13 586	18 843	18 981	20 569
USA	994 000	1 050 000	971 000	925 000	851 000
Argentina					
Talc	11 777	13 380	14 585	8 971	*8 000
Pyrophyllite	2 180	4 242	3 450	3 400	*3 400
Brazil					
Talc (b)	275 499	265 042	258 695	216 454	*200 000
Agalmatolite (b)	108 501	111 083	98 445	105 306	*100 000
Pyrophyllite (b)	21 472	18 259	11 173	11 451	*10 000
Chile	4 276	3 986	3 772	2 231	2 421
Colombia	14 800	14 832	*15 000	*15 000	*15 000
Peru	12 985	5 750	11 165	12 085	9 668
Uruguay	898	1 133	972	2 905	2 093
Venezuela	*32 000	*32 000	*32 000	*32 000	*32 000
Bhutan	*3 500	*3 000	*3 200	...	...
China	*2 400 000	4 068 900	2 097 800	1 741 320	...
India					
Pyrophyllite (e)	141 655	102 875	91 924	106 268	144 311
Steatite (e)	512 579	474 957	481 554	557 112	553 241
Indonesia					
Pyrophyllite	...	32 594	22 611	...	...
Iran (a)	26 530	29 178	30 100	...	...
Japan					
Talc	56 153	*53 000	*50 000	*50 000	*50 000
Pyrophyllite	617 967	620 344	496 605	437 834	433 411
Korea, Dem. P.R. of	*180 000	*180 000	*150 000	*120 000	*120 000
Korea, Republic of					
Talc	19 066	25 751	24 411	15 313	11 344
Pyrophyllite	780 062	994 366	843 609	754 657	917 972
Nepal (c)	5 323	6 809	5 553	6 257	5 852
Pakistan (d)	28 265	45 414	48 927	67 670	*70 000
Taiwan	1 500	1 331	73	1 816	-----
Thailand					
Talc	7 238	7 139	2 172	4 960	7 390
Pyrophyllite	64 330	304 524	40 241	38 053	46 011

**Production of Talc**

tonnes

Country	1996	1997	1998	1999	2000
Australia					
Talc (d)	176 163	185 601	199 315	190 037	*180 000
Pyrophyllite (d)	595	337	702	347	1 727
World Total	8 100 000	10 300 000	7 700 000	7 200 000	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**

tonnes

Country	1996	1997	1998	1999	2000
Austria	145 925	146 131	157 732	159 206	129 226
Belgium-Luxembourg	66 979	74 238	77 276	79 086	86 536
Finland (a)	*168 000	*141 000	*145 000	*182 000	*210 000
France	176 799	209 299	216 966	213 881	229 681
Germany	6 102	6 041	6 273	4 215	5 216
Greece	54	116	972	1 597	1 413
Italy	68 246	78 612	80 228	87 787	98 344
Macedonia	712	844	612	...	...
Netherlands	50 889	58 185	70 522	87 984	162 006
Norway	35 800	36 512	35 488	33 688	31 249
Russia	1 164	1 144	257	732	1 002
Slovakia	7 800	4 500	2 600	1 777	1 510
Spain	39 583	49 945	43 887	55 137	58 247
Sweden	23 077	24 243	18 351	17 964	10 884
Switzerland	577	870	721	606	1 048
Turkey	87	165	208	122	56
United Kingdom	3 227	3 100	4 574	3 175	3 757
Egypt	4 610	5 887	8 481	4 233	...
South Africa					
Talc	24	56	104	96	40
Pyrophyllite	*5 000	*6 000	*7 000	*8 000	*8 000
Canada	26 073	26 276	29 661	44 447	58 506
USA	198 969	188 902	158 872	150 654	163 472
Brazil	2 056	3 914	3 925	6 028	7 074
Peru	3 493	5 454	5 670	5 665	...
China	1 023 901	1 021 001	766 019	732 480	804 431
Hong Kong (c)	10 238	10 375	9 650	7 311	6 501
India (b)	99 197	27 361	32 224	12 378	...
Japan	7 097	7 755	5 222	6 830	8 920
Korea, Republic of					
Talc	2 638	2 402	1 099	445	1 429
Pyrophyllite	226 170	253 195	152 290	175 757	151 463
Singapore	2 754	1 931	1 563	2 184	1 561
of which, re-exports	2 744	1 922	1 544	1 576	914
Taiwan	4 079	4 809	6 377	6 984	9 026
Thailand	3 469	2 873	2 589	3 621	2 945
Australia	150 567	91 307	2 796	111 610	134 188

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	1996	1997	1998	1999	2000
Austria	24 123	19 304	15 748	42 804	25 441
Belarus	...	...	1 567	1 252	1 346
Belgium-Luxembourg	74 660	96 181	98 211	92 906	104 074
Croatia	975	1 366	1 007	1 094	1 055
Cyprus	227	240	233	255	186
Czech Republic	...	6 669	6 313	7 802	8 659
Denmark	9 208	11 877	12 991	13 668	13 476
Finland	313	866	5 927	4 934	4 881
France	31 038	40 503	49 837	36 144	41 304
Germany	226 138	228 450	213 254	212 333	258 529
Greece	5 381	4 614	7 014	5 129	10 325
Hungary	...	8 181	9 077	9 245	10 224
Irish Republic	1 354	986	1 083	1 210	1 783
Italy	85 744	92 190	94 832	101 338	99 879
Netherlands	134 954	81 171	116 447	181 949	167 896
Norway	16 478	14 868	16 776	11 795	12 722
Poland	23 100	21 600	14 900	15 061	13 450
Portugal	12 921	12 511	14 432	15 284	14 873
Romania	...	553	520	678	804
Russia	2 196	3 301	5 091	6 961	9 521
Slovakia	500	600	500	382	...
Slovenia	...	...	4 417	3 382	3 639
Spain	38 162	43 173	49 177	60 767	60 728
Sweden	24 718	25 309	30 967	31 823	42 571
Switzerland	13 263	14 284	14 183	15 836	15 159
Turkey	4 762	6 933	8 576	8 443	12 809
United Kingdom	73 084	83 013	76 744	57 439	56 325
Yugoslavia, Federal Republic of	...	960	1 049	819	1 040
Algeria	777	2 750	2 169	2 029	...
Egypt	1 125	638	2 705	3 149	...
Ethiopia	...	135	73	144	409
Ghana	635	950	826	956	23 815
Ivory Coast	2 328	...	...	...	...
Kenya	...	...	3 565	4 998	3 267
Morocco	2 285	2 789	2 698	3 596	...
Nigeria	1 607	1 629	3 050	3 508	...
Senegal	...	...	265	449	1 023
South Africa	6 146	6 328	6 670	5 021	4 213
Tunisia	3 350	3 082	2 668	4 103	...
Canada	58 304	55 281	47 459	57 992	61 787
Costa Rica	1 724	1 344	2 593	1 800	2 146
El Salvador	550	662	793	658	545
Guatemala	319	563	575	549	666
Honduras	174	259	494	609	...
Jamaica	527	515	334	446	...
Mexico	112 872	117 138	114 554	121 713	130 900
Panama	884	1 023	913	908	...
Trinidad & Tobago	553	575	556	...	485
USA	179 738	115 166	157 564	194 812	255 761
Argentina	2 619	4 101	4 684	7 932	5 156
Brazil	8 572	9 495	10 591	10 763	10 096
Chile	6 620	7 824	6 732	...	...
Colombia	5 326	5 109	5 763	3 616	4 790
Ecuador	1 301	2 090	2 254	1 395	2 016
Peru	1 093	1 056	897	1 023	...
Venezuela	8 205	7 223	4 320	9 768	5 104
China	5 362	8 179	8 971	10 274	14 171
Dubai	2 569	3 309	3 273	...	...
Hong Kong	6 369	5 498	3 331	7 832	12 653
Indonesia	109 550	88 156	50 920	48 382	81 486
Japan	567 721	579 930	453 587	404 581	403 286
Jordan	1 603	1 976	2 278	2 210	1 877

**Imports of Talc**

tonnes

Country	1996	1997	1998	1999	2000
Korea, Republic of					
Talc	276 323	210 047	143 386	78 119	94 013
Pyrophyllite	5 501	10 983	7 293	11 651	23 951
Malaysia	35 589	58 800	50 479	...	...
Pakistan (a)	22 497	1 648	12 155	2 476	3 159
Philippines	21 008	16 785	18 937	23 746	...
Saudi Arabia	7 100	4 906	5 285	9 156	6 514
Singapore	11 701	29 604	12 057	14 079	14 713
Sri Lanka	2 269	2 500	2 195	2 323	...
Syria	1 615	3 909	12 378	...	...
Taiwan	136 799	132 001	133 462	136 148	138 474
Thailand	3 469	48 169	51 503	60 451	67 763
Australia	938	1 712	668	1 277	1 103
New Zealand	2 725	2 620	2 685	3 146	2 620

Note(s) :-

(a) Years ended 30 June of that stated

**Production of Tantalum and Niobium Minerals**

tonnes

Country	1996	1997	1998	1999	2000
Burundi					
Columbite-tantalite	37	46	30	42	20
Ethiopia					
Tantalite (a)	70	80	80	50	66
Nigeria					
Tantalite	*25	*25	*25	*25	*25
Columbite	57	496	9	...	...
Rwanda					
Columbite-tantalite	99	269	378	147	561
Zimbabwe					
Columbite-tantalite	----	1	6	3	4
Canada					
Pyrochlore	5 700	5 700	5 600	5 800	6 000
Tantalite	187	180	190	173	190
Brazil					
Pyrochlore	36 474	42 225	(b) 51 000	(b) 42 100	...
Columbite-tantalite	*190	*190	*330	*330	*330
Djalmaite	8	...	14	23	...
China					
Columbite-tantalite	45	...	175	201	*260
Malaysia					
Struverite	265	391	521	675	969
Australia					
Tantalite	920	1 010	1 150	1 300	1 800
World total concentrates	44 100	50 700	59 500	50 900	52 400
Nb content	*17 800	*20 500	*24 000	*20 300	*20 500
Ta content	*610	*750	*890	*920	*1 280

## Note(s):-

- (1) Niobium and tantalum minerals are believed to be produced in Democratic Republic of the Congo, French Guiana, Russia, 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

(b) Data for Minas Gerais only

**Exports of Tantalum and Niobium**

tonnes

Country	1996	1997	1998	1999	2000
Austria					
Tantalum	36	43	47	66	118
Czech Republic					
Tantalum	...	601	551	417	276
France					
Tantalum	79	39	5	31	59
Germany					
Niobium & tantalum ores	109	72	191	308	739
Tantalum	141	165	154	246	336
Italy					
Tantalum	12	21	1	2	14
Portugal					
Tantalum	----	1	----	19	33
Russia					
Tantalum	8	7	10	6	12
Turkey					
Tantalum	3	20	12	15	1
United Kingdom					
Tantalum	314	349	290	354	579
Ethiopia					
Tantalum	...	30	60	85	43
Rwanda					
Columbite & tantalite	138	224	239	...	...
Zimbabwe					
Tantalum	20	20	15	15	...
Canada					
Niobium & tantalum ores (a)	40	31	8	172	207
USA					
Tantalum ores & concentrates	53	91	391	403	328
Tantalum	372	455	486	553	572
Brazil					
Columbite-tantalite	106	323	217	75	148
China					
Tantalum	73	123	176	239	308
Japan					
Tantalum	173	219	242	302	385
Kazakhstan					
Tantalum	100	100	97	197	...
Korea, Republic of					
Tantalum	4	...	16	19	69
Malaysia					
Columbite & tantalite	238	195	170	198	...
Singapore					
Tantalum (b)	...	...	251	49	411
Tin slags	60	----	----	----	----
Taiwan					
Tantalum	19	15	19	2	5
Thailand					
Tantalum ores & concentrates	1 040	2 740	...	341	450
Tantalum	62	68	46	85	156
Tin slags	----	4 107	816	290	...
Australia					
Tantalum	268	264	290	128	166

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	1996	1997	1998	1999	2000
Austria					
Tantalum	49	1	4	1	2
Czech Republic					
Tantalum	158	179	155	170	250
France					
Tantalum	39	17	27	15	16
Germany					
Tantalum	169	235	183	203	298
Irish Republic					
Tantalum	3	10	23	22	23
Netherlands					
Tantalum	...	...	...	41	72
Poland					
Tantalum	5	2	2	22	5
United Kingdom					
Tantalum	980	1 463	1 375	1 119	976
USA					
Tantalum concentrates	1 109	908	1 218	992	2 068
Niobium concentrates	224	131	70	95	151
Tantalum	480	400	829	945	1 108
Niobium	341	423	563	468	606
China					
Tantalum	138	135	203	257	356
Hong Kong					
Tantalum	32	3	8	61	95
India					
Niobium & tantalum ores (a)	466	266	143	133	...
Japan					
Niobium ores & concentrates	2	29	57	56	64
Tantalum	186	128	154	287	409
Korea, Republic of					
Tantalum	13	26	35	38	65
Taiwan					
Tantalum	4	2	2	6	50
Thailand					
Tantalum	2	6	13	23	29
Australia					
Tantalum	6	12	11	2	10

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	1996	1997	1998	1999	2000
Portugal	4 637	3 566	2 958	2 163	1 246
Russia	9 000	7 500	7 000	5 200	6 600
United Kingdom	2 103	2 396	448	----	----
Burundi	4	15	9	13	3
Nigeria	2 500	2 800	1 900	*1 500	*2 000
Rwanda	209	155	440	359	400
Bolivia	14 802	12 898	11 308	12 417	12 503
Brazil	20 568	19 065	14 607	13 200	13 800
Peru (a)	27 004	27 952	25 745	30 618	37 410
China	69 700	67 500	70 100	80 100	97 100
Indonesia	51 024	55 174	53 959	47 754	51 629
Kazakhstan	...	500	500	500	500
Laos	1 508	1 030	595	404	414
Malaysia	5 174	5 070	5 754	7 340	6 307
Mongolia	18	10	----	----	----
Myanmar	459	335	221	149	1 600
Thailand	1 050	550	1 460	2 450	1 700
Vietnam	*4 500	*4 800	*4 500	*4 500	*4 500
Australia	8 824	10 168	10 204	10 011	9 144
World Total	223 000	221 000	212 000	219 000	247 000

Note(s):-

(a) Recoverable

**Smelter Production of Tin**

tonnes

Country	1996	1997	1998	1999	2000
Russia	12 400	9 200	4 100	3 800	5 400
Nigeria	56	70	1 920	...	...
Mexico	1 234	1 188	1 083	1 262	1 204
Bolivia (a)	16 733	16 853	11 102	11 166	9 353
Brazil	18 361	17 525	14 342	12 787	13 823
Peru	800	8 759	13 928	17 342	17 357
China	71 500	67 700	79 300	90 800	112 400
India	...	3 700	3 700	*3 600	*3 600
Indonesia	48 960	52 577	53 997	48 340	46 432
Malaysia	38 051	34 823	27 201	28 913	26 200
Thailand	10 981	11 986	15 353	17 306	17 076
Vietnam	3 008	2 790	2 770	2 336	*2 400
Australia	460	605	655	585	775
<b>World Total</b>	<b>223 000</b>	<b>228 000</b>	<b>229 000</b>	<b>240 000</b>	<b>258 000</b>

Note(s):-

(a) Refined, including alloys

**Exports of Tin**

tonnes

Country	1996	1997	1998	1999	2000
Austria					
Unwrought (a)	167	102	78	106	51
Scrap	131	179	241	294	167
Belgium-Luxembourg					
Unwrought	6 782	7 642	7 518	7 097	8 031
Unwrought alloys	395	211	309	206	433
Scrap	199	479	81	167	108
Czech Republic					
Unwrought (a)	175	219	15	109	20
Denmark					
Scrap	102	137	153	114	113
Estonia					
Scrap	...	8	172	336	592
Finland					
Unwrought alloys	185	238	90	63	17
Scrap	22	64	148	101	173
France					
Unwrought	109	160	233	283	282
Unwrought alloys	591	715	651	359	378
Scrap	1 374	2 805	3 165	2 274	1 612
Germany					
Unwrought	248	426	395	854	575
Unwrought alloys	483	648	1 065	826	1 108
Scrap	467	559	568	509	309
Irish Republic					
Scrap	19	45	154	78	207
Italy					
Unwrought (a)	2 595	152	543	200	248
Scrap	164	185	243	140	195
Netherlands					
Unwrought	451	743	7 466	6 818	2 976
Unwrought alloys	882	691	568	816	449
Scrap	313	265	1 308	563	483
Portugal					
Concentrates	9 653	6 927	6 257	4 155	2 332
Russia					
Concentrates	3 421	2 538	2 303	4 315	3 241
Unwrought (a)	8 859	7 608	2 103	792	1 747
Scrap	50	7	13	----	...
Spain					
Unwrought (a)	95	691	1 544	257	669
Scrap	28	654	169	91	94
Sweden					
Unwrought (a)	207	260	361	282	390
Scrap	173	115	415	462	305
Switzerland					
Unwrought (a)	153	105	80	95	64
Scrap	69	171	127	136	97
United Kingdom					
Concentrates	3 667	3 646	1 292	173	121
Unwrought	568	281	3 396	88	136
Unwrought alloys	1 767	1 759	2 100	2 239	3 030
Scrap	4 416	875	1 356	3 631	1 587
Burundi					
Concentrates	5 502	20 935	----	18 408	4 706
Nigeria					
Unwrought	*100	*100	*100	*100	...
Rwanda					
Concentrates	393	327	219	...	...
Canada					
Unwrought (a)	1 465	988	467	577	557
Scrap	5 918	740	2 946	1 340	929
Jamaica					
Scrap	1 715	...	...	...	...

**Exports of Tin**

tonnes

Country	1996	1997	1998	1999	2000
USA					
Unwrought (a)	6 730	6 043	6 284	8 075	8 721
of which, re-exports	1 950	1 380	1 228	1 341	2 101
Scrap	9 587	7 507	9 504	8 544	5 977
Bolivia					
Concentrates	3 769	3 554	2 617	1 842	3 553
Unwrought	11 326	12 424	10 382	11 770	12 063
Brazil					
Unwrought (a)	12 268	12 930	6 988	6 469	7 544
Peru					
Concentrates	38 271	31 627	20 900	21 855	...
Unwrought	4 501	10 949	6 599	3 241	...
China					
Unwrought	29 412	30 663	45 489	54 159	62 418
Unwrought alloys	6 716	10 425	8 084	10 424	15 314
Hong Kong					
Concentrates (b)	821	914	132	----	250
Unwrought (a)	10 811	6 078	11 730	6 520	8 297
of which, re-exports	10 702	5 991	10 634	6 367	7 941
Scrap	227	229	270	15	21
India					
Unwrought (a) (c)	7 573	6 348	483	423	...
Indonesia					
Unwrought (a)	46 312	49 908	52 100	46 435	44 427
Scrap	62	181	198	791	911
Japan					
Concentrates	167	167	28	1	0
Unwrought (a)	193	211	289	310	341
Scrap	470	1 161	760	697	975
Jordan					
Scrap	1 071	1 720	...	...	...
Korea, Republic of					
Unwrought (a)	298	565	3 730	276	276
Scrap	90	12	37	50	173
Laos					
Concentrates (d)	1 060	730	551	332	440
Malaysia					
Unwrought (a)	34 342	31 785	22 376	24 024	20 615
Scrap	904	531	851	388	...
Singapore					
Concentrates (b)	1 370	1 617	2 057	5 909	3 706
Unwrought	38 656	43 502	40 655	43 768	37 145
of which, re-exports	36 554	...	38 891	42 163	35 031
Scrap	1 504	1 250	261	351	319
of which, re-exports	318	...	29	26	38
Taiwan					
Unwrought (a)	212	248	386	364	606
Scrap	728	760	1 529	2 314	2 868
Thailand					
Unwrought (a)	4 850	7 983	11 163	12 267	13 036
Scrap	70	97	148	169	51
Vietnam					
Unwrought	*2 300	2 790	2 770	...	...
Australia					
Concentrates	15 726	17 069	15 590	16 651	14 254
Unwrought (a)	498	537	542	508	277
Scrap	277	1 789	1 492	681	1 510

Note(s):-

(1) In this table the term 'unwrought' tin corresponds to item 8001 of the Harmonised System 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**

tonnes

Country	1996	1997	1998	1999	2000
Austria					
Unwrought (a)	822	806	641	820	875
Scrap	52	44	86	114	136
Belgium-Luxembourg					
Unwrought	1 544	1 833	1 579	1 063	983
Unwrought alloys	968	584	1 062	1 227	2 128
Scrap	1 420	2 259	3 953	3 006	4 186
Croatia					
Unwrought (a)	117	105	74	73	74
Czech Republic					
Unwrought (a)	526	587	436	483	556
Finland					
Unwrought (a)	241	352	377	111	127
France					
Concentrates	451	230	1 008	203	37
Unwrought	8 191	8 104	8 505	7 596	7 722
Unwrought alloys	608	386	905	686	614
Scrap	536	1 740	1 957	1 163	1 236
Germany					
Unwrought	19 685	20 735	21 195	18 620	21 519
Unwrought alloys	702	782	768	473	528
Scrap	248	400	416	572	758
Greece					
Unwrought (a)	491	502	296	153	307
Hungary					
Unwrought (a)	464	332	314	443	562
Irish Republic					
Unwrought (a)	343	363	288	869	435
Italy					
Unwrought	6 317	5 206	6 335	5 726	6 068
Unwrought alloys	258	590	437	313	185
Scrap	120	5	73	9	0
Netherlands					
Unwrought	10 180	12 945	13 345	10 042	5 603
Unwrought alloys	1 073	989	1 116	1 094	888
Scrap	203	370	793	508	1 008
Norway					
Unwrought	553	477	402	387	457
Unwrought alloys	90	81	104	130	96
Poland					
Unwrought	1 229	1 298	1 090	957	1 194
Portugal					
Unwrought	725	748	940	834	1 505
Unwrought alloys	458	276	411	92	246
Romania					
Unwrought (a)	511	434	412	204	191
Russia					
Concentrates	13 218	3 870	310	390	1 236
Unwrought (a)	125	181	410	1 538	2 833
Scrap	...	...	...	102	491
Slovakia					
Unwrought	607	8	746	836	651
Spain					
Concentrates	66	15	2	358	436
Unwrought	24 354	4 429	4 109	3 458	4 875
Unwrought alloys	1 516	719	497	435	600
Scrap	81	97	42	47	2 242
Sweden					
Unwrought	495	549	663	634	807
Unwrought alloys	62	276	308	271	358
Scrap	93	112	164	95	62
Switzerland					
Unwrought (a)	636	851	864	814	824
Turkey					
Unwrought (a)	1 409	1 234	1 335	1 267	1 864
Ukraine					
Unwrought	368	288	48	33	...

**Imports of Tin**

tonnes

Country	1996	1997	1998	1999	2000
United Kingdom					
Unwrought	10 010	14 768	10 753	9 120	9 185
Unwrought alloys	1 901	1 303	1 220	952	1 753
Scrap	557	456	477	393	384
Yugoslavia, Federal Republic of					
Unwrought (a)	107	206	123	28	106
Egypt					
Unwrought	4 024	209	380	232	...
Ethiopia					
Unwrought	...	971	1 400	...	...
Morocco					
Unwrought (a)	142	120	113	76	...
South Africa					
Unwrought (a)	2 425	2 391	1 823	2 316	2 327
Zimbabwe					
Unwrought	52	76	*110	111	...
Canada					
Unwrought	4 462	4 659	4 223	7 663	5 397
Scrap	489	701	451	576	431
Mexico					
Concentrates	1 760	1 746	1 541	609	4 812
Unwrought	1 537	1 534	2 772	2 891	...
Scrap	31	12	55	255	888
USA					
Unwrought	30 004	40 580	44 105	48 012	44 937
Unwrought alloys	11 828	3 869	1 319	3 090	4 372
Scrap	6 744	1 961	4 187	2 736	2 341
Argentina					
Unwrought	1 135	1 280	1 159	1 100	979
Bolivia					
Concentrates	11 479	8 550	----	26	----
Chile					
Unwrought	790	797	552	439	690
Colombia					
Unwrought (a)	293	291	336	234	231
Peru					
Unwrought (a)	128	154	147	88	...
Venezuela					
Unwrought (a)	669	353	738	323	263
China					
Concentrates	434	509	692	871	2 077
Unwrought	741	1 138	1 040	1 291	1 629
Unwrought alloys	1 320	1 512	1 948	2 498	3 306
Dubai					
Concentrates	673	706	40	...	...
Unwrought	550	735	938	...	...
Hong Kong					
Concentrates	100	1 699	82	----	----
Unwrought	11 135	5 619	8 991	4 765	4 872
Unwrought alloys	2 758	1 435	6 240	5 308	6 104
Scrap	200	232	226	144	35
India					
Concentrates (b)	2 478	5 016	144	----	...
Unwrought (a) (b)	5 049	4 203	3 655	3 366	...
Scrap (b)	1 779	26	76	----	...
Iran					
Unwrought (d)	...	545	231	574	...
Israel					
Unwrought (a)	*250	*300	*320	*230	130
Japan					
Unwrought	25 272	28 133	23 624	25 993	28 131
Unwrought alloys	2 294	2 488	2 480	2 901	4 355
Scrap	96	49	143	89	196

**Imports of Tin**

tonnes

Country	1996	1997	1998	1999	2000
Kazakhstan					
Unwrought	*260	*710	912	1 082	...
Korea, Republic of					
Unwrought	11 118	12 054	11 771	12 125	14 936
Unwrought alloys	733	198	257	390	777
Malaysia					
Concentrates (c)	32 343	30 454	21 961	20 110	19 052
Unwrought	3 639	3 225	2 608	2 618	...
Unwrought alloys	4 222	3 907	3 986	4 108	...
Pakistan					
Scrap	765	138	341	173	...
Philippines					
Unwrought (a)	874	750	557	1 388	...
Saudi Arabia					
Unwrought	62	62	51	207	190
Singapore					
Concentrates	820	917	289	578	1 278
Unwrought	2 108	3 930	1 879	5 007	6 775
Scrap	684	652	589	540	128
Taiwan					
Unwrought	7 280	9 857	9 088	11 052	11 255
Unwrought alloys	2 656	2 862	3 026	2 489	2 766
Scrap	461	437	551	229	309
Thailand					
Concentrates	17 269	22 031	26 451	30 675	31 059
Unwrought (a)	209	87	69	195	439
Australia					
Unwrought (a)	945	2 476	2 750	2 544	1 849
New Zealand					
Unwrought (a)	446	57	99	107	72

Note(s) :-

(1) In this table the term 'unwrought' tin corresponds to item 8001 of the Harmonised System and comprises ingots, pigs, unwrought bars, sticks, etc.

(a) Including alloys

(b) Years ended 31 March following that stated

(c) Sn content

(d) Years ended 20 March following that stated

## Production of Titanium Minerals

tonnes

Country	1996	1997	1998	1999	2000
Norway					
Ilmenite	758 711	558 000	589 534	579 623	690 900
Ukraine					
Ilmenite	...	...	507 435	536 542	576 749
Rutile	...	...	...	110 951	132 517
Egypt					
Ilmenite (c)	57 000	53 496	57 495	...	...
South Africa					
Ilmenite (b)	*1 700 000	*1 853 000	*1 836 000	*1 870 000	*1 853 000
Rutile	*110 000	*115 000	*115 000	*123 000	*123 000
Canada					
Ilmenite (a) (b)	*2 500 000	*2 400 000	*2 700 000	*2 500 000	*2 400 000
USA	*400 000	*800 000	*800 000	*600 000	*600 000
Brazil					
Ilmenite	125 520	184 655	115 444	234 209	...
Rutile	1 771	2 196	2 323	3 388	3 162
China					
Ilmenite	...	218 200	58 200	57 708	...
India					
Ilmenite (d)	231 513	332 727	377 907	387 756	377 907
Rutile (d)	9 305	14 365	16 039	17 471	16 041
Korea, Republic of					
Ilmenite	389 992	344 808	241 865	203 413	168 664
Malaysia					
Ilmenite	244 642	167 504	124 689	127 695	124 801
Sri Lanka					
Ilmenite	66 456	22 533	37 148	-----	-----
Rutile	3 532	2 968	1 930	-----	-----
Vietnam					
Ilmenite	8 000	97 000	130 000	*120 000	*130 000
Australia					
Ilmenite	2 030 000	2 233 000	2 424 000	1 936 000	2 145 000
Rutile	183 000	234 000	244 000	184 000	209 000
Leucoxene	30 000	32 000	32 000	33 000	37 000
World Total					
Ilmenite (wt of concs)	9 200 000	9 800 000	10 000 000	9 200 000	9 400 000
Rutile (wt of concs)	419 000	479 000	490 000	439 000	484 000
All forms (TiO <sub>2</sub> content)	*4 700 000	*5 000 000	*5 100 000	*4 700 000	*4 800 000

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 2000 South Africa produced an estimated 1090000 tonnes (85% TiO<sub>2</sub>) and Canada produced 893000 tonnes (80-95% TiO<sub>2</sub>)
- (c) Years ended 30 June of that stated
- (d) Years ended 31 March following that stated

**Exports of Titanium**

tonnes

Country	1996	1997	1998	1999	2000
Austria					
Metal	167	239	121	194	204
Oxides	1 565	2 194	2 195	2 904	2 487
Belarus					
Oxides	3 000	3 000	3 332	1 458	46
Belgium-Luxembourg					
Metal	451	569	870	885	986
Oxides	214 954	243 120	259 406	265 178	312 795
Czech Republic					
Oxides	17 900	21 682	23 423	26 505	29 376
Estonia					
Metal	183	49	39	75	83
Finland					
Metal	79	165	87	164	311
Oxides (b)	*32 900	*57 200	*63 800	*84 400	*68 000
France					
Titanium minerals	2 931	1 443	868	56	565
Metal	2 339	4 470	4 510	4 341	5 081
Oxides	175 744	212 059	184 689	171 636	198 541
Georgia					
Metal	----	----	205	539	151
Germany					
Titanium minerals	970	588	11 251	670	164
Metal	4 092	4 092	3 570	5 007	6 578
Oxides	237 877	277 670	267 996	287 789	299 268
Greece					
Oxides	1 000	1 400	820	1 159	1 281
Italy					
Metal	4 534	3 559	4 595	4 090	4 676
Oxides	25 780	37 264	39 792	34 989	26 858
Netherlands					
Titanium minerals	7 992	8 693	2 209	3 669	1 806
Metal	1 091	1 185	1 309	1 809	1 482
Oxides	(b) *39 100	68 626	71 717	(b) *54 900	(b) *54 400
Norway					
Titanium minerals	400 932	453 000	447 000	375 000	455 450
Metal	538	...	130	135	176
Oxides (b)	*24 500	*28 100	*27 100	*21 800	*24 300
Poland					
Oxides	13 500	19 600	47 600	21 406	21 280
Russia					
Metal	28 879	33 826	27 854	14 518	15 031
Slovenia					
Oxides	21 688	32 707	31 848	35 928	42 369
Spain					
Metal	363	236	350	327	308
Oxides	53 695	55 761	51 446	66 156	74 071
Sweden					
Metal	998	805	1 392	1 182	1 295
Oxides	7 478	6 013	7 150	7 983	8 401
Switzerland					
Metal	317	233	311	305	332
Oxides	621	567	443	385	1 723
Turkey					
Metal	28	62	788	295	245
Ukraine					
Titanium minerals	122 590	211 877	231 419	279 580	(b) *316 900
Metal	730	1 664	1 785	5 093	(b) *5 200
Oxides	36 645	35 418	39 543	57 896	(b) *68 500
United Kingdom					
Metal	11 028	12 379	11 443	9 328	13 563
Oxides	148 315	158 332	165 635	190 440	210 692
Sierra Leone					
Ilmenite	...	...	----	2 614	----
Rutile	5 924	...	----	4 757	----
South Africa					
Titanium minerals (b)	*316 600	*258 400	*322 800	*224 200	*170 000
Titanium slag (b)	*579 500	*525 900	*549 900	*523 000	*470 000
Oxides (b)	*7 200	*10 300	*15 200	*11 100	...

## Exports of Titanium

tonnes

Country	1996	1997	1998	1999	2000
Canada					
Titanium minerals & slag	*1 100 000	*800 000	*1 000 000	*900 000	*1 000 000
Metal	666	492	930	1 038	1 015
Oxides	70 627	80 855	88 167	85 949	73 380
Mexico					
Oxides	64 953	25 406	3 600	2 800	42 994
USA					
Titanium minerals	15 825	24 359	60 374	13 127	19 945
Metal	13 392	17 175	17 449	17 275	18 176
Oxides	340 137	405 072	400 614	385 709	463 472
Brazil					
Oxides	5 919	8 155	13 320	8 095	8 332
China					
Titanium minerals	24 912	18 673	1 828	12 144	31 028
Metal	1 974	2 108	1 721	1 399	1 045
Oxides	24 223	26 904	34 572	44 772	62 072
Hong Kong					
Oxides (c)	24 826	27 083	23 703	23 430	26 632
India					
Ilmenite (a)	42 961	109 312	64 955	55 168	...
Other titanium minerals (a)	7 399	8 955	6 744	13 390	...
Oxides (a)	649	846	4 173	1 154	...
Israel					
Metal (b)	*400	*300	*200	*300	*400
Japan					
Metal	15 855	24 193	19 418	16 802	16 856
Oxides	77 740	94 876	97 371	108 388	92 410
Kazakhstan					
Metal	12 953	18 493	17 571	8 817	...
Korea, Republic of					
Titanium minerals	59 920	36 190	24 320	18 430	59 970
Oxides	17 567	16 375	20 885	21 510	29 096
Kyrgyzstan					
Metal	(b) *300	(b) *100	45	----	...
Malaysia					
Ilmenite	115 122	146 600	72 900	121 200	...
Oxides	49 584	56 600	50 500	48 300	...
Saudi Arabia					
Titanium minerals	...	...	2 493	3 548	2 087
Oxides	45 200	45 000	25 118	11 478	57 514
Singapore					
Oxides	23 939	42 526	39 268	43 071	38 291
of which, re-exports	9 757	7 604	5 338	17 216	6 649
Sri Lanka					
Ilmenite	1 093	30 000	20	...	...
Rutile	21 282	100	80	(d) 160	...
Taiwan					
Metal	174	391	767	1 106	831
Oxides	71 916	47 795	72 876	81 366	92 894
Thailand					
Ilmenite	4 178	3 106	----	6 708	5 520
Vietnam					
Titanium minerals	*25 000	90 000	99 000	(b) *90 500	*110 000
Australia					
Ilmenite	1 062 364	1 349 892	1 285 873	1 051 000	*1 147 000
Rutile	168 763	207 604	217 863	171 000	*189 000
Leucoxene	28 698	33 623	21 094	31 000	54 000
Oxides	130 692	132 155	133 619	142 585	139 780

## 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 Harmonised System items 2823 and 3206.10
- (3) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

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

## Titanium

## Imports of Titanium

tonnes

Country	1996	1997	1998	1999	2000
Austria					
Metal	338	510	608	454	683
Oxides	15 896	20 658	18 986	16 942	18 838
Belarus					
Oxides	*2 500	*5 500	9 231	5 271	4 887
Belgium-Luxembourg					
Ilmenite	3 091	262	413	635	18 612
Other titanium minerals	57 625	50 007	82 705	83 099	115 497
Titanium slag	54 267	49 146	36 414	43 252	29 418
Metal	1 298	1 030	1 363	1 666	1 341
Oxides	58 084	163 638	179 944	170 623	224 621
Bulgaria					
Titanium minerals	479	670	*700	*700	...
Croatia					
Oxides	2 648	2 569	2 269	2 453	1 922
Cyprus					
Oxides	850	1 148	963	867	881
Czech Republic					
Titanium minerals	56 200	55 949	61 093	67 855	75 502
Metal	...	84	136	453	189
Oxides	2 600	3 113	3 002	3 191	3 970
Denmark					
Metal	629	1 097	785	323	823
Oxides	14 067	17 451	16 203	18 273	20 517
Estonia					
Oxides	...	963	1 412	888	1 085
Finland					
Titanium minerals	*105 000	*103 000	*108 500	*95 000	...
Metal	88	100	165	82	250
Oxides	6 908	8 860	9 082	9 617	8 808
France					
Ilmenite	37 667	52 490	81 127	53 667	182 583
Other titanium minerals	117 162	96 119	141 575	92 682	17 288
Titanium slag	159 761	92 773	...	116 357	48 117
Metal	4 942	7 343	7 472	6 638	7 757
Oxides	115 143	123 629	124 028	127 084	143 436
Germany					
Ilmenite	342 250	236 404	345 057	315 818	387 707
Other titanium minerals	251 050	195 479	277 325	275 515	170 381
Titanium slag	81 392	127 137	...	134 790	130 353
Metal	7 973	9 426	8 560	9 430	9 595
Oxides	153 144	153 104	182 501	169 879	196 901
Greece					
Titanium minerals	1 045	600	774	689	742
Oxides	17 672	20 728	22 639	20 946	20 719
Hungary					
Metal	...	135	234	181	345
Oxides	5 400	6 300	6 200	6 800	7 605
Irish Republic					
Oxides	2 094	3 740	3 411	3 947	4 101
Italy					
Titanium minerals	4 689	1 654	5 145	3 973	85 910
Titanium slag	...	67 407	...	69 236	16 764
Metal	5 845	5 031	6 254	5 794	5 904
Oxides	116 220	138 209	141 229	141 100	163 705
Latvia					
Oxides	...	...	1 128	766	873
Netherlands					
Ilmenite	...	...	6 085	31 567	55 587
Other titanium minerals	(b) 62 820	(b) 47 130	28 515	28 239	42 479
Titanium slag	...	...	...	17 509	9 877
Metal	1 561	3 104	2 397	3 505	4 101
Oxides	61 571	69 661	73 719	59 198	52 786
Norway					
Titanium minerals	29 637	352	122	19	-----
Metal	538	638	1 139	670	407
Oxides	6 986	7 540	8 948	8 807	8 626

**Imports of Titanium**

tonnes

Country	1996	1997	1998	1999	2000
Poland					
Titanium minerals	62 500	69 800	87 200	74 439	87 393
Metal	...	...	...	182	186
Oxides	8 400	13 900	15 700	21 414	26 324
Portugal					
Oxides	18 100	17 784	18 995	18 018	17 227
Romania					
Titanium minerals	2 295	2 219	3 281	1 517	3 017
Oxides	2 034	2 617	3 633	3 684	3 992
Russia					
Titanium minerals	76 518	89 925	93 599	63 408	75 478
Metal	478	1 049	2 615	1 449	665
Oxides	28 571	29 658	28 319	43 036	51 958
Slovakia					
Oxides	100	2 293	2 500	1 606	...
Slovenia					
Titanium minerals	11 500	11 700	11 565	11 533	12 462
Oxides	1 400	1 700	1 976	2 107	2 444
Spain					
Ilmenite	138 171	155 093	122 165	129 460	170 723
Other titanium minerals	...	1 706	2 181	1 958	2 020
Metal	1 465	1 583	1 957	2 301	1 498
Oxides	63 339	76 095	79 856	73 963	87 837
Sweden					
Titanium minerals	658	422	700	548	225
Metal	401	367	585	1 540	1 604
Oxides	33 705	36 856	35 384	39 550	40 747
Switzerland					
Metal	443	481	521	391	503
Oxides	18 452	19 861	19 737	19 090	21 423
Turkey					
Titanium minerals	7 343	5 514	5 824	5 464	6 077
Oxides	44 462	60 872	53 710	51 135	59 446
United Kingdom					
Ilmenite	164 050	156 649	100 765	95 473	134 861
Other titanium minerals	75 937	93 122	181 420	84 841	70 348
Titanium slag	91 045	99 308	119 386	120 890	160 738
Metal	18 495	28 117	30 712	26 883	28 013
Oxides	83 245	80 138	102 697	74 434	80 119
Yugoslavia, Federal Republic of					
Oxides	1 500	1 800	2 100	1 387	792
Algeria					
Oxides	7 717	5 778	8 636	7 588	...
Egypt					
Titanium minerals	1 400	1 346	1 324	1 775	...
Oxides	8 035	8 969	14 856	12 487	...
Ethiopia					
Oxides	...	644	853	596	367
Kenya					
Oxides	...	...	1 978	2 001	1 883
Mauritius					
Oxides	...	...	821	811	907
Morocco					
Oxides	6 000	6 468	8 110	7 767	...
Nigeria					
Oxides	2 704	5 546	4 056	23 806	...
South Africa					
Metal	...	288	133	172	307
Oxides	6 383	7 427	9 803	8 209	9 962
Sudan					
Oxides	...	...	6 650	...	...
Tunisia					
Oxides	3 851	3 990	4 344	5 554	...

## Titanium

**Imports of Titanium**

tonnes

Country	1996	1997	1998	1999	2000
Canada					
Titanium minerals	7 382	8 458	4 737	4 923	6 542
Metal	2 033	1 692	1 908	1 371	3 480
Oxides	84 683	110 686	117 814	111 959	98 625
Mexico					
Ilmenite	143 836	119 540	174 418	167 767	238 204
Rutile sand	813	1 245	1 088	627	...
Titanium slag	20 199	37 343	20 001	...	...
Oxides	30 991	57 539	55 984	...	194 671
USA					
Ilmenite	608 336	565 461	402 961	402 129	473 766
Rutile (c)	324 482	345 842	386 983	343 840	438 143
Titanium slag	421 140	429 919	626 258	677 723	532 744
Metal	35 709	37 547	27 772	17 843	19 321
Oxides	167 044	194 269	199 913	224 810	218 128
Argentina					
Titanium minerals	2 061	1 948	2 321	1 804	1 543
Oxides	29 337	30 465	31 625	30 564	31 389
Brazil					
Titanium minerals	865	1 195	1 062	220	1 508
Oxides	64 344	69 578	70 433	74 482	70 754
Chile					
Oxides	4 957	10 961	10 154	8 466	10 889
Colombia					
Oxides	12 612	16 052	13 812	13 284	16 449
Uruguay					
Oxides	1 750	2 582	2 771	2 763	2 977
Venezuela					
Oxides	8 508	13 578	11 293	11 786	14 330
China					
Titanium minerals	56 622	29 850	20 520	15 540	39 647
Metal	2 684	2 315	3 201	2 269	2 297
Oxides	92 886	100 610	89 782	120 037	157 013
Dubai					
Metal	146	296	241	...	...
Oxides	10 613	12 414	12 647	...	...
Hong Kong					
Metal	...	...	268	129	193
Oxides	33 197	38 452	34 287	33 388	34 619
India					
Titanium minerals (d)	5 167	7 230	35	0	...
Metal (d)	276	222	94	129	...
Oxides (d)	31 981	27 729	21 083	29 871	...
Indonesia					
Titanium minerals	2 535	1 500	2 575	1 637	2 777
Metal	539	...	138	120	195
Oxides	14 007	13 240	23 106	11 147	43 831
Iran					
Titanium minerals	...	...	5 024	3 680	...
Oxides	...	...	14 130	16 719	...
Israel					
Oxides	*10 000	12 833	10 424	12 125	...
Japan					
Titanium minerals	402 325	408 705	468 445	461 267	416 718
Metal	8 828	13 041	11 694	4 096	7 527
Oxides	100 243	102 809	82 817	79 034	80 164
Jordan					
Oxides	*2 900	3 487	3 776	4 615	3 588
Kazakhstan					
Titanium minerals	*30 000	*30 000	34 341	23 104	...
Korea, Republic of					
Rutile sand	12 510	12 259	9 383	10 081	...
Titanium minerals	56 092	165 097	149 357	133 383	129 144
Metal	2 208	3 582	2 712	3 838	4 042
Oxides	78 255	91 455	65 826	94 641	100 290

**Imports of Titanium**

tonnes

Country	1996	1997	1998	1999	2000
Malaysia					
Titanium minerals	117 628	132 420	72 872	121 125	...
Oxides	15 200	19 447	16 200	9 989	...
Oman					
Oxides	529	851	1 063	960	1 332
Pakistan					
Oxides (a)	7 249	7 895	9 611	916	2 140
Philippines					
Titanium minerals	2 414	1 422	920	1 346	...
Oxides	24 249	29 161	19 222	27 123	...
Saudi Arabia					
Titanium minerals	69 311	105 695	50 157	85 253	30 090
Oxides	2 579	1 598	2 814	5 372	6 148
Singapore					
Titanium minerals	43 700	52 849	32 307	49 842	44 723
Metal	...	...	143	503	74
Oxides	25 140	21 163	18 774	23 969	22 952
Sri Lanka					
Oxides	2 300	2 300	2 451	2 392	...
Taiwan					
Titanium minerals	75 232	117 431	103 828	99 337	114 089
Metal	1 950	3 467	2 419	2 375	3 127
Oxides	59 145	45 186	60 625	67 275	66 338
Thailand					
Rutile	5 725	6 153	(b) 4 787	3 289	2 703
Other titanium minerals	4 882	5 792	...	1 900	4 579
Metal	113	102	56	109	109
Oxides	38 993	42 550	26 244	33 610	42 512
Australia					
Titanium minerals	419	299	15 620	22	...
Metal	346	576	555	597	474
Oxides	1 004	330	1 082	12 104	17 733
New Zealand					
Oxides	9 998	9 639	7 699	9 849	8 457

## 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 Harmonised System items 2823 and 3206.10  
(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

## Tungsten

**Mine Production of Tungsten**

tonnes (metal content)

Country	1996	1997	1998	1999	2000
Austria	1 072	1 138	1 077	1 218	1 237
Portugal (c)	777	1 029	821	435	743
Russia (c)	4 500	4 500	3 000	3 000	3 000
Rwanda	104	78	30	54	144
Uganda	----	----	8	0	----
Mexico	188	179	130	40	----
Bolivia	581	513	497	334	393
Brazil (a)	99	40	...	13	14
Peru	263	226	60	----	----
China	26 650	25 030	23 845	20 200	24 612
Kazakhstan	96	----	----	----	----
Korea, Dem. P.R. of	*900	*900	*800	*700	*700
Kyrgyzstan	*100	*100	*100	*100	*100
Mongolia	22	33	46	27	52
Myanmar (b)	334	272	178	87	82
Tajikistan	*50	----	----	----	----
Thailand (c)	35	28	31	28	28
Uzbekistan	*300	*250	*200	*200	*200
Vietnam	130	210	----	----	----
Australia (d) (e)	61	2	4	4	----
<b>World Total</b>	<b>36 300</b>	<b>34 500</b>	<b>30 900</b>	<b>26 400</b>	<b>31 300</b>

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	1996	1997	1998	1999	2000
Albania					
Ore	...	...	...	1 009	171
Austria					
Metal	1 265	1 060	830	1 399	1 062
Belgium-Luxembourg					
Metal	211	177	157	213	255
Carbide	128	96	128	28	31
Czech Republic					
Ore	128	137	106	128	61
Metal	100	116	174	133	372
Denmark					
Metal	15	18	41	9	29
Estonia					
Ore	...	5 736	711	278	224
Metal	...	...	...	309	287
France					
Metal	398	518	449	420	2 755
Carbide	358	350	...	357	394
Germany					
Metal	1 494	1 555	1 426	1 469	1 942
Irish Republic					
Metal	17	33	59	83	194
Italy					
Metal	190	373	446	196	171
Netherlands					
Ore	10	20	388	97	10
Metal	414	432	417	237	182
Poland					
Ores & concentrates	----	----	342	461	...
Metal	56	97	33	10	150
Portugal					
Ore	1 319	1 881	1 269	601	715
Metal	18	26	59	86	546
Russia					
Ore	3 226	8 843	5 446	4 639	4 906
Metal (d)	*930	*510	*770	*1 350	*900
Spain					
Metal	20	108	71	68	185
Sweden					
Metal	31	134	53	50	14
Carbide	...	255	...	227	444
Switzerland					
Metal	54	137	171	206	154
United Kingdom					
Metal	1 074	1 939	2 300	1 335	4 869
Carbide	807	270	291	481	8
Rwanda					
Ores & concentrates	43	63	...	...	...
South Africa					
Metal	...	233	229	241	291
Uganda					
Ore	76	40	51	35	78
Mexico					
Ores & concentrates	234	279	198	39	5
USA					
Metal	1 586	1 832	2 693	2 639	2 337
Ammonium paratungstate (a)	152	121	287	103	53
Carbide	1 316	1 104	1 210	701	983
Bolivia					
Ore	1 031	917	882	589	692
Peru					
Ores & concentrates	839	328	56	109	...

## Tungsten

**Exports of Tungsten**

tonnes

Country	1996	1997	1998	1999	2000
China					
Ores & concentrates	140	751	190	80	...
Metal	1 262	1 041	1 561	1 946	2 738
Ammonium paratungstate	12 425	14 596	12 675	10 507	9 276
Hong Kong					
Ore (c)	3 179	362	245	104	63
India					
Metal (b)	203	95	83	172	...
Israel					
Metal (d)	*260	*340	*480	*390	*450
Japan					
Metal	1 437	1 300	1 586	1 362	1 538
Korea, Republic of					
Metal	567	608	700	607	895
Carbide	1 086	1 071	1 158	...	...
Myanmar					
Ores & concentrates	194	42	85	-----	-----
Singapore					
Ore (c)	776	464	297	242	175
Metal	151	189	177	267	258
Taiwan					
Metal	142	183	319	143	95
Thailand					
Ore	213	303	65	107	40
Australia					
Ores & concentrates	-----	16	20	20	22
Metal	7	52	34	2	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	1996	1997	1998	1999	2000
Austria					
Ore	300	1 800	1 500	1 000	...
Metal	730	355	459	380	358
Carbide	...	...	...	278	449
Belgium-Luxembourg					
Metal	228	382	378	284	384
Carbide	137	100	122	39	36
Czech Republic					
Metal	100	125	89	52	184
Denmark					
Metal	7	17	5	41	109
Estonia					
Ore	...	5 521	198	296	132
Metal	...	...	58	327	277
Finland					
Metal	88	86	76	61	100
France					
Metal	*600	393	685	877	744
Carbide	329	224	...	462	534
Germany					
Ore	378	272	479	805	77
Metal	2 329	2 376	3 131	3 792	4 392
Carbide	667	1 059	1 091	874	1 182
Irish Republic					
Metal	314	586	335	235	79
Italy					
Metal	135	173	278	363	292
Carbide	...	430	...	313	360
Netherlands					
Ore	68	171	405	215	397
Metal	546	*400	270	169	247
Carbide	...	...	...	218	74
Poland					
Ores & concentrates	127	121	97	137	1
Metal	21	11	28	28	178
Portugal					
Carbide	82	75	...	96	75
Russia					
Metal	166	87	158	116	87
Spain					
Metal	99	45	52	51	556
Sweden					
Metal	388	393	338	461	356
Carbide	...	839	...	933	1 036
Switzerland					
Metal	120	146	112	122	113
United Kingdom					
Metal	1 614	1 889	2 055	1 819	2 207
Carbide	1 041	1 357	2 293	752	838
Nigeria					
Metal	...	8	2	35	...
South Africa					
Metal	7	74	155	127	159
Canada					
Metal	149	217	201	150	215
Carbide	400	...	...	...	...
Mexico					
Metal	219	...	305	*200	...
USA					
Ore	7 627	8 616	8 606	4 696	3 632
Metal	2 686	2 462	2 485	2 128	2 002
Ammonium paratungstate (a)	1 580	2 100	1 920	1 920	2 484
Carbide	491	699	999	863	1 064

## Tungsten

**Imports of Tungsten**

tonnes

Country	1996	1997	1998	1999	2000
China					
Ore	2 693	2 564	1 474	1 950	563
Metal	151	138	127	312	404
Hong Kong					
Ore	614	189	1	1	62
Metal	12	92	109	349	67
India					
Ore (b)	315	440	210	130	...
Metal (b)	123	294	387	161	...
Indonesia					
Metal	41	316	128	83	128
Japan					
Ore	478	1 473	1 881	1 794	1 514
Metal	871	895	750	629	1 578
Korea, Republic of					
Metal	110	124	170	176	266
Kyrgyzstan					
Metal	440	15	12	14	...
Malaysia					
Metal	822	793	273	...	...
Singapore					
Ore	317	103	66	17	29
Metal	137	167	147	168	229
Taiwan					
Metal	171	197	264	374	340
Thailand					
Metal	28	76	38	140	234
Australia					
Metal	85	110	96	68	115

## 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

**Mine Production of Vanadium**

tonnes (metal content)

Country	1996	1997	1998	1999	2000
Hungary	*200	*200	*100	-----	-----
Russia	*11 000	*9 000	*9 000	*9 000	*9 000
South Africa	17 095	16 103	18 954	17 612	18 021
USA	*900	*2 700	*2 400	...	...
China	*14 000	*15 000	*15 500	*16 000	*16 000
Kazakhstan	*900	*900	*1 000	*1 000	*1 000
Australia	...	...	...	-----	1 510
World Total	44 100	43 900	47 000	46 000	47 900

Note(s):-

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

**Exports of Vanadium**

tonnes

Country	1996	1997	1998	1999	2000
Austria					
Pentoxide	472	...	...	...	...
Belgium-Luxembourg					
Vanadiferous residues	6 969	4 097	6 803	6 395	5 281
Pentoxide	60	4	28	8	49
Vanadium-titanium pig iron	16	149	1	...	...
Denmark					
Vanadium-titanium pig iron	135	13	67	108	125
France					
Pentoxide	17	2	86	322	13
Metal	...	59	2	22	16
Germany					
Vanadiferous residues	566	364	189	282	358
Pentoxide	201	296	163	183	91
Metal	320	659	581	133	336
Italy					
Vanadiferous residues	...	55	1 735	1 748	3 502
Netherlands					
Vanadiferous residues	...	...	...	687	291
Pentoxide	...	217	258	214	222
Russia					
Pentoxide	...	4 453	2 430	7 638	8 431
Metal	15	61	51	35	52
United Kingdom					
Metal	7	188	...	...	...
South Africa					
Pentoxide (a)	13 260	16 183	17 596	15 871	15 865
Mexico					
Vanadiferous residues	1 556	1 384	4 298	2 186	4 479
USA					
Pentoxide	2 974	1 108	1 165	647	996
Metal	157	155	346	322	106
China					
Vanadiferous residues	11 018	18	0	...	...
Pentoxide	4 299	6 465	7 586	6 167	6 872
Korea, Republic of					
Vanadiferous residues	...	...	2 925	4 728	3 095

## Note(s):-

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

(a) Includes vanadium content of pentoxide and vanadiferous residues

**Imports of Vanadium**

tonnes

Country	1996	1997	1998	1999	2000
Austria					
Vanadiferous residues	*26 000	*27 000	*27 000	*29 000	*27 000
Ores & concentrates	...	...	50	873	506
Pentoxide	3 174	3 110	2 030	2 752	2 206
Metal	----	45	88	6	12
Belgium-Luxembourg					
Vanadiferous residues	11	15	...	314	410
Pentoxide	3 330	3 342	1 389	1 707	3 142
Czech Republic					
Pentoxide	...	...	360	3 641	5 495
Metal	...	1	26	70	40
France					
Ores & concentrates	427	509	374	156	162
Pentoxide	246	406	476	362	461
Metal	...	875	114	264	130
Germany					
Vanadiferous residues	133	43	133	903	127
Pentoxide	730	926	918	828	614
Metal	32	24	47	18	20
Italy					
Pentoxide	...	373	447	166	74
Netherlands					
Vanadiferous residues	...	...	345	225	127
Pentoxide	...	640	2 983	1 198	1 312
Norway					
Metal	----	...	17	39	58
Russia					
Pentoxide	...	204	232	1 718	1 139
Metal	158	534	316	132	69
Spain					
Vanadiferous residues	...	122	181	...	----
Sweden					
Metal	71	58	96	59	49
United Kingdom					
Pentoxide	73	161	156	306	277
Metal	368	628	690	373	271
South Africa					
Pentoxide	...	91	116	34	22
Tunisia					
Pentoxide	134	334	92	181	...
Canada					
Pentoxide	1 986	2 316	2 332	1 308	689
USA					
Vanadiferous residues	5 593	9 543	24 069	13 840	20 250
Pentoxide	873	1 425	1 381	351	1 323
Metal	96	525	11	22	47
Brazil					
Pentoxide	405	58	58	84	200
China					
Vanadiferous residues	2 001	3 001	10 123	7 002	6 152
Pentoxide	283	9	35	143	457
Metal	1 022	30	1	37	41
Japan					
Pentoxide	4 675	5 322	5 043	3 700	4 539
Metal	148	226	190	103	238
Korea, Republic of					
Vanadiferous residues	...	...	...	400	1 100
Pentoxide	1 332	2 259	1 705	2 535	2 852
Taiwan					
Vanadiferous residues	168	171	336	444	376
Metal	19	63	27	8	3

**Imports of Vanadium**

tonnes

Country	1996	1997	1998	1999	2000
Australia					
Pentoxide	23	232	31	31	30
Metal	152	123	10	...	11

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	1996	1997	1998	1999	2000
Bulgaria	19 400	20 700	17 500	10 600	10 000
Finland	26 294	31 200	30 700	19 600	16 100
Georgia	*1 000	*1 000	*1 000	*1 000	*1 000
Greece	7 230	17 627	19 851	17 943	16 834
Irish Republic	164 500	193 100	180 400	200 200	263 000
Italy	11 000	8 500	2 500	-----	-----
Macedonia	22 000	21 000	24 000	21 000	20 000
Norway	8 990	6 709	960	-----	-----
Poland	159 000	158 271	157 874	160 081	154 278
Romania	32 082	31 737	25 650	26 536	27 455
Russia	175 000	121 000	114 000	132 000	136 000
Spain	145 468	147 098	138 014	153 000	203 927
Sweden	160 133	155 385	164 711	174 448	176 788
Turkey	68 000	63 800	57 700	57 000	48 000
Yugoslavia, Federal Republic of	15 108	12 782	14 967	3 615	3 266
Algeria	3 100	3 700	4 600	5 200	5 500
Congo, Democratic Republic	3 182	1 686	1 234	*1 000	*1 000
Morocco	81 316	89 141	112 000	111 703	105 107
Namibia	34 377	39 658	42 142	37 140	40 266
South Africa	76 853	71 062	69 630	69 733	62 703
Tunisia	31 920	2 967	31 200	48 900	41 200
Canada	1 222 386	1 076 385	1 061 645	1 020 982	996 921
Honduras	37 037	39 483	36 639	40 996	43 064
Mexico	377 599	379 252	395 391	362 807	392 791
USA	628 063	631 900	755 000	813 500	829 100
Argentina	31 093	33 357	35 560	34 192	33 761
Bolivia	145 092	154 491	152 110	146 144	149 134
Brazil	117 341	152 634	87 475	98 590	100 254
Chile	36 004	33 934	15 943	32 263	31 403
Peru	760 353	867 691	868 758	899 524	910 303
China	1 161 000	1 209 900	1 273 200	1 476 000	1 710 000
India	154 000	142 200	194 500	185 000	208 000
Iran	76 300	76 500	82 000	79 000	80 000
Japan	79 709	71 569	67 670	64 263	63 601
Kazakhstan	159 400	222 600	225 600	270 300	322 100
Korea, Dem. P.R. of	*80 000	60 000	44 000	37 000	34 000
Korea, Republic of	8 384	8 992	10 489	9 832	11 474
Myanmar	572	*500	500	300	200
Saudi Arabia	5 290	5 100	3 550	3 161	3 047
Thailand	18 100	9 100	19 500	18 600	15 900
Uzbekistan	*12 000	*2 000	-----	-----	-----
Vietnam	*16 000	*17 000	*26 000	*26 000	*26 000
Australia	1 076 000	1 035 000	1 066 000	1 163 000	1 410 000
World Total	7 400 000	7 400 000	7 600 000	8 000 000	8 700 000

**Production of Slab Zinc**

tonnes

Country	1996	1997	1998	1999	2000
Belgium	207 400	213 600	205 000	232 400	263 800
Bulgaria	80 000	82 000	86 136	84 000	85 000
Finland	175 635	175 333	198 940	225 200	222 900
France	324 500	317 200	320 400	318 000	318 000
Germany	328 100	317 679	333 968	332 852	*330 000
Italy	268 700	268 300	231 600	145 300	170 300
Macedonia	59 200	53 147	57 162	49 608	62 800
Netherlands	207 100	203 200	217 100	221 400	216 768
Norway	135 100	142 249	137 925	143 976	138 390
Poland	163 100	170 600	174 800	178 900	179 000
Portugal	3 600	*3 600	*4 000	*4 000	*4 000
Romania	28 182	30 226	29 326	28 695	51 929
Russia	175 000	190 000	196 000	231 310	241 025
Spain	360 800	370 911	365 767	*370 000	...
Turkey	23 700	37 458	35 800	27 000	----
Ukraine	*2 000	*2 000	----	----	----
United Kingdom	96 867	107 704	99 600	132 800	99 600
Yugoslavia, Federal Republic of	29 954	29 454	13 600	700	8 300
Algeria	29 259	36 404	30 842	31 709	26 335
Congo, Democratic Republic	100	----	----	----	----
South Africa	101 100	108 463	106 662	108 000	103 000
Canada	716 467	703 798	745 131	776 927	779 586
Mexico	221 736	231 444	230 325	218 943	235 073
USA	366 000	366 000	367 600	371 300	370 900
Argentina	39 292	41 772	41 777	43 443	39 269
Brazil	193 339	192 701	183 806	194 010	*200 000
Peru	173 139	166 105	174 655	196 978	200 207
China	1 163 800	1 434 400	1 486 300	1 703 200	1 957 000
India	149 000	166 000	180 000	189 000	208 000
Iran	5 000	7 000	17 000	21 000	34 000
Japan	599 053	603 112	607 899	633 383	654 384
Kazakhstan	170 081	188 996	240 728	248 754	262 570
Korea, Dem. P.R. of	*90 000	*55 000	*43 000	*40 000	*37 000
Korea, Republic of	286 604	335 488	390 260	430 108	476 787
Thailand	72 380	84 054	90 980	97 292	101 142
Uzbekistan	45 000	53 000	52 000	27 000	18 000
Australia	336 000	318 000	320 000	349 000	498 000
<b>World Total</b>	<b>7 400 000</b>	<b>7 800 000</b>	<b>8 000 000</b>	<b>8 400 000</b>	<b>9 000 000</b>

## Exports of Zinc

tonnes

Country	1996	1997	1998	1999	2000
Austria					
Unwrought (a)	2 977	13 108	14 955	18 948	20 746
Scrap	2 869	3 079	3 537	2 360	3 345
Belgium-Luxembourg					
Ore	1 095 059	1 130 638	607 159	686 666	531 616
Unwrought	144 915	143 121	105 298	87 099	102 816
Unwrought alloys	147 855	...	...	142 586	...
Scrap	21 319	36 920	26 148	23 481	18 849
Bulgaria					
Unwrought (a)	72 093	67 196	(b) *75 000	(b) *71 700	(b) *82 200
Czech Republic					
Unwrought (a)	300	3 008	758	1 861	2 865
Scrap	3 700	4 794	2 509	2 607	2 750
Denmark					
Scrap	5 744	7 038	6 069	6 804	7 351
Estonia					
Scrap	(b) *1 400	1 931	1 768	1 845	1 426
Finland					
Unwrought	137 317	128 746	155 494	186 944	176 366
Unwrought alloys	2 918	4 842	4 250	2 316	360
Scrap	7 700	9 344	8 363	7 016	6 668
France					
Ore	10 146	16 407	19 655	21 623	44 107
Unwrought	226 741	177 074	143 683	127 893	111 730
Unwrought alloys	5 567	7 479	15 376	25 970	29 963
Scrap	28 116	39 161	37 834	34 189	41 599
Germany					
Ore	46 030	41 710	56 509	64 299	58 100
Unwrought	70 130	49 088	53 350	58 110	66 002
Unwrought alloys	27 710	38 446	37 150	38 577	40 377
Scrap	29 044	33 795	35 691	45 412	45 218
Greece					
Ores & concentrates	8 503	32 501	42 878	29 500	32 670
Unwrought (a)	719	300	1 211	2 000	885
Scrap	1 198	1 552	700	527	173
Hungary					
Unwrought	467	1 153	841	928	948
Scrap	1 961	2 259	2 574	2 423	3 153
Irish Republic					
Ores & concentrates	282 567	347 300	315 099	338 609	331 533
Scrap	568	921	456	699	632
Italy					
Ore	2 474	18 326	24 546	24 972	30 670
Unwrought	40 392	15 616	8 731	5 633	5 731
Unwrought alloys	13 329	15 425	10 739	5 883	6 328
Scrap	8 773	9 138	6 915	10 211	10 845
Latvia					
Unwrought (b)	*200	*2 000	*1 000	...	*200
Macedonia					
Ore	3 568	11 091	2 099	...	...
Unwrought (a)	55 592	53 655	53 067	(b) *47 600	(b) *79 100
Netherlands					
Unwrought	166 630	193 761	254 995	240 868	223 418
Unwrought alloys	47 315	40 230	45 738	2 406	98
Scrap	20 608	24 966	21 793	19 267	18 842
Norway					
Unwrought	112 980	124 187	116 805	121 857	116 999
Unwrought alloys	8 430	6 651	9 168	10 239	12 067
Poland					
Ore	46 948	39 780	19 900	26 329	21 200
Unwrought	63 378	59 300	67 900	91 700	75 489
Unwrought alloys	2 437	2 605	3 766	2 295	2 488
Scrap	111	56	440	237	897
Portugal					
Scrap	----	332	2 380	857	729
Romania					
Ore	...	3 286	11 302	23 737	46 410
Unwrought	8 199	14 756	18 625	18 617	46 355

**Exports of Zinc**

tonnes

Country	1996	1997	1998	1999	2000
Russia					
Ores & concentrates	86 651	56 583	38 436	46 092	52 180
Unwrought (a)	119 498	120 577	117 167	118 192	117 168
Scrap (b)	*400	*1 800	*2 300	*3 000	*1 300
Slovakia					
Unwrought	700	400	400	1 352	...
Scrap	100	500	...	580	...
Spain					
Ore	116 180	136 282	121 884	150 074	232 781
Unwrought	183 142	180 175	122 746	142 447	84 575
Unwrought alloys	14 997	20 259	25 988	29 440	38 900
Scrap	2 251	2 419	1 402	2 785	5 451
Sweden					
Ore	315 030	292 797	293 053	329 282	341 193
Unwrought (a)	158	4 193	3 172	710	609
Scrap	6 524	5 580	6 224	27 393	20 396
Switzerland					
Unwrought (a)	166	513	212	1 142	546
Scrap	2 127	2 026	2 894	4 030	3 832
Turkey					
Ores & concentrates	85 914	96 167	101 840	100 503	128 187
Unwrought	3 309	15 511	15 702	4 838	49
Ukraine					
Unwrought (a)	----	23	281	1 113	(b) *1 800
United Kingdom					
Unwrought	10 925	10 309	10 879	15 924	12 393
Unwrought alloys	23 008	24 730	23 840	22 656	20 128
Scrap	26 871	33 723	21 877	43 025	45 636
Yugoslavia, Federal Republic of					
Unwrought (a)	22 300	20 465	1 038	845	4 041
Algeria					
Unwrought (a)	26 558	24 244	24 446	21 209	...
Kenya					
Scrap	...	...	1 030	905	1 043
Morocco					
Ore	178 175	191 172	242 270	230 540	...
Namibia					
Concentrates (c)	34 377	34 524	36 096	32 589	32 245
South Africa					
Unwrought	7 700	11 400	12 134	27 648	13 618
Tunisia					
Ore	73 938	6 914	31 070	74 159	...
Unwrought	...	...	16 635	9 050	...
Canada					
Ores & concentrates (c)	706 735	489 373	425 340	326 925	319 150
Unwrought	581 609	547 597	576 926	610 811	603 460
Unwrought alloys	204	48	381	574	1 734
Scrap	28 608	27 304	27 111	25 567	36 408
Honduras					
Ores & concentrates (c)	37 037	39 483	36 639	40 996	...
Mexico					
Ores & concentrates	258 125	293 516	336 269	316 057	303 443
Unwrought	75 859	61 431	65 154	74 109	90 003
USA					
Ore (c)	470 213	483 511	571 373	531 307	523 071
of which, re-exports	45 280	24 555	19 181	37	----
Unwrought (a)	16 222	18 689	13 844	21 962	17 066
Scrap	31 594	34 744	26 676	23 581	26 472
Argentina					
Ores & concentrates	7 273	1 447	309	286	150
Unwrought	7 590	7 818	9 307	7 505	8 124
Bolivia					
Ore	297 973	311 324	311 792	294 519	301 096
Brazil					
Unwrought	49 447	23 200	14 765	26 244	24 325

## Exports of Zinc

tonnes

Country	1996	1997	1998	1999	2000
Chile					
Concentrates	66 258	80 022	45 420	51 389	69 083
Peru					
Concentrates	1 090 687	1 235 089	1 010 549	1 170 245	1 015 489
Unwrought	122 155	107 802	121 712	124 174	...
China					
Ores & concentrates	109 391	381 309	201 325	233 150	138 891
Unwrought	217 413	543 841	370 612	507 501	574 630
Unwrought alloys	9 364	13 167	12 282	19 641	18 766
Scrap	2 105	2 298	5 108	5 955	2 098
Dubai					
Unwrought	...	1 091	613	...	...
Hong Kong					
Unwrought (a)	100 304	97 120	109 077	110 351	130 064
of which, re-exports	91 264	90 808	100 634	104 026	126 161
Scrap	14 416	15 258	15 307	27 800	31 318
of which, re-exports	13 268	15 228	14 999	27 164	30 058
India					
Ore (e)	31 239	92 364	30 921	32 315	...
Unwrought (a) (e)	949	11 752	16 555	51	...
Indonesia					
Ore	...	28 425	39 103	39 432	38
Unwrought (a)	1 270	1 400	421	345	794
Iran					
Ores & concentrates (d)	...	194 807	47 658	118 769	...
Unwrought	...	...	492	5 076	5 529
Japan					
Unwrought	28 500	23 531	46 683	70 834	51 100
Unwrought alloys	1 823	1 755	12 837	8 547	4 557
Scrap	6 930	7 093	5 876	6 487	6 599
Jordan					
Scrap	3 203	2 603	458	551	246
Kazakhstan					
Ore	23 075	57 964	74 538	78 300	...
Unwrought (a)	149 549	191 126	218 024	(b) *278 100	(b) *193 000
Korea, Dem. P.R. of					
Unwrought (a) (b)	*8 100	*6 000	*2 700	*500	*200
Korea, Republic of					
Unwrought (a)	24 282	91 204	159 056	153 523	196 345
Unwrought alloys	212	369	8 151	9 321	19 113
Scrap	2 192	2 210	671	68	----
Malaysia					
Scrap	2 900	4 100	6 600	*9 000	...
Myanmar					
Concentrates (e)	----	----	2 014	373	----
Philippines					
Scrap	165	2 007	3 153	1 319	...
Saudi Arabia					
Unwrought	...	...	5 696	5 343	6 263
Scrap	900	3 297	2 138	3 505	3 145
Singapore					
Unwrought	34 858	123 959	135 404	110 009	111 030
of which, re-exports	33 608	...	133 259	108 005	108 176
Scrap	1 049	2 944	2 509	2 622	2 090
Taiwan					
Unwrought (a)	6 968	9 881	9 342	10 764	12 516
Scrap	1 400	2 504	3 788	1 911	1 980
Thailand					
Unwrought	20	22 117	41 174	21 959	18 660
Unwrought alloys	----	1 561	6 993	8 699	7 305
Scrap	4	3 068	1 345	873	448
Uzbekistan					
Unwrought (b)	*5 500	*6 800	*29 800	*16 400	*37 500
Vietnam					
Ores & concentrates	...	55 000	85 000	...	...

**Exports of Zinc**

tonnes

Country	1996	1997	1998	1999	2000
Australia					
Ores & concentrates	1 487 647	1 478 789	1 565 066	1 697 017	1 710 075
Unwrought	239 722	218 420	227 836	280 367	427 187
Scrap	1 509	1 145	1 312	1 191	4 217
New Zealand					
Scrap	799	771	28	58	72

Note(s):-

(1) In this table the term 'unwrought' zinc corresponds to item 7901 of the Harmonised System and comprises blocks, pigs, slabs, etc.

- (a) Including alloys
- (b) BGS estimates, based on known imports into certain countries
- (c) Zn content
- (d) Years ended 20 March following that stated
- (e) Years ended 31 March following that stated

**Imports of Zinc**

tonnes

Country	1996	1997	1998	1999	2000
Austria					
Unwrought	43 104	46 741	58 890	47 261	45 015
Unwrought alloys	14 428	17 913	18 882	16 079	16 126
Scrap	893	1 310	947	721	891
Belarus					
Unwrought (a)	700	300	1 313	2 031	2 906
Belgium-Luxembourg					
Ore	1 393 376	1 605 860	1 048 756	1 018 447	879 412
Unwrought	222 649	247 904	232 249	192 761	233 203
Unwrought alloys	12 692	11 221	13 567	3 474	2 049
Scrap	23 869	48 650	48 518	50 113	55 556
Bulgaria					
Ore	116 953	147 283	(b) *100 000	(b) *135 000	...
Croatia					
Unwrought (a)	2 358	2 501	3 039	2 186	2 340
Czech Republic					
Unwrought (a)	17 125	20 101	22 394	21 387	27 724
Denmark					
Unwrought	10 645	10 795	14 305	9 983	12 244
Unwrought alloys	1 389	1 707	828	707	2 428
Scrap	21	517	390	328	363
Estonia					
Scrap	6 000	6 445	6 135	6 147	5 449
Finland					
Ore	288 603	292 378	376 747	411 447	448 698
Scrap	1 809	2 089	4 046	3 235	2 424
France					
Ore	604 490	634 286	563 460	601 964	637 021
Unwrought	108 023	114 185	116 935	128 500	129 061
Unwrought alloys	49 102	43 838	46 526	35 640	49 384
Scrap	11 952	16 031	12 966	17 242	12 758
Germany					
Ore	439 315	323 616	378 135	208 729	282 566
Unwrought	187 880	236 170	258 576	252 203	251 227
Unwrought alloys	52 863	70 458	75 088	77 944	86 245
Scrap	10 021	7 839	5 826	15 262	18 021
Greece					
Unwrought (a)	21 179	25 331	22 637	20 894	24 617
Hungary					
Unwrought (a)	13 660	15 701	20 456	19 047	23 997
Irish Republic					
Unwrought (a)	2 845	3 587	3 788	2 512	3 232
Italy					
Ore	518 843	517 834	495 111	252 306	316 968
Unwrought	101 735	98 129	148 873	198 080	212 920
Unwrought alloys	27 639	33 696	40 263	53 550	38 457
Scrap	21 825	21 981	17 571	19 236	23 204
Lithuania					
Unwrought	698	1 889	301	304	328
Macedonia					
Unwrought	92 110	74 053	487	*500	...
Netherlands					
Ore	334 142	312 478	412 481	404 839	427 101
Unwrought	115 621	119 536	159 018	125 505	171 866
Unwrought alloys	783	375	4 959	5 863	603
Scrap	3 882	7 875	5 470	7 265	8 849
Norway					
Ore	124 025	194 381	221 918	216 338	209 118
Unwrought (a)	1 347	2 359	3 819	2 264	1 577
Scrap	2 423	1 371	660	888	429
Poland					
Ore	86 488	72 800	94 400	100 582	95 443
Unwrought (a)	3 745	5 400	6 900	8 703	10 493
Portugal					
Unwrought	6 395	7 421	11 718	13 560	12 146
Unwrought alloys	9 012	7 976	9 590	6 631	7 413

**Imports of Zinc**

tonnes

Country	1996	1997	1998	1999	2000
Romania					
Ores & concentrates	----	----	46 016	75 015	148 679
Unwrought (a)	1 000	654	7 899	4 976	6 075
Russia					
Ore	140 525	230 577	206 605	226 951	228 886
Unwrought (a)	38 101	40 468	40 129	5 577	11 343
Slovakia					
Unwrought (a)	25 305	23 294	26 172	20 545	24 062
Slovenia					
Unwrought (a)	14 068	19 696	20 927	18 960	23 136
Spain					
Ore	521 113	516 042	509 558	599 672	562 965
Unwrought	2 366	3 815	822	2 082	2 507
Unwrought alloys	9 487	9 688	10 497	12 907	9 059
Scrap	319	2 576	2 446	2 536	3 314
Sweden					
Unwrought	32 029	30 943	37 829	28 570	22 536
Unwrought alloys	7 587	6 440	8 804	8 869	11 313
Switzerland					
Unwrought	17 091	19 098	20 126	19 243	16 257
Unwrought alloys	2 770	2 215	3 065	3 106	3 758
Turkey					
Ore	32 066	68 240	83 377	59 099	333
Unwrought (a)	47 442	64 941	67 404	65 380	95 229
Scrap	200	100	235	942	327
Ukraine					
Unwrought	12 172	9 122	15 470	13 562	...
United Kingdom					
Ores & concentrates	154 230	135 209	139 806	91 613	177 204
Unwrought	133 989	136 217	162 046	111 382	118 702
Unwrought alloys	4 124	12 035	10 908	6 293	7 388
Scrap	2 995	3 238	3 806	3 507	4 760
Yugoslavia, Federal Republic of					
Concentrates	(b) *8 000	29 746	20 216	1	22 162
Unwrought	14 700	10 581	4 149	3 744	42
Egypt					
Unwrought (a)	9 058	12 331	16 141	17 212	...
Kenya					
Unwrought (a)	13 234	13 989	8 729	10 360	8 733
Morocco					
Unwrought (a)	6 314	7 138	7 815	8 463	...
Nigeria					
Unwrought (a)	8 102	59 895	7 696	7 364	...
South Africa					
Unwrought (a)	1 035	6 452	2 217	1 096	22 178
Scrap	723	142	307	86	756
Tanzania					
Unwrought	904	1 725	2 505	2 447	...
Togo					
Unwrought	1 730	2 287	2 648	1 738	...
Tunisia					
Unwrought (a)	5 552	6 514	6 848	4 834	...
Canada					
Ores & concentrates (c)	181 783	187 547	210 494	266 454	207 676
Unwrought	11 651	18 949	13 749	12 370	14 511
Scrap	2 131	2 234	680	831	408
Costa Rica					
Unwrought (a)	4 913	6 649	6 643	8 206	9 864
El Salvador					
Unwrought (a)	282	774	399	656	971
Guatemala					
Unwrought (a)	1 480	2 189	4 206	3 953	3 808
Honduras					
Unwrought (a)	685	922	864	775	...
Mexico					
Unwrought	1 718	12 610	24 829	46 966	39 918

**Imports of Zinc**

tonnes

Country	1996	1997	1998	1999	2000
USA					
Ore (c)	17 320	51 451	46 250	78 092	58 573
Unwrought (a)	818 870	876 447	872 056	1 068 120	928 008
Scrap	31 862	29 555	29 239	26 569	36 488
Argentina					
Ores & concentrates	17 144	18 107	8 170	8 093	15 219
Unwrought	8 361	9 326	9 161	5 485	6 967
Brazil					
Ores & concentrates	213 088	211 610	213 281	216 288	186 945
Unwrought (a)	4 003	3 388	8 389	17 853	23 228
Chile					
Unwrought (a)	9 612	8 339	8 670	8 633	11 039
Colombia					
Unwrought (a)	17 266	22 376	21 001	16 830	21 316
Ecuador					
Unwrought (a)	3 387	4 962	4 839	3 298	4 803
Uruguay					
Unwrought	1 467	1 170	1 764	1 418	1 138
Venezuela					
Unwrought	8 772	11 204	13 958	10 081	11 804
Unwrought alloys	6 586	8 269	7 803	4 037	5 935
Bangladesh					
Unwrought	36 400	22 000	28 000	*35 000	*56 000
China					
Ores & concentrates	295 079	166 503	52 508	44 003	77 942
Unwrought	10 612	10 800	12 090	16 091	19 496
Unwrought alloys	58 899	61 171	75 385	91 347	110 477
Scrap	20 374	23 493	25 667	42 127	47 784
Dubai					
Unwrought	4 279	6 027	5 326	...	...
Hong Kong					
Unwrought	29 603	24 977	38 344	27 250	21 370
Unwrought alloys	91 725	83 674	92 287	102 650	124 705
Scrap	16 894	11 089	12 701	13 629	21 100
India					
Ores & concentrates (d)	42 661	31 776	62 668	49 460	...
Unwrought (d)	81 453	73 892	60 830	62 023	...
Unwrought alloys (d)	524	1 839	1 699	3 433	...
Scrap (d)	18 341	41 943	41 344	45 480	...
Indonesia					
Unwrought	88 743	83 747	59 987	55 065	86 848
Unwrought alloys	5 458	5 652	5 667	3 748	7 480
Iran					
Unwrought (e)	*15 000	19 139	6 734	6 575	...
Israel					
Unwrought (a)	15 200	16 500	*18 700	*17 000	...
Japan					
Ore	922 875	989 373	945 295	1 123 071	1 063 555
Unwrought	134 798	179 672	113 370	55 335	80 762
Unwrought alloys	10 027	11 849	8 012	7 559	4 856
Jordan					
Unwrought (a)	1 396	990	1 272	1 792	1 249
Kazakhstan					
Ores & concentrates	11 628	21 403	14 495	1 434	...
Korea, Dem. P.R. of					
Ores & concentrates (b)	*47 300	*30 000	*17 000	*28 000	*20 000
Korea, Republic of					
Ores & concentrates	530 786	661 456	800 136	881 885	959 645
Unwrought (a)	89 553	68 779	71 019	111 374	128 635
Macao					
Unwrought	521	205	619	228	----
Malaysia					
Unwrought (a)	49 017	61 225	68 670	119 800	...
Pakistan					
Unwrought (a) (f)	11 098	13 530	15 029	597	1 048

**Imports of Zinc**

tonnes

Country	1996	1997	1998	1999	2000
Philippines					
Unwrought (a)	55 420	53 549	39 771	50 017	...
Saudi Arabia					
Unwrought	11 628	10 112	13 792	14 187	19 775
Singapore					
Unwrought	45 457	240 041	168 951	132 465	160 554
Scrap	2 424	3 685	2 181	1 857	1 455
Sri Lanka					
Unwrought (a)	1 869	1 558	1 836	2 145	...
Syria					
Unwrought	...	1 599	4 185	...	...
Taiwan					
Unwrought	196 420	228 896	240 737	272 973	294 142
Unwrought alloys	14 094	13 699	14 827	17 956	16 241
Scrap	62 456	53 718	50 027	51 656	49 125
Thailand					
Ores & concentrates	62 222	136 904	135 863	143 269	173 930
Unwrought	37 748	21 472	14 445	10 210	15 304
Unwrought alloys	10 002	6 662	7 233	8 480	8 528
Australia					
Ores & concentrates	10 431	...	10 275	54 223	107 535
Unwrought (a)	413	805	1 785	3 477	2 278
New Zealand					
Unwrought (a)	16 722	15 222	16 568	16 786	149 555

Note(s) :-

(1) In this table the term 'unwrought' zinc corresponds to item 7901 of the Harmonised System 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**

tonnes

Country	1996	1997	1998	1999	2000
Russia (a)	5 080	5 500	6 293	6 200	6 300
Ukraine	*55 000	*65 000	*65 000	*69 000	*75 000
South Africa	*320 000	*310 000	*290 000	*320 000	*325 000
USA	*120 000	*120 000	*150 000	*190 000	*180 000
Brazil (a)	15 560	19 252	21 483	27 048	29 805
China	2 293	3 428	134	1 850	...
India	*19 000	*19 000	*19 000	*19 000	*19 000
Indonesia	*2 000	105	231	*250	*250
Malaysia	4 511	4 050	3 057	1 763	3 642
Sri Lanka	15 863	12 451	8 814	-----	-----
Australia	460 000	418 000	369 000	360 000	373 000
<b>World Total</b>	<b>1 019 000</b>	<b>977 000</b>	<b>933 000</b>	<b>995 000</b>	<b>1 014 000</b>

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	1996	1997	1998	1999	2000
Belgium-Luxembourg					
Concentrates	5 354	464	1 587	2 119	13 233
Metal	124	142	167	142	365
Estonia					
Metal	...	...	...	17	65
France					
Concentrates	821	685	458	679	754
Germany					
Concentrates	4 354	4 461	6 174	5 704	5 428
Metal	132	152	229	254	241
Italy					
Concentrates	19 435	20 567	20 831	22 988	22 582
Metal	1 426	368	330	386	721
Netherlands					
Concentrates	16 810	17 331	7 568	6 038	1 978
Norway					
Concentrates	4 230	1 637	170	10	----
Portugal					
Metal	20	----	----	180	472
Russia					
Concentrates	4 383	5 200	4 877	3 969	5 316
Metal	62	117	170	40	343
Spain					
Concentrates	3 027	2 033	3 399	5 605	6 951
Ukraine					
Concentrates	15 079	18 722	15 746	36 282	...
United Kingdom					
Concentrates	2 819	4 492	3 039	333	422
Metal	669	281	247	382	447
South Africa					
Concentrates	(a) *292 800	(a) *310 300	252 705	295 247	288 641
Canada					
Metal	128	92	205	333	220
USA					
Concentrates	36 546	44 341	41 200	69 542	73 641
Metal	1 089	1 305	1 169	1 020	1 251
Brazil					
Concentrates	1 004	712	276	230	...
China					
Concentrates	834	1 770	1 419	330	158
Metal	233	174	140	94	22
Hong Kong					
Concentrates (b)	60 181	25 243	22 019	23 831	18 708
Indonesia					
Concentrates	1 100	1 000	2 001	0	----
Japan					
Metal	112	79	58	41	159
Malaysia					
Concentrates	3 300	5 500	6 600	12 800	...
Taiwan					
Concentrates	700	79	572	881	1 322
Metal	232	430	621	850	782
Thailand					
Concentrates	20	100	1 740	419	1 666
Australia					
Concentrates	423 853	341 805	398 761	290 051	82 211
Metal	5	31	14	111	119

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

**Imports of Zirconium**

tonnes

Country	1996	1997	1998	1999	2000
Austria					
Concentrates	2 177	591	900	1 017	1 684
Belarus					
Concentrates	*1 000	*1 500	1 625	971	1 843
Belgium-Luxembourg					
Concentrates	2 861	2 782	3 062	3 531	7 954
Metal	240	387	1 014	535	477
Czech Republic					
Concentrates	2 000	2 106	3 151	3 736	3 459
Metal	...	170	200	174	617
France					
Concentrates	63 530	56 561	54 164	60 282	57 420
Metal	146	314	156	116	135
Germany					
Concentrates	64 751	60 265	72 300	...	...
Metal	318	489	496	396	412
Italy					
Concentrates	115 945	121 271	144 636	141 560	151 500
Metal	229	94	377	141	1 159
Netherlands					
Concentrates	56 821	28 197	26 225	32 422	30 993
Metal	62	155	170	88	64
Poland					
Concentrates	1 142	1 455	1 024	956	1 790
Metal	433	191	36	22	7
Portugal					
Concentrates	3 004	4 718	4 375	3 955	3 610
Romania					
Concentrates	800	215	178	110	468
Metal	0	18	...	57	18
Russia					
Concentrates	6 072	3 457	5 119	8 445	9 530
Spain					
Concentrates	83 582	104 929	98 066	108 668	115 108
Metal	133	164	170	114	232
Sweden					
Concentrates	788	369	506	648	602
Metal	...	...	...	122	91
Switzerland					
Metal	60	96	61	94	45
Turkey					
Concentrates	382	251	1 680	1 072	3 184
Zirconium sand	9 490	...	...	...	...
United Kingdom					
Concentrates	57 432	57 830	54 986	37 695	34 048
Metal	386	534	510	263	727
Nigeria					
Metal	20	29	44	5	...
Tunisia					
Concentrates	1 589	368	690	431	...
Canada					
Concentrates	22 512	6 818	8 654	5 826	7 204
Metal	349	358	322	280	284
Mexico					
Zirconium sand	16 606	17 971	19 251	17 291	...
USA					
Concentrates	92 483	62 361	89 542	57 626	65 186
Metal	620	759	894	859	1 040
Brazil					
Concentrates	7 975	8 707	6 632	5 504	15 012
China					
Concentrates	118 848	81 988	98 616	130 688	161 007
Metal	535	781	665	888	1 053

**Imports of Zirconium**

tonnes

Country	1996	1997	1998	1999	2000
Hong Kong					
Concentrates	63 010	27 662	23 216	23 905	18 845
India					
Concentrates (a)	4 646	7 540	4 679	3 665	...
Indonesia					
Concentrates	1 475	2 066	1 170	3 010	12 184
Metal	49	105	32	58	177
Japan					
Concentrates	113 203	90 496	78 626	74 647	86 952
Metal	617	714	671	654	704
Korea, Republic of					
Concentrates	12 289	14 259	6 252	12 494	11 246
Metal	138	86	135	165	168
Malaysia					
Concentrates	5 000	6 600	7 400	10 300	...
Philippines					
Zirconium sand	248	454	21	152	...
Saudi Arabia					
Concentrates	...	340	280	780	508
Singapore					
Concentrates	3 100	4 088	2 940	3 465	4 243
Taiwan					
Concentrates	12 086	11 815	15 737	15 360	19 038
Zirconium sand	10 124	10 751	10 490	10 291	14 402
Metal	34	23	71	331	112
Thailand					
Concentrates	1 507	2 167	2 032	21	6 713
Australia					
Concentrates	29 094	447	443	351	418

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	1996	1997	1998	1999	2000
Russia	*1 000	*1 000	*1 000	*1 000	*1 000
Madagascar (a)	11	28	30	*30	*30
USA	5 260	5 770	6 080	5 070	4 510
China	*1 400	*1 400	*1 400	*1 400	*1 400
Kazakhstan	*100	*100	(a) 221	(a) 220	(a) 424

Note(s):-

(a) Includes ornamental and industrial products

**Production of Borates**

tonnes

Country	1996	1997	1998	1999	2000
Russia	1 020 000	*1 000 000	*1 000 000	*1 000 000	*1 000 000
Turkey	1 446 697	1 568 571	*1 650 000	*1 400 000	*1 400 000
USA (a)	1 150 000	1 190 000	1 170 000	1 220 000	1 070 000
Argentina	342 210	422 556	279 272	565 647	*580 000
Bolivia	9 231	12 469	15 930	15 362	...
Chile	149 008	170 605	280 140	324 691	337 966
Peru	39 982	46 988	17 945	14 716	9 309
China (b)	...	248 300	247 100	289 400	*310 000
Iran (c)	3 433	2 323	2 086	3 663	*4 000
Kazakhstan	40 000	*20 000	13 100	...	...

Note(s):-

(a) Sold or used by producers

(b) B<sub>2</sub>O<sub>3</sub> equivalent

(c) Years ended 20 March following that stated

**Production of Germanium Metal**

tonnes

Country	1996	1997	1998	1999	2000
Belgium	22	23	...	...	...
Ukraine	0	0	1	1	...
USA (a)	*18	*20	*22	*20	*23
China	11	...	14	14	...
Japan	2	1	0	1	2

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

Other Mineral Commodities

**Production of Primary Magnesium Metal**

tonnes

Country	1996	1997	1998	1999	2000
France	14 000	13 800	14 700	16 200	16 500
Norway	37 790	34 200	35 400	40 800	41 400
Russia	31 500	33 000	34 100	35 200	35 500
Ukraine	12 896	7 654	5 040	3	-----
Yugoslavia, Federal Republic of	3 090	3 942	3 965	1 203	1 270
Canada (a)	*46 000	*49 000	*60 000	*64 000	*64 000
USA	133 100	124 800	106 100	75 000	*70 000
Brazil	*9 000	*9 000	*9 000	7 968	5 723
China	73 200	75 985	70 464	120 700	142 100
India	1 000	1 000	1 500	*1 000	*500
Israel	100	7 400	24 500	24 300	31 700
Kazakhstan	13 431	17 900	20 907	11 031	10 380

Note(s):-

(a) Capacity

**Production of Nepheline Syenite**

tonnes

Country	1996	1997	1998	1999	2000
Norway	299 610	303 717	319 835	304 592	330 000
Russia (b)	827 814	939 020	859 698	859 000	814 000
South Africa (a)	145 000	114 201	104 000	82 000	...
Canada	606 000	647 000	636 000	678 000	708 000

Note(s):-

(a) Mostly used as aggregate  
 (b) Nepheline concentrates

**Production of Perlite**

tonnes

Country	1996	1997	1998	1999	2000
Armenia	350 000	160 000	220 000	90 000	90 000
Bulgaria	25 500	20 000	20 078	13 580	16 700
Georgia	*5 000	*5 000	...	...	...
Greece	598 640	695 917	658 332	777 898	*600 000
Hungary	104 263	151 785	148 455	140 787	151 069
Italy	*60 000	*60 000	*60 000	*60 000	*60 000
Russia	*45 000	*45 000	...	...	...
Slovakia	25 160	25 019	24 238	19 460	17 022
Turkey	157 580	103 416	124 312	147 818	149 426
Ukraine	*25 000	*25 000	...	...	...
Morocco	...	51 195	...	...	...
South Africa	682	403	*400	*400	*400
Mexico	37 417	51 758	54 840	61 596	68 702
USA	811 000	656 000	832 000	821 000	873 000
Argentina	21 547	27 578	21 495	21 008	17 521
China	...	...	...	104 900	...
India (d)	310	80	207	383	274
Iran (b)	2 300	4 200	13 320	15 069	*15 000
Japan	304 300	288 010	250 000	260 000	260 000
Philippines	19 638	25 941	6 356	10 235	2 092
Thailand	1 200	700	3 600	5 800	...
Australia (a)	6 234	6 304	6 068	3 886	6 675
New Zealand	(c) 1 880	(c) 4 960	*2 000	*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

Other Mineral Commodities

**Production of Selenium Metal**

tonnes

Country	1996	1997	1998	1999	2000
Belgium	*250	*250	*200	*200	*200
Finland	43	43	43	37	37
Germany	*115	*115	*100	*100	*100
Poland	73	76	67	67	65
Russia	*40	*40	*40	*40	*40
Sweden	20	*20	*20	*20	*20
Yugoslavia, Federal Republic of	38	45	41	26	21
Zambia	19	17	13	10	*10
Canada	694	592	398	359	350
USA	379	353	*350	...	...
Chile (a)	73	63	29	...	...
Peru	13	13	18	23	23
China	*65	*65	*65	*65	*65
India (b)	12	13	11	6	...
Japan	588	546	550	546	612
Kazakhstan	*40	*40	*40	*40	*40
Philippines	44	38	40	35	36
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	1996	1997	1998	1999	2000
Botswana	119 137	199 990	195 500	*196 000	191 043
Ethiopia (a)	4 907	5 009	5 272	4 409	3 805
Kenya	223 000	257 640	242 910	245 680	238 190
USA	10 200 000	10 700 000	10 100 000	10 200 000	10 200 000

Note(s):-

(a) Years ended 7 July of that stated

**Production of Strontium Minerals**

tonnes

Country	1996	1997	1998	1999	2000
Spain	114 829	95 162	119 077	128 457	*140 000
Turkey	*30 000	*30 000	*30 000	*25 000	*25 000
Mexico	141 142	134 707	118 230	149 804	157 420
Argentina (a)	3 775	3 049	2 416	2 141	*2 200
Iran (b)	7 835	5 900	-----	1 650	*2 000
Pakistan (c)	1 221	706	598	634	*600
Turkmenistan	*20 000	...	...	...	...

Note(s):-

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

(a) May contain unbeneficiated material

(b) Years ended 20 March following that stated

(c) Years ended 30 June of that stated

**Production of Tellurium Metal**

tonnes

Country	1996	1997	1998	1999	2000
Canada	59	59	62	64	80
USA	50	50	50	50	50
Peru	25	25	22	17	22
Japan	40	25	39	35	36

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	1996	1997	1998	1999	2000
Czech Republic	589	624	611	605	498
France	930	748	508	438	319
Hungary	227	222	----	----	----
Portugal	14	17	19	10	13
Romania	*100	*100	*100	*100	*50
Russia	*2 000	*2 000	*2 000	*2 000	*2 000
Spain	254	254	255	255	251
Ukraine	*500	*500	*500	*500	*500
Gabon	560	472	731	294	----
Namibia	2 450	2 903	2 778	2 687	2 713
Niger	3 326	3 492	3 713	2 916	2 898
South Africa	1 447	1 122	965	919	860
Canada	11 689	12 020	10 936	8 214	10 680
USA	2 420	2 170	1 872	1 807	1 456
Argentina	23	35	8	8	...
China	*500	*500	*500	*500	*500
India	*200	*200	*200	*200	*200
Kazakhstan	1 210	1 090	1 270	1 588	1 825
Pakistan	*23	*23	*23	*23	*23
Uzbekistan	1 459	1 764	2 000	2 130	2 350
Australia	4 976	5 490	4 901	5 997	7 588
World Total	34 900	35 700	33 900	31 200	34 700
World Total ( $U_3O_8$ equivalent)	41 200	42 100	40 000	36 800	40 900

**Production of Vermiculite**

tonnes

Country	1996	1997	1998	1999	2000
Russia	*30 000	*25 000	*25 000	*25 000	...
Egypt (c)	140	54	*50	...	...
Kenya	734	1 418	353	164	124
South Africa	196 000	211 001	221 331	217 820	208 835
Zimbabwe	10 249	14 841	14 804	12 844	16 215
USA (a)	*170 000	...	...	*175 000	*175 000
Brazil (b)	21 999	22 248	31 658	40 045	*40 000
China	...	...	...	92 610	...
India (d)	3 755	4 699	4 274	3 123	4 984
Japan	*15 000	*15 000	*15 000	*15 000	*15 000
Australia (c)	5 000	3 327	7 589	10 490	11 750

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	1996	1997	1998	1999	2000
Czech Republic	800	----	...	...	...
Finland	22 304	20 700	16 700	13 883	*15 000
Namibia	248	194	267	347	441
South Africa	----	----	646	200	...
Mexico	28 365	20 655	41 264	44 126	30 836
USA	*150 000	*150 000	...	...	*130 000
China	*200 000	*200 000	*300 000	*300 000	*250 000
India (a)	93 060	97 742	94 700	117 094	120 944

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



**Lithium Magnesite and Magnesia Magnesite  
Ceryl Bismuth Borates Bromine Cadmium Chro-  
mianite Silver Strontium Sulphur Talc Tanta-**



Graphite Gypsum Iodine  
Ium Antimony Arsenic A  
um Potash Pyrites Rare  
yposum Iodine Iron ore  
nomy Arsenic Asbestos  
ash Pyrites Rare earths  
odine Iron ore Iron and  
Asbestos Barytes Bar  
are earths Salt Selenium