

British Geological Survey

World Mineral Statistics 1997-2001

World Minerals Programme



BRITISH GEOLOGICAL SURVEY

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PREFACE

This volume is the twenty-fifth 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. Customers now have access to full online credit purchasing on the website www.bgs.ac.uk/shop

The production of most minerals and metals continued to rise in 2001 and this may have been partly to blame for the weakening of the prices of many of them, especially metals, towards the year's end. Bauxite (for aluminium), steel, copper and cobalt all attained record production levels. Copper consumption, as reflected in this volume by the production statistics, has recently been rising by more than five per cent *per annum*, a rate not seen since the last years of the nineteenth century when the world was first being electrified. Chile now produces more than a third of total world output and mine expansions alone in Chile since 1996 account for twelve per cent of the world's copper production in 2001. In Indonesia, copper output has almost doubled in the past five years and that country is now in third place, closely behind the USA where production has been falling steadily over the same period.

The rapid rise of China as a mineral producer and consumer is a phenomenon that continues to demand attention. In terms of mine output, China is the largest producer of eighteen of the sixty-two mined commodities in this book. It is also the largest exporter of at least half of those eighteen and these exports include such critical materials as antimony, barytes, fluor spar, tungsten and tin. Among refined metals, China is the largest producer of crude steel, zinc, tin, manganese metal, magnesium and aluminium - since the closure of several US aluminium smelters in 2001 - and the second and third largest producer respectively of refined lead and refined copper. No other nation has had this degree of hegemony in metal production since the USA and the Soviet Union in the twentieth century and Britain in the early nineteenth century. Not all of its output is directly comparable to that of other countries in terms of quality: in spite of being the leading iron ore producer, China is also the second largest importer of iron ore, since high-grade imports are needed to blend with the lower-grade indigenous output. For this reason China is increasingly a customer for Australian iron ore output. Alumina is another material for which China is among the top five importers, driven by the need to maintain its soaring aluminium output, also illustrated by the figures in this volume.

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.

David A. Falvey, PhD
Executive Director

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21 February 2003

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Maps of world mine production

Bauxite	Manganese ore
Chromium	Nickel
Copper	Tin
Iron ore	Zinc

Graphs of world mine production 1980-2001

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

EXPLANATORY NOTES

Coverage

World Mineral Statistics covers the majority of economically important, and internationally traded, mineral commodities. For each commodity constant efforts are made to ensure that as many producing and trading countries as possible are reported and that trade data cover all major traded forms. For some commodities, where statistics on production and trade are not publicly available, estimates are made. Users of this compilation are advised that more statistical information than can be included in a publication of this nature is held in the 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 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 Minerais 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

STATISTICAL TABLES

Production of Bauxite

tonnes

Country	1997	1998	1999	2000	2001
Albania	4 453	4 128	4 624	*3 000	*3 000
Bosnia & Herzegovina	...	...	...	20 700	77 000
France	169 000	170 000	170 000	185 000	153 000
Greece	1 876 983	1 714 023	1 882 505	1 965 561	2 047 255
Hungary	742 700	908 900	935 200	1 046 470	1 000 044
Romania	127 450	161 865	-----	-----	-----
Russia	3 988 000	4 092 000	4 513 000	5 000 000	4 805 000
Turkey	369 482	458 028	207 743	458 537	242 040
Yugoslavia, Federal Republic of	470 050	238 489	503 434	630 000	610 000
Ghana	519 200	384 406	355 261	503 824	692 620
Guinea	16 510 000	17 300 000	17 320 000	17 950 000	17 312 100
Mozambique	8 218	6 103	7 883	8 130	8 597
Jamaica	11 987 304	12 646 439	11 688 481	11 126 524	12 370 412
USA (b) (d)	197 981	225 288	*270 000	*200 000	*200 000
Brazil (c)	11 539 965	11 566 798	12 661 746	13 974 480	13 178 400
Guyana	2 470 895	2 267 368	2 359 272	2 689 451	2 012 711
Suriname	3 877 183	3 931 108	3 714 595	3 610 381	4 393 640
Venezuela	4 966 794	4 825 647	4 166 450	4 360 720	4 526 485
China	*9 000 000	*6 400 000	*7 100 000	*7 900 000	*7 900 000
India (f)	6 112 131	6 609 525	7 049 943	7 992 782	8 585 368
Indonesia	808 749	1 055 647	1 116 323	1 150 800	1 237 000
Iran (a)	244 999	336 006	461 639	440 000	*400 000
Kazakhstan	3 416 000	3 436 800	3 606 500	3 729 600	3 667 700
Malaysia	279 066	160 271	222 724	123 270	64 161
Pakistan (e)	4 934	4 953	11 216	10 377	3 728
Vietnam	29 000	46 360	*30 000	16 000	20 000
Australia	44 464 000	44 653 000	48 416 000	53 802 000	53 800 000
World Total	124 000 000	124 000 000	129 000 000	139 000 000	139 000 000

Note(s):

(1) This table includes production of refractory bauxite

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

Production of Alumina

tonnes (Al₂O₃ content)

Country	1997	1998	1999	2000	2001
Azerbaijan	-----	*3 000	76 000	217 000	95 000
Bosnia & Herzegovina	-----	-----	37 000	219 400	100 000
France	454 000	444 000	472 000	508 000	*500 000
Germany	737 815	*600 000	583 000	717 021	715 164
Greece	584 000	622 000	621 700	668 300	678 934
Hungary	*243 000	337 500	295 000	357 100	271 980
Irish Republic	1 272 941	1 322 536	1 395 735	1 410 674	1 448 730
Italy	597 000	608 000	636 000	668 000	649 000
Romania	279 537	250 266	277 388	416 587	319 397
Russia	2 379 800	2 465 400	2 687 000	2 889 000	3 091 000
Slovakia	46 812	26 507	-----	-----	-----
Spain	725 700	725 500	726 800	734 000	784 000
Turkey	164 333	156 825	159 122	155 448	145 993
Ukraine	1 074 500	1 290 720	1 230 200	1 360 000	1 340 000
United Kingdom	100 000	96 000	90 000	88 500	98 000
Yugoslavia, Federal Republic of	159 540	152 519	156 012	186 135	200 660
Guinea	519 647	499 630	568 479	540 922	674 300
Canada	1 165 000	1 229 000	1 233 000	1 023 000	1 036 000
Jamaica	3 394 177	3 440 167	3 569 633	3 600 125	3 542 385
USA	*5 093 000	*5 654 000	*5 144 000	*4 786 000	*4 340 000
Brazil	3 088 000	3 322 100	3 515 100	3 754 100	3 519 700
Suriname	1 725 857	1 771 889	1 853 052	1 906 073	1 893 254
Venezuela	1 730 368	1 553 445	1 468 489	1 755 265	1 833 162
China	2 936 100	3 340 000	3 837 400	4 328 100	4 746 500
India	1 940 000	1 855 000	1 930 000	2 107 000	2 170 000
Japan	728 000	737 600	736 600	781 700	739 100
Kazakhstan	1 094 200	1 084 500	1 157 692	1 216 679	1 231 126
Australia	13 384 000	13 853 000	14 532 000	15 680 000	16 314 000
World Total	45 600 000	47 400 000	49 000 000	52 100 000	52 500 000

Note(s):

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

Production of Primary Aluminium

tonnes

Country	1997	1998	1999	2000	2001
Bosnia & Herzegovina	8 000	30 000	70 000	94 751	95 064
France	399 400	423 600	455 100	441 100	459 800
Germany	571 941	612 381	633 803	643 545	651 592
Greece	132 600	146 100	159 900	162 600	162 000
Hungary	33 700	34 000	34 000	33 850	34 590
Iceland	123 356	183 400	221 434	225 721	242 526
Italy	187 700	187 000	187 200	189 800	187 500
Netherlands	231 800	264 700	287 388	301 689	293 153
Norway (a)	918 511	994 195	1 007 989	1 031 000	1 034 000
Poland	51 500	51 500	51 600	55 473	54 606
Romania	161 907	174 040	174 100	179 039	181 831
Russia	2 906 000	3 010 000	3 149 000	3 247 000	3 302 000
Slovakia	110 190	108 000	105 200	109 000	110 062
Slovenia	74 400	70 800	77 200	75 600	76 632
Spain	360 061	360 400	375 500	365 700	376 400
Sweden	98 798	96 098	99 340	101 086	101 000
Switzerland	27 339	32 106	34 439	35 539	36 288
Turkey	62 020	61 803	61 705	61 501	61 730
Ukraine	100 547	106 678	115 425	119 290	121 034
United Kingdom	247 675	258 397	269 700	305 099	340 778
Yugoslavia, Federal Republic of	80 600	76 736	80 916	95 465	108 123
Cameroon	90 900	81 600	91 900	94 900	80 500
Egypt	178 200	187 200	186 700	188 900	190 800
Ghana	151 600	56 100	114 200	155 500	162 300
Mozambique	-----	-----	-----	63 800	270 200
Nigeria	2 500	25 500	15 900	-----	-----
South Africa	673 043	676 999	689 230	674 167	662 497
Canada	2 327 188	2 374 118	2 389 834	2 373 460	2 582 746
Mexico	66 356	61 848	62 736	61 200	51 500
USA	3 603 400	3 712 700	3 778 600	3 668 400	2 637 000
Argentina	186 330	186 605	204 600	263 870	243 840
Brazil	1 189 100	1 208 000	1 249 600	1 271 400	1 132 000
Suriname	23 128	27 416	6 638	-----	-----
Venezuela	642 000	586 499	570 321	570 870	570 580
Bahrain	489 915	501 308	502 663	509 038	522 042
China	2 178 600	2 435 300	2 808 900	2 989 200	3 575 800
Dubai	379 200	386 648	440 700	536 000	536 000
India (b)	553 255	543 451	612 968	624 206	635 573
Indonesia	217 400	134 300	112 300	192 300	208 800
Iran (c)	95 521	123 758	137 422	141 494	*145 000
Japan	16 694	16 302	10 904	6 536	6 632
Tajikistan	188 900	195 630	229 100	300 000	324 000
Australia	1 495 000	1 627 000	1 718 000	1 770 000	1 797 000
New Zealand	310 324	317 600	326 800	328 400	322 300
World Total	21 900 000	22 700 000	23 900 000	24 700 000	24 700 000

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	1997	1998	1999	2000	2001
Armenia					
Scrap	13 740	*14 000	9 965	15 810	...
Austria					
Unwrought	4 800	14 444	8 317	7 666	12 071
Unwrought alloys	62 467	72 884	77 157	84 770	89 985
Scrap	40 028	44 360	55 512	54 104	55 565
Azerbaijan					
Alumina	...	3 280	75 559	213 303	93 039
Unwrought	6 709	7 643	22 808	13 102	5 894
Scrap	...	492	3 836	12 174	3 762
Belarus					
Unwrought (a) (e)	*1 500	*3 000	*2 200	*6 000	...
Scrap	(e) *1 300	4 008	4 056	4 700	2 500
Belgium-Luxembourg					
Bauxite	1 734	28 452	9 093	133 827	63 483
Alumina	1 817	2 381	3 203	5 098	3 608
Unwrought	2 644	53 783	35 818	29 754	142 931
Unwrought alloys	72 557	57 272	30 923	31 821	41 445
Scrap	147 630	135 234	132 901	142 861	161 980
Bosnia & Herzegovina					
Unwrought (a) (e)	*4 300	*23 800	*58 700	*85 900	*86 700
Scrap (e)	*6 000	*3 300	*4 100	*6 100	*8 200
Bulgaria					
Unwrought (a)	12 765	3 075	1 169	506	(e) *3 300
Scrap	2 757	3 481	8 637	21 721	...
Croatia					
Bauxite	12 800	5 849	29 491	21 015	5 981
Scrap	2 100	3 554	5 575	8 033	8 311
Cyprus					
Unwrought (d)	...	285	2 689	15 477	6 236
Czech Republic					
Unwrought (a)	37 126	42 726	62 394	47 454	38 362
Scrap	15 148	21 233	26 118	26 241	30 520
Denmark					
Alumina	3 600	3 984	4 250	4 141	3 481
Unwrought alloys	29 623	28 778	28 452	23 333	26 092
Scrap	36 642	30 029	31 489	34 292	48 753
Estonia					
Unwrought (a)	9 245	(e) *5 900	37 870	2 309	3 744
Scrap	5 549	6 996	7 475	16 144	9 994
Finland					
Unwrought (a)	33 577	37 072	39 631	40 730	33 670
Scrap	3 339	4 046	6 242	8 529	7 913
France					
Bauxite	2 504	29 577	20 650	25 619	4 157
Alumina	106 756	117 898	123 213	129 376	166 329
Alumina hydrate	112 946	71 739	55 438	68 272	117 496
Unwrought	91 490	78 955	78 335	81 992	78 306
Unwrought alloys	135 365	99 711	74 915	75 453	72 663
Scrap	160 329	165 766	198 915	247 753	248 291
Georgia					
Unwrought	...	...	6 602	5 865	...
Scrap	(e) *4 900	(e) *7 600	(e) *7 600	27 816	23 842
Germany					
Bauxite	27 655	35 759	32 399	35 361	35 894
Alumina	268 415	233 561	198 433	191 531	167 226
Alumina hydrate	368 389	433 391	452 136	515 888	537 767
Unwrought	34 928	25 612	33 335	53 127	71 793
Unwrought alloys	194 687	211 075	266 917	321 684	294 918
Scrap	545 771	528 396	549 248	546 235	557 252
Greece					
Bauxite	537 011	477 582	391 130	666 578	567 470
Alumina	297 238	313 398	285 459	249 681	279 120
Alumina hydrate	34 070	13 595	12 063	6 500	34 493
Unwrought	30 429	42 384	54 366	84 799	6 368
Unwrought alloys	16 440	18 923	5 850	9 663	9 457
Scrap	14 532	5 460	10 865	16 410	9 444

Exports of Bauxite, Alumina and Aluminium

tonnes

Country	1997	1998	1999	2000	2001
Hungary					
Bauxite	59 280	4 612	5 158	2 711	2 371
Alumina	207 067	254 550	227 970	278 685	258 945
Unwrought (a)	19 163	21 733	12 653	12 185	10 894
Scrap	16 717	18 113	17 536	24 313	29 656
Iceland					
Unwrought (a)	119 794	162 035	221 444	209 680	257 952
Scrap	4 200	4 844	4 916	6 136	8 367
Irish Republic					
Alumina	1 407 607	1 505 074	1 443 841	1 873 414	1 891 293
Alumina hydrate	29 860	21 238	2 556	4 563	20 746
Unwrought alloys	5 839	5 476	5 993	5 879	3 287
Scrap	9 750	8 821	10 883	14 765	14 470
Italy					
Bauxite	2 623	4 312	107 978	255 878	69 646
Alumina	471 281	487 700	538 556	601 032	646 064
Alumina hydrate	5 868	12 493	21 793	33 622	29 901
Unwrought	5 077	11 751	9 293	2 894	2 639
Unwrought alloys	32 181	23 952	20 324	30 940	28 817
Scrap	18 640	12 469	11 224	21 689	19 416
Latvia					
Unwrought	1 891	6 958	16 337	23 419	26 973
Scrap	6 671	7 318	6 340	6 115	2 389
Lithuania					
Scrap	12 350	18 308	18 416	31 742	22 873
Moldova					
Scrap	2 017	4 577	19 242	...	...
Netherlands					
Bauxite	30 675	50 656	50 869	35 211	76 216
Alumina	214 325	241 320	172 798	287 473	144 613
Alumina hydrate	20 135	51 157	55 960	47 315	24 904
Unwrought	204 479	209 059	192 342	177 895	169 741
Unwrought alloys	250 015	259 682	288 157	275 788	300 275
Scrap	191 254	166 635	184 500	168 405	153 947
Norway					
Unwrought	192 313	126 168	119 024	138 907	156 506
Unwrought alloys	723 003	862 949	868 931	902 908	1 031 140
Scrap	20 516	20 362	19 259	24 721	37 376
Poland					
Unwrought (a)	27 800	48 300	37 094	36 275	30 519
Scrap	8 698	11 700	22 700	49 630	62 915
Portugal					
Unwrought (a)	3 480	34 213	69 426	106 601	96 870
Scrap	11 760	12 349	14 087	14 682	19 266
Romania					
Alumina	53 218	11 692	56 510	239 780	196 600
Unwrought	107 483	102 200	77 573	72 767	73 320
Scrap	...	4 242	19 946	32 905	6 577
Russia					
Bauxite	992 945	999 322	260 493	14 699	5 779
Alumina	274 110	349 195	142 605	85 969	4 497
Alumina hydrate	8 751	6 347	3 953	1 850	3 726
Unwrought	2 455 249	2 519 619	2 638 907	2 562 217	2 539 280
Unwrought alloys	253 574	270 783	476 770	632 410	556 321
Scrap (e)	*336 900	*437 700	*502 600	*341 300	*179 500
Slovakia					
Unwrought	110 155	117 123	370 000	143 438	147 985
Scrap	(e) *2 300	5 596	5 077	6 583	4 744
Slovenia					
Alumina	11 362	10 171	4 481	6 979	10 452
Unwrought (a)	55 970	51 054	56 505	60 836	71 092
Scrap	4 700	5 723	6 016	7 393	9 522
Spain					
Alumina	194 869	160 074	259 073	208 414	292 210
Alumina hydrate	243 999	240 130	306 990	268 920	231 485
Unwrought	7 812	20 419	1 968	2 890	5 191
Unwrought alloys	122 911	87 324	78 382	79 183	86 974
Scrap	10 971	9 449	19 921	34 991	30 251

Exports of Bauxite, Alumina and Aluminium

tonnes

Country	1997	1998	1999	2000	2001
Sweden					
Unwrought	1 309	800	1 286	8 982	3 183
Unwrought alloys	65 134	46 831	63 531	44 335	62 986
Scrap	44 156	49 202	42 182	66 697	63 869
Switzerland					
Unwrought (a)	8 945	8 388	11 581	15 691	5 536
Scrap	75 180	78 889	86 476	88 590	100 096
Turkey					
Alumina	41 706	27 187	22 903	17 613	29 123
Unwrought (a)	1 433	24 308	24 525	10 319	6 289
Scrap	10 339	8 593	10 504	12 992	12 098
Ukraine					
Alumina	*800 000	*900 000	*800 000	1 155 112	1 106 584
Unwrought (a)	134 698	187 739	318 178	374 847	291 873
Scrap	35 272	47 633	36 229	41 377	(e) *12 000
United Kingdom					
Alumina	(b) 27 653	18 640	(b) 17 197	(b) 12 581	11 795
Alumina hydrate	...	34 778	...	(e) *30 600	42 451
Unwrought	129 429	32 067	12 415	89 761	16 855
Unwrought alloys	241 147	193 134	225 110	261 274	243 780
Scrap	104 231	122 591	104 823	141 207	204 605
Yugoslavia, Federal Republic of					
Bauxite	4 655	549	48 398	2 124	713
Unwrought	(a) 62 526	(a) 61 394	66 420	2 636	92 143
Unwrought alloys	...	...	3 097	361	3 651
Scrap	387	6 907	2 975	423	4 718
Algeria					
Scrap	9 488	8 359	7 256	6 530	...
Cameroon					
Unwrought (a)	65 600	57 400	70 700	68 285	56 726
Egypt					
Unwrought (a)	89 400	63 778	69 868	*70 000	64 097
Ghana					
Bauxite	...	615 851	247 249	...	...
Unwrought (a)	130 000	*55 000	124 400	114 300	...
Guinea					
Bauxite	13 625 000	14 168 000	13 606 000	14 005 000	...
Alumina	506 990	521 199	560 000	570 938	...
Morocco					
Scrap	6 314	3 174	6 394	8 445	...
Mozambique					
Bauxite	8 218	6 103	7 883	8 130	8 597
Sierra Leone					
Bauxite	99 547	----	----	----	...
South Africa					
Unwrought (a)	580 025	556 985	630 634	504 438	461 037
Scrap	15 825	22 121	17 052	27 683	29 443
Canada					
Alumina	113 385	111 949	114 259	125 802	106 042
Unwrought	891 017	870 427	804 929	804 936	1 172 264
Unwrought alloys	995 840	986 011	1 056 981	1 032 337	873 646
Scrap	271 338	281 348	296 424	290 654	287 774
Cuba					
Scrap (e)	*2 300	*2 400	*2 300	*1 800	*1 500
Dominican Republic					
Scrap	2 598	...	...	5 987	5 295
Guatemala					
Unwrought (a)	470	1 773	4 577	10 099	3 736
Honduras					
Scrap	2 083	1 866	3 799	5 270	...
Jamaica					
Bauxite	3 641 131	4 052 087	2 795 368	2 118 908	3 617 767
Alumina	3 446 373	3 496 027	3 621 983	3 642 538	3 530 013
Mexico					
Unwrought (a)	5 744	6 951	7 081	10 313	7 545
Scrap	94 271	77 159	91 126	83 366	78 294

Exports of Bauxite, Alumina and Aluminium

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Country	1997	1998	1999	2000	2001
Panama					
Scrap	6 161	7 205	6 952	8 619	8 473
USA					
Bauxite	92 146	110 181	161 260	154 566	119 642
of which, re-exports	7 552	10 551	12 253	12 519	7 838
Alumina	1 230 903	1 258 515	1 144 458	1 108 536	1 217 725
Alumina hydrate	83 249	70 871	67 486	58 944	57 827
Unwrought	128 505	98 766	123 843	111 054	41 722
Unwrought alloys	239 759	172 802	199 415	168 293	297 061
Scrap	343 322	452 586	449 843	622 892	451 989
Argentina					
Unwrought	58 580	23 437	47 038	44 570	69 120
Unwrought alloys	54 939	64 293	76 700	143 289	113 413
Scrap	6 716	5 434	3 566	3 757	6 447
Brazil					
Bauxite	4 373 463	4 315 642	4 511 896	4 166 202	3 426 658
Alumina	616 284	853 541	1 078 126	1 241 435	1 171 462
Unwrought	682 320	631 332	658 994	615 903	467 051
Unwrought alloys	33 854	61 110	129 588	144 051	120 872
Scrap	4 848	11 713	13 375	2 975	420
Chile					
Scrap	3 467	4 095	5 151	6 422	8 203
Colombia					
Scrap	6 614	8 285	12 270	10 861	9 728
Guyana					
Bauxite	2 200 300	2 346 113	2 389 004	2 532 924	1 836 389
Suriname					
Alumina	1 647 279	1 732 921	1 857 667	1 869 252	1 909 265
Unwrought	27 532	26 843	6 788	----	----
Venezuela					
Bauxite	217 399	164 282	323 728	211 724	150 274
Alumina	387 652	298 955	309 914	486 764	645 674
Unwrought	276 517	274 014	323 014	286 329	264 039
Unwrought alloys	78 642	74 762	91 762	101 936	133 988
Scrap	14 427	16 001	20 088	23 053	21 630
Bahrain					
Unwrought (a)	352 900	360 000	365 000	52 365	10 926
China					
Bauxite	160 645	84 258	847	1	145
Alumina	12 773	32 613	14 406	9 642	25 339
Alumina hydrate	44 617	40 552	35 225	44 973	56 656
Unwrought	163 151	237 756	99 540	81 189	294 902
Unwrought alloys	85 311	89 142	107 062	127 921	113 927
Scrap	4 294	4 995	6 910	7 557	9 189
Dubai					
Unwrought (a)	378 488	374 696	441 663	515 900	*530 000
Scrap	...	16 226	23 749	...	...
Hong Kong					
Alumina (d)	4 010	3 737	2 160	2 366	2 850
Unwrought	219 451	190 570	162 817	137 376	87 972
of which, re-exports	219 309	190 371	162 685	137 322	87 838
Unwrought alloys (d)	33 220	59 076	52 138	55 670	46 393
Scrap	126 052	96 147	86 067	66 534	46 052
of which, re-exports	91 350	75 534	65 593	48 514	29 007
India					
Bauxite (c)	86 876	98 942	596 801	1 248 175	...
Alumina (c)	427 183	216 879	86 062	189 310	...
Alumina hydrate (c)	18 695	29 927	31 496	77 116	...
Unwrought (c)	69 110	29 227	95 394	72 890	...
Unwrought alloys (c)	5 858	4 618	5 667	48 359	...

Exports of Bauxite, Alumina and Aluminium

Country	1997	1998	1999	2000	2001
Indonesia					
Bauxite	715 010	740 199	826 927	879 204	876 272
Unwrought	158 325	133 306	72 129	167 239	131 392
Unwrought alloys	7 869	14 749	7 744	4 923	18 177
Scrap	3 001	4 662	4 294	3 634	7 241
Iran					
Unwrought (a)	(e) *2 400	15 213	25 602	34 624	...
Israel					
Unwrought (a)	*5 500	2 300	2 800	1 300	(e) *3 400
Scrap	(e) *15 700	(e) *15 600	(e) *15 300	17 866	(e) *12 600
Japan					
Alumina	97 231	94 028	107 971	124 859	101 333
Alumina hydrate	125 913	151 147	199 347	212 458	176 821
Unwrought (a)	10 259	7 147	10 513	10 011	...
Scrap	21 433	26 695	27 636	34 625	...
Jordan					
Alumina hydrate	2 514	5 178	6 713	44	...
Scrap	4 475	4 567	5 534	5 172	5 750
Kazakhstan					
Alumina	1 201 868	1 002 376	1 159 644	1 356 398	1 249 767
Unwrought (a)	19 221	49 635	(e) *50 400	(e) *98 200	(e) *70 300
Scrap	31 880	42 920	(e) *56 200	(e) *89 700	(e) *31 300
Korea, Dem. P.R. of					
Unwrought (a) (e)	*3 100	*3 400	*9 000	*3 100	*2 600
Korea, Republic of					
Alumina	...	618	10 486	42 796	3 283
Unwrought	81 090	55 454	26 651	4 462	1 459
Unwrought alloys	16 252	14 916	5 167	7 363	6 550
Scrap	8 368	3 348	1 799	1 914	935
Kyrgyzstan					
Scrap	5 800	11 600	40 289	42 675	3 594
Lebanon					
Scrap	...	5 196	6 801	7 228	7 752
Malaysia					
Bauxite	177 000	87 100	92 500	113 810	51 680
Scrap	13 400	14 278	3 768	6 897	30 572
Oman					
Scrap	3 900	1 379	2 087	2 716	2 259
Philippines					
Scrap	9 620	19 383	16 705	21 634	...
Saudi Arabia					
Unwrought	...	15 850	6 812	1 373	...
Scrap	39 148	18 797	27 060	24 646	...
Singapore					
Alumina	17 585	11 981	9 057	7 943	1 013
of which, re-exports	16 880	11 796	8 941	7 752	838
Unwrought	92 024	58 345	77 812	74 994	92 691
of which, re-exports	...	57 175	77 102	74 295	91 958
Scrap	39 758	44 750	40 803	41 736	42 189
Taiwan					
Unwrought	10 548	3 025	11 540	13 185	13 907
Unwrought alloys	127 203	145 859	82 818	89 961	82 241
Scrap	13 744	14 311	28 032	47 284	42 457
Tajikistan					
Unwrought	183 031	186 778	225 095	273 406	287 000
Thailand					
Unwrought	5 253	7 925	4 631	160 943	5 124
Scrap	15 566	17 686	11 065	70 654	13 389

Exports of Bauxite, Alumina and Aluminium

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Country	1997	1998	1999	2000	2001
Australia					
Bauxite	*5 500 000	*5 500 000	*7 000 000	*7 500 000	*7 500 000
Alumina	10 531 994	10 460 475	10 737 791	12 071 264	12 645 044
Alumina hydrate	370 116	343 273	392 753	377 542	338 896
Unwrought	969 816	1 153 723	1 187 874	1 223 694	1 205 901
Unwrought alloys	186 149	160 982	201 941	157 328	278 494
Scrap	57 455	66 654	80 043	70 809	91 043
New Zealand					
Unwrought (a)	283 344	294 923	297 432	296 146	293 492
Scrap	8 546	12 801	12 638	12 716	19 682

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

Imports of Bauxite, Alumina and Aluminium

Country	1997	1998	1999	2000	2001
Austria					
Bauxite	27 949	26 811	26 336	24 404	25 581
Alumina	47 437	29 867	41 975	50 969	43 134
Alumina hydrate	5 175	5 888	3 252	5 612	5 937
Unwrought	104 678	134 156	110 380	116 717	160 372
Unwrought alloys	138 453	119 015	115 108	139 214	139 329
Scrap	110 492	118 056	126 037	139 274	...
Azerbaijan					
Bauxite	----	----	...	603 461	168 425
Belarus					
Alumina	*6 000	8 227	12 938	20 149	23 009
Unwrought	(b) 7 393	9 164	9 331	9 859	10 192
Scrap	600	589	2 253	4 282	2 142
Belgium-Luxembourg					
Bauxite	13 107	43 411	87 263	93 710	112 399
Alumina	9 951	11 825	10 029	9 709	8 785
Alumina hydrate	52 207	51 887	42 151	43 516	35 659
Unwrought	256 907	350 391	253 655	245 989	448 703
Unwrought alloys	131 427	146 289	159 506	185 915	151 061
Scrap	126 851	178 243	155 114	193 631	185 465
Bulgaria					
Unwrought (a)	13 960	9 058	6 136	13 105	...
Croatia					
Bauxite	63 101	57 069	81 288	62 267	76 243
Unwrought (a)	23 784	25 593	36 061	31 487	32 087
Cyprus					
Unwrought alloys	5 299	6 004	5 283	6 885	6 749
Czech Republic					
Bauxite	10 646	13 632	14 323	12 013	15 212
Alumina	14 289	17 825	14 761	17 095	24 771
Alumina hydrate	11 307	11 832	10 727	10 935	9 960
Unwrought	44 777	57 281	48 057	41 552	43 792
Unwrought alloys	36 302	48 415	56 214	64 904	76 779
Scrap	25 500	34 197	35 897	34 678	26 013
Denmark					
Bauxite	8 783	8 627	7 328	11 178	20 077
Alumina	16 182	12 444	16 856	17 027	18 897
Unwrought (a)	41 018	45 623	43 640	45 418	48 723
Scrap	22 118	22 982	20 922	20 371	163 573
Estonia					
Alumina	1 912	2 965	253	2 927	1 757
Unwrought	9 175	62	39	460	2 744
Finland					
Bauxite	9 431	21 079	8 275	3 848	3 544
Alumina	2 353	2 006	2 564	2 179	2 204
Alumina hydrate	38 834	43 101	33 673	36 424	41 950
Unwrought	17 882	17 192	20 702	20 721	21 586
Unwrought alloys	15 647	20 648	22 513	31 299	28 948
Scrap	54 430	46 938	48 048	30 155	29 829
France					
Bauxite	1 457 723	1 578 486	1 472 094	1 569 306	1 667 959
Alumina	438 896	507 418	578 950	460 901	785 981
Alumina hydrate	40 599	111 903	97 541	98 719	46 522
Unwrought	230 911	191 512	144 583	190 495	182 477
Unwrought alloys	266 763	284 396	320 070	337 271	324 411
Scrap	160 004	192 112	159 335	150 091	145 422
Germany					
Bauxite	2 181 018	1 531 027	2 200 973	2 170 064	1 965 709
Alumina	785 291	832 168	770 127	650 080	777 003
Alumina hydrate	293 677	290 460	326 953	359 940	480 679
Unwrought	698 561	637 505	525 335	610 431	625 469
Unwrought alloys	701 649	834 429	807 818	975 753	976 513
Scrap	440 194	479 496	446 510	441 033	419 586

Imports of Bauxite, Alumina and Aluminium

tonnes

Country	1997	1998	1999	2000	2001
Greece					
Bauxite	3	27 456	40 852	282 649	252 246
Alumina	995	6 334	2 399	5 225	3 711
Unwrought	87 660	85 870	73 680	95 031	78 683
Unwrought alloys	31 790	37 410	39 524	40 679	44 151
Scrap	6 476	4 306	7 989	16 678	19 148
Hungary					
Bauxite	1 664	1 897	21 334	25 212	88 950
Unwrought (a)	170 157	156 988	154 127	192 980	203 346
Scrap	11 714	9 760	9 566	9 344	7 016
Iceland					
Alumina	155 801	377 078	463 691	406 011	465 373
Unwrought	2 695	1 134	1 438	4 120	2 451
Irish Republic					
Bauxite	2 881 584	3 299 255	3 248 871	3 232 037	3 493 883
Alumina	7 753	10 500	5 490	9 493	7 768
Unwrought (a)	11 028	10 316	10 182	12 219	11 474
Scrap	5 100	2 058	2 040	2 301	695
Italy					
Bauxite	1 949 915	2 132 204	2 324 818	2 226 746	2 324 849
Alumina	195 571	200 800	209 097	213 732	126 284
Alumina hydrate	124 986	106 053	101 023	115 215	145 496
Unwrought	266 744	270 690	297 565	321 717	307 267
Unwrought alloys	308 337	337 340	355 201	383 057	362 897
Scrap	352 300	360 129	358 044	368 341	429 647
Latvia					
Scrap	...	3 888	8 812	10 380	11 977
Lithuania					
Alumina hydrate	7 833	8 456	14 231	9 718	5 338
Scrap	5 677	5 833	4 819	6 583	1 654
Macedonia					
Unwrought	3 330	7 232	6 726	2 367	742
Netherlands					
Bauxite	38 981	57 122	39 105	108 474	95 110
Alumina	708 510	832 751	695 599	826 316	726 542
Alumina hydrate	118 140	129 002	138 863	154 745	131 097
Unwrought	444 457	430 688	447 344	492 419	350 467
Unwrought alloys	92 056	92 214	136 768	124 172	170 095
Scrap	225 060	224 627	215 563	239 333	206 963
Norway					
Bauxite	31 402	14 261	31 007	24 325	34 811
Alumina	1 733 334	1 899 852	1 920 834	2 034 199	1 977 187
Alumina hydrate	41 186	38 386	39 732	42 387	37 426
Unwrought	155 421	83 382	168 755	160 813	163 090
Unwrought alloys	40 842	64 552	17 256	91 639	60 982
Scrap	68 723	76 079	87 744	86 441	95 290
Poland					
Bauxite	37 300	30 100	29 447	27 063	37 835
Alumina	122 800	118 800	116 700	126 656	108 804
Alumina hydrate	21 700	24 000	21 900	24 499	25 517
Unwrought	30 500	44 500	48 900	54 469	49 234
Unwrought alloys	33 700	43 000	57 400	67 290	67 181
Scrap	5 100	20 900	19 200	16 057	12 080
Portugal					
Alumina	8 427	8 687	8 668	10 115	10 638
Unwrought	4 305	7 160	10 110	6 314	5 072
Unwrought alloys	75 464	102 015	149 605	188 624	169 878
Scrap	422	944	2 016	4 306	2 746
Romania					
Bauxite	666 583	303 426	612 281	1 428 143	1 152 415
Alumina	151 931	140 689	146 877	186 972	81 407
Russia					
Bauxite	440 000	17 000	58 000	299 651	324 761
Alumina	4 181 960	3 658 027	3 815 878	3 770 061	3 685 906
Alumina hydrate	7 255	10 504	29 948	70 027	20 253
Unwrought	32 362	33 947	98 502	153 792	68 913
Scrap	6 279	6 362	595	151	181

Imports of Bauxite, Alumina and Aluminium

Country	1997	1998	1999	2000	2001
Slovakia					
Bauxite	85 000	531	2 759	4 125	28 803
Alumina	215 852	210 200	206 947	212 117	232 601
Alumina hydrate	1 499	40 800	53	92	374
Unwrought (a)	23 443	24 839	30 968	51 099	36 909
Scrap	800	1 100	4 193	2 181	4 163
Slovenia					
Bauxite	45 887	51 137	50 237	54 840	87 940
Alumina	184 114	177 720	181 496	177 313	194 001
Unwrought	41 750	64 059	64 779	78 859	107 987
Scrap	3 900	3 400	6 366	10 874	13 739
Spain					
Bauxite	2 392 221	2 578 888	2 414 176	2 757 733	3 059 122
Alumina	33 325	37 213	39 821	59 544	61 147
Alumina hydrate	18 318	18 704	16 295	19 818	35 064
Unwrought	125 442	88 719	79 073	90 024	67 047
Unwrought alloys	62 882	88 263	141 633	140 965	149 069
Scrap	45 697	52 081	54 864	57 095	63 125
Sweden					
Bauxite	32 526	28 222	27 707	13 219	28 463
Alumina	184 706	128 180	89 286	154 467	133 786
Alumina hydrate	*50 000	*50 000	46 797	62 269	54 262
Unwrought	54 652	66 469	32 565	32 542	16 612
Unwrought alloys	62 415	71 998	72 028	76 515	80 571
Scrap	6 721	7 525	10 782	20 548	24 295
Switzerland					
Alumina	50 046	65 504	68 026	72 695	65 877
Alumina hydrate	16 757	18 600	19 868	20 916	19 621
Unwrought	108 871	94 919	76 248	67 842	67 203
Unwrought alloys	34 683	46 314	47 401	68 454	63 319
Scrap	13 034	17 098	14 142	18 745	15 910
Turkey					
Bauxite	25 680	24 844	25 247	35 758	25 323
Alumina	13 906	9 425	11 517	13 688	14 164
Unwrought	60 568	69 474	61 775	92 299	72 786
Unwrought alloys	81 767	73 704	71 072	80 861	52 939
Scrap	34 681	24 398	22 517	28 263	11 090
Ukraine					
Bauxite	2 045 854	3 075 299	2 880 090	4 043 524	3 456 200
Alumina	20 237	1 903	...	1 305	...
Unwrought (a)	1 147	888	971	1 059	860
United Kingdom					
Bauxite (e)	322 215	278 737	217 514	222 319	271 404
Alumina	505 974	381 804	541 344	568 317	713 808
Alumina hydrate	77 572	79 427	102 100	73 170	63 687
Unwrought	310 882	310 767	307 607	120 138	135 094
Unwrought alloys	132 373	184 942	136 950	158 217	211 245
Scrap	107 567	138 125	141 971	123 185	112 240
Yugoslavia, Federal Republic of					
Alumina	1 310	566	6 588	5 440	15 500
Unwrought (a)	4 170	3 831	1 688	2 997	4 770
Algeria					
Unwrought (a)	1 654	4 970	4 051	6 022	...
Cameroon					
Alumina	*185 000	153 480	197 437	178 031	221 325
Egypt					
Bauxite	322 724	381 795	389 068	*400 000	262 935
Alumina	*360 000	*380 000	*380 000	*400 000	...
Alumina hydrate	38 400	5 800	31 500	*20 000	...
Ghana					
Alumina	*300 000	*100 000	*120 000	107 866	52 202
Kenya					
Alumina	3 893	2 190	2 567	2 956	...
Unwrought (a)	4 005	3 783	1 527	2 098	...

Imports of Bauxite, Alumina and Aluminium

tonnes

Country	1997	1998	1999	2000	2001
Morocco					
Bauxite	44 910	43 751	48 968	40 935	...
Alumina	5 390	5 373	6 026	4 874	...
Unwrought (a)	2 439	3 700	3 543	5 667	...
Nigeria					
Bauxite	24 848	5 398	11 130	5 710	...
Unwrought (a)	32 055	63 096	3 335	10 854	...
South Africa					
Bauxite	13 414	11 663	9 307	13 766	8 301
Alumina	1 241 568	1 240 430	1 281 124	1 548 314	1 297 663
Alumina hydrate	14 316	12 339	11 236	5 851	11 945
Unwrought (a)	3 750	6 675	50 526	8 158	5 433
Scrap	1 719	1 969	1 374	2 920	7 063
Tunisia					
Alumina hydrate	35 248	36 943	43 041	49 629	...
Unwrought (a)	2 289	4 586	2 671	5 256	...
Canada					
Bauxite	3 134 947	3 888 711	3 064 154	2 838 270	2 861 649
Alumina	3 226 775	3 198 867	3 396 761	3 739 759	3 976 446
Unwrought	21 084	32 639	50 001	45 258	21 495
Unwrought alloys	154 537	169 029	196 476	231 145	201 493
Scrap	90 599	107 425	123 068	127 321	114 388
Costa Rica					
Unwrought (a)	11 986	6 224	10 163	11 344	11 701
El Salvador					
Unwrought (a)	4 783	3 956	4 257	4 340	4 110
Mexico					
Bauxite	53 899	42 315	33 105	46 214	27 969
Alumina	162 457	165 091	139 653	137 471	111 345
Alumina hydrate	65 119	62 498	59 225	69 776	55 697
Unwrought	40 109	63 514	73 778	81 736	69 379
Unwrought alloys	88 488	111 981	128 468	152 125	351 466
Scrap	41 305	47 649	88 266	107 185	87 041
Panama					
Unwrought (a)	1 646	1 459	1 779	1 100	1 304
USA					
Bauxite, crude dried	10 200 000	10 800 000	8 900 000	6 800 000	7 430 000
Bauxite, calcined	369 000	393 000	299 000	310 000	242 000
Alumina	4 042 664	4 151 311	3 896 251	3 929 109	3 186 874
Unwrought	1 153 740	1 355 321	1 359 698	1 087 624	1 380 368
Unwrought alloys	928 970	1 094 085	1 368 630	1 475 486	1 296 738
Scrap	453 568	500 938	614 356	624 892	415 769
Argentina					
Bauxite	34 292	34 169	27 721	36 506	42 445
Alumina	371 254	288 504	425 212	474 492	465 236
Alumina hydrate	18 836	23 423	22 035	26 217	24 891
Brazil					
Bauxite	39 810	11 643	5 882	8 387	8 547
Alumina	6 946	20 442	23 105	6 915	7 347
Unwrought	3 164	3 400	1 056	1 621	7 744
Unwrought alloys	2 544	2 421	1 051	708	988
Scrap	1 328	4 126	4 400	4 230	12 182
Chile					
Bauxite	2 174	10 852	2 011	...	...
Alumina	5 516	7 545	6 115	7 019	8 165
Unwrought	15 529	14 597	11 173	14 557	14 545
Colombia					
Bauxite	13 860	14 630	17 008	35 685	16 741
Alumina	8 104	8 694	6 675	7 220	7 927
Unwrought	24 958	20 864	20 673	24 706	24 599
Unwrought alloys	17 822	15 486	7 267	7 182	5 343
Ecuador					
Bauxite	12 756	12 610	7 124	39 045	54 497
Unwrought (a)	8 388	8 304	5 452	8 358	6 876

Imports of Bauxite, Alumina and Aluminium

Country	1997	1998	1999	2000	2001
Peru					
Bauxite	2 235	4 674	1 170	1 087	4 083
Alumina	2 623	3 795	2 457	4 337	1 887
Unwrought (a)	2 756	2 840	1 190	1 509	1 139
Uruguay					
Bauxite	7 796	9 148	6 403	8 758	6 188
Alumina	1 565	1 533	1 501	1 897	1 420
Unwrought	3 351	3 270	2 802	3 188	2 014
Venezuela					
Bauxite	20 775	17 582	18 982	22 470	12 814
Alumina	7 244	12 053	6 031	10 259	8 417
Unwrought (a)	2 885	641	422	1 267	390
Abu Dhabi					
Scrap	5 729	5 093	9 477	...	...
Bahrain					
Alumina	914 610	968 830	785 522	913 638	968 823
China					
Bauxite	137 131	148 533	243 489	403 516	320 771
Alumina	1 094 407	1 574 909	1 623 186	1 881 714	3 346 019
Alumina hydrate	1 968	2 351	9 605	8 257	5 316
Unwrought	230 229	203 208	380 626	614 823	226 360
Unwrought alloys	58 662	103 780	153 378	299 306	303 278
Scrap	335 898	277 168	399 268	804 629	367 802
Dubai					
Bauxite	20 818	28 526	31 191	...	...
Alumina	774 452	726 399	806 904	...	...
Unwrought	32 961	6 625	5 474	4 636	...
Scrap	6 316	8 213	8 162	...	...
Hong Kong					
Alumina	4 112	3 307	2 258	2 358	3 087
Unwrought	443 478	350 211	207 391	191 310	115 757
Unwrought alloys	35 982	51 123	55 056	51 453	47 133
Scrap	103 941	81 810	66 524	42 911	21 393
India					
Bauxite (c)	32 245	59 027	29 902	27 099	...
Alumina (c)	14 256	11 499	14 819	12 855	...
Unwrought (c)	52 857	53 523	37 126	37 238	...
Unwrought alloys (c)	18 819	22 803	10 113	9 199	...
Scrap (c)	18 948	67 125	81 503	60 100	...
Indonesia					
Alumina	391 517	218 030	199 426	362 776	425 444
Alumina hydrate	68 233	96 288	91 718	91 569	107 101
Unwrought	84 402	63 380	78 288	78 313	48 717
Unwrought alloys	65 388	26 759	28 632	49 072	54 947
Scrap	5 300	1 534	878	2 807	3 690
Iran					
Alumina	*200 000	*250 000	*270 000	*180 000	*190 000
Unwrought (f)	8 254	7 102	10 807	11 408	...
Scrap	8 900	16 498	18 177	22 404	...
Israel					
Unwrought (a)	44 698	48 045	46 053	45 934	...
Japan					
Bauxite	1 995 236	1 977 481	1 953 644	2 096 283	2 051 014
Alumina	36 543	32 285	36 418	38 404	37 506
Alumina hydrate	69 871	68 931	49 682	53 365	51 020
Unwrought	2 163 622	1 859 817	1 833 005	1 963 630	1 814 508
Unwrought alloys	863 913	691 995	826 226	941 607	796 093
Scrap	158 893	152 998	160 654	130 423	120 838
Jordan					
Alumina	25 298	12 042	36 759	21 053	24 907
Unwrought (a)	6 741	6 884	6 926	10 719	13 685

Imports of Bauxite, Alumina and Aluminium

tonnes

Country	1997	1998	1999	2000	2001
Korea, Republic of					
Bauxite	180 978	162 983	168 254	215 674	109 371
Alumina	63 390	60 110	67 007	71 097	79 876
Alumina hydrate	99 874	102 003	135 399	155 507	201 583
Unwrought	605 021	497 457	730 031	683 793	722 447
Unwrought alloys	166 314	86 646	150 356	205 931	158 158
Scrap	80 760	54 968	105 963	101 949	133 450
Lebanon					
Alumina	...	2 965	3 058	...	1 559
Unwrought	...	20 854	14 248	16 001	15 567
Malaysia					
Alumina	*31 500	41 914	57 907	38 938	...
Unwrought	107 700	71 600	102 000	110 438	96 366
Unwrought alloys	75 200	34 500	82 100	79 505	...
Scrap	24 700	23 615	47 297	34 729	...
Pakistan					
Alumina (d)	6 508	6 267	6 144	5 685	...
Unwrought (a) (d)	10 161	4 764	3 554	9 379	...
Scrap (d)	53 020	56 786	56 512	58 397	...
Philippines					
Bauxite	6 077	680	986	616	476
Alumina	10 431	10 228	13 108	14 673	2 203
Unwrought (a)	33 887	24 308	34 402	34 418	3 672
Scrap	3 200	108	257	436	709
Saudi Arabia					
Bauxite	267 590	148 263	166 125	52 770	...
Alumina	6 514	*6 500	202 008	7 822	...
Unwrought (a)	4 378	3 821	3 081	2 515	...
Singapore					
Alumina	4 177	2 061	2 131	2 609	3 846
Alumina hydrate	28 789	26 162	5 938	12 017	6 571
Unwrought	102 586	82 097	76 658	81 032	230 893
Scrap	5 445	4 791	3 030	2 903	3 045
Syria					
Scrap	...	9 781	9 320	...	...
Taiwan					
Bauxite	79 577	71 931	57 556	67 891	64 632
Alumina	31 455	33 754	32 739	38 741	33 240
Alumina hydrate	42 949	53 791	51 739	54 613	50 538
Unwrought	355 481	314 429	387 253	419 544	274 711
Unwrought alloys	156 604	135 131	171 226	185 170	142 738
Scrap	212 883	167 070	139 504	138 603	115 018
Tajikistan					
Bauxite	320 336	352 571	...	...	...
Alumina	*230 000	*220 000	...	...	...
Thailand					
Bauxite	35 055	26 678	39 081	35 946	40 935
Alumina	13 492	10 043	13 086	18 405	19 804
Alumina hydrate	43 308	48 549	58 665	48 632	72 696
Unwrought	111 500	89 268	82 393	113 133	1 924 018
Unwrought alloys	126 599	106 866	77 242	242 964	108 634
Scrap	5 447	3 123	7 156	11 485	13 126

Imports of Bauxite, Alumina and Aluminium

tonnes

Country	1997	1998	1999	2000	2001
Australia					
Bauxite	13 935	12 602	6 562	9 837	9 501
Alumina	37 337	11 291	9 273	10 065	9 517
Unwrought (a)	4 161	5 900	5 259	6 025	7 573
Scrap	6 641	6 474	7 429	8 802	9 973
New Zealand					
Alumina	551 138	628 558	632 299	*620 000	604 355
Unwrought (a)	10 290	10 954	12 919	9 688	5 727
Scrap	5 185	5 386	3 163	1 761	1 078

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

Mine Production of Antimony

tonnes (metal content)

Country	1997	1998	1999	2000	2001
Russia	6 000	4 000	4 356	8 000	4 152
Turkey	19	*20	*20	*20	*20
Morocco	160	160	250	----	----
South Africa	3 415	4 243	5 278	3 710	4 827
Canada	630	428	425	433	278
Guatemala	752	420	----	----	8 162
Mexico	1 909	1 301	273	52	81
USA	356	489	450	*340	----
Bolivia	5 999	4 735	2 790	1 907	2 072
Peru (a)	242	364	255	461	274
China	131 100	97 400	89 600	99 300	97 000
Kyrgyzstan	3 062	1 298	1 320	1 505	*1 500
Tajikistan	*1 200	*1 500	*1 800	*2 000	*2 500
Thailand	80	260	70	100	20
Australia (b)	*2 500	*2 400	*2 500	*2 200	*1 800
World Total	157 000	119 000	109 000	120 000	123 000

Note(s):

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

- (a) Including Sb content of antimonial lead plus Sb content of ores for export
(b) Years ended 30 June of that stated

Exports of Antimony

Country	1997	1998	1999	2000	2001
Austria					
Metal	59	47	8	1	37
Belgium-Luxembourg					
Oxide (a)	*6 700	*6 700	*8 700	*11 200	*11 200
Estonia					
Metal	63	126	...	...	13
Oxide	155	258	...	...	...
France					
Ores & concentrates	...	26	12 203	1	0
Metal	74	132	13	292	60
Oxide	5 270	5 292	4 371	5 156	3 715
Germany					
Metal	32	38	48	36	38
Oxide	957	1 061	1 141	968	783
Greece					
Metal	...	5	26	1	54
Italy					
Metal	9	3	36	13	36
Netherlands					
Metal	434	914	206	286	186
Oxide	962	1 027	792	649	872
Russia					
Ore	1 272	1 484	1 000	...	...
Metal	277	660	(a) *270	(a) *80	(a) *260
Oxide	1 824	715	97	143	...
Spain					
Metal	85	6	11	16	92
Oxide	370	829	819	701	974
Sweden					
Metal	2	25	0	4	4
Turkey					
Metal	2	540	412	84	50
United Kingdom					
Metal	116	100	88	870	473
Oxide	(a) *5 600	5 139	(a) *4 000	(a) *4 400	1 297
South Africa					
Ore (c)	1 585	3 655	4 278	4 146	4 500
Metal	17	11	4	4	60
Oxide	5 127	4 609	5 501	5 105	5 520
Canada					
Ores & concentrates	195	519	----	----	----
Mexico					
Metal	441	331	415	538	243
Oxide	3 350	2 901	5 433	7 276	11 419
USA					
Ores & concentrates	3 798	3 997	2 506	2 618	518
Metal	774	1 015	642	1 163	1 891
Oxide	4 033	3 953	3 866	7 532	7 448
Bolivia					
Ore	1 385	1 310	806	1 131	570
Metal	159	61	322	202	222
Oxide	5 968	4 508	2 657	1 312	2 081
Peru					
Metal	340	352	332	241	371
China					
Ores & concentrates	3 859	2 375	20	0	----
Metal	31 034	22 365	45 339	45 091	22 097
Oxide	28 329	28 062	36 704	36 086	36 067
Sulphide	13 850	5 636	1 975	2 395	...
Dubai					
Metal	66	20	64	...	...
Hong Kong					
Metal (b)	16 672	15 290	10 705	6 825	4 988

Exports of Antimony

tonnes

Country	1997	1998	1999	2000	2001
Indonesia					
Ore	0	...	1 028	1 245	----
Japan					
Metal	79	343	187	180	162
Oxide	2 157	1 925	2 339	2 321	1 924
Kazakhstan					
Metal	(a) *100	217	----	(a) *70	...
Korea, Republic of					
Metal	145	26	43	44	10
Oxide	1 335	604	308	195	213
Kyrgyzstan					
Metal	3 628	1 043	748	857	...
Oxide	(a) *1 400	919	783	755	...
Singapore					
Metal	181	11	246	530	4 123
Oxide	514	471	555	675	581
of which, re-exports	376	369	508	652	555
Taiwan					
Metal	655	379	411	749	269
Oxide	1 161	1 240	1 144	1 345	977
Thailand					
Metal	705	163	47	193	130
Oxide	1 082	787	3	50	10
Australia					
Ores & concentrates	2 704	2 863	2 971	2 357	830

Note(s):

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

(b) Re-exports

(c) Sb content

Imports of Antimony

Country	1997	1998	1999	2000	2001
Austria					
Metal	192	221	131	174	205
Oxide	176	226	262	252	146
Belarus					
Metal	...	26	15	32	39
Belgium-Luxembourg					
Ore	1 876	1 703	238	66	6
Metal	6 277	8 321	6 828	12 858	11 928
Oxide	772	1 016	888	1 612	900
Bulgaria					
Metal	103	129	98	60	...
Czech Republic					
Metal	19	67	12	2	53
Oxide	...	289	394	429	548
Estonia					
Metal	63	125	...	...	...
Oxide	219	195	1	1	1
Finland					
Oxide	236	177	164	215	269
France					
Ore	32	128	7	8	223
Metal	8 569	8 316	7 564	8 345	6 854
Oxide	1 008	1 218	1 283	2 520	2 090
Germany					
Ore	...	442	578	500	494
Metal	620	746	1 231	741	599
Oxide	5 064	5 170	4 850	6 835	6 384
Greece					
Metal	45	58	98	47	98
Italy					
Ore	417	453	272	611	446
Metal	626	956	1 882	1 429	1 929
Oxide	4 078	4 543	4 374	4 391	4 366
Netherlands					
Ore	...	7	153	265	144
Metal	724	1 748	1 414	762	775
Oxide	2 510	2 675	2 539	3 061	2 293
Norway					
Metal	29	10	5	3	9
Oxide	347	353	227	338	157
Poland					
Metal	86	50	36	70	58
Oxide	...	...	466	605	611
Portugal					
Metal	8	24	7	5	3
Oxide	...	235	183	263	331
Romania					
Metal	71	87	45	63	70
Russia					
Metal	967	834	1 230	1 374	...
Oxide	644	204	374	640	...
Slovenia					
Metal	14	19	14	3	29
Spain					
Metal	1 130	1 510	1 143	1 511	2 277
Oxide	902	1 004	1 041	813	828
Sweden					
Metal	75	81	60	26	108
Oxide	543	409	453	396	401
Switzerland					
Ores & concentrates	1 416	283	22	121	10
Metal	0	27	52	25	44
Oxide	677	681	786	969	1 033
Turkey					
Metal	120	55	30	11	20
Oxide	...	...	244	241	209
Ukraine					
Metal	25	24	21	47	...

Imports of Antimony

tonnes

Country	1997	1998	1999	2000	2001
United Kingdom					
Metal	2 808	950	133	461	345
Oxide	1 883	2 105	1 707	2 082	4 103
Yugoslavia, Federal Republic of					
Metal	100	61	65	42	43
Algeria					
Metal	121	72	200	120	...
Egypt					
Oxide	...	61	289	...	117
Morocco					
Metal	11	32	25	32	...
South Africa					
Metal	162	204	221	120	255
Oxide	185	149	166	131	134
Tunisia					
Metal	30	45	45	35	...
Canada					
Metal	433	391	384	481	446
Oxide	1 965	2 138	2 174	2 059	1 776
Mexico					
Ores & concentrates	2 977	4 198	2 967	3 068	757
Metal	579	761	1 008	1 253	2 944
Oxide	1 333	1 440	1 832	6 313	11 876
USA					
Ore	1 513	2 644	3 606	4 632	2 611
Metal	14 975	13 298	14 753	14 193	12 622
Oxide	27 906	23 106	23 010	28 487	27 657
Argentina					
Metal	200	275	197	207	277
Brazil					
Ores & concentrates	202	9	25	4	12
Metal	920	1 136	1 062	1 258	1 200
Oxide	208	204	158	345	536
Colombia					
Metal	65	92	73	64	56
Venezuela					
Metal	25	77	26	34	26
China					
Ores & concentrates	9 010	3 681	144	80	217
Metal	2 675	2 782	1 246	472	188
Oxide	502	1 038	1 312	1 206	316
Dubai					
Metal	173	24	----	...	...
Hong Kong					
Metal	11 948	5 613	3 486	1 930	4 580
Oxide	2 874	2 459	2 040	1 184	1 063
India					
Metal (a)	1 414	1 406	1 949	1 589	...
Oxide (a)	108	214	289	273	...
Indonesia					
Metal	279	192	196	394	278
Oxide	392	365	336	388	499
Iran					
Metal	281	573	1 413	1 119	...
Japan					
Ores & concentrates	1 077	698	96	40	20
Metal	8 796	8 513	8 576	10 965	7 372
Oxide	11 162	8 887	8 270	8 497	7 382
Sulphide	283	243	250	1 069	...
Kazakhstan					
Metal	20	55	62	1	45
Korea, Republic of					
Metal	10 456	8 920	12 515	12 563	10 051
Oxide	690	1 149	3 974	5 407	5 357

Imports of Antimony

Country	1997	1998	1999	2000	2001
Malaysia					
Metal	381	1 367	...	393	111
Pakistan					
Metal (b)	130	99	127	120	...
Philippines					
Metal	45	10	139	62	57
Singapore					
Metal	50	19	458	691	5 910
Oxide	2 093	1 366	1 798	2 401	1 594
Sri Lanka					
Metal	...	23	40	40	...
Taiwan					
Metal	4 644	2 962	5 008	5 062	2 957
Oxide	5 516	5 530	7 159	7 330	6 256
Thailand					
Ores & concentrates	274	138	553	----	...
Metal	1 314	847	562	857	443
Oxide	650	521	829	1 192	904
Australia					
Metal	197	139	203	265	337
Oxide	523	622	559	533	534
New Zealand					
Metal	95	73	69	70	42

Note(s) :-

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

Production of White Arsenic

tonnes

Country	1997	1998	1999	2000	2001
Belgium	*2 000	*1 500	*1 500	*1 500	*1 000
France	*2 500	*2 000	*1 000	*1 000	*1 000
Georgia	*400	*400	*400	*400	*400
Germany	*250	*200	*200	*200	*100
Russia	*1 500	*1 500	*1 500	*1 500	*1 500
Ghana	4 577	*5 000	*7 000	*3 000	----
Namibia (a)	1 297	233	----	----	914
Canada	*250	*250	*250	*250	*250
Mexico	3 959	3 396	3 193	3 329	3 143
Bolivia	282	284	437	318	*300
Chile (b)	11 159	11 690	9 789	10 712	...
Peru	837	624	1 611	2 495	1 958
China	*15 000	*15 500	*16 000	*16 000	*16 000
Iran	492	323	*300	*400	*400
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

Country	1997	1998	1999	2000	2001
Belgium-Luxembourg					
Metallic arsenic	2	----	5	12	29
Denmark					
Metallic arsenic	1 156	1 301	----	----	----
France					
Metallic arsenic	7	8	5	7	22
Germany					
Metallic arsenic	13	17	22	27	8
Italy					
Metallic arsenic	0	14	5	15	----
Netherlands					
Metallic arsenic	26	41	31	46	39
United Kingdom					
Metallic arsenic	3	22	45	11	5
Namibia					
White arsenic	1 044	314	----	----	...
USA					
Metallic arsenic	81	534	1 408	76	62
Bolivia					
White arsenic	282	284	438	318	249
Chile					
White arsenic	11 159	11 690	9 789	10 712	...
China					
White arsenic (a)	*16 600	*23 900	*16 500	...	...
Metallic arsenic	1 901	2 184	2 497	2 505	2 039
Japan					
Metallic arsenic	13	17	28	42	29
Australia					
Metallic arsenic	50	127	70	107	156
New Zealand					
Metallic arsenic	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	1997	1998	1999	2000	2001
Austria					
Metallic arsenic	18	22	1	----	28
Belgium-Luxembourg					
Metallic arsenic	20	40	46	149	73
Denmark					
Metallic arsenic	829	920	...	----	----
France					
Metallic arsenic	76	72	68	87	50
Germany					
Metallic arsenic	19	32	25	10	8
Greece					
Metallic arsenic	11	21	26	27	15
Irish Republic					
Metallic arsenic	20	19	20	218	31
Italy					
Metallic arsenic	76	102	77	75	48
Netherlands					
Metallic arsenic	...	75	92	77	137
Norway					
Metallic arsenic	36	36	61	54	44
Poland					
White arsenic	76	64	74	...	...
Metallic arsenic	42	40	25	25	...
Spain					
Metallic arsenic	73	93	112	153	87
Sweden					
Metallic arsenic	13	15	20	20	18
Switzerland					
Metallic arsenic	2	8	3	3	2
Turkey					
White arsenic	403	...	1	1	10
Metallic arsenic	...	...	13	58	23
United Kingdom					
Metallic arsenic	122	81	108	109	87
South Africa					
Metallic arsenic	...	...	...	42	60
Canada					
Metallic arsenic	138	668	1 711	257	391
USA					
White arsenic	29 996	38 636	29 131	31 117	31 500
Metallic arsenic	909	1 000	1 298	830	1 030
Hong Kong					
Metallic arsenic	69	71	58	39	----
India					
White arsenic (a)	1 328	2 170	873	714	...
Metallic arsenic (a)	109	183	310	67	...
Indonesia					
Metallic arsenic	143	123	256	390	273
Japan					
Metallic arsenic	78	----	103	45	----
Korea, Republic of					
Metallic arsenic	103	48	85	101	72
Taiwan					
White arsenic	99	159	99	40	1
Thailand					
Metallic arsenic	36	24	56	81	80
Australia					
White arsenic	1 234	2 122	...	...	...
Metallic arsenic	124	148	61	42	103
New Zealand					
Metallic arsenic	14	...	21	189	998

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

Country	1997	1998	1999	2000	2001
Bulgaria	300	672	354	*350	*350
Greece	63 294	35 068	32 000	...	...
Russia	723 973	601 859	674 000	752 000	735 000
Slovakia	30 000	19 000	2 000	...	...
Yugoslavia, Federal Republic of	765	1 457	361	563	194
Egypt (b)	776	147	...	...	...
South Africa					
Crocidolite	232	----	----	----	----
Chrysotile	49 754	27 752	18 836	18 782	13 393
Swaziland					
Chrysotile	25 888	27 693	22 912	12 690	...
Zimbabwe					
Chrysotile	144 959	123 295	87 872	151 954	118 969
Canada					
Chrysotile	454 991	302 000	340 000	307 000	272 000
USA (a)	6 890	5 760	7 190	5 260	5 260
Argentina	301	309	259	254	*250
Brazil	208 447	198 332	188 386	209 332	172 695
Colombia (c)	136 700	*136 000	*136 000	*136 000	...
China	437 000	297 000	329 000	276 000	257 581
India					
Amphibole (e)	25 537	20 111	18 550	15 397	10 629
Iran (d)	10 373	2 258	2 123	*2 000	*2 000
Japan					
Chrysotile	2 254	1 389	1 052	...	...
Kazakhstan	181 818	155 400	139 300	233 200	270 600
World Total	2 500 000	2 000 000	2 000 000	2 200 000	2 000 000

Note(s):

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

(a) Sold or used by producers

(b) Years ended 30 June of that stated

(c) Crude

(d) Years ended 20 March following that stated

(e) Years ended 31 March following that stated

Exports of Unmanufactured Asbestos

tonnes

Country	1997	1998	1999	2000	2001
Belarus	*3 000	3 604	4 334	65	3
Belgium-Luxembourg	263	685	1	0	----
Czech Republic	----	51	1	...	...
France	164	----	...	46	59
Greece	51 720	35 185	28 360	8 946	252
Italy	42	7	...	----	...
Lithuania	7 113	2 982	3 967	643	139
Poland	300	300	1	14	...
Russia	98 832	241 681	261 138	332 417	...
Slovakia	328	...	...	...	...
Spain	19	15	5	126	36
United Kingdom	16	45	49	2	1
South Africa	38 209	24 875	20 314	16 627	11 965
Swaziland	*20 000	*19 000	*20 000	*20 000	...
Zimbabwe	143 169	113 008	204 575	134 859	*147 000
Canada	430 288	319 430	332 406	315 326	272 596
USA	23 061	18 896	21 997	18 765	14 748
Brazil	63 165	51 239	49 419	63 134	53 918
China	13 553	18 591	10 720	11 814	18 431
India (a)	282	348	172	403	...
Japan	160	32	20	----	54
Kazakhstan	60 429	123 906	107 428	153 553	199 254
Saudi Arabia	6 440	8 608	17 970	9 727	...

Note(s):

(a) Years ended 31 March following that stated

Imports of Unmanufactured Asbestos

Country	1997	1998	1999	2000	2001
Azerbaijan	...	2 589	2 976	8 252	7 404
Belarus	*20 000	21 518	25 639	25 301	20 738
Belgium-Luxembourg	2 366	2	25	98	65
Croatia	3 033	2 746	1 704	2 586	2 666
Czech Republic	1 315	1 684	1 441	1 402	2 322
Denmark	125	-----	-----	-----	...
Estonia	800	253	255	180	58
France	55	979	15	16	25
Germany	143	191	214	189	168
Greece	239	244	72	501	1 016
Hungary	5 759	7 452	1 486	3 558	2 167
Irish Republic	2 468	891	8	1 007	-----
Italy	-----	192	305	87	...
Latvia	1 828	1 385	1 042	857	664
Lithuania	10 819	5 877	4 102	1 356	...
Macedonia	1 998	2 000	*2 000	*2 000	...
Moldova	3 189	357	300	5	12
Poland	23 000	9 700	24	19	19
Portugal	7 324	6 302	8 949	4 710	5 505
Romania	6 807	18 705	13 986	10 244	13 644
Russia	17 128	30 157	23 853	27 259	...
Slovakia	1 215	...	...	...	...
Slovenia	1 800	1 716	1 487	893	...
Spain	21 192	21 349	17 847	15 568	13 349
Turkey	33 725	22 674	15 494	19 455	10 557
United Kingdom	4 820	1 840	789	246	347
Yugoslavia, Federal Republic of	1 365	1 427	592	607	697
Algeria	9 997	8 017	4 673	10 281	...
Egypt	10 100	7 850	3 347	*3 000	659
Ghana	3	4 613	401	648	2 719
Morocco	4 376	1 623	1 428	1 759	...
Nigeria	7 799	12 515	79 108	10 367	...
Senegal	*300	1 436	1 542	1 784	2 002
South Africa	9 571	7 013	10 262	10 217	11 060
Tunisia	3 573	4 907	1 700	3 638	...
Zambia	*500	*500	1 737	887	1 214
Canada	128	138	203	125	111
Cuba (d)	*6 600	*4 400	*2 300	*800	*100
El Salvador	999	1 266	1 688	1 678	1 691
Mexico	28 886	29 102	23 089	26 102	18 182
Panama	1 171	600	897	1 121	...
USA	20 922	15 823	15 808	14 637	21 600
Argentina	6 549	4 847	2 634	2 079	1 756
Bolivia	1 818	1 664	1 660	982	749
Brazil	38 941	39 597	24 049	35 491	33 136
Chile	9 198	5 125	2 295	2 088	...
Colombia	16 650	14 554	11 569	12 189	11 852
Ecuador	1 348	2 253	4 044	4 456	4 064
Peru	4 078	2 944	1 188	1 434	1 256
Uruguay	1 511	1 432	1 187	809	728
Venezuela	2 214	1 782	2 028	3 734	1 591
China	103 265	71 694	69 391	72 004	110 489
Dubai	7 660	5 291	6 257	...	...
India (c)	83 356	106 249	112 936	97 345	...
Indonesia	41 845	21 079	30 415	54 891	49 914
Iran (a)	75 587	40 505	65 364	55 265	...
Japan	176 021	120 813	117 143	98 595	79 463
Kazakhstan	3 700	116	537	1 255	1 890
Korea, Republic of	44 985	29 619	32 519	28 972	26 307
Kyrgyzstan	22 200	18 800	18 901	17 307	20 454
Lebanon	...	2 124	1 195	1 325	621
Malaysia	21 700	14 600	18 000	18 640	...
Oman	1 331	1 231	3 636	2 347	2 636
Pakistan (b)	989	4 583	2 865	4 160	...

Imports of Unmanufactured Asbestos

tonnes

Country	1997	1998	1999	2000	2001
Philippines	2 206	1 500	2 882	3 144	2 929
Singapore	243	18	91	4	----
Sri Lanka	18	1 744	10 903	*11 000	...
Syria	3 068	1 488	3 267	*3 000	...
Taiwan	5 773	5 682	6 572	5 421	3 716
Thailand	177 124	60 093	100 423	120 563	126 915
Australia	1 556	1 471	1 316	1 246	945

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

Country	1997	1998	1999	2000	2001
Belgium	*30 000	*40 000	*30 000	*30 000	*30 000
Bulgaria	*120 000	124 000	111 000	*120 000	*100 000
France	77 000	75 400	75 700	92 000	81 000
Georgia	2 782	390	----	416	1 094
Germany	118 698	123 272	118 489	111 790	*110 000
Greece	842	*800	*800	*800	*800
Italy	26 694	31 792	24 557	11 262	*10 000
Poland	3 400	----	----	----	----
Romania	12 729	10 327	4 632	4 266	2 849
Russia	*60 000	*60 000	*60 000	*60 000	*60 000
Slovakia	62 102	14 877	15 900	13 700	14 500
Spain	102 411	79 820	39 553	32 653	*63 000
Turkey	226 594	160 042	150 058	120 893	102 323
United Kingdom	*74 000	64 000	59 000	54 000	*66 000
Algeria	39 140	37 006	50 510	51 925	43 020
Egypt (e)	320	600	...	...	...
Morocco	343 314	353 206	328 945	343 557	471 102
Nigeria	147 645	245 554	...	...	...
South Africa	2 071	610	2 844	1 628	----
Tunisia	12 847	8 011	3 000	3 702	2 208
Zimbabwe	1 217	1 844	3 140	5 032	7 464
Canada	77 000	90 000	123 000	15 000	24 000
Guatemala	3 000	----	75	113	455
Mexico	236 606	161 555	157 953	127 668	142 017
USA (b)	692 000	476 000	434 000	392 000	400 000
Argentina	13 121	1 833	4 365	*4 400	*4 500
Bolivia	4 402	2 500	6 005	3 050	*3 000
Brazil (d)	43 307	48 634	40 824	54 100	*55 000
Chile	2 654	1 430	823	1 026	584
Colombia	900	*900	*900	*900	*900
Ecuador	...	...	2 532	1 476	1 181
Peru	63 727	7 506	3 512	11 403	11 031
Afghanistan	*2 000	*2 000	*2 000	*2 000	*2 000
China	4 462 400	2 941 200	1 715 740	3 024 030	3 985 200
India (a)	453 073	660 854	363 414	845 001	915 557
Iran (c)	150 241	178 355	165 520	*183 000	*218 000
Kazakhstan	30 900	8 900	51 200	15 200	42 600
Korea, Dem. P.R. of	*120 000	*100 000	*70 000	*70 000	*70 000
Korea, Republic of	105	----	100	30	200
Laos	3 000	9 050	7 900	1 400	3 300
Malaysia	2 608	1 580	13 506	7 274	649
Myanmar (a)	20 467	18 562	27 679	32 669	*29 000
Pakistan (e)	23 390	20 657	16 845	22 432	25 831
Saudi Arabia	9 000	10 800	13 200	16 000	...
Thailand	54 817	105 221	76 092	56 180	23 559
Australia	*17 000	*15 000	*18 000	*14 000	*16 000
World Total	8 000 000	6 300 000	4 400 000	6 000 000	7 400 000

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	1997	1998	1999	2000	2001
Azerbaijan	2 000	1 780	1 920	2 667	4 504
Belgium-Luxembourg	15 802	17 222	11 198	6 177	6 707
Bulgaria	116 505	112 962	110 128	125 440	(b) *119 900
France	60 000	45 000	47 000	60 000	*50 000
Georgia	617	470	2	60	----
Germany	18 552	14 779	14 978	15 906	38 775
Italy	427	1 876	432	306	390
Netherlands	34 350	54 463	54 129	49 611	88 229
Norway	16 207	11 514	4 630	5 169	9 227
Russia	1 693	(b) *300	(b) *3 900	(b) *1 800	(b) *2 200
Slovakia	15 580	16 010	15 494	13 197	14 215
Spain	80 981	70 264	18 054	25 431	39 910
Turkey	125 412	123 974	57 558	89 145	136 916
United Kingdom	9 475	6 590	8 196	28 503	58 969
Morocco	320 454	362 340	212 206	327 154	...
Tunisia	291	1 002	4 622	3 908	...
Canada	21 075	25 426	15 931	14 238	21 964
Mexico	65 325	18 145	15 349	8 082	3 699
USA	23 245	16 910	24 419	37 221	45 020
Bolivia	4 402	2 500	5 960	3 050	6 855
Peru	64 697	8 353	3 502	7 591	6 082
Venezuela	...	3 650	2 663	3 127	...
China	2 927 095	1 774 337	1 286 855	2 523 041	2 588 004
Hong Kong (c)	120	115	1 301	654	1 137
India (a)	24 372	106 232	37 845	153 960	...
Indonesia	4 031	3 161	1 350	2 705	7 504
Iran	41 700	27 577	11 502	23 500	...
Kazakhstan	30 135	6 749	28 434	22 203	53 693
Korea, Dem. P.R. of (b)	...	*2 800	*7 200	*2 600	*10 900
Laos	3 000	9 050	7 900	1 400	3 300
Oman	4 200	441	4 073	4 594	9 192
Saudi Arabia	...	5 902	5 364	638	...
Singapore	8 072	7 405	5 537	6 250	8 167
of which, re-exports	4 664	4 028	5 352	5 397	8 164
Thailand	31 250	57 652	58 914	35 112	39 387
Australia	2 737	2 055	688	1 078	1 888

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

Country	1997	1998	1999	2000	2001
Albania	1 701	22	23	2	...
Austria	2 924	2 488	2 382	3 439	3 151
Azerbaijan	*9 400	9 364	14 765	34 332	40 914
Belarus	2 000	2 038	2 748	1 398	1 852
Belgium-Luxembourg	12 384	11 741	15 253	14 738	6 706
Croatia	560	105	356	299	111
Czech Republic	10 828	8 004	9 652	9 230	10 594
Denmark	15 988	24 606	27 101	33 413	46 013
Finland	2 134	2 223	2 120	2 644	2 537
France	24 860	25 271	22 576	25 084	19 902
Georgia	...	...	2 067	5 910	...
Germany	230 696	255 201	202 026	241 776	251 884
Greece	1 951	1 278	858	1 711	1 657
Hungary	2 725	2 799	1 095	1 037	1 455
Irish Republic	676	114	230	192	176
Italy	74 827	70 887	66 177	70 143	93 733
Netherlands	136 604	114 635	73 579	98 200	111 042
Norway	158 036	145 616	134 596	158 610	145 445
Poland	4 800	6 700	8 225	7 958	7 358
Portugal	1 176	3 656	2 065	3 893	2 721
Romania	18 984	88 130	15 128	21 086	8 198
Russia	24 422	27 025	34 847	21 110	...
Slovakia	575	456	...	301	538
Slovenia	1 000	894	827	730	1 026
Spain	23 686	25 696	30 691	27 032	39 311
Sweden	4 155	4 212	2 433	2 149	1 892
Switzerland	3 663	4 520	2 051	2 090	1 917
Turkey	912	2 069	515	626	371
United Kingdom	139 065	98 506	65 703	57 362	77 273
Algeria	37 769	39 041	4 990	14 449	...
Cameroon	*3 000	1 374	1 919	2 298	1 272
Congo	...	----	1 503	----	900
Gabon	*1 300	*1 300	*1 300	*1 300	...
South Africa	1 980	1 421	1 716	2 423	2 254
Tunisia	949	350	2 687	331	...
Canada	21 860	13 642	56 003	57 702	79 927
Mexico	68 360	30 385	3 181	4 767	4 011
Trinidad & Tobago	33 914	33 512	26 000	19 412	14 627
USA	2 244 245	1 874 616	858 094	2 085 440	2 500 618
Argentina	8 762	2 982	5 922	3 497	5 371
Colombia	47 109	20 391	48 356	...	24 759
Ecuador	3 357	572	2 073	3 759	4 133
Venezuela	149 874	109 890	74 001	59 176	64 291
Abu Dhabi	3 069	297	196	...	...
China	47	249	326	497	457
Dubai	1 122	1 906	2 845	...	...
Hong Kong	222	365	947	708	1 187
Indonesia	85 550	71 988	55 010	54 426	87 868
Japan	114 384	90 894	113 018	108 156	94 272
Kazakhstan	*5 000	7 290	431	...	33 860
Korea, Republic of	63 695	46 240	80 088	71 957	57 285
Lebanon	...	147	547	...	221
Malaysia	10 700	8 311	13 977	21 950	38 180
Oman	941	10 584	7 564	21 306	28 000
Philippines	908	870	1 615	1 255	1 111
Saudi Arabia	59 888	3 249	38 618	10 510	...
Singapore	7 845	4 951	2 687	5 909	6 731
Syria	13 712	2 668	12	...	...
Taiwan	5 538	5 011	3 748	3 527	3 284
Thailand	11 123	9 711	11 167	6 549	23 577
Australia	7 289	19 190	5 401	17 725	9 747
New Zealand	833	949	828	631	864

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	1997	1998	1999	2000	2001
Armenia					
Bentonite	*3 000	*3 000	3 493	2 807	907
Azerbaijan					
Bentonite	70 000	*35 000	*1 000	----	----
Bosnia & Herzegovina					
Bentonite	*10 000	*10 000	*10 000	*10 000	*10 000
Bulgaria					
Bentonite	170 700	176 110	242 725	295 800	320 000
Croatia					
Bentonite	7 331	7 581	8 441	10 013	10 580
Cyprus					
Bentonite	101 000	140 000	177 000	167 000	127 000
Czech Republic					
Bentonite	110 000	125 000	160 000	280 000	224 000
Denmark					
Bentonite	*3 000	*9 000	...	...	12 166
Georgia					
Bentonite	12 000	*11 000	*12 000	*12 000	...
Germany					
Bentonite	511 190	508 738	476 580	464 616	...
Greece					
Bentonite	942 555	1 148 408	1 049 657	1 148 694	1 258 872
Hungary					
Bentonite	19 553	26 724	61 928	5 120	30 441
Italy					
Bentonite	511 760	580 209	562 674	636 589	...
Fuller's earth	22 025	29 470	59 903	25 384	...
Macedonia					
Bentonite	*30 000	*30 000	*30 000	*30 000	*30 000
Poland					
Fuller's earth	6 100	5 400	5 000	4 000	...
Romania					
Bentonite	27 133	25 434	20 577	37 587	23 779
Russia					
Bentonite	*655 000	*500 000	*500 000	*500 000	*500 000
Slovakia					
Bentonite	79 760	81 010	64 390	77 000	73 000
Spain					
Bentonite	196 661	46 241	137 305	90 152	*90 000
Attapulгите	133 035	113 330	90 282	28 307	24 477
Sepiolite	554 268	553 584	508 655	596 324	673 600
Turkey					
Bentonite	521 158	565 708	899 614	636 273	674 577
Sepiolite	11 277	7 213	19 945	18 295	10 253
Ukraine					
Bentonite	*25 000	*25 000	*25 000	*25 000	*25 000
United Kingdom					
Fuller's earth (a)	134 800	94 400	74 500	65 500	52 000
Algeria					
Bentonite	17 657	15 655	15 491	22 708	21 282
Fuller's earth	3 960	3 942	2 489	3 431	3 254
Egypt					
Bentonite (e)	1 267	1 545	...	...	...
Morocco					
Bentonite	49 633	33 311	36 528	43 152	71 741
Fuller's earth (f)	24 465	30 650	21 956	30 665	40 664
Mozambique					
Bentonite	13 782	11 133	11 187	16 418	1 611
Senegal					
Attapulгите	82 607	110 400	139 300	148 700	121 100
South Africa					
Bentonite	75 538	48 382	50 363	85 187	108 306
Attapulгите	9 421	7 830	7 067	7 337	8 894

Production of Bentonite and Fuller's Earth

Country	1997	1998	1999	2000	2001
Canada					
Bentonite (b)	18 900	...	...	...	...
Guatemala					
Bentonite	4 000	2 278	4 301	3 317	10 521
Mexico					
Bentonite	111 503	185 729	208 611	269 730	415 133
Fuller's earth	51 430	48 016	47 522	51 685	148 194
Nicaragua					
Bentonite	1 724	1 406	1 760	...	...
USA					
Bentonite (c)	4 020 000	3 820 000	4 070 000	3 760 000	*3 820 000
Fuller's earth (c)	2 370 000	2 420 000	2 560 000	2 910 000	*2 400 000
Argentina					
Bentonite	113 572	131 320	128 809	125 686	130 000
Fuller's earth	*1 500	*1 500	*1 500	*1 500	*1 500
Brazil					
Bentonite	117 156	264 303	296 489	317 621	...
Chile					
Bentonite	717	721	1 104	1 314	1 695
Colombia					
Bentonite	8 640	*8 500	*8 500	*8 500	...
Peru					
Bentonite	20 171	19 563	19 659	21 059	18 217
China					
Bentonite	...	1 330 400	766 860	1 124 340	1 289 700
India					
Bentonite (d)	446 000	413 160	456 386	...	...
Fuller's earth (d)	27 000	70 313	138 287	...	...
Indonesia					
Bentonite	*25 000	3 736	5 213	*5 000	...
Iran					
Bentonite (g)	109 520	118 290	129 561	...	...
Japan					
Bentonite	495 646	443 566	428 247	415 115	405 738
Korea, Republic of					
Bentonite	142 027	59 765	112 258	67 652	116 098
Fuller's earth	24 829	28 805	35 246	28 400	38 378
Myanmar					
Bentonite (d)	4 908	3 871	1 066	998	*900
Pakistan					
Bentonite (e)	10 169	15 000	15 349	14 354	16 441
Fuller's earth (e)	12 307	14 659	15 565	17 978	13 668
Philippines					
Bentonite	...	3 900	1 844	1 500	...
Thailand					
Bentonite	3 200	5 806	4 535	2 100	200
Turkmenistan					
Bentonite	5 000	...	...	1 919	2 514
Uzbekistan					
Bentonite	15 000	*15 000	*15 000	*15 000	*15 000
Australia					
Bentonite (e)	73 148	104 458	179 804	99 272	92 928
Fuller's earth	28 262	15 670	10 240	11 860	13 194
New Zealand					
Bentonite	12 802	15 465	12 258	9 419	8 300

Production of Bentonite and Fuller's Earth

tonnes

Country	1997	1998	1999	2000	2001
World Total Bentonite	11 300 000	11 200 000	11 500 000	11 500 000	11 900 000
World Total Fuller's Earth (h)	3 500 000	3 600 000	3 700 000	4 100 000	3 700 000

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

Country	1997	1998	1999	2000	2001
Armenia					
Bentonite	3 333	(c) *700	3 614	2 250	...
Austria					
Bentonite	6 757	7 281	1 239	2 881	8 142
Azerbaijan					
Bentonite	68 100	34 570	1 111	66	772
Belgium-Luxembourg					
Bentonite	1 447	2 207	3 933	4 084	5 642
Bosnia & Herzegovina					
Bentonite (c)	*4 900	*10 200	*11 100	*6 400	...
Bulgaria					
Bentonite	104 288	112 491	150 309	165 354	...
Cyprus					
Bentonite	51 912	54 475	82 084	71 060	80 714
Czech Republic					
Bentonite	20 608	23 306	26 099	32 853	46 823
Denmark					
Bentonite	2 199	3 650	4 309	5 113	10 911
Finland					
Bentonite	11 301	24 867	29 875	21 923	15 891
France					
Bentonite	25 523	27 795	30 189	37 805	23 580
Fuller's earth	2 975	2 431	2 312	2 609	267
Georgia					
Bentonite	(c) *8 400	(c) *11 800	10 136	8 166	...
Germany					
Bentonite	72 839	54 018	64 993	42 595	56 589
Greece					
Bentonite	12 002	126 698	39 742	10 810	80 669
Hungary					
Bentonite	501	873	1 673	4 503	5 782
Italy					
Bentonite	182 225	200 241	182 417	209 236	209 107
Macedonia					
Bentonite	8 287	10 546	5 800	7 050	6 981
Netherlands					
Bentonite	85 313	126 243	142 947	155 660	165 460
Fuller's earth	6 205	17 696	10 421	9 860	8 123
Romania					
Bentonite	927	409	6 893	14 789	12 748
Russia					
Bentonite	3 491	3 659	1 351	9 988	...
Slovakia					
Bentonite	66 771	45 766	55 948	55 209	65 850
Fuller's earth	(c) *900	(c) *500	(c) *1 400	1 248	1 091
Spain					
Bentonite	13 398	62 307	61 964	68 216	61 691
Sepiolite	614 698	585 893	612 533	603 895	...
Fuller's earth	7 490	20 736	11 999	15 790	14 370
Sweden					
Bentonite	4 459	4 706	5 482	6 917	6 716
Turkey					
Bentonite	61 999	90 182	104 425	123 858	106 104
Ukraine					
Bentonite	(c) *16 400	18 500	25 900	46 300	...
United Kingdom					
Bentonite	96 781	108 868	76 459	75 472	72 983
Fuller's earth	61 077	739	554	429	121
Algeria	7 469	1 195	1 350	1 570	1 580
Egypt	2 092	2 040	3 635	...	6 136
Morocco					
Bentonite	40 238	33 428	31 275	25 007	...
Fuller's earth	892	1 043	1 170	1 063	...
Mozambique					
Bentonite	6 660	6 192	480	172	240

Exports of Bentonite and Fuller's Earth

tonnes

Country	1997	1998	1999	2000	2001
Senegal					
Fuller's earth (b)	...	106 965	139 117	125 221	152 533
South Africa					
Bentonite	2 042	1 243	3 073	12 857	12 492
Canada					
Bentonite	1 397	2 306	1 912	314	638
Guatemala					
Bentonite	2 543	2 076	2 693	1 436	5 438
Mexico					
Bentonite	15 713	38 665	58 945	56 288	36 239
USA					
Bentonite	860 077	812 364	743 711	772 803	626 858
Fuller's earth	146 667	119 205	152 708	135 897	145 781
Argentina					
Bentonite	35 102	32 916	32 592	41 126	43 135
Colombia					
Bentonite	1 170	970	320	566	866
China					
Bentonite	65 248	55 072	83 105	108 748	113 738
Fuller's earth	5 967	3 910	7 116	12 150	27 723
India					
Bentonite (a)	183 616	210 975	123 857	118 613	...
Fuller's earth (a)	...	...	36 142	19 655	...
Indonesia					
Bentonite	6 196	3 813	8 550	19 797	19 407
Fuller's earth	3 079	3 262	7 702	15 059	20 977
Israel					
Bentonite (c)	*700	*1 100	*1 000	*2 100	*1 200
Japan					
Bentonite	2 245	1 518	2 372	1 780	1 621
Korea, Republic of					
Bentonite	6 102	3 240	4 538	1 807	5 403
Singapore					
Bentonite	14 900	11 150	5 435	5 012	2 546
of which, re-exports	10 262	7 452	4 330	4 835	2 490
Thailand					
Bentonite	529	1 303	1 172	2 690	2 341
Australia					
Bentonite	17 869	13 126	13 348	13 443	20 042
Fuller's earth	2 303	2 570	2 160	2 001	----

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

Country	1997	1998	1999	2000	2001
Austria					
Bentonite	45 596	50 393	40 604	52 361	55 291
Belarus	...	7 222	6 910	11 736	9 066
Belgium-Luxembourg					
Bentonite	16 800	17 118	18 362	23 876	24 730
Fuller's earth	2 991	2 041	2 387	5 045	6 362
Croatia					
Bentonite	5 171	17 074	11 556	7 138	10 094
Cyprus	...	215	7 720	1 790	11 060
Czech Republic					
Bentonite	7 162	9 271	11 753	12 887	15 410
Denmark					
Bentonite	19 689	24 482	28 849	36 017	40 261
Fuller's earth	589	904	572	228	183
Finland					
Bentonite	48 473	56 864	53 935	30 609	50 898
Fuller's earth	366	1 791	51	42	60
France					
Bentonite	135 717	160 789	170 190	184 809	162 787
Fuller's earth	3 345	2 174	722	1 731	1 196
Georgia					
Bentonite	...	...	3 651	2 251	...
Germany					
Bentonite	207 106	243 554	281 618	233 046	230 303
Fuller's earth	9 538	9 207	7 045	5 419	7 476
Greece					
Bentonite	3 298	9 659	5 740	8 119	3 654
Hungary	6 348	3 363	4 243	3 587	3 797
Irish Republic					
Bentonite	2 195	2 125	775	1 271	1 064
Italy					
Bentonite	67 677	79 538	77 957	104 562	112 094
Fuller's earth	11 396	12 575	13 346	12 139	12 920
Lithuania	1 302	1 779	1 387	1 670	2 124
Netherlands					
Bentonite	177 283	244 576	309 914	276 017	236 201
Fuller's earth	31 364	20 800	21 124	24 909	24 615
Norway					
Bentonite	17 242	17 518	16 191	15 220	11 476
Poland					
Bentonite	76 900	71 800	60 333	61 733	64 986
Fuller's earth	1 000	1 100	1 236	920	797
Portugal					
Bentonite	13 941	18 847	12 681	16 679	16 376
Romania	2 459	2 640	1 895	2 700	9 861
Russia					
Bentonite	186 178	131 473	176 089	149 475	...
Slovakia					
Bentonite	3 749	8 118	6 614	5 871	4 861
Slovenia	...	5 734	5 568	4 657	3 738
Spain					
Bentonite	54 551	51 248	54 139	59 714	64 157
Sweden					
Bentonite	90 429	146 144	118 387	62 250	136 742
Switzerland					
Bentonite	21 245	22 075	25 054	26 275	21 715
Fuller's earth	2 187	1 737	2 121	1 802	1 682
United Kingdom					
Bentonite	162 819	331 453	246 341	255 942	235 517
Sepiolite (c)	70 153	74 407	63 567	80 538	65 062
Fuller's earth	...	51 398	16 326	6 563	5 896
Cameroon	...	...	595	894	744
Egypt	5 315	4 335	7 339	...	823
Nigeria	2 758	11 837	7 561	1 000	...

Imports of Bentonite and Fuller's Earth

tonnes

Country	1997	1998	1999	2000	2001
South Africa					
Bentonite	1 984	2 701	2 551	2 795	7 069
Tunisia					
Bentonite	5 543	4 865	3 708	4 419	...
Canada					
Bentonite	371 660	324 995	336 280	325 575	254 254
Fuller's earth	7 873	22 817	16 522	10 830	28 284
Mexico					
Bentonite	34 205	45 057	41 391	55 213	15 471
USA					
Bentonite	7 562	7 772	8 909	8 465	4 278
Fuller's earth	3 533	288	398	70	31
Brazil					
Bentonite	34 729	60 814	53 900	82 963	73 246
Chile					
Bentonite	7 762	6 040	6 077	8 797	...
Colombia					
Bentonite	9 629	10 258	4 812	3 846	2 833
Peru					
Bentonite	3 624	3 434	2 689	1 641	487
Uruguay					
Bentonite	101	414	506	949	1 090
Venezuela					
Bentonite	71 291	62 763	12 456	24 488	25 322
Bahrain					
Bentonite	...	...	...	3 320	19 782
China					
Bentonite	1 679	2 083	5 583	5 319	6 775
Fuller's earth	1 160	1 152	457	234	287
Hong Kong					
Bentonite	8 408	3 880	7 024	9 996	8 094
India (b)	671	1 232	4 192	3 971	...
Indonesia					
Bentonite	24 476	12 206	16 259	29 263	18 643
Fuller's earth	76	54	1 782	405	20 839
Japan					
Bentonite	227 816	157 386	173 122	224 126	199 709
Fuller's earth	8 350	8 125	8 239	8 224	9 140
Kazakhstan					
Bentonite	...	3 042	...	7 848	...
Korea, Republic of					
Bentonite	26 724	17 067	60 067	54 521	51 900
Fuller's earth	1 861	3 038	4 282	4 658	4 662
Kuwait					
Bentonite	5 461	...	...	9 556	...
Lebanon	...	1 021	628	1 256	369
Malaysia					
Bentonite	146 872	73 012	144 196	201 892	...
Fuller's earth	9 065	33 635	40 470	60 699	...
Pakistan					
Bentonite (a)	1 860	1 045	1 355	3 306	...
Philippines					
Bentonite	8 446	3 429	2 920	3 406	4 411
Fuller's earth	6 119	6 634	...	8 937	10 678
Saudi Arabia					
Bentonite	17 493	26 727	23 198	29 253	...
Singapore					
Bentonite	24 554	21 211	10 812	14 175	8 153
Taiwan					
Bentonite	34 838	30 692	33 992	33 723	31 421
Fuller's earth	2 173	2 527	3 111	3 883	3 838
Thailand					
Bentonite	33 685	17 961	33 955	42 344	27 364

Imports of Bentonite and Fuller's Earth

Country	1997	1998	1999	2000	2001
Australia					
Bentonite	10 370	12 190	13 052	25 300	24 518
New Zealand	3 130	4 026	3 247	3 684	4 034

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
(c) Exports from Spain

Mine Production of Bismuth

tonnes (metal content)

Country	1997	1998	1999	2000	2001
Bulgaria	*40	*40	*40	*40	*40
Romania	*40	*40	*40	*40	*40
Russia	10	*10	*10	*10	*10
Canada	230	219	255	243	310
Mexico	1 642	1 204	548	1 112	1 390
USA	*50	...	...	...	...
Peru	774	832	705	744	640
China (a)	548	239	2 682	1 122	*1 500
Japan (b)	550	479	481	520	551
Kazakhstan	13	...	----	----	...
Tajikistan	*5	*5	*5	*5	*5
Australia	*100	*100	*100	*100	*100
World Total	4 000	3 200	4 900	3 900	4 600

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

Exports of Bismuth

Country	1997	1998	1999	2000	2001
Austria					
Metal	...	...	...	10	24
Belgium-Luxembourg					
Compounds	842	1 172	1 373	1 262	1 415
Finland					
Metal	...	17	27	0	----
France					
Compounds	81	14	10	52	12
Metal	47	44	11	31	28
Germany					
Compounds	336	27	28	38	35
Metal	75	102	51	125	104
Netherlands					
Metal	48	300	29	73	6
Russia					
Metal	35	269	11	...	...
Spain					
Compounds	...	40	52	43	72
Metal	12	12	7	4	7
Sweden					
Metal	6	----	24	25	2
United Kingdom					
Metal	2 038	1 973	2 381	2 987	1 269
Canada					
Metal	150	176	190	302	127
Mexico					
Metal	1 731	2 526	755	908	1 006
USA					
Compounds	135	340	196	557	...
Metal	243	266	302	530	597
Peru					
Metal	1 204	880	660	778	597
China					
Metal	1 603	1 344	2 694	5 369	2 414
Hong Kong					
Metal (a)	9	----	52	5	0
Japan					
Metal	11	5	9	3	31
Kazakhstan					
Metal	11	2	54	229	252
Korea, Republic of					
Metal	107	94	53	63	69

Note(s):

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

(a) Re-exports

Imports of Bismuth

tonnes

Country	1997	1998	1999	2000	2001
Austria					
Metal	...	6	17	18	67
Belgium-Luxembourg					
Metal	38	3	24	17	1
Czech Republic					
Metal	32	21	31	35	26
Denmark					
Metal	...	5	6	2	3
France					
Compounds	163	130	123	226	101
Metal	283	300	291	446	420
Germany					
Compounds	426	710	861	1 383	1 295
Metal	940	1 314	1 597	1 810	2 038
Greece					
Metal	6	2	10	9	8
Irish Republic					
Metal	60	42	42	54	30
Italy					
Metal	165	150	145	190	391
Netherlands					
Compounds	393	597	292	393	360
Metal	188	263	130	1 107	278
Poland					
Metal	12	9	10	9	8
Russia					
Metal	13	6	36	30	...
Slovenia					
Metal	...	40	54	39	35
Spain					
Metal	135	250	119	167	125
Sweden					
Metal	34	11	39	41	16
Switzerland					
Metal	10	13	10	27	18
United Kingdom					
Metal	1 256	1 382	1 265	1 379	1 515
South Africa					
Compounds	...	411	1 696	819	9
Canada					
Metal	161	131	114	139	185
USA					
Metal	2 183	2 766	2 082	2 412	2 204
Brazil					
Metal	112	111	84	128	104
China					
Metal	51	4	95	78	214
Hong Kong					
Metal	46	2	9	72	8
India					
Metal (a)	20	49	40	20	...
Indonesia					
Compounds	1 207	216	387	43	----
Japan					
Metal	380	373	242	361	241
Korea, Republic of					
Metal	...	8	27	43	31
Taiwan					
Compounds	26	25	20	29	20
Metal	33	37	37	19	43
Thailand					
Metal	6	6	8	8	11

Imports of Bismuth

Country	1997	1998	1999	2000	2001
Australia Metal	7	15	3	4	7

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	1997	1998	1999	2000	2001
France	8 800 000	8 600 000	8 063 000	7 909 000	*8 000 000
Germany	*700 000	*600 000	*500 000	*500 000	*500 000
Italy	*300 000	*300 000	*300 000	*300 000	*300 000
Russia	*60 000	*60 000	*60 000	*60 000	*60 000
Spain	*100 000	*100 000	*100 000	*100 000	*100 000
Ukraine	956 000	1 866 000	2 559 000	1 284 000	...
United Kingdom	35 600 000	35 900 000	24 800 000	33 200 000	...
USA (a)	247 000 000	230 000 000	239 000 000	228 000 000	212 000 000
China	50 100 000	40 000 000	42 000 000	42 000 000	*40 000 000
India	2 509 190	1 477 000	886 700	1 062 200	927 700
Israel	184 000 000	185 000 000	181 000 000	210 000 000	206 000 000
Japan	*20 000 000	*20 000 000	*20 000 000	*20 000 000	*20 000 000
World Total	550 000 000	524 000 000	519 000 000	544 000 000	521 000 000

Note(s):

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

Exports of Bromine

Country	1997	1998	1999	2000	2001
Belgium-Luxembourg	1 663 800	27 007 000	32 234 800	2 556 500	21 200 000
Germany	12 300	38 400	17 700	12 300	15 000
Italy	4 532	1 000	6	...	16 000
Poland	19 000	27 000	8 000	8 154	...
Ukraine	...	1 314 924	589 900	1 007 083	...
United Kingdom	5 025 081	7 011 058	5 335 234	10 850 261	11 304 252
Yugoslavia, Federal Republic of	17 000	...	51 000	-----	...
USA	2 465 395	1 666 235	2 180 599	1 865 377	3 710 000
China	58 716	58 144	113 669	147 644	...
India (a)	80 488	10 000	10 983	22 476	...

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

Imports of Bromine

kilograms

Country	1997	1998	1999	2000	2001
Austria	104 900	164 200	83 000	125 300	228 000
Belgium-Luxembourg	1 162 100	28 104 000	32 810 600	27 580 000	23 057 000
Denmark	118	2 000	39 000	----	----
Finland	1 000	70 000	63 346	114 000	92 000
France	7 888 000	9 295 000	10 769 000	...	11 914 000
Germany	3 092 100	2 667 000	2 281 100	4 095 300	2 121 000
Irish Republic	33 992	51 000	17 877	22 158	22 000
Italy	239 468	241 000	212 828	...	113 000
Poland	80 000	63 000	37 000	43 259	...
Spain	194 767	150 000	199 494	226 237	233 000
Sweden	...	5 000	2 000	6 000	----
Turkey	...	...	69 172	69 811	91 505
United Kingdom	5 213 006	8 001 874	6 927 595	5 986 773	5 387 458
Canada	1 345 534	1 090 190	1 193 598	1 405 207	1 813 693
Mexico (c)	221 000	350 000	261 000	156 410	126 000
USA	1 648 027	1 196 316	2 354 535	5 474 881	5 610 000
China	1 892 148	1 919 719	2 538 086	4 015 225	427 000
India (a)	1 460 040	2 368 783	1 037 859	1 995 890	...
Korea, Republic of	974 234	923 099	...	...	14 000
Pakistan (b)	7 838	----	660	----	...
Taiwan	...	28 227	75 153	84 260	...
Thailand	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

Production of Cadmium

Country	1997	1998	1999	2000	2001
Belgium	1 420	1 318	1 235	1 148	1 236
Bulgaria	183	195	217	233	233
Finland	494	520	696	683	604
France	309	177	195	160	176
Germany	729	617	703	458	539
Italy	287	470	359	287	352
Macedonia	*10	*10	*10	*10	*10
Netherlands	745	739	731	655	455
Norway	305	276	244	302	367
Poland	22	----	----	6	330
Russia	*790	*800	*900	*925	*925
Spain	334	196	----	----	----
Turkey	89	69	64	----	----
United Kingdom	455	440	547	503	425
Yugoslavia, Federal Republic of	45	17	----	----	----
Algeria	36	13	----	----	----
Namibia	2	----	----	----	----
Canada (a)	2 260	2 090	1 911	1 941	1 429
Mexico	1 223	1 275	1 275	1 268	1 421
USA (a)	2 059	1 240	1 185	1 890	*680
Argentina	45	34	----	----	34
Brazil	*130	*130	*130	*130	*130
Peru	359	405	466	483	456
China	1 982	2 125	2 154	2 368	2 507
India (b)	257	295	278	326	431
Japan	2 473	2 337	2 567	2 472	2 460
Kazakhstan	(a) 745	(a) 1 622	(a) 1 246	257	170
Korea, Dem. P.R. of	*200	*200	*200	*200	*200
Korea, Republic of	*1 000	1 178	1 791	1 911	1 879
Thailand	440	----	----	----	----
Uzbekistan	*100	*100	*100	*100	*100
Australia	632	585	462	525	378
World Total	20 200	19 500	19 700	19 200	17 900

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	1997	1998	1999	2000	2001
Belgium-Luxembourg					
Metal	1 816	2 172	1 089	1 956	1 525
Sulphide	14	22	15	12	31
Bulgaria					
Metal	248	301	286	286	(b) *420
Czech Republic					
Metal	...	...	45	141	87
Finland					
Metal	476	415	762	834	682
France					
Metal	1 493	1 155	1 252	2 533	3 614
Germany					
Metal	1 179	758	382	600	1
Italy					
Metal	301	212	363	5	739
Sulphide	29	35	23	2	5
Macedonia					
Metal	36	134	164	(b) *600	...
Netherlands					
Metal	858	1 108	1 206	791	891
Norway					
Metal	321	454	280	347	357
Poland					
Oxide	35	25	9	7	...
Russia					
Metal (b)	*1 070	*650	*270	*540	*1 220
Spain					
Metal	263	20	41	10	1
Sweden					
Oxide	...	15	87	96	54
United Kingdom					
Metal	18	28	215	19	87
Canada					
Metal	2 539	2 050	2 170	2 060	1 399
Mexico					
Metal	1 284	1 215	1 431	1 288	1 494
USA					
Metal	558	606	104	314	272
Sulphide	399	29	107	1 109	52
Peru					
Metal	494	347	479	508	386
China					
Metal	372	225	12	25	254
Hong Kong					
Metal (a)	231	66	----	...	42
Japan					
Metal	98	17	4	...	57
Sulphide	9	11	9	...	2
Kazakhstan					
Metal	866	1 216	...	...	1 042
Korea, Republic of					
Metal	1 576	799	2 120	2 205	1 680
Thailand					
Metal	303	39	1	19	----
Uzbekistan					
Metal (b)	*170	*150	...	...	...
Australia					
Metal	449	700	448	540	323

Note(s):

(a) Re-exports

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

Imports of Cadmium

Country	1997	1998	1999	2000	2001
Austria					
Metal	1	1	7	1	2
Oxide	64	56	40	44	5
Belgium-Luxembourg					
Metal	3 289	7 802	5 332	8 263	7 828
Sulphide	----	----	9	0	46
France					
Metal	823	990	930	1 058	1 488
Oxide	...	...	923	665	1 032
Germany					
Metal	26	34	7	6	8
Oxide	144	165	165	150	149
Sulphide	7	5	7	8	11
Italy					
Metal	43	20	37	35	45
Oxide	...	479	168	94	76
Sulphide	1	8	2	2	1
Netherlands					
Metal	267	426	149	25	544
Poland					
Metal	128	20	7	2	6
Oxide	7	51	41	141	...
Russia					
Metal	672	1 614	...	...	...
Spain					
Metal	129	91	126	43	94
Oxide	...	...	71	22	56
Sweden					
Metal	265	248	284	26	65
Oxide	...	...	26	20	10
Switzerland					
Metal	13	8	8	13	7
Turkey					
Metal	8	20	5	8	9
Oxide	...	...	28	46	28
United Kingdom					
Metal	854	632	462	790	942
Canada					
Sulphide	412	3	11	...	0
USA					
Metal	790	620	490	425	107
Oxide	645	605	475	386	...
Brazil					
Oxide	138	132	124	129	...
China					
Metal	1 323	854	869	2 739	3 456
Hong Kong					
Metal	234	38	19	0	33
India					
Metal (a)	1 766	1 238	2 339	1 046	...
Indonesia					
Sulphide	----	60	23	80	1
Iran					
Metal	...	37	91	99	...
Japan					
Metal	4 772	3 562	3 351	4 056	2 723
Korea, Republic of					
Metal	47	6	5	0	17
Singapore					
Metal	...	7	331	400	867
Taiwan					
Oxide	323	376	387	287	...
Sulphide	5	14	8	0	...

Note(s) :-

(a) Years ended 31 March following that stated

Production of Chromium Ores and Concentrates

tonnes

Country	1997	1998	1999	2000	2001
Albania	157 203	124 000	109 200	120 400	85 890
Finland	588 856	498 075	597 438	628 414	575 126
Macedonia	*5 000	-----	-----	-----	-----
Russia	77 900	69 500	48 047	79 000	117 700
Turkey	1 702 633	1 404 470	1 014 544	545 725	389 759
Madagascar	133 960	166 096	-----	131 293	23 637
South Africa	6 162 000	6 479 582	6 817 050	6 662 000	5 502 010
Sudan	*30 500	60 000	23 800	28 500	20 500
Zimbabwe	669 757	605 405	653 479	668 043	722 625
Cuba	44 100	46 000	52 000	56 300	...
Brazil (a)	242 077	352 751	357 141	421 290	*300 000
China	176 800	205 300	220 540	208 000	181 900
India (e)	1 515 286	1 418 119	1 737 985	1 971 806	1 810 920
Indonesia	2 156	4 700	6 355	-----	-----
Iran (b) (c)	324 253	316 597	368 400	*250 000	*250 000
Kazakhstan	1 795 900	1 602 700	2 405 600	2 606 600	2 045 800
Myanmar (e)	4 059	2 447	*3 200	*3 000	*3 000
Oman	17 985	29 756	26 010	15 100	30 100
Pakistan (d)	23 763	8 885	16 279	24 473	12 980
Philippines (b)	98 115	42 228	17 530	20 920	27 926
United Arab Emirates	61 000	76 886	60 000	30 000	10 000
Vietnam	51 000	59 000	58 500	76 300	80 000
Australia	18 756	72 496	71 886	74 260	15 750
World Total	13 900 000	13 600 000	14 700 000	14 600 000	12 300 000

Note(s):

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

- (a) Including beneficiated and direct shipping ore
- (b) Including foundry sand and/or lumpy ore
- (c) Years ended 20 March following that stated
- (d) Years ended 30 June of that stated
- (e) Years ended 31 March following that stated

Exports of Chromium

Country	1997	1998	1999	2000	2001
Albania					
Ores & concentrates	55 600	52 058	13 399	30 684	...
Austria					
Ores & concentrates	203	526	709	729	647
Metal	1 057	2 956	3 015	3 198	2 858
Belgium-Luxembourg					
Ores & concentrates	17 266	6 046	18 695	16 307	17 051
Metal	702	233	227	395	318
Czech Republic					
Metal	102	49	13	1	1
Denmark					
Metal	390	468	257	637	964
Estonia					
Metal	213	6	88	318	200
Finland					
Ores & concentrates	675	255	31	282	354
Metal	36	408	0	0	0
France					
Ores & concentrates	2 060	2 467	2 823	2 658	2 129
Metal	4 128	4 783	4 697	5 990	6 634
Germany					
Ores & concentrates	9 372	16 478	16 098	14 675	6 771
Metal	1 878	1 037	726	1 108	225
Greece					
Ores & concentrates	----	----	2 162	3 000	5 067
Irish Republic					
Metal	9	7	43	35	1
Italy					
Ores & concentrates	16 551	2 228	1 234	2 669	5 558
Metal	25	260	416	594	815
Lithuania					
Metal	22	3	129	48	26
Netherlands					
Ores & concentrates	47 461	65 029	51 965	50 515	58 219
Metal	847	1 365	1 387	969	812
Poland					
Ores & concentrates	5 700	...	966	3 452	145
Metal	231	143	1 970	2	137
Russia					
Ores & concentrates	4 508	3 019	972	(b) *100	(b) *200
Metal	7 774	5 251	6 060	6 123	*4 000
Slovakia					
Metal	1 821	1 707	1 983	2 699	2 869
Spain					
Ores & concentrates	1 754	1 268	2 057	1 315	678
Metal	803	503	1 569	815	1 569
Switzerland					
Metal	41	34	298	27	156
Turkey					
Ores & concentrates	623 914	537 652	569 083	467 010	321 047
Metal	34	36	50	91	279
Ukraine					
Metal	180	----	61	0	...
United Kingdom					
Ores & concentrates	886	707	871	503	170
Metal	5 732	5 803	5 549	8 821	4 609
Madagascar					
Ores & concentrates	117 760	147 700	57 500	118 000	...
South Africa					
Ores & concentrates	1 288 000	858 618	840 580	1 090 362	931 436
Sudan					
Ores & concentrates	12 725	10 500	23 868	40	...
Zimbabwe					
Ores & concentrates	38	11 406	1 037	...	...

Exports of Chromium

tonnes

Country	1997	1998	1999	2000	2001
Cuba					
Ores & concentrates	...	3 000	28 416	39 478	...
USA					
Ores & concentrates	25 882	129 335	115 509	145 085	62 577
Metal	2 466	1 185	2 408	1 356	1 093
Brazil					
Ores & concentrates	87 029	154 521	194 486	142 605	78 588
China					
Ores & concentrates	12 817	3 990	3 612	2 404	13 182
Metal	3 736	3 418	5 240	6 771	4 781
India					
Ores & concentrates (a)	438 948	492 540	714 448	659 882	1 000 000
Iran					
Ores & concentrates (b)	*164 600	*125 400	*186 700	*169 800	*79 100
Japan					
Ores & concentrates	8 649	116	95	8 322	65
Metal	327	173	346	218	226
Kazakhstan					
Ores & concentrates	579 647	388 448	528 272	577 361	503 514
Metal	120	----	----	(b) *390	(b) *930
Korea, Republic of					
Metal	7	4	64	20	11
Oman					
Ores & concentrates	7 787	3 624	4 150	9 783	7 138
Pakistan					
Ores & concentrates (c)	77 915	71 511	33 904	78 310	...
Philippines					
Ores & concentrates	131 130	54 111	34 573	30 537	...
Taiwan					
Ores & concentrates	1 264	953	803	357	257
Metal	390	398	201	163	104
United Arab Emirates					
Ores & concentrates	*13 000	23 000	*33 600	*700	...
Vietnam					
Ores & concentrates	58 000	71 000	...	...	...
Australia					
Ores & concentrates	15 753	71	42 229	81 936	15 785

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

Country	1997	1998	1999	2000	2001
Austria					
Ores & concentrates	55 345	34 793	34 979	36 490	37 321
Metal	611	452	771	2 050	1 713
Belgium-Luxembourg					
Ores & concentrates	25 082	25 877	23 869	9 808	5 789
Metal	947	565	540	557	629
Croatia					
Ores & concentrates	69 168	32 010	2 161	15 705	908
Czech Republic					
Ores & concentrates	3 737	8 782	10 325	11 821	15 054
Metal	41	8	10	35	12
Denmark					
Ores & concentrates	666	904	775	294	512
Metal	46	46	27	64	19
Estonia					
Ores & concentrates	3 497	2 349	983	7	4
Metal	175	1	136	317	204
Finland					
Ores & concentrates	3 224	5 174	6 647	6 288	7 174
Metal	22	110	54	42	174
France					
Ores & concentrates	27 620	29 023	27 752	27 174	26 693
Metal	917	923	711	649	699
Germany					
Ores & concentrates	180 312	201 728	101 700	119 869	130 485
Metal	1 950	1 888	1 777	2 905	2 257
Greece					
Ores & concentrates	3 007	2 170	2 162	213	231
Hungary					
Ores & concentrates	700	700	700	1 010	549
Metal	110	68	...	104	85
Irish Republic					
Metal	9	42	75	46	26
Italy					
Ores & concentrates	105 047	83 863	41 184	60 566	82 769
Metal	626	617	711	467	549
Lithuania					
Metal	----	----	110	58	3
Netherlands					
Ores & concentrates	57 589	61 785	38 827	55 178	73 730
Metal	1 318	2 230	2 170	1 488	1 359
Norway					
Ores & concentrates (a)	*251 000	*425 000	*468 000	*282 000	*176 000
Metal	115	102	80	48	89
Poland					
Ores & concentrates	31 900	30 400	32 658	25 804	26 128
Portugal					
Ores & concentrates	1 603	1 947	1 886	1 916	2 569
Romania					
Ores & concentrates	15 348	13 479	2 966	1 301	2 405
Metal	6	47	337	95	22
Russia					
Ores & concentrates	627 345	466 565	625 538	714 322	...
Metal	256	40	286	696	...
Slovakia					
Ores & concentrates	39 413	45 121	31 312	54 500	...
Metal	5	1	60	9	58
Slovenia					
Ores & concentrates	23 900	30 020	647	607	722
Metal	17	16	18	8	18
Spain					
Ores & concentrates	4 459	3 673	4 750	5 861	9 141
Metal	200	335	219	385	1 202
Sweden					
Ores & concentrates	290 000	319 000	250 000	350 000	200 000
Metal	557	629	1 459	888	1 275

Imports of Chromium

tonnes

Country	1997	1998	1999	2000	2001
Switzerland					
Ores & concentrates	1 117	1 233	1 380	1 483	818
Metal	155	127	123	135	112
Turkey					
Ores & concentrates	819	19 497	48 285	69 470	101 278
United Kingdom					
Ores & concentrates	157 914	120 967	83 608	163 647	135 369
Metal	1 554	1 787	1 573	1 519	1 601
Yugoslavia, Federal Republic of					
Ores & concentrates	3 128	2 441	2 757	629	1 581
Egypt					
Ores & concentrates	2 637	93	417	...	...
South Africa					
Ores & concentrates	...	...	8 251	21 301	11 046
Metal	103	121	48	172	87
Canada					
Ores & concentrates	33 732	34 042	42 803	15 084	13 759
Metal	436	455	632	700	533
Mexico					
Ores & concentrates	6 691	5 526	5 657	8 852	5 072
USA					
Ores & concentrates	303 598	380 788	228 958	267 792	189 101
Metal	10 037	9 512	9 171	9 964	8 106
Argentina					
Ores & concentrates	39 392	42 409	53 615	55 031	33 803
Brazil					
Ores & concentrates	14 199	9 777	8 482	48 347	10 295
Metal	117	167	239	257	250
Chile					
Ores & concentrates	9 809	16 028	6 815	13 210	3 720
Peru					
Ores & concentrates	1 904	4 202	1 876	1 612	3 921
Venezuela					
Ores & concentrates	2 502	3 617	790	2 539	2 826
China					
Ores & concentrates	894 001	711 544	816 230	1 112 791	1 090 441
Metal	1 815	598	969	751	250
India					
Ores & concentrates (b)	1 724	686	6 886	54 567	...
Metal (b)	193	126	156	138	...
Japan					
Ores & concentrates	577 402	416 665	380 115	501 727	411 120
Metal	1 973	2 365	2 343	3 202	3 480
Korea, Republic of					
Ores & concentrates	385	209	35	188	171
Metal	748	948	1 492	1 312	1 372
Singapore					
Ores & concentrates	494	294	522	588	656
Metal	23	40	26	23	29
Taiwan					
Ores & concentrates	8 852	9 809	9 160	8 318	7 470
Metal	166	172	195	248	241
Thailand					
Ores & concentrates	5 406	999	5 016	4 872	4 347
Australia					
Ores & concentrates	9 214	8 661	10 912	10 141	10 978
Metal	256	250	206	160	165

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

Country	1997	1998	1999	2000	2001
Albania					
Lignite	40 000	48 706	32 595	20 666	15 700
Austria					
Brown coal & lignite	1 130 339	1 140 151	1 137 388	1 254 605	1 193 970
Bosnia & Herzegovina					
Brown coal & lignite	1 741 000	1 794 000	1 848 000	1 635 000	...
Bulgaria					
Anthracite & bituminous	102 000	120 406	123 200	118 200	115 000
Brown coal & lignite	29 606 000	29 783 000	25 734 000	26 980 000	27 007 000
Croatia					
Bituminous	48 535	50 839	15 311	----	----
Czech Republic					
Bituminous	16 069 000	16 112 000	14 340 000	14 850 000	15 140 000
Lignite	747 000	652 000	512 000	453 000	507 000
Brown coal	57 395 000	51 283 000	44 858 000	50 610 000	51 036 000
France					
Anthracite & bituminous	5 779 000	4 864 000	4 533 000	3 166 000	1 972 000
Lignite	1 030 000	735 000	558 000	296 000	324 000
Georgia	4 600	14 700	12 000	7 300	1 200
Germany					
Anthracite & bituminous	46 789 987	41 639 952	40 258 004	34 251 019	27 900 000
Brown coal	177 159 541	166 036 413	161 282 000	167 691 000	175 400 000
Greece					
Lignite	58 939 419	60 910 433	61 861 049	64 026 457	66 730 897
Hungary					
Bituminous	925 000	877 000	738 000	744 000	635 200
Lignite	8 054 000	7 628 000	7 702 000	7 862 000	8 043 062
Brown coal	7 193 000	6 563 000	6 477 000	5 670 000	5 392 000
Italy					
Lignite	203 061	83 700	80 000	...	...
Macedonia					
Lignite	6 700 000	8 180 000	7 500 000	7 100 000	6 000 000
Norway					
Bituminous (d)	386 440	328 170	403 940	631 926	1 787 784
Poland					
Anthracite	157 000	65 000	----	----	----
Bituminous	137 636 000	115 661 000	111 894 136	103 617 556	104 321 590
Lignite	63 169 437	62 820 314	60 838 707	59 505 486	59 541 000
Romania					
Anthracite & bituminous	5 642 000	4 331 000	3 742 000	4 042 000	...
Brown coal & lignite	30 604 000	23 774 000	20 793 000	26 882 000	(i) 33 300 000
Russia	245 000 000	231 919 000	249 521 000	258 000 000	269 000 000
Slovakia					
Brown coal	3 853 000	3 893 000	3 732 000	3 646 100	3 421 100
Slovenia					
Brown coal & lignite	4 954 000	4 891 000	4 562 000	4 479 300	4 133 000
Spain					
Anthracite	6 666 820	5 682 568	5 204 917	5 143 977	4 694 000
Bituminous	7 200 513	6 717 821	6 349 061	6 166 586	5 797 000
Sub-bituminous	4 124 414	3 925 498	3 707 095	3 630 805	3 475 000
Lignite	8 462 519	9 749 739	8 831 828	8 523 586	8 718 000
Turkey					
Anthracite	3 645 896	3 336 021	2 738 040	3 330 355	3 639 002
Bituminous	117 310	157 334	93 310	110 945	82 661
Lignite	56 779 793	66 583 499	66 706 450	61 314 974	57 876 332
Ukraine					
Bituminous	75 514 000	75 767 000	80 640 000	79 923 000	(i) 83 900 000
Lignite	1 433 000	1 409 000	1 184 000	1 067 000	...
United Kingdom					
Bituminous (g)	48 495 000	41 177 000	37 077 000	31 198 000	31 930 000
Yugoslavia, Federal Republic of					
Bituminous	91 540	104 596	49 481	87 882	69 711
Lignite	42 312 896	43 577 410	30 037 930	33 638 291	31 789 143
Brown coal	512 228	389 996	413 289	398 438	375 620

Production of Coal

tonnes

Country	1997	1998	1999	2000	2001
Botswana	776 917	928 100	945 316	946 900	930 374
Congo, Democratic Republic					
Bituminous	95 000	100 000	100 000	100 000	...
Egypt	350 000	200 000	*250 000	*39 000	*58 000
Malawi	63 210	54 238	43 831	34 250	34 410
Morocco					
Anthracite	376 300	269 100	129 200	30 810	1 908
Niger	162 840	181 213	168 466	158 200	163 275
Nigeria					
Sub-bituminous	9 830	11 801	...	...	...
South Africa					
Anthracite	1 997 314	2 064 000	1 919 244	1 617 969	1 455 190
Bituminous	216 620 006	222 200 000	221 594 925	222 500 000	222 105 086
Swaziland					
Bituminous	203 115	410 021	426 299	378 043	...
Tanzania					
Bituminous	28 443	45 073	75 044	79 184	77 789
Zambia					
Bituminous	164 443	185 717	127 854	...	...
Zimbabwe					
Bituminous	5 300 749	5 467 100	4 977 355	4 406 684	4 494 347
Canada					
Bituminous	41 216 344	38 284 407	36 537 653	33 804 234	34 140 918
Sub-bituminous	25 782 503	25 285 315	24 299 674	24 168 751	24 939 381
Lignite	11 652 553	11 790 106	11 659 351	11 190 106	11 390 275
Mexico					
Bituminous	12 707 443	12 378 788	13 302 345	14 287 138	12 176 884
USA					
Anthracite	4 257 000	4 765 000	4 325 000	4 148 000	3 499 000
Bituminous	593 143 000	580 934 000	545 882 000	520 974 000	562 600 000
Sub-bituminous	313 043 000	350 307 000	368 965 000	371 223 000	374 900 000
Lignite	78 327 000	77 807 000	79 123 000	77 620 000	76 100 000
Argentina					
Bituminous	250 136	218 270	353 839	*360 000	...
Brazil					
Bituminous & lignite (e)	5 542 000	5 084 357	6 062 963	6 797 294	5 645 578
Chile					
Bituminous	134 435	116 611	82 240	110 039	123 320
Lignite	1 278 862	113 564	425 110	393 311	444 767
Colombia					
Bituminous	32 797 000	33 751 000	32 754 000	38 142 000	43 440 700
Peru					
Anthracite	21 694	7 385	1 488	16 625	20 093
Bituminous	*45 000	*45 000	*45 000	*45 000	*45 000
Venezuela					
Bituminous	5 291 908	6 458 324	6 594 611	7 843 736	7 687 570
Afghanistan					
Bituminous	*185 000	*190 000	*200 000	*200 000	...
Bhutan	*70 000	*69 000	68 000	*67 000	*65 000
China					
Anthracite	293 608 300	228 650 000	181 811 500	175 727 200	...
Bituminous	1 003 636 000	953 090 000	816 257 400	780 669 000	(i) 1 089 700 000
Lignite	75 575 800	50 770 000	45 566 300	42 773 600	...
India					
Bituminous (h)	296 656 000	292 270 000	304 103 000	313 696 000	327 644 000
Lignite (h)	23 052 000	23 419 000	22 124 000	22 947 000	23 503 000
Indonesia					
Anthracite & bituminous	54 608 400	60 320 949	73 648 000	76 885 000	91 928 000
Iran					
Bituminous (c)	1 598 529	1 830 020	1 775 174	*1 800 000	*2 000 000
Japan					
Bituminous	4 270 000	3 660 000	3 689 513	3 147 000	3 208 000
Kazakhstan					
Bituminous	70 174 000	68 057 900	56 617 400	72 429 500	76 306 200
Lignite	2 473 000	1 714 700	1 760 200	2 442 900	2 651 400

Production of Coal

Country	1997	1998	1999	2000	2001
Korea, Dem. P.R. of					
Anthracite	70 000 000	66 500 000	67 200 000	67 200 000	...
Lignite	21 000 000	23 800 000	24 000 000	24 000 000	...
Korea, Republic of					
Anthracite	4 514 000	4 361 000	4 197 000	4 150 000	3 817 000
Kyrgyzstan	521 500	432 400	417 000	424 900	477 300
Laos	108 013	86 081	78 826	184 177	122 942
Malaysia	105 231	349 849	308 502	382 942	545 845
Mongolia					
Anthracite & bituminous	303 300	...	1 423 500	1 437 300	1 492 400
Brown coal & lignite	4 620 700	(i) 5 057 000	3 528 500	3 562 700	3 707 600
Myanmar (h)	29 849	31 025	42 773	52 553	*41 000
Pakistan (a) (b)	3 133 393	3 164 226	3 246 270	3 372 871	3 009 244
Philippines					
Bituminous	1 078 654	1 157 304	1 204 979	1 353 453	1 229 822
Taiwan					
Bituminous	99 089	79 140	91 674	83 380	-----
Tajikistan	20 000	20 000	16 600	20 700	27 500
Thailand					
Lignite	23 443 475	20 161 721	18 266 308	17 713 753	19 616 996
Uzbekistan					
Bituminous	59 000	68 000	89 100	91 500	91 700
Lignite	2 888 000	2 855 000	2 864 000	2 410 000	2 619 300
Vietnam					
Anthracite	11 388 000	11 700 000	9 600 000	11 600 000	13 000 000
Australia					
Bituminous (f)	216 690 000	222 040 000	232 860 000	244 840 000	266 490 000
Brown coal (b)	58 160 000	65 600 000	65 820 000	65 780 000	64 960 000
New Zealand					
Bituminous	1 500 145	1 626 000	1 620 866	1 792 784	1 896 771
Sub-bituminous	1 950 548	1 527 000	1 672 947	1 580 235	1 811 681
Lignite	213 341	166 000	211 917	212 616	202 944
World Total	4 766 000 000	4 599 000 000	4 386 000 000	4 369 000 000	4 576 000 000

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) Years ended 30 June of that stated
- (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

Exports of Coal

tonnes

Country	1997	1998	1999	2000	2001
Belgium-Luxembourg					
Anthracite	289 285	874 527	781 378	1 121 661	1 029 455
Other coal	1 652 469	1 372 040	1 700 894	1 556 603	1 309 947
Briquettes	31 303	14 350	39 215	18 869	15 955
Czech Republic					
Hard coal (b)	6 647 799	6 726 000	6 123 838	5 885 403	5 712 522
Lignite	4 664 842	3 687 730	3 216 502	2 732 595	2 977 065
Briquettes	366 442	242 501	183 687	155 398	168 874
Denmark					
Hard coal (b)	106 416	139 321	201 571	112 534	100 160
Estonia					
Hard coal (b)	71 496	7 501	941	48 021	33 648
France					
Anthracite	15 107	3 033	4 074	1 240	15 698
Other coal	204 038	64 546	74 877	87 494	69 544
Briquettes	43 570	20 048	12 996	12 871	5 299
Germany					
Hard coal (b)	513 327	322 353	200 506	178 430	105 443
Brown coal	339 407	251 869	200 744	220 449	304 061
Briquettes	427 260	232 346	207 775	260 538	218 890
Irish Republic					
Anthracite	----	----	42 771	32 942	1 285
Briquettes	7 572	19 073	24 264	23 638	20 787
Italy (b)	3 709	7 650	23 011	32 153	54 884
Netherlands					
Anthracite	112 565	143 879	93 150	99 939	272 320
Other coal	2 824 677	4 124 961	4 744 469	8 316 654	13 104 257
Briquettes	32 210	20 760	9 463	3 612	977
Poland					
Hard coal	29 474 000	28 078 000	24 103 604	23 244 864	23 031 605
Lignite	37 000	23 500	13 400	9 477	14 789
Russia					
Anthracite	2 128 855	1 751 578	1 585 933	2 469 473	...
Other coal	20 695 000	21 609 000	25 661 298	41 191 291	...
Lignite	813 206	309 131	126 815	251 990	...
Briquettes	29 778	11 838	12 068	539	...
Turkey					
Anthracite	...	3 888	5 107	13 707	35 713
Ukraine	2 374 743	1 882 275	2 138 128	2 319 896	...
United Kingdom					
Anthracite	393 772	282 025	335 907	304 387	272 985
Other coal	666 119	688 621	439 022	616 291	309 560
Briquettes	98 171	57 410	53 759	77 063	77 184
Mozambique	17 839	17 903	20 502	29 010	32 272
South Africa					
Anthracite	1 648 594	1 376 000	1 080 136	1 125 000	970 493
Other coal	57 333 704	65 700 000	65 100 000	68 800 000	65 704 419
Zimbabwe (b)	45 882	42 810	32 536	23 881	*50 000
Canada					
Hard coal (b)	35 613 722	32 907 404	33 920 300	32 421 988	29 618 049
Lignite	72 788	46 403	30 040	64 407	68 344
USA					
Anthracite	580 216	612 548	438 326	448 424	396 068
Other coal	75 667 653	69 626 919	53 050 767	52 408 665	44 000 000
Lignite	455 778	290 176	44 964	43 240	47 306
Briquettes	29 832	45 116	45 475	60 762	44 248
Colombia	27 580 000	30 061 000	29 932 000	35 614 000	38 324 500
Venezuela	4 927 922	5 920 000	6 753 276	8 097 000	7 627 000
China					
Anthracite	2 115 741	2 786 821	3 145 563	3 887 055	7 651 072
Other coal	28 606 785	29 503 933	34 261 511	51 158 963	83 293 372
India (a)	540 722	822 968	1 156 289	1 290 313	...

Exports of Coal

Country	1997	1998	1999	2000	2001
Indonesia					
Anthracite	1 091 542	1 318 772	1 107 111	354 874	161 293
Other coal	41 038 390	46 931 707	54 099 358	56 797 343	66 344 257
Briquettes	168 000	94 750	78 775	831 895	252 550
Kazakhstan					
Hard coal	24 857 303	23 578 438	16 175 232	25 679 253	27 243 015
Lignite	219 849	110 474	68 595	33 439	268 252
Kyrgyzstan					
Hard coal	78 000	23 000	10 792	21 597	...
Laos					
Lignite	68 075	68 884	95 529	126 289	103 223
Malaysia	2 025	31 800	2 022	5 000	10 387
Vietnam	3 454 000	3 454 000	3 260 000	3 050 000	...
Australia					
Anthracite	485 664	703 037	711 437	449 725	1 160 293
Other coal	157 253 593	166 339 204	170 695 035	186 434 364	192 770 156
Briquettes	62 894	122	133	11 015	141
New Zealand	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	1997	1998	1999	2000	2001
Austria					
Hard coal (c)	3 796 610	3 577 943	3 355 572	3 412 703	3 846 806
Brown coal	18 863	10 899	20 345	38 117	52 745
Briquettes	139 250	105 177	109 408	117 219	108 786
Belarus	786 400	716 370	642 847	576 460	224 090
Belgium-Luxembourg					
Anthracite	856 978	981 210	953 736	1 040 686	1 138 122
Other coal	11 862 591	11 358 312	9 806 997	9 702 654	9 829 971
Brown coal	158 490	213 354	161 605	198 317	232 063
Briquettes	38 967	26 611	38 522	20 372	52 887
Bulgaria					
Anthracite	1 883 577	2 145 144	1 106 620	1 448 415	...
Other coal	1 421 918	1 246 750	952 551	1 818 322	...
Croatia					
Hard coal	62 452	167 867	261 671	806 241	642 574
Lignite	133 684	98 170	82 830	80 303	84 520
Cyprus	122 626	22 083	29 157	57 607	85 931
Czech Republic	2 274 356	1 578 070	1 029 446	1 094 508	1 202 901
Denmark					
Anthracite	71 644	78 571	75 855	89 167	81 874
Other coal	14 003 715	8 284 775	7 057 146	6 435 687	6 916 611
Estonia					
Hard coal (c)	118 648	87 466	87 072	149 092	126 569
Finland					
Hard coal (c)	7 439 189	4 613 280	3 596 331	5 072 701	6 174 441
France					
Anthracite	1 904 691	1 655 772	1 777 657	1 088 272	1 049 738
Other coal	11 661 093	12 303 542	13 516 239	16 091 962	13 508 122
Lignite	37 919	31 437	21 085	51 244	60 810
Briquettes	139 330	112 082	82 872	77 348	98 610
Germany					
Anthracite	348 536	387 288	352 617	440 328	846 310
Other coal	19 511 920	21 801 982	21 733 088	22 483 547	27 397 137
Brown coal	2 150 892	1 943 544	2 089 587	1 812 000	1 936 950
Briquettes	530 856	370 663	232 540	195 611	159 991
Greece					
Hard coal (c)	1 230 221	1 175 265	1 126 351	1 038 517	1 357 243
Hungary					
Hard coal (c)	1 742 672	...	1 567 991	1 663 064	...
Brown coal	456 029	265 559	...	221 555	247 929
Iceland					
Hard coal	58 255	69 685	60 654	100 853	97 682
Irish Republic					
Anthracite	109 108	120 081	156 350	102 388	282 790
Other coal	3 053 424	2 728 413	1 621 849	1 666 083	1 682 981
Briquettes	40 867	43 912	45 771	42 306	42 480
Italy					
Anthracite	658 500	197 665	214 079	231 539	155 092
Other coal	15 249 673	15 474 813	17 155 041	18 768 117	20 068 964
Latvia	143 194	123 669	123 618	79 833	86 754
Lithuania					
Hard coal (c)	323 538	269 298	144 540	129 430	...
Macedonia					
Hard coal	82 533	82 500	79 655	68 649	51 185
Brown coal	119 116	98 682	32 922	1 448	2 896
Briquettes	85 038	97 256	4 495	272	...
Moldova					
Anthracite	135 703	93 354	70 495	83 315	152 002
Other coal	236 489	410 031	115 902	54 879	...
Netherlands					
Anthracite	156 257	952 934	1 187 521	1 890 491	1 293 055
Other coal	18 998 000	20 352 039	17 140 488	18 794 685	26 951 400
Brown coal	43 828	19 477	30 060	30 042	38 959
Briquettes	42 113	45 423	17 205	12 541	16 111
Norway					
Anthracite (a)	106 361	152 694	88 456	86 671	105 585
Other coal (a)	725 246	766 142	734 845	746 117	684 305
Lignite (a)	28 809	48 049	90 777	86 497	35 000

Imports of Coal

Country	1997	1998	1999	2000	2001
Poland					
Hard coal (c)	3 244 000	4 198 000	2 374 285	1 503 434	1 902 766
Portugal					
Anthracite	447 943	336 726	180 884	375 617	209 725
Other coal	5 160 295	4 653 374	5 867 892	5 999 032	4 459 459
Romania (c)	5 248 649	3 866 796	2 412 701	2 467 034	3 015 063
Russia					
Anthracite	5 376 810	4 465 260	1 129 790	4 258 806	...
Other coal	9 721 829	10 480 000	14 912 207	21 259 190	...
Brown coal	82 223	21 809	2 996	9 898	...
Slovakia					
Hard coal (c)	4 837 174	4 439 131	4 370 495	4 852 343	...
Lignite	2 195 000	(g) 1 418 000	1 135 575	806 199	763 850
Slovenia					
Hard coal (c)	32 907	231 472	299 022	12 937	28 581
Lignite	341 558	151 918	81 155	296 245	440 419
Spain					
Anthracite	159 315	281 363	1 185 524	1 326 932	1 741 429
Other coal	11 180 489	14 264 919	18 925 349	20 321 647	17 174 707
Sweden					
Anthracite	42 372	25 942	12 775	13 939	10 194
Other coal	2 972 087	3 012 878	2 919 133	2 974 052	2 758 180
Switzerland					
Anthracite	7 342	10 199	13 139	14 357	12 492
Other coal	73 154	58 467	48 021	236 123	155 809
Turkey					
Hard coal (c)	9 600 283	8 447 808	6 515 726	13 173 182	5 974 476
Ukraine					
Anthracite	...	...	266 042	611 115	...
Other coal	(c) 8 368 976	(c) 8 390 047	4 687 720	5 994 619	...
Lignite	482 514	20 789	21 941	...	...
United Kingdom					
Anthracite	1 247 553	501 809	602 346	1 057 911	2 757 188
Other coal	18 581 823	20 742 610	20 167 409	22 397 393	32 772 976
Briquettes	29 631	13 556	8 298	17 197	11 317
Yugoslavia, Federal Republic of					
Hard coal	112 418	32 128	111 007	30 975	10 707
Lignite	...	66 841	87 793	104 963	127 188
Algeria	380 362	619 932	528 247	431 746	...
Botswana					
Hard coal (c)	20 477	1 945	26 258	18 789	19 148
Egypt					
Hard coal	1 626 164	1 483 924	1 320 394	...	...
Kenya					
Anthracite	12 363	6 698	7 131	449	...
Other coal	31 975	33 083	165	64 773	...
Mauritius	27 783	86 344	128 879	259 503	347 462
Morocco (c)	2 195 410	2 655 992	2 595 055	3 267 465	...
South Africa	1 159 917	1 532 284	1 024 068	1 250 751	2 187 165
Canada					
Anthracite	523 133	713 282	518 410	570 068	494 708
Other coal	14 181 304	19 136 149	19 450 505	19 190 383	18 931 643
Cuba	15 735	17 850	22 390	21 739	...
Guatemala					
Other coal	1	0	47 115	191 853	402 496
Mexico					
Hard coal (c)	2 157 455	2 301 340	2 478 839	2 425 417	3 438 727
Lignite	1 830	1 816	4 724	3 777	1 876
Panama	114 148	55 734	69 650	69 740	24 161
USA					
Anthracite	25 194	5 121	33 957	17 468	53 817
Other coal	6 715 663	7 821 385	8 170 338	11 253 751	17 817 464
Lignite	72 788	46 403	31 420	65 266	69 403
Briquettes	----	2	10 101	15 171	10 085

Imports of Coal

tonnes

Country	1997	1998	1999	2000	2001
Argentina	1 051 391	988 459	926 300	1 104 346	841 572
Brazil					
Anthracite	648 973	604 071	487 980	945 853	999 385
Other coal	11 606 358	10 054 963	12 941 936	13 928 271	13 791 919
Chile	4 638 125	4 605 359	5 320 594	4 416 807	2 629 071
Peru	486 441	386 995	379 386	619 357	442 417
Venezuela	102 188	28 557	54 390	74 298	86 575
China					
Anthracite	85 724	43 736	143 044	213 178	443 617
Other coal	1 912 883	1 538 397	1 528 002	1 903 630	2 049 653
Hong Kong					
Hard coal (c)	5 575 100	7 100 704	6 391 157	6 057 500	8 032 530
India (c) (d)	16 439 621	16 536 179	19 699 968	20 929 858	...
Indonesia					
Hard coal (c)	384 852	59 475	198 067	140 116	30 466
Iran (b)	412 025	299 065	1 102 230	849 989	...
Israel	8 671 000	9 637 000	9 598 458	9 589 000	...
Japan					
Anthracite	3 474 785	3 261 130	2 781 904	3 678 658	4 673 440
Other coal	129 453 043	128 337 217	134 417 103	141 464 086	150 669 000
Lignite	13 382	14 483	13 642	12 370	7 331
Kazakhstan					
Hard coal	975 300	1 211 147	1 121 398	688 798	202 690
Korea, Dem. P.R. of (e)	*268 000	*186 000	*596 000	*256 000	*420 000
Korea, Republic of					
Anthracite	721 918	788 973	1 138 826	2 038 016	3 110 114
Other coal	48 860 765	51 416 850	52 314 965	61 807 033	63 628 794
Kyrgyzstan					
Hard coal	281 207	800 979	763 821	725 637	342 250
Lignite	...	...	46 752	20 776	1 433
Lebanon					
Briquettes	...	119 428	152 671	128 050	149 150
Malaysia					
Anthracite	8 138	1 222	8 256	16 170	...
Other coal	2 514 694	2 297 599	2 632 342	2 660 796	3 575 728
Pakistan (f)	909 638	1 012 326	912 451	1 005 811	...
Philippines (c)	3 750 874	4 244 518	4 023 445	4 223 554	...
Saudi Arabia					
Hard coal (c)	34 645	30 612	24 338	1 440	...
Taiwan					
Anthracite	50 605	50 516	43 405	79 925	104 948
Other coal	36 646 759	37 292 319	40 923 370	45 262 506	48 640 367
Thailand					
Anthracite	8 094	23 095	110 804	164 689	234 887
Other coal	3 191 919	1 521 416	3 031 334	3 933 738	4 645 056
Australia					
Anthracite	10 065	247	9 723	8 193	8 865
Other coal	79 037	174 501	110 233	16 232	19 111
New Caledonia	258 341	298 736	244 321	253 642	259 479

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	1997	1998	1999	2000	2001
Russia	*4 000	*3 700	*4 500	*4 500	*5 000
Botswana	334	335	332	308	325
Congo, Democratic Republic	*4 000	*5 000	*5 000	*4 000	*4 000
Morocco	780	287	882	1 001	1 337
South Africa	316	296	306	397	373
Zambia (a)	6 037	*7 000	*7 000	*7 000	*7 000
Zimbabwe	126	100	129	79	96
Canada	5 709	5 861	5 323	5 298	5 334
Cuba	2 500	2 700	2 600	2 900	3 200
Brazil	1 500	2 500	2 900	4 100	*4 000
China	466	409	303	411	679
Indonesia	*650	*650	*650	*650	*650
Australia (b)	1 996	2 138	1 802	1 726	2 701
New Caledonia	2 964	3 036	2 803	2 620	3 473
World Total	31 400	34 000	34 530	35 000	38 200

Note(s):

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

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

Production of Cobalt Metal

tonnes

Country	1997	1998	1999	2000	2001
Belgium	*1 200	*1 200	*950	*1 110	*1 090
Finland	5 000	5 250	6 200	7 700	8 100
Norway	3 417	3 850	4 000	3 400	3 300
Russia	4 000	3 700	3 800	*4 500	*5 000
Congo, Democratic Republic (c)	2 808	4 490	5 180	4 320	3 199
Morocco	226	242	472	1 207	1 341
South Africa (b)	316	296	306	397	373
Uganda	----	----	77	411	512
Zambia	3 949	5 011	3 946	3 342	4 657
Canada (a)	3 792	4 415	4 196	4 364	4 378
Brazil	266	364	630	792	889
China	*1 200	*1 200	*1 200	*1 200	*1 200
Japan	264	329	247	311	*350
Australia	617	1 395	1 701	2 637	3 473
World Total	27 100	31 700	32 900	35 700	37 900

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

Country	1997	1998	1999	2000	2001
Austria					
Metal	75	126	80	87	50
Belgium-Luxembourg					
Ore	67	630	280	92	104
Metal	(a) *2 300	(a) *2 500	2 640	(a) *2 900	(a) *2 700
Oxides	(a) *3 000	(a) *2 500	4 263	(a) *4 500	(a) *2 900
Estonia					
Metal	20	16	58	58	49
Oxides	111	100	12	4	...
Finland					
Metal	2 074	1 633	2 733	3 976	...
Oxides	2 264	2 565	2 812	3 256	...
France					
Metal	573	786	507	...	733
Oxides	60	76	131	209	114
Germany					
Metal	1 387	1 103	1 396	931	1 027
Oxides	197	121	136	164	126
Irish Republic					
Oxides	104	136	110	68	49
Italy					
Metal	71	75	45	566	86
Oxides	56	77	155	188	126
Netherlands					
Metal	1 354	989	1 363	2 451	2 737
Oxides	85	148	198	527	459
Norway					
Metal	3 461	3 666	4 055	3 908	3 322
Poland					
Metal	1	32	29	22	31
Russia					
Ore	1 564	6 215	895	*850	...
Metal	4 572	3 023	9 136	8 493	...
Oxides	261	267	1 031	1 265	...
Spain					
Metal	50	1	13	24	49
Oxides	17	34	109	39	2
Sweden					
Metal	103	144	260	234	110
Oxides	251	314	295	257	12
Switzerland					
Metal	183	118	94	85	205
United Kingdom					
Metal	1 858	2 001	1 793	1 631	1 855
Oxides	1 229	1 323	1 012	1 141	1 256
Congo, Democratic Republic					
Metal	*2 800	*4 500	*5 200	*4 300	*3 200
Morocco					
Ore	----	2 500	2 560	2 072	...
Metal	218	240	464	1 238	...
South Africa					
Metal (e)	256	265	263	330	317
Oxide	81	198	234	1 008	1 768
Uganda					
Metal	----	----	67	395	...
Zambia					
Metal	*3 900	*5 000	4 036	3 025	4 380
Zimbabwe					
Metal	300	*300	417	400	...
Canada					
Metal	6 002	6 751	6 318	4 961	5 034
Oxides	549	476	278	349	380
Cuba					
Oxide, sinter & sulphide (b)	*2 400	*2 800	*2 700	*2 900	*3 100

Exports of Cobalt

tonnes

Country	1997	1998	1999	2000	2001
USA					
Metal	1 902	2 024	1 710	2 822	3 073
Oxides	676	582	603	1 321	1 274
Brazil					
Metal	211	241	549	627	777
China					
Metal	216	222	123	191	222
Oxides	204	287	238	155	111
Hong Kong					
Ore (c)	...	11	1 262	1 260	1 184
Metal (c)	1 154	704	1 600	3 788	1 246
Oxides (c)	1 819	216	59	68	50
India					
Metal (d)	27	17	220	49	...
Japan					
Metal	900	119	751	1 106	1 342
Oxides	88	134	193	234	380
Korea, Republic of					
Metal	39	34	96	240	838
Philippines					
Oxide	4	28	56	100	...
Saudi Arabia					
Oxide	----	305	480	164	...
Singapore					
Metal	454	678	1 113	884	939
of which, re-exports	453	627	825	644	734
Oxide	104	120	239	296	215
of which, re-exports	86	118	236	282	201
Taiwan					
Metal	445	445	112	191	146
Australia					
Ore	159	40	17	1 127	1 265
Metal	875	2 306	3 100	4 410	5 674
Oxides	289	32	1	4	11

Note(s):

- (a) Exports of cobalt are not separately recorded. Figures shown are BGS estimates based on known imports into certain
(b) Co content
(c) Re-exports
(d) Years ended 31 March following that stated
(e) Includes metal and metal contained in sulphate

Imports of Cobalt

Country	1997	1998	1999	2000	2001
Austria					
Metal	439	340	332	537	415
Belgium-Luxembourg					
Metal (b)	*1 500	*2 000	*5 000	*4 300	...
Oxides	340	358	436	476	667
Czech Republic					
Metal	48	81	55	34	41
Denmark					
Metal	8	6	2	8	6
Estonia					
Metal	2	36	29	42	30
Finland					
Ore	138	12 690	90 323	66 618	61 785
France					
Ore	76	1 639	80	65	69
Metal	2 023	1 768	1 428	1 618	1 723
Oxides	649	568	534	566	471
Germany					
Metal	2 127	2 481	2 094	2 289	2 408
Oxides	339	477	488	385	301
Greece					
Metal	43	57	44	108	33
Irish Republic					
Metal	191	265	151	207	527
Oxides	35	21	70	101	45
Italy					
Metal	691	595	564	539	624
Oxides	735	914	874	1 089	1 004
Netherlands					
Metal	456	679	1 394	781	1 451
Oxides	452	337	228	624	510
Norway					
Metal	1 100	1 661	1 371	1 717	2 196
Oxides	408	631	645	642	113
Poland					
Metal	37	48	37	46	53
Oxide	46	54	31	38	38
Russia					
Metal	1	72	17	158	...
Oxide	56	27	72	109	...
Slovenia					
Metal	...	83	134	180	214
Spain					
Metal	163	146	204	287	228
Oxides	783	901	1 071	1 223	1 336
Sweden					
Metal	669	1 004	680	764	813
Switzerland					
Metal	353	353	316	380	394
Turkey					
Metal	70	60	58	75	62
Oxides	80	53	59	59	60
United Kingdom					
Metal	3 980	3 950	4 434	3 886	4 187
Oxides	799	672	504	496	641
South Africa					
Ore	0	327	2 862	1 993	3 670
Metal	629	840	822	729	1 145
Oxides	7	44	67	10	42
Canada					
Metal	1 224	1 325	862	825	1 561
Mexico					
Metal	97	158	69	92	95
Oxides	250	267	196	318	147
USA					
Metal	7 858	8 036	7 584	8 324	8 753
Oxide	1 149	1 205	1 264	1 513	1 279

Imports of Cobalt

tonnes

Country	1997	1998	1999	2000	2001
Brazil					
Metal	1 002	297	185	325	332
Oxide	243	208	149	135	173
Venezuela					
Oxides	29	13	36	44	23
China					
Ore	494	2 787	7 573	16 038	29 222
Metal	572	600	1 348	2 077	3 107
Oxides	150	52	98	87	221
Dubai					
Metal	272	434	930	...	...
Hong Kong					
Ore	273	-----	...	787	1 144
Metal	1 626	890	1 481	3 608	1 233
Oxide	333	161	230	122	80
India					
Ore (a)	607	2 465	2 356	4 030	...
Metal (a)	408	384	357	352	...
Indonesia					
Ore	49	22	1 554	8 142	624
Metal	42	163	5	154	12
Oxides	...	79	82	239	137
Iran					
Metal	...	39	15	15	...
Oxide	61	29	49	78	...
Japan					
Metal	7 016	6 789	7 476	9 337	7 973
Oxide	1 753	1 752	2 800	3 354	1 484
Korea, Republic of					
Metal	626	561	820	1 020	888
Oxides	147	126	218	511	712
Malaysia					
Metal	100	400	700	761	1 004
Oxides	44	72	62	198	...
Philippines					
Metal	33	12	20	99	86
Saudi Arabia					
Oxides	192	74	1 666	287	...
Singapore					
Metal	619	780	852	827	898
Oxide	207	137	279	275	291
Taiwan					
Metal	879	1 010	859	1 035	932
Oxides	197	164	182	210	228
Thailand					
Metal	119	109	131	204	100
Oxide	55	32	84	126	146
Australia					
Metal	73	125	78	76	97
Oxide	96	79	113	75	93

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	1997	1998	1999	2000	2001
Albania	324	2 300	869	----	----
Armenia	6 770	9 158	9 830	12 234	16 405
Bulgaria	75 500	75 500	76 000	*76 000	80 200
Cyprus	3 900	4 908	5 006	5 200	5 200
Finland	8 500	9 500	10 500	11 500	11 600
Georgia	6 000	3 500	1 000	14 000	17 000
Macedonia	*13 000	9 100	10 200	10 000	8 000
Norway	6 671	2 699	----	----	----
Poland	414 737	435 800	463 200	454 100	474 000
Portugal	106 580	114 515	99 472	76 300	82 965
Romania	22 638	19 065	16 455	16 099	19 185
Russia	505 000	*500 000	*510 000	*580 000	*600 000
Spain	38 887	39 438	7 862	24 804	10 800
Sweden	86 610	73 685	71 160	77 765	74 269
Turkey	64 600	73 900	73 051	76 053	58 696
Yugoslavia, Federal Republic of	73 567	70 900	51 700	46 000	31 000
Botswana	19 820	22 124	20 960	18 722	26 194
Congo, Democratic Republic	39 651	38 236	30 070	...	20 378
Morocco	15 400	10 700	7 123	6 528	5 357
Namibia	17 879	6 500	----	5 070	27 015
South Africa	185 000	187 800	162 900	147 600	141 900
Zambia	331 235	378 798	270 995	249 304	306 387
Zimbabwe	6 832	5 952	4 977	*8 000	3 600
Canada	659 500	705 766	620 085	633 855	632 751
Cuba	2 208	1 351	1 090	1 346	*1 000
Mexico	390 536	384 641	381 184	364 566	367 379
USA	1 939 600	1 859 400	1 600 900	1 446 800	1 338 600
Argentina	30 421	170 273	210 126	145 197	191 566
Brazil	39 952	34 446	31 371	31 786	34 448
Chile	3 392 000	3 686 900	4 391 200	4 602 000	4 739 000
Colombia	1 800	*1 800	*2 100	2 018	*2 000
Peru	506 498	483 338	536 387	553 924	722 035
China	495 500	486 800	520 100	592 600	587 000
India	37 200	48 000	34 100	33 800	35 600
Indonesia	548 300	809 100	766 100	1 012 000	1 048 700
Iran	118 700	128 300	130 000	147 200	146 300
Japan	932	1 070	1 038	1 211	744
Kazakhstan	316 000	338 600	373 500	430 200	470 100
Korea, Dem. P.R. of	*10 000	*10 000	*10 000	*12 000	*12 000
Malaysia	18 821	13 907	4 600	----	----
Mongolia	130 000	127 784	128 210	125 868	134 974
Myanmar	2 927	*6 700	26 736	26 711	26 300
Philippines	48 637	45 381	37 631	31 900	20 300
Saudi Arabia	1 101	782	821	837	800
Uzbekistan	74 400	74 400	66 000	*70 000	*70 000
Australia	549 000	619 000	741 000	841 000	896 000
Papua New Guinea	111 515	151 556	187 921	203 061	203 762
World Total	11 500 000	12 300 000	12 700 000	13 200 000	13 700 000

Smelter Production of Copper

tonnes

Country	1997	1998	1999	2000	2001
Armenia	3 000	5 000	5 000	6 000	7 100
Belgium	142 500	138 400	142 800	144 700	138 200
Bulgaria	98 000	112 000	107 200	163 000	134 700
Finland	159 000	156 000	149 600	155 400	169 300
Germany	281 900	264 500	250 200	237 600	351 300
Norway	32 900	31 700	33 300	27 000	26 700
Poland	432 000	422 700	466 225	462 838	485 869
Romania	25 024	18 709	24 010	16 429	9 279
Russia	535 000	530 000	520 000	550 000	608 000
Slovakia	*10 000	*10 000	2 050	-----	-----
Spain	288 900	291 382	292 773	289 957	279 900
Sweden	93 493	81 642	76 023	105 033	182 933
Turkey	23 100	22 900	22 900	22 500	23 000
Yugoslavia, Federal Republic of	105 500	107 700	44 900	33 800	24 000
Congo, Democratic Republic (a)	38 400	35 000	31 000	33 000	25 000
Namibia	23 802	8 739	-----	13 488	27 700
South Africa	163 600	153 200	149 300	140 000	132 900
Zambia (a)	267 200	255 081	242 600	205 000	240 000
Zimbabwe	18 000	10 000	10 000	7 000	6 000
Canada	529 525	553 148	550 171	543 593	598 185
Mexico	332 999	334 714	314 429	308 225	319 151
USA	1 440 000	1 490 000	1 090 000	861 700	857 200
Brazil	177 060	167 205	193 014	184 257	212 243
Chile	1 389 600	1 403 100	1 473 900	1 460 400	1 503 200
Peru	347 447	354 678	350 377	340 447	384 912
China	789 000	838 600	837 000	1 013 900	1 145 100
India	51 400	107 600	224 500	256 000	293 000
Indonesia	-----	-----	126 700	173 800	217 500
Iran (b)	106 287	129 020	131 764	155 856	...
Japan	1 214 172	1 171 657	1 256 276	1 331 352	1 304 717
Kazakhstan	327 397	351 336	383 457	413 859	433 349
Korea, Dem. P.R. of	*10 000	*10 000	*10 000	*10 000	*10 000
Korea, Republic of	146 000	284 000	350 000	370 900	360 000
Oman	33 900	35 100	26 100	33 100	35 100
Philippines	173 200	161 600	162 000	159 900	189 000
Uzbekistan	110 600	84 900	72 000	75 000	65 100
Australia	208 000	236 000	344 000	391 000	455 000
World Total	10 100 000	10 400 000	10 500 000	10 700 000	11 400 000

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

Country	1997	1998	1999	2000	2001
Austria	74 093	74 786	74 075	73 873	...
Belgium	373 000	368 000	388 000	423 000	424 000
Bulgaria	34 500	32 100	37 800	31 000	34 500
Cyprus	4 045	4 920	5 260	5 088	4 604
Finland	116 328	122 894	114 700	114 000	115 500
France	35 600	22 400	2 000	----	----
Germany	673 712	695 869	695 626	709 472	693 773
Italy	85 700	29 100	28 500	72 800	30 200
Norway	32 900	31 700	33 300	25 300	26 700
Poland	440 644	446 837	470 494	486 002	498 451
Romania	22 912	21 008	20 983	15 303	18 522
Russia	639 900	655 900	736 600	824 000	871 000
Slovakia	30 300	19 900	1 988	----	15 000
Spain	292 000	303 076	304 617	315 734	290 700
Sweden	128 414	125 355	113 960	133 118	216 237
Turkey	114 600	91 900	60 500	64 100	58 000
United Kingdom	60 402	53 774	50 334	----	----
Yugoslavia, Federal Republic of	113 534	94 396	49 902	45 632	32 365
Congo, Democratic Republic	39 600	35 000	29 000	29 000	29 000
South Africa	126 500	123 100	116 400	106 400	107 000
Zambia	333 200	302 600	268 400	226 169	296 506
Zimbabwe	16 100	10 000	14 500	14 400	5 300
Canada	560 582	562 261	548 563	551 393	564 631
Mexico	300 500	356 800	344 200	343 200	354 200
USA	2 465 400	2 489 200	2 118 700	1 802 100	1 800 600
Argentina	*16 000	*16 000	*16 000	*16 000	*16 000
Brazil	177 060	167 205	193 014	184 257	212 243
Chile	2 116 600	2 334 900	2 666 400	2 668 300	2 882 200
Peru	395 073	411 429	436 339	451 728	471 875
China	1 179 400	1 211 300	1 174 200	1 371 100	1 523 300
India	65 900	134 000	208 100	259 100	325 100
Indonesia	----	----	90 800	158 400	212 500
Iran (a)	138 406	150 048	154 232	181 238	...
Japan	1 278 699	1 277 352	1 341 549	1 437 351	1 425 691
Kazakhstan	301 056	324 763	361 890	394 723	421 755
Korea, Dem. P.R. of	*10 000	*10 000	*10 000	*10 000	*10 000
Korea, Republic of	263 000	373 211	448 034	470 956	476 094
Myanmar (b)	----	9 730	27 853	26 546	*25 000
Oman	23 635	24 360	17 171	24 281	24 200
Philippines	146 600	152 400	148 000	138 700	164 500
Uzbekistan	115 000	89 900	72 000	*75 000	*75 000
Australia	301 000	304 000	437 000	509 000	*580 000
World Total	13 600 000	14 100 000	14 400 000	14 800 000	15 600 000

Note(s):

- (1) Figures relate to both primary and secondary refined copper, whether electrolytic or fire refined. Metal recovered from secondary materials by remelting alone is excluded
- (2) In addition to the countries listed, Albania, 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	1997	1998	1999	2000	2001
Albania					
Scrap	(a) *4 800	(a) *200	(a) *700	1 989	(a) *1 700
Armenia					
Ore	30 942	(a) *138 600	46 463	25 813	...
Scrap	(a) *200	(a) *1 200	4 172	4 400	3 192
Austria					
Unwrought	97 477	104 976	90 720	104 410	84 765
Unwrought alloys	2 330	1 746	624	1 509	1 121
Scrap	23 045	23 901	19 450	19 797	18 439
Azerbaijan					
Scrap	(a) *400	160	6 487	12 439	3 762
Belarus					
Scrap	(a) *3 100	4 975	6 126	7 400	11 100
Belgium-Luxembourg					
Matte & cement	156	4 770	5 518	2 166	631
Unwrought, unrefined	2 943	1 583	12 017	17 675	12 322
Unwrought, refined	146 106	144 764	171 924	199 088	240 995
Unwrought alloys	7 972	12 518	15 914	24 856	20 265
Scrap	92 842	69 907	96 893	152 934	136 612
Bosnia & Herzegovina					
Scrap (a)	*3 600	*2 500	*2 200	*4 500	*4 500
Bulgaria					
Ore	97 126	71 125	134 476	97 589	...
Unwrought	111 335	105 234	(a) *119 000	(a) *222 400	(a) *141 200
Scrap	1 838	1 999	(a) *3 300	(a) *10 200	(a) *5 900
Croatia					
Scrap	5 810	5 622	6 860	7 265	6 506
Cyprus					
Unwrought	4 048	4 938	5 260	5 105	5 015
Scrap	2 046	3 824	43 931	1 895	1 307
of which, re-exports	1 059	3 788	43 911	1 875	1 307
Czech Republic					
Unwrought	4 586	3 188	2 051	5 615	1 909
Scrap	26 574	28 055	32 461	37 390	39 516
Denmark					
Scrap	30 743	31 986	35 184	38 978	39 979
Estonia					
Scrap	4 869	4 253	5 647	8 819	7 981
Finland					
Unwrought, unrefined	39 275	32 951	32 347	41 580	51 804
Unwrought, refined	49 261	39 185	30 845	16 735	19 935
Unwrought alloys	1 388	1 004	838	847	1 382
Scrap	37 445	20 932	16 955	16 557	14 032
France					
Unwrought	20 028	38 410	21 981	12 421	27 912
Unwrought alloys	10 169	12 754	13 329	13 776	11 581
Scrap	132 939	122 322	199 970	203 291	190 041
Georgia					
Ores & concentrates	...	...	5 531	46 486	...
Scrap	(a) *1 700	(a) *2 800	(a) *5 700	7 196	9 376
Germany					
Ore	24 727	11 896	14 898	26 023	19 053
Unwrought, unrefined	4 171	236	118	25	4 989
Unwrought, refined	146 752	109 741	140 165	94 125	108 224
Unwrought alloys	25 952	26 457	27 496	35 588	27 379
Scrap	335 664	306 024	272 055	289 766	261 464
Greece					
Scrap	10 859	4 655	2 902	6 298	6 558
Hungary					
Scrap	13 268	14 183	13 742	20 586	19 952
Irish Republic					
Scrap	11 043	9 715	9 227	11 790	8 835
Italy					
Matte & cement	59	1 114	6 219	677	4 377
Unwrought	5 215	3 438	4 888	12 084	28 074
Unwrought alloys	13 125	14 436	18 192	21 555	16 851
Scrap	57 488	50 519	54 144	66 030	55 930

Exports of Copper

Country	1997	1998	1999	2000	2001
Latvia					
Scrap	(a) *17 200	8 838	8 200	9 196	8 160
Lithuania					
Scrap	12 301	9 741	8 360	12 134	10 016
Macedonia					
Ore	19 754	38 170	40 616	40 517	27 329
Unwrought	4 937	(a) *1 200	(a) *1 800	(a) *1 500	(a) *300
Moldova					
Scrap	1 820	2 382	4 938	1 414	...
Netherlands					
Matte & cement	476	2 142	1 456	67	46
Unwrought	11 173	9 757	9 261	6 702	5 444
Scrap	106 125	74 457	87 502	132 013	100 488
Norway					
Ore	32 485	14 825	----	60	----
Unwrought	33 273	30 642	33 898	25 968	24 681
Unwrought alloys	1 808	1 589	1 971	1 674	1 665
Scrap	13 034	9 229	12 737	17 248	17 394
Poland					
Ores & concentrates	15 808	23 966	494	0	----
Unwrought	209 000	182 386	220 950	240 290	231 455
Unwrought alloys	11 452	10 778	8 794	6 121	4 601
Scrap	3 257	8 675	10 139	26 153	22 351
Portugal					
Ore	465 368	447 370	441 029	325 725	368 150
Unwrought	6	1 035	1 098	269	36
Scrap	9 044	9 892	12 337	20 006	14 353
Romania					
Ore	...	14 362	28 499	19 489	64 002
Matte & cement	2 434	2 015	...	...	...
Unwrought	15 141	8 394	9 990	13 064	14 740
Scrap	206	17 856	34 668	41 553	9 417
Russia					
Ore	34 693	39 797	26 182	25 161	10 843
Unwrought	571 451	550 900	640 150	647 978	650 564
Scrap	355 359	356 479	(a) *231 500	(a) *71 900	(a) *38 300
Slovakia					
Ores & concentrates	10 300	----	7 989	25	...
Unwrought	900	1 180	2 071	343	1 280
Scrap	(a) *4 500	4 544	8 345	7 854	5 475
Slovenia					
Scrap	5 200	6 257	6 372	7 857	7 999
Spain					
Ore	54 205	59 880	83 383	29 057	79 561
Unwrought, unrefined	33 514	27 464	25 461	27 068	35 090
Unwrought, refined	106 791	103 469	93 098	57 383	23 785
Unwrought alloys	4 714	4 706	7 955	7 502	7 465
Scrap	46 328	31 089	48 860	53 947	52 154
Sweden					
Ore	60 147	15 783	29 437	28 758	14 829
Matte & cement	6 108	7 053	...	3 853	196
Unwrought, refined	18 637	19 739	13 290	12 232	70 682
Unwrought alloys	11 375	8 841	7 924	8 712	8 827
Scrap	18 112	14 254	18 448	31 160	29 680
Switzerland					
Unwrought	6 242	6 556	5 791	4 313	128
Scrap	53 012	42 885	50 650	61 756	58 356
Turkey					
Ore	180 669	154 149	194 300	190 007	136 702
Matte & cement	...	4 569	7 179	2 235	...
Unwrought	8 139	7 630	17 704	5 899	20 176
Scrap	500	500	1 064	1 054	6 855
Ukraine					
Unwrought	5 271	11 140	51 156	97 851	92 866
Scrap	97 662	91 794	76 117	53 485	...

Exports of Copper

tonnes

Country	1997	1998	1999	2000	2001
United Kingdom					
Ore & matte	10 163	8 559	9 667	6 741	11 075
Unwrought	5 852	9 776	8 648	10 571	10 315
Unwrought alloys	24 053	28 796	35 612	21 228	23 808
Scrap	111 722	108 407	107 527	217 016	156 121
Yugoslavia, Federal Republic of					
Unwrought	72 710	97 915	30 579	1 808	57 150
Algeria					
Scrap	9 338	5 772	5 806	7 800	...
Botswana					
Matte & cement (b)	18 100	20 400	20 200	23 500	15 700
Congo, Democratic Republic					
Unwrought, unrefined (c)	*31 000	*30 000	*30 000	*25 000	...
Unwrought, refined	5 900	...	...	...	...
Egypt					
Scrap	2 143	116	1 037	...	5 504
Ghana					
Scrap	*1 100	1 528	1 709	1 500	...
Morocco					
Ore	40 827	35 725	29 480	25 200	...
Matte & cement	2 744	2 250	1 752	...	...
Scrap	7 062	5 140	7 732	12 800	...
Namibia					
Unwrought	21 360	7 750	----	5 004	...
South Africa					
Ores & concentrates (b)	8 617	5 613	6 454	5 259	5 961
Unwrought	68 669	80 877	70 683	43 251	60 506
Scrap	26 398	47 645	76 085	57 643	81 592
Tunisia					
Scrap	3 919	1 142	3 208	5 800	...
Uganda					
Scrap	224	118	216	225	417
Zambia					
Unwrought, refined	303 784	227 980	232 723	216 615	296 387
Zimbabwe					
Unwrought	7 999	11 023	25 361	5 890	*4 000
Canada					
Ores & concentrates (b)	492 534	414 180	334 016	679 591	630 014
Matte & cement (b)	17 181	19 505	20 037	13 137	16 052
Unwrought	457 437	440 497	376 832	345 898	392 681
Scrap	126 177	101 346	65 153	73 133	70 267
Cuba					
Concentrates	(a) *12 500	7 426	7 082	7 854	(a) *2 100
Scrap (a)	*3 200	*4 500	*4 100	*4 900	*3 100
Mexico					
Concentrates	44 534	68 722	73 795	308 620	100 143
Matte & cement	2 475	15 663	5 741	3 378	1 148
Unwrought	196 678	237 005	131 164	98 054	152 983
Scrap	96 387	58 423	58 603	71 580	70 563
USA					
Ores & concentrates (b)	124 186	36 497	75 698	160 245	46 269
Matte & cement	32 075	10 556	12 717	18 369	14 738
Unwrought, unrefined	31 643	28 812	32 786	24 435	26 958
Unwrought, refined	93 342	85 618	25 602	97 006	23 322
Unwrought alloys	24 725	20 064	19 409	25 788	32 371
Scrap	386 286	310 763	316 777	488 050	558 633
Argentina					
Ores & concentrates	80 443	574 981	718 762	509 658	692 564
Scrap	3 640	2 583	5 882	11 293	10 054
Brazil					
Unwrought, refined	35 987	7 003	21 172	13 453	14 992
Scrap	1 884	2 897	8 268	5 970	5 847

Exports of Copper

Country	1997	1998	1999	2000	2001
Chile					
Ores & concentrates (b)	1 104 800	1 167 500	1 542 500	1 749 200	1 798 200
Unwrought, unrefined	158 400	157 400	168 200	174 600	154 900
Unwrought, refined	2 031 700	2 248 200	2 553 800	2 549 200	2 696 400
Scrap	2 489	2 751	4 463	4 404	7 615
Colombia					
Ore	9 786	16 671	8 699	10 923	9 299
Scrap	5 906	7 278	10 468	8 380	9 217
Ecuador					
Scrap	2 760	2 717	2 317	2 491	1 900
Peru					
Ore	295 679	250 747	192 814	320 657	371 179
Unwrought, unrefined	56 790	44 674	30 678	23 588	31 186
Unwrought, refined	361 477	347 575	415 849	376 523	432 772
Scrap	3 515	3 066	2 108	1 960	1 499
Venezuela					
Scrap	8 638	7 173	9 952	10 647	9 201
China					
Unwrought, unrefined	5 661	12 972	3 495	2 430	2 371
Unwrought, refined	77 869	106 108	94 586	114 525	50 972
Unwrought alloys	735	2 336	4 956	1 784	782
Scrap	11 934	9 584	11 162	10 154	9 934
Dubai					
Scrap	44	8 138	14 786	...	...
Hong Kong					
Unwrought	59 835	76 815	44 418	57 962	56 362
of which, re-exports	59 694	76 675	43 610	54 768	55 038
Scrap	313 847	211 752	153 146	148 580	130 281
of which, re-exports	242 233	145 158	98 419	93 788	82 701
Indonesia					
Ores & concentrates	1 716 828	2 014 754	1 939 989	2 580 180	2 510 981
Unwrought	5 519	5 286	101 453	145 303	269 691
Scrap	4 329	9 772	8 498	7 791	10 128
Iran					
Ores & concentrates	(a) *1 000	(a) *15 000	27 808	(a) *150 900	(a) *141 400
Unwrought (a)	*8 400	*23 200	*37 300	*37 400	*25 700
Scrap (a)	*2 600	*400	*4 400	*1 800	...
Israel					
Scrap	11 547	10 937	9 884	10 436	(a) *10 100
Japan					
Unwrought, unrefined	23 951	34 448	38 542	42 772	45 137
Unwrought, refined	157 696	292 907	318 854	299 377	416 017
Unwrought alloys	11 413	18 215	16 471	18 167	23 140
Scrap	79 940	75 492	83 904	110 327	156 591
Jordan					
Scrap	2 804	2 166	2 071	2 838	2 396
Kazakhstan					
Ores & concentrates	11 097	0	10 326	121 422	150 179
Unwrought	306 033	339 205	355 931	392 482	409 165
Scrap	(a) *32 500	24 097	43 256	(a) *87 400	(a) *33 200
Korea, Dem. P.R. of					
Unwrought (a)	*400	*500	*8 500	*2 000	*1 000
Korea, Republic of					
Matte & cement	1 997	945	871	2 073	925
Unwrought	40 494	297 495	148 662	27 115	8 157
Unwrought alloys	689	1 423	5 492	9 196	8 164
Scrap	27 761	24 905	16 049	33 869	29 919
Kyrgyzstan					
Unwrought	(a) *5 500	(a) *4 300	(a) *500	120	1 480
Scrap	11 157	5 467	6 174	7 858	1 304
Lebanon					
Scrap	...	6 078	5 260	6 950	5 333
Malaysia					
Ore (b)	21 400	15 400	6 800	----	...
Scrap	53 700	121 357	48 213	30 333	19 772

Exports of Copper

tonnes

Country	1997	1998	1999	2000	2001
Mongolia					
Ores & concentrates	479 700	485 700	492 700	496 000	...
Scrap	508	139	168	428	...
Oman					
Unwrought	23 100	18 619	20 733	21 505	27 212
Scrap	58 623	39 240	34 420	2 213	...
Pakistan					
Scrap (d)	23 192	2 028	3 265	3 746	...
Philippines					
Ores & concentrates	120 811	116 721	161 786	92 256	57 995
Unwrought	118 925	101 661	157 625	128 811	156 916
Scrap	32 782	26 070	25 700	29 100	...
Saudi Arabia					
Unwrought	...	8 504	11 181	2 961	...
Scrap	16 694	13 002	12 266	21 817	...
Singapore					
Unwrought	201 835	105 611	137 197	78 198	64 013
of which, re-exports	200 556	104 910	136 292	76 430	62 109
Scrap	64 963	70 668	57 685	60 191	55 690
Taiwan					
Matte & cement	2 261	2 005	3 649	4 056	2 975
Unwrought	5 494	5 073	5 191	6 237	8 968
Scrap	33 146	26 531	41 781	74 469	50 020
Thailand					
Unwrought	381	1 098	899	2 164	389
Scrap	18 688	18 926	15 536	18 446	26 942
Uzbekistan					
Unwrought (a)	*25 000	*11 400	*16 200	*21 400	*26 400
Australia					
Ores & concentrates	979 965	1 234 500	1 072 651	1 021 452	1 248 528
Unwrought, refined	116 050	126 804	253 919	323 372	396 993
Unwrought alloys	834	1 493	1 057	2 584	5 888
Scrap	30 708	29 157	26 673	33 256	32 804
New Zealand					
Scrap	2 133	1 871	2 192	3 016	2 964
Papua New Guinea					
Ores & concentrates (b)	86 791	187 249	182 290	184 477	211 975

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

Country	1997	1998	1999	2000	2001
Austria					
Unwrought, unrefined	3 468	3 710	1 659	5 419	----
Unwrought, refined	39 497	35 536	26 540	36 391	35 845
Unwrought alloys	3 138	3 873	5 137	4 435	3 164
Scrap	90 668	82 586	88 130	81 509	59 281
Belarus					
Unwrought	*1 300	1 978	2 213	1 707	2 265
Scrap	*1 500	1 692	2 900	4 859	8 586
Belgium-Luxembourg					
Unwrought, unrefined	101 160	94 045	140 069	215 056	148 800
Unwrought, refined	102 245	100 955	71 186	41 047	44 050
Unwrought alloys	4 690	5 979	3 474	3 683	3 657
Scrap	186 786	233 722	220 103	265 246	245 104
Bulgaria					
Ores & concentrates	86 580	208 698	167 367	244 823	...
Unwrought	8 700	*5 000	5 787	7 879	...
Czech Republic					
Unwrought	12 203	14 352	14 510	14 288	18 434
Scrap	2 711	2 828	1 854	3 133	2 759
Denmark					
Unwrought	2 432	2 403	2 173	2 825	2 600
Scrap	6 509	14 707	8 021	10 673	12 798
Finland					
Ore	464 435	544 111	514 879	468 557	503 460
Unwrought, refined	21 206	14 223	15 229	9 631	5 489
Unwrought alloys	5 546	5 086	4 744	4 474	3 899
Scrap	34 309	15 046	11 317	7 576	3 624
France					
Matte & cement	2 755	1 119	191	151	390
Unwrought, unrefined	4 785	4 644	670	72	177
Unwrought, refined	527 980	585 477	550 007	585 829	564 415
Unwrought alloys	20 011	15 416	15 154	21 121	12 858
Scrap	87 556	100 868	93 233	87 946	70 698
Germany					
Ore	640 856	605 691	839 574	708 614	1 034 722
Matte & cement	20 230	7 915	2 910	7 515	3 070
Unwrought, unrefined	62 636	45 406	36 613	32 370	26 579
Unwrought, refined	526 854	578 913	565 299	689 673	527 947
Unwrought alloys	39 486	41 963	34 552	44 175	35 661
Scrap	568 738	610 197	515 564	490 828	390 731
Greece					
Unwrought	96 933	103 592	114 876	135 629	129 818
Unwrought alloys	815	1 691	678	624	590
Scrap	4 088	651	2 590	7 841	2 627
Hungary					
Unwrought	15 967	17 000	18 900	29 877	...
Scrap	2 754	3 743	4 913	8 310	5 370
Irish Republic					
Scrap	1 080	646	353	1 354	1 080
Italy					
Unwrought, unrefined	5 579	4 749	1 900	2 763	1 455
Unwrought, refined	450 196	564 851	625 183	603 259	649 687
Unwrought alloys	20 829	22 320	19 961	20 460	21 575
Scrap	259 546	254 408	195 367	179 050	168 541
Lithuania					
Scrap	6 409	2 499	527	1 764	570
Macedonia					
Unwrought	2 557	156	510	27	15
Moldova					
Scrap	1 298	1 605	500	...	...
Netherlands					
Unwrought	44 133	78 016	137 729	155 553	123 138
Unwrought alloys	3 028	3 245	1 216	1 374	1 612
Scrap	101 936	92 486	76 482	78 166	65 053
Norway					
Matte & cement (a)	*25 000	*22 000	*20 000	*18 000	...
Unwrought	4 422	3 713	3 225	3 594	3 500
Scrap	5 892	5 234	6 275	5 890	7 647

Imports of Copper

tonnes

Country	1997	1998	1999	2000	2001
Poland					
Unwrought	2 251	600	4 151	8 106	2 042
Scrap	1 497	1 136	2 627	6 249	3 722
Portugal					
Unwrought	3 955	2 532	3 486	3 409	3 637
Scrap	902	2 282	1 879	487	1 265
Romania					
Ores & concentrates	22 584	10 964	51 193	41 206	127
Unwrought	754	1 500	4 165	15 938	25 611
Russia					
Ore	143 159	62 843	57 754	127 001	193 695
Unwrought	7 360	6 165	3 439	8 961	3 319
Scrap	3 933	2 347	711	221	...
Slovakia					
Ores & concentrates	16 600	24 600	*12 000	*12 000	...
Unwrought	9 088	8 271	1 773	1 464	...
Slovenia					
Unwrought	4 000	4 819	3 881	3 540	3 226
Scrap	1 700	2 670	2 125	3 755	3 300
Spain					
Ore	888 487	935 942	1 003 472	936 207	902 428
Unwrought, unrefined	2 533	1 511	7 441	17 557	16 024
Unwrought, refined	12 431	29 069	29 186	30 885	42 505
Unwrought alloys	10 274	11 596	10 216	9 976	6 461
Scrap	67 737	72 145	66 828	81 310	82 473
Sweden					
Ore	67 018	53 966	67 539	152 426	324 398
Unwrought, unrefined	1 428	9 151	8 356	55	29
Unwrought, refined	47 673	61 531	76 899	82 430	49 088
Unwrought alloys	4 926	4 471	5 443	3 968	3 815
Scrap	32 096	41 339	35 529	34 120	31 373
Switzerland					
Unwrought	7 770	7 902	7 641	7 604	8 621
Unwrought alloys	1 319	1 482	1 980	3 588	3 777
Scrap	19 055	24 314	19 472	16 675	13 800
Turkey					
Ore	35 951	8 219	18 369	56 968	45 075
Unwrought	112 331	135 874	148 212	196 414	151 636
Scrap	17 443	7 358	14 822	21 744	5 522
United Kingdom					
Unwrought, unrefined	2 262	236	629	1 085	290
Unwrought, refined	365 895	348 509	303 267	337 969	310 894
Unwrought alloys	3 353	5 423	4 965	7 325	7 249
Scrap	54 856	54 483	35 572	20 597	19 651
Yugoslavia, Federal Republic of					
Ores & concentrates	184 399	138 527	28 679	67 875	50 036
Unwrought	6 459	4 627	387	1 808	1 962
Namibia					
Ores & concentrates (a)	9 628	3 199	----	8 028	...
Nigeria					
Matte & cement	14	27	170	...	...
Unwrought	5 973	124	69	202	...
South Africa					
Unwrought	1 570	2 184	1 531	3 851	4 466
Scrap	4 837	4 796	5 730	5 114	5 311
Togo					
Unwrought	...	4 000	3 862	...	...
Tunisia					
Unwrought	2 265	2 521	3 069	4 190	...
Zambia					
Ores & concentrates (a)	4 560	4 560	4 560	1 140	240
Zimbabwe					
Matte & cement	3 200	*3 000	7 607	7 000	...
Unwrought	6 100	*6 000	6 000	4 200	...

Imports of Copper

Country	1997	1998	1999	2000	2001
Canada					
Ores & concentrates (a)	134 853	123 650	137 662	211 299	219 534
Matte & cement	9 211	10 700	22 178	2 039	147
Unwrought	49 738	38 214	44 187	23 278	29 061
Unwrought alloys	6 892	7 624	8 276	12 303	8 801
Scrap	172 870	113 032	74 103	92 260	100 611
Mexico					
Ores & concentrates	108 388	100 661	143 352	245 449	43 433
Matte & cement	23 908	4 785	...	14 632	16 730
Unwrought	66 387	184 581	191 838	229 751	244 648
Scrap	16 100	22 331	28 931	20 976	6 704
USA					
Ores & concentrates (a)	45 829	217 936	93 261	233	121 756
Matte & cement (a)	1 111	1 036	1 060	946	...
Unwrought, unrefined	155 384	180 184	174 758	194 685	217 966
Unwrought, refined	646 058	720 383	930 103	1 036 636	1 198 570
Unwrought alloys	22 122	17 510	23 596	9 619	6 977
Scrap	211 621	166 100	135 972	143 210	114 576
Argentina					
Unwrought, refined	36 078	40 682	27 973	33 043	27 547
Brazil					
Ores & concentrates	413 411	421 349	582 104	495 790	543 818
Unwrought	116 819	139 884	115 844	160 772	147 717
Scrap	2 066	1 206	1 129	4 120	3 544
Colombia					
Unwrought	535	1 033	2 054	3 785	4 768
Venezuela					
Unwrought, refined	17 304	16 851	11 522	...	...
Unwrought alloys	344	264	166	165	192
Abu Dhabi					
Scrap	...	2 861	6 231	...	...
China					
Ores & concentrates	937 776	1 182 867	1 250 148	1 813 288	2 255 252
Matte & cement	1 020	33	262	423	82
Unwrought, unrefined	111 070	95 858	129 960	124 710	91 237
Unwrought, refined	88 345	162 650	404 764	667 623	834 971
Unwrought alloys	11 410	9 892	13 012	19 813	27 959
Scrap	796 841	956 644	1 701 391	2 501 168	3 332 533
Dubai					
Scrap	2 490	2 209	7 163	...	...
Hong Kong					
Unwrought, unrefined	8 218	3 337	389	119	34
Unwrought, refined	137 654	267 964	47 589	54 044	59 692
Unwrought alloys	948	1 573	2 385	4 284	5 732
Scrap	332 420	188 490	112 815	106 409	92 178
India					
Ore (b)	87 890	296 022	400 546	471 399	...
Unwrought (b)	138 025	61 235	49 964	15 436	...
Scrap (b)	145 197	140 030	205 116	85 067	...
Indonesia					
Unwrought	58 997	68 284	44 446	32 917	56 670
Unwrought alloys	1 795	2 744	2 179	2 812	3 561
Scrap	2 755	1 406	2 327	3 966	3 939
Japan					
Ores & concentrates	3 769 017	3 975 398	4 286 193	4 443 316	4 158 747
Matte & cement	12 283	1 736	1 449	1 755	1 957
Unwrought	358 711	275 378	265 517	221 994	163 304
Unwrought alloys	6 342	3 237	2 790	5 561	3 990
Scrap	193 549	162 798	174 463	190 231	142 712
Kazakhstan					
Ores & concentrates	12 313	15 024	...	...	...
Scrap	*1 000	1 467	1 582	1 619	3 633

Imports of Copper

tonnes

Country	1997	1998	1999	2000	2001
Korea, Republic of					
Ore	518 112	973 450	1 166 630	1 177 284	1 173 674
Unwrought, unrefined	108 823	62 649	59 894	47 931	58 954
Unwrought, refined	395 659	487 358	484 686	418 932	379 950
Unwrought alloys	804	811	646	799	1 222
Scrap	119 921	88 947	184 778	203 607	177 106
Kuwait					
Unwrought	13 221	15 400	10 937	*11 000	...
Kyrgyzstan					
Scrap	3 507	1 716	56	20	----
Malaysia					
Unwrought	162 800	135 755	159 794	169 955	167 685
Oman					
Ores & concentrates	177 795	77 013	134 497	276 047	70 464
Pakistan					
Unwrought	10 800	9 600	10 000	10 501	...
Scrap (c)	2 776	99	3 773	2 189	...
Philippines					
Concentrates	496 324	435 065	518 920	435 703	509 390
Unwrought	15 798	10 017	17 124	16 008	11 919
Scrap	549	1 697	4 977	1 042	286
Saudi Arabia					
Unwrought	38 679	77 756	49 198	79 549	...
Singapore					
Unwrought	213 115	199 662	116 942	59 988	70 654
Scrap	28 221	26 821	18 701	21 647	17 753
Taiwan					
Unwrought	589 980	585 810	656 359	630 570	542 647
Unwrought alloys	10 198	13 902	17 040	13 256	12 263
Scrap	37 498	41 447	50 179	44 317	60 514
Thailand					
Unwrought	157 363	90 599	123 283	158 997	175 061
Scrap	3 686	1 795	2 949	4 358	4 210
Australia					
Matte & cement	3 196	3 691	5 499	6 386	5 526
Unwrought	7 687	524	2 895	21 302	29 368
Unwrought alloys	18 467	2 606	2 944	4 194	3 964
Scrap	4 022	4 318	6 679	4 136	2 512
New Zealand					
Unwrought	7 450	7 294	7 332	3 168	8 328
Scrap	2 040	...	4 520	3 410	2 834

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

Country	1997	1998	1999	2000	2001
Russia	19 400 000	19 800 000	16 200 000	20 500 000	20 500 000
Angola	1 314 182	2 764 858	3 572 200	4 014 000	5 100 000
Botswana	20 111 000	19 639 000	21 263 000	24 635 000	26 190 000
Central African Republic	486 787	419 967	430 126	461 004	614 000
Congo, Democratic Republic	20 977 000	21 362 000	22 000 000	16 500 000	19 637 000
Ghana	829 524	823 125	680 964	887 049	1 132 102
Guinea	417 146	392 488	382 743	368 599	*370 000
Ivory Coast	306 665	*310 000	398 282	320 208	320 000
Lesotho	...	...	43 000	20 000	20 000
Liberia	*200 000	*300 000	*200 000	*170 000	155 000
Namibia	1 419 530	1 465 959	1 632 860	1 541 747	1 495 245
Sierra Leone	*400 000	*250 000	*600 000	*350 000	*375 000
South Africa	10 041 380	10 704 628	10 014 815	10 780 683	11 162 630
Tanzania	123 090	97 830	234 800	354 388	254 271
Zimbabwe	421 307	28 732	42 578	23 028	----
Canada	----	300 006	2 492 807	2 533 750	3 685 171
Brazil	*100 000	100 349	*900 000	*1 000 000	*1 000 000
Guyana	36 573	34 399	45 441	81 706	179 463
Venezuela	284 208	96 811	95 144	109 597	*150 000
China	120 385	112 825	113 065	160 000	150 000
India (a)	30 994	34 580	40 956	57 407	81 448
Indonesia	*30 000	*28 000	*30 000	*30 000	...
Australia	40 175 000	40 843 000	29 784 000	26 647 000	26 177 000
World Total	117 200 000	119 900 000	111 200 000	111 500 000	118 800 000

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	1997	1998	1999	2000	2001
Austria					
Dust	815 000	746 960	3 976 470	8 500 000	550 000
Belgium-Luxembourg					
Unsorted	369 000	1 000	...	...	----
Gem, rough	132 880 000	160 778 000	158 000 000	125 000 000	122 500 000
Gem, cut	7 723 000	7 762 000	3 500 000	3 500 000	4 500 000
Industrial	28 104 000	19 000 000	7 500 000	11 500 000	8 000 000
Dust	67 265 000	67 300 000	23 000 000	28 500 000	24 500 000
France					
Gem, cut	£40 000 000	£45 900 000	£25 700 000	£64 500 000	£80 140 000
Industrial	£100 000	£300 000	£400 000	£1 084 000	£3 438 000
Dust	3 708 955	...	...	1 000 000	50 000
Germany					
Gem, cut	108 063	263 058	176 713	175 521	...
Industrial	74 078	70 582	28 164	48 843	...
Dust	46 710 000	48 145 000	32 725 000	46 500 000	41 500 000
Irish Republic					
Industrial	59 785 000	23 745 000	52 530 000	24 430 000	5 140 000
Italy					
Unsorted	£61 000	£60 000	£369 000	£744 000	£154 000
Gem, cut	£4 946 000	£5 600 000	£9 144 000	£12 151 000	£15 342 000
Industrial	£427 000	£400 000	£483 000	£309 000	£111 000
Netherlands					
Unsorted	£2 555 000	£2 191 000	£3 094 000	£2 016 000	£2 026 000
Gem, rough	£6 000	£27 000	...	£14 000	£3 000
Gem, cut	£6 361 000	£6 443 000	£7 536 000	£6 466 000	£7 891 000
Industrial	£1 273 000	£1 777 000	£1 013 000	£2 951 000	£2 887 000
Poland					
Industrial	55 000	5 000	10 000	...	...
Portugal					
Gem, rough	£16 487 000	£5 610 000	£430 000	...	----
Gem, cut	£34 744 000	£15 694 000	£29 996 000	£19 186 000	£26 769 000
Romania	879 100	...	...	...	...
Spain					
Gem, cut	£874 000	£1 032 000	£1 505 000	£2 760 000	£1 890 000
Industrial	£351 000	£777 000	£496 000	£241 000	£1 481 000
Sweden					
Gem, cut	£200 000	£60 000	£125 000	£27 000	£4 000
Switzerland					
Unsorted	60 000	65 000	80 000	30 000	----
Gem, rough	2 440 000	1 005 000	1 860 000	1 520 000	1 110 000
Gem, cut	1 070 000	300 000	400 000	720 000	1 130 000
Industrial	375 000	1 415 000	815 000	320 000	35 000
Dust	72 285 000	76 720 000	82 420 000	80 145 000	80 615 000
United Kingdom					
Unsorted	11 117 190	5 794 334	2 784 476	8 616 140	4 030 600
Gem, rough	69 757 480	65 595 954	63 338 299	61 757 031	69 542 709
Gem, cut	2 667 551	1 729 965	1 706 334	795 268	899 959
Industrial	25 772 889	35 394 187	29 978 880	27 030 867	11 861 312
Dust	73 505 020	56 682 115	49 034 945	...	88 612 930
Angola	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	340 126	278 873	297 332	318 410	...
Industrial	146 661	141 094	132 794	142 004	...
Guinea	392 334	337 448	383 620	367 521	...
Mauritius					
Unsorted	£900 000	£800 000	£200 000	...	...
Gem, rough	£100 000	£2 000	£1 132 000	£150 000	...
Gem, cut	£16 800 000	£16 400 000	£19 108 000	£22 980 000	...
Industrial	£2 600 000	£2 800 000	£261 000	£274 000	...
Namibia	1 475 871	1 188 616	1 768 329	1 706 206	...
Sierra Leone	*400 000	*250 000	*300 000	*350 000	...

Exports of Diamond

Country	1997	1998	1999	2000	2001
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	...	344 158	130 160	343 945	260 419
Tunisia					
Gem, cut	...	125 000	225 000	...	...
Industrial	120 000	...	10 000	...	...
Canada					
Unsorted	...	...	2 403 254	2 287 019	3 318 523
Gem, rough	8 364	23 652	31 281	13 919	123
of which, re-exports	7 300	13 298	4 552	3 219	21
Gem, cut	37 751	50 243	51 318	44 417	55 999
of which, re-exports	27 714	47 744	48 034	37 176	29 411
Industrial	51 164	21 262	21 287	2 557	8 921
of which, re-exports	43 183	18 068	14 302	1 626	5 115
Dust	214 006	105 948	117 795	93 019	77 726
of which, re-exports	130 296	12 097	----	----	25 000
USA					
Unsorted	392 257	235 438	412 683	736 156	...
of which, re-exports	324 721	185 942	309 157	267 782	...
Gem, rough	901 327	904 523	723 083	1 008 538	...
of which, re-exports	874 585	879 790	660 830	829 500	...
Gem, cut	2 562 779	3 174 135	5 028 081	15 446 571	(c) 9 010 000
of which, re-exports	2 475 724	3 016 585	4 644 266	14 640 872	6 420 000
Industrial	4 003 704	5 007 158	4 217 660	3 986 251	...
of which, re-exports	3 260 520	3 876 268	3 378 584	2 158 149	...
Dust	128 697 795	107 973 890	101 218 432	100 573 455	95 100 000
of which, re-exports	2 616 355	3 505 648	2 813 377	1 991 284	...
China					
Unsorted	34 445	20 140	205	9 790	250
Gem, rough	157 430	181 220	342 900	677 070	669 595
Gem, cut	712 770	741 365	1 252 785	1 445 740	1 512 815
Industrial	13 611 550	8 696 265	6 714 690	9 799 845	11 702 980
Dust	11 032 415	11 590 400	43 798 030	105 481 230	141 123 135
Dubai					
Unsorted	...	185 000	2 010 000	...	...
Hong Kong					
Unsorted (b)	2 189 423	681 469	1 332 656	769 577	2 750 267
Gem, rough (b)	1 679 345	2 209 337	6 582 249	8 349 438	9 981 402
Gem, cut	2 593 636	2 875 100	3 903 552	4 962 704	4 431 823
of which, re-exports	2 568 985	2 860 234	3 866 240	4 793 456	4 347 966
Industrial (b)	1 375 890	765 292	1 407 546	63 000	288 914
India					
Gem, rough (a) (b)	961 399	1 096 363	1 741 501	266 952	...
Gem, cut (a)	10 785 173	11 146 970	14 478 995	22 383 779	...
Industrial (a)	100	430	12 570	201 449	...
Dust (a)	5 316 542	6 046 126	12 449 088	44 862 124	...
Israel					
Gem, rough	£640 967 000	£519 386 000	£820 167 000	£1 135 839 000	...
Gem, cut	£3 471 354 000	£3 281 923 000	£3 948 839 000	£5 171 691 000	...
Industrial	£5 653 000	£6 442 000	£31 382 000	£64 106 000	...
Japan					
Industrial	2 018 739	2 519 134	3 095 358	2 925 490	...
Dust	15 066 371	16 529 190	17 204 192	19 299 341	...
Korea, Republic of					
Gem, cut	4 283	108 902	...	70 000	105 000
Industrial	59	28 905	...	555 000	1 735 000
Kuwait					
Gem	635 000	480 000	535 000	150 000	...
Malaysia					
Unsorted	£1 000 000	£700 000	£515 000	...	...
Gem, rough	...	...	£2 000	...	...
Gem, cut	£38 700 000	£19 800 000	£15 471 000	...	...

Exports of Diamond

carats

Country	1997	1998	1999	2000	2001
Singapore					
Gem	£140 313 000	£59 892 000	£69 828 000	£116 349 000	£122 979 000
of which, re-exports	£119 016 000	£57 102 000	£66 262 000	£115 766 000	£118 160 000
Industrial	£12 068 000	£2 571 000	£9 899 000	£10 082 000	£14 702 000
of which, re-exports	£7 626 000	£2 180 000	£9 777 000	£9 261 000	£14 527 000
Dust	...	...	...	£213 000	£276 000
Sri Lanka					
Gem, rough	197 132	58 928	...	...	...
Gem, cut	221 955	141 594	...	...	...
Industrial	3 554	4 893	...	...	...
Taiwan					
Industrial	...	...	610 000	3 930 000	1 370 000
Dust	53 745 000	33 995 000	36 545 000	44 310 000	8 600 000
Thailand					
Unsorted	2 631 379	...	80 994	866 335	415 926
Gem, rough	141 394	...	2 922 926	1 456 619	113 483
Gem, cut	5 357 875	...	8 511 310	...	1 441 226
Industrial	107 630	...	1 185 480	1 279 034	2 155 537
Dust	4 324 916	...	3 892 850	394 680	648 609
Australia					
Unsorted	*29 541 000	*52 218 000	*51 704 000	*31 292 000	*27 460 000
Gem	32 638	31 869	22 000	48 000	38 000
New Zealand					
Gem, cut (b)	£153 000	£631 000	£373 000	£628 000	£478 000

Note(s):

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- (2) See explanatory notes at the front of the volume regarding currency conversion
- (3) In this table the term 'Dust' corresponds to item 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) Gem; total

Imports of Diamond

Country	1997	1998	1999	2000	2001
Austria					
Unsorted	4 199	6 554	13 205	13 864	...
Gem	17 639	23 076	35 716	14 137	...
Industrial	63 103	53 712	653	3 700	...
Dust	15 984 000	23 571 880	24 887 565	33 500 000	33 000 000
Belgium-Luxembourg					
Unsorted	8 020 000	4 000 000	4 000 000	4 000 000	3 000 000
Gem, rough	129 298 000	124 000 000	140 000 000	120 500 000	123 000 000
Gem, cut	6 418 000	6 000 000	6 000 000	7 000 000	8 500 000
Industrial	35 803 000	44 500 000	31 500 000	27 000 000	25 000 000
Dust	83 005 000	74 895 000	56 000 000	62 500 000	56 500 000
Czech Republic					
Unsorted	£90 000	£234 000	£86 000	£245 000	...
Gem, rough	£100 000	£121 000	£90 000	£47 000	...
Gem, cut	£136 000	£168 000	£167 000	£398 000	...
Industrial	£271 000	£214 000	£242 000	£297 000	...
Dust	£639 000	£650 000	£535 000	£702 000	...
Finland					
Gem, cut	9 363	20 000	115 000	105 000	160 000
Industrial	164	50 000	175 000	125 000	20 000
France					
Unsorted	207 370	...	...	10 500 000	9 500 000
Gem, cut	350 793	...	...	2 000 000	12 000 000
Industrial	388 951	...	...	2 000 000	1 500 000
Dust	13 560 155	10 500 000	16 000 000	12 000 000	24 000 000
Germany					
Gem, cut	494 351	504 940	516 680	530 657	476 717
Industrial	1 797 380	2 434 993	2 645 448	3 418 322	2 278 364
Dust	51 350 000	61 055 000	70 825 000	67 140 000	67 250 000
Greece					
Unsorted	£503 000	£599 000	£180 000	£447 000	£223 000
Gem, rough	...	£155 000	£62 000	£11 000	£6 000
Gem, cut	£2 105 000	£2 435 000	£1 106 000	£2 062 000	£1 824 000
Industrial	£788 000	£1 049 000	£433 000	£801 000	£58 000
Hungary					
Dust	1 671 575	1 010 600	758 770	715 975	1 269 915
Irish Republic					
Unsorted	4 940 000	855 000	8 300 000	34 310 000	48 655 000
Gem, rough	535 000	250 000	2 170 000	1 910 000	2 140 000
Gem, cut	8 705 000	5 220 000	17 350 000	20 375 000	45 300 000
Industrial	61 785 000	3 045 000	5 980 000	8 565 000	46 820 000
Italy					
Unsorted	£486 000	£270 000	£1 334 000	£1 612 000	£1 087 000
Gem, rough	£476 000	£500 000	£341 000	£631 000	£890 000
Gem, cut	£17 391 000	£12 330 000	£215 392 000	£236 883 000	£236 885 000
Industrial	£3 001 000	£4 600 000	£5 041 000	£7 469 000	£6 802 000
Dust	...	...	...	12 585 000	101 940 000
Netherlands					
Unsorted	£7 904 000	£7 431 000	£7 936 000	£8 713 000	£2 021 000
Gem, rough	£23 000	£156 000	£13 000	£184 000	£2 135 000
Gem, cut	£17 370 000	£14 976 000	£19 964 000	£26 503 000	£20 034 000
Industrial	£606 000	£385 000	£928 000	£236 000	£850 000
Norway					
Unsorted	...	...	420 000	30 000	45 000
Gem	...	...	2 445 000	2 550 000	1 965 000
Industrial	...	...	50 000	90 000	90 000
Dust	...	...	520 000	290 000	220 000
Poland					
Unsorted	...	...	40 000	20 000	...
Gem	50 000	6 350 000	10 000	30 000	...
Industrial	275 000	415 000	110 000	235 000	...
Portugal					
Unsorted	£79 000	£114 000	£67 000	£43 000	£78 000
Gem, rough	£49 170 000	£27 441 000	£19 294 000	£17 753 000	£20 914 000
Gem, cut	£3 832 000	£3 890 000	£11 777 000	£12 550 000	£8 758 000
Industrial	£1 014 000	£1 335 000	£684 000	£491 000	£738 000

Imports of Diamond

carats

Country	1997	1998	1999	2000	2001
Romania					
Gem, cut	166 776	...	...	...	...
Industrial	£700 000	£600 000	...	...	...
Slovenia					
Gem, cut	...	10 000	10 000	15 000	25 000
Industrial	...	10 000	35 000	110 000	90 000
Dust	...	700 000	845 000	1 730 000	1 505 000
Spain					
Unsorted	£1 141 000	£1 557 000	£2 502 000	£3 264 000	£2 679 000
Gem, cut	£19 806 000	£21 351 000	£27 521 000	£30 064 000	£27 660 000
Industrial	£1 789 000	£2 049 000	£2 923 000	£2 246 000	£4 508 000
Sweden					
Unsorted	£272 000	£546 000	£605 000	£687 000	£84 000
Gem, cut	£2 715 000	£2 478 000	£2 482 000	£3 002 000	£3 634 000
Industrial	£27 000	£77 000	£75 000	£227 000	£116 000
Dust	...	£4 263 000	£4 338 000	£4 797 000	£5 248 000
Switzerland					
Unsorted	10 000	10 000	15 000	30 000	...
Gem, rough	4 170 000	4 535 000	3 515 000	4 435 000	3 475 000
Gem, cut	375 000	420 000	485 000	585 000	875 000
Industrial	575 000	365 000	575 000	930 000	735 000
Dust	107 225 000	94 210 000	90 615 000	83 965 000	89 730 000
Turkey					
Unsorted	...	...	70 970	974 245	25 000
Gem	7 627 692	833 102	618 000	4 873 050	2 725 000
Industrial	1 111 596	28 783	198 545	463 625	40 000
Dust	7 244 305	...	3 878 635	4 908 115	4 725 000
United Kingdom					
Unsorted	14 987 637	10 211 264	4 676 550	5 560 568	586 774
Gem, rough	65 930 928	105 803 662	151 651 213	79 691 733	81 302 570
Gem, cut	8 853 149	6 694 184	4 809 531	6 423 082	4 396 223
Industrial	28 967 856	28 797 763	8 406 120	16 208 556	7 344 542
Dust	68 967 250	82 518 395	64 953 625	98 133 490	74 756 325
Botswana					
Unsorted	35 250	100 000	...	...	...
Gem	262 690	204 070	22 030	...	...
Industrial	299 430	3 857 785	156 470 650	...	...
Mauritius					
Gem, rough	£8 200 000	£5 100 000	£8 514 000	£10 853 000	...
Gem, cut	£5 400 000	£7 400 000	£7 412 000	£6 668 000	...
Industrial	£6 900 000	£6 400 000	£6 922 000	£4 777 000	...
South Africa					
Unsorted	55 280	68 677	63 256	61 130	...
Gem, rough	601 542	397 265	639 788	826 225	...
Gem, cut	72 135	70 734	56 764	101 330	...
Industrial	1 473 889	1 272 212	1 480 601	1 197 831	...
Dust	3 617 197	3 519 364	5 342 778	5 624 013	...
Tunisia					
Unsorted	140 000	140 000	225 000	...	...
Gem, cut	...	10 000	95 000	...	...
Industrial	5 185 000	235 000	-----	...	...
Dust	105 000	120 000	50 000	...	...
Canada					
Unsorted	£14 547 000	£17 012 000	£22 046 000	£31 940 000	£31 023 000
Gem, cut	221 239	249 969	307 423	340 275	293 568
Industrial	1 733 188	822 194	682 472	...	500 778
Dust	5 082 213	2 346 249	2 533 200	3 759 535	4 800 793
Costa Rica					
Industrial	...	...	...	...	280 000
Mexico					
Gem, cut	733 190	563 140	885 000	769 110	940 000
Industrial	539 110	470 530	1 354 900	1 024 675	1 170 000
Dust	2 250 650	6 723 830	4 787 910	4 894 455	6 010 000
Panama					
Gem	...	30 000	10 000	50 000	10 000

Imports of Diamond

Country	1997	1998	1999	2000	2001
USA					
Unsorted	14 529	29 325	27 796	124 529	...
Gem, rough	1 936 591	1 439 349	4 266 330	2 276 708	900 000
Gem, cut	13 448 617	16 401 998	19 120 150	19 507 925	16 200 000
Industrial	4 432 122	6 101 071	4 399 015	5 068 360	...
Dust	254 596 244	222 232 369	208 530 774	289 134 221	281 500 000
Chile					
Dust	704 690	261 230	313 355	195 270	162 660
Venezuela					
Industrial	5 100 000	300 000	600 000	500 000	...
Abu Dhabi					
Gem	255 000	740 000	1 760 000	...	...
Dust	...	100 000	30 000	...	...
China					
Unsorted	90 220	80 960	167 255	260 565	421 265
Gem, rough	1 488 295	1 620 820	2 677 240	3 170 885	3 285 620
Gem, cut	638 575	860 265	1 907 060	3 607 675	4 138 235
Industrial	2 332 965	91 300	624 500	474 910	988 810
Dust	11 838 030	2 210 882	3 432 070	1 950 515	2 666 165
Dubai	650 000	2 370 000	...	...	...
Hong Kong					
Unsorted	1 409 419	701 796	1 042 219	785 071	2 107 984
Gem, rough	1 219 496	1 794 802	6 712 549	8 948 599	8 414 012
Gem, cut	7 261 058	6 729 602	9 991 900	11 222 357	11 174 600
Industrial	1 023 602	770 004	1 681 310	2 080 459	231 881
India					
Gem, rough (a)	102 819 567	118 929 243	112 015 856	100 027 307	...
Gem, cut (a)	861 207	1 619 280	3 096 916	2 472 461	...
Dust (a)	7 360 533	3 709 153	6 509 609	11 610 610	...
Israel					
Gem, rough	£2 529 449 000	£1 858 253 000	£2 644 679 000	£3 031 605 000	...
Gem, cut	£565 394 000	£664 209 000	£933 048 000	£1 418 302 000	...
Industrial	£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	31 940	22 289	17 770	21 976	...
Gem, cut	2 659 711	2 479 136	3 077 944	2 710 978	...
Industrial	1 976 261	2 150 393	1 555 576	523 671	...
Dust	2 725 505	78 121 591	101 872 554	113 250 487	...
Jordan					
Industrial	65 000	20 000	15 000	55 000	...
Korea, Republic of					
Gem, cut	...	59 744	25 000	175 000	195 000
Industrial	...	93 837	590 000	1 020 000	1 360 000
Malaysia					
Unsorted	£48 849 000	£32 200 000	£14 425 000	£14 000 000	...
Gem, cut	£42 743 000	£10 700 000	£15 308 000	£22 300 000	...
Industrial	£2 442 000	£1 600 000	£639 000	£4 900 000	...
Oman	180 000	1 775 000	----	9 840 000	...
Philippines					
Industrial	63 704	50 698	...	...	...
Singapore					
Unsorted	£1 047 000	£2 259 000	£163 000	£78 000	£175 000
Gem, rough	£869 000	£3 677 000	£224 000	£2 146 000	£995 000
Gem, cut	£298 971 000	£115 371 000	£198 204 000	£241 561 000	£232 116 000
Industrial	£8 917 000	£5 349 000	£10 663 000	£11 572 000	£14 485 000
Dust	...	...	...	£695 000	£640 000
Sri Lanka					
Unsorted	24 443	31 610	...	...	...
Gem, rough	777 967	717 606	...	...	...
Gem, cut	73 387	56 682	...	...	...
Industrial	139 628	155 282	...	...	...
Dust	306 909	250 160	...	...	...

Imports of Diamond

carats

Country	1997	1998	1999	2000	2001
Taiwan					
Unsorted	25 000	60 000	35 000	10 000	10 000
Gem, rough	5 000	10 000	150 000	5 000	...
Gem, cut	560 000	580 000	1 380 000	2 075 000	1 175 000
Industrial	3 030 000	1 730 000	3 070 000	9 440 000	5 845 000
Dust	33 830 000	31 680 000	24 625 000	33 435 000	30 920 000
Thailand					
Unsorted	108 217 127	...	48 701 533	...	29 702 903
Gem, rough	8 274 281	...	...	210 850 398	33 832 803
Gem, cut	88 912 115	...	...	43 283 548	96 581 834
Industrial	323 867	...	713 137	3 939 995	1 737 425
Dust	158 222 379	...	59 279 323	5 534 594	13 175 998
Australia					
Gem, rough	613 222	309 037	(b) 169 000	(b) 258 000	(b) 233 000
Gem, cut	143 706	133 069	...	...	...
Industrial	1 164 113	889 903	824 000	664 000	302 000
Dust	1 560 960	1 427 285	1 626 000	1 596 000	2 078 000
New Zealand					
Gem, rough	£222 000	£139 000	£60 000	...	...
Gem, cut	£7 623 000	£6 939 000	£7 911 000	£9 498 000	£9 606 000
Industrial	£72 000	£174 000	£53 000	£42 000	...

Note(s) :-

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- (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

Country	1997	1998	1999	2000	2001
Czech Republic	42 000	35 000	37 000	34 000	83 000
Denmark					
Moler (d)	207 000	213 000	164 000	189 000	*190 000
France	*80 000	*80 000	*80 000	*75 000	*75 000
Germany	50 475	53 953	53 444	54 309	...
Hungary	2 885	2 368	1 240	1 878	1 323
Iceland	27 482	25 734	28 299	27 614	30 434
Italy	*25 000	*25 000	*25 000	*25 000	*25 000
Macedonia	*5 000	*5 000	*5 000	*5 000	*5 000
Poland	1 200	1 530	1 240	*1 270	*1 000
Portugal	1 540	2 265	772	686	387
Romania	23 880	34 600	11 592	9 890	6 517
Soviet Union (f)	*90 000	*80 000	*80 000	*80 000	*80 000
Spain (b)	43 207	57 105	51 897	66 770	*67 000
Turkey	1 000	3 643	5 926	...	...
Algeria	2 332	2 133	2 563	2 979	2 863
Kenya	297	468	3 587	3 634	3 500
Canada	*1 000	*1 000	...	...	...
Costa Rica	500	200	...	...	...
Mexico	59 463	66 812	65 146	96 448	69 474
USA (c)	773 000	725 000	747 000	677 000	644 000
Argentina	9 449	25 430	34 056	*35 000	*35 000
Brazil (e)	14 215	13 557	9 223	11 242	*10 000
Chile	11 825	14 868	14 477	13 384	22 705
Colombia	*4 000	*4 000	*4 000	*4 000	*4 000
Peru	*35 100	*35 100	*35 000	*35 000	*35 000
China	...	114 600	82 170	83 300	124 100
Iran (a)	...	600	4 350	*5 000	*5 000
Japan	158 622	136 399	132 090	111 193	...
Korea, Republic of	53 538	37 649	30 222	34 143	27 530
Saudi Arabia	...	1 000	1 000	1 000	...
Thailand	91	912	2 332	390	720
Australia (g)	12 643	14 433	25 330	28 810	28 407
World Total	1 850 000	1 810 000	1 740 000	1 720 000	1 750 000

Note(s):

(1) In addition to the countries listed, Egypt is believed to produce diatomite

(a) Years ended 20 March following that stated

(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

Exports of Diatomite

tonnes

Country	1997	1998	1999	2000	2001
Austria	7 852	7 187	6 197	7 177	5 802
Belgium-Luxembourg	2 417	4 061	14 752	1 850	3 575
Czech Republic	6 563	5 989	5 929	5 976	5 493
Denmark	*100 000	*100 000	*80 000	*90 000	*90 000
France	31 561	31 441	29 973	35 585	28 149
Germany	7 408	10 430	5 540	5 209	5 267
Iceland	29 935	25 410	28 482	11 414	4 301
Italy	1 260	1 129	1 804	1 531	1 776
Netherlands	347	229	239	564	1 105
Russia	635	181	258	407	...
Spain	1 577	2 301	2 152	2 243	4 467
Sweden	1 223	1 266	1 339	1 682	1 605
United Kingdom	486	705	565	511	1 342
Algeria	693	353	735	880	1 108
Kenya	...	619	534	540	...
South Africa	606	670	5 723	1 063	484
Mexico	10 831	10 344	10 928	10 102	11 139
USA	140 965	138 706	123 931	131 770	148 013
Chile	5 581	6 357	8 280	7 082	7 413
Peru	5 754	3 580	4 621	14 596	6 168
China	138 309	125 529	73 003	74 161	83 696
Hong Kong (a)	2 641	2 463	1 363	808	353
Indonesia	656	2 805	4 349	6 725	7 356
Iran	...	5 550	5 887	...	...
Japan	1 715	2 669	2 206	1 139	2 496
Saudi Arabia	2 678	4 807	1 080	945	...
Singapore (a)	502	549	341	260	189
Taiwan	4 921	3 693	929	1 158	1 864
Thailand	...	...	126	612	1 501

Note(s):

(a) Re-exports

Imports of Diatomite

Country	1997	1998	1999	2000	2001
Austria	19 156	16 869	20 392	22 891	21 396
Belarus	...	3 476	4 375	2 299	402
Belgium-Luxembourg	6 635	5 255	6 621	6 776	9 067
Bulgaria	701	734	932	1 141	...
Croatia	799	751	981	631	1 232
Czech Republic	6 301	2 318	2 115	1 895	1 695
Denmark	7 867	7 906	5 519	5 993	5 728
Finland	3 146	2 462	2 652	2 738	2 996
France	13 116	18 092	16 844	14 075	12 725
Germany	46 530	52 079	50 799	45 488	35 286
Greece	962	867	585	714	504
Hungary	2 290	2 989	3 222	2 975	2 845
Irish Republic	483	667	385	211	286
Italy	7 186	9 722	6 847	7 865	7 047
Netherlands	22 359	10 909	18 844	20 654	11 800
Norway	1 889	2 254	1 984	1 974	2 021
Poland	6 512	6 187	6 717	7 150	7 284
Portugal	1 243	1 667	1 493	2 151	1 771
Romania	2 144	2 592	3 209	3 133	2 980
Russia	3 462	4 220	6 195	6 130	...
Slovakia	2 055	1 913	1 868	1 599	1 406
Slovenia	...	577	357	481	503
Spain	5 258	5 563	5 706	5 501	5 349
Sweden	4 885	5 138	4 998	5 964	4 684
Switzerland	3 669	3 764	3 757	3 869	4 332
Turkey	893	880	880	1 183	1 211
United Kingdom	20 595	42 274	30 885	35 561	33 474
Yugoslavia, Federal Republic of	1 269	1 240	955	1 104	643
Cameroon	...	...	437	461	590
Egypt	856	1 207	596	...	833
Morocco	739	714	474	262	...
Nigeria	715	451	956	1 037	...
South Africa	4 506	4 175	4 621	4 272	3 772
Tunisia	833	714	1 090	1 212	...
Canada	25 002	23 032	22 148	20 339	19 910
Costa Rica	186	226	142	60	70
El Salvador	1 676	762	1 120	786	756
Guatemala	1 004	980	891	337	559
Honduras	546	739	842	569	...
Mexico	2 117	3 561	1 810	1 795	968
Panama	534	552	620	540	413
USA	2 040	802	387	531	1 990
Argentina	5 382	5 793	6 669	5 848	4 938
Brazil	3 309	2 913	2 840	3 182	3 985
Chile	5 961	4 562	5 660	14 748	...
Colombia	2 734	2 800	4 222	3 158	4 090
Ecuador	268	329	231	392	272
Peru	2 123	2 177	2 718	2 323	2 972
Venezuela	1 336	1 385	1 310	1 573	2 224
China	5 848	9 306	3 668	3 053	2 775
Dubai	...	...	42 312	...	...
Hong Kong	3 191	2 903	1 428	1 547	777
India (b)	2 596	2 996	2 804	3 389	...
Indonesia	4 231	2 477	2 610	3 405	3 907
Iran (a)	231	369	382	381	...
Japan	8 668	7 735	7 927	9 054	7 427
Kazakhstan	...	163	294	503	...
Malaysia	3 727	3 844	...	3 588	...
Philippines	2 513	714	1 318	1 126	726
Saudi Arabia	10 954	1 001	1 284	3 169	...
Singapore	1 773	1 804	2 599	3 151	2 596
Taiwan	10 964	10 287	9 784	8 316	7 245
Thailand	256	660	1 070	1 398	1 252

Imports of Diatomite

tonnes

Country	1997	1998	1999	2000	2001
Australia	9 663	9 181	9 454	9 440	9 411
New Zealand	1 491	1 352	2 026	1 479	1 599

Note(s) :-

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

Production of Feldspar

Country	1997	1998	1999	2000	2001
Bulgaria	36 000	36 000	28 000	22 000	*20 000
Czech Republic	243 000	266 000	244 000	337 000	373 000
Finland	40 000	42 740	43 827	38 609	36 145
France	621 000	620 000	640 000	642 000	720 000
Germany	455 969	333 893	278 953	322 116	302 650
Greece	68 000	71 000	78 500	94 700	126 400
Italy	2 118 117	2 503 541	2 493 846	2 851 289	*3 000 000
Macedonia	*8 000	8 137	11 275	10 057	20 449
Norway	78 169	82 036	72 777	72 000	79 500
Poland	108 100	116 700	105 300	95 588	145 980
Portugal	81 597	96 854	114 685	136 730	112 923
Romania	25 962	37 010	36 627	37 157	43 047
Russia	*45 000	*40 000	*45 000	*45 000	*45 000
Spain	400 156	429 614	439 204	478 260	*520 000
Sweden	42 308	34 363	34 000	35 000	40 000
Turkey	1 011 542	1 089 483	1 369 655	1 150 706	1 059 211
United Kingdom (c)	8 108	3 278	2 448	3 645	2 995
Yugoslavia, Federal Republic of	4 880	4 280	3 452	4 254	4 451
Algeria	*7 000	8 026	2 820	707	----
Egypt (d)	57 335	325 654	*330 000	*330 000	*300 000
Morocco	15 110	18 332	1 112	16 052	8 979
Nigeria	1 225	1 682	...	...	...
South Africa	59 688	56 761	59 336	66 774	66 062
Zimbabwe	2 254	2 241	1 915	2 059	1 055
Cuba	14 700	14 400	4 800	6 700	...
Guatemala	11 400	17 249	17 072	17 804	6 809
Mexico	155 760	197 866	262 241	334 439	329 591
USA	*900 000	*820 000	*875 000	*790 000	*800 000
Argentina	105 320	42 468	62 926	*61 000	*60 000
Brazil (e)	79 399	145 783	150 492	148 515	*150 000
Chile	3 808	1 460	1 346	2 311	2 867
Colombia	66 845	*55 000	*55 000	*55 000	*55 000
Ecuador	60 328	69 319	33 142	47 041	37 633
Peru	2 502	3 983	1 594	5 642	4 253
Uruguay	3 229	2 240	1 556	2 493	3 522
Venezuela	160 000	148 000	125 000	139 000	142 425
China	*2 000 000	*2 000 000	*2 000 000	*2 000 000	*2 000 000
India (a)	112 238	116 351	194 158	179 046	204 275
Indonesia	24 399	40 434	23 236	*24 000	...
Iran (b)	160 615	141 862	150 050	*156 000	*168 000
Japan (f)	1 045 743	867 064	982 820	1 021 644	*1 000 000
Jordan	7 340	4 008	1 000	11 112	----
Korea, Republic of	341 018	248 493	409 334	330 417	389 361
Malaysia	9 779	31 369	26 940	29 895	40 509
Myanmar (a)	11 960	*12 000	*12 000	*12 000	*12 000
Pakistan (d)	25 169	26 360	29 235	34 252	45 145
Philippines	12 717	2 938	16 909	6 500	33 122
Saudi Arabia	8 200	10 000	*21 000	21 100	...
Sri Lanka	25 676	25 274	26 012	28 638	27 438
Taiwan	----	----	171	409	147
Thailand	611 789	440 288	626 415	542 991	710 543
Uzbekistan	*4 000	...	300	4 300	*4 300
Australia (d)	68 796	65 459	74 892	94 096	113 917
World Total	11 500 000	12 000 000	12 500 000	13 000 000	13 500 000

Note(s):

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

(a) Years ended 31 March following that stated

(b) Years ended 20 March following that stated

(c) China stone

(d) Years ended 30 June of that stated

(e) Including beneficiated and directly shipped material

(f) Including weathered granite feldspar

Exports of Feldspar

tonnes

Country	1997	1998	1999	2000	2001
Austria	20 668	22 547	14 943	6 295	10 174
Czech Republic	54 474	57 546	62 273	85 931	131 699
Finland	23 048	25 953	27 876	28 985	32 570
France	122 119	126 350	242 379	296 491	385 161
Germany	60 999	35 317	70 699	60 691	63 736
Greece	19 314	10 576	17 703	68	67
Italy	42 687	89 042	136 362	122 154	128 544
Macedonia	5 496	8 587	10 300	13 401	20 450
Netherlands	2 990	3 680	821	810	693
Norway	67 741	83 943	69 297	71 154	82 030
Poland	200	100	556	831	562
Portugal	2 069	2 060	1 861	2 616	147
Russia	8 417	9 627	8 463	12 136	...
Spain	22 653	29 512	40 915	57 316	52 161
Sweden	16 385	14 531	23 574	20 164	27 662
Turkey	950 140	1 283 211	1 799 854	2 114 432	1 208 808
United Kingdom	853	148	131	101	93
South Africa	2 468	1 439	1 381	726	1 249
Guatemala	5 044	4 760	4 596	5 957	6 282
Mexico	11 379	8 809	9 937	8 746	8 434
USA	7 224	13 193	9 882	11 449	5 457
Argentina	4 595	4 442	3 482	4 529	3 015
Brazil	3 025	49	3 081	61	2 865
China	591 265	608 501	539 040	607 067	557 243
Hong Kong (a) (c)	164 965	134 751	128 586	60 144	15 712
India (b)	77 644	52 631	56 981	164 119	...
Iran	...	995	2 918	...	...
Japan	13 062	8 533	6 422	7 166	3 242
Korea, Republic of	34 248	14 080	5 481	3 970	2 636
Singapore	105	67	321	15	55
of which, re-exports	93	-----	321	15	35
Taiwan	1 579	2 996	4 278	6 054	2 582
Thailand	290 688	241 387	282 680	294 292	333 015
Australia	42 980	27 095	33 731	54 569	15 322

Note(s):

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

(b) Years ended 31 March following that stated

(c) Re-exports

Imports of Feldspar

Country	1997	1998	1999	2000	2001
Austria	4 377	3 238	3 124	3 844	4 213
Belarus	...	15 806	22 511	30 186	44 065
Belgium-Luxembourg	24 836	24 363	24 396	25 329	25 250
Croatia	2 521	2 610	6 202	6 578	10 491
Czech Republic	5 685	5 474	6 317	7 658	7 226
Denmark	3 300	4 576	5 774	3 740	5 753
Finland	117	267	452	734	742
France	46 110	47 367	45 029	37 596	29 741
Germany	41 670	48 165	45 405	51 494	51 965
Greece	1 302	492	944	2 545	7 466
Irish Republic	121	130	103	50	98
Italy	714 234	1 023 919	1 433 174	1 566 525	1 865 170
Lithuania	11 625	4 155	4 178	5 563	5 065
Netherlands	14 118	12 732	9 469	9 213	7 531
Norway	841	466	833	8 870	14 040
Poland	35 600	40 000	57 382	81 995	144 145
Portugal	34 456	31 026	48 594	50 280	72 198
Romania	8 752	9 838	15 523	19 694	34 378
Russia	532	1 204	166	530	...
Slovakia	22 759	...	17 959	26 213	29 202
Slovenia	...	3 833	4 550	3 923	5 232
Spain	229 481	315 236	411 192	552 152	501 395
Sweden	6 820	7 643	6 392	7 194	6 430
Switzerland	6 248	5 696	5 281	4 550	7 408
Turkey	7 546	18 100	633	18 840	19 803
Ukraine	2 283	4 231	2 558	4 012	...
United Kingdom	24 051	18 208	25 707	25 743	18 361
Algeria	5 001	4 411	3 996	3 391	...
Egypt	28 014	50 003	24 443	...	83
Ghana	399	21	----	164	63
Morocco	4 571	8 227	16 548	24 350	...
Tunisia	7 956	4 092	10 525	16 981	...
Canada	1 612	2 297	1 872	1 704	1 426
Costa Rica	5 287	6 287	5 053	6 398	5 919
Mexico	3 485	1 195	1 095	1 818	1 196
Nicaragua	1 002	955	1 245	1 342	1 321
USA	8 578	6 556	6 837	7 216	6 144
Chile	2 202	2 694	...	2 430	3 355
Ecuador	2 984	2 325	8 831	2 264	4 611
Venezuela	499	645	595	567	909
China	11 121	20 256	11 253	6 205	3 446
Hong Kong	31 140	21 217	5 369	410	84
Indonesia	80 514	92 374	53 984	105 271	120 525
Japan	13 004	6 613	1 805	1 781	1 366
Jordan	160	209	547	940	979
Korea, Republic of	1 024	854	1 933	1 629	1 316
Lebanon	...	18 250	17 409	15 849	24 708
Malaysia	267 457	236 281	139 455	280 968	382 850
Philippines	9 986	3 525	20 179	5 902	22 586
Saudi Arabia	----	----	370	528	...
Singapore	10 979	5 925	7 749	7 598	6 547
Syria (a) (b)	2 730	...	16 382	...	...
Taiwan	755 071	762 588	694 246	563 078	473 198
Thailand	10 306	9 111	13 592	13 423	14 263
Australia	138	80	78	10	40
New Zealand	431	479	405	781	584

Note(s) :-

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

(b) Including some fluorspar

Production of Fluorspar

tonnes

Country	1997	1998	1999	2000	2001
France	106 600	105 600	105 800	114 000	123 000
Germany	23 868	30 641	28 260	31 124	*30 000
Italy	105 794	104 187	46 916	67 768	*45 000
Romania	*15 000	*15 000	*15 000	*15 000	*15 000
Russia	*80 000	*100 000	153 800	187 600	*190 000
Spain	124 987	135 568	148 238	140 466	134 039
Turkey	3 903	5 034	4 812	4 113	3 752
United Kingdom	*64 000	*65 000	*40 000	*36 000	*50 000
Egypt	775	140	*500	*500	*500
Kenya	68 700	60 854	93 602	100 102	118 850
Morocco	103 800	105 000	83 100	76 991	96 500
Namibia	23 160	40 685	57 599	66 129	81 245
South Africa	206 990	236 640	217 540	212 709	286 387
Tunisia	1 426	1 188	520	----	----
Mexico	552 840	598 043	557 106	635 230	619 468
Argentina	7 168	11 517	12 704	*11 200	*11 000
Brazil (a)	78 032	72 085	44 926	44 046	54 000
China	*2 300 000	*2 350 000	*2 230 000	*2 240 000	*2 200 000
India (d)	11 338	48	220	3 253	6 799
Iran (b)	17 035	26 275	18 387	*20 000	*20 000
Korea, Dem. P.R. of	*39 000	*30 000	*25 000	*25 000	*25 000
Kyrgyzstan	4 176	3 200	2 997	3 000	1 175
Mongolia	174 200	168 218	153 693	198 541	199 105
Pakistan (c)	1 050	2 647	220	997	*1 000
Tajikistan	*3 000	...	...	...	9 000
Thailand	7 826	3 743	13 005	4 745	3 020
Vietnam	*2 000	*3 000	*3 000	*3 000	*3 000
World Total	4 100 000	4 300 000	4 100 000	4 200 000	4 300 000

Note(s):

- (1) In addition to the countries listed, Bulgaria is believed to produce fluorspar
(2) In addition, the USA produced the following amounts of fluorspar equivalent in fluorosilicic acid derived from processing phosphate rock ('000 t): 1997: 121; 1998: 118; 1999: 122; 2000: 119; 2001: 93

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

Exports of Fluorspar

Country	1997	1998	1999	2000	2001
Austria	21	117	90	233	72
Belarus	*1 500	2 077	924	...	----
Belgium-Luxembourg	821	1 131	1 972	1 569	298
Czech Republic	22 688	24 827	12 519	13 658	9 442
France	35 748	24 342	29 194	35 342	38 023
Germany	20 206	15 892	20 197	18 875	16 634
Italy	557	1 471	7 595	13 443	20 709
Netherlands	2 404	187	5 377	2 825	7 399
Russia	324	2 056	2 967	4 740	...
Spain	24 998	986	1 152	8 920	1 132
Sweden	2 102	4 400	5 967	6 451	5 603
United Kingdom	5 215	4 202	4 829	4 879	2 373
Kenya	72 300	45 618	64 094	103 944	...
Morocco	114 419	135 302	83 446	78 151	...
Namibia	18 307	42 135	71 011	55 948	...
South Africa	182 716	153 031	196 160	147 464	259 199
Mexico	317 341	335 236	359 930	398 343	360 437
USA	64 870	46 150	58 769	43 212	34 137
China	1 293 672	1 315 972	1 221 491	1 198 478	1 109 384
Hong Kong (a)	1 050	1 965	26 954	79 077	88 495
Iran	...	5 460	11 044	10 900	...
Japan	1 013	867	407	227	129
Jordan	...	...	400	5 046	...
Kyrgyzstan	...	...	1 977	3 064	1 888
Mongolia	147 900	121 800	164 100	197 100	...
Singapore	233	266	3	300	270
of which, re-exports	218	181	3	80	270
Thailand	10 760	7 740	5 515	4 290	4 901
Uzbekistan	*15 000	*15 000	*15 000	*15 000	...

Note(s):

(a) Re-exports

Imports of Fluorspar

tonnes

Country	1997	1998	1999	2000	2001
Austria	7 529	5 704	3 959	1 923	3 514
Belarus	*1 200	2 393	1 589	588	1 095
Belgium-Luxembourg	9 774	10 690	11 095	10 246	13 662
Croatia	275	275	206	161	155
Czech Republic	51 532	41 943	30 989	31 903	27 785
Denmark	4 926	7 152	1 011	2 144	1 238
Finland	11 317	11 246	7 503	11 969	10 892
France	6 267	5 902	4 218	3 999	3 355
Germany	263 201	290 687	300 656	270 412	266 764
Greece	14 313	15 298	14 029	8 733	11 210
Hungary	4 500	2 500	900	545	6 006
Irish Republic	200	158	33	45	19
Italy	111 666	106 304	184 145	209 326	209 672
Netherlands	12 561	4 883	7 055	50 999	65 422
Norway	42 397	42 804	*48 000	47 415	...
Poland	6 100	7 800	8 411	5 387	4 789
Portugal	971	1 380	1 457	1 693	1 243
Romania	19 271	11 831	24 684	4 739	7 314
Russia	227 161	227 373	173 544	178 217	...
Slovakia	8 730	8 600	6 584	7 955	2 393
Slovenia	1 800	1 691	1 144	1 141	939
Spain	11 347	16 394	28 859	14 153	18 819
Sweden	7 968	15 972	12 381	9 386	16 103
Switzerland	325	554	775	664	497
Turkey	12 219	8 141	9 472	19 263	16 100
Ukraine	40 871	40 092	27 883	59 977	...
United Kingdom	(a) *42 000	41 610	*43 000	*40 000	34 999
Yugoslavia, Federal Republic of	4 016	4 786	3 591	25	----
Egypt	1 021	297	129	...	408
South Africa	...	...	...	4 608	6 258
Tunisia	50 182	53 672	65 378	56 950	...
Canada	157 661	186 351	169 974	180 085	164 164
Mexico	13 683	37 168	55 159	50 974	28 520
USA	822 211	498 204	457 152	509 895	527 955
Brazil	15 510	34 482	7 215	31 872	18 315
Chile	1 103	525	579	432	345
Peru	486	480	422	654	541
Venezuela	724	1 643	672	1 005	988
Hong Kong	1 025	2 400	10 950	22 310	22 005
India (b)	39 136	72 352	76 295	59 677	...
Indonesia	706	493	854	2 002	1 638
Japan	573 738	545 726	535 413	562 021	519 221
Jordan	200	120	5	121	24
Kazakhstan	*3 000	3 391	3 500	548	...
Korea, Republic of	87 918	77 928	84 022	92 257	74 456
Malaysia	3 200	1 400	13 600	3 822	2 109
Philippines	1 071	439	226	280	280
Singapore	864	826	406	660	616
Taiwan	46 999	54 574	55 294	54 263	51 656
Thailand	3 830	3 863	5 763	5 995	2 226
Australia	5 636	3 620	6 848	4 966	7 300

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	1997	1998	1999	2000	2001
Armenia	*500	294	405	*400	*400
Bulgaria	1 713	1 660	1 524	1 500	*1 500
Finland	1 900	2 370	2 770	1 600	1 700
France	4 953	3 793	3 567	2 643	2 512
Georgia	700	800	1 587	*1 600	*1 600
Italy	331	1 117	894	820	522
Poland (d)	375	409	489	367	349
Romania	*4 000	*4 000	*4 000	*4 000	*4 000
Russia	123 937	113 807	125 870	142 500	152 500
Slovakia	458	340	363	306	157
Spain	3 343	5 791	12 086	*5 500	...
Sweden	6 777	5 944	4 202	3 570	4 986
Turkey	*1 000	*1 000	*1 200	*500	*500
Ukraine	...	...	24	135	69
Yugoslavia, Federal Republic of (d)	3 014	2 684	1 260	1 121	----
Burkina Faso	1 089	1 091	886	589	209
Burundi	----	----	----	----	415
Cameroon	*1 000	*1 000	*1 000	*1 000	*1 000
Congo, Democratic Republic	394	152	207	52	*50
Eritrea	612	573	534	264	*270
Ethiopia (b)	755	...	2 928	3 206	3 365
Ghana	54 446	72 003	78 660	78 399	70 049
Guinea	3 713	7 835	13 576	15 030	16 263
Ivory Coast	2 419	3 400	2 967	3 444	*3 400
Kenya	440	388	990	1 243	1 545
Liberia	*500	*800	*1 000	*1 000	*1 000
Mali	16 323	20 562	23 688	*25 000	40 367
Morocco (d)	*450	*450	*450	505	1 191
Namibia	2 417	1 882	2 005	2 417	2 851
South Africa	490 600	465 100	451 200	428 200	394 757
Sudan	*5 000	5 671	5 565	5 770	*5 800
Tanzania	232	427	4 890	15 060	30 088
Uganda (e)	6 819	5 029	5 558	9 860	6 090
Zambia (c)	226	210	79	*100	*130
Zimbabwe	24 225	25 175	27 114	22 007	18 478
Canada	171 376	165 599	157 755	155 538	159 425
Costa Rica	733	636	165	51	*100
Dominican Republic	2 350	1 421	651	...	...
Guatemala	...	...	4 449	4 500	*4 500
Honduras	*150	*150	879	878	3 553
Mexico	25 317	25 426	23 755	26 375	23 543
Nicaragua	2 563	3 834	4 448	3 672	3 840
Panama	1 202	1 517	*1 500	*1 500	*1 500
USA	362 295	366 411	341 481	345 000	335 000
Argentina	2 289	20 400	38 515	25 954	30 630
Bolivia	13 292	14 444	11 786	12 000	12 374
Brazil	52 335	46 031	51 422	52 420	54 000
Chile	49 459	44 980	48 069	54 143	42 673
Colombia	18 811	18 813	34 599	37 018	21 813
Ecuador	3 069	1 474	2 026	2 871	2 297
French Guiana	3 225	2 735	2 972	3 376	3 921
Guyana	13 577	14 146	13 159	13 546	14 184
Peru	77 940	94 214	128 486	132 585	138 022
Uruguay	1 200	2 303	2 392	2 240	2 083
Venezuela	22 322	6 740	5 946	7 332	9 076
China (d)	181 360	177 620	165 680	176 910	181 870
India (a)	2 636	2 683	2 153	2 168	2 422
Indonesia	89 979	124 019	129 032	127 192	166 090
Iran (d)	684	856	930	950	*1 000
Japan	8 384	8 601	9 405	8 400	7 815
Kazakhstan (d)	9 659	8 929	9 655	11 529	16 569
Korea, Dem. P.R. of	*500	*500	----	----	----
Korea, Republic of	611	4	6	13	10
Kyrgyzstan	16 860	21 311	20 200	22 000	24 670

Mine Production of Gold

kilograms (metal content)

Country	1997	1998	1999	2000	2001
Malaysia	4 487	3 394	3 449	4 026	3 970
Mongolia	8 451	9 531	10 246	11 485	12 092
Myanmar (a) (d)	181	172	116	100	100
Oman	584	579	597	604	603
Philippines	32 199	34 049	31 050	36 541	33 840
Saudi Arabia	7 260	5 153	4 579	3 637	*4 000
Tajikistan	2 550	3 200	2 700	*2 700	*2 700
Thailand	-----	-----	-----	-----	320
Uzbekistan	81 700	81 000	89 000	87 000	*86 000
Vietnam	1 800	1 800	1 900	3 000	3 000
Australia	314 090	310 320	299 750	296 420	280 080
Fiji	4 671	3 758	3 881	3 842	4 907
New Zealand	11 359	7 731	8 577	9 880	9 850
Papua New Guinea	48 482	61 641	65 747	74 540	67 043
Solomon Islands	...	1 415	3 426	1 555	-----
World Total	2 420 000	2 460 000	2 520 000	2 550 000	2 550 000

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, Sierra Leone and Taiwan 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

Country	1997	1998	1999	2000	2001
Armenia					
Metal	79	1 123	3 435	2 806	5 475
Waste & scrap	2 527	201	(c) *600	(c) *300	(c) *1 000
Austria					
Metal	1 900	2 700	3 200	54 400	16 800
Waste & scrap	6 000	600	200	1 600	44 900
Belgium-Luxembourg					
Metal	29 500	32 100	3 800	5 100	3 200
Waste & scrap	£2 124 000	£1 019 000	...	£770 000	£1 365 000
Cyprus					
Metal (a)	...	53	1 892	10	28
Czech Republic					
Metal	2 489	2 806	3 486	3 573	4 431
Waste & scrap	4 287	8 680	1 255	811	1 373
Denmark					
Metal	2 861	982	1 212	1 297	854
Waste & scrap	2 690	2 602	5 764	7 028	7 789
Estonia					
Waste & scrap	(c) *6 700	(c) *13 100	(c) *1 000	4 389	8 044
Finland					
Metal	4 947	...	...	...	...
Waste & scrap	51 273	636	329	1 302	912
France					
Metal	42 600	24 600	24 200	17 300	31 900
Waste & scrap	66 900	56 300	39 400	47 100	77 800
Georgia					
Metal	(c) *100	(c) *1 000	----	----	2 258
Germany					
Metal	73 400	67 400	68 800	80 000	78 100
Waste & scrap	228 700	160 500	313 100	646 300	1 517 300
Greece					
Metal	613	117	1 467	352	219
Hungary					
Metal	740	805	1 181	1 092	1 110
Irish Republic					
Metal	£4 000	----	£7 000	£5 000	£35 000
Waste & scrap	£196 000	£984 000	£951 000	£2 900 000	£3 850 000
Italy					
Metal	13 734	23 276	32 614	138 479	31 299
Waste & scrap	...	568	357	8	78
Latvia					
Waste & scrap	504	172	55	133	137
Lithuania					
Waste & scrap	...	1	4 738	9 148	10 140
Netherlands					
Metal	13 182	7 759	8 066	3 592	...
Waste & scrap	...	104 500	35 900	37 100	31 500
Norway					
Metal	1 714	1 823	1 854	1 621	2 647
Waste & scrap	1 280	938	899	1 215	5 007
Poland					
Metal	1 451	201	419	389	114
Portugal					
Metal	1 207	851	16	...	...
Waste & scrap	1 329	127	16	...	...
Russia					
Metal	(c) *7 100	51 619	(c) *29 200	(c) *24 800	(c) *22 900
Slovakia					
Ore	1 261 000	825 000	1 207 000	968 000	...
Metal	...	(c) *100	148	147	133
Waste & scrap	...	...	...	155	494
Slovenia					
Metal	...	91	58	128	160
Waste & scrap	...	525	589	0	5 973
Spain					
Metal	36 177	103 927	3 472	4 053	2 046
Waste & scrap	86	1	2 983	36 797	14 030

Exports of Gold

kilograms

Country	1997	1998	1999	2000	2001
Sweden					
Metal	4 000	1 000	16 907	4 000	6 000
Waste & scrap	1 000	...	14 000	6 000	79 000
Switzerland					
Metal	1 677 130	1 541 530	1 225 858	1 266 758	1 266 166
Waste & scrap	44 849	63 818	60 162	43 817	27 274
Ukraine					
Metal (c)	...	...	*500	*300	*300
Waste & scrap (c)	*20 500	*27 600	*37 100	*60 000	*40 300
United Kingdom					
Metal	1 151 116	623 971	589 540	438 116	405 319
Waste & scrap	54 013	104 568	377 931	356 243	493 588
Yugoslavia, Federal Republic of					
Metal	1 000	2 254	617	----	430
Burkina Faso					
Metal	1 167	1 341	914	674	246
Burundi					
Metal	----	----	40 356	282	415
Central African Republic					
Metal	19	24	35	10	...
Ethiopia					
Metal	...	840	352	3 921	...
Ghana					
Metal	...	90 917	71 091	...	...
Waste & scrap	...	15 000	8 020	...	...
Guinea					
Metal	3 719	7 834	12 001	13 105	...
Kenya					
Metal	2 248	15 788	...	1 115	...
Mauritius					
Metal	...	96	45	43	340
Waste & scrap	...	59	388	135	489
Mozambique					
Metal	----	----	8	17	13
Namibia					
Metal	2 452	1 918	2 005	2 423	...
South Africa					
Metal	502 457	460 822	452 621	403 945	383 140
Sudan					
Metal	*5 000	5 388	*5 500	*6 000	...
Tanzania					
Metal	...	418	4 875	14 303	29 766
Togo					
Metal (a)	14 374	13 798	12 816	...	...
Uganda					
Metal	6 819	5 029	5 558	7 303	4 271
Zimbabwe					
Metal	£221 684 000	£95 159 000	£130 611 000	...	...
Canada					
Ores & concentrates (d)	6 010	5 656	4 450	4 429	3 968
Metal	218 346	225 273	186 430	202 590	162 885
Cuba					
Metal (c)	...	*800	*1 800	*50	...
Waste & scrap (c)	*1 400	*1 600	*2 400	*3 400	*700
Dominican Republic					
Metal	2 350	1 421	651	...	...
Mexico					
Metal	42 888	37 309	45 547	31 773	44 000
Waste & scrap	4 567	...	3 192	12 342	1 000
Nicaragua					
Metal	800	3 400	4 400	2 800	3 400
USA					
Metal, unrefined	87 550	91 598	86 748	105 483	...
Metal, refined	390 528	436 376	437 706	457 303	(f) 522 203
Metal, other	10 561	18 705	22 513	20 095	...
Waste & scrap	62 019	58 555	40 751	65 069	40 885

Exports of Gold

kilograms

Country	1997	1998	1999	2000	2001
Bolivia					
Metal	10 288	11 998	9 953	9 759	10 302
Brazil					
Metal	48 236	44 234	39 026	41 543	37 329
Chile					
Metal	54 989	30 050	27 616	34 650	35 447
Colombia					
Ore	462 656	397 788	...	...	...
Guyana					
Metal	11 076	12 970	12 183	13 313	13 977
Peru					
Metal	46 271	97 982	131 511	126 989	133 574
Uruguay					
Metal	2 400	3 600	3 400	3 900	3 400
China					
Metal (c)	*1 700	*5 100	*1 300	*4 400	*2 900
Hong Kong					
Metal	6 890	50 038	39 976	54 747	90 200
of which, re-exports	6 890	24 363	10 584	21 376	31 046
Waste & scrap	8 043	44 504	18 464	38 024	43 035
of which, re-exports	8 043	43 067	5 574	36 631	35 376
Indonesia					
Metal	26 905	49 834	42 608	67 604	65 144
Waste & scrap	1 040	...	920	308	4 581
Japan					
Metal	51 881	71 605	62 391	96 048	70 385
Waste & scrap	11 254	4 442	25	529	48
Kazakhstan					
Metal	8 489	16 200	24 300	20 132	15 900
Waste & scrap (c)	...	...	*300	*6 900	*3 100
Korea, Dem. P.R. of					
Metal (c)	...	*1 300	*1 400	*100	*700
Korea, Republic of					
Metal	577 064	695 861	317 763	161 025	120 877
Waste & scrap	108	59 197	334	1 778	21 053
Kuwait					
Metal	...	...	459	42 000	...
Kyrgyzstan					
Metal (c)	*2 500	*20 400	*14 400	*12 000	*10 600
Lebanon					
Metal	...	2 651	5 535	6 704	8 126
Malaysia					
Metal	£87 700 000	£31 000 000	£28 600 000	£25 500 000	£32 400 000
Waste & scrap	...	101 464	60 408	75 865	340 348
Oman					
Metal	2 828	475	910	918	867
Philippines					
Ores & concentrates (b)	5 652	4 499	...	...	...
Metal	...	73 190	56 368	48 177	...
Saudi Arabia					
Metal	...	9 348	417 059	425 527	...
Waste & scrap	...	208	5 206	...	...
Singapore					
Metal	42 243	140 989	41 254	35 884	60 875
of which, re-exports	26 994	118 614	19 636	10 308	36 277
Waste & scrap	8 481	6 103	4 128	8 867	2 733
Taiwan					
Metal	3 056	2 678	4 200	4 912	4 312
Waste & scrap	6 113	12 592	58	4	20
Thailand					
Metal	42 828	44 409	18 777	7 382	4 901
Waste & scrap	5 930	78 983	38 515	3 350	5 360
Uzbekistan					
Metal (c)	*5 800	*6 700	*12 400	*18 100	*15 500

Exports of Gold

kilograms

Country	1997	1998	1999	2000	2001
Australia					
Metal	340 785	504 508	348 033	296 377	303 704
Waste & scrap	£1 285 000	£3 276 000	£113 000	£364 000	...
Fiji					
Metal	4 671	3 885	3 881	3 842	4 907
New Zealand					
Metal	39 750	30 224	28 680	54 904	36 426
Papua New Guinea					
Metal (e)	45 418	64 106	64 694	74 540	68 146

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
- (f) Metal; all forms

Imports of Gold

kilograms

Country	1997	1998	1999	2000	2001
Armenia					
Metal	154	100	557	1 339	2 164
Austria					
Metal	41 500	53 200	40 700	25 700	21 300
Waste & scrap	1 000	600	1 600	1 400	400
Belarus					
Metal	(d) *300	(d) *100	(d) *300	1 489	-----
Belgium-Luxembourg					
Metal	10 700	13 000	3 900	800	2 300
Waste & scrap	£21 216 000	£14 616 000	...	£32 277 000	...
Croatia					
Metal	£700 000	£598 000	£136 000	£58 000	...
Cyprus					
Metal	4 169	2 031	1 672	2 037	1 223
Czech Republic					
Metal	2 346	2 415	2 244	1 845	1 402
Waste & scrap	...	190	257	360	392
Denmark					
Metal	17 933	4 429	1 237	2 729	911
Waste & scrap	321	1 017	1 951	1 578	842
Estonia					
Metal	182	953	105	110	...
Finland					
Metal	1 060	1 577	1 408	1 294	1 677
France					
Metal	54 200	49 700	55 000	44 200	42 500
Waste & scrap	16 600	2 800	1 900	31 100	335 000
Germany					
Metal	91 500	141 200	83 700	60 400	71 600
Waste & scrap	202 000	449 300	465 400	1 309 872	1 583 000
Greece					
Metal	1 883	14 827	5 740	...	757
Waste & scrap	7	3 698	1 633	21 400	5 149
Hungary					
Metal	259	243	395	283	194
Iceland					
Metal	...	356	200	400	300
Irish Republic					
Metal	£7 360 000	£7 921 000	£7 250 000	£9 094 000	£8 002 196
Waste & scrap	...	311	46 090	12 435	6 158
Italy					
Metal	407 273	440 713	405 952	415 753	398 542
Waste & scrap	408	424	368	9 571	15 694
Lithuania					
Metal	£103 000	£187 000	£116 000	£20 000	...
Macedonia					
Metal	545	323	82	144	38
Malta					
Metal	£14 700 000	£12 600 000	£1 868 000	...	...
Netherlands					
Metal	18 895	15 542	14 549	6 574	19 215
Waste & scrap	...	1 600	6 800	62 000	1 000
Norway					
Metal	1 750	2 183	2 111	2 197	3 501
Waste & scrap	525	301	67	322	1 115
Poland					
Metal	440	55	33	413	985
Portugal					
Metal	9 736	6 442	174	2 551	4 791
Slovakia					
Metal	(d) *600	3 376	722	495	545
Slovenia					
Metal	(d) *200	1 076	1 322	1 399	1 539
Spain					
Metal	139 445	84 963	1 399	22 968	30 100
Waste & scrap	1 862	262	528	742	3 182

Imports of Gold

kilograms

Country	1997	1998	1999	2000	2001
Sweden					
Metal	£6 525 000	£4 407 000	£3 632 000	£10 355 000	£7 671 705
Waste & scrap	£30 000	£1 000	...	£76 000	4 000
Switzerland					
Metal	1 592 971	1 551 295	1 402 778	1 280 545	1 360 081
Waste & scrap	117 973	182 026	28 426	42 648	45 122
Ukraine					
Metal (d)	*900	*600	*1 300	*1 100	*1 100
United Kingdom					
Metal	506 211	1 190 371	828 382	971 705	972 188
Waste & scrap	152 707	217 272	161 199	318 705	167 513
Egypt					
Metal	6 663	6 765	...	...	...
Mauritius					
Metal	...	3 514	964	410	557
South Africa					
Metal	240	361	231	402	121
Tunisia					
Metal	1 527	1 835	2 642	2 000	...
Canada					
Ores & concentrates (b)	3 336	4 436	6 744	6 042	7 664
Metal	83 373	113 913	120 772	43 965	39 072
USA					
Ore (c)	3 445	3 441	689	647	...
Metal, unrefined	13 730	17 260	23 649	38 920	31 100
Metal, refined	192 299	256 490	195 612	183 898	161 000
Metal, other	70 310	107 460	107 386	67 233	50 600
Waste & scrap	14 055	16 727	30 379	30 210	26 400
Bolivia					
Metal	3 916	7 144	3 643	2 173	959
Brazil					
Metal	379	174	...	1 980	...
Abu Dhabi					
Metal	...	1 464	57 828	...	...
China					
Metal	(d) *2 000	(d) *8 500	(d) *16 700	(d) *7 300	...
Hong Kong					
Metal	432 931	231 139	119 460	128 127	88 960
Waste & scrap	4 678	11 808	30 075	40 275	54 002
India					
Metal (a)	265 457	455 406	471 573	471 207	...
Indonesia					
Metal	1 489	226	13 139	3 556	79 613
Waste & scrap	869	...	3 218	----	183
Israel					
Metal	£80 131 000	£75 195 000	£55 853 000	£33 251 000	...
Waste & scrap	£1 113 000	£1 143 000	£415 000	£549 000	...
Japan					
Metal	119 473	86 017	108 393	72 951	43 231
Waste & scrap	138 396	150 992	145 671	197 837	238 394
Jordan					
Metal	5 675	3 574	2 845	2 640	4 281
Kazakhstan					
Metal	...	900	1 800	700	1 000
Korea, Republic of					
Metal	604 881	459 244	363 757	242 757	184 821
Waste & scrap	...	7	46	39 140	54 124
Kuwait					
Metal	...	...	12 284	9 921	...
Lebanon					
Metal	...	43 379	45 209	41 791	28 862
Malaysia					
Metal	148 208	50 812	...	101 157	112 422
Oman					
Metal	14 072	8 858	6 518	5 321	8 091

Imports of Gold

kilograms

Country	1997	1998	1999	2000	2001
Pakistan					
Metal	£251 600 000	£122 900 000	£206 500 000	£151 700 000	...
Philippines					
Metal	3 167	10 129	18 229	27 108	13 745
Saudi Arabia					
Metal	194 416	167 410	148 796	180 854	...
Singapore					
Metal	71 860	28 201	32 572	45 261	51 889
Waste & scrap	2 394	6 509	7 651	2 243	4 668
Sri Lanka					
Metal	27 394	29 329	...	...	...
Taiwan					
Metal	103 053	64 929	83 049	83 253	51 903
Thailand					
Metal	203 057	135 480	559 357	1 216 233	282 708
Australia					
Metal	£361 214 000	£1 200 405 000	£797 620 000	£631 000 000	£771 000 000
Waste & scrap	£34 000	£5 569 000	£2 076 000	£600 000	...
New Zealand					
Metal	1 385	178	1 303	13 620	971

Note(s) :-

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

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

Production of Graphite

tonnes

Country	1997	1998	1999	2000	2001
Austria (a)	12 582	10 738	2 635	669	116
Czech Republic	25 000	28 000	22 000	23 000	17 000
Germany	1 030	270	3 891	3 414	...
Norway	7 713	8 271	7 339	8 392	9 070
Romania	2 563	1 951	1 041	1 251	1 176
Russia	14 275	...	15 670	20 125	16 563
Sweden	1 581	3 277	4 504	5 602	1 035
Turkey	*15 000	*15 000	*15 000	*15 000	*15 000
Ukraine	4 289	5 104	7 461	7 431	*7 500
Madagascar	15 397	18 690	14 516	...	...
Mozambique	5 125	5 889	4 007	----	----
Zimbabwe	12 779	13 806	12 321	11 838	12 117
Canada	*25 000	*25 000	*25 000	*25 000	*20 000
Mexico	47 982	43 461	27 781	30 330	21 442
Brazil (b)	41 444	61 369	53 503	71 208	*72 000
China	1 680 400	1 621 000	320 000	445 700	435 443
India (c)	111 518	135 668	108 826	124 790	105 375
Korea, Dem. P.R. of	*40 000	*35 000	*33 000	*30 000	*25 000
Korea, Republic of	83	62	62	65	238
Sri Lanka	5 400	5 910	4 592	5 902	6 585
World Total	2 070 000	2 050 000	680 000	830 000	780 000

Note(s):

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

- (a) Crude
(b) Including beneficiated and directly shipped material
(c) Years ended 31 March following that stated

Exports of Graphite

Country	1997	1998	1999	2000	2001
Austria	4 063	3 902	3 463	3 655	3 631
Belgium-Luxembourg	113	1 494	1 678	4 848	4 878
Czech Republic	2 831	2 670	2 501	2 712	2 621
France	801	349	652	614	178
Germany	9 108	8 843	8 549	12 120	10 334
Italy	129	234	91	373	199
Netherlands	536	889	937	1 798	4 877
Norway	*7 000	*7 000	*7 000	9 002	...
Russia	742	613	997	1 570	(a) *1 300
Spain	59	36	4 289	13 134	14 299
Sweden	515	2 311	3 262	4 042	2 164
Ukraine	2 328	1 905	2 259	3 986	...
United Kingdom	1 871	2 206	1 973	2 429	2 635
Madagascar	13 975	13 087	9 781	13 669	...
Mozambique	4 730	5 558	4 083	----	----
South Africa (a)	*1 700	*1 200	*2 400	...	...
Zimbabwe	10 997	12 125	8 974	11 381	----
Canada	26 148	20 617	18 763	20 634	12 977
Mexico	16 651	16 974	13 774	15 889	16 973
USA	41 404	28 769	30 966	26 060	27 375
Brazil	12 614	13 521	11 308	17 993	12 788
China	170 022	180 752	205 891	333 440	374 116
Hong Kong (c)	108	151	69	97	99
India (b)	265	556	1 107	3 937	...
Japan	3 027	1 949	1 894	1 707	1 762
Korea, Dem. P.R. of (a)	*5 900	*4 400	*3 800	*3 500	*3 700
Korea, Republic of	2 019	1 255	1 430	1 380	1 263
Sri Lanka	6 094	5 136	5 344	*5 000	...

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	1997	1998	1999	2000	2001
Austria	9 616	9 223	7 670	7 611	5 521
Belarus	*200	211	337	830	1 221
Belgium-Luxembourg	2 428	5 167	5 836	9 847	9 948
Czech Republic	634	839	735	975	1 518
Denmark	452	381	422	613	707
Finland	344	543	549	649	411
France	3 756	1 702	25 371	53 643	24 440
Germany	39 272	39 190	38 228	45 517	49 720
Greece	674	564	119	60	54
Hungary	544	612	431	571	474
Irish Republic	705	221	430	342	108
Italy	9 606	11 407	9 462	12 241	11 319
Netherlands	6 566	4 296	2 611	3 622	5 636
Norway	54	77	3	318	347
Poland	2 187	3 021	2 586	3 727	2 856
Portugal	229	378	608	678	1 297
Russia	1 561	948	1 418	6 316	...
Slovakia	2 756	2 580	2 549	5 199	1 992
Spain	7 005	8 016	6 321	8 296	7 675
Sweden	578	489	707	1 062	1 026
Switzerland	674	523	748	445	538
Turkey	4 709	4 206	5 067	6 250	6 431
United Kingdom	23 740	27 885	21 204	26 088	22 482
Yugoslavia, Federal Republic of	639	477	210	711	206
Egypt	787	551	1 906	...	378
South Africa	2 155	2 055	1 928	1 818	1 940
Canada	8 489	13 496	7 634	5 775	8 819
Mexico	4 333	4 031	3 182	3 449	1 691
USA	58 111	61 578	55 790	60 804	52 148
Argentina	864	829	607	968	1 139
Venezuela	930	547	699	1 356	1 767
China	801	1 557	1 239	740	2 844
Hong Kong	117	43	57	107	92
India (c)	1 081	694	979	987	...
Indonesia	1 832	1 875	1 950	7 699	2 416
Iran (a)	458	1 161	1 729	784	...
Japan	85 249	76 205	111 615	143 906	143 540
Korea, Republic of	46 887	30 722	37 222	53 801	49 478
Malaysia	2 100	6 700	2 500	445	13 488
Pakistan (b)	2 942	2 030	2 302	2 761	...
Philippines	176	188	242	128	207
Saudi Arabia	1 410	843	5 529	12 671	...
Singapore	1 358	765	840	1 294	486
Taiwan	8 744	9 225	9 816	9 398	8 886
Thailand	1 524	747	615	1 034	779
Australia	1 059	1 792	1 803	4 741	7 894
New Zealand	331	227	168	203	102

Note(s) :-

(1) This table excludes synthetic graphite

(a) Years ended 20 March following that stated

(b) Years ended 30 June of that stated

(c) Years ended 31 March following that stated

Production of Gypsum

Country	1997	1998	1999	2000	2001
Armenia	*10 000	...	11 652	9 630	12 811
Austria					
Gypsum	894 398	872 468	898 830	825 077	790 478
Anhydrite	79 528	88 932	100 374	120 967	138 745
Azerbaijan	2 000	3 300	...	...	...
Bosnia & Herzegovina	*30 000	*30 000	*30 000	49 492	59 728
Bulgaria	156 000	183 929	148 748	169 600	167 000
Croatia	102 470	104 660	137 991	150 765	130 861
Cyprus	222 000	270 000	197 000	147 000	137 000
Czech Republic	241 000	222 000	136 000	82 000	24 000
France	4 500 000	*4 500 000	*4 500 000	*4 500 000	*4 500 000
Georgia	3 700	5 700	6 414	4 082	15 408
Germany (a)	2 548 000	2 459 000	2 259 000	2 344 000	1 966 000
Greece	662 646	554 998	686 416	801 025	808 890
Hungary (a)	192 000	185 000	203 000	251 000	231 000
Irish Republic	477 000	*500 000	*500 000	*500 000	*500 000
Italy	1 215 767	1 237 522	1 382 709	1 523 879	*1 500 000
Latvia	116 916	119 096	*100 000	*100 000	*100 000
Macedonia	25 000	*25 000	*25 000	*25 000	*20 000
Moldova	14 400	19 100	18 500	31 400	55 200
Poland					
Gypsum	899 958	862 820	925 707	998 628	793 684
Anhydrite	135 000	166 100	237 000	284 683	300 356
Portugal	566 517	562 380	569 519	698 673	*700 000
Romania	79 000	75 000	*75 000	*75 000	*75 000
Russia	559 200	609 400	867 200	1 013 000	1 189 000
Slovakia (a)	116 000	128 000	117 000	108 000	168 800
Spain	7 741 713	9 058 212	9 213 589	9 929 478	*10 920 000
Switzerland	*300 000	*300 000	*300 000	*300 000	*300 000
Turkey	413 802	351 557	242 960	302 552	243 822
Ukraine	...	68 400	96 500	119 000	...
United Kingdom	*2 000 000	*2 000 000	*1 800 000	*1 500 000	*1 700 000
Yugoslavia, Federal Republic of	32 124	27 778	33 962	46 651	58 045
Algeria	*275 000	*275 000	1 316 000	1 341 000	*1 350 000
Egypt (b)	784 836	741 192	...	...	...
Ethiopia (d)	40 072	37 325	35 983	46 798	50 500
Kenya	*12 000	*11 000	*10 000	8 416	8 200
Libya	*125 000	*150 000	*150 000	*175 000	*150 000
Mauritania	*80 000	*100 000	*100 000	*100 000	*100 000
Morocco	*450 000	*450 000	*450 000	*450 000	*450 000
Niger	2 500	2 559	1 502	1 474	3 205
Nigeria	432 559	...	...	...	...
Somalia	*1 000	*1 500	*1 500	*1 500	*1 500
South Africa	396 929	485 749	505 404	413 105	382 830
Sudan	*4 000	*3 000	*4 000	*4 000	*4 000
Tanzania	46 320	59 066	21 195	60 000	72 000
Tunisia	*100 000	*100 000	*100 000	*100 000	*100 000
Canada					
Gypsum	8 937 000	8 827 000	9 723 000	9 054 000	8 484 000
Anhydrite	180 100	139 800	163 325	178 145	111 617
Cuba	133 400	134 300	110 400	*110 000	*110 000
Dominican Republic	115 261	80 016	81 249	110 044	175 553
El Salvador	*5 500	*6 000	*6 000	*6 000	*6 000
Guatemala	30 000	52 216	110 173	212 109	58 153
Honduras	*28 000	*30 000	*30 000	*30 000	*30 000
Jamaica	263 662	154 451	235 990	330 441	320 323
Mexico	5 869 175	5 370 701	5 188 969	5 653 901	6 237 056
Nicaragua	15 820	22 660	26 880	28 170	34 370
USA	18 600 000	19 000 000	22 400 000	19 500 000	16 300 000
Argentina	729 495	650 356	571 344	*514 000	*500 000
Brazil (e)	1 352 476	1 283 955	1 496 936	1 541 109	1 450 000
Chile	398 354	780 676	886 294	375 847	516 876
Colombia	564 681	*560 000	*560 000	*560 000	*560 000
Ecuador	1 510	1 672	1 456	1 043	834

Production of Gypsum

tonnes

Country	1997	1998	1999	2000	2001
Paraguay	*5 000	*5 000	*4 000	4 400	4 300
Peru	63 640	78 656	75 636	52 346	20 966
Venezuela	80 000	72 000	42 000	25 000	*50 000
Afghanistan	*3 000	*3 000	*3 000	*3 000	*3 000
Bhutan	*50 000	*53 000	*54 000	*54 000	*55 000
China	*9 100 000	*6 800 000	*6 700 000	*6 800 000	*6 800 000
India (f)	2 195 423	2 267 240	3 247 009	2 644 415	2 887 834
Indonesia	----	405	5 707	5 000	6 000
Iran (c)	8 281 098	8 604 744	8 356 792	*9 000 000	*9 000 000
Israel	121 000	56 000	140 000	130 000	133 000
Jordan	114 500	178 364	244 920	157 869	...
Laos	144 306	104 250	130 000	137 500	121 219
Lebanon	*2 000	*2 000	*2 000	*2 000	*16 000
Mongolia	*25 000	*25 000	*25 000	*25 000	*25 000
Myanmar (f)	40 642	40 234	43 102	52 573	*76 000
Oman	122 664	165 000	180 129	131 909	30 600
Pakistan (b)	464 942	243 978	244 538	334 441	391 728
Saudi Arabia	380 000	372 132	400 761	407 047	*400 000
Syria	330 000	325 000	394 000	333 000	*345 000
Taiwan	2 317	2 221	1 747	1 884	1 006
Tajikistan	1 000	...	...	...	...
Thailand					
Gypsum	8 557 584	4 333 804	5 005 173	5 830 326	6 190 814
Anhydrite	292 441	162 057	203 850	255 472	310 720
Turkmenistan	3 700	3 200	1 600	2 100	2 500
Uzbekistan	80 000	*80 000	*80 000	*80 000	*80 000
Yemen, Republic of	99 000	102 000	100 000	*100 000	...
Australia (b)	2 392 600	3 052 300	3 465 300	3 766 900	*3 400 000
World Total	97 300 000	92 700 000	100 400 000	99 400 000	97 100 000

Note(s):

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

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

Exports of Gypsum

Country	1997	1998	1999	2000	2001
Austria					
Crude	57 692	55 761	61 727	51 999	54 034
Calcined	90 321	88 194	102 614	87 510	72 827
Azerbaijan	...	...	2 738	1 310	...
Belarus					
Crude & calcined	...	895	11 900	2 274	9 784
Belgium-Luxembourg					
Crude	43 879	73 097	67 089	76 246	104 842
Calcined	6 751	3 567	4 846	4 859	3 998
Croatia					
Crude & calcined	...	5 542	8 830	23 301	20 032
Cyprus					
Crude & calcined	215 634	270 271	201 695	143 474	209 179
Czech Republic					
Crude	59 769	68 351	107 478	68 115	39 414
Calcined	5 855	5 570	8 426	11 083	6 674
Denmark					
Crude	60 411	58 092	15 624	23 909	86 764
Calcined	141 826	75 410	36 476	353 548	141 866
Finland					
Crude & calcined	3 492	3 721	3 485	4 177	4 710
France					
Crude	459 164	453 699	532 232	463 092	478 877
Calcined	422 105	405 544	291 434	276 847	282 629
Germany					
Crude	172 589	169 238	134 270	128 317	123 299
Calcined	680 859	828 936	636 192	693 861	705 776
Greece					
Crude	22 621	24 414	41 094	111 045	56 967
Calcined	944	4 500	4 568	470	291
Hungary					
Crude & calcined	535	758	290	412	270
Irish Republic					
Crude	528	510	566	896	820
Calcined	38 925	30 307	30 676	35 199	37 919
Italy					
Crude	60 425	73 382	59 426	51 791	47 185
Calcined	23 548	49 598	107 833	113 041	74 209
Latvia	103 751	79 505	59 416	37 150	35 302
Macedonia					
Crude & calcined	7 233	7 771	6 020	8 967	9 221
Moldova					
Crude & calcined	...	78 802	130 403	...	248 117
Netherlands					
Crude	29 677	20 580	6 725	537	22 169
Calcined	2 363	3 339	3 971	2 885	2 350
Norway					
Crude & calcined	...	105	7 254	17 358	22 305
Poland					
Crude & calcined	94 700	91 100	78 600	79 661	21 449
Romania	6 565	5 638	4 252	5 191	6 115
Russia					
Crude & calcined	1 044	1 325	4 674	7 312	...
Slovakia					
Crude & calcined	28 400	29 100	10 900	3 666	69
Spain					
Crude	2 920 179	3 515 903	2 939 001	3 080 386	2 590 879
Calcined	309 283	295 504	415 179	500 097	460 778
Sweden					
Crude & calcined	563	885	3 039	5 239	5 692
Switzerland					
Crude	16 816	14 930	25 593	24 560	25 122
Calcined	2 081	4 301	5 328	2 830	1 738
Turkey					
Crude & calcined	32 755	36 608	45 319	92 533	156 907
United Kingdom					
Crude	10 239	9 322	6 746	9 709	3 049
Calcined	25 113	24 352	73 865	31 474	29 474

Exports of Gypsum

tonnes

Country	1997	1998	1999	2000	2001
Egypt					
Crude & calcined	57 865	32 003	14 508	...	4 380
Kenya	...	38 174	28 469	41 403	...
Morocco					
Crude	225 089	192 017	157 044	214 901	...
Calcined	2 794	2 933	4 715	5 487	...
Tanzania	...	1 267	1 189	2 103	1 752
Togo (c)	4 442	7 835	...	867	...
Tunisia					
Crude & calcined	19 829	17 566	17 328	24 242	...
Canada					
Crude	6 053 283	5 660 091	6 363 488	6 374 386	5 655 457
Calcined	1 350	1 530	1 835	1 009	2 265
Guatemala	15 474	33 001	28 104	44 078	59 152
Jamaica	160 972	166 038	156 947	286 672	285 032
Mexico	3 675 870	3 463 116	3 117 669	1 185 126	659 688
USA					
Crude	251 780	176 471	146 311	168 121	294 351
Calcined	237 885	211 499	588 606	243 751	261 953
Argentina	34 869	29 189	35 432	28 857	24 274
Colombia	3 208	...	...	6 236	...
Venezuela	4 542	5 722	14 689	4 306	2 028
China					
Crude	120 608	114 068	110 362	90 767	102 632
Calcined	7 898	10 850	10 830	10 757	11 578
Hong Kong (c)	47 654	18 051	140 178	156 163	...
India					
Crude & calcined (b)	20 198	38 734	31 765	37 553	...
Indonesia					
Crude	----	373	3 541	1 012	36
Calcined	...	...	13 208	50 107	10 020
Iran (a)	190 760	107 580	86 610	...	...
Japan					
Crude	1 727	1 212	1 279	848	836
Calcined	3 794	3 432	2 785	3 276	3 712
Kazakhstan	...	31 609	15 413	16 893	24 690
Korea, Republic of					
Crude & calcined	7 436	7 096	2 110	4 393	2 014
Kyrgyzstan					
Crude & calcined	...	105	1 088	75 022	25 010
Laos	146 230	89 298	93 039	131 517	107 714
Oman					
Crude	61 765	6 018	8 124	3 477	3 007
Philippines					
Crude	25 812	5 005	...	...	...
Calcined	29 322	5 506	5 487	133	...
Saudi Arabia					
Crude & calcined	62 762	56 141	53 825	40 272	...
Singapore					
Crude & calcined	12 740	17 727	6 138	12 503	7 488
of which, re-exports	2 475	800	739	459	5 466
Syria	18 823	11 893	26 371	...	...
Taiwan					
Crude	5 015	4 829	4 004	3 927	2 538
Calcined	5 373	2 242	1 718	900	821
Thailand					
Crude	6 772 085	3 973 203	4 260 735	4 165 646	4 980 730
Calcined	100 004	70 173	72 698	93 111	80 488

Exports of Gypsum

Country	1997	1998	1999	2000	2001
Australia					
Crude	303 417	764 832	1 133 723	827 358	883 328
Calcined	15 136	11 315	7 296	4 129	830

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	1997	1998	1999	2000	2001
Albania					
Crude & calcined	2 343	314	494	3 974	...
Austria					
Crude	22 130	20 698	21 638	29 926	16 701
Calcined	48 817	43 945	47 614	31 735	41 988
Azerbaijan					
Crude & calcined	...	27 206	16 147	14 881	10 822
Belarus					
Crude & calcined	...	93 572	151 694	122 874	72 714
Belgium-Luxembourg					
Crude	588 067	575 917	767 694	800 514	701 760
Calcined	365 400	381 601	338 404	350 278	329 502
Croatia					
Crude & calcined	35 642	37 026	24 018	20 322	45 679
Czech Republic					
Crude	27 283	34 531	25 760	8 628	9 523
Calcined	25 795	29 939	23 407	22 307	23 410
Denmark					
Crude	241 900	269 006	163 438	283 266	256 834
Calcined	6 567	10 061	12 558	7 080	8 952
Estonia					
Crude & calcined	11 419	9 484	15 763	15 852	13 236
Finland					
Crude	210 869	263 557	277 541	281 183	292 833
Calcined	7 898	6 344	19 871	31 374	7 725
France					
Crude	177 004	245 432	264 504	200 529	205 820
Calcined	29 439	35 933	41 167	47 813	44 697
Georgia					
Crude & calcined	...	...	3 731	3 819	...
Germany					
Crude	159 545	180 628	273 764	208 536	225 631
Calcined	73 950	71 634	50 807	46 851	34 767
Greece					
Crude	10 033	1 229	229	1 408	504
Calcined	1 736	1 963	2 753	23 025	26 386
Hungary					
Crude	62 476	66 295	50 147	51 481	48 842
Iceland					
Crude & calcined	6 155	8 042	8 974	9 273	8 146
Irish Republic					
Crude	6 892	6 814	7 266	8 639	8 615
Calcined	3 886	1 678	571	561	444
Italy					
Crude	546	715	3 765	2 304	2 479
Calcined	19 402	18 731	20 436	25 943	23 487
Latvia					
Crude & calcined	...	7 540	2 991	2 852	3 459
Lithuania					
Crude & calcined	40 939	30 365	28 667	30 701	38 999
Macedonia					
Crude & calcined	164	776	1 622	532	642
Netherlands					
Crude	230 907	182 423	196 156	175 167	222 337
Calcined	328 365	335 844	419 469	407 007	274 769
Norway					
Crude	29 482	28 015	25 521	23 851	36 175
Calcined	332 441	375 899	354 670	332 034	308 328
Poland					
Crude	5 900	55 000	65 988	78 372	22 813
Calcined	81 700	119 500	180 149	127 071	125 354
Portugal					
Crude	39 636	42 798	44 279	35 966	40 509
Calcined	169 780	233 205	310 987	374 538	374 719
Romania					
Crude & calcined	4 573	4 982	10 109	36 947	109 719
Russia					
Crude & calcined	58 877	33 317	17 676	32 712	...
Slovakia					
Crude & calcined	108 726	88 800	94 824	102 728	40 702
Slovenia					
Crude & calcined	69 099	73 684	75 474	77 110	70 509

Imports of Gypsum

Country	1997	1998	1999	2000	2001
Spain					
Crude	...	6 021	121	43 375	47 567
Calcined	46 213	48 781	54 677	22 248	8 143
Sweden					
Crude	185 952	321 316	214 236	296 067	177 264
Calcined	92 476	57 108	137 657	59 347	87 144
Switzerland					
Crude	57 448	65 623	60 400	67 960	65 203
Calcined	67 896	71 705	69 844	71 517	66 156
Turkey	39 120	30 198	73 521	83 549	66 472
United Kingdom					
Crude	521 455	328 175	391 447	492 422	755 112
Calcined	42 859	33 227	33 818	62 728	31 481
Burkina Faso	8 121	9 876	11 682	5 343	...
Cameroon	...	27 613	53 856	46 803	44 602
Egypt					
Crude & calcined	6 494	6 660	8 111	...	1 876
Ghana					
Crude & calcined	1 524	25 470	6 726	43 649	46 916
Kenya	...	24 515	22 332	8 334	...
Morocco					
Crude & calcined	4 753	1 008	1 183	1 015	...
Nigeria					
Crude & calcined	3 533	3 815	4 592	8 439	...
Senegal					
Crude & calcined	...	44 799	59 227	55 405	130 582
South Africa					
Crude & calcined	8 767	9 056	7 712	8 235	7 163
Tanzania	143	1 267	1 188	3 252	770
Togo					
Crude & calcined	38 306	40 056	58 933	28 886	...
Tunisia					
Crude & calcined	1 305	1 442	2 026	1 864	...
Uganda	...	28 448	17 024	5 714	11 584
Canada					
Crude	207 538	96 590	121 047	154 604	243 158
Calcined	31 775	38 463	28 876	22 245	37 570
Costa Rica					
Crude & calcined	36 482	77 994	57 990	59 631	106 723
El Salvador					
Crude & calcined	16 381	33 439	25 894	44 014	39 644
Guadeloupe	10 272	12 622	18 962	10 757	17 381
Martinique	10 143	7 450	18 398	10 171	17 775
Mexico					
Crude	4 942	4 694	5 623	5 679	5 248
Calcined	21 467	23 695	28 975	21 468	17 315
Panama	16 388	11 301	20 640	13 391	33 813
Trinidad & Tobago					
Crude & calcined	2 941	6 250	...	459	6 156
USA					
Crude	8 414 117	8 678 644	9 379 401	9 170 778	8 266 655
Ground & calcined	9 523	11 384	14 184	15 560	9 366
Colombia	219 546	217 046	104 396	165 651	161 100
Ecuador	71 176	116 229	37 041	64 698	125 578
French Guiana					
Crude & calcined	1 412	2 660	2 130	2 150	3 121
Paraguay					
Crude & calcined	18 801	17 523	25 402	17 746	15 576
Uruguay					
Crude & ground	49 422	51 768	54 255	25 904	49 353
Venezuela	194 853	230 862	231 217	159 627	231 681

Imports of Gypsum

tonnes

Country	1997	1998	1999	2000	2001
Abu Dhabi	45 311	51 254	58 893	...	...
Bahrain	6 651	5 710	8 512	9 340	7 625
China					
Crude	4 416	4 398	21 243	35 153	6 041
Calcined	16 299	15 085	20 404	27 335	18 064
Dubai					
Crude & calcined	4 104	3 198	4 031	...	...
Hong Kong					
Crude	70 968	10 969	26 752	26 062	10 026
Calcined	19 536	16 116	12 292	16 960	16 144
India					
Crude & calcined (a)	16 253	14 629	10 126	20 136	...
Indonesia					
Crude	513 604	582 127	507 791	546 721	1 036 124
Calcined	30 228	20 454	16 892	31 999	38 400
Japan					
Crude	4 814 767	2 928 552	2 539 371	2 487 726	1 973 409
Calcined	8 195	6 151	6 741	7 673	9 816
Jordan	8 097	7 085	4 858	3 654	1 644
Kazakhstan					
Crude & calcined	...	3 446	4 156	10 552	...
Korea, Republic of					
Crude	930 201	515 582	531 892	676 503	682 821
Calcined	3 721	2 644	2 165	12 187	10 106
Kuwait					
Crude	189 795	...	...	125 686	...
Kyrgyzstan					
Crude & calcined	*29 000	28 762	15 814	13 875	14 734
Lebanon					
Crude & calcined	...	100 965	110 175	116 823	103 053
Macao	27 237	12 476	25 629	9 764	...
Malaysia					
Crude & calcined	712 403	863 087	423 559	567 465	...
Oman	2 201	2 581	7 131	5 611	9 179
Philippines					
Crude	280 900	91 735	260 530	229 046	129 766
Calcined	12 063	10 726	13 843	12 547	11 714
Saudi Arabia					
Crude & calcined	39 002	32 133	33 904	151 123	...
Singapore					
Crude & calcined	110 256	128 390	83 880	61 378	31 929
Sri Lanka	52 318	63 670	44 306	...	...
Taiwan					
Crude	810 556	600 068	498 394	471 174	332 209
Calcined	6 606	4 029	5 172	4 820	4 861
Thailand					
Crude	79 150	319	243	141	141
Calcined	3 100	1 607	1 584	2 564	2 248
Australia					
Crude	11 928	2 877	15 640	7 372	50 142
Calcined	2 153	2 471	4 353	3 180	4 553
New Caledonia					
Crude & calcined	6 246	5 267	5 805	5 280	5 364
New Zealand					
Crude & calcined	42 394	365 361	211 153	163 451	221 299

Note(s) :-

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

(a) Years ended 31 March following that stated

Production of Iodine

Country	1997	1998	1999	2000	2001
Azerbaijan	5 000	...	...	*2 000	...
Russia	73 000	168 000	25 000	24 000	46 000
USA	1 320 000	1 490 000	1 620 000	1 470 000	*1 700 000
Chile (a)	8 832 344	9 851 673	8 636 545	9 839 348	9 449 000
China	*500 000	*500 000	*500 000	*500 000	...
Indonesia	83 000	65 000	74 000	*75 000	...
Japan	6 036 000	6 142 000	6 152 000	*6 100 000	...
Turkmenistan	88 000	137 000	153 000	291 000	333 000
Uzbekistan	----	*1 000	*2 000	*2 000	...
World Total	16 900 000	18 400 000	17 200 000	18 300 000	18 200 000

Note(s):

(a) Exports

Exports of Iodine

kilograms

Country	1997	1998	1999	2000	2001
Azerbaijan	7 000	...	...	2 000	...
Belgium-Luxembourg	1 558 600	1 632 000	1 707 500	1 570 900	1 908 400
Czech Republic	1 000	8 000	2 000	1 000	...
France	73 900	43 700	30 200	27 100	74 900
Germany	324 200	539 600	568 300	855 900	570 400
Irish Republic	2 000	13 613	80	27 742	2 500
Italy	45 884	17 201	4 335	4 694	2 892
Lithuania	2 000	2 000	-----	2 000	13 000
Norway	23	1 217	17 607	19 244	64
Russia	21 000	69 000	85 000	101 000	...
Spain	19 037	41 526	6 938	74 721	300 485
Sweden	...	-----	1 000	5 000	1 000
Turkey	...	...	41 833	5 540	2 307
United Kingdom	184 176	138 391	148 093	385 000	507 363
Canada	56 717	54 940	6 359	6 726	5 126
Mexico	...	...	36 000	66 470	54 000
USA	3 257 253	3 196 101	3 026 934	1 766 884	1 593 000
Brazil	34 555	24 870	4 301	43 026	24 061
Chile	8 832 344	9 851 673	8 636 545	9 839 348	9 393 481
China	19 500	26 070	1 323	8 020	12 120
India (a)	10 000	150	319 350	214 195	...
Indonesia	33 459	19 000	37 092	940 285	1 427 501
Japan	5 602 646	4 994 110	4 653 202	4 788 264	5 440 460
Saudi Arabia	...	1 137 000	299 000	44 000	...
Singapore	10 525	4 378	6 373	4 504	10 137
of which, re-exports	10 320	3 361	5 728	4 504	8 230
Australia	200	250	2 000	3 534	1 975

Note(s):

(a) Years ended 31 March following that stated

Imports of Iodine

Country	1997	1998	1999	2000	2001
Austria	87 100	97 900	73 100	69 300	101 600
Belgium-Luxembourg	1 427 000	1 745 600	1 736 700	1 501 800	2 006 900
Cyprus	17 693	16 073	13 521	11 529	17 000
Czech Republic	21 000	8 000	15 000	21 000	24 000
Denmark	24 219	26 008	8 975	11 451	24 614
Finland	2 496	3 610	7 105	4 928	4 491
France	1 880 600	1 838 900	1 580 200	2 139 700	1 469 800
Germany	1 229 900	1 282 900	1 328 900	1 346 700	1 752 800
Greece	23 000	13 000	1 318	1 158	1 766
Irish Republic	...	90 707	7 136	17 582	44 664
Italy	944 562	841 025	834 259	749 474	1 049 291
Lithuania	3 000	3 000	900	4 000	7
Netherlands	1 373 000	1 845 000	2 051 200	2 380 900	2 156 800
Norway	549 692	351 791	124 711	228 029	118 903
Poland	31 000	25 000	29 000	17 773	20 000
Portugal	86 325	24 990	22 543	22 443	76 686
Romania	1 000	6 000	...	...	...
Russia	84 000	62 000	109 000	135 000	...
Slovenia	...	4 000	7 000	1 263	2 200
Spain	589 862	608 324	722 532	1 019 447	1 247 590
Sweden	2 000	10 000	2 000	3 000	1 000
Switzerland	62 428	8 784	3 585	18 949	28 203
Turkey	...	...	62 480	139 043	39 422
Ukraine	12 486	6 960	1 211	8 213	...
United Kingdom	1 353 469	1 693 418	956 976	1 304 692	1 015 061
Yugoslavia, Federal Republic of	24 000	8 000	3 000	1 000	7 000
Botswana	6 031	4 808	674	11 000	31 000
Egypt	206 000	99 000	330 000	...	12 000
South Africa	15 684	13 346	14 210	23 667	19 454
Tunisia	799	1 495	2 506	5 000	...
Canada	641 446	529 337	430 085	528 000	531 705
Mexico	...	...	1 777 000	1 162 838	941 000
USA	6 016 775	5 727 186	5 086 301	4 790 961	5 024 000
Argentina	37 000	35 000	37 984	37 435	27 045
Brazil	298 000	418 000	527 000	883 072	1 108 799
Colombia	27 000	26 000	22 000	24 000	...
Uruguay	1 600	2 000	2 200	2 200	5 000
Venezuela	13 000	18 000	10 000	10 000	18 000
China	346 284	575 456	748 671	793 731	630 163
Hong Kong	265 224	184 009	59 132	59 784	19 937
India (a)	477 125	606 917	700 823	801 057	...
Indonesia	170 905	18 193	25 159	34 128	24 798
Iran	...	23 000	30 000	8 000	...
Japan	205 206	349 110	290 195	363 364	273 200
Korea, Republic of	35 465	49 193	68 920	92 803	100 680
Pakistan (b)	21 338	27 976	19 000	31 085	...
Philippines	6 331	2 575	...	10 000	14 000
Singapore	3 576	8 856	20 699	1 971	5 599
Sri Lanka	422	25	1 000	...	...
Taiwan	28 709	28 227	21 852	27 287	31 949
Thailand	8 216	13 000	12 000	20 487	34 453
Australia	37 663	56 538	56 000	59 996	86 550
New Zealand	40 000	7 000	31 000	29 000	45 005

Note(s) :-

(a) Years ended 31 March following that stated

(b) Years ended 30 June of that stated

Production of Iron Ore

tonnes

Country	1997	1998	1999	2000	2001
Austria	1 794 129	1 792 000	1 747 000	1 855 000	1 839 141
Bosnia & Herzegovina	*150 000	*150 000	*150 000	*150 000	...
Bulgaria	858 000	895 300	699 400	588 800	464 000
France	522 700	21 000	6 000	16 100	...
Germany (f) (i)	200 940	604 912	615 165	461 525	...
Macedonia	*15 000	*15 000	*15 000	*15 000	...
Norway	724 400	588 700	520 000	470 000	381 000
Portugal (f)	18 905	20 200	11 733	11 800	...
Romania	756 000	459 000	131 000	116 000	*133 000
Russia	70 867 300	72 600 000	82 200 000	87 100 000	82 800 000
Slovakia	452 800	479 212	458 035	447 055	435 492
Spain	57 930	52 161	60 232	75 054	55 058
Sweden	21 893 000	20 930 000	18 853 000	20 557 000	19 486 000
Turkey	5 986 900	5 885 429	4 869 032	4 076 257	3 931 874
Ukraine	52 993 500	51 070 200	47 769 100	55 883 200	54 700 000
United Kingdom	1 210	1 188	*1 000	1 033	510
Yugoslavia, Federal Republic of	7 230	5 125	2 088	1 115	----
Algeria	1 637 000	1 783 000	1 338 000	1 645 000	1 291 000
Egypt (d)	2 662 447	2 941 798	*2 700 000	*2 500 000	...
Mauritania	11 703 000	11 411 000	11 042 000	11 069 000	10 100 000
Morocco	12 011	9 285	6 625	6 462	7 976
Nigeria	76 544	18 796	----	----	...
South Africa (c)	33 225 130	32 965 235	29 507 000	33 707 364	34 757 159
Tunisia	264 400	221 800	222 200	183 300	206 500
Zimbabwe	479 032	371 589	598 650	438 495	361 362
Canada (g)	37 277 000	37 808 000	31 594 000	36 740 000	29 341 000
Cuba (b)	18 800	42 100	69 500	101 500	...
Mexico	11 956 000	11 101 000	10 814 000	11 300 000	8 660 000
USA	62 971 000	62 931 000	57 749 000	63 089 000	46 100 000
Brazil (a)	184 924 580	199 233 506	194 485 974	212 559 898	215 000 000
Chile	8 738 191	9 112 055	8 345 035	8 728 927	8 834 152
Colombia	754 772	525 825	576 414	660 109	636 837
Peru	4 746 070	4 905 632	4 078 186	4 143 299	4 563 551
Venezuela	18 359 509	16 784 217	14 050 827	17 352 963	16 902 437
China	268 612 000	246 890 900	237 230 100	223 947 600	217 014 700
India (h)	75 723 000	72 230 000	74 946 000	80 762 000	83 367 000
Indonesia	487 354	564 424	584 428	489 126	469 400
Iran (e)	6 217 727	8 174 657	11 488 785	*11 500 000	*11 500 000
Kazakhstan	13 132 600	9 335 800	9 616 700	16 156 800	15 617 000
Korea, Dem. P.R. of	*2 000 000	*1 000 000	*1 000 000	*1 000 000	...
Korea, Republic of	295 960	238 252	187 987	163 192	22 693
Malaysia (g)	269 089	376 009	337 462	258 573	376 476
Thailand	43 840	90 700	122 633	100	50
Vietnam	330 000	374 000	...	...	...
Australia	156 286 000	160 731 000	151 558 000	171 508 000	181 435 000
New Zealand	2 477 728	2 224 325	2 303 376	2 691 780	1 636 400
World Total	1 063 000 000	1 050 000 000	1 015 000 000	1 085 000 000	1 057 000 000

Note(s):

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

Exports of Iron Ore

Country	1997	1998	1999	2000	2001
Belgium-Luxembourg					
Iron Ore	12 616	13 880	67 657	32 755	43 578
Burnt pyrites	----	18 190	98 522	3	...
France	584 665	37 351	20 178	21 148	38 116
Georgia	(a) *52 600	(a) *48 500	...	...	...
Germany					
Iron ore	14 176	4 461	12 222	20 659	16 280
Burnt pyrites	94 633	13 678	1 318	4 587	6 112
Italy					
Burnt pyrites	17 296	48 802	65 162	96 060	57 643
Netherlands					
Iron ore	107 663	29 344	151 475	157 229	29 697
Burnt pyrites	63 895	44 352	20 576	4	27
Norway					
Iron ore	270 815	50 829	19 127	17 598	33 727
Burnt pyrites	87 562	64 053	38 232	45 081	46 323
Russia	11 772 600	13 828 300	10 841 114	19 224 008	...
Slovakia	79 500	75 000	95 900	115 628	112 227
Spain					
Iron ore	43 224	55 173	36 742	26 227	1 702
Burnt pyrites	138 015	55 052	33 256	108 384	168 181
Sweden	17 571 842	14 631 068	13 819 605	16 323 925	13 619 293
Ukraine	20 083 455	17 703 014	13 343 939	18 737 248	...
Yugoslavia, Federal Republic of					
Burnt pyrites	17 219	16 157	21 367	6	12 818
Liberia	100 000	100 000	----	100 000	...
Mauritania	11 689 000	11 402 000	11 042 000	11 100 000	10 100 000
South Africa	20 729 659	22 093 000	21 092 000	21 397 329	23 519 404
Tunisia	9 025	15 801	9 581	16 570	...
Canada	33 142 058	30 691 746	26 885 514	26 571 394	22 315 371
USA (b)	6 392 675	6 065 078	6 125 063	6 148 513	5 605 645
Brazil	134 092 571	150 210 269	139 801 476	156 892 908	155 746 254
Chile	6 726 425	7 071 147	5 887 614	6 488 297	6 181 506
Peru	3 800 000	4 504 523	3 694 124	3 526 990	4 199 827
Venezuela	9 321 862	8 603 412	6 616 973	6 883 328	6 857 000
Bahrain	3 200 000	1 900 000	2 700 000	3 852 065	2 920 765
China (b)	5 409	20 134	16 278	605	585
India (c)	19 498 132	22 273 379	15 716 166	20 161 360	...
Japan	70	103	29 042	78 832	60 442
Kazakhstan	8 622 565	7 353 001	3 394 300	5 327 941	...
Korea, Dem. P.R. of (a)	*168 000	*83 000	*26 000	*49 000	*86 000
Malaysia	9 000	160 049	147 184	103 805	79 136
Philippines	4 487 000	3 663 000	3 852 000	3 870 665	...
Australia	146 757 247	136 396 291	146 200 021	157 857 461	156 800 513
New Zealand	558 246	678 790	1 329 660	760 879	748 274

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	1997	1998	1999	2000	2001
Austria	5 101 249	5 237 875	4 349 862	5 425 923	...
Belgium-Luxembourg	11 158 528	13 493 548	12 112 181	11 830 358	11 223 322
Bulgaria	1 992 564	2 208 000	715 254	1 289 623	...
Croatia	...	80	9 564	14 243	15 728
Czech Republic	7 383 349	7 395 000	5 356 868	6 932 742	6 891 369
Denmark					
Burnt pyrites	21 828	66 946	45 165	59 326	47 038
Finland	3 731 829	3 922 531	3 818 567	3 917 135	3 916 207
France					
Iron ore	20 212 123	19 746 303	19 999 656	19 688 773	16 707 431
Burnt pyrites	13 329	8 337	5 894	4 228	24 758
Germany					
Iron ore	41 686 890	53 595 582	38 801 838	47 502 511	40 094 653
Burnt pyrites	94 633	86 364	89 957	76 415	55 380
Greece					
Burnt pyrites	61 204	39 557	22 886	156 876	125 242
Hungary	1 467 892	2 063 600	1 744 312	2 098 145	1 702 510
Iceland	24 560	22 768	22 774	33 104	41 499
Italy (a)	16 663 374	15 717 985	15 614 537	17 619 370	15 813 643
Lithuania	1 951	5 541	2 868	5 150	...
Netherlands					
Iron ore	8 595 877	8 827 125	7 949 025	7 560 788	6 310 886
Burnt pyrites	57 481	27 794	111 119	47 175	106 277
Norway	561 474	529 789	488 582	187 630	187 566
Poland (a)	10 582 900	9 981 900	7 418 423	9 736 781	7 709 132
Portugal	558 546	590 086	538 354	580 178	141 064
Romania	6 625 253	6 569 462	4 171 545	5 049 180	3 874 940
Russia					
Iron ore	5 392 492	6 562 256	3 313 496	9 188 913	...
Burnt pyrites	3 552	8 805	...	...	...
Slovakia	4 307 000	3 975 500	4 270 146	4 741 501	3 269 165
Spain	5 858 327	6 583 581	6 283 186	6 265 454	6 641 053
Sweden					
Iron ore	102 638	69 083	68 929	94 483	108 597
Burnt pyrites	10 694	22 613	48 357	17 442	15 763
Switzerland (a)	14 720	14 373	13 222	15 001	16 388
Turkey	2 900 453	3 857 835	2 973 052	4 140 103	784 796
Ukraine	1 881 478	3 369 816	4 683 179	7 413 440	...
United Kingdom					
Iron ore	21 032 971	20 764 785	17 030 212	16 778 947	15 351 877
Burnt pyrites	18 409	25 787	21 649	29 446	17 130
Yugoslavia, Federal Republic of	1 067 222	52 515	1 254 517	302 312	78 808
Egypt	877 995	2 193 934	1 284 997	*3 000 000	...
Libya	1 348 000	1 700 000	1 600 000	2 100 000	...
Tunisia	111 483	187 132	226 073	167 469	...
Canada	7 081 265	7 200 963	7 311 445	6 566 054	5 905 931
Mexico	2 885 308	3 954 913	3 555 891	3 065 077	2 291 505
Trinidad & Tobago	1 052 433	1 364 268	2 300 000	2 500 000	3 400 000
USA (a)	18 595 659	16 973 180	14 254 523	15 658 001	10 652 289
Argentina	5 054 185	5 558 631	4 142 666	5 323 026	4 639 345
Paraguay	48 990	40 000	21 000	101 460	157 931
Abu Dhabi	40 428	21 040	38 183	...	...
Bahrain	3 163 000	1 600 000	2 600 000	3 077 934	1 835 903
China					
Iron ore	55 067 487	51 594 678	55 272 881	69 970 779	92 392 677
Burnt pyrites	38 346	176 040	1 123	63	84
India (d)	371 390	149 248	132 569	486	...
Indonesia					
Iron ore	1 472 099	1 310 494	2 430 408	2 156 360	1 292 369
Burnt pyrites	398 536	98	11 754	308	238
Iran (b)	3 000 000	1 479 194	1 735 675	2 403 899	...
Japan	126 600 755	120 618 050	120 107 002	131 732 578	126 297 011
Kazakhstan	*220 000	242 586	250 000	135 000	...
Korea, Republic of	38 592 030	33 611 499	35 400 291	38 980 349	45 875 365

Imports of Iron Ore

Country	1997	1998	1999	2000	2001
Lebanon	...	11 523	35 300	18 878	9 163
Malaysia	2 618 000	1 071 937	1 356 056	1 736 221	1 568 261
Pakistan (c)	1 228 993	1 928 368	1 265 693	1 566 032	...
Philippines	3 997 000	2 828 000	4 000 000	4 026 071	322 912
Saudi Arabia	2 360 040	2 800 886	3 046 235	2 919 767	...
Taiwan					
Iron ore	14 042 963	14 042 341	13 236 522	14 859 677	15 571 077
Burnt pyrites	-----	126 281	73 474	74 190	...
Australia	5 558 851	4 926 790	4 282 000	4 426 997	3 997 806

Note(s) :-

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

Production of Pig Iron

tonnes

Country	1997	1998	1999	2000	2001
Austria	3 965 864	4 034 229	3 926 094	4 332 786	4 375 000
Belgium	8 076 475	8 618 117	8 430 392	8 471 214	7 732 000
Bosnia & Herzegovina	*100 000	*100 000	*100 000	*100 000	*100 000
Bulgaria	1 643 000	1 390 000	1 152 000	1 220 000	1 200 000
Czech Republic	5 195 400	4 981 800	4 022 700	4 621 500	4 670 700
Finland	2 786 126	2 919 692	2 954 127	2 982 787	2 851 821
France	13 315 344	13 458 358	13 432 778	13 506 955	11 884 200
Germany	30 940 000	30 162 000	27 934 000	30 845 000	29 184 000
Hungary	1 139 934	1 258 851	1 309 584	1 340 353	1 225 714
Italy	11 304 000	10 770 000	10 603 000	11 194 000	10 620 000
Luxembourg	438 030	-----	-----	-----	-----
Netherlands	5 805 000	5 562 000	5 307 000	4 970 000	5 305 000
Norway	70 000	70 000	70 000	70 000	70 000
Poland	7 295 637	6 128 484	5 233 124	6 491 867	5 442 633
Portugal	431 000	365 000	389 000	382 000	82 000
Romania	4 556 000	4 541 151	2 969 467	3 065 788	3 234 975
Russia	37 327 600	34 661 000	40 856 000	44 600 000	44 900 000
Slovakia	3 072 000	2 756 000	2 987 000	3 166 400	3 254 600
Spain	3 927 000	4 236 000	4 058 000	4 059 000	4 094 000
Sweden	3 060 100	3 149 000	3 212 200	3 145 700	3 614 200
Switzerland	*100 000	*80 000	*80 000	*80 000	*80 000
Turkey	5 565 000	5 286 000	5 181 000	5 333 000	5 300 000
Ukraine	20 600 000	20 936 000	23 009 800	25 698 700	26 400 000
United Kingdom	13 054 500	12 746 100	12 139 300	10 890 500	9 870 400
Yugoslavia, Federal Republic of	906 704	825 916	134 882	562 808	460 884
Algeria	525 771	740 968	782 895	750 384	794 715
Egypt	2 704 000	2 956 000	2 970 000	3 500 000	3 800 000
Libya	1 007 000	1 004 000	1 302 000	1 490 000	1 090 000
Morocco	*15 000	*15 000	*15 000	*15 000	*15 000
South Africa	7 307 000	7 960 000	7 592 000	7 818 000	7 360 000
Tunisia	152 300	122 900	180 200	195 400	191 600
Canada	8 669 788	8 936 802	8 856 569	8 904 044	8 302 141
Mexico	8 889 363	10 115 563	10 878 132	10 444 728	8 037 183
Trinidad & Tobago	1 133 800	1 023 100	1 293 000	1 524 800	2 187 400
USA	50 110 000	49 830 000	47 940 000	49 450 000	42 250 000
Argentina	3 576 039	3 659 744	2 974 208	3 602 566	3 189 834
Brazil	25 336 000	25 446 800	24 948 500	28 135 000	27 731 000
Chile	941 465	992 568	1 029 522	1 023 695	926 731
Colombia	323 701	255 896	264 362	272 254	318 953
Paraguay	78 615	65 545	61 281	82 018	71 765
Peru	367 795	343 341	242 952	409 185	379 010
Venezuela	5 607 558	5 423 881	5 071 050	6 401 348	5 473 143
China	115 114 100	118 521 000	125 329 900	131 034 200	155 542 500
India	26 211 000	25 317 000	25 359 000	26 761 000	27 600 000
Indonesia	1 535 000	1 571 000	1 736 000	1 740 000	1 480 000
Iran	6 481 000	5 626 000	6 142 000	6 700 000	7 200 000
Japan	78 519 469	74 981 000	74 519 916	81 070 748	78 835 836
Kazakhstan	3 089 300	2 594 200	3 438 100	4 010 300	3 910 900
Korea, Dem. P.R. of	*500 000	*250 000	*250 000	*250 000	*250 000
Korea, Republic of	22 712 406	23 299 189	23 329 000	24 937 000	25 898 000
Malaysia	1 486 000	878 000	950 000	1 240 000	1 120 000
Myanmar	40 000	*40 000	*30 000	*40 000	*40 000
Pakistan	1 068 000	*1 000 000	1 140 000	1 138 000	1 384 000
Qatar	564 000	706 000	666 000	620 962	733 549
Saudi Arabia	2 107 000	2 268 000	2 343 000	3 060 000	2 880 000
Taiwan	8 870 000	9 374 000	8 890 000	9 618 000	10 000 000
Vietnam	41 000	48 000	66 000	47 000	...
Australia	7 884 000	7 724 000	7 468 000	*6 660 000	*7 300 000
New Zealand	534 000	609 000	620 000	603 000	600 000
World Total	578 200 000	572 700 000	578 200 000	614 700 000	622 900 000

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

Country	1997	1998	1999	2000	2001
Albania	24 000	22 000	15 600	64 700	94 100
Austria	5 181 000	5 282 000	5 202 000	5 722 000	5 870 000
Belarus	1 110 000	1 300 000	1 448 000	1 622 000	1 611 000
Belgium	10 717 603	11 403 848	10 910 168	11 614 731	10 741 000
Bosnia & Herzegovina	72 000	75 000	60 000	77 000	*100 000
Bulgaria	2 628 000	2 240 000	1 889 000	2 017 000	2 035 000
Croatia	68 733	104 854	77 213	70 999	57 993
Czech Republic	6 750 100	6 497 800	5 615 500	6 215 800	6 315 900
Denmark	787 000	800 000	727 000	803 000	746 000
Finland	3 734 299	3 951 589	3 955 658	4 096 389	3 938 122
France	19 767 457	20 126 200	20 199 977	20 953 667	19 394 693
Georgia	103 152	56 353	7 036	50	----
Germany	45 007 000	44 046 000	42 062 000	46 376 000	44 803 000
Greece	1 016 000	1 109 000	951 000	1 088 000	1 281 000
Hungary	1 818 523	1 940 110	1 919 739	1 969 821	2 064 507
Irish Republic	336 361	354 780	335 000	360 000	150 000
Italy	25 841 000	25 678 000	24 738 000	26 759 000	26 526 000
Latvia	464 529	470 835	484 000	500 292	*510 000
Luxembourg	2 580 219	2 476 909	2 600 324	2 571 243	2 724 679
Macedonia	50 000	49 000	49 000	50 000	*50 000
Moldova	811 000	735 000	796 300	908 000	966 000
Netherlands	6 641 000	6 225 000	5 947 000	5 492 000	5 800 000
Norway	585 000	637 000	610 000	679 000	635 000
Poland	11 585 100	9 915 125	8 853 211	10 498 262	8 809 211
Portugal	911 000	906 000	1 038 000	1 089 000	727 000
Romania	6 675 000	6 335 896	4 391 746	4 671 967	4 930 185
Russia	48 502 000	43 673 000	51 518 000	59 100 000	59 000 000
Slovakia	3 484 000	3 428 000	3 533 600	3 733 200	3 988 600
Slovenia	372 690	405 210	405 000	465 000	457 000
Spain	13 683 000	14 827 000	14 882 000	15 874 000	16 504 000
Sweden	5 147 700	5 153 100	5 067 200	5 228 700	5 518 100
Switzerland	1 047 000	1 018 000	1 037 000	1 140 000	*1 000 000
Turkey	13 644 093	13 165 724	13 806 898	13 571 563	14 382 257
Ukraine	25 285 700	24 105 255	27 393 000	31 782 000	33 100 000
United Kingdom	18 500 500	17 315 000	16 283 700	15 154 600	13 542 700
Yugoslavia, Federal Republic of	978 960	949 314	226 240	682 362	510 675
Algeria	394 718	646 621	773 696	771 614	947 040
Egypt	2 717 000	2 870 000	2 627 000	2 838 000	3 799 000
Libya	897 000	874 000	966 000	1 055 000	846 000
South Africa	8 311 000	7 956 000	7 857 000	8 821 000	8 481 000
Tunisia	195 000	171 000	231 000	229 000	239 000
Zimbabwe	214 000	212 000	255 000	258 000	156 000
Canada	15 458 635	15 832 839	16 136 095	16 496 339	15 178 896
Cuba	334 600	283 200	302 700	327 300	269 600
Dominican Republic	82 479	35 874	42 893	38 942	...
El Salvador	44 868	43 162	33 501	40 506	38 502
Mexico	14 218 339	14 181 685	15 242 737	15 586 211	13 291 906
Trinidad & Tobago	747 000	776 900	723 900	743 700	668 300
USA	98 485 000	98 658 000	97 427 000	101 824 000	90 103 000
Argentina	4 168 500	4 215 890	3 805 205	4 479 204	4 107 075
Brazil	26 152 900	25 759 900	24 996 200	27 865 000	26 717 000
Chile	1 167 492	1 171 409	1 290 512	1 351 986	1 247 000
Colombia	733 951	635 814	534 038	659 882	637 602
Ecuador	43 700	45 784	53 000	58 483	60 979
Paraguay	65 542	56 243	55 689	76 784	67 034
Peru	607 391	630 687	558 697	750 682	756 955
Uruguay	39 070	52 012	45 404	38 102	30 890
Venezuela	3 986 549	3 553 315	3 261 365	3 834 575	3 813 561
Bangladesh (b)	36 000	35 000	36 000	35 000	...
China	108 941 700	114 588 400	123 954 100	127 236 100	151 634 400
Hong Kong	*100 000	*100 000	*100 000	*100 000	*100 000
India	24 415 000	23 480 000	24 296 000	26 924 000	27 291 000
Indonesia	3 816 176	2 698 814	2 890 749	2 848 099	2 780 607
Iran (c)	6 059 375	5 608 000	6 304 366	6 614 519	*6 900 000

Production of Crude Steel

tonnes

Country	1997	1998	1999	2000	2001
Israel	270 000	*280 000	*280 000	*280 000	*220 000
Japan	104 544 796	93 547 990	94 192 400	106 444 468	102 865 950
Kazakhstan	3 880 248	3 116 500	4 086 882	4 778 800	4 691 028
Korea, Dem. P.R. of	600 000	*300 000	*300 000	*300 000	*300 000
Korea, Republic of	42 554 151	39 895 839	41 042 412	43 107 123	43 852 192
Malaysia	2 962 000	1 902 709	2 770 000	3 650 000	4 100 000
Mongolia	22 700	16 300	13 100	13 000	...
Pakistan	479 000	494 000	*500 000	*500 000	*500 000
Philippines	980 464	884 000	530 000	426 000	426 000
Qatar	608 000	637 000	629 000	743 615	907 608
Saudi Arabia	2 539 000	2 356 000	2 610 000	2 981 000	3 381 000
Singapore	382 619	499 000	590 000	603 000	456 000
Syria	*70 000	*70 000	*70 000	*70 000	*70 000
Taiwan	16 056 267	16 965 134	15 437 755	16 895 545	17 261 119
Thailand	2 101 218	1 814 146	1 532 160	2 099 633	2 127 000
United Arab Emirates	*90 000	*90 000	*90 000	*90 000	...
Uzbekistan	379 000	351 000	344 000	407 000	434 000
Vietnam	314 488	306 256	308 305	305 881	318 780
Australia (a)	8 837 000	8 886 000	8 162 000	7 383 000	7 076 000
New Zealand	768 631	756 000	775 000	702 000	826 000
World Total	797 000 000	775 000 000	788 000 000	847 000 000	849 000 000

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

Country	1997	1998	1999	2000	2001
Albania					
Ferro-chrome	31 454	30 252	28 120	12 500	11 900
Austria					
Ferro-molybdenum	4 600	4 900	4 900	4 700	4 900
Ferro-nickel	3 700	3 300	2 600	3 300	2 600
Ferro-vanadium	5 900	5 900	6 400	5 900	5 800
Belgium					
Ferro-manganese	12 700	13 800	----	...	...
Ferro-silico-manganese	7 700	4 400	----	...	...
Ferro-molybdenum	8 300	9 600	5 300	...	...
Ferro-vanadium	2 400	2 300	1 800	...	...
Bulgaria					
Ferro-silicon	*10 000	*10 000	*10 000	*10 000	...
Croatia					
Ferro-chrome	24 231	11 861	----	15 753	361
Czech Republic					
Ferro-vanadium	*2 000	*2 000	*2 000	*2 000	*2 000
Finland					
Ferro-chrome & ferro-silico-chrome	236 652	230 906	256 290	260 605	236 000
France					
Ferro-manganese & spiegeleisen	434 377	438 212	419 672	409 169	414 200
Ferro-silico-manganese	63 000	57 000	55 000	32 773	65 248
Ferro-silicon	109 000	106 000	*110 000	*110 000	...
Other ferro-alloys	101 000	55 000	...	...	...
Silicon metal	72 286	70 082	80 000	94 127	89 896
Georgia					
Ferro-manganese	3 991	10 312	6 441	6 088	7 820
Ferro-silico-manganese	16 616	31 775	26 249	20 458	32 779
Other ferro-alloys	39	3 446	4 856	582	105
Germany					
Ferro-chrome	25 856	20 879	16 960	21 600	19 308
Other ferro-alloys	*30 000	*30 000	*30 000	*30 000	*30 000
Silicon metal	20 599	19 200	21 400	26 417	27 739
Greece					
Ferro-nickel	72 934	62 673	59 545	81 662	88 755
Iceland					
Ferro-silicon	70 286	67 784	70 100	108 288	112 935
Italy					
Ferro-chrome	11 295	11 487	----	----	----
Ferro-manganese	40 000	49 000	19 000	*40 000	...
Ferro-silico-manganese	*100 000	119 675	112 358	*100 000	...
Ferro-silicon	...	19 909	...	...	...
Silicon metal	12 619	8 094	6 257	9 590	----
Macedonia					
Ferro-alloys	...	106 661	78 009	57 842	27 287
Silicon metal	*1 000	*500	----	----	...
Norway					
Ferro-chrome	145 124	174 678	159 714	153 500	82 600
Ferro-manganese	119 318	153 089	124 000	150 585	111 823
Ferro-silico-manganese	177 409	206 749	235 000	198 671	277 938
Ferro-silicon	342 137	357 293	354 281	450 364	427 590
Other ferro-alloys	31 443	38 130	49 000	54 639	47 600
Silicon metal	119 540	132 309	153 120	138 139	134 958
Poland					
Ferro-chrome	6 249	4 212	----	----	----
Ferro-manganese	47 500	50 152	57	0	497
Ferro-silico-manganese	20 000	15 100	10 000	18 997	20 007
Ferro-silicon	77 258	74 991	62 481	55 969	48 608
Other ferro-alloys	8 500	13 300	2 700	4 174	4 039
Romania					
Ferro-chrome	950	873	----	----	----
Ferro-manganese	11 505	4 170	25	1 989	384
Ferro-silico-manganese	62 570	83 617	550	62 320	71 921
Ferro-silicon	9 620	5 553	----	8 309	5 823
Silicon metal	*300	*150	----	----	...

Production of Ferro-Alloys

tonnes

Country	1997	1998	1999	2000	2001
Russia					
Spiegeleisen	*7 000	*7 000	*7 000	*7 000	...
Ferro-chrome	248 000	218 100	266 904	274 000	211 000
Ferro-silico-chrome	36 100	106 000	109 413	91 013	79 115
Ferro-manganese	47 100	78 800	*90 000	*71 000	...
Ferro-nickel	*40 000	*30 000	*33 000	*35 000	...
Ferro-phosphorus	3 600	----	...	100	...
Ferro-silicon	498 000	496 000	601 413	652 000	707 000
Other ferro-alloys	*40 000	*40 000	*40 000	*40 000	...
Silicon metal	*40 000	*40 000	*40 000	*40 000	...
Slovakia					
Ferro-chrome	11 394	11 715	6 986	17 658	4 766
Ferro-silico-manganese	45 159	46 627	37 000	52 141	46 288
Ferro-silicon	50 133	49 963	70 000	47 611	45 815
Other ferro-alloys	29 308	54 672	...	50 508	46 357
Slovenia					
Ferro-chrome	9 232	10 621	560	----	----
Ferro-silicon	*10 000	*10 000	*8 000	*9 000	*9 000
Spain					
Ferro-chrome	490	1 145	935	905	----
Ferro-manganese	22 788	18 360	10 000	26 815	24 804
Ferro-silico-manganese	122 199	107 952	95 000	128 197	102 110
Ferro-silicon	38 340	39 115	42 000	50 071	53 427
Silicon metal	19 220	18 424	28 000	28 215	29 114
Sweden					
Ferro-chrome	101 195	115 534	128 269	106 399	107 036
Ferro-silicon	22 410	20 356	21 440	18 948	21 197
Turkey					
Ferro-chrome	108 320	110 175	123 905	97 240	50 735
Ferro-silico-chrome	6 953	6 530	6 340	7 170	5 895
Ferro-silicon	4 730	4 810	620	----	----
Ukraine					
Spiegeleisen	----	----	----	5 400	...
Ferro-manganese	307 700	291 500	257 300	338 100	...
Ferro-silico-manganese	559 700	485 560	498 905	684 040	...
Ferro-silicon	288 200	222 511	243 600	323 417	...
Yugoslavia, Federal Republic of					
Ferro-nickel	6 209	1 215	----	----	----
Egypt					
Ferro-silicon (g)	54 080	56 703	*55 000	*55 000	...
Other ferro-alloys (g)	26 220	17 800	*30 000	*30 000	...
South Africa					
Ferro-chrome (d)	1 939 500	2 025 260	2 155 202	2 574 264	2 141 008
Ferro-manganese	498 759	542 120	527 106	(f) 907 272	(f) 783 021
Ferro-silico-manganese	326 238	308 845	307 545	...	...
Ferro-silicon	102 152	108 410	105 998	108 513	174 238
Ferro-vanadium	*5 000	*6 000	*6 000	*15 000	...
Silicon metal	34 001	32 611	35 797	40 264	...
Zimbabwe					
Ferro-chrome	233 386	246 782	248 395	246 324	249 841
Ferro-silico-chrome	16 614	21 385	24 760	19 631	16 848
Canada					
Ferro-niobium	3 400	3 400	3 500	3 300	4 600
Ferro-silicon	*80 000	*70 000	*70 000	*70 000	*70 000
Silicon metal	*30 000	*30 000	*30 000	*30 000	*30 000
Dominican Republic					
Ferro-nickel	85 450	65 892	63 760	72 488	54 784
Mexico					
Ferro-manganese	69 977	86 701	79 567	90 501	60 014
Ferro-silico-manganese	105 381	104 650	113 916	107 922	74 290
USA					
Ferro-chrome (d) (e)	60 700	30 000	...	...	...
Ferro-nickel	32 100	8 590	----	----	----
Ferro-silicon	359 000	334 000	325 000	250 000	...
Silicon metal	183 000	188 000	186 000	175 000	*130 000

Production of Ferro-Alloys

Country	1997	1998	1999	2000	2001
Argentina					
Ferro-manganese	7 672	5 000	*2 000	----	...
Ferro-silico-manganese	25 000	25 000	*10 000	4 900	...
Ferro-silicon	19 265	11 000	2 600	2 500	...
Other ferro-alloys	20 400	23 000	13 900	16 900	...
Silicon metal	...	7 000	*8 000	*8 000	...
Brazil					
Ferro-chrome	67 429	65 683	78 874	134 562	84 428
Ferro-silico-chrome	7 056	6 824	11 910	7 790	5 899
Ferro-silico-magnesium	14 076	7 717	9 882	9 658	11 032
Ferro-manganese	152 530	137 549	85 260	121 277	96 016
Ferro-silico-manganese	175 919	124 458	148 384	171 304	180 235
Ferro-nickel	32 015	26 389	19 807	19 315	17 966
Ferro-niobium	25 475	30 973	28 557	27 359	37 411
Ferro-silicon	212 183	166 278	200 833	189 935	159 345
Other ferro-alloys	1 046	1 170	----	----	----
Silicon metal	136 884	126 744	136 572	166 344	112 123
Chile					
Ferro-chrome	*2 000	*2 000	*2 000	...	...
Ferro-manganese	5 608	5 122	2 833	4 011	1 975
Ferro-silico-manganese	3 175	3 921	2 048	1 802	153
Ferro-molybdenum	3 157	1 978	2 079	1 454	...
Ferro-silicon	1 294	1 159	1 000	*1 000	...
Colombia					
Ferro-nickel	58 500	65 400	65 900	64 500	89 400
Venezuela					
Ferro-manganese	6 010	7 671	10 694	15 655	...
Ferro-silico-manganese	57 876	48 504	47 635	69 735	...
Ferro-nickel	----	----	----	3 200	27 033
Ferro-silicon	58 000	35 571	55 505	86 188	...
Bhutan					
Ferro-silicon	*15 000	*18 000	*18 000	*15 000	*16 000
China					
Ferro-chrome	358 700	423 825	301 300	207 523	226 037
Ferro-silico-chrome	59 900	69 050	50 400	47 947	35 591
Ferro-manganese	*1 180 000	1 016 300	940 900	940 000	947 300
Ferro-silico-manganese	*770 000	(c) ...	...	...	(c) ...
Ferro-molybdenum	(c) ...	2 199	2 141	167	(c) ...
Ferro-rare earth	(c) ...	7 928	8 980	2 951	(c) ...
Ferro-silicon	*1 250 000	1 276 600	1 118 900	1 390 000	1 384 900
Ferro-titanium	(c) ...	1 238	3 642	34	(c) ...
Ferro-tungsten	(c) ...	6 359	9 430	8 253	(c) ...
Ferro-vanadium	(c) ...	9 130	18 767	9 940	(c) ...
Other ferro-alloys	*425 000	*735 000	1 354 000	1 430 700	1 937 800
India					
Ferro-aluminium (b)	3 058	...	...	1 743	1 510
Ferro-chrome (b)	344 000	307 000	299 000	302 000	382 000
Ferro-silico-chrome (b)	311	...	...	...	...
Ferro-silico-magnesium (b)	1 429	1 717	2 310	2 385	2 460
Ferro-manganese (b)	161 000	165 000	136 000	207 000	170 000
Ferro-silico-manganese (b)	200 000	193 000	233 000	236 000	276 000
Ferro-molybdenum (b)	501	662	1 693	2 152	1 881
Ferro-silicon (b)	80 000	57 000	56 000	76 000	67 000
Ferro-vanadium (b)	175	345	735	644	674
Indonesia					
Ferro-manganese	*15 000	*13 000	*12 000	*12 000	...
Ferro-silico-manganese	*7 000	*7 000	*7 000	*7 000	...
Ferro-nickel	49 990	42 260	46 030	50 500	*50 000
Iran					
Ferro-chrome (a)	11 730	14 590	12 485	10 900	*10 000
Ferro-silicon (a)	37 692	47 224	34 680	49 529	...

Production of Ferro-Alloys

tonnes

Country	1997	1998	1999	2000	2001
Japan					
Ferro-chrome	191 005	142 931	119 777	130 074	111 167
Ferro-manganese	376 663	334 081	315 152	337 694	368 293
Ferro-silico-manganese	78 323	70 886	65 744	72 092	66 257
Ferro-molybdenum	4 328	3 443	3 391	3 699	3 485
Ferro-nickel	352 840	345 772	332 293	367 181	367 739
Ferro-silicon	3 426	951	1 452	----	----
Ferro-tungsten	62	61	43	42	109
Ferro-vanadium	4 232	4 073	3 349	4 108	3 613
Other ferro-alloys	9 594	1 101	6 077	7 171	5 733
Kazakhstan					
Ferro-chrome	605 125	542 050	731 563	799 762	761 900
Ferro-silico-chrome	48 462	33 553	49 282	55 634	79 746
Ferro-silico-manganese	55 053	57 376	78 495	102 719	141 183
Ferro-silicon	133 380	92 125	140 263	133 269	145 780
Other ferro-alloys	...	183 054	268 040	291 622	...
Korea, Dem. P.R. of					
Ferro-alloys	*10 000	*10 000	*10 000	*10 000	...
Korea, Republic of					
Ferro-manganese	158 755	158 418	140 000	146 000	144 000
Ferro-silico-manganese	77 078	106 997	(c) ...	(c) ...	(c) ...
Other ferro-alloys	2 174	2 785	120 000	108 000	106 000
Taiwan					
Ferro-manganese	12 130	12 532	----	----	...
Ferro-silicon	3 391	3 775	3 212	2 975	...
Australia					
Ferro-manganese (g)	103 565	95 658	106 006	98 421	124 586
Ferro-silico-manganese (g)	85 629	89 537	101 455	115 585	120 758
Silicon metal	31 000	*30 000	*30 000	*30 000	*30 000
New Caledonia					
Ferro-nickel	159 019	157 959	157 592	151 049	153 012

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

Country	1997	1998	1999	2000	2001
Albania					
Ferro-chrome	(f) *22 700	(f) *26 700	(f) *33 400	21 609	(f) *17 600
Scrap	11 684	(f) *3 900	(f) *3 800	(f) *13 100	(f) *29 600
Armenia					
Scrap	234 316	186 000	55 322	37 822	11 614
Austria					
Pig iron	679	185	717	631	1 549
Ferro-alloys	5 889	7 595	5 518	3 310	6 154
Ingots, blooms, billets	236 630	219 382	227 262	248 303	177 057
Scrap	653 254	573 400	558 267	789 435	754 489
Azerbaijan					
Scrap	15 100	6 937	13 021	149 496	18 652
Belarus					
Ferro-alloys	27 994	3 417	3 246	...	38
Ingots, blooms, billets	450 346	592 800	708 504	774 700	400 800
Scrap	190 330	145 444	129 426	150 400	153 400
Belgium-Luxembourg					
Pig iron	91 244	130 812	124 891	180 780	116 359
Sponge & powder	1 760	2 262	2 673	3 797	4 395
Ferro-chrome	21 109	42 781	47 169	39 754	39 937
Ferro-silico-magnesium	371	1 625	2 633	3 271	1 171
Ferro-manganese	26 424	19 238	13 324	21 737	24 367
Ferro-silico-manganese	11 175	17 715	33 190	31 690	31 139
Ferro-silicon	9 238	37 804	30 411	24 591	30 427
Ferro-titanium & Fe-Si-Ti	389	450	456	244	29
Other ferro-alloys	451	8 626	2 002	1 296	9 106
Silicon metal	136	9 251	6 668	7 741	12 440
Ingots, blooms, billets	955 607	804 377	491 486	615 783	498 122
Scrap	1 673 084	1 408 715	1 561 184	1 974 795	1 799 938
Bosnia & Herzegovina					
Ferro-silicon (f)	*2 000	*10 800	*15 200	*21 300	*31 200
Scrap (f)	*25 100	*60 900	*6 700	*43 500	*14 500
Bulgaria					
Ferro-alloys	2 902	8 052	3 657	2 779	(f) *4 000
Ingots, blooms, billets	246 578	37 271	106 492	102 033	(f) *183 000
Scrap	156 725	58 488	101 919	386 591	(f) *212 000
Croatia					
Ferro-chrome	23 943	12 173	2	15 468	-----
Scrap	124 561	102 443	101 868	106 021	133 451
Cyprus					
Scrap (b)	21 344	15 944	16 744	17 341	26 839
Czech Republic					
Pig iron	230 102	161 308	42 092	32 820	25 352
Ferro-chrome	2 523	1 247	1 455	1 190	2 300
Ferro-vanadium	1 463	2 030	1 531	2 940	2 195
Other ferro-alloys	6 054	4 134	7 911	3 165	2 412
Silicon metal	957	1 113	433	915	816
Ingots, blooms, billets	431 037	245 511	257 604	262 130	250 740
Scrap	977 588	873 412	852 585	987 452	1 000 515
Denmark					
Ingots, blooms, billets	71 590	58 023	25 693	143 030	59 258
Scrap	580 347	479 924	511 129	658 353	770 311
Estonia					
Pig iron (b) (f)	*128 900	*239 600	*81 800	*43 600	...
Ferro-chrome	(f) *15 900	(f) *700	42 515	18 804	2 283
Other ferro-alloys	...	...	7 483	3 639	4 269
Silicon metal	...	...	14 585	20 052	...
Ingots, blooms, billets	83	3 770	22 687	263	2 728
Scrap	411 098	644 816	546 117	502 495	380 328
Finland					
Ferro-chrome & ferro-silico-chrome	105 472	64 251	89 974	43 887	82 590
Ingots, blooms, billets	280 214	230 115	208 787	144 538	130 066
Scrap	365 761	269 999	212 045	394 218	362 373

Exports of Iron, Steel and Ferro-Alloys

tonnes

Country	1997	1998	1999	2000	2001
France					
Pig iron	48 199	7 830	18 006	520	4 426
Sponge & powder	3 593	5 026	5 769	7 864	6 895
Ferro-chrome	702	455	426	5 965	2 478
Ferro-silico-magnesium	9 615	8 377	4 824	5 929	5 714
Ferro-manganese	54 584	46 927	35 019	19 275	26 049
Ferro-silico-manganese	61 372	56 855	44 218	15 750	62 877
Ferro-molybdenum	101	92	240	530	410
Ferro-nickel	25 813	14 256	1 563	872	712
Ferro-niobium	628	704	440	735	784
Ferro-silicon	33 873	41 049	48 316	50 247	43 956
Ferro-titanium & Fe-Si-Ti	1 082	1 535	1 443	1 123	1 842
Ferro-vanadium	32	18	22	70	21
Other ferro-alloys	33 062	40 983	30 331	36 008	45 650
Ingots, blooms, billets	1 692 045	1 804 004	2 416 133	2 447 574	2 621 568
Scrap	3 640 248	3 484 599	3 731 225	4 537 161	4 161 312
Georgia					
Pig iron	3 943	2 204	300	4	----
Ferro-manganese	10 155	10 430	15 069	8 409	8 038
Ferro-silico-manganese	16 672	31 587	28 837	18 453	31 652
Ingots, blooms, billets	59 666	27 274	6 708	4 527	1 539
Scrap	(f) *38 100	(f) *65 800	385 955	782 582	724 747
Germany					
Pig iron	127 095	65 445	81 300	116 513	75 137
Sponge & powder	29 485	21 011	16 304	27 258	30 585
Ferro-chrome	51 436	59 663	38 575	47 714	34 379
Ferro-silico-chrome	3 512	1 019	525	251	3 115
Ferro-silico-magnesium	6 470	6 875	6 896	4 894	6 912
Ferro-manganese	12 236	17 755	11 286	19 071	19 346
Ferro-silico-manganese	7 853	11 255	9 367	11 082	13 743
Ferro-molybdenum	855	681	1 153	765	903
Ferro-nickel	174	909	582	42	...
Ferro-niobium	590	312	853	1 066	816
Ferro-phosphorus	1 567	1 532	1 506	1 704	1 149
Ferro-silicon	35 707	44 943	47 426	50 904	66 920
Ferro-titanium & Fe-Si-Ti	2 106	2 304	2 500	2 585	2 877
Ferro-tungsten & Fe-Si-W	76	120	92	310	112
Ferro-vanadium	459	332	262	299	373
Other ferro-alloys	16 921	24 078	12 690	11 272	20 321
Silicon metal	9 477	7 943	8 957	10 736	10 632
Ingots, blooms, billets	2 240 378	1 734 789	1 842 123	2 451 015	2 032 350
Scrap	6 930 512	7 027 029	6 999 310	6 878 310	6 598 673
Greece					
Ferro-alloys	932	...	11 101	12 794	10 175
Ingots, blooms, billets	6 145	92	999	2 363	5 083
Scrap	88 418	72 376	55 010	35 747	47 721
Hungary					
Ferro-alloys	1 555	2 217	1 689	1 573	441
Ingots, blooms, billets	14 775	42 902	17 277	23 843	47 954
Scrap	646 064	552 051	468 613	631 088	462 172
Iceland					
Ferro-silicon	74 993	67 237	69 956	99 884	111 898
Scrap	25 832	20 834	21 206	28 727	47 261
Irish Republic					
Scrap	35 084	25 356	19 956	61 401	133 287
Italy					
Pig iron	34 762	31 739	20 514	26 986	47 031
Sponge & powder	17 802	20 647	20 905	...	2 095
Ferro-chrome	4 781	1 781	1 456	2 693	1 843
Ferro-silico-magnesium	103	107	29	57	10
Ferro-manganese	8 184	13 465	13 077	20 413	17 472
Ferro-silico-manganese	10 789	5 361	3 832	6 876	3 371
Ferro-molybdenum	324	303	137	186	525
Ferro-silicon	1 930	2 427	3 336	2 248	3 143
Ferro-vanadium	44	269	301	1 669	1 023
Other ferro-alloys	1 078	536	340	340	1 107
Silicon metal	5 225	2 918	2 046	1 197	743
Ingots, blooms, billets	231 924	184 330	306 045	841 283	770 001
Scrap	35 682	36 590	105 191	166 125	151 196

Exports of Iron, Steel and Ferro-Alloys

Country	1997	1998	1999	2000	2001
Latvia					
Pig iron (b) (f)	*154 500	*203 300	...	*51 100	...
Ferro-chrome (b) (f)	*25 800	*30 100	*53 000	*8 800	*24 000
Other ferro-alloys (b) (f)	*2 500	*8 900	...	*500	...
Ingots, blooms, billets (b) (f)	*19 800	*26 200	...	...	...
Scrap	157 731	94 051	55 152	96 674	37 885
Lithuania					
Scrap	467 659	414 586	270 282	396 627	563 394
Macedonia					
Ferro-silicon	57 543	67 472	56 530	42 584	29 099
Other ferro-alloys	35 227	52 849	24 827	16 720	9 433
Silicon metal	4 604	1 096	15	...	...
Scrap	2 372	3 225	*3 000	42 615	4 558
Malta					
Scrap	14 000	14 000	13 930	11 197	18 594
Moldova					
Scrap	1 372	5 811	3 946	...	219
Netherlands					
Pig iron	11 658	51 881	86 489	62 714	62 667
Sponge & powder	140	446	21 821	87 650	76 545
Ferro-chrome	75 798	53 185	35 413	24 952	27 898
Ferro-silico-chrome	566	2 379	134	25	32
Ferro-manganese	11 512	4 729	1 259	28 383	26 335
Ferro-silico-manganese	17 215	14 678	13 027	9 105	25 958
Ferro-molybdenum	4 579	4 268	4 800	4 282	3 401
Ferro-nickel	-----	5 871	7 464	12 525	10 796
Ferro-niobium	64	3 881	5 336	10 281	7 512
Ferro-silicon	13 270	3 501	3 111	1 351	4 937
Ferro-titanium & Fe-Si-Ti	1 695	214	...	...	...
Ferro-tungsten & Fe-Si-W	238	170	140	215	380
Ferro-vanadium	3 133	3 440	2 033	1 083	2 194
Other ferro-alloys	6 949	749	3 018	2 162	9 767
Silicon metal	4 984	5 892	8 093	2 098	14 014
Ingots, blooms, billets	1 343 578	454 945	965 500	511 537	312 200
Scrap	3 363 946	2 655 404	2 434 145	3 101 130	3 072 052
Norway					
Pig iron	70 000	65 000	...	...	...
Ferro-chrome (f)	*150 000	*161 000	*158 100	*172 200	*73 200
Ferro-manganese (f)	*196 000	*203 900	*203 200	*205 400	*180 400
Ferro-silico-manganese	206 103	223 406	246 923	232 125	275 291
Ferro-silicon	412 873	423 154	425 761	407 164	324 858
Other ferro-alloys	34 247	40 026	48 308	54 776	48 994
Silicon metal	109 435	119 560	142 247	154 807	153 017
Ingots, blooms, billets	131 337	143 442	140 600	177 302	110 888
Scrap	156 118	134 216	140 354	139 044	150 020
Poland					
Pig iron	157 900	135 200	74 456	137 667	40 670
Ferro-chrome	4 774	2 014	762	26	...
Ferro-manganese & Fe-Si-Mn	1 815	4 434	487	...	...
Ferro-silicon	46 438	43 852	37 655	50 497	...
Other ferro-alloys	762	1 325	835	9 272	61 413
Ingots, blooms, billets	1 198 000	...	825 288	1 256 739	948 473
Scrap	517 900	446 200	730 592	987 895	1 269 594
Portugal					
Ingots, blooms, billets	91 029	88 366	140 231	107 702	44 980
Scrap	127 179	122 069	78 393	172 330	246 777
Romania					
Pig iron	71 141	39 154	...	7 473	2 548
Sponge & powder	6 221	8 544	8 857	7 767	7 264
Ferro-alloys	56 162	47 625	8 186	61 255	66 286
Ingots, blooms, billets	72 858	148 306	237 609	59 291	435 748
Scrap	237 991	759 347	1 325 996	2 289 430	1 679 265

Exports of Iron, Steel and Ferro-Alloys

tonnes

Country	1997	1998	1999	2000	2001
Russia					
Pig iron	2 419 873	2 466 100	2 908 000	3 691 000	...
Sponge & powder	393 548	421 164	401 263	481 896	...
Ferro-chrome	146 946	130 387	158 873	161 496	(f) *131 900
Ferro-silico-chrome	8 193	23 930	12 634	6 346	...
Ferro-manganese	3 809	6 226	1 884	3 062	(f) *4 900
Ferro-silico-manganese	78	4 620	6 235	8 164	...
Ferro-molybdenum	735	889	381	34	...
Ferro-nickel	9 690	4 549	3 414	4 681	(f) *3 800
Ferro-silicon	148 793	145 442	196 811	193 217	...
Ferro-titanium & Fe-Si-Ti	16 335	12 794	15 546	14 197	(f) *12 300
Ferro-tungsten & Fe-Si-W	2 722	1 759	1 025	443	(f) *300
Ferro-vanadium	2 314	3 134	4 631	5 902	(f) *3 600
Other ferro-alloys	2 844	1 349	1 119	864	...
Silicon metal	73 924	36 214	33 462	44 502	...
Ingots, blooms, billets	11 409 000	8 048 553	13 229 437	12 667 963	...
Scrap	5 250 351	7 260 386	7 546 891	6 821 377	(f) *5 784 000
Slovakia					
Pig iron	20 000	23 125	10 510	37 392	23 551
Ferro-silicon	(f) *61 600	(c) ...	64 144	58 041	53 629
Other ferro-alloys	(f) *85 100	149 358	82 922	116 412	102 422
Ingots, blooms, billets	120 000	(f) *114 000	(f) *49 000	53 720	202 645
Scrap	213 000	254 000	296 198	274 525	375 552
Slovenia					
Ferro-alloys	16 000	16 137	20 348	25 967	27 200
Ingots, blooms, billets	...	13 703	10 674	13 638	11 953
Scrap	102 973	86 802	87 155	114 018	136 041
Spain					
Pig iron	1 098	1 389	1 095	2 065	2 900
Sponge & powder	1 224	2 285	2 236	3 074	4 956
Ferro-chrome	1 028	906	1 151	1 257	466
Ferro-manganese	36 711	61 866	61 540	42 861	66 834
Ferro-silico-manganese	59 398	51 124	45 970	27 949	34 622
Ferro-molybdenum	36	221	229	362	120
Ferro-silicon	5 711	6 814	4 411	4 666	5 826
Other ferro-alloys	525	724	536	304	1 120
Silicon metal	11 118	8 517	16 580	15 379	14 027
Ingots, blooms, billets	316 018	384 502	369 672	376 331	263 813
Scrap	43 285	16 745	29 812	52 770	45 419
Sweden					
Pig iron	29 850	14 528	2 443	27 611	35 593
Sponge & powder	14 626	15 196	11 601	13 929	11 324
Ferro-chrome	*80 000	76 912	45 000	53 700	...
Ferro-silico-magnesium	281	786	5 358	2 636	1 102
Ferro-manganese & Fe-Si-Mn	2 225	1 906	1 413	1 050	...
Ferro-molybdenum	103	134	80	134	65
Ferro-phosphorus	579	474	602	565	399
Ferro-silicon	1 602	2 756	602	564	762
Ferro-vanadium	157	115	27	30	24
Other ferro-alloys	393	1 815	165	458	3 138
Silicon metal	...	9	565	475	1 766
Ingots, blooms, billets	149 382	267 585	121 611	92 258	197 800
Scrap	323 068	357 589	399 749	473 534	560 297
Switzerland					
Silicon metal	14 206	10 533	4	3	1
Scrap	432 876	377 433	346 356	401 561	457 523
Turkey					
Pig iron	148 786	18 259	77 804	94 231	109 862
Ferro-chrome	94 360	86 457	136 643	68 597	15 446
Other ferro-alloys	436	825	3 902	742	673
Ingots, blooms, billets	1 382 239	796 778	658 024	1 262 574	2 132 421
Scrap	22 309	28 144	29 303	28 583	28 937

Exports of Iron, Steel and Ferro-Alloys

Country	1997	1998	1999	2000	2001
Ukraine					
Pig iron	722 723	2 082 673	1 881 204	1 612 051	...
Ferro-manganese	(f) *169 200	172 112	121 804	194 351	...
Ferro-silico-manganese	446 991	353 747	342 070	465 814	...
Ferro-nickel	2 396	2 154	5 752	9 736	30 704
Ferro-silicon	...	...	596 640	838 230	...
Other ferro-alloys	16 322	14 957	2 035	3 662	...
Ingots, blooms, billets	4 196 639	4 937 336	7 989 718	9 361 509	...
Scrap	1 935 000	3 281 108	4 743 490	5 188 159	...
United Kingdom					
Pig iron	4 411	1 632	446	679	6 749
Sponge & powder	1 584	1 349	1 895	2 231	3 164
Ferro-chrome & ferro-silico-chrome	2 641	1 854	1 047	876	1 206
Ferro-manganese	1 578	2 878	452	1 327	792
Ferro-silico-manganese	532	2 456	1 327	1 307	8
Ferro-molybdenum	9 029	10 453	8 311	7 251	9 278
Ferro-nickel	4 363	3 376	0	9	104
Ferro-niobium	32	32	47	107	280
Ferro-phosphorus	126	167	95	22	26
Ferro-silicon	4 026	2 502	2 382	1 400	2 247
Ferro-titanium & Fe-Si-Ti	18 823	20 211	18 894	18 839	16 422
Ferro-vanadium	201	96	77	49	118
Other ferro-alloys	5 917	5 049	5 033	6 818	6 013
Ingots, blooms, billets	954 817	561 451	407 044	520 306	746 730
Scrap	3 561 352	3 177 490	3 578 027	4 378 117	4 821 840
Yugoslavia, Federal Republic of					
Ferro-alloys	7 182	1 723	6	6 587	5
Scrap	3 370	8 566	16 756	42 871	40 947
Algeria					
Pig iron	206 913	49 473	93 102	111 025	...
Ingots, blooms, billets	19 352	31 055	82 857	136 363	...
Scrap	69 668	57 365	28 811	59 239	...
Botswana					
Scrap	7 098	7 383	...	7 399	9 091
of which, re-exports	6 843	7 292	...	...	...
Egypt					
Ferro-alloys	32 512	41 312	33 060	...	50 794
Scrap	2 654	4 424	13 168	*15 000	24 217
Mauritius					
Scrap	20 800	12 602	11 593	18 009	16 481
Morocco					
Scrap	168 209	105 631	92 837	145 780	...
Senegal					
Scrap	2 110	14 045	6 140	5 000	18 399
South Africa					
Pig iron	516 684	512 253	570 027	499 458	523 755
Sponge & powder	20 767	2 123	3 771	5 891	11 112
Ferro-chrome	1 633 000	1 649 874	1 897 110	2 118 562	2 016 251
Ferro-manganese	453 597	433 432	421 636	556 749	939 811
Ferro-silico-manganese	266 313	298 512	227 488	191 583	138 997
Ferro-silicon	47 469	48 002	46 366	36 579	53 142
Other ferro-alloys	...	4 997	9 071	65 448	10 707
Silicon metal	31 898	38 745	33 120	40 955	616 701
Ingots, blooms, billets	461 540	491 156	309 109	597 410	643 753
Scrap	585 441	449 823	593 449	1 363 045	505 107
Sudan					
Scrap	...	2 035	...	...	...
Tunisia					
Scrap	3 913	3 198	31 429	51 712	...
Zimbabwe					
Ferro-chrome	277 915	268 650	233 558	(e) 289 481	(e) *265 000
Ferro-silico-chrome	24 334	21 767	25 124	...	...
Ingots, blooms, billets	23 806	12 896	41 458	31 158	*30 000
Scrap	92 291	43 641	76 696	46 164	...

Exports of Iron, Steel and Ferro-Alloys

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Country	1997	1998	1999	2000	2001
Canada					
Pig iron	137 651	165 393	116 757	109 058	124 596
Sponge & powder	93 024	166 558	84 409	144 497	70 332
Ferro-chrome	860	53	215	76	470
Ferro-manganese	100	1 770	53	1 292	975
Ferro-silico-manganese	561	305	242	476	491
Ferro-niobium	2 387	2 060	2 200	2 479	3 570
Ferro-silicon	15 933	20 891	23 356	20 764	23 800
Other ferro-alloys	2 080	1 648	1 536	1 060	1 032
Silicon metal	38 840	37 722	43 749	59 282	45 013
Ingots, blooms, billets	376 157	324 632	369 333	357 359	234 042
Scrap	2 330 983	2 244 744	1 881 465	1 914 053	1 933 550
Cuba					
Ingots, blooms, billets (f)	*92 000	*33 800	*57 000	*89 000	*71 300
Scrap (f)	*13 000	*2 000	*98 000	*59 000	*28 000
Dominican Republic					
Ferro-nickel	84 388	69 420	62 678	71 644	59 735
Scrap	11 167	*11 000	*11 000	11 047	13 468
Mexico					
Ferro-manganese	36 864	34 329	30 120	34 237	27 388
Ferro-silico-manganese	44 578	47 802	52 150	49 864	19 029
Other ferro-alloys	717	486	713	1 166	1 009
Ingots, blooms, billets	2 271 512	2 488 820	2 650 417	2 491 835	1 445 758
Scrap	232 083	155 618	148 005	168 949	...
Nicaragua					
Scrap	19 575	17 763	6 600	12 508	11 722
Trinidad & Tobago					
Sponge	362 948	223 113	521 700	678 073	1 146 584
Ingots, blooms, billets	12 700	3 800	...	3 119	14 800
USA					
Pig iron	100 199	97 140	106 151	76 137	46 039
Sponge & powder	60 954	69 071	44 012	53 582	39 881
Ferro-chrome & ferro-silico-chrome	16 809	15 464	15 340	51 101	25 727
Ferro-manganese	19 428	21 591	23 768	19 336	19 443
Ferro-silico-manganese	10 879	12 969	8 914	5 292	6 521
Ferro-molybdenum	1 573	1 582	1 839	1 575	1 427
Ferro-nickel	12 110	1 747	85	62	135
Ferro-niobium	59	25	166	60	162
Ferro-phosphorus	3 208	2 543	1 621	4 879	2 590
Ferro-silicon	56 685	52 362	49 814	47 905	25 280
Ferro-vanadium	619	868	497	271	142
Other ferro-alloys	5 625	4 590	5 344	5 106	8 513
Silicon metal	24 878	24 767	38 871	21 552	16 585
Ingots, blooms, billets	246 190	241 434	131 336	106 085	135 423
Scrap	8 942 513	5 928 593	5 390 686	5 938 113	7 407 847
Argentina					
Pig iron	145 344	185 902	63 556	...	...
Ferro-silico-manganese	4 854	17 364	238	...	...
Ferro-silicon	10 154	2 176	2 705	3 208	4 061
Other ferro-alloys	14 463	14 693	8 293	5 140	3 443
Silicon metal	40	5 166	3 454	4 149	218
Ingots, blooms, billets	25 770	21 724	97 681	30 365	138 456
Brazil					
Pig iron	2 563 147	3 214 615	3 030 491	3 808 760	4 135 297
Ferro-chrome	16 374	3 790	227	135	144
Ferro-manganese	70 068	33 026	23 279	52 613	22 201
Ferro-nickel	18 483	8 516	4 431	6 656	2 518
Ferro-niobium	23 823	27 542	26 588	27 927	28 429
Fe-silico-spiegeleisen & Si-Mn	76 608	36 600	58 680	80 857	65 633
Ferro-silicon	159 796	134 664	160 061	182 197	110 231
Other ferro-alloys	40 429	37 142	29 450	29 127	26 916
Silicon metal	127 014	102 737	123 218	154 009	104 538
Ingots, blooms, billets	5 524 644	5 426 212	6 378 997	6 213 427	6 364 730
Chile					
Ferro-alloys	4 912	3 232	3 784	3 224	4 235
Ingots, blooms, billets	7 995	...	...	12 489	10 354
Scrap	13 494	16 365	4 381	4 486	8 212

Exports of Iron, Steel and Ferro-Alloys

Country	1997	1998	1999	2000	2001
Colombia					
Ferro-nickel	52 482	57 183	61 501	54 280	94 969
Ecuador					
Scrap	34 814	13 218	3 163	7 240	3 056
Suriname					
Scrap	40 618	4 457	*4 000	*4 000	...
Venezuela					
Sponge & powder	1 143 657	1 554 276	2 239 643	2 713 829	2 814 123
Ferro-silico-manganese	37 293	24 129	16 077	22 777	6 199
Ferro-silicon	69 078	36 294	36 427	64 807	66 244
Ingots, blooms, billets	957 372	327 634	...	436 135	506 649
Scrap	138 122	129 466	29 738	55 857	27 886
Bahrain					
Scrap	51 482	45 793	33 448	50 772	54 672
China					
Pig iron	5 535 634	2 424 656	1 621 161	3 332 747	685 879
Sponge & powder	13 217	15 813	56 472	60 804	17 047
Ferro-chrome	98 069	102 083	73 813	131 160	208 894
Ferro-silico-chrome	31 296	40 725	17 465	23 628	16 463
Ferro-manganese	145 847	130 658	122 257	190 036	156 770
Ferro-silico-manganese	428 956	297 669	298 511	362 427	353 649
Ferro-molybdenum	24 458	31 739	38 586	44 370	37 671
Ferro-silicon	208 067	265 981	349 231	491 627	512 289
Ferro-titanium & Fe-Si-Ti	421	859	746	1 356	935
Ferro-tungsten & Fe-Si-W	2 210	3 617	4 111	5 127	6 303
Ferro-vanadium	1 949	2 308	2 125	3 073	2 110
Other ferro-alloys	121 614	84 319	57 101	60 736	63 043
Silicon metal	290 586	275 823	268 229	328 844	324 693
Ingots, blooms, billets	4 146 220	2 172 881	2 328 264	5 089 204	2 729 389
Scrap	68 251	24 922	62 873	47 280	9 673
Dubai					
Scrap	198 542	184 056	202 329	...	...
Hong Kong					
Ferro-alloys (b)	24 869	8 944	5 370	3 395	2 158
Silicon metal (b)	...	1 095	732	...	...
Ingots, blooms, billets (b)	40 630	20 708	984	4 227	5 387
Scrap	700 173	754 109	692 804	769 869	937 425
of which, re-exports	181 877	249 253	153 519	132 900	134 235
India					
Pig iron (d)	500 622	211 659	130 952	205 481	...
Sponge & powder (d)	45 702	26 682	2 589	7 476	...
Ferro-chrome (d)	199 948	148 672	107 389	143 205	...
Ferro-silico-chrome (d)	365	5 770	6 275	820	...
Ferro-manganese (d)	358	7 343	1 459	5 382	...
Ferro-silico-manganese (d)	34 606	34 113	35 684	61 502	...
Other ferro-alloys (d)	15 353	19 836	8 028	3 427	...
Silicon metal (d)	3 894	777	362	5 588	...
Ingots, blooms, billets (d)	298 049	57 643	62 552	155 133	...
Scrap (d)	32 747	8 607	2 240	1 569	...
Indonesia					
Sponge & powder	92 631	25 515	27 863	3 336	441
Ferro-nickel	41 222	41 342	35 590	52 674	36 898
Ingots, blooms, billets	82 988	97 364	25 087	4 140	4 405
Scrap	10 729	10 325	29 790	40 082	36 916
Iran					
Ferro-chrome (f)	*6 900	*10 500	*11 400	*5 700	*800
Ferro-silicon	(f) *6 600	(f) *50 700	20 109	15 446	...
Other ferro-alloys	(f) *1 300	(f) *800	2 378	(f) *1 500	(f) *900
Ingots, blooms, billets (a)	470 072	521 807	889 544	(f) *352 000	(f) *599 000
Scrap (f)	*54 300	*48 100	*171 800	*116 000	*84 000
Israel					
Scrap (f)	*23 800	*29 100	*9 100	*6 800	*5 500

Exports of Iron, Steel and Ferro-Alloys

tonnes

Country	1997	1998	1999	2000	2001
Japan					
Pig iron	250 256	2 310 635	1 734 043	223 775	528 602
Sponge & powder	22 973	24 345	35 842	44 058	37 266
Ferro-chrome	915	700	1 462	2 544	2 686
Ferro-manganese	45 557	26 814	19 400	44 249	28 018
Ferro-silico-manganese	122	217	3 104	4 928	431
Ferro-nickel	69 663	74 018	111 311	114 829	121 708
Ferro-silicon	5 305	4 065	5 065	4 888	4 287
Other ferro-alloys	3 418	2 762	3 625	3 625	3 470
Silicon metal	2 284	2 447	2 768	3 269	3 486
Ingots, blooms, billets	574 508	1 196 176	2 256 797	1 499 028	3 083 080
Scrap	2 313 259	3 821 597	4 315 228	2 895 444	459 833
Jordan					
Scrap	16 065	16 332	20 411	16 749	13 307
Kazakhstan					
Ferro-chrome	444 072	443 035	563 505	655 910	...
Ferro-silico-chrome	27 451	14 119	18 916	16 507	30 246
Ferro-manganese	1 040	131	60	782	...
Ferro-silico-manganese	49 394	47 577	65 207	89 850	111 458
Ferro-phosphorus	1 408	1 140	2 801	(c) ...	4 881
Ferro-silicon	78 487	66 107	71 714	74 635	...
Other ferro-alloys	...	274	11	7 660	680 884
Ingots, blooms, billets	(f) *117 700	8 846	170 358	211 784	246 650
Scrap	267 426	515 198	1 270 559	2 136 493	2 107 186
Korea, Dem. P.R. of					
Pig iron (f)	*60 100	*65 600	*42 700	*100 000	*132 000
Ferro-alloys (f)	*8 900	*3 600	*3 100	*1 700	*3 100
Ingots, blooms, billets (f)	*68 300	*54 900	*53 700	*36 900	*50 500
Scrap (f)	*163 100	*33 200	*51 700	*30 000	*67 000
Korea, Republic of					
Ferro-manganese	9 746	22 928	11 996	17 033	12 616
Ferro-silico-manganese	19 802	15 573	7 453	15 490	14 978
Ferro-vanadium	203	124	355	458	123
Other ferro-alloys	516	729	...	6 493	7 107
Silicon metal	645	443	1 151	9 394	1 933
Ingots, blooms, billets	714 951	636 250	218 644	124 125	418 033
Scrap	38 734	41 819	26 341	37 235	61 856
Kuwait					
Scrap	34 072	162 132	194 504	240 082	...
Kyrgyzstan					
Scrap	26 000	16 543	12 779	40 538	122 203
Lebanon					
Scrap	...	130 613	128 901	148 853	184 781
Macao					
Scrap	5 563	3 563	8 466	16 221	...
Malaysia					
Sponge & powder	825 000	513 006	478 822	369 123	503 291
Ingots, blooms, billets	36 000	225 807	111 644	7 910	39 292
Scrap	10 000	9 800	9 900	43 294	...
Mongolia					
Ingots, blooms, billets	14 500	10 200	5 600	7 800	...
Scrap	*40 000	*55 000	*50 000	*50 000	...
Oman					
Scrap	39 241	100 861	24 739	28 433	26 948
Philippines					
Ferro-chrome	5 985	----	394	...	...
Scrap	32 724	38 547	21 610	76 801	...
Saudi Arabia					
Silicon metal	...	1 934	32 861	8 938	...
Scrap	3 898	2 330	3 417	1 198	...
Singapore					
Ferro-alloys	1 919	1 205	720	340	200
of which, re-exports	1 797	1 029	681	311	154
Ingots, blooms, billets	1 996	3 065	...	18 558	7 418
of which, re-exports	374	2 604	...	6 546	6 648
Scrap	331 733	474 047	339 241	517 024	505 604
Sri Lanka					
Scrap	52 141	...	41 749	*42 000	...

tonnes

Exports of Iron, Steel and Ferro-Alloys

Country	1997	1998	1999	2000	2001
Taiwan					
Pig iron	1 776	1 943	4 477	6 103	45 233
Ferro-silicon	1 155	1 147	1 801	1 805	837
Other ferro-alloys	1 272	1 620	1 529	813	828
Silicon metal	463	731	1 159	1 476	1 976
Ingots, blooms, billets	15 255	32 598	37 300	92 779	66 623
Scrap	123 154	94 857	107 331	149 695	175 284
Thailand					
Scrap	*48 000	96 161	76 003	99 960	102 465
Australia					
Sponge & powder	4 440	591	253 531	268 047	1 189 079
Ferro-manganese	41 087	57 316	27 470	...	...
Ferro-silico-manganese	86 129	81 313	70 188	...	...
Other ferro-alloys	1 009	800	478	1 203	441
Silicon metal	26 742	28 244	36 954	28 886	33 851
Ingots, blooms, billets	1 458 304	1 826 387	1 545 831	678 743	20 140
Scrap	764 775	576 772	758 865	767 223	1 109 792
New Caledonia					
Ferro-nickel	158 224	158 929	156 843	154 103	154 862
New Zealand					
Ingots, blooms, billets	10 040	10 032	12 261	4 936	3 688
Scrap	26 199	96 062	86 396	135 000	158 519

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

Imports of Iron, Steel and Ferro-Alloys

tonnes

Country	1997	1998	1999	2000	2001
Albania					
Ingots, blooms, billets	1 306	2 261	4 570	29 974	...
Austria					
Pig iron	17 428	24 618	22 503	29 401	34 724
Sponge & powder	10 066	10 648	10 519	11 258	10 385
Ferro-chrome	26 550	24 032	19 629	31 129	33 710
Ferro-silico-chrome	748	1 012	340	26	...
Ferro-silico-magnesium	968	1 248	1 239	969	829
Ferro-manganese	20 357	21 744	20 115	18 565	24 511
Ferro-silico-manganese	16 505	17 155	8 933	3 615	5 054
Ferro-molybdenum	1 068	942	683	1 524	1 087
Ferro-niobium & ferro-niobium-tantalum	369	620	388	361	543
Ferro-phosphorus	817	964	955	1 876	990
Ferro-silicon	16 575	21 433	17 623	18 929	20 884
Ferro-titanium & Fe-Si-Ti	684	1 156	681	865	737
Ferro-tungsten & Fe-Si-W	422	589	483	868	845
Ferro-vanadium	612	1 025	1 285	1 575	622
Other ferro-alloys	1 187	3 504	1 371	1 790	3 640
Silicon metal	16 749	6 728	6 298	6 659	8 478
Ingots, blooms, billets	110 803	272 943	167 328	183 202	163 944
Scrap	682 250	685 810	578 309	695 834	833 909
Belarus					
Pig iron	(f) 159 502	132 842	128 122	118 195	133 844
Sponge & powder	...	2 625	26 040	48 037	54 504
Ferro-alloys	(f) 48 239	33 474	31 815	41 910	28 491
Ingots, blooms, billets	...	21 579	19 835	23 426	12 151
Scrap	724 923	767 280	732 835	1 139 800	734 500
Belgium-Luxembourg					
Pig iron	91 304	203 699	200 890	334 225	233 325
Sponge & powder	30 765	4 778	31 988	47 970	8 425
Ferro-chrome	113 044	146 391	146 100	178 130	155 561
Ferro-silico-chrome	3 335	4 032	4 296	2 393	7 992
Ferro-silico-magnesium	927	2 310	2 782	3 424	1 414
Ferro-manganese	43 122	47 039	52 600	63 097	63 766
Ferro-silico-manganese	36 909	57 422	52 669	58 256	58 555
Ferro-molybdenum	2 264	3 248	2 850	2 748	2 355
Ferro-nickel	24 508	32 099	28 692	32 285	36 455
Ferro-niobium	656	719	535	701	849
Ferro-phosphorus	246	613	691	816	604
Ferro-silicon	44 760	69 163	60 179	59 406	67 460
Ferro-titanium & Fe-Si-Ti	1 019	1 323	1 347	1 851	1 436
Ferro-vanadium	236	310	198	241	331
Other ferro-alloys	1 281	9 478	1 710	1 524	4 791
Silicon metal	1 985	13 901	16 559	14 238	12 750
Ingots, blooms, billets	2 881 218	2 809 762	2 905 305	3 530 375	2 631 575
Scrap	4 024 388	3 938 147	2 474 180	2 727 227	2 740 480
Bulgaria					
Pig iron	16 577	21 600	23 145	44 989	...
Ferro-manganese	5 744	4 999	1 420	5 596	...
Other ferro-alloys	10 916	5 210	2 630	6 531	...
Ingots, blooms, billets	65 045	69	4	10	...
Scrap	66 152	143 321	54 440	84 179	...
Croatia					
Pig iron	13 371	10 696	10 329	10 449	12 560
Ferro-alloys	2 935	3 077	2 199	2 313	1 706
Silicon metal	...	427	451	357	438
Ingots, blooms, billets	20 128	27 390	26 718	23 638	22 673
Scrap	5 554	16 531	6 368	8 099	7 569

Imports of Iron, Steel and Ferro-Alloys

Country	1997	1998	1999	2000	2001
Czech Republic					
Pig iron	143 000	161 000	62 465	66 334	91 906
Ferro-chrome	27 340	36 114	31 425	44 880	39 975
Ferro-manganese	32 463	25 430	19 517	17 569	20 716
Ferro-silico-manganese	18 818	22 924	16 777	22 291	25 660
Ferro-molybdenum	465	695	563	898	1 157
Ferro-silicon	25 263	24 923	18 948	20 666	20 640
Ferro-vanadium	100	131	205	283	278
Other ferro-alloys	4 511	5 982	5 327	6 638	8 092
Silicon metal	4 098	4 510	3 151	4 099	2 832
Ingots, blooms, billets	206 223	313 838	184 221	188 542	272 751
Scrap	39 923	114 108	134 543	182 992	347 858
Denmark					
Pig iron	97 192	133 126	121 314	148 640	112 108
Sponge & powder	3 942	2 594	2 408	1 436	1 943
Ferro-manganese	3 117	3 889	3 112	3 735	3 497
Ferro-silico-manganese	5 177	6 879	6 291	5 284	6 079
Ferro-silicon	3 520	3 010	2 272	2 768	2 479
Other ferro-alloys	1 920	4 110	946	2 522	13 822
Silicon metal	1 519	2 123	2 323	2 410	1 686
Ingots, blooms, billets	43 609	83 489	7 541	4 351	11 604
Scrap	357 694	273 910	235 598	279 695	326 574
Estonia					
Pig iron	242	8 764	886	841	695
Ferro-alloys	8 992	40 558	44 456	16 033	12 273
Silicon metal	...	75	15 799	19 378	649
Scrap	210 201	401 586	339 645	265 312	28 995
Finland					
Pig iron	31 744	30 498	22 009	32 759	42 707
Sponge & powder	14 003	18 644	33 587	16 983	12 235
Ferro-chrome	5 055	9 685	4 314	3 828	5 073
Ferro-manganese	10 837	12 377	11 726	12 840	13 199
Ferro-silico-manganese	26 197	34 270	31 005	28 682	29 989
Ferro-molybdenum	1 581	1 646	1 673	1 764	1 873
Ferro-nickel	53 783	44 569	44 635	51 634	61 421
Ferro-niobium	358	449	423	469	426
Ferro-phosphorus	145	190	288	217	221
Ferro-silicon	18 024	15 113	14 411	15 500	18 928
Ferro-titanium & Fe-Si-Ti	536	852	735	833	1 271
Ferro-vanadium	141	207	240	171	175
Other ferro-alloys	3 422	6 303	3 026	2 521	4 767
Silicon metal	2 411	2 942	3 077	3 622	3 007
Ingots, blooms, billets	224 157	209 121	331 409	323 548	448 017
Scrap	348 080	449 640	345 704	465 528	482 372
France					
Pig iron	189 127	213 188	228 303	294 402	235 212
Sponge & powder	18 734	25 713	25 642	23 054	124 727
Ferro-chrome	266 349	283 292	283 009	314 783	253 110
Ferro-silico-chrome	143	108	196	87	127
Ferro-silico-magnesium	3 084	2 702	2 789	2 167	2 006
Ferro-manganese	49 156	59 532	50 040	47 814	42 103
Ferro-silico-manganese	57 786	59 597	45 014	69 823	53 527
Ferro-molybdenum	5 098	4 835	4 709	5 885	5 803
Ferro-nickel	57 202	41 604	19 050	25 071	27 640
Ferro-niobium	1 745	1 983	1 632	2 044	2 133
Ferro-phosphorus	2 431	3 437	3 174	3 136	2 550
Ferro-silicon	47 952	60 877	53 961	74 807	68 969
Ferro-titanium & Fe-Si-Ti	4 459	5 478	5 119	4 706	5 259
Ferro-tungsten & Fe-Si-W	568	769	299	569	622
Ferro-vanadium	909	1 154	1 059	1 008	1 401
Other ferro-alloys	10 133	22 355	11 864	13 234	42 196
Silicon metal	20 136	20 336	16 105	19 555	22 084
Ingots, blooms, billets	890 109	1 404 233	1 386 584	1 765 134	2 120 903
Scrap	2 402 691	2 748 147	2 948 480	3 236 091	2 934 281

Imports of Iron, Steel and Ferro-Alloys

tonnes

Country	1997	1998	1999	2000	2001
Germany					
Pig iron	296 685	339 177	257 567	256 621	280 829
Sponge & powder	58 410	57 330	61 791	140 416	288 427
Ferro-chrome	396 657	449 711	417 825	420 503	381 746
Ferro-silico-chrome	22 121	19 592	9 003	8 144	6 087
Ferro-silico-magnesium	4 066	3 831	3 613	11 926	12 538
Ferro-manganese	175 233	180 041	131 569	197 356	198 415
Ferro-silico-manganese	144 301	101 243	134 131	133 257	130 975
Ferro-molybdenum	8 449	9 828	8 811	11 119	11 104
Ferro-nickel	88 858	56 098	29 629	58 291	80 666
Ferro-niobium	3 664	3 359	2 603	3 236	3 268
Ferro-phosphorus	5 540	4 612	5 662	6 176	5 285
Ferro-silicon	173 056	175 323	187 994	196 017	209 195
Ferro-titanium & Fe-Si-Ti	7 056	8 380	7 556	7 921	8 310
Ferro-tungsten & Fe-Si-W	455	645	549	403	561
Ferro-vanadium	5 423	5 506	4 075	5 263	6 832
Other ferro-alloys	20 138	27 124	9 872	14 481	33 594
Silicon metal	121 559	117 776	85 384	98 318	94 338
Ingots, blooms, billets	1 141 721	1 593 375	1 165 465	1 778 789	1 310 471
Scrap	1 862 205	2 678 292	2 863 594	3 523 681	3 560 264
Greece					
Pig iron	13 132	11 561	7 706	4 864	14 682
Ferro-manganese	2 349	*1 800	1 025	2 971	2 188
Ferro-silico-manganese	8 738	7 607	4 763	8 827	15 462
Ferro-silicon	5 754	3 048	2 212	1 987	11 059
Other ferro-alloys	489	800	436	649	163
Silicon metal	563	963	911	915	873
Ingots, blooms, billets	464 809	145 225	402 216	711 253	505 889
Scrap	762 235	491 145	278 010	309 235	776 523
Hungary					
Pig iron	32 281	45 615	25 644	25 167	23 983
Ferro-manganese	9 316	10 369	11 082	11 584	10 441
Ferro-silicon	6 570	6 415	6 213	5 830	5 736
Other ferro-alloys	5 230	4 556	4 046	4 309	5 764
Ingots, blooms, billets	233 838	282 161	292 283	210 739	168 833
Scrap	13 575	57 710	22 479	40 299	111 440
Irish Republic					
Pig iron	2 964	3 804	3 074	5 475	3 401
Ferro-alloys	1 117	2 325	2 821	626	3 772
Silicon metal	...	434	1 160	1 366	1 032
Ingots, blooms, billets	1 775	1 558	1 331	1 222	1 203
Scrap	5 000	12 661	94 958	88 914	26 285
Italy					
Pig iron	1 310 196	1 711 795	1 249 505	1 103 642	1 308 092
Sponge & powder	48 362	161 618	107 120	202 669	220 836
Ferro-chrome	230 009	259 357	299 033	294 176	303 726
Ferro-silico-chrome	532	172	393	347	...
Ferro-silico-magnesium	5 537	5 855	8 375	6 628	4 570
Ferro-manganese	68 961	68 274	77 851	72 812	74 801
Ferro-silico-manganese	71 842	81 050	90 136	83 192	95 270
Ferro-molybdenum	4 397	5 735	4 869	4 886	5 063
Ferro-nickel	39 560	40 062	26 998	23 913	36 887
Ferro-niobium	1 407	1 395	1 140	1 285	1 431
Ferro-phosphorus	1 219	1 492	1 278	1 653	917
Ferro-silicon	112 822	112 673	129 115	118 396	134 547
Ferro-titanium & Fe-Si-Ti	3 651	3 296	3 410	3 735	3 120
Ferro-tungsten & Fe-Si-W	168	146	114	180	177
Ferro-vanadium	1 493	1 296	1 566	1 380	2 014
Other ferro-alloys	8 819	16 523	7 189	8 562	14 245
Silicon metal	32 053	33 896	31 667	44 411	42 596
Ingots, blooms, billets	1 649 167	2 111 264	2 684 986	2 070 840	2 270 890
Scrap	4 303 774	5 112 063	4 255 639	4 056 830	4 348 543
Latvia					
Ferro-alloys	...	9 042	11 030	14 474	7 585
Silicon metal	...	471	1 309	1 793	1 895
Ingots, blooms, billets	1 000	44 455	41 995	64 766	91 262
Scrap	280 169	216 098	174 691	214 024	178 503

Imports of Iron, Steel and Ferro-Alloys

Country	1997	1998	1999	2000	2001
Lithuania					
Scrap	82 817	63 050	5 921	8 286	32 421
Macedonia					
Ingots, blooms, billets	61 804	11 317	17 619	12 046	6 517
Scrap	889	11 611	27 097	7 017	...
Netherlands					
Pig iron	176 940	196 800	79 328	127 682	132 065
Sponge & powder	2 280	2 956	19 458	95 375	42 829
Ferro-chrome	150 790	176 092	204 088	132 868	126 622
Ferro-silico-chrome	5 408	2 731	1 751	3 545	2 487
Ferro-silico-magnesium (d) ...	(d) ...	1 891	1 020	502	318
Ferro-manganese	39 020	55 750	32 599	59 362	42 022
Ferro-silico-manganese	37 709	39 946	38 231	26 395	35 316
Ferro-molybdenum	6 971	4 735	6 279	7 956	8 781
Ferro-nickel	2 977	23 309	27 420	29 130	23 658
Ferro-niobium	466	4 263	6 049	6 575	7 888
Ferro-phosphorus (d) ...	(d) ...	2 165	2 459	1 520	2 720
Ferro-silicon	63 684	75 765	74 596	81 450	90 882
Ferro-titanium & Fe-Si-Ti	3 217	1 380	2 588	2 389	1 736
Ferro-tungsten & Fe-Si-W	711	750	670	2 380	370
Ferro-vanadium	2 380	1 266	1 572	2 477	1 969
Other ferro-alloys	5 377	2 256	2 205	2 330	4 798
Silicon metal	23 258	26 156	44 396	42 360	32 276
Ingots, blooms, billets	71 199	123 650	85 602	279 573	119 504
Scrap	2 073 111	1 396 827	1 354 536	1 167 772	1 272 600
Norway					
Pig iron	8 179	10 216	17 924	15 874	18 207
Sponge & powder	37 973	900	37 267	42 414	44 037
Ferro-chrome	688	712	366	844	762
Ferro-manganese	15 181	22 231	37 484	17 467	10 848
Ferro-silico-manganese	3 933	294	52	438	19
Ferro-silicon	9 161	7 825	3 408	7 057	13 610
Other ferro-alloys	975	844	1 690	1 152	2 145
Silicon metal	13 203	8 235	10 456	7 898	8 649
Ingots, blooms, billets	166 505	178 746	117 345	176 632	161 217
Scrap	290 278	346 976	331 948	368 454	334 136
Poland					
Pig iron	30 700	26 300	22 338	11 745	146 508
Ferro-chrome	8 332	8 929	7 225	10 388	7 729
Ferro-silico-magnesium	2 151	1 672	1 725	2 313	...
Ferro-manganese	12 324	20 858	35 376	63 562	43 277
Ferro-silico-manganese	14 673	12 345	18 173	33 705	28 401
Ferro-molybdenum	610	794	586	795	809
Ferro-phosphorus	1 020	1 086	1 184	1 104	...
Ferro-silicon	13 047	9 858	14 345	25 762	24 657
Ferro-vanadium	259	246	361	541	386
Other ferro-alloys	1 397	2 530	2 879	3 500	6 424
Silicon metal	5 150	6 049	6 708	6 764	5 658
Ingots, blooms, billets	133 000	...	47 777	43 331	48 142
Scrap	14 400	19 300	86 886	170 108	104 820
Portugal					
Pig iron	23 285	27 032	18 969	24 253	23 395
Ferro-manganese	1 108	1 304	1 203	1 180	603
Ferro-silico-manganese	7 553	6 310	7 252	6 877	3 204
Ferro-silicon	4 658	4 360	4 017	3 749	3 439
Other ferro-alloys	2 626	4 576	5 353	5 922	5 942
Ingots, blooms, billets	14 126	22 860	53 177	46 558	73 499
Scrap	39 749	173 559	288 200	227 168	184 327
Romania					
Ferro-alloys	80 566	85 521	56 083	61 774	59 826
Silicon metal	708	2 044	1 979	2 460	1 759
Ingots, blooms, billets	340 439	346 160	238 673	512 266	648 391

Imports of Iron, Steel and Ferro-Alloys

tonnes

Country	1997	1998	1999	2000	2001
Russia					
Pig iron	53 894	24 127	4 174	2 051	...
Sponge & powder	584 588	55 495	3 515	5 265	...
Ferro-chrome	8 247	8 734	7 449	9 057	...
Ferro-manganese	144 674	150 344	105 338	162 166	...
Ferro-silico-manganese	154 570	114 641	121 292	189 994	...
Ferro-molybdenum	311	1 124	2 141	3 701	...
Ferro-niobium	139	362	224	396	...
Ferro-silicon	40 534	15 249	4 464	18 634	...
Ferro-titanium & Fe-Si-Ti	120	1 437	387	2 310	...
Ferro-vanadium	104	219	233	817	...
Other ferro-alloys	882	1 465	2 367	2 485	...
Silicon metal	1 824	2 245	4 436	8 589	...
Ingots, blooms, billets	19 912	17 731	16 544	15 261	...
Scrap	92 841	77 093	301 901	312 433	...
Slovakia					
Pig iron	18 000	24 341	17 317	17 889	19 209
Sponge & powder	425	2 095	3 677	8 483	26
Ferro-alloys	13 000	15 508	12 408	18 946	24 870
Silicon metal	3 165	...	4 589	5 348	50
Ingots, blooms, billets	13 081	...	17 318	19 599	4 015
Scrap	115 000	188 586	134 405	219 213	383 068
Slovenia					
Pig iron	9 847	8 387	10 632	14 265	13 497
Ferro-alloys	22 176	25 332	26 458	28 058	28 298
Silicon metal	...	2 020	2 262	2 564	3 547
Ingots, blooms, billets	2 533	3 166	2 315	4 057	5 800
Scrap	203 099	261 088	179 747	250 090	249 517
Spain					
Pig iron	255 342	350 118	324 990	387 778	321 671
Sponge & powder	342 934	567 763	771 805	860 410	738 608
Ferro-chrome	188 775	192 914	218 710	215 228	246 756
Ferro-silico-chrome	5 949	5 351	4 151	4 186	2 951
Ferro-silico-magnesium	4 065	3 527	2 632	2 493	4 035
Ferro-manganese	13 967	13 514	20 919	32 615	53 221
Ferro-silico-manganese	24 976	25 312	31 338	15 121	26 375
Ferro-molybdenum	3 260	2 266	2 114	2 186	3 077
Ferro-nickel	25 806	32 235	34 987	43 770	49 769
Ferro-niobium	368	387	220	221	271
Ferro-phosphorus	1 968	1 990	1 649	1 841	2 127
Ferro-silicon	42 561	43 300	39 520	39 884	50 862
Ferro-titanium & Fe-Si-Ti	488	561	745	1 044	1 059
Ferro-vanadium	531	343	563	567	1 688
Other ferro-alloys	3 954	11 717	16 759	10 015	11 130
Silicon metal	3 655	4 953	3 045	3 328	3 816
Ingots, blooms, billets	474 682	438 176	848 086	772 207	855 775
Scrap	5 249 904	5 998 402	5 677 123	6 127 787	6 290 607
Sweden					
Pig iron	31 011	59 364	54 919	100 988	40 289
Sponge & powder	5 357	7 650	7 604	12 168	3 704
Ferro-chrome	71 078	76 916	80 231	85 046	92 574
Ferro-silico-chrome	2 334	3 458	2 642	5 244	3 239
Ferro-silico-magnesium	1 270	1 919	7 377	3 977	2 180
Ferro-manganese	22 952	28 899	31 463	29 280	33 034
Ferro-silico-manganese	16 127	19 347	20 701	28 840	17 309
Ferro-molybdenum	2 508	4 013	3 354	3 269	3 585
Ferro-nickel	17 979	15 090	5 195	12 756	12 418
Ferro-niobium	376	611	595	671	623
Ferro-phosphorus	991	969	987	1 114	777
Ferro-silicon	31 064	36 840	31 381	35 802	42 809
Ferro-titanium & Fe-Si-Ti	1 813	2 264	2 285	2 340	1 736
Ferro-tungsten & Fe-Si-W	722	601	402	510	867
Ferro-vanadium	1 070	1 575	1 487	1 209	855
Other ferro-alloys	1 415	4 947	2 729	2 257	7 631
Silicon metal	2 101	2 413	3 808	4 416	5 095
Ingots, blooms, billets	393 046	305 002	389 416	477 366	366 264
Scrap	492 324	612 175	454 865	490 184	376 456

Imports of Iron, Steel and Ferro-Alloys

Country	1997	1998	1999	2000	2001
Switzerland					
Pig iron	22 268	36 101	27 870	30 806	33 986
Sponge & powder	6 381	8 038	9 033	9 073	6 176
Ferro-aluminium	333	28	1	4	1
Ferro-chrome	732	1 012	913	1 412	1 020
Ferro-manganese	5 518	3 824	3 302	5 927	6 161
Ferro-silico-manganese	4 413	5 615	5 145	5 786	4 655
Ferro-silicon	5 850	6 042	5 741	5 944	5 952
Other ferro-alloys	1 185	1 276	1 153	1 971	1 511
Silicon metal	16 579	12 023	1 120	696	701
Ingots, blooms, billets	93 321	90 596	52 522	69 174	44 303
Scrap	165 862	217 924	208 365	239 387	246 179
Turkey					
Pig iron	244 247	194 160	153 706	226 951	155 350
Sponge & powder	3 221	14 088	8 634	20 281	22 674
Ferro-manganese	32 459	24 323	29 364	43 147	34 409
Ferro-silico-manganese	102 756	91 245	90 684	97 763	78 749
Ferro-silicon	41 466	48 971	51 768	58 630	44 864
Other ferro-alloys	5 232	6 554	9 308	11 385	10 041
Silicon metal	...	1 841	2 005	1 985	1 468
Ingots, blooms, billets	1 390 031	1 484 361	1 607 637	1 923 083	1 039 166
Scrap	7 747 674	6 550 614	7 877 831	7 457 315	4 993 240
Ukraine					
Ferro-alloys	20 280	18 096	12 930	38 531	...
Scrap	90 061	26 250	1 937	23 198	...
United Kingdom					
Pig iron	210 112	225 303	156 325	133 734	159 725
Sponge & powder	25 690	33 529	23 005	40 061	23 551
Ferro-chrome & ferro-silico-chrome	118 915	114 275	120 393	114 459	104 130
Ferro-silico-magnesium	11 374	9 671	8 565	6 965	5 318
Ferro-manganese	135 902	111 500	90 301	91 053	73 507
Ferro-silico-manganese	38 261	49 448	53 965	66 279	53 747
Ferro-molybdenum	773	599	792	490	351
Ferro-nickel	20 251	11 909	4 470	2 503	7 166
Ferro-niobium	856	1 086	952	1 548	1 261
Ferro-phosphorus	3 025	2 980	2 630	2 310	2 163
Ferro-silicon	96 005	82 802	80 753	67 821	72 663
Ferro-titanium & Fe-Si-Ti	5 161	4 887	4 054	2 672	2 465
Ferro-tungsten & Fe-Si-W	112	56	66	63	96
Ferro-vanadium	378	378	648	1 443	727
Other ferro-alloys	3 108	4 475	4 717	4 086	4 073
Silicon metal	46 675	45 285	58 164	78 089	86 026
Ingots, blooms, billets	458 875	549 465	412 482	518 194	388 350
Scrap	211 827	179 204	164 757	201 251	178 923
Yugoslavia, Federal Republic of					
Pig iron	2 100	800	570	415	1 084
Ferro-alloys	13 451	7 405	10 333	6 587	4 441
Ingots, blooms, billets	124 152	34 804	220 158	88 373	4 020
Scrap	37 577	42 372	82 104	42 871	19 844
Algeria					
Ferro-manganese	1 931	1 951	1 786	2 411	...
Other ferro-alloys	1 758	3 202	1 740	3 180	...
Botswana					
Ferro-alloys	7 752	5 571	...	4 490	6 409
Scrap	4 299	5 294	...	891	522
Cameroon					
Ingots, blooms, billets	...	...	10 756	35 687	22 942
Egypt					
Pig iron	94 208	32 122	42 259	...	709
Ferro-alloys	22 300	20 322	15 004	...	21 695
Ingots, blooms, billets	1 209 431	1 910 852	1 246 300	...	1 182 650
Scrap	54 909	277 279	518 218	*300 000	429 827
Ethiopia					
Ingots, blooms, billets	3 122	3 321	1 583	5 721	...
Scrap (g)	310	60 435	75 761

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Country	1997	1998	1999	2000	2001
Ghana					
Ferro-alloys	...	1 106	974	1 157	1 259
Ingots, blooms, billets	...	5 532	16 497	15 796	12 585
Kenya					
Ingots, blooms, billets	495	43 426	74 089	65 712	...
Mauritius					
Ingots, blooms, billets	34 587	37 331	40 679	32 308	46 638
Morocco					
Pig iron	1 448	2 383	2 574	2 858	...
Ingots, blooms, billets	587 408	557 876	527 763	578 966	...
Nigeria					
Ferro-alloys	2 058	1 456	1 281	1 238	...
Ingots, blooms, billets	32 930	68 477	17 731	136 896	...
South Africa					
Sponge & powder	3 884	85 719	313 568	494 049	512 484
Ferro-chrome	465	628	9 080	580	1 142
Ferro-silico-magnesium	220	457	218	351	347
Ferro-silico-manganese	196	5 338	571	0	...
Ferro-molybdenum	1 258	1 040	1 419	845	598
Ferro-nickel	2 263	4 508	2 159	...	...
Ferro-niobium	87	223	79	119	153
Ferro-phosphorus	1 882	168	...	...	...
Ferro-silicon	3 100	2 844	3 564	7 887	3 322
Ferro-titanium & Fe-Si-Ti	417	537	562	605	281
Other ferro-alloys	222	1 428	1 696	3 073	1 160
Silicon metal	2 895	9 609	4 078	4 427	2 228
Scrap	50 048	43 066	47 454	65 447	75 177
Tanzania					
Ingots, blooms, billets	8 104	9 330	5 413	...	...
Togo					
Ingots, blooms, billets	5 057	298	4 372	11 366	...
Tunisia					
Ferro-alloys	2 808	2 216	2 709	2 794	...
Ingots, blooms, billets	108 477	106 408	192 070	157 639	...
Scrap	1 304	3 110	550	8 397	...
Zimbabwe					
Ferro-manganese	1 100	772	1 439	*1 000	...
Ferro-silicon	45 341	3 201	3 320	2 007	...
Canada					
Pig iron	130 002	124 430	168 225	67 706	68 105
Sponge & powder	52 411	35 831	15 050	184 467	739 616
Ferro-calcium-silicon	2 042	1 918	1 944	2 347	1 753
Ferro-chrome	58 333	50 502	45 329	43 755	37 725
Ferro-silico-chrome	594	487	697	501	513
Ferro-manganese	70 568	70 021	73 045	72 363	63 775
Ferro-silico-manganese	43 979	52 200	37 156	38 028	41 116
Ferro-molybdenum	1 664	1 846	1 838	1 885	1 659
Ferro-niobium	1 683	1 885	1 855	1 820	1 357
Ferro-phosphorus	1 247	1 270	1 175	861	978
Ferro-silicon	43 877	50 924	46 795	45 356	35 435
Ferro-titanium & Fe-Si-Ti	1 134	1 465	1 439	1 639	1 492
Ferro-vanadium	793	1 018	696	600	555
Other ferro-alloys	2 536	2 219	2 665	2 666	1 510
Silicon metal	20 106	19 522	20 873	27 597	19 557
Ingots, blooms, billets	821 685	835 063	392 208	531 258	420 600
Scrap	1 531 652	1 482 266	1 568 817	1 326 647	1 097 388
Costa Rica					
Ingots, blooms, billets	80 212	69 651	58 852	37 122	35 610
El Salvador					
Ingots, blooms, billets	38 595	69 711	59 259	29 825	85 944
Scrap	17 774	24 184	11 663	11 929	13 140
Guatemala					
Ingots, blooms, billets	43 341	182 242	130 362	34 552	86 781
Scrap	50 282	31 613	10 033	92 213	131 806

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Country	1997	1998	1999	2000	2001
Mexico					
Pig iron	493 510	514 741	299 690	934 697	404 719
Sponge & powder	411 611	212 839	353 500	462 253	619 883
Ferro-chrome	9 301	8 154	7 940	7 644	5 651
Ferro-manganese	16 313	15 151	11 354	11 638	19 127
Ferro-silico-manganese	15 539	25 967	13 494	18 202	28 177
Ferro-silicon	27 717	31 062	31 468	31 763	24 786
Other ferro-alloys	6 797	8 811	8 936	8 298	9 819
Silicon metal	6 559	6 286	6 835	7 709	8 892
Ingots, blooms, billets	399 660	773 613	432 820	602 604	506 524
Scrap	1 895 475	1 280 083	1 150 000	1 961 941	...
Panama					
Ingots, blooms, billets	51 713	29 000	33 598	11 404	11 849
Trinidad & Tobago					
Ferro-alloys	11 397	6 102	...	9 713	5 947
USA					
Pig iron	3 153 082	5 145 121	4 989 059	4 969 628	4 372 758
Sponge & powder	1 223 391	1 170 294	1 338 542	1 582 218	1 771 503
Ferro-chrome	388 858	418 492	603 794	576 691	256 271
Ferro-silico-chrome	36 502	24 946	35 947	19 230	14 617
Ferro-manganese	302 996	336 097	314 929	312 237	251 340
Ferro-silico-manganese	303 109	345 044	299 997	378 929	269 246
Ferro-molybdenum	5 891	7 720	8 540	8 333	5 575
Ferro-nickel	38 218	35 918	37 840	40 044	29 904
Ferro-niobium	6 957	8 076	7 380	7 163	7 768
Ferro-phosphorus	11 457	13 651	10 598	13 049	10 300
Ferro-silicon	195 209	203 804	248 905	326 122	176 355
Ferro-titanium & Fe-Si-Ti	6 233	7 335	4 747	6 053	4 122
Ferro-tungsten & Fe-Si-W	1 087	825	895	630	475
Ferro-vanadium	2 535	2 455	2 730	3 480	3 326
Other ferro-alloys	40 090	39 356	31 897	34 330	25 300
Silicon metal	125 087	106 929	118 500	136 185	121 997
Ingots, blooms, billets	5 771 636	6 220 275	7 565 441	7 749 318	5 861 273
Scrap	2 833 522	3 024 556	3 686 289	3 229 893	2 610 930
Argentina					
Pig iron	1 322	1 580	975	2 550	2 902
Ferro-chrome	3 164	3 715	2 097	3 730	3 851
Ferro-manganese	6 289	8 649	8 212	12 146	8 458
Ferro-silico-manganese	21 550	4 344	17 187	22 732	28 389
Ferro-silicon	974	3 174	3 196	5 627	5 711
Other ferro-alloys	1 632	2 226	1 897	2 950	3 060
Silicon metal	5 119	4 214	5 292	8 535	6 135
Ingots, blooms, billets	528 367	413 903	151 337	87 203	120 841
Scrap	7 743	9 827	943	184	983
Brazil					
Sponge & powder	8 491	5 430	4 463	29 516	5 893
Ferro-chrome	6 842	5 676	4 970	10 649	7 183
Ferro-manganese	9 346	10 131	28 453	8 158	27 918
Other ferro-alloys	7 428	7 277	4 596	6 157	8 311
Chile					
Ferro-alloys	11 542	11 921	12 044	15 952	17 607
Colombia					
Ferro-chrome	290	331	135	595	538
Ferro-manganese	5 857	5 382	4 145	6 159	5 439
Ferro-silico-manganese	4 494	2 447	1 754	2 680	2 979
Ferro-silicon	3 040	2 233	1 896	2 830	3 076
Other ferro-alloys	928	853	916	1 054	1 246
Ingots, blooms, billets	173 515	171 523	87 543	116 296	147 726
Scrap	142 511	119 033	20 500	96 455	...
Ecuador					
Ingots, blooms, billets	160 715	177 712	129 394	210 869	218 844

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Country	1997	1998	1999	2000	2001
Peru					
Sponge	...	22 113	36 649	104 778	151 490
Ferro-chrome	971	1 210	849	1 048	378
Ferro-manganese	2 162	2 320	3 927	972	1 747
Ferro-silico-manganese	7 030	8 375	3 050	5 098	4 512
Ferro-silicon	1 280	1 708	863	1 495	1 398
Ingots, blooms, billets	91 284	117 554	46 851	...	...
Scrap	19 581	18 883	...	10 477	17 188
Uruguay					
Ferro-alloys	778	666	706	649	679
Ingots, blooms, billets	200	3 004	...	...	...
Venezuela					
Sponge & powder	3 025	734	1 690	1 341	2 029
Ferro-chrome	359	209	93	268	301
Ferro-manganese	20 180	15 209	6 904	15 684	14 726
Other ferro-alloys	1 686	3 250	1 376	2 743	3 827
Silicon metal	2 119	1 086	1 560	1 945	1 540
Ingots, blooms, billets	24 967	...	12 933	8 375	28 782
Scrap	66 254	98 256	23 003	...	11 697
Bahrain					
Silicon metal	...	...	...	3 643	4 572
Bangladesh					
Pig iron (a)	15 493	...	...	...	...
Ferro-alloys (a)	103 635	...	...	...	...
Scrap (a)	13 127	...	...	...	...
China					
Pig iron	24 013	23 972	58 811	17 514	480 118
Sponge & powder	31 181	12 811	43 922	145 860	721 674
Ferro-alloys	28 999	6 975	9 003	9 310	35 964
Silicon metal	1 876	2 468	924	1 176	1 568
Ingots, blooms, billets	394 774	690 829	2 134 955	4 901 163	8 362 437
Scrap	1 828 759	2 018 655	3 339 073	5 099 105	9 776 318
Dubai					
Silicon metal	11 542	11 920	13 101	...	...
Ingots, blooms, billets	9 817	11 497	14 199	...	...
Scrap	18 009	26 205	19 826	...	...
Hong Kong					
Sponge & powder	1 717	2 378	3 122	11 945	1 139
Ferro-alloys	20 586	4 462	4 688	1 612	632
Silicon metal	3 856	1 008	811	1 239	775
Ingots, blooms, billets	143 730	237 749	360 476	441 876	542 834
Scrap	255 113	249 397	204 829	213 596	180 948
India					
Pig iron (e)	2 666	2 247	3 417	1 867	...
Sponge & powder (e)	2 903	3 209	2 625	57 309	...
Ferro-chrome & ferro-silico-chrome (e)	14 185	3 510	7 442	24 917	...
Ferro-manganese & Fe-Si-Mn (e)	14 993	7 117	10 727	9 273	...
Ferro-molybdenum (e)	245	153	60	16	...
Ferro-nickel (e)	9 469	4 924	5 412	1 956	...
Ferro-silicon (e)	14 112	7 898	33 350	23 460	...
Other ferro-alloys (e)	4 689	3 522	3 622	4 464	...
Silicon metal (e)	13 823	8 725	10 918	13 064	...
Ingots, blooms, billets (e)	414 223	607 764	579 883	354 952	...
Scrap (e)	1 658 894	1 494 745	1 924 390	1 698 895	...
Indonesia					
Pig iron	220 848	75 138	135 489	154 603	62 856
Sponge & powder	228 625	57 543	91 208	278 036	229 636
Ferro-manganese	36 009	7 482	10 274	16 609	6 146
Ferro-silico-manganese	32 545	16 085	10 937	21 340	19 989
Ferro-silicon	9 158	8 480	10 167	10 747	9 092
Other ferro-alloys	2 407	996	1 385	2 672	2 556
Silicon metal	1 658	785	1 242	1 165	1 569
Ingots, blooms, billets	1 718 583	268 109	434 099	1 251 167	1 089 251
Scrap	869 730	399 964	690 945	1 263 506	1 438 338

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Country	1997	1998	1999	2000	2001
Iran					
Ferro-manganese	31 300	18 137	43 716	27 517	...
Other ferro-alloys	...	4 018	2 160	4 189	...
Silicon metal	...	935	1 409	557	...
Ingots, blooms, billets (c)	89 291	33 553	48 433	196 437	...
Scrap	50 200	43 878	10 100	19 945	...
Japan					
Pig iron	1 052 218	184 396	143 294	850 765	181 313
Sponge & powder	227 821	113 446	92 788	63 099	149 337
Ferro-chrome	811 555	628 345	599 839	776 333	739 540
Ferro-silico-chrome	4 729	3 414	3 171	5 817	3 493
Ferro-manganese	95 240	109 853	89 570	69 682	54 551
Ferro-silico-manganese	257 536	201 284	227 218	223 759	218 406
Ferro-molybdenum	3 167	2 214	2 193	3 345	3 872
Ferro-nickel	49 752	41 069	34 284	37 635	45 472
Ferro-niobium	4 977	6 516	6 889	5 566	6 278
Ferro-phosphorus	7 639	7 324	6 827	8 892	...
Ferro-silicon	556 735	401 939	440 152	504 764	472 840
Ferro-titanium & Fe-Si-Ti	6 276	4 792	3 979	3 537	4 858
Ferro-tungsten & Fe-Si-W	775	974	560	1 101	826
Ferro-vanadium	1 770	1 915	1 985	2 775	2 995
Other ferro-alloys	14 099	11 065	11 611	...	19 672
Silicon metal	166 312	163 202	184 596	200 369	191 003
Ingots, blooms, billets	274 082	45 554	8 042	12 195	27 914
Scrap	414 555	176 907	282 019	321 424	151 107
Jordan					
Ferro-alloys	259	610	1 076	1 267	1 968
Ingots, blooms, billets	252 480	299 418	332 755	295 651	399 859
Scrap	1 661	939	3 418	8 535	3 629
Kazakhstan					
Ferro-manganese	(d) ...	14 969	18 857	26 001	...
Other ferro-alloys	(f) 20 373	4 048	5 410	6 089	34 877
Ingots, blooms, billets	...	8 386	9 949	12 493	...
Scrap	78 000	1 884	4 706	4 788	10 089
Korea, Dem. P.R. of					
Ferro-manganese (b)	*1 800	*2 300	*5 400	*5 400	*4 800
Other ferro-alloys (b)	*16 400	*8 300	*10 500	*3 700	*4 300
Korea, Republic of					
Pig iron	3 691 551	2 481 263	2 752 486	2 271 671	1 445 469
Sponge & powder	911 933	607 926	742 820	604 926	595 082
Ferro-chrome	299 313	287 466	384 336	359 491	323 538
Ferro-silico-chrome	12 311	17 063	14 492	14 002	9 454
Ferro-manganese	41 085	36 445	33 766	54 318	50 990
Ferro-silico-manganese	120 438	89 959	84 002	108 763	100 082
Ferro-molybdenum	1 785	1 423	2 149	2 759	3 233
Ferro-nickel	85 172	86 594	85 779	98 032	106 584
Ferro-niobium	634	779	1 099	682	953
Ferro-phosphorus	3 392	3 681	4 271	3 921	3 245
Ferro-silicon	128 241	118 983	133 739	149 828	152 146
Ferro-titanium & Fe-Si-Ti	764	462	579	618	678
Ferro-tungsten & Fe-Si-W	74	90	122	143	172
Ferro-vanadium	728	762	632	414	339
Other ferro-alloys	----	6 465	...	4 912	9 189
Silicon metal	19 325	12 592	22 623	32 311	25 465
Ingots, blooms, billets	3 631 133	1 579 493	2 638 634	3 443 612	3 101 898
Scrap	6 532 716	5 566 790	6 583 505	6 851 903	6 731 384
Lebanon					
Ingots, blooms, billets	...	82 818	50 689	58 075	177 014
Scrap	...	7 044	1 938	5 042	40 294
Malaysia					
Pig iron	...	98 575	175 498	331 036	186 150
Sponge & powder	5 897	4 934	61 766	25 862	43 149
Ferro-manganese	19 597	4 791	13 800	31 001	...
Ferro-silicon	8 211	4 125	...	69 697	...
Ferro-vanadium	314	48	...	880	249
Other ferro-alloys	947	341	...	24 471	...
Ingots, blooms, billets	...	282 714	240 391	79 330	394 105
Scrap	991 000	417 000	979 313	1 587 341	...

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Country	1997	1998	1999	2000	2001
Oman					
Ingots, blooms, billets	4 007	24 501	9 900	35	92
Pakistan					
Pig iron (a)	6 109	8 457	----	135 598	...
Ferro-chrome	1 600	1 200	1 300	1 700	...
Ferro-manganese (a)	8 263	7 582	6 828	12 473	...
Ferro-silicon (a)	...	...	6 515	9 156	...
Ingots, blooms, billets (a)	48 336	32 504	...	...	...
Scrap (a)	121 263	65 790	...	190 375	...
Philippines					
Pig iron	24 536	12 574	...	2 259	253
Ferro-manganese	2 857	3 262	3 200	3 087	...
Ferro-silico-manganese	540	918	695	1 589	2 497
Ferro-silicon	3 670	5 255	2 644	4 372	...
Other ferro-alloys	296	164	257	198	...
Ingots, blooms, billets	1 799 813	983 318	1 310 206	1 105 121	1 103 768
Scrap	60 488	51 961	4 642	3 557	2 987
Saudi Arabia					
Pig iron	11 893	46 486	96 906	49 136	...
Ferro-alloys	6 324	2 837	9 497	5 899	...
Silicon metal	664	778	599	399	...
Ingots, blooms, billets	149 110	321 101	108 426	50 063	...
Scrap	37 004	23 853	12 124	35 889	...
Singapore					
Pig iron	21 500	26 510	63 399	21 891	11 196
Sponge & powder	1 714	1 507	2 111	2 569	3 222
Ferro-manganese	904	682	953	1 207	523
Ferro-silico-manganese	4 204	4 204	4 939	4 350	3 506
Ferro-silicon	1 901	1 420	3 484	2 057	1 099
Other ferro-alloys	3 568	406	349	464	422
Silicon metal	...	865	578	2 120	711
Ingots, blooms, billets	422 065	116 968	316 183	292 939	309 866
Scrap	63 521	68 633	141 027	233 888	177 181
Sri Lanka					
Ingots, blooms, billets	121 798	132 766	131 922	...	...
Syria					
Ingots, blooms, billets	22 350	51 209	55 631	...	...
Taiwan					
Pig iron	1 112 462	955 323	951 797	847 323	448 377
Sponge & powder	24 957	22 969	24 836	28 633	36 997
Ferro-chrome	285 664	309 496	397 972	395 171	357 758
Ferro-manganese	51 793	42 990	67 161	69 468	59 629
Ferro-silico-manganese	77 702	79 780	71 212	77 001	86 494
Ferro-molybdenum	2 234	2 974	2 876	1 812	1 598
Ferro-nickel	81 818	90 978	110 969	117 094	120 898
Ferro-niobium	164	345	189	336	268
Ferro-silicon	63 313	64 723	66 445	74 432	67 235
Ferro-tungsten & Fe-Si-W	122	230	106	225	103
Ferro-vanadium	490	468	575	1 121	604
Other ferro-alloys	6 558	6 421	4 846	5 641	5 268
Silicon metal	25 275	19 434	18 092	17 321	12 662
Ingots, blooms, billets	7 013 973	7 528 921	9 121 332	9 026 461	5 480 483
Scrap	1 960 652	2 398 392	1 800 846	1 957 909	2 119 421
Thailand					
Pig iron	219 603	118 441	135 430	306 043	107 367
Sponge & powder	1 325	1 638	2 752	4 737	4 265
Ferro-chrome	3 095	3 398	3 977	7 188	4 218
Ferro-manganese	7 744	7 675	5 526	7 211	6 593
Ferro-silico-manganese	21 947	17 553	19 148	20 859	19 040
Ferro-silicon	15 645	12 569	14 910	17 506	17 291
Other ferro-alloys	775	2 418	1 614	1 853	1 043
Silicon metal	3 536	2 735	3 828	4 919	5 131
Ingots, blooms, billets	3 256 499	3 260 000	3 190 960	2 736 852	2 791 793
Scrap	728 218	320 014	629 698	741 332	693 905

Imports of Iron, Steel and Ferro-Alloys

Country	1997	1998	1999	2000	2001
Australia					
Pig iron	26 729	97 178	41 115	6 230	5 623
Sponge & powder	13 388	9 257	4 539	4 110	41 230
Ferro-chrome	11 707	8 438	11 871	8 127	8 980
Ferro-manganese & Fe-Si-Mn	8 075	11 933	6 600	5 024	6 223
Ferro-molybdenum	334	294	283	435	480
Ferro-niobium	150	100	91	41	8
Ferro-silicon	35 825	33 952	32 604	28 832	27 673
Ferro-titanium & Fe-Si-Ti	356	361	412	364	351
Ferro-vanadium	700	232	295	99	69
Other ferro-alloys	1 934	1 629	8 790	1 848	8 618
Silicon metal	2 948	3 771	4 076	5 611	4 434
Ingots, blooms, billets	124 113	37 217	...	14 984	6 296
Scrap	2 216	10 363	5 000	21 319	6 012
New Zealand					
Ferro-manganese	2 074	2 981	1 816	2 088	2 321
Ferro-silicon	2 519	1 892	2 234	2 486	1 586
Other ferro-alloys	2 555	2 045	2 419	3 117	2 985
Silicon metal	2 188	1 553	3 661	4 239	2 628

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	1997	1998	1999	2000	2001
Austria	42 654	39 666	30 759	25 066	*20 000
Belgium	*300 000	*300 000	*300 000	*300 000	*300 000
Bosnia & Herzegovina	*3 000	*3 000	*3 000	*3 000	...
Bulgaria	158 000	154 760	144 341	*150 000	*150 000
Czech Republic (h)	822 394	1 101 312	1 049 225	1 242 158	1 140 319
France	332 000	333 000	328 000	385 000	377 000
Germany (g)	721 000	736 000	*700 000	*700 000	*700 000
Greece	56 459	46 388	64 931	54 226	60 075
Italy	180 570	247 970	295 871	284 148	...
Poland (k)	69 700	69 200	80 300	90 139	103 220
Portugal	216 075	271 296	213 796	127 581	...
Romania	29 169	24 742	25 456	18 942	21 979
Russia	48 400	40 600	82 300	...	...
Slovakia	22 720	14 580	22 930	21 000	34 730
Spain (k)	296 015	312 539	326 803	353 355	*400 000
Turkey	472 646	403 733	449 954	390 830	318 055
Ukraine	237 900	201 670	221 526	172 800	...
United Kingdom (a) (l)	2 359 676	2 391 595	2 303 602	2 376 057	2 204 156
Yugoslavia, Federal Republic of	65 724	75 092	40 321	39 475	60 900
Algeria	18 533	13 640	16 833	11 616	13 356
Burundi	3 539	3 500	1 597	1 500	----
Egypt (d)	112 657	138 184	...	...	...
Eritrea	4 670	3 809	1 138	943	*990
Ethiopia (c)	3 512	378	681	1 654	1 790
Kenya	...	...	192	793	700
Madagascar	*1 500	*1 500	*1 500	*1 500	...
Nigeria	125 219	*110 000	*110 000	*110 000	...
South Africa	122 798	138 304	122 413	98 897	87 515
Tanzania	898	----	----	----	----
Cuba	11 500	11 000	10 400	9 700	...
Mexico	235 278	339 013	489 993	532 268	681 709
USA (e)	9 280 000	9 640 000	9 160 000	8 800 000	*9 030 000
Argentina	47 365	46 832	52 665	*50 000	*50 000
Brazil (b)	1 348 562	1 499 381	1 652 997	1 827 826	*2 000 000
Chile	14 238	11 530	4 361	6 445	5 300
Ecuador	7 348	5 600	20 652	11 022	8 818
Paraguay	*66 700	*66 700	*66 500	*66 500	*66 500
Peru	7 875	4 968	1 332	6 165	5 532
Venezuela	5 000	4 000	12 000	*10 000	...
Bangladesh (d)	8 849	7 731	7 700	7 900	...
China	950 000	1 000 000	1 332 000	1 450 000	...
India (i) (j)	166 453	159 493	168 618	179 274	182 281
Indonesia	1 956	8 567	21 389	*15 000	...
Iran (m)	484 785	451 807	529 767	...	...
Israel	16 000	27 000	20 000	13 000	13 300
Japan	110 915	83 257	53 092	25 739	19 976
Jordan	34 550	50 531	34 040	36 795	...
Kazakhstan	*20 000	*20 000	*20 000	*20 000	*20 000
Korea, Republic of	898 347	627 360	672 824	705 145	850 360
Malaysia	221 769	198 930	213 973	233 885	381 594
Pakistan (d)	66 235	66 672	64 692	63 494	12 980
Philippines	1 440	1 783	5 465	1 510	5 111
Saudi Arabia	7 100	7 100	7 500	7 500	...
Sri Lanka	20 126	11 110	12 573	12 230	9 403
Taiwan	27 491	72 188	75 784	38 606	28 921
Thailand (h)	315 098	262 859	127 770	221 062	181 583
Uzbekistan (i)	...	*10 000	*15 000	...	...
Vietnam	*1 100	*1 100	*1 100	*1 200	*1 300
Australia (d) (f)	217 000	182 000	201 000	223 000	221 000
New Zealand	21 874	16 965	16 686	16 310	15 620

Production of Kaolin

Country	1997	1998	1999	2000	2001
World Total	21 400 000	22 100 000	22 000 000	22 300 000	22 800 000

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 7 July of 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 20 March following that stated

Exports of Kaolin

tonnes

Country	1997	1998	1999	2000	2001
Albania	*10 000	54	0	----	...
Austria	5 037	2 965	2 743	3 235	2 998
Belgium-Luxembourg	308 573	324 359	248 829	324 267	357 363
Bulgaria	100 155	95 322	77 891	155 429	(a) *119 500
Croatia	...	3 605	3 143	3 080	2 620
Czech Republic	397 720	418 948	428 342	442 934	455 089
Denmark	912	1 436	1 003	1 045	1 050
Finland	2 333	3 572	5 466	6 915	7 561
France	260 812	330 616	307 307	348 868	290 332
Germany	178 366	194 610	387 173	367 230	350 804
Greece	15 733	8 952	3 811	4 252	723
Hungary	1 866	1 814	1 539	2 229	3 121
Italy	42 537	56 878	60 852	56 689	58 835
Netherlands	85 534	138 731	185 784	233 688	282 035
Poland	4 800	...	3 342	1 903	6 321
Portugal	4 951	2 741	9 701	10 287	11 944
Russia	574	302	1 233	1 050	...
Spain	144 343	104 342	103 831	130 290	155 446
Sweden	25 476	35 697	13 507	11 491	7 199
Turkey	158 642	185 431	262 211	272 128	227 159
Ukraine	291 161	230 888	246 565	294 039	...
United Kingdom (d)	2 052 914	2 093 460	2 018 969	2 074 548	1 928 230
Egypt	64 456	46 205	2 806	*3 000	4 328
South Africa	1 503	4 962	5 199	3 986	10 023
USA	3 395 222	3 585 990	3 349 793	3 727 982	3 482 037
Argentina	8 242	9 620	8 158	11 646	6 334
Brazil	764 743	964 268	1 156 593	1 390 636	1 437 400
Colombia	4 994	5 530	6 255	7 107	11 371
China	820 520	882 169	892 785	871 042	777 033
Hong Kong (c)	396 008	284 962	205 996	147 159	77 668
India (b)	10 138	7 810	9 335	8 462	...
Indonesia	126 462	90 976	128 923	114 138	88 242
Iran	...	31 126	12 920	57 900	...
Israel (a)	*16 100	...	*15 500	*17 800	*5 100
Japan	9 139	12 475	13 628	7 554	5 490
Jordan	1 155	768	11 526	15 018	8 895
Kazakhstan	10 000	8 020	(a) *2 900	1 170	4 234
Korea, Dem. P.R. of (a)	*6 000	*7 500	*4 800	*4 400	*7 100
Korea, Republic of	23 623	24 504	22 926	20 840	14 250
Malaysia	68 900	59 371	91 490	80 391	115 896
Singapore	927	539	1 471	618	477
of which, re-exports	918	525	1 408	509	383
Taiwan	21 344	19 262	17 129	13 033	5 582
Thailand	12 184	10 454	15 237	13 162	9 440
Australia	25 141	24 796	24 150	15 936	16 889
New Zealand	22 761	14 925	11 213	5 000	...

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

Country	1997	1998	1999	2000	2001
Austria	227 663	216 307	222 559	250 552	254 030
Belarus	*15 000	21 909	33 581	30 966	28 195
Belgium-Luxembourg	690 593	596 714	556 417	470 979	467 193
Croatia	21 410	4 849	5 636	5 513	6 357
Cyprus	421	4 020	5 197	3 712	369
Czech Republic	10 087	16 028	13 412	17 649	19 514
Denmark	28 862	20 210	19 910	18 505	19 369
Finland	1 402 209	1 357 735	1 249 452	1 493 786	1 355 460
France	439 674	368 970	400 812	379 697	380 166
Germany	729 379	739 660	719 302	809 665	749 260
Greece	57 688	44 061	44 968	43 835	23 933
Hungary	38 726	37 509	33 601	28 869	34 000
Irish Republic	11 774	11 627	12 980	12 539	11 505
Italy	834 122	930 913	989 397	1 108 281	1 020 131
Latvia	1 300	2 303	3 630	2 607	3 386
Macedonia	8 965	9 895	6 152	7 553	7 945
Moldova	...	4 924	3 066	6 400	6 457
Netherlands	360 327	393 780	460 095	560 760	455 737
Norway	241 707	250 210	263 832	274 484	251 950
Poland	60 100	55 000	54 656	53 027	66 759
Portugal	109 909	121 639	128 709	140 863	151 525
Romania	58 851	49 338	53 812	68 404	71 015
Russia	131 238	101 940	133 106	190 328	...
Slovakia	60 800	74 800	76 847	81 985	93 735
Slovenia	22 300	24 816	24 934	28 703	25 583
Spain	470 225	585 468	630 623	797 987	796 040
Sweden	386 758	371 589	402 204	548 460	422 071
Switzerland	56 975	59 144	46 985	45 273	37 383
Turkey	116 727	139 326	114 965	198 837	117 550
United Kingdom	88 946	47 272	28 502	42 537	95 337
Yugoslavia, Federal Republic of	7 702	9 075	8 778	25 637	12 694
Algeria	5 813	10 684	3 556	7 201	...
Egypt	85 127	120 712	87 720	*90 000	9 763
Ethiopia	1 500	270	91	137	...
Ghana	2 920	3 597	3 208	3 116	3 434
Kenya	4 100	3 100	2 759	3 014	...
Mauritius	...	937	855	639	189
Morocco	16 005	25 541	25 520	25 231	...
South Africa	22 054	24 753	17 509	16 353	15 675
Tunisia	50 058	57 353	65 454	88 680	...
Zimbabwe	1 747	1 528	5 510	2 353	...
Canada	717 103	860 450	917 129	906 761	967 886
Costa Rica	2 282	3 909	3 639	4 818	4 063
Guatemala	4 378	2 682	4 306	7 257	7 717
Mexico	300 139	338 176	367 455	351 446	330 443
Nicaragua	1 901	1 715	2 107	4 252	4 463
USA	30 384	52 943	57 255	62 656	113 625
Argentina	21 548	25 684	19 129	17 457	13 018
Brazil	4 305	4 941	3 746	5 367	5 686
Chile	24 196	16 002	20 728	22 116	32 192
Colombia	11 402	8 967	7 763	11 259	8 376
Ecuador	13 166	13 911	8 589	22 293	26 743
Peru	1 509	2 704	1 907	3 671	3 574
Uruguay	10 334	13 333	9 026	9 416	9 932
Venezuela	27 772	21 987	24 181	23 463	24 327
Bangladesh (b)	65 102	...	...	...	...
China	54 295	64 326	105 182	182 763	190 967
Dubai	9 847	32 228	17 919	...	...
Hong Kong	172 105	139 015	56 287	30 412	20 323
India (c)	3 103	4 825	6 690	6 671	...
Indonesia	144 964	134 903	101 232	145 253	94 990
Iran (a)	11 195	19 975	23 845	19 126	...
Israel	*15 000	*17 000	*16 500	...	...
Japan	1 333 036	1 393 293	1 347 092	1 400 969	1 397 275

Imports of Kaolin

tonnes

Country	1997	1998	1999	2000	2001
Jordan	4 276	4 486	3 515	5 003	4 760
Korea, Republic of	274 430	211 674	255 206	259 975	292 290
Lebanon	...	44 377	36 336	27 526	29 619
Malaysia	34 300	31 962	93 569	48 686	...
Pakistan (b)	8 252	10 138	8 270	8 718	...
Philippines	50 050	59 000	67 063	72 422	27 012
Saudi Arabia	5 571	4 790	6 513	9 218	...
Singapore	10 451	9 613	10 907	8 846	7 849
Sri Lanka	...	8 358	3 474	*3 500	...
Syria	...	7 855	14 618	...	...
Taiwan	1 146 106	988 891	994 472	834 904	741 957
Thailand	64 141	38 281	53 087	64 154	61 355
Australia	20 753	16 578	8 892	10 482	12 159
New Zealand	6 450	8 206	12 817	11 105	10 946

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	1997	1998	1999	2000	2001
Bulgaria	28 000	24 200	13 800	10 900	18 500
Finland	2 200	1 800	130	380	-----
Greece	19 335	22 632	19 699	15 554	26 588
Irish Republic	45 000	35 900	39 200	57 500	44 500
Italy	11 800	6 800	6 500	4 000	4 000
Macedonia	28 000	30 000	27 000	24 000	*24 000
Norway	2 231	-----	-----	-----	-----
Poland	54 729	59 533	62 900	51 200	52 600
Romania	19 447	15 128	17 489	18 750	19 676
Russia	16 000	13 000	14 000	14 000	*14 000
Spain	19 925	21 422	28 715	51 793	35 600
Sweden	108 624	114 430	116 393	106 584	85 975
Turkey	13 113	14 603	14 225	15 888	15 936
United Kingdom	*1 600	*1 600	1 000	*1 000	*800
Yugoslavia, Federal Republic of	14 029	16 700	8 631	3 790	4 291
Algeria	840	730	760	510	560
Morocco	78 228	81 000	80 000	82 147	76 748
Namibia	18 300	13 500	9 886	12 115	13 024
South Africa	83 114	84 128	80 191	75 262	50 771
Tunisia	1 424	4 274	6 300	6 200	6 942
Canada	186 234	189 752	162 180	148 769	153 934
Honduras	5 930	4 329	5 226	4 805	6 750
Mexico	174 661	166 060	125 656	137 975	136 413
USA	458 536	493 094	520 165	464 700	466 400
Argentina	13 760	15 004	14 256	14 115	12 334
Bolivia	18 608	13 848	10 153	9 523	9 090
Brazil	8 729	7 567	10 281	8 832	10 300
Chile	1 264	337	608	785	1 193
Peru	262 466	257 713	271 782	270 576	289 546
China	711 900	580 500	548 900	659 500	676 000
India	32 900	37 700	37 700	36 000	32 000
Iran	9 300	12 500	14 400	17 200	11 800
Japan	5 227	6 198	6 074	8 835	4 997
Kazakhstan	28 400	30 200	34 200	39 300	37 700
Korea, Dem. P.R. of	*35 000	*30 000	*26 000	*22 000	*26 000
Korea, Republic of	3 632	3 559	1 800	2 700	1 000
Myanmar	2 800	2 200	1 800	1 200	900
Tajikistan	*2 000	*2 000	*2 000	*2 000	*2 000
Thailand	5 000	6 100	9 500	9 900	300
Uzbekistan	*1 800	*1 000	-----	-----	-----
Australia	526 000	618 000	681 000	739 000	759 000
World Total	3 100 000	3 000 000	3 000 000	3 100 000	3 100 000

Production of Refined Lead

tonnes

Country	1997	1998	1999	2000	2001
Austria	21 941	23 248	23 773	23 773	24 500
Belgium (a)	142 901	...	125 243	156 215	...
Bulgaria	72 600	77 084	81 600	84 100	83 000
Czech Republic	21 843	24 327	27 017	28 700	30 500
France	282 800	290 200	275 400	263 200	231 400
Germany	329 203	352 885	352 772	387 167	373 622
Greece	*6 000	*6 000	*6 000	*6 000	*6 000
Irish Republic	12 600	13 000	13 000	8 500	9 800
Italy	211 600	199 300	215 300	230 500	221 900
Macedonia	26 046	28 415	19 738	22 939	19 737
Netherlands	19 500	17 200	*18 000	21 000	20 000
Poland	64 732	64 400	63 985	55 900	66 000
Portugal	*6 000	*6 000	*6 000	*6 000	*6 000
Romania	17 686	19 872	17 462	23 555	26 900
Russia	46 700	33 100	55 260	51 501	60 000
Slovenia	15 000	14 000	15 000	15 300	*15 000
Spain	88 000	90 000	96 000	120 000	121 600
Sweden	89 350	91 631	83 927	82 375	77 633
Switzerland	8 870	8 572	9 173	10 007	10 233
Turkey	9 000	8 800	9 000	*9 000	*9 000
Ukraine	11 000	7 340	9 902	15 034	12 800
United Kingdom	384 112	349 704	347 600	324 451	366 305
Yugoslavia, Federal Republic of	23 632	23 756	----	1 242	----
Algeria	7 100	6 300	6 200	5 700	6 100
Kenya	*1 000	*1 000	*1 000	*1 000	*1 000
Morocco	64 202	61 953	65 209	66 812	58 178
Namibia	1 530	236	----	----	----
Nigeria	*5 000	*5 000	*5 000	*5 000	*5 000
South Africa	43 000	50 000	52 000	46 000	55 000
Zimbabwe	*2 000	*2 000	*2 000	*1 000	*1 000
Canada	271 395	265 487	266 415	284 333	230 928
Mexico	255 200	250 200	199 000	232 900	233 300
Trinidad & Tobago	*1 000	*1 000	*1 000	*1 000	*1 000
USA (b)	1 417 100	1 390 600	1 447 000	1 471 000	1 375 000
Argentina	32 116	30 357	25 695	35 700	34 500
Brazil (c)	44 500	48 000	52 000	50 000	47 000
Colombia	*10 000	*12 000	*11 000	*10 000	*9 000
Peru	97 882	109 493	111 276	116 412	121 181
Venezuela	25 000	25 000	25 000	25 000	25 000
China	707 500	756 900	918 400	1 099 900	1 195 400
India	59 900	63 700	51 700	67 000	63 000
Indonesia	*30 000	22 000	18 000	18 000	18 000
Iran	49 400	47 000	*47 000	*55 000	*55 000
Israel	12 000	12 000	13 000	13 000	20 000
Japan	296 764	302 064	293 525	311 562	302 387
Kazakhstan	81 975	118 634	158 890	205 501	177 489
Korea, Dem. P.R. of	*30 000	20 000	14 000	10 000	7 000
Korea, Republic of	182 000	191 409	190 405	219 123	211 010
Malaysia	35 900	29 000	33 000	32 000	38 000
Myanmar (d)	1 585	1 855	1 717	1 100	1 800
Pakistan	*3 000	*3 000	*3 000	*3 000	*3 000
Philippines	25 000	22 000	24 000	25 000	26 000
Saudi Arabia	17 000	18 000	19 000	18 000	16 000
Taiwan	36 200	38 700	44 400	41 800	40 000
Thailand	19 080	22 125	26 766	27 193	30 000
United Arab Emirates	2 200	2 000	2 000	2 000	2 000

Production of Refined Lead

tonnes

Country	1997	1998	1999	2000	2001
Australia	234 000	206 000	272 000	251 000	270 000
New Zealand	10 000	10 000	10 000	10 000	10 000
World Total	6 000 000	6 000 000	6 300 000	6 700 000	6 600 000

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	1997	1998	1999	2000	2001
Albania					
Scrap (f)	*500	*500	*400	*400	*300
Austria					
Unwrought	5 434	6 380	5 066	4 519	6 375
Belarus					
Unwrought	3 702	2 909	19	182	226
Scrap	*4 500	5 268	4 623	3 865	3 871
Belgium-Luxembourg					
Ore	81 019	106 868	96 153	126 905	96 613
Unwrought	97 588	83 399	90 857	122 509	96 885
Scrap	7 127	5 100	6 984	8 979	9 465
Bulgaria					
Unwrought	66 696	63 800	70 702	72 777	...
Croatia					
Unwrought	1 200	1 341	1 027	115	20
Scrap	315	485	480	590	809
Cyprus					
Scrap	1 255	1 211	1 958	2 371	1 965
of which, re-exports	974	887	1 832	2 371	1 965
Czech Republic					
Unwrought	4 858	2 784	6 704	9 200	6 786
Scrap	1 585	3 039	3 313	4 152	3 750
Denmark					
Unwrought	658	645	13 859	2 186	3 090
Scrap	2 009	5 987	1 306	1 959	1 864
Estonia					
Scrap	618	282	1 059	278	459
Finland					
Unwrought	2 707	425	495	----	5
Scrap	5 735	1 160	12 366	12 653	811
France					
Unwrought	87 499	89 483	77 916	76 757	62 680
Scrap	6 357	3 024	5 101	20 275	21 979
Germany					
Ore	----	5 170	16 443	27 765	8 868
Unwrought	72 818	88 922	83 669	117 138	160 412
Scrap	13 866	14 910	15 561	13 112	12 669
Greece					
Unwrought	2 924	2 594	5 885	3 671	6 127
Hungary					
Scrap	2 215	2 509	2 315	1 718	1 944
Irish Republic					
Ores & concentrates	50 561	36 158	33 400	48 056	58 150
Italy					
Ore	9 000	4 850	5 000	...	...
Unwrought	58 334	21 132	26 381	24 103	8 646
Scrap	191	1 423	4 589	5 595	2 716
Lithuania					
Scrap	2 676	417	650	779	1 129
Macedonia					
Ore	17 485	17 642	14 955	16 259	14 034
Unwrought	18 478	20 837	19 656	21 892	22 537
Netherlands					
Unwrought	10 770	1 966	2 919	3 532	1 256
Scrap	21 557	21 856	20 227	24 706	26 188
Norway					
Scrap	8 122	10 660	13 494	15 329	15 693
Poland					
Ores & concentrates	59 436	59 992	76 115	59 977	73 989
Unwrought	27 700	36 800	45 838	41 381	44 691
Scrap	333	391	489	1 501	1 921
Portugal					
Unwrought	1 279	5	202	60	567
Scrap	714	1 541	3 556	2 827	3 506
Romania					
Unwrought	3 598	3 348	3 788	18 260	16 142
Scrap	...	1 456	5 224	6 083	1 483

Exports of Lead

Country	1997	1998	1999	2000	2001
Russia					
Ores & concentrates	32 598	21 754	21 006	19 321	...
Unwrought (f)	*31 900	*27 700	*24 600	*58 900	*28 100
Scrap	16 355	14 796	4 410	3 076	...
Slovakia					
Unwrought (f)	*3 500	*3 600	*2 000	3 311	2 873
Scrap (f)	*1 100	*500	...	83	...
Slovenia					
Unwrought	9 200	6 095	7 014	6 392	6 587
Spain					
Ore	24 727	41 230	34 760	113 715	97 594
Unwrought	767	2 073	6 217	5 842	6 098
Scrap	823	1 465	1 073	2 706	3 684
Sweden					
Ore	75 552	114 854	124 500	127 922	118 723
Unwrought	51 227	57 865	57 377	67 565	54 414
Scrap	151	680	221	73	545
Switzerland					
Unwrought	6 100	3 155	2 849	5 730	4 074
Scrap	7 002	6 607	6 032	4 883	4 479
Turkey					
Ore (e)	9 856	10 135	12 836	20 915	11 172
Unwrought	...	978	2 720	1 890	4 985
Ukraine					
Unwrought	(f) *5 400	(f) *6 600	7 040	11 068	...
Scrap (f)	*1 400	*3 500	*900	*1 000	...
United Kingdom					
Unwrought	85 007	104 327	82 887	82 539	93 552
Unwrought alloys	31 909	33 096	31 460	35 145	42 308
Scrap	10 618	6 178	11 577	7 352	10 700
Yugoslavia, Federal Republic of					
Concentrates	5 318	4 510	3 585	----	6 846
Unwrought	18 646	5 335	2 220	5 102	2 264
Algeria					
Unwrought	1 682	1 595	971	1 010	1 036
Scrap	3 023	1 798	690	253	...
Morocco					
Ore	47 500	48 195	47 803	39 196	...
Unwrought	50 758	59 017	53 588	55 079	...
Scrap	3 015	4 205	2 412	----	...
Namibia					
Concentrates (b)	11 407	11 999	5 360	12 775	...
Unwrought	1 354	283	----	----	...
South Africa					
Concentrates (b)	85 836	77 029	67 000	75 100	49 856
Unwrought	2 355	2 701	1 721	787	11 762
Tunisia					
Ore	5 917	3 684	7 885	8 980	...
Scrap	1 023	2 121	546	233	...
Canada					
Ores & concentrates (b) (g)	111 703	52 249	58 831	72 546	69 092
Unwrought	208 319	206 103	220 965	226 232	172 693
Scrap	12 973	7 632	6 465	4 047	1 632
Dominican Republic					
Scrap	1 428	...	...	4 005	5 444
Honduras					
Ores & concentrates (b)	5 930	4 329	5 226	4 805	6 750
Mexico					
Ores & concentrates	10 836	12 238	37 054	57 870	29 818
Unwrought	102 678	71 834	28 670	29 487	19 779
Scrap	2 290	1 292	1 830	1 678	1 377
USA					
Ores & concentrates (b)	82 190	87 938	93 504	116 678	180 390
of which, re-exports	39 721	15 516	----	----	79
Unwrought	70 429	70 417	84 599	49 893	(a) 21 014
Unwrought alloys	5 635	6 642	6 054	6 116	...
Scrap	89 417	101 667	115 030	72 469	108 265

Exports of Lead

tonnes

Country	1997	1998	1999	2000	2001
Argentina					
Ores & concentrates	15 413	18 976	13 406	10 269	2 747
Unwrought	52	204	733	10 183	19 443
Bolivia					
Ore	35 812	34 937	24 925	27 253	23 631
Brazil					
Ores & concentrates	10 604	11 228	9 723	20 677	11 225
Peru					
Ores & concentrates	218 882	200 695	225 555	301 825	208 866
Unwrought	91 286	96 721	98 675	108 900	113 600
Venezuela					
Unwrought	8 016	10 319	7 945	9 367	10 708
China					
Ore	25 681	34 371	22 906	2 766	210
Unwrought	184 569	250 940	468 368	467 810	472 072
Scrap	61	1 751	1 060	37	51
Dubai					
Scrap	6 201	2 871	5 886	...	...
Hong Kong					
Unwrought	10 848	13 039	12 506	14 008	16 912
of which, re-exports	10 626	12 860	12 403	13 954	16 839
Scrap	93	429	1 195	1 368	2 805
India					
Unwrought (d)	2 034	411	171	229	...
Indonesia					
Unwrought	8 172	15 358	5 929	8 989	3 316
Scrap	109	3 791	139	198	49
Iran					
Ore (c)	10 850	9 644	9 810	*15 000	...
Israel					
Unwrought (f)	*1 900	*3 600	*5 400	*7 000	*7 300
Scrap (f)	*800	*700	*1 500	*800	*1 200
Japan					
Unwrought	5 980	6 416	6 858	6 478	6 729
Scrap	15 614	8 575	9 368	5 166	3 857
Jordan					
Scrap	1 670	937	1 527	2 359	2 612
Kazakhstan					
Unwrought	77 823	85 170	109 968	155 452	131 238
Scrap	852	167	120	56	...
Korea, Dem. P.R. of					
Unwrought (f)	*8 100	*2 600	*3 400	*2 800	*2 700
Korea, Republic of					
Unwrought	25 563	45 217	30 949	36 063	35 212
Malaysia					
Unwrought	1 500	18 000	35 900	7 602	23 310
Scrap	2 700	800	700	1 317	1 746
Saudi Arabia					
Unwrought	*15 000	10 008	7 631	5 895	...
Scrap	4 085	1 211	4 681	2 482	...
Singapore					
Unwrought	23 610	30 946	18 022	68 254	89 028
of which, re-exports	23 610	30 469	17 916	68 156	88 909
Scrap	2 234	4 161	2 475	2 488	1 714
of which, re-exports	2 234	891	129	201	125
Taiwan					
Unwrought	12 615	11 496	17 976	24 626	24 176
Thailand					
Ore	14 500	18 502	19 500	6 300	14 544
Unwrought	811	4 313	15	169	5 445
Scrap	276	519	775	788	761

Exports of Lead

Country	1997	1998	1999	2000	2001
Australia					
Ores & concentrates	194 456	350 755	408 968	430 000	443 724
Unwrought , base bullion (h)	171 511	134 897	150 809	109 000	148 414
Unwrought, refined	199 864	170 416	244 972	218 000	206 921
Scrap	4 472	2 438	4 872	4 600	3 020
New Zealand					
Unwrought	8 992	11 745	9 025	6 274	2 739

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

Imports of Lead

tonnes

Country	1997	1998	1999	2000	2001
Austria					
Unwrought	44 295	50 910	36 534	40 438	46 677
Scrap	4 469	2 314	2 351	2 538	1 921
Belarus					
Unwrought	(i) 4 146	3 659	484	633	474
Scrap	*500	931	607	13	9
Belgium-Luxembourg					
Ore	62 349	95 581	96 710	117 528	101 613
Unwrought	44 941	52 659	62 275	28 653	30 894
Scrap	20 882	19 611	28 612	32 043	38 002
Bulgaria					
Ore	60 739	*68 000	76 143	88 338	...
Croatia					
Unwrought	4 054	2 949	827	2 365	841
Cyprus					
Unwrought	3 002	2 888	2 105	1 927	2 359
Czech Republic					
Unwrought	18 821	28 816	34 306	52 886	58 777
Denmark					
Unwrought	5 233	3 876	2 531	3 364	3 447
Scrap	2 620	1 611	1 895	2 032	1 535
Finland					
Unwrought	2 051	1 830	2 133	3 425	1 825
Scrap	821	542	81	181	287
France					
Ore	205 411	201 999	192 078	222 259	182 072
Unwrought	52 085	50 393	74 128	87 602	80 869
Scrap	37 609	43 194	51 764	48 198	40 099
Germany					
Ore	60 804	135 270	191 178	209 758	267 848
Unwrought	119 047	122 657	113 501	134 230	189 697
Scrap	14 500	13 735	16 738	18 724	19 056
Greece					
Unwrought	6 214	2 982	5 420	3 764	5 970
Scrap	8 100	10 861	4 897	1 350	882
Hungary					
Unwrought	13 876	12 387	9 867	11 577	10 117
Irish Republic					
Unwrought	21 325	27 329	20 761	21 083	24 432
Scrap	6 684	5 066	7 889	5 974	9 163
Italy					
Ore	92 300	97 969	182 670	158 478	109 714
Unwrought	105 457	82 108	98 155	88 093	90 537
Scrap	7 369	2 843	2 157	1 965	6 346
Macedonia					
Unwrought	3 363	1 024	496	581	202
Netherlands					
Unwrought	49 767	31 942	19 212	12 184	9 316
Scrap	10 302	9 787	10 821	11 164	8 427
Norway					
Unwrought	3 146	2 322	2 483	4 111	3 213
Poland					
Unwrought	10 400	8 900	14 788	33 525	33 400
Portugal					
Unwrought	22 934	28 072	19 615	18 053	20 604
Romania					
Ores & concentrates	5 182	7 449	12 966	32 615	30 678
Unwrought	293	2 355	6 537	4 377	3 767
Russia					
Ore (f)	...	*28 000	*45 000	*62 000	...
Unwrought	30 054	19 536	27 242	52 668	39 634
Scrap	820	247	20	...	...
Slovakia					
Unwrought	1 000	1 053	957	885	633
Slovenia					
Unwrought	9 200	10 233	9 025	10 923	10 738

Imports of Lead

tonnes

Country	1997	1998	1999	2000	2001
Spain					
Unwrought	81 060	95 983	101 293	106 245	117 501
Scrap	9 635	12 394	13 972	8 903	13 311
Sweden					
Unwrought	2 433	5 902	5 208	6 940	6 777
Scrap	4 717	1 857	3 055	2 152	2 548
Switzerland					
Unwrought	6 966	4 468	6 237	6 976	7 098
Turkey					
Unwrought	41 324	50 713	40 283	56 168	41 970
United Kingdom					
Ores & concentrates (b)	40 569	34 276	34 080	*34 000	*33 000
Unwrought , base bullion (h)	189 508	169 839	174 757	140 344	184 518
Unwrought, other	22 777	30 015	39 284	109 102	33 202
Scrap	5 120	5 537	7 704	10 849	15 633
Algeria					
Unwrought	4 290	7 280	6 273	4 536	...
Egypt					
Unwrought	16 548	13 079	8 960	*9 000	8 062
Scrap	14 380	5 256	----	----	...
Kenya					
Unwrought	600	786	1 022	587	...
Morocco					
Ore	14 403	20 585	26 681	27 338	...
South Africa					
Unwrought	20 581	16 914	11 774	13 386	13 144
Scrap	4 688	7 126	3 253	495	4 745
Tunisia					
Unwrought	4 767	5 650	4 642	7 138	...
Canada					
Ores & concentrates (b) (g)	53 194	36 855	58 980	52 041	58 216
Unwrought	36 424	34 140	13 575	17 534	4 024
Scrap	85 293	93 476	110 108	65 669	55 178
Cuba					
Unwrought	673	1 102	4 230	319	...
El Salvador					
Scrap	2 604	3 231	2 697	1 046	985
Mexico					
Ores & concentrates	16 478	26 615	26 742	38 707	36 311
Unwrought	15 788	14 372	56 586	36 587	38 663
USA					
Ores & concentrates (b)	130 667	90 018	40 896	66 392	11 000
Unwrought	237 107	234 350	276 398	316 324	(a) 257 683
Unwrought alloys	29 305	34 339	36 972	33 964	...
Scrap	16 453	12 184	16 171	17 547	11 638
Argentina					
Unwrought	7 649	8 755	4 306	3 212	1 643
Brazil					
Unwrought	60 633	59 956	56 013	70 723	73 454
Scrap	*5 000	*5 000	*4 000	*1 000	...
Chile					
Unwrought	8 666	3 995	3 719	6 439	4 942
Colombia					
Unwrought	6 938	9 800	7 644	8 522	8 672
Venezuela					
Unwrought	6 354	5 892	5 207	6 338	5 874
Scrap	1 860	1 338	517	352	783
China					
Ores & concentrates	118 330	236 034	169 669	311 395	397 116
Unwrought	6 985	15 413	15 774	16 261	28 788
Dubai					
Unwrought	2 248	4 042	1 606	...	...
Scrap	1 354	351	579	...	...

Imports of Lead

tonnes

Country	1997	1998	1999	2000	2001
Hong Kong					
Unwrought	8 287	20 502	13 790	13 150	19 278
India					
Ore (c)	40 287	10 678	12 270	13 344	...
Unwrought (c)	47 790	65 147	64 186	54 110	...
Scrap (c)	16 346	16 373	13 657	12 773	...
Indonesia					
Unwrought	91 453	32 819	27 575	46 939	32 684
Scrap	968	0	0	65	3 993
Iran					
Unwrought (d)	8 578	9 892	780	1 862	...
Scrap	100	1 024	263	409	...
Israel					
Unwrought	(f) *1 600	1 383	(f) *600	3 040	(f) *2 700
Japan					
Ore	154 470	183 272	167 880	185 484	186 207
Unwrought	53 446	35 693	21 087	31 385	52 045
Jordan					
Unwrought	1 518	2 496	2 447	1 899	1 637
Kazakhstan					
Ore	31 976	57 382	98 989	129 873	107 940
Scrap	*8 000	9 337	8 581	19 222	25 209
Korea, Republic of					
Ores & concentrates	104 468	164 829	178 010	251 644	242 355
Unwrought	170 356	118 535	116 563	122 517	141 082
Scrap	4 168	972	6 359	1 187	4 975
Malaysia					
Unwrought	60 600	61 800	101 000	83 544	74 129
Oman					
Unwrought	3 430	4 916	4 608	4 580	2 740
Pakistan					
Unwrought (e)	5 747	6 594	237	7 176	...
Philippines					
Unwrought	8 166	5 872	19 479	19 142	9 184
Saudi Arabia					
Unwrought	1 000	1 390	3 791	3 355	...
Singapore					
Unwrought	27 291	35 457	101 716	84 681	96 094
Scrap	2 047	2 281	2 236	2 504	627
Taiwan					
Unwrought	114 177	111 118	138 247	139 360	132 944
Thailand					
Unwrought	38 510	23 762	166 180	69 106	57 466
Australia					
Ores & concentrates	50 014	*50 000	*43 000	*43 000	...
Unwrought	6 771	11 251	10 417	14 839	5 753
New Zealand					
Unwrought	1 749	...	1 757	737	570
Scrap	9 035	7 108	4 164	925	2 640

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) Includes alloys

(b) Pb content

(c) Years ended 31 March following that stated

(d) Years ended 20 March following that stated

(e) Years ended 30 June of that stated

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

(g) Including Pb content of zinc concentrates

(h) Includes a substantial precious metal content, mainly silver

(i) Imports from CIS only

Production of Lithium Minerals

Country	1997	1998	1999	2000	2001
Portugal					
Lepidolite	6 838	13 306	14 862	9 352	11 571
Namibia	632	247	----	----	----
Zimbabwe	49 833	28 055	36 671	37 914	36 103
Canada	*22 500	*22 500	*22 500	*22 500	*22 500
USA (a) (b)	*4 000	...	...	...	...
Argentina (c) (e)	1 876	8 583	4 387	5 276	4 512
Brazil					
Amblygonite	24	----	----	----	...
Petalite	386	260	442	1 077	*1 000
Spodumene	6 499	9 035	10 629	9 796	*10 000
Chile (c)	24 246	28 377	30 231	35 869	31 320
China	66 909	43 122	46 198	31 967	34 276
Australia					
Spodumene (d)	114 934	62 948	75 824	64 983	56 370
World Total (Li content)	*13 200	*11 800	*10 800	*11 600	*10 500

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	1997	1998	1999	2000	2001
Belgium-Luxembourg					
Oxides	161	273	406	406	470
Carbonate	2 563	2 804	3 951	3 549	3 392
France					
Oxides	93	131	88	90	19
Carbonate	2 163	2 528	2 563	2 819	3 130
Germany					
Oxides	819	644	650	740	647
Carbonate	1 439	989	1 403	1 690	1 771
Italy					
Carbonate	41	88	51	124	87
Netherlands					
Oxides	493	299	220	380	590
Carbonate	634	156	281	142	205
Russia					
Oxides	914	868	627	1 033	(a) *1 300
Carbonate	17	2	12	...	...
Spain					
Carbonate	231	14	301	6 839	1 617
Switzerland					
Oxides	33	117	63	9	96
United Kingdom					
Oxides	103	134	85	116	95
Carbonate	342	397	308	285	214
Namibia					
Lithium minerals	381	----	----	----	...
Zimbabwe					
Lithium minerals	11 223	8 872	16 480	27 912	*5 600
USA					
Oxides	5 739	4 365	5 027	5 045	5 548
Carbonate	5 119	3 295	2 789	2 847	3 279
Argentina					
Carbonate	515	5 082	1 280	1 259	1 098
Chile					
Carbonate	21 597	24 699	32 011	34 912	33 432
China					
Oxides	992	1 913	2 195	2 302	2 438
Carbonate	937	932	602	861	1 335
New Zealand					
Carbonate	45	75	95	404	387

Note(s):

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

Imports of Lithium

Country	1997	1998	1999	2000	2001
Austria					
Carbonate	61	280	106	118	114
Belgium-Luxembourg					
Oxides	325	603	643	793	784
Carbonate	2 241	3 500	4 020	5 542	5 136
France					
Oxides	346	429	482	432	420
Carbonate	1 026	1 203	1 293	1 333	1 133
Germany					
Oxides	4 975	4 563	3 903	5 529	5 100
Carbonate	7 286	2 429	4 034	4 026	4 187
Italy					
Oxides	167	278	274	165	168
Carbonate	1 720	1 937	1 057	1 662	1 659
Netherlands					
Oxides	171	298	249	332	539
Carbonate	711	673	754	952	897
Poland					
Oxides	130	97	111	87	39
Carbonate	46	27	31	44	46
Russia					
Oxides	140	55	517	856	...
Carbonate	297	1 647	1 793	1 787	...
Slovenia					
Oxides	...	80	100	82	116
Spain					
Oxides	188	238	257	243	347
Carbonate	546	421	633	469	713
Sweden					
Oxides	54	156	160	126	130
Carbonate	280	103	208	126	183
Turkey					
Oxides	...	...	83	113	70
Carbonate	...	...	109	107	134
United Kingdom					
Oxides	602	589	389	376	374
Carbonate	2 070	1 925	818	779	499
South Africa					
Oxides	228	152	199	168	169
Carbonate	127	146	133	51	81
Canada					
Oxides	120	129	211	239	558
Carbonate	1 109	1 151	1 086	1 046	814
USA					
Carbonate	5 090	14 005	13 927	14 629	10 254
Venezuela					
Carbonate	413	141	680	600	228
China					
Oxides	----	300	182	15	31
Carbonate	1 397	2 956	3 543	4 479	4 687
Hong Kong					
Oxides	123	302	40	6	63
India					
Oxides (a)	1 230	784	1 070	653	...
Carbonate (a)	262	152	237	20	...
Indonesia					
Oxides	90	63	152	85	381
Carbonate	...	42	76	278	46
Iran					
Oxides	...	36	81	76	...
Japan					
Oxides	1 360	1 343	1 572	1 558	1 312
Carbonate	5 927	4 768	6 655	7 194	6 843

Imports of Lithium

tonnes

Country	1997	1998	1999	2000	2001
Korea, Republic of					
Oxides	288	249	...	313	327
Carbonate	1 031	713	983	1 037	1 114
Taiwan					
Oxides	...	183	280	39	38
Carbonate	127	437	115	180	102
Thailand					
Oxides	165	50	120	172	119
Australia					
Oxides	245	230	271	218	301
Carbonate	164	162	127	8	...
New Zealand					
Oxides	352	48	206	787	721

Note(s) :-

(a) Years ended 31 March following that stated

Production of Magnesite

Country	1997	1998	1999	2000	2001
Austria	790 297	722 876	748 635	725 832	680 534
Greece	623 030	698 049	495 144	442 785	483 296
Netherlands (f)	198 000	216 000	220 000	233 000	240 000
Poland	29 600	33 700	38 800	26 140	22 200
Russia	2 700 000	2 200 000	2 400 000	2 500 000	2 600 000
Slovakia	863 600	877 842	826 902	1 000 211	961 212
Spain	409 835	482 295	505 209	534 234	598 000
Turkey	2 063 975	2 703 720	1 724 744	2 673 525	2 738 086
Yugoslavia, Federal Republic of	98 384	80 923	30 642	40 925	36 173
Egypt (d)	7 536	2 806	...	...	...
South Africa	76 699	74 375	74 000	...	18 500
Zimbabwe	13 050	4 321	5 356	4 029	2 466
Canada (b)	*165 000	*165 000	*165 000	*165 000	*165 000
Brazil (c)	294 629	342 485	282 145	279 876	265 000
Colombia	*10 500	*10 500	*10 500	*10 500	*10 500
China	*8 000 000	*8 500 000	*9 500 000	*10 000 000	*10 000 000
India (e)	373 520	349 852	325 764	317 765	280 450
Iran (a)	115 758	121 529	154 631	*140 000	*143 000
Korea, Dem. P.R. of	*1 600 000	*800 000	*800 000	*650 000	*650 000
Pakistan (d)	4 057	3 157	2 175	2 697	5 795
Philippines	*700	*700	*700	410	4 093
Australia	245 192	360 113	280 363	349 538	599 994
World Total	18 700 000	18 800 000	18 600 000	20 100 000	20 500 000

Note(s):

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

- (a) Years ended 20 March following that stated
- (b) Officially described as magnesitic dolomite and brucite
- (c) Including beneficiated and directly shipped material
- (d) Years ended 30 June of that stated
- (e) Years ended 31 March following that stated
- (f) Chloride produced from solution mining

Exports of Magnesite and Magnesias

tonnes

Country	1997	1998	1999	2000	2001
Austria					
Magnesite	89	80	880	7 713	...
Magnesia	132 283	95 145	18 437	33 490	...
Belgium-Luxembourg					
Magnesite	212	384	364	883	276
Magnesia	64 508	82 040	51 821	47 634	60 846
Czech Republic (a)	*2 400	*3 800	*300	*4 400	*1 000
Denmark	1 058	1 427	976	363	299
France					
Magnesia	20 926	16 809	12 889	11 743	9 561
Germany					
Magnesite	1 211	602	119	217	233
Magnesia	70 206	71 504	41 274	56 707	90 154
Greece					
Magnesite	13 728	16 205	19 027	19 205	18 555
Magnesia	168 398	149 459	138 019	135 809	128 124
Irish Republic	3 696	554	707	1 177	1 541
Italy					
Magnesite	12 653	7 393	4 505	3 016	2 521
Magnesia	37 841	54 927	38 418	68 596	57 158
Netherlands					
Magnesite	10 413	476	636	562	2 502
Magnesia	319 723	95 637	113 402	69 044	448 602
Norway	*3 500	*3 500	----	6 361	----
Russia	299 395	204 662	161 814	200 888	...
Slovakia	236 700	310 400	375 100	385 032	377 755
Spain					
Magnesite	1 400	397	24 080	23 270	9 201
Magnesia	136 560	139 567	153 600	151 712	150 632
Turkey					
Magnesite	27 115	39 135	36 089	28 266	37 723
Magnesia	165 794	173 115	188 931	207 486	190 347
United Kingdom					
Magnesite	175	234	53	89	78
Magnesia	58 774	46 754	37 010	43 835	40 023
Yugoslavia, Federal Republic of					
Magnesia	6 428	4 338	259	9 558	637
Canada					
Magnesia	54 167	57 102	61 944	68 187	61 147
Mexico					
Magnesia	47 607	30 872	35 567	35 468	14 652
USA					
Magnesite	51 797	54 398	29 589	31 127	18 949
Magnesia	102 628	94 948	92 868	100 013	109 080
Brazil					
Magnesia	92 403	88 092	67 173	79 930	56 657
China					
Magnesite	166 536	108 535	33 131	43 807	109 267
Magnesia	2 122 125	1 945 208	2 068 708	1 993 826	1 997 547
Hong Kong (c)	8 495	9 284	31 088	24 273	7 918
India					
Magnesite (b)	80	319	761	2 253	...
Magnesia (b)	535	1 350	3 100	2 743	...
Israel					
Magnesia	*7 000	*11 000	*7 500	*7 200	...
Japan					
Magnesite	418	285	174	83	38
Magnesia	55 350	37 054	38 354	40 946	41 076
Korea, Dem. P.R. of (a)	*86 100	*31 500	*67 500	*117 500	*150 600
Korea, Republic of					
Magnesia	----	2 607	5 190	5 809	14 774
Singapore	987	1 259	197	211	251
Taiwan					
Magnesia	2 553	327	2 171	10 441	2 755

Exports of Magnesite and Magnesia

Country	1997	1998	1999	2000	2001
Australia					
Magnesite	604	811	163	166	37 835
Magnesia	89 737	139 568	123 655	186 165	166 535

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 Magnesite

tonnes

Country	1997	1998	1999	2000	2001
Austria					
Magnesite	176 566	136 780	108 884	135 281	...
Magnesia	49 691	53 684	32 182	30 013	26 220
Belarus	*2 100	2 846	4 007	9 837	8 497
Belgium-Luxembourg					
Magnesite	1 274	1 585	1 738	8 732	12 733
Magnesia	68 013	82 172	61 148	67 637	90 663
Bulgaria	8 753	7 915	5 306	6 905	...
Croatia	677	836	405	666	764
Czech Republic					
Magnesite	972	885	1 810	1 522	4 362
Magnesia	41 237	40 207	36 544	34 156	33 375
Denmark					
Magnesite	1 143	1 077	639	2 841	1 204
Magnesia	7 045	5 178	3 509	4 803	4 770
Finland					
Magnesia	8 032	12 834	12 536	14 770	12 856
France					
Magnesite	7 544	9 615	21 054	23 738	13 047
Magnesia	186 512	199 802	145 692	164 453	148 516
Germany					
Magnesite	10 547	8 371	15 190	17 337	16 285
Magnesia	496 025	471 106	385 102	493 512	451 522
Greece					
Magnesite	1 508	9 851	8 275	5 505	13 087
Magnesia	381	541	814	1 358	11 507
Hungary	12 849	12 163	9 787	11 963	12 032
Irish Republic					
Magnesite	232	252	3 531	296	108
Magnesia	42 419	45 694	44 757	56 551	47 947
Italy					
Magnesite	21 130	31 542	30 695	29 864	32 911
Magnesia	121 772	111 329	98 192	106 661	106 250
Latvia	...	4 573	3 014	3 322	3 071
Lithuania					
Magnesite	1 393	1 182	2 167	444	5
Netherlands					
Magnesite	1 823	2 890	13 228	5 562	2 242
Magnesia	67 510	210 890	235 603	286 232	377 804
Norway					
Magnesite	187	5 302	5 469	6 594	4 013
Magnesia	5 833	386	222	368	403
Poland	110 100	98 400	79 277	95 007	69 772
Portugal					
Magnesite	2 530	1 762	1 869	2 892	1 888
Magnesia	2 699	2 597	3 203	2 288	18 635
Romania	28 322	27 905	21 960	23 280	31 707
Russia	76 993	32 524	42 092	90 238	...
Slovakia	24 300	18 600	21 518	34 249	36 609
Slovenia	5 900	7 117	7 993	7 584	8 406
Spain					
Magnesite	7 683	5 548	4 421	6 924	1 521
Magnesia	89 628	103 699	95 497	104 268	112 201
Sweden					
Magnesia	24 478	37 095	39 854	34 884	40 361
Switzerland					
Magnesite	289	1 114	306	547	394
Magnesia	4 001	3 867	3 538	4 278	4 600
Turkey					
Magnesia	19 627	15 164	18 288	30 964	23 373
Ukraine	509 873	357 850	484 823	507 169	...
United Kingdom					
Magnesite	11 190	12 176	38 325	24 541	7 122
Magnesia	153 388	147 167	122 870	127 360	108 988
Yugoslavia, Federal Republic of					
Magnesite	5 468	5 617	1 054	3 030	114
Magnesia	2 400	...	122	6 528	----

Imports of Magnesite and Magnesias

Country	1997	1998	1999	2000	2001
Egypt	16 706	11 748	10 937	*11 200	15 376
South Africa					
Magnesite	1 917	3 965	3 441	2 687	2 892
Magnesia	70 144	69 005	54 229	55 844	50 821
Zimbabwe	...	...	11 134	30 883	...
Canada					
Magnesite	190 355	120 294	25 914	88 883	40 887
Magnesia	84 378	103 898	112 090	92 210	78 261
Mexico					
Magnesite	1 113	1 023	522	492	793
Magnesia	40 631	38 693	33 018	54 884	38 053
USA					
Magnesite	10 863	4 645	7 822	14 574	11 477
Magnesia	446 748	568 382	532 292	655 845	510 073
Argentina					
Magnesia	23 286	22 385	14 879	22 767	18 305
Brazil					
Magnesia	126 041	121 966	46 717	7 690	7 610
Chile					
Magnesia	13 201	18 688	13 474	14 116	14 683
Colombia	10 024	11 960	8 616	12 438	9 868
Peru					
Magnesia	2 148	5 067	2 274	2 038	5 537
Venezuela					
Magnesite	20 537	13 487	8 888	17 229	11 857
Magnesia	44 289	16 585	12 640	7 875	10 899
China	5 983	7 420	5 295	8 008	9 460
Hong Kong	3 329	3 296	3 066	4 911	2 633
India					
Magnesite (a)	2 284	5 074	9 755	11 448	...
Magnesia (a)	54 906	37 026	47 453	54 768	...
Indonesia					
Magnesite	313	217	3 049	3 328	2 733
Magnesia	30 012	27 163	28 200	36 890	18 421
Iran	...	13 027	4 486	25 059	...
Israel	*3 000	*1 400	*1 800	*1 300	...
Japan					
Magnesite	2 738	1 828	1 607	2 244	1 870
Magnesia	577 942	499 443	486 827	632 117	648 844
Kazakhstan	*20 500	12 184	9 317	10 158	...
Korea, Republic of					
Magnesite	5 088	1 240	1 237	923	242
Magnesia	186 167	175 726	177 116	203 145	207 546
Malaysia					
Magnesite	14 200	4 500	15 200	6 513	15 410
Magnesia	2 000	8 200	26 400	36 365	...
Philippines					
Magnesite	4 936	1 971	133	2 120	583
Magnesia	12 119	2 653	1 535	6 525	4 113
Singapore	13 649	9 286	2 504	2 734	2 025
Taiwan					
Magnesite	703	2 209	273	470	2 321
Magnesia	194 721	195 145	211 222	235 169	189 352
Thailand					
Magnesite	26 923	16 544	24 144	25 965	25 317
Magnesia	4 993	4 976	4 043	5 749	6 493
Australia					
Magnesite	776	2 428	2 391	293	533
Magnesia	8 755	4 469	3 990	4 807	6 281
New Zealand					
Magnesite	2 465	3 209	3 160	7 687	7 273
Magnesia	26 544	20 016	29 197	21 884	25 276

Note(s) :-

(1) The term 'magnesias', 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	1997	1998	1999	2000	2001
Austria (a)	33 909	33 869	33 018	35 060	36 783
Bulgaria	47 430	55 600	-----	-----	1 515 000
Georgia (f)	14 200	16 000	54 900	63 100	98 300
Greece	2 542	1 898	345	60	20
Hungary	49 000	34 000	41 000	41 000	43 000
Italy	2 128	974	972	1 038	...
Romania	*100 000	*100 000	*60 000	27 080	71 000
Turkey	31 160	53 283	29 000	23 300	20 000
Ukraine (f)	3 039 500	2 217 000	1 984 800	2 740 600	2 710 000
Gabon	1 904 000	2 092 000	1 908 000	1 743 000	1 791 000
Ghana	333 400	384 406	638 937	895 669	1 076 666
Morocco	30 806	28 332	29 150	25 830	13 757
Namibia	39 671	-----	-----	-----	...
South Africa					
Metallurgical	3 087 775	3 012 827	3 092 784	3 613 154	3 239 903
Chemical	32 886	31 294	29 210	22 273	26 241
Mexico	533 783	510 062	458 946	418 300	261 284
Brazil (b)	2 042 435	2 107 219	1 699 618	2 179 480	*2 400 000
Chile	63 673	48 931	40 505	41 716	31 320
China	5 975 600	5 283 000	3 186 000	3 514 000	4 306 800
India (c) (e)	1 641 963	1 537 693	1 585 726	1 595 458	1 552 723
Iran (d)	86 523	101 390	96 883	...	...
Kazakhstan	402 400	634 100	944 000	1 201 900	1 402 800
Australia	2 136 000	1 501 000	1 900 000	1 613 000	1 977 000
World Total	21 600 000	19 800 000	17 800 000	19 900 000	22 600 000

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) Years ended 31 March following that stated
- (f) Marketable

Exports of Manganese

Country	1997	1998	1999	2000	2001
Austria					
Metal	311	58	2 517	21 614	28 326
Belgium-Luxembourg					
Ore	20 899	16 648	18 734	21 966	47 237
Metal	2 489	2 247	1 347	1 652	4 129
Bulgaria					
Ore	29 115	48 958	34 104	21 104	...
Czech Republic					
Metal	...	20	157	26	...
Estonia					
Metal	...	41	437	820	490
France					
Ore (a)	107 499	116 556	198 347	303 274	382 914
Metal	811	610	120	431	261
Georgia					
Metal	...	(e) *200	(e) *200	1 440	...
Germany					
Metal	8 859	8 243	6 654	11 747	10 186
Italy					
Metal	166	103	623	84	62
Netherlands					
Ore	14 660	14 075	12 125	13 617	9 889
Metal	3 560	5 160	5 806	6 503	9 614
Norway					
Metal	68	35	...	0	2
Russia					
Metal (e)	*1 700	*5 400	*2 200	*5 300	*2 400
Spain					
Ore	1 459	1 414	1 844	3 588	11 474
Metal	2 347	2 334	2 924	5 331	6 113
Sweden					
Ore	...	...	12 575	12 524	1
Metal	145	115	105	116	99
Turkey					
Metal	5	25	107	3	----
Ukraine					
Ore	232 767	286 622	172 377	23 420	...
Metal	(e) *4 900	(e) *26 200	34 950	65 101	...
United Kingdom					
Metal	*3 400	4 742	*3 800	*3 800	*3 700
Gabon					
Ore	1 789 900	2 063 800	1 883 800	1 920 000	...
Ghana					
Ore	...	387 179	479 437	645 700	...
Morocco					
Ore	31 063	23 485	22 512	16 876	...
Namibia					
Ore	34 400	----	----	----	...
South Africa					
Ore	1 772 801	1 679 975	1 568 560	1 845 247	1 527 947
Metal	36 234	35 362	29 960	13 386	692
Canada					
Metal	260	484	223	438	1 064
Mexico					
Ore	89 307	48 713	29 755	20 379	14 070
Metal	896	690	697	988	1 354
USA					
Ore	84 294	8 406	4 240	20 108	9 884
Metal	8 005	5 837	3 575	2 369	1 944
Brazil					
Ore	981 810	1 089 946	506 640	1 026 253	1 222 154

Exports of Manganese

tonnes

Country	1997	1998	1999	2000	2001
China					
Ore	579	1 616	7 206	5 196	3 300
Metal	63 471	73 214	80 626	97 200	126 784
Hong Kong					
Metal (c)	121	38	130	0	1
India					
Ore (b) (d)	259 194	166 963	75 685	265 010	...
Japan					
Metal	485	391	35	44	48
Kazakhstan					
Ore	*300 000	421 832	547 877	521 012	422 070
Metal (e)	*100	*900	*200	*100	*1 300
Korea, Republic of					
Metal	...	...	36	710	273
Singapore					
Ore	17 218	19 825	19 319	17 253	16 656
of which, re-exports	3 952	3 781	4 988	4 726	5 735
Australia					
Ore	*1 541 000	*1 066 000	*1 312 000	*1 408 000	*1 612 000
Metal	1 098	49	1 218	2 500	...

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

Country	1997	1998	1999	2000	2001
Austria					
Metal	1 882	2 143	8 287	14 288	19 889
Belgium-Luxembourg					
Ore	139 130	127 521	83 407	78 179	106 749
Metal	4 076	3 728	4 823	5 884	8 136
Bulgaria					
Ore	1 918	3 249	----	315	...
Croatia					
Metal	54	51	14	49	58
Czech Republic					
Ore	18 231	3 507	3 505	10 436	7 314
Metal	198	207	155	244	206
Denmark					
Metal	31	29	129	79	76
Estonia					
Metal	...	41	437	847	821
Finland					
Ore	24 339	22 184	18 681	25 093	10 538
Metal	140	1 375	774	4 896	259
France					
Ore (b)	998 570	1 204 454	950 913	1 618 372	1 390 507
Metal	6 352	8 251	6 396	10 132	11 081
Germany					
Ore (b)	26 234	23 108	21 711	8 644	7 380
Metal	18 324	42 939	27 449	47 498	45 296
Greece					
Ore	27 130	22 396	23 050	20 853	22 329
Metal	399	500	474	546	681
Hungary					
Metal	328	357	361	453	476
Irish Republic					
Ore (b)	47 339	37 408	39 799	54 840	38 977
Metal	16	64	55	59	49
Italy					
Ore (b)	166 266	283 914	135 299	253 215	100 908
Metal	2 665	2 791	2 708	3 466	10 089
Macedonia					
Ore	40 453	12 625	1 161	6 157	...
Netherlands					
Ore	18 057	24 485	19 833	11 984	10 209
Metal	6 128	8 270	8 156	14 471	9 661
Norway					
Ore	730 758	721 529	650 379	608 216	711 545
Metal	1 648	2 224	1 783	2 284	1 699
Poland					
Ore	155 600	109 600	9 950	38 975	43 603
Metal	319	310	337	345	1 834
Romania					
Ore	98 943	46 763	35 545	127 114	128 961
Metal	2 800	115	153	137	158
Russia					
Ore	177 539	479 117	738 422	621 078	...
Metal	64	1 320	2 832	4 345	...
Slovakia					
Ore	113 852	148 434	185 765	132 601	...
Metal	...	...	117	101	185
Slovenia					
Metal	100	137	112	70	42
Spain					
Ore	275 957	486 951	332 673	420 908	352 275
Metal	4 101	5 147	4 227	6 913	12 475
Sweden					
Ore	93	1 735	3 071	6 298	1 871
Metal	2 669	3 257	8 059	8 164	8 072
Switzerland					
Metal	627	483	480	553	449
Turkey					
Metal	106	78	50	85	34

Imports of Manganese

tonnes

Country	1997	1998	1999	2000	2001
United Kingdom					
Ore (b)	71 233	28 300	8 234	2 956	2 701
Metal	7 225	8 796	7 284	8 620	9 636
Cameroon					
Ore	*2 000	2 041	1 980	1 200	...
Egypt					
Ore	953	674	483	*500	18 412
South Africa					
Ore	14 797	4 023	5 017	19 416	50 488
Metal	200	83	322	23	1 489
Canada					
Ore (a)	3 974	24 967	59 301	26 302	24 110
Metal	5 087	5 580	5 853	3 765	4 373
Mexico					
Ore	109 022	78 176	73 071	99 702	66 417
Metal	1 941	905	1 631	2 324	2 527
USA					
Ore	356 903	345 645	471 706	434 349	357 639
Metal	15 062	16 026	15 335	16 706	21 550
Argentina					
Ore	74 093	64 419	20 345	20 396	14 716
Brazil					
Metal	3 353	2 247	2 161	3 075	3 823
Colombia					
Ore	13 134	18 036	1 816	22 027	22 278
Venezuela					
Ore	104 011	99 802	47 785	102 362	69 127
Bahrain					
Metal	...	...	...	557	825
China					
Ore	1 316 784	1 179 052	1 056 874	1 202 466	1 711 506
Metal	532	122	79	75	36
Dubai					
Metal	88	29	8	...	...
Hong Kong					
Metal	319	254	354	377	90
India					
Ore (c)	5 065	4 343	5 102	2 887	...
Metal (c)	1 298	1 565	1 910	1 937	...
Indonesia					
Ore (b)	15 488	24 724	5 566	3 463	1 737
Metal	100	37	131	147	50
Iran					
Metal	100	98	40	64	...
Israel					
Ore	*3 500	*1 800	*200	*900	...
Japan					
Ore (b)	1 363 516	1 207 907	1 227 064	1 148 008	1 226 835
Metal	40 565	39 197	39 936	43 270	52 748
Korea, Republic of					
Ore	482 797	494 333	503 337	546 970	506 879
Metal	3 337	5 539	10 580	11 931	15 436
Philippines					
Ore (b)	13 559	800	2 758	1 037	...
Saudi Arabia					
Ore	8 459	93 219	115 806	167 115	...
Metal	1 773	...	904	185	...
Singapore					
Ore	38 600	----	----	----	----
Metal	111	134	1 112	1 541	2 025
Taiwan					
Ore	65 971	57 714	29 028	32 418	38 352
Metal	590	886	841	1 027	700

Imports of Manganese

Country	1997	1998	1999	2000	2001
Thailand					
Metal	147	148	114	150	190
Australia					
Ore	26	2 034	11 138	44 066	39 492
Metal	1 783	2 121	1 921	1 743	1 485
New Zealand					
Metal	36	29	43	...	140

Note(s) :-

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

(a) Mn content

(b) Including manganiferous iron ore

(c) Years ended 31 March following that stated

Production of Mercury

kilograms

Country	1997	1998	1999	2000	2001
Finland	63 000	54 000	55 000	76 100	71 200
Slovenia	5 000	5 000	-----	-----	-----
Spain	389 229	672 681	433 000	236 600	524 000
Algeria	490 383	224 077	240 327	215 625	320 091
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)	4 000	5 000	6 500	*7 000	*7 500
China	835 000	225 000	195 000	203 000	193 000
Kyrgyzstan	611 000	637 600	645 900	550 000	574 400
Tajikistan	*40 000	*35 000	*35 000	*40 000	*40 000
World Total	2 500 000	1 900 000	1 600 000	1 400 000	1 800 000

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

Country	1997	1998	1999	2000	2001
Austria	8 400	67 100	2 100	8 400	24 100
Belgium-Luxembourg	10 400	22 300	52 500	0	54 100
Czech Republic	8 000	3 000	3 000	19 000	12 000
Denmark	4 414	399	245	126	865
Estonia	35 000	17 000	...	...	...
Finland	138 780	115 238	36 918	82 808	77 627
France	15 900	34 000	94 600	11 400	12 500
Germany	95 600	136 400	152 300	567 400	412 000
Italy	43 773	12 011	1 164	28 325	21 968
Netherlands	580 000	199 700	90 600	426 300	298 000
Norway	52 647	32 008	14 525	...	...
Poland	...	...	7 000	94 317	50 000
Russia (a)	*133 000	*70 000	...	*135 000	...
Slovakia	...	...	17 000	1 000	34 000
Slovenia	673	16 097	545	831	1 446
Spain	594 295	312 578	511 305	956 655	569 833
Sweden	...	2 000	1 000	----	23 000
Switzerland	6 908	21 679	41 153	60 114	92 862
Ukraine	28 290	5 028	----	60 500	...
United Kingdom	16 628	34 528	5 413	3 069	17 299
Algeria	394 715	376 913	100 050	142 140	172 500
Morocco	9 000	9 000	...	10 000	...
South Africa	...	77 775	3 905	7 344	46 415
Canada	4 264	8 037	1 778	4 108	8 045
USA	133 794	63 155	203 230	221 984	108 000
Chile	4 244	5 382	6 500	*7 000	...
China	15 749	88 442	2 088	4 242	50 005
Hong Kong (b)	710 230	352 114	141 700	14 728	...
India	...	...	35 837	359 534	...
Indonesia	11 750	...	...	100 000	14 400
Japan	6 213	4 924	7 074	38 851	16 502
Korea, Republic of	1 568	598	1 903	1 140	...
Kyrgyzstan	692 000	623 000	552 000	547 000	481 300
Singapore (b)	1 752	3 872	4 254	5 105	55 413
Taiwan	36 381	1 728	----	----	21 545
Australia	848	14 946	3 000	33 936	1 315

Note(s):

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

(b) Re-exports

Imports of Mercury

kilograms

Country	1997	1998	1999	2000	2001
Austria	9 900	900	1 500	300	2 400
Azerbaijan	...	1 000	...	15 000	...
Belgium-Luxembourg	70 000	72 600	102 600	21 000	18 000
Czech Republic	5 000	4 000	3 000	3 000	1 000
Denmark	1 405	856	1 070	587	1 276
Finland	4 730	9 070	12 659	77	177
France	23 100	36 000	206 700	31 400	23 100
Germany	77 700	41 400	27 600	59 300	68 300
Greece	5 000	4 000	4 001	20 940	125 335
Irish Republic	122	429	103 960	1 298	2 401
Italy	29 194	11 268	17 341	48 484	32 672
Netherlands	495 000	424 300	59 900	560 000	908 200
Norway	304	585	314	180	347
Poland	16 000	3 000	4 000	5 287	5 000
Portugal	8 126	933	869	749	7 546
Romania	1 000	...	----	1 000	----
Russia	30 000	46 000	11 000	110 000	...
Slovakia	3 000	771	8 322	8 022	4 000
Spain	148 980	224 706	132 400	143 032	734 351
Sweden	38 000	15 000	17 000	1 000	1 000
Switzerland	28 231	11 333	7 895	27 379	24 309
Turkey	41 853	40 830	38 032	3 981	10 602
United Kingdom	44 387	7 935	8 337	18 719	5 042
Yugoslavia, Federal Republic of	12 000	2 000	4 000	----	3 000
Botswana	...	101 114	...	165 000	72 000
Egypt	1 000	2 000	4 000	...	2 000
Kenya	...	3 000	16 000	...	...
Nigeria	2 000	15 000	4 000	...	...
South Africa	...	...	...	12 528	12 424
Togo	1 000	2 000	...	4 000	...
Canada	7 116	11 383	9 434	12 000	7 419
Mexico	8 207	19 800	26 382	9 584	52 000
USA	163 535	128 344	61 599	135 695	99 000
Argentina	14 000	13 000	37 284	48 681	56 027
Brazil	57 000	82 000	49 720	40 537	62 545
Chile	5 064	2 538	1 396	1 043	730
Colombia	25 000	97 000	26 000	68 000	57 000
Ecuador	4 606	9 480	11 460	8 200	9 888
Peru	42 000	45 000	42 000	31 000	73 000
Uruguay	----	----	----	3 500	...
Venezuela	3 000	...	3 000	7 000	1 000
China	481 285	523 664	883 201	774 820	488 679
Hong Kong	772 866	861 554	174 154	73 816	64 688
India (b)	267 797	124 823	207 384	285 644	...
Indonesia	26 771	16 281	61 620	48 686	1 286
Iran	...	66 000	122 000	181 000	...
Japan	13 812	6 911	10 351	6 901	11 045
Korea, Republic of	36 808	17 804	25 533	11 459	14 204
Malaysia	7 705	2 987	...	3 000	5 000
Pakistan (a)	68 156	60 516	121 452	79 832	...
Philippines	5 004	39 396	64 000	30 000	20 000
Singapore	93 142	64 938	319 035	129 542	143 444
Sri Lanka	22 148	889	1 000	...	...
Taiwan	9 528	7 173	6 317	4 500	3 393
Thailand	10 547	13 000	13 000	12 077	17 170
Australia	66 834	39 901	27 000	34 439	57 863

Note(s) :-

(a) Years ended 30 June of that stated

(b) Years ended 31 March following that stated

Production of Mica

Country	1997	1998	1999	2000	2001
Finland	5 630	7 241	8 470	10 035	8 983
France (e)	14 100	*17 000	*17 000	...	...
Russia	*10 000	*10 000	*10 000	*10 000	*10 000
Spain (e)	12 397	10 278	9 362	10 086	*10 000
Yugoslavia, Federal Republic of	420	247	229	1 727	303
Madagascar	1 138	1 232	54	67	90
Morocco	...	-----	210	1 897	*2 000
South Africa	1 423	1 556	1 010	708	950
Zimbabwe	30	1 309	499	273	-----
Canada	*30 000	*30 000	*30 000	*30 000	*30 000
Mexico	975	890	971	1 658	648
USA (d) (e)	112 000	87 000	95 400	101 000	97 800
Argentina	3 528	3 480	3 097	*3 100	*3 100
Brazil	*4 000	*4 000	*5 000	*4 000	*4 000
China (c)	*47 500	*40 200	*40 700	*43 300	*52 200
India (b)	2 604	2 551	3 386	4 117	4 152
Iran (f)	1 086	1 200	1 470	*2 000	*2 000
Korea, Republic of (a)	34 489	38 459	24 734	65 295	109 339
Malaysia (g)	5 708	3 642	3 675	3 835	4 107
Sri Lanka	3 700	2 784	1 425	1 491	1 161
Taiwan	7 806	7 750	6 966	6 862	9 733
Australia	1 085	639	1 016	749	959
World Total	300 000	270 000	260 000	320 000	370 000

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	1997	1998	1999	2000	2001
Austria	2 870	3 431	3 634	2 629	2 951
Belgium-Luxembourg	-----	304	61	416	829
Finland	4 576	5 592	7 969	8 331	7 362
France	10 593	12 108	12 567	4 649	2 836
Germany	1 972	2 028	1 630	2 173	1 922
Italy	316	374	451	352	349
Netherlands	1 527	1 362	1 913	4 589	1 397
Norway	1 942	2 051	2 172	1 833	1 760
Russia	1 007	837	730	828	...
Spain	1 028	460	1 745	1 925	1 856
Sweden	113	983	60	87	102
Turkey	365	575	308	296	338
United Kingdom					
Unmanufactured	78	24	120	68	22
Ground	5 056	4 686	3 913	3 638	3 758
Waste	270	474	254	56	17
Madagascar	603	212	511	796	...
South Africa	387	334	262	263	216
Zimbabwe	723	1 109	535	207	...
Canada	15 560	18 099	24 435	25 195	20 094
USA					
Unmanufactured	2 404	1 660	4 422	1 664	2 025
Ground	6 476	6 901	7 753	9 380	8 063
Brazil	1 629	498	1 009	1 205	1 404
China	47 542	40 178	40 714	43 332	52 219
India					
Block (a)	1 652	997	1 227	2 119	...
Splittings (a)	1 906	644	881	1 112	...
Condenser films (a)	23	10	-----	51	...
Ground (a)	39 319	41 991	38 926	55 304	...
Waste (a)	4 253	6 040	5 000	4 659	...
Japan	915	626	862	951	1 133
Korea, Republic of	54	6 859	40	34	45
Malaysia	6 503	4 198	4 140	4 912	...
Singapore	501	517	207	392	150
of which, re-exports	471	305	186	388	149
Sri Lanka	3 051	2 433	1 347	...	...
Taiwan	636	2 079	1 861	1 955	1 577

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 31 March following that stated

Imports of Mica

Country	1997	1998	1999	2000	2001
Austria	597	604	696	483	570
Belgium-Luxembourg					
Ground	...	729	844	1 138	1 033
Czech Republic	540	657	699	707	890
Denmark	353	298	226	254	241
Finland	1 002	1 273	768	1 118	1 818
France					
Ground (a)	1 161	1 151	1 320	1 596	1 689
Waste	3 044	2 039	2 025	2 470	981
Germany					
Unmanufactured	868	878	1 485	1 453	387
Ground	22 661	26 492	18 735	19 428	21 498
Greece	129	61	201	119	48
Irish Republic	864	557	582	657	639
Italy					
Unmanufactured	290	230	326	121	62
Ground	2 259	2 220	4 442	2 741	2 594
Netherlands	3 199	3 476	3 742	4 005	3 383
Norway	3 399	2 998	3 150	2 051	2 426
Poland	594	891	826	883	820
Portugal	45	110	144	57	56
Russia	203	1 853	126	34	...
Spain	2 314	2 351	2 129	1 287	1 185
Sweden	862	963	475	713	562
Switzerland	307	476	665	297	300
Turkey	129	81	56	117	136
United Kingdom					
Unmanufactured	12	29	125	203	344
Ground	9 036	7 961	6 977	5 355	7 258
Waste	8 342	10 379	5 854	8 119	4 016
Botswana	419	545	...	161	39
South Africa	...	...	...	214	313
Zimbabwe					
Mica	...	...	3 244	4 872	...
Canada	4 058	4 861	5 073	6 507	6 400
Jamaica	213	202	267	223	...
Mexico	1 553	1 435	1 792	1 991	1 997
USA					
Block	47	73	37	107	405
Splittings	3 967	2 630	2 659	4 017	2 770
Ground	12 959	15 492	20 626	22 111	17 713
Other unmanufactured	10 380	7 637	5 143	6 458	14 657
Colombia	280	254	318	317	282
Venezuela	420	250	333	325	...
China	1 029	1 213	1 090	5 400	5 325
Dubai	389	195	500	...	...
Hong Kong	131	51	192	198	169
Indonesia	1 367	773	1 075	1 009	2 032
Iran (b)	20	258	439	148	...
Japan					
Unmanufactured	6 529	7 581	7 863	11 060	10 991
Ground	40 481	32 436	34 496	32 717	34 222
Waste	2 695	3 572	2 609	1 591	2 689
Korea, Republic of	7 675	4 379	6 117	6 147	6 308
Malaysia	...	5 223	4 111	5 143	16 001
Philippines	236	223	504	343	609
Saudi Arabia	1 386	1 123	1 597	1 430	...
Singapore	1 684	933	817	1 206	643
Taiwan					
Unmanufactured	448	499	760	758	485
Ground	1 901	1 683	2 592	2 848	2 180
Thailand	1 089	590	860	889	1 291

Imports of Mica

tonnes

Country	1997	1998	1999	2000	2001
Australia	1 483	1 879	2 172	2 286	1 888
New Zealand	£186 000	£149 000	£132 000	£144 000	£107 000

Note(s) :-

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

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

Mine Production of Molybdenum

tonnes (metal content)

Country	1997	1998	1999	2000	2001
Armenia	*1 800	*2 600	2 756	3 082	2 943
Bulgaria	*400	*400	*400	*400	*400
Russia	4 800	4 800	4 800	3 700	4 800
Canada	8 223	8 469	5 932	7 457	8 210
Mexico	4 842	5 949	7 961	6 886	5 518
USA	60 100	53 300	42 400	40 900	37 600
Chile	21 339	25 298	27 270	33 639	33 492
Peru	4 261	4 336	5 472	7 205	8 351
China	33 300	30 015	29 745	28 755	28 201
Iran (a)	1 600	2 400	2 600	1 900	...
Kazakhstan	81	100	155	215	94
Kyrgyzstan	...	148	242	*250	*250
Mongolia	1 992	1 848	1 954	1 336	1 446
Uzbekistan	*500	*500	*500	348	580
World Total	143 000	140 000	132 000	136 000	134 000

Note(s):

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

(a) Years ended 20 March following that stated

Exports of Molybdenum

tonnes

Country	1997	1998	1999	2000	2001
Austria					
Metal	1 747	1 684	1 700	1 864	2 023
Oxides	81	85	1	36	0
Belgium-Luxembourg					
Ores & concentrates	13 466	17 437	12 615	11 951	9 864
Metal	296	104	143	802	543
Oxides	150	216	242	132	242
Estonia					
Metal	5	18	49	106	76
France					
Ores & concentrates	873	118	89	6	99
Metal	61	65	57	161	93
Germany					
Ores & concentrates	111	36	206	39	157
Metal	1 368	1 070	1 132	1 337	1 220
Oxides	731	770	17	3 863	...
Italy					
Metal	65	197	94	34	98
Netherlands					
Ores & concentrates	5 662	6 106	4 869	7 303	16 092
Metal	408	249	167	380	829
Oxides	161	96	246	2 109	2 014
Russia					
Ores & concentrates	4 645	7 368	10 941	9 297	...
Metal	901	932	569	355	...
United Kingdom					
Ores & concentrates	3 717	2 401	998	317	297
Metal	143	248	104	277	...
South Africa					
Metal	9	1	173	260	1
Canada					
Ores & concentrates (a)	11 235	10 748	10 558	10 640	13 743
Mexico					
Ores & concentrates	12 347	10 702	9 838	8 404	11 976
USA					
Ores & concentrates (a)	58 531	42 480	28 527	23 740	28 624
Metal	916	1 127	976	1 056	1 076
Oxides	1 262	1 149	1 155	1 279	951
Chile					
Ores & concentrates	36 266	43 323	44 720	53 511	83 986
Oxides	2 947	3 618	2 030	2 978	3 907
Peru					
Ores & concentrates	7 753	8 011	9 824	13 355	15 249
China					
Ores & concentrates	2 819	4 567	9 300	14 172	22 582
Metal	531	849	1 029	1 639	1 744
Oxides	21 983	17 147	7 976	4 221	4 107
Iran					
Ores & concentrates	...	809	4 974	...	...
Japan					
Metal	110	126	121	171	172
Oxides	92	106	24	108	35
Korea, Republic of					
Ores & concentrates	491	339	855	1 109	562
Metal	9	107	153	444	169
Mongolia					
Ores & concentrates	4 109	4 131	4 164	3 028	*3 200
Taiwan					
Metal	142	254	122	13	10
Oxides	130	86	55	4	29

Note(s):

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

(a) Mo content

Imports of Molybdenum

Country	1997	1998	1999	2000	2001
Austria					
Ores & concentrates	5 566	232	...	...	...
Metal	255	289	163	198	197
Oxides	2 378	2 761	2 139	3 274	...
Belgium-Luxembourg					
Ores & concentrates	22 075	22 613	13 339	19 268	19 527
Metal	207	208	156	374	1 196
Oxides	969	529	605	388	635
Czech Republic					
Metal	448	60	37	39	45
Estonia					
Metal	6	38	34	128	102
Finland					
Ores & concentrates	3 172	2 959	3 258	3 591	3 296
France					
Ores & concentrates	2 539	2 354	3 273	2 384	2 126
Metal	627	...	526	817	635
Oxides	96	57	73	104	119
Germany					
Ores & concentrates	8 437	12 976	10 331	10 866	10 814
Metal	1 465	1 922	1 993	2 159	2 364
Oxides	1 085	703	378	311	318
Greece					
Metal	68	97	26	1	12
Hungary					
Metal	95	124	122	150	114
Italy					
Ores & concentrates	3 725	4 629	3 575	3 140	4 065
Metal	164	173	159	241	284
Oxides	248	94	90	92	74
Netherlands					
Ores & concentrates	17 660	18 706	18 939	25 656	25 896
Metal	691	340	346	530	192
Oxides	1 004	814	1 153	1 758	1 958
Poland					
Ores & concentrates	230	152	173	144	111
Metal	32	48	102	75	54
Portugal					
Metal	16	16	14	17	14
Russia					
Ores & concentrates	626	1 491	1 202	939	...
Metal	52	41	292	253	...
Spain					
Ores & concentrates	3 238	3 129	3 050	3 578	3 811
Metal	119	81	50	45	34
Sweden					
Ores & concentrates	7 451	6 271	5 173	5 742	5 409
Metal	1 168	186	205	208	249
Oxides	371	448	626	784	659
Switzerland					
Metal	28	37	25	30	25
Turkey					
Metal	7	10	42	5	2
United Kingdom					
Ores & concentrates	18 898	17 495	13 872	12 457	16 373
Metal	859	903	1 374	846	1 165
Oxides	89	110	65	34	60
Nigeria					
Metal	121	...	...	...	...
South Africa					
Ores & concentrates	866	1 815	1 107	2 138	2 261
Metal	16	11	...	12	123
Oxides	619	465	742	550	89
Canada					
Metal	80	92	92	84	95
Oxides	648	664	1 074	1 029	954

Imports of Molybdenum

tonnes

Country	1997	1998	1999	2000	2001
USA					
Ores & concentrates	10 513	10 736	10 325	10 043	9 444
Metal	1 040	662	688	744	1 129
Oxides	1 420	1 182	842	1 211	1 013
Brazil					
Ores & concentrates	3 316	3 479	3 932	4 384	4 598
Metal	267	164	199	135	116
Oxides	156	44	42	414	65
Chile					
Ores & concentrates	11 794	11 252	8 667	7 345	8 405
China					
Ores & concentrates	6 992	10 843	15 680	18 769	24 577
Metal	624	410	189	178	216
Oxides	904	261	166	781	146
India					
Ores & concentrates (a)	2 866	2 682	2 967	3 141	...
Metal (a)	111	111	97	70	...
Indonesia					
Ores & concentrates	19	751	68	8	3
Metal	----	16	77	287	127
Japan					
Ores & concentrates	31 262	30 540	26 477	32 402	31 747
Metal	713	517	484	833	882
Oxides	1 698	1 816	1 147	1 167	1 492
Korea, Republic of					
Ores & concentrates	4 072	5 379	6 402	5 482	5 887
Metal	120	100	278	200	205
Kyrgyzstan					
Metal	...	18	14	18	19
Malaysia					
Metal	106	163	...	24	1 127
Singapore					
Metal	8	18	4	4	42
Oxides	...	67	94	59	207
Taiwan					
Ores & concentrates	----	----	517	1 216	1 080
Metal	211	240	297	195	78
Oxides	188	249	240	449	324
Australia					
Ores & concentrates	596	434	381	17 785	78
Metal	82	69	141	343	348
Oxides	106	587	46	131	53

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	1997	1998	1999	2000	2001
Finland	3 252	1 967	730	3 347	2 200
Greece	20 996	18 544	16 556	23 365	20 742
Macedonia	5 300	5 800	100	-----	-----
Norway	2 725	3 219	2 965	2 536	2 500
Russia	235 000	235 000	235 000	235 000	235 000
Yugoslavia, Federal Republic of	2 700	800	-----	-----	-----
Botswana	20 157	22 851	22 898	21 446	22 454
South Africa (a)	34 849	36 679	36 200	36 614	36 443
Zimbabwe	11 000	10 400	9 593	8 300	8 100
Canada	190 529	208 302	186 236	190 793	193 917
Cuba	59 100	65 100	63 900	68 500	73 400
Dominican Republic	47 730	40 311	39 997	39 943	33 419
Brazil	31 936	36 764	43 784	45 317	45 400
Colombia	31 230	29 422	39 274	58 927	53 000
Venezuela	-----	-----	-----	2 472	11 400
China	46 600	48 700	49 500	50 300	51 000
Indonesia	71 100	74 100	89 100	98 200	102 100
Kazakhstan	4 000	3 600	3	284	-----
Philippines	18 133	20 685	12 389	20 200	27 500
Australia	123 400	143 900	119 600	165 700	206 000
New Caledonia	136 459	124 729	109 509	126 041	117 464
World Total	1 096 000	1 131 000	1 077 000	1 197 000	1 242 000

Note(s):

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

Smelter/Refinery Production of Nickel

tonnes

Country	1997	1998	1999	2000	2001
Austria	2 000	1 800	1 500	1 300	1 300
Finland	35 285	43 379	52 800	54 429	54 600
France	10 702	11 778	11 700	12 300	13 036
Greece	17 610	15 004	13 462	17 126	17 675
Macedonia	5 300	5 800	-----	-----	3 000
Norway	62 700	70 150	74 100	58 700	68 200
Russia	240 900	233 900	226 000	236 600	230 300
Ukraine	-----	-----	-----	-----	1 500
United Kingdom	36 091	39 050	38 086	37 980	33 800
Yugoslavia, Federal Republic of	2 440	466	-----	-----	-----
South Africa	34 849	36 410	32 600	36 600	36 500
Zimbabwe	19 100	19 300	19 800	19 300	19 500
Canada	131 639	146 755	124 260	134 225	140 591
Cuba	33 571	38 192	37 510	39 511	40 700
Dominican Republic	32 554	25 222	24 456	27 829	21 662
USA	15 996	4 290	-----	-----	-----
Brazil	18 199	21 083	22 931	23 253	22 452
Colombia	25 170	28 140	28 341	27 737	38 446
Venezuela	-----	-----	-----	...	9 700
China	43 300	40 100	44 400	50 900	49 700
Indonesia	9 999	8 500	9 225	10 111	10 300
Japan	128 400	126 500	134 700	160 700	154 100
Australia	73 700	79 600	83 600	112 200	128 000
New Caledonia	44 312	44 491	45 289	43 914	45 912
World Total	1 024 000	1 040 000	1 025 000	1 105 000	1 141 000

Note(s):

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

Exports of Nickel

Country	1997	1998	1999	2000	2001
Austria					
Mattes, sinters etc.	77	109	49	99	153
Unwrought (a)	1 069	524	586	908	315
Scrap	398	219	471	307	495
Belgium-Luxembourg					
Unwrought	16 519	11 566	12 324	12 143	12 265
Unwrought alloys	1 796	1 920	1 936	1 978	2 531
Scrap	1 245	770	1 126	1 021	2 595
Czech Republic					
Unwrought (a)	1 776	125	353	71	42
Scrap	5 355	751	899	218	237
Oxides	...	93	157	231	126
Denmark					
Scrap	367	912	1 343	322	280
Estonia					
Mattes, sinters etc.	...	13	1 020	1 011	938
Unwrought (a)	142	324	198	412	619
Scrap	90	341	408	224	1 587
Finland					
Ore	53 974	11 480	14 868	25 804	30 711
Unwrought	23 650	26 409	29 457	28 504	36 815
Scrap	26	454	76	218	50
Oxides	1 163	1 399	1 106	1 664	...
France					
Unwrought	7 842	7 347	6 884	9 950	9 094
Unwrought alloys	907	707	707	1 187	434
Scrap	4 499	10 420	5 674	7 190	9 134
Oxides	...	...	...	387	551
Germany					
Unwrought	8 545	17 087	13 553	7 346	8 418
Unwrought alloys	3 572	4 678	4 573	7 190	6 328
Scrap	9 236	6 674	12 308	26 627	10 826
Oxides	141	46	19	77	670
Irish Republic					
Scrap	512	662	935	833	674
Italy					
Unwrought (a)	2 217	2 985	1 443	2 472	2 102
Scrap	395	1 162	805	1 354	1 057
Latvia					
Scrap	1 828	2 651	2 412	4 303	2 293
Lithuania					
Scrap	241	51	65	711	739
Netherlands					
Mattes, sinters etc.	6 530	27 745	(b) *6 400	(b) *7 800	(b) *8 100
Unwrought (a)	37 258	23 450	26 234	27 901	54 127
Scrap	2 810	2 017	1 204	2 042	1 365
Oxides	1 437	1 384	1 126	1 817	...
Norway					
Ore	30 512	34 016	26 546	24 999	30 142
Unwrought	62 295	70 153	73 328	59 956	65 829
Scrap	145	176	399	173	255
Russia					
Ore	64	----	250	1 648	3 756
Mattes, sinters etc. (b)	*9 800	*12 000	*16 200	*18 400	*13 600
Unwrought	218 722	212 186	207 448	188 484	182 949
Unwrought alloys	3 135	1 948	3 837	8 469	6 740
Scrap (b)	*16 900	*10 700	*5 400	*7 400	*7 300
Oxides	544	845	350	33	...
Slovenia					
Unwrought	600	352	435	850	225
Spain					
Unwrought (a)	917	2 252	8 013	3 743	168
Scrap	512	143	584	190	385
Sweden					
Unwrought (a)	93	103	301	1 040	613
Scrap	198	166	532	696	432

Exports of Nickel

tonnes

Country	1997	1998	1999	2000	2001
Switzerland					
Unwrought (a)	120	50	469	103	179
Scrap	661	445	606	917	492
Ukraine					
Unwrought	----	2 535	121	294	...
Scrap	134	57	(b) *300	(b) *700	(b) *100
United Kingdom					
Mattes, sinters etc.	146	58	197	1 634	136
Unwrought	18 887	20 502	20 728	21 678	21 670
Unwrought alloys	3 558	4 271	3 733	5 203	5 955
Scrap	4 367	5 109	5 432	7 015	7 736
Botswana					
Mattes, sinters etc. (c)	14 691	16 516	16 342	19 041	12 683
South Africa					
Unwrought (d)	20 365	22 570	16 195	15 275	3 225
Scrap (b)	*3 200	*3 000	*900	...	...
Tunisia					
Scrap	1 221	356	480	553	...
Zimbabwe					
Unwrought	13 609	10 324	11 462	13 863	*14 000
Canada					
Mattes, sinters etc.	86 696	107 817	103 250	73 208	92 504
Unwrought (a)	101 075	107 257	87 135	99 395	111 980
Scrap	4 159	2 322	3 200	5 682	2 927
Cuba					
Oxide, sinter & sulphide (e)	*59 900	*68 800	*67 600	*70 500	*75 100
USA					
Mattes, sinters etc.	3 104	1 690	1 991	2 556	2 611
Unwrought (a)	5 754	7 394	10 517	12 683	15 945
Scrap	25 056	25 952	24 191	29 983	31 647
Oxides	404	1 157	569	790	846
Brazil					
Mattes, sinters etc.	180	8 724	19 015	16 330	20 038
Unwrought	5 907	7 933	13 008	11 927	9 614
China					
Unwrought (a)	4 748	15 051	14 455	9 218	5 422
Scrap	905	779	861	444	180
Oxides	830	251	325	443	289
Hong Kong					
Unwrought (a) (f)	5 177	5 682	6 184	13 340	17 136
Scrap	62	316	911	398	136
Indonesia					
Ore	1 899 153	2 214 986	1 675 375	1 444 436	2 244 912
Mattes, sinters etc.	41 164	34 881	54 429	47 997	33 094
Israel					
Scrap (b)	*1 900	*1 400	*2 700	*3 400	*2 500
Japan					
Mattes, sinters etc.	1 468	6 129	7 905	23 072	25 480
Unwrought (a)	1 385	393	501	1 223	954
Scrap	8 563	954	489	683	712
Oxides	3 026	3 312	4 580	3 873	3 077
Kazakhstan					
Unwrought	253	0	5	6	...
Korea, Republic of					
Unwrought (a)	935	16	29	32	73
Scrap	1 813	1 568	1 096	1 730	1 228
Philippines					
Ores & concentrates	780 432	1 249 923	1 417 406	1 724 687	...
Scrap	965	2 447	385	1	...
Saudi Arabia					
Unwrought	...	2 246	584	69	...
Scrap	...	1 063	3 154	5 047	...

Exports of Nickel

Country	1997	1998	1999	2000	2001
Singapore					
Unwrought (f)	7 250	5 901	9 229	13 325	12 784
Scrap	1 517	971	1 303	1 734	1 975
Oxides	...	409	315	246	492
Taiwan					
Unwrought (a)	91	118	575	269	165
Scrap	1 366	934	1 681	1 953	1 242
Oxides	79	77	215	401	282
Australia					
Ore	181 099	216 731	225 750	229 172	240 584
Mattes, sinters etc.	*60 000	70 171	(b) *49 100	(b) *64 100	(b) *60 700
Unwrought	43 292	53 007	71 146	86 441	89 064
Unwrought alloys	1 884	1 371	1 794	2 002	2 280
Scrap (b)	*600	*500	*400	*700	*1 300
New Caledonia					
Ores	5 391 000	4 237 400	3 790 066	4 108 676	3 697 230
Mattes, sinters etc.	14 857	16 813	15 808	18 158	18 390

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

Imports of Nickel

tonnes

Country	1997	1998	1999	2000	2001
Austria					
Mattes, sinters etc.	164	334	245	197	552
Unwrought (a)	3 503	3 618	3 742	7 296	5 150
Scrap	176	84	73	620	540
Oxides	49	24	151	765	853
Belarus					
Unwrought (a)	...	56	127	385	500
Belgium-Luxembourg					
Mattes, sinters etc.	313	13	448	213	33
Unwrought	32 253	27 872	36 987	31 107	33 851
Unwrought alloys	1 721	2 054	559	460	682
Scrap	3 277	719	694	835	2 577
Oxides	145	234	207	341	292
Czech Republic					
Unwrought (a)	934	1 475	1 077	1 758	2 231
Oxides	...	206	214	251	177
Denmark					
Unwrought (a)	131	160	84	157	202
Estonia					
Unwrought	165	367	211	427	11
Scrap	85	284	352	289	1 641
Finland					
Ore	163 962	247 276	249 028	217 154	250 973
Mattes, sinters etc.	7 314	21 701	24 266	26 654	30 946
Unwrought (a)	9 511	7 976	6 558	5 880	9 809
Scrap	247	289	183	379	31
Oxides	346	540	2	0	48
France					
Mattes, sinters etc.	16 744	16 697	15 985	16 638	19 437
Unwrought	32 807	39 221	36 956	40 991	34 347
Unwrought alloys	6 740	6 658	6 652	5 491	7 372
Scrap	1 379	2 199	2 040	3 351	1 848
Oxides	216	537	397	317	219
Germany					
Mattes, sinters etc.	8 629	11 560	8 436	10 701	9 525
Unwrought	62 752	77 030	79 030	94 153	81 674
Unwrought alloys	1 488	1 502	1 705	4 335	1 660
Scrap	11 723	7 486	9 103	12 599	9 254
Oxides	411	472	779	701	590
Greece					
Unwrought	108	127	144	226	126
Irish Republic					
Unwrought (a)	1 129	1 487	1 170	1 154	1 834
Italy					
Mattes, sinters etc.	2	171	14	77	225
Unwrought	41 065	46 414	45 687	46 241	50 142
Unwrought alloys	940	1 112	1 036	1 640	1 845
Scrap	1 415	1 808	1 964	5 970	2 141
Netherlands					
Mattes, sinters etc.	36 543	18 593	...	...	...
Unwrought	15 384	42 306	75 302	65 684	59 920
Unwrought alloys	63	211	643	59	401
Scrap	3 307	1 881	1 995	2 368	3 083
Oxides	825	570	544	752	1 728
Norway					
Mattes, sinters etc.	132 146	139 094	151 010	118 719	131 096
Unwrought (a)	79	168	154	175	98
Poland					
Unwrought	1 421	1 925	1 488	2 052	2 307
Portugal					
Unwrought (a)	290	356	265	282	315
Romania					
Unwrought	563	593	391	467	671
Russia					
Ore	628 682	129 544	17 729	307 322	30 422
Unwrought	1 246	2 096	412	1 837	3 836
Scrap	2 903	3 158	4 021	3 971	3 677

Imports of Nickel

Country	1997	1998	1999	2000	2001
Slovenia					
Unwrought (a)	4 375	3 916	4 275	3 718	2 954
Spain					
Mattes, sinters etc.	584	43	22	42	18
Unwrought (a)	21 567	18 222	25 979	20 849	31 752
Oxides	122	149	213	231	231
Sweden					
Mattes, sinters etc.	4 372	6 289	5 700	5 756	6 124
Unwrought	14 113	20 039	21 667	28 583	24 547
Unwrought alloys	661	1 546	1 185	687	942
Scrap	21 064	17 967	9 570	12 901	13 495
Switzerland					
Unwrought (a)	964	1 596	1 068	1 511	1 591
Scrap	401	234	161	122	61
Turkey					
Unwrought (a)	1 677	1 815	1 493	1 459	1 584
Oxides	...	...	90	94	92
United Kingdom					
Mattes, sinters etc.	54 534	59 263	57 457	54 768	51 963
Unwrought	17 706	12 538	15 669	18 825	47 030
Unwrought alloys	3 424	4 182	7 355	2 095	2 788
Scrap	13 181	11 884	15 731	22 644	14 963
Oxides	155	98	199	131	145
Botswana					
Ores	433	2 612	...	22 531	32 168
Slurry, mattes, sinters etc.	...	56	...	276	72
Egypt					
Unwrought	311	328	351	*400	134
South Africa					
Unwrought (a)	5 319	9 579	8 460	8 695	5 543
Canada					
Ores & concentrates (b)	2 524	1 138	934	1 152	1 941
Mattes, sinters etc.	49 902	51 363	61 173	65 750	72 317
Unwrought (a)	2 599	1 946	3 319	3 255	2 959
Scrap	16 572	16 641	20 448	20 507	22 207
Oxides	957	2 774	2 116	3 722	3 625
Mexico					
Unwrought (a)	2 102	2 277	5 455	2 009	1 862
USA					
Ores & concentrates (b)	43 029	3 110	0	193	15
Slurry, mattes, sinters etc.	2 480	2 762	4 260	3 388	1 735
Unwrought (a)	122 832	122 517	108 758	123 279	115 319
Scrap	12 397	8 430	9 037	13 215	11 215
Oxides	1 532	2 176	1 859	2 109	2 145
Argentina					
Unwrought	532	529	420	460	483
Brazil					
Unwrought (a)	7 129	6 277	8 870	10 524	7 829
Colombia					
Unwrought	175	148	86	180	158
Venezuela					
Unwrought (a)	153	190	81	85	133
China					
Ore	2 662	1 813	79	1 232	6 986
Mattes, sinters etc.	40	560	640	2 672	3 645
Unwrought (a)	1 117	4 983	4 498	11 951	37 406
Scrap	36	70	138	34	165
Oxides	2 272	1 642	2 154	3 281	2 984
Hong Kong					
Mattes, sinters etc.	7 342	157 378	86	453	25
Unwrought (a)	8 977	13 122	10 760	18 721	22 924
Oxides	1 321	1 424	1 747	2 524	1 862

Imports of Nickel

tonnes

Country	1997	1998	1999	2000	2001
India					
Mattes, sinters etc. (c)	2 015	1 055	368	348	...
Unwrought (a) (c)	11 814	11 526	9 820	12 287	...
Scrap (c)	1 845	1 347	925	111	...
Indonesia					
Unwrought (a)	211	880	224	491	398
Iran					
Unwrought	*500	1 143	515	257	...
Japan					
Ore	4 362 374	4 086 149	3 905 809	4 579 118	4 418 798
Mattes, sinters etc.	76 715	80 563	87 820	113 263	118 247
Unwrought	57 096	39 003	48 282	57 822	28 139
Unwrought alloys	747	1 050	624	431	623
Scrap	12 836	10 273	11 736	15 657	16 039
Oxides	221	129	103	131	60
Korea, Republic of					
Mattes, sinters etc.	20 772	24 281	24 504	37 717	34 020
Unwrought (a)	19 069	21 374	38 782	24 704	21 577
Scrap	12 509	61	545	558	44
Oxides	256	207	168	245	226
Malaysia					
Unwrought (a)	759	529	1 100	861	...
Pakistan					
Unwrought (a) (d)	373	555	373	406	...
Philippines					
Scrap	9 000	5 000	600	44 000	45 000
Singapore					
Unwrought	9 026	6 775	9 227	14 141	22 297
Scrap	329	605	664	523	555
Oxides	493	449	453	430	735
Taiwan					
Mattes, sinters etc.	4 797	10 928	10 784	11 586	13 711
Unwrought (a)	41 888	38 803	55 578	55 588	37 710
Scrap	232	155	534	645	658
Oxides	1 265	1 156	1 147	1 381	762
Thailand					
Unwrought (a)	1 325	1 002	7 056	1 872	1 411
Australia					
Unwrought (a)	1 290	1 545	1 196	924	1 360
Scrap	256	----	131	51	1 023

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

Country	1997	1998	1999	2000	2001
Albania	359 666	309 000	268 000	314 000	308 000
Austria	972 340	959 285	962 393	970 513	957 472
Azerbaijan	9 100 000	11 400 000	13 800 000	14 000 000	14 900 000
Belarus	1 822 000	1 830 000	1 840 000	1 841 000	1 841 000
Bulgaria	27 750	31 700	38 700	40 900	32 000
Croatia	1 496 223	1 389 408	1 292 665	907 154	826 108
Czech Republic	159 000	172 000	176 000	168 000	178 000
Denmark	11 375 000	11 752 000	14 931 000	17 753 000	17 378 000
France	1 779 728	1 708 883	1 539 131	1 417 568	1 382 646
Georgia	133 800	119 200	91 300	109 500	98 800
Germany	2 820 398	2 894 526	2 740 073	3 119 592	3 444 298
Greece	467 000	315 000	*300 000	256 000	188 109
Hungary	1 355 420	1 241 380	1 272 140	1 130 850	1 058 060
Italy	5 892 055	5 560 072	5 049 417	4 499 420	4 066 000
Lithuania	160 000	160 000	...	...	...
Netherlands	2 068 906	1 714 000	1 594 000	1 443 443	1 370 302
Norway	156 215 000	150 006 000	148 728 000	158 625 000	163 088 000
Poland	289 139	360 000	424 806	652 696	768 980
Romania	6 517 000	6 309 043	6 140 000	6 042 000	6 017 000
Russia	306 000 000	303 283 000	305 000 000	323 000 000	348 000 000
Slovakia	63 136	60 000	60 270	56 940	54 115
Spain	379 563	535 140	304 292	226 422	344 074
Turkey	3 454 021	3 226 873	2 938 479	2 747 630	2 550 876
Ukraine	4 128 100	3 899 900	3 797 900	3 692 900	3 700 000
United Kingdom	120 321 000	124 080 000	128 286 000	117 882 000	108 387 000
Yugoslavia, Federal Republic of	979 081	913 029	704 838	804 768	746 056
Algeria	54 234 000	54 922 800	54 680 000	36 365 000	37 712 000
Angola	36 500 000	36 000 000	36 700 000	36 825 000	36 469 000
Benin	*150 000	*150 000	----	----	...
Cameroon	6 300 000	5 300 000	4 800 000	4 500 000	4 100 000
Congo	11 471 847	12 288 822	12 775 737	12 667 606	12 108 033
Congo, Democratic Republic	1 400 000	1 300 000	1 250 000	1 250 000	1 250 000
Egypt (b)	41 800 000	40 700 000	*40 000 000	37 000 000	*38 000 000
Equatorial Guinea	3 000 000	4 100 000	5 000 000	5 600 000	9 000 000
Gabon	18 200 000	16 900 000	17 000 000	16 400 000	15 000 000
Ghana	*250 000	*250 000	*250 000	*250 000	...
Ivory Coast	732 000	1 002 000	1 373 000	1 606 000	*1 650 000
Libya	70 000 000	69 600 000	67 000 000	69 500 000	67 000 000
Morocco	...	...	11 300	13 000	10 100
Nigeria	112 700 000	105 900 000	99 200 000	103 300 000	105 200 000
South Africa	*600 000	*1 200 000	*1 100 000	*1 200 000	*1 100 000
Sudan	...	600 000	3 500 000	6 300 000	*6 500 000
Tunisia	3 806 000	3 895 300	3 938 000	3 700 000	3 343 900
Barbados	45 004	79 143	97 113	76 895	63 642
Canada	103 172 000	107 213 800	101 744 300	106 982 100	108 815 100
Cuba	1 461 500	1 678 200	2 136 300	2 695 300	2 885 500
Guatemala	989 463	1 280 739	1 177 413	1 050 092	1 067 317
Mexico	161 251 000	163 630 000	155 047 000	160 786 000	166 732 000
Trinidad & Tobago	6 375 770	6 318 301	6 439 502	6 153 729	5 840 307
USA	321 148 000	311 193 000	292 727 000	289 790 000	288 745 000
Argentina	44 174 851	44 834 345	42 423 518	40 980 939	41 054 875
Bolivia	1 398 500	1 602 357	1 355 157	1 282 403	1 449 570
Brazil	44 545 677	51 620 023	58 310 277	65 540 000	68 620 000
Chile	446 117	427 553	335 558	297 247	282 598
Colombia	33 622 738	38 885 956	42 041 092	35 527 000	31 158 988
Ecuador	19 766 766	19 121 078	19 011 567	20 390 618	20 749 000
Peru	5 826 583	5 696 200	5 219 862	4 902 588	4 784 726
Suriname	620 000	600 000	700 000	720 000	764 000
Venezuela	165 438 000	174 291 000	160 175 000	165 156 000	160 000 000

Production of Crude Petroleum

tonnes

Country	1997	1998	1999	2000	2001
Abu Dhabi	*97 200 000	*99 800 000	*89 400 000	*99 550 000	*97 050 000
Bahrain	1 934 000	1 879 000	1 870 000	1 870 000	1 858 000
Brunei	8 800 000	8 600 000	9 700 000	10 300 000	10 100 000
China (a)	160 741 400	160 176 000	160 215 400	162 620 300	164 931 400
Dubai	*16 300 000	*16 500 000	*15 800 000	*14 850 000	*13 750 000
India (d)	33 772 000	32 722 000	31 949 000	32 426 000	32 037 000
Indonesia	72 400 000	71 300 000	73 100 000	68 800 000	66 500 000
Iran	185 100 000	188 900 000	176 200 000	187 700 000	182 900 000
Iraq	58 300 000	105 600 000	126 100 000	128 600 000	117 900 000
Israel	13 564	5 630	4 100	3 400	3 400
Japan	768 000	722 000	666 000	675 000	693 000
Jordan	2 097	2 100	2	13 083	1 783
Kazakhstan	25 778 200	25 945 100	30 130 400	35 316 800	39 696 300
Kuwait (c)	105 200 000	107 900 000	99 500 000	106 000 000	104 200 000
Kyrgyzstan	84 800	77 100	77 000	77 100	75 500
Malaysia	34 100 000	34 630 000	33 000 000	33 100 000	31 800 000
Mongolia	-----	6 000	10 000	9 000	10 000
Myanmar	590 000	480 000	490 000	580 000	...
Oman	45 100 000	44 748 000	45 049 000	47 675 000	47 400 000
Pakistan (b)	2 853 565	2 739 000	2 665 000	2 719 000	*3 000 000
Philippines	*150 000	41 000	43 000	57 000	42 000
Qatar	32 200 000	34 600 000	33 400 000	36 800 000	36 000 000
Ras al Khaimah	*25 000	*25 000	*25 000	*25 000	*25 000
Saudi Arabia (c)	443 800 000	444 500 000	411 900 000	441 400 000	422 900 000
Sharjah	*3 525 000	*3 525 000	*2 325 000	*2 575 000	*2 375 000
Syria	28 900 000	28 800 000	29 000 000	27 600 000	27 300 000
Taiwan	46 200	49 200	43 000	33 900	40 500
Tajikistan	30 000	20 000	20 000	20 000	20 000
Thailand	3 231 000	3 396 000	3 767 000	5 216 000	5 445 000
Turkmenistan	5 367 500	6 819 200	7 159 800	7 181 000	8 343 000
Uzbekistan	7 900 000	8 100 000	8 100 000	7 500 000	7 256 000
Vietnam	10 090 000	12 500 000	15 200 000	16 300 000	16 700 000
Yemen, Republic of	17 338 000	17 600 000	18 770 000	20 720 000	21 700 000
Australia	30 000 000	28 000 000	27 000 000	37 000 000	34 000 000
New Zealand	2 586 800	2 054 300	1 811 300	1 607 900	1 496 700
Papua New Guinea	3 533 406	3 775 065	4 100 452	3 257 077	2 693 749
World Total	3 348 000 000	3 413 000 000	3 338 000 000	3 441 000 000	3 424 000 000

Note(s):

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

- (a) Including oil from shale and coal
- (b) Years ended 30 June of that stated
- (c) Including shares of production from the Neutral Zone
- (d) Years ended 31 March following that stated

Production of Natural Gas

million m³

Country	1997	1998	1999	2000	2001
Albania	18	16	13	11	11
Austria	1 428	1 568	1 741	1 805	1 954
Azerbaijan	5 960	5 590	5 997	5 643	5 500
Belarus	246	252	256	257	255
Bulgaria	38	33	27	15	22
Croatia	1 717	1 570	1 567	1 768	1 889
Czech Republic	118	137	143	118	101
Denmark	7 694	7 348	7 741	8 000	8 200
France	2 586	2 183	1 940	1 883	1 809
Georgia	----	----	----	80	40
Germany	22 615	21 967	23 072	21 720	21 698
Greece	38	33	...	36	32
Hungary	4 513	3 958	3 562	3 349	3 286
Irish Republic	2 359	1 742	1 366	1 187	*1 000
Italy	19 123	18 981	17 635	16 380	15 547
Netherlands	80 282	77 105	71 702	69 180	74 323
Norway	46 726	48 146	51 582	53 076	57 465
Poland	4 836	4 852	4 757	4 956	5 179
Romania	15 916	14 441	14 617	14 607	14 853
Russia	544 000	564 000	563 000	555 000	551 000
Slovakia	284	260	219	203	212
Slovenia	12 100	12 500	5 700	6 800	6 100
Spain	174	114	148	179	557
Turkey	199	202	...	493	266
Ukraine	18 131	17 967	18 092	17 884	18 200
United Kingdom	91 558	95 506	105 070	115 338	112 803
Yugoslavia, Federal Republic of	688	731	679	729	506
Algeria	71 800	76 600	86 000	84 400	78 200
Angola	570	580	560	580	530
Egypt	13 500	13 860	13 500	13 300	15 500
Equatorial Guinea	44	78	83	98	790
Gabon	100	100	100	100	100
Ivory Coast	879	*1 000	1 395	1 323	1 230
Libya	6 570	6 360	6 000	6 100	6 000
Morocco	52	...	44	50	49
Nigeria	5 100	5 100	6 000	10 800	13 400
South Africa	*1 500	*1 500	*2 000	*2 000	*2 000
Tunisia	300	300	300	2 000	2 400
Canada	184 181	188 984	195 733	201 569	204 571
Cuba	37	124	460	574	595
Mexico	31 700	34 330	36 150	35 820	35 310
Trinidad & Tobago	7 380	8 642	9 423	9 758	14 023
USA (b)	535 200	538 700	533 300	537 700	550 300
Argentina	30 319	32 832	37 616	41 217	40 805
Bolivia	3 016	3 106	2 612	3 597	5 275
Brazil	6 000	6 300	6 700	6 800	7 700
Chile	3 211	3 218	2 957	2 702	2 684
Colombia	5 900	6 300	5 200	5 900	6 100
Peru	513	*650	678	612	*620
Venezuela	30 830	32 335	27 410	27 924	28 900
Abu Dhabi	25 300	26 200	27 200	29 000	...
Afghanistan	*2 300	*2 200	*2 500	*2 500	...
Bahrain	8 070	8 552	8 778	8 976	9 285
Bangladesh	7 600	7 800	8 300	10 000	10 800
Brunei	11 099	10 800	11 300	11 600	11 300
China	22 703	22 321	25 198	27 226	30 344
Dubai	1 900	1 600	1 600	1 600	...
India (c)	19 703	25 706	26 885	27 860	27 863
Indonesia	90 293	84 370	86 887	82 354	79 288
Iran	47 000	50 000	51 000	57 000	60 000
Iraq	4 300	6 500	7 600	6 900	2 900
Japan	2 279	2 301	2 280	2 453	2 521
Jordan	291	300	282	287	279
Kazakhstan	5 569	4 878	6 585	8 228	8 471

Production of Natural Gasmillion m³

Country	1997	1998	1999	2000	2001
Kuwait (a)	9 250	9 260	8 600	9 600	9 500
Kyrgyzstan	24	18	25	32	33
Malaysia	40 582	38 474	40 851	45 300	47 400
Myanmar	1 781	*1 750	1 674	*3 300	*6 800
Oman	5 000	5 100	5 500	8 400	13 400
Pakistan (d)	19 761	19 814	21 095	*23 000	*24 300
Qatar	17 400	19 580	22 100	29 100	32 500
Ras al Khaimah	40	40	40	40	...
Saudi Arabia (a)	45 300	46 820	46 200	49 800	53 700
Sharjah	9 000	9 200	9 200	9 200	...
Syria	4 400	4 000	3 900	3 900	6 000
Taiwan	849	879	856	747	849
Tajikistan	40	30	40	40	50
Thailand	16 168	17 598	19 195	20 194	19 632
Turkmenistan	17 318	13 257	22 943	47 153	51 270
Uzbekistan	51 200	54 790	55 600	56 400	57 400
Vietnam	700	1 100	1 100	1 600	1 700
Australia	29 876	30 361	30 755	31 165	32 482
New Zealand	5 424	4 767	5 559	5 918	6 253
Papua New Guinea	119	138	135	143	142
World Total	2 345 000	2 393 000	2 437 000	2 517 000	2 569 000

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

Country	1997	1998	1999	2000	2001
Austria	48 276	51 392	52 941	57 085	60 151
Azerbaijan	292 669	2 149 337	4 268 465	5 511 642	9 142 508
Belarus	400 000	381 500	300 000	350 600	450 000
Belgium-Luxembourg	55 597	3 423	56 242	1 417 209	328 893
Croatia	296 338	30 874	6 502	5 685	15 001
Czech Republic	90 000	103 504	109 319	110 672	118 714
Denmark	6 507 328	8 061 369	8 873 887	11 393 325	11 645 846
Estonia (a) (b)	*70 000	*394 000	*465 000	*563 000	*720 000
France	41 785	400 408	453 634	134 324	55 631
Georgia	137 810	61 528	52 205	79 570	69 666
Germany	1 008 553	156 975	168 289	313 476	907 924
Greece	700 026	740 109	1 216 076	695 163	596 613
Italy	321 595	208 758	265 456	167 922	250 353
Latvia (a) (b)	*2 560 000	*2 165 000	...	...	...
Lithuania	201 316	264 790	227 079	311 983	349 491
Netherlands	229 487	14 164	11 620	17 545	177 964
Norway	136 909 684	131 818 902	128 179 516	139 954 502	146 645 926
Poland	2 000	...	2	128 931	439 625
Russia	127 271 000	137 234 000	134 545 000	144 414 000	...
Slovakia	24 000	23 000	...	14 668	16 895
Slovenia	163 870	82 082	----	...	1 125
Ukraine	5 139	87 910	1 479 484	272 606	(a) *653 000
United Kingdom	71 795 525	73 428 795	75 473 136	78 022 274	82 057 946
Algeria	33 734 000	34 297 945	36 504 727	40 556 456	...
Cameroon	...	...	...	5 383 313	4 895 890
Congo	...	11 268 439	12 637 482	11 224 260	...
Egypt	6 147 800	2 791 380	2 819 200	...	2 408 900
Libya	53 700 000	55 900 000	47 800 000	48 400 000	47 600 000
Nigeria	92 600 000	91 500 000	85 100 000	99 100 000	104 300 000
Tunisia	2 795 499	2 920 270	3 276 844	3 017 853	...
Barbados	----	69 304	104 249	77 624	60 146
Canada	64 915 842	67 517 536	61 450 668	72 703 029	70 960 455
Guatemala	893 216	1 218 743	1 080 830	1 116 994	1 058 583
Mexico	88 975 000	90 009 000	80 290 000	85 648 851	88 400 000
Trinidad & Tobago	2 835 482	2 436 048	3 186 000	2 483 262	2 437 507
USA	7 327 812	6 839 731	5 876 075	2 555 849	1 177 134
Argentina	17 632 260	17 501 194	14 220 047	14 580 444	14 922 104
Bolivia	222 708	338 698	253 961	181 752	243 388
Colombia	17 769 000	23 500 000	26 573 000	20 648 539	15 945 431
Ecuador	12 780 207	11 999 416	11 839 541	12 055 515	12 574 475
Peru	2 200 000	2 100 000	1 400 000	700 000	900 000
Suriname	160 000	180 000	270 000	166 000	335 000
Venezuela	115 744 000	118 388 000	100 676 000	104 890 000	102 860 000
Brunei	7 091 923	68 616 000	7 997 406	8 026 203	...
China	19 828 882	15 600 712	7 167 271	10 437 779	7 550 605
Indonesia	39 363 253	37 097 731	36 049 287	29 225 946	32 857 030
Iran	*128 500 000	*124 700 000	*113 800 000	*123 800 000	*121 500 000
Iraq	36 700 000	*69 600 000	*104 700 000	*100 200 000	*84 000 000
Israel (a)	...	*98 000	*95 000	...	...
Japan	188 453	132 283	----	16	75 653
Kazakhstan	16 381 784	20 429 000	23 764 000	29 348 808	32 400 362
Kuwait	57 299 847	60 134 435	47 722 869	68 036 053	*62 500 000
Malaysia	15 872 000	18 013 000	17 724 800	17 344 570	15 393 955
Oman	41 661 000	41 100 000	42 125 000	44 590 000	45 328 762
Pakistan (c)	406 041	168 579	352 482	295 746	...
Qatar	22 600 000	27 900 000	28 300 000	30 100 000	29 500 000
Saudi Arabia	314 406 535	318 291 013	284 885 017	311 700 000	300 800 000
Syria	16 758 000	16 672 750	17 602 458	...	...
Thailand	670 914	695 038	819 950	11 134 798	1 672 327
Turkmenistan (a)	*54 000	*132 000	*529 000	*175 000	*386 000
United Arab Emirates	95 100 000	99 500 000	93 600 000	...	...
Vietnam	9 638 000	12 145 000	14 882 000	15 500 000	...
Yemen, Republic of	15 628 000	13 706 000	15 657 000	*17 000 000	...

Exports of Crude Petroleum

tonnes

Country	1997	1998	1999	2000	2001
Australia	11 664 000	12 238 000	10 122 296	20 424 257	19 021 019
New Zealand	1 082 982	1 635 922	1 219 763	932 552	1 067 027
Papua New Guinea	3 754 855	3 848 126	4 206 754	3 243 542	*3 200 000

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

Country	1997	1998	1999	2000	2001
Austria	8 467 771	8 396 114	7 684 052	7 314 935	7 858 165
Azerbaijan	260 879	90 561	...	...	...
Belarus	10 460 800	10 054 600	9 899 905	11 924 686	11 913 300
Belgium-Luxembourg	32 327 044	33 613 385	31 741 912	32 114 347	38 628 736
Bulgaria	5 832 748	...	...	...	...
Croatia	4 008 271	3 446 481	4 608 832	3 835 167	4 012 709
Cyprus	1 039 834	1 128 541	1 184 607	1 154 746	1 048 256
Czech Republic	7 023 306	6 947 928	5 997 039	5 819 443	6 004 685
Denmark	4 768 350	4 605 084	4 752 381	5 664 799	2 853 538
Finland	9 476 213	11 426 549	11 180 897	11 616 731	10 951 956
France	86 964 817	91 356 469	81 273 805	83 394 974	85 259 764
Germany	100 737 953	108 124 652	103 753 381	105 292 890	104 631 624
Greece	10 753 000	16 532 000	9 269 870	18 301 453	20 112 238
Hungary	5 480 450	6 738 041	5 755 022	...	...
Irish Republic	2 887 604	3 136 654	1 775 747	2 128 504	2 475 545
Italy	78 030 889	85 432 822	79 784 467	83 272 202	83 971 514
Lithuania	5 033 453	6 339 260	4 527 321	4 690 243	6 116 989
Macedonia	378 118	787 653	495 034	801 768	641 599
Netherlands	61 200 000	62 244 603	59 563 859	55 718 885	60 427 836
Norway	1 559 657	1 921 796	2 186 298	915 314	956 019
Poland	14 713 000	15 367 000	15 272 026	18 039 804	17 558 327
Portugal	12 701 350	13 372 594	13 084 461	11 422 174	12 517 253
Romania	6 244 782	5 973 527	4 294 300	4 641 598	5 543 644
Russia	7 905 006	7 884 624	6 015 437	5 891 728	...
Slovakia	5 335 000	5 446 000	5 351 444	5 329 492	5 408 523
Slovenia	2 715 086	2 331 808	271 555	128 439	1
Spain	53 471 773	59 116 315	52 380 984	57 954 412	56 824 754
Sweden	21 005 871	20 264 108	18 787 590	20 723 480	18 262 971
Switzerland	4 832 714	5 015 516	5 034 861	4 578 217	4 773 040
Turkey	...	23 791 392	...	...	23 141 640
Ukraine	8 977 000	9 884 000	9 396 434	5 986 426	...
United Kingdom	41 382 610	36 135 627	29 923 937	36 552 593	38 542 685
Yugoslavia, Federal Republic of	...	...	518 512	157 823	1 846 787
Algeria	...	...	330 205	...	...
Cameroon	...	1 456 063	1 429 097	1 354 423	1 508 646
Egypt	...	5 816 132	4 851 002	...	...
Ethiopia (d)	84 458	16 280	24	1	...
Ghana	...	4 318 727	9 325 081	1 264 283	1 394 364
Kenya	1 833 744	2 157 695	810 782	1 251 637	...
Madagascar	447 449	374 330	389 815	460 755	...
Morocco	6 014 215	6 004 075	7 183 023	6 852 525	...
Senegal	...	893 394	778 276	931 353	776 286
South Africa	23 610 211	20 019 690	19 335 451	18 319 949	18 766 918
Tanzania	...	375 320	429 489	...	...
Tunisia	935 168	821 651	1 092 637	1 196 154	...
Barbados	303 100	...	...	...	...
Canada	47 298 401	48 264 579	41 840 219	45 603 695	48 152 591
Costa Rica	636 191	39 677	...	49 343	258 399
Cuba	1 000 000	800 000	700 000	800 000	800 000
El Salvador	789 345	877 392	977 055	995 795	970 282
Guatemala	778 628	779 972	748 252	726 348	785 233
Jamaica	745 802	755 738	466 858	1 101 786	...
Martinique	717 032	612 249	513 027	261 105	604 407
Netherlands Antilles	12 500 000	12 572 075	9 946 620	12 100 000	11 800 000
Nicaragua	773 945	913 718	863 426	871 380	987 131
Panama	2 091 063	2 314 953	2 525 709	2 213 732	2 736 966
Trinidad & Tobago	2 452 317	3 914 587	4 607 841	5 309 036	4 938 380
USA	418 577 642	442 208 021	440 214 413	463 553 662	480 600 638
Argentina	1 166 567	1 269 436	948 079	1 568 986	1 429 937
Brazil	24 341 816	21 970 247	18 207 522	15 123 678	17 070 609
Chile	8 554 579	9 516 634	9 851 644	10 120 519	10 352 030
Colombia	...	...	145 576	246 990	320 233
Paraguay	187 068	218 921	88 377	37 613	82 946
Peru	3 977 618	4 767 658	3 097 123	3 110 004	3 817 224
Uruguay	1 503 635	1 090 000	1 705 449	1 761 659	1 775 801

Imports of Crude Petroleum

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Country	1997	1998	1999	2000	2001
Bangladesh (a)	1 505 082
China	35 469 702	27 322 633	36 613 687	70 134 276	60 255 355
India (b)	34 399 000	68 904 365	58 384 523	74 120 000	...
Indonesia	9 508 614	10 507 985	11 497 497	11 473 486	14 174 862
Israel	...	6 771 000	...	...	...
Japan	226 878 133	214 850 343	212 049 133	211 981 493	208 103 752
Jordan	3 440 862	3 555 855	3 497 279	3 763 383	3 875 111
Kazakhstan	1 725 962	2 073 726	714 503	1 009 641	2 336 904
Korea, Dem. P.R. of (c)	*506 000	*504 000	*584 000	*473 000	*721 000
Korea, Republic of	116 681 048	110 606 443	118 024 367	120 651 683	116 156 262
Kyrgyzstan	70 150	62 390	64 766	20 672	----
Malaysia	1 255 925	1 928 586	...	6 962 773	8 623 424
Pakistan (a)	3 844 271	4 048 453	4 476 093	4 453 104	...
Philippines	17 446 853	15 856 000	16 157 651	15 349 139	15 374 510
Singapore	55 507 008	52 014 065	44 434 723	41 831 652	40 817 058
Sri Lanka	1 600 174	2 179 278	1 049 120	...	...
Taiwan	34 477 160	34 983 693	36 521 001	38 909 906	37 613 630
Thailand	31 190 196	23 090 320	28 855 806	27 946 040	29 794 610
Australia	20 427 000	22 926 000	24 220 854	19 998 051	21 979 223
New Zealand	3 452 007	4 494 640	4 269 973	4 555 000	4 106 824

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

Country	1997	1998	1999	2000	2001
Finland	689 053	715 705	734 068	751 291	767 020
Russia	9 540 000	9 480 000	10 560 000	10 540 000	10 530 000
Algeria	1 062 600	1 155 000	1 095 000	877 000	939 000
Egypt	1 067 000	1 076 100	1 017 900	1 095 900	971 500
Morocco	23 084 000	22 644 000	22 163 000	21 463 000	21 983 000
Senegal					
Phosphate rock	1 584 405	1 519 210	1 796 900	1 837 000	1 708 000
Aluminium phosphate (a)	8 680	21 230	64 356	23 710	20 610
South Africa	2 732 000	2 739 000	2 956 806	2 796 225	2 549 600
Tanzania	2 120	1 437	7 250	5 100	4 000
Togo	2 631 400	2 253 400	1 714 500	1 370 100	1 061 600
Tunisia	7 222 100	7 950 800	8 006 300	8 301 200	8 105 900
Zimbabwe	93 849	91 433	84 763	77 662	86 611
Canada	----	----	...	330 000	780 000
Mexico	713 662	756 349	950 649	1 052 464	787 283
USA	45 900 000	44 200 000	40 600 000	38 600 000	31 900 000
Brazil (d)	4 257 391	4 437 818	4 343 638	4 725 106	4 800 000
Chile	12 605	31 405	20 408	18 524	18 977
Colombia	44 517	43 688	43 148	42 615	*42 000
Peru	67 136	46 821	9 038	5 581	4 825
Venezuela	291 000	322 000	366 000	389 000	399 000
China	25 093 700	28 109 000	29 117 700	22 475 800	24 371 100
Christmas Island (b) (c) (e)	567 860	587 660	699 828	*600 000	*600 000
India (f)	1 623 190	1 276 269	1 203 282	1 361 832	1 069 049
Iraq	*1 000 000	*1 000 000	*1 000 000	*1 000 000	*1 000 000
Israel	2 708 000	2 940 000	3 836 000	3 914 000	*3 500 000
Jordan	5 895 581	5 923 000	6 013 610	5 458 260	5 764 307
Kazakhstan	720 000	812 000	650 000	610 000	...
Korea, Dem. P.R. of	*70 000	*70 000	*70 000	*100 000	*100 000
Pakistan (e)	11 045	...	3 456	5 208	----
Sri Lanka	29 635	37 598	30 258	34 443	35 770
Syria	2 392 000	2 496 000	2 084 000	2 166 000	2 043 000
Thailand	3 818	3 029	3 880	3 260	2 359
Uzbekistan	----	105 500	139 200	169 800	225 000
Vietnam	581 000	576 000	710 000	791 000	683 000
Australia	419	813	1 250	2 108 000	1 917 000
Nauru	491 300	486 600	603 600	503 900	265 700
World Total	142 000 000	144 000 000	143 000 000	136 000 000	130 000 000

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	1997	1998	1999	2000	2001
Austria	196	3 086	1 452	1 397	1 320
Belgium-Luxembourg	12 675	40 624	35 678	39 501	43 858
France	1 149	4 538	8 414	1 523	2 536
Germany	81	1 646	890	678	674
Italy	30 205	2 391	1 411	820	794
Macedonia	1 336	757	1 734	863	792
Netherlands	99 188	174 733	71 146	120 824	65 689
Poland	46 000	19 000	20 607	14 989	2 700
Russia	4 258 900	4 329 320	4 470 414	3 799 360	3 378 700
Spain	1 431	78 253	189	22	...
Switzerland	9	4 289	----	----	----
United Kingdom	425	321	261	1 295	317
Algeria	1 103 000	1 151 000	1 062 900	879 000	745 000
Egypt	180 700	222 000	206 000	315 800	264 800
Morocco	11 669 340	11 730 653	11 382 500	10 487 498	10 858 400
Senegal	616 700	448 753	523 986	379 201	268 810
South Africa	902 600	830 000	993 587	779 019	555 200
Togo	2 686 600	2 242 600	1 617 000	1 219 900	1 302 300
Tunisia	1 247 043	937 165	978 676	1 106 745	1 130 300
USA	335 000	378 000	272 000	299 000	111 000
Peru	69 471	23 032	15 402	1 800	5 110
China	1 660 379	2 150 227	2 503 019	3 448 985	4 912 606
Christmas Island	567 860	587 660	610 000	590 000	567 600
Indonesia	1 600	175	2 280	9 062	17 264
Israel	1 472 500	1 546 000	1 546 000	1 165 022	1 002 700
Jordan	4 367 215	4 563 421	3 632 679	3 196 398	3 606 200
Kazakhstan	167 044	667 060	430 000	499 544	373 600
Malaysia	5 800	900	9 499	2 973	165
Syria	1 658 705	1 838 942	1 298 343	1 595 000	1 521 000
Australia	8 348	5 199	7 600	7 790	1 313
Nauru	491 300	484 200	718 000	527 800	249 700

Imports of Phosphate Rock

Country	1997	1998	1999	2000	2001
Austria	238 676	295 555	299 372	...	...
Belarus	371 600	373 677	331 601	256 192	239 400
Belgium-Luxembourg	1 866 679	1 817 279	1 734 417	1 304 103	1 395 630
Bulgaria	521 792	316 800	204 700	341 800	417 700
Croatia	279 807	226 811	173 853	233 427	173 144
Czech Republic	78 835	58 305	47 753	45 473	48 539
Denmark	93 200	72 800	68 361	76 537	44 643
Finland	59 444	101 365	85 396	72 966	46 352
France	1 557 341	1 471 321	1 356 181	1 072 594	923 926
Germany	284 812	252 950	142 779	140 251	155 278
Greece	525 614	437 066	361 710	264 934	328 110
Hungary	21 704	15 481	8 043	23 144	14 793
Irish Republic	7 214	11 115	1 828	2 227	2 144
Italy	142 211	167 485	197 727	198 434	263 295
Lithuania	539 771	666 384	852 808	836 797	485 429
Macedonia	57 983	84 735	44 100	8 100	64 434
Netherlands	1 944 971	1 922 476	1 711 205	1 178 614	822 583
Norway	667 801	628 205	671 668	615 940	638 449
Poland	1 752 000	1 684 000	1 528 188	1 472 050	1 636 053
Portugal	137 590	183 954	156 689	141 161	158 684
Romania	480 297	272 912	340 340	344 152	278 348
Russia	84 365	59 098	106 025	60 332	...
Spain	2 207 570	2 105 369	2 210 185	1 862 774	2 062 062
Sweden	55 138	74 048	73 942	67 416	81 983
Turkey	1 117 910	1 041 910	873 875	667 998	497 120
Ukraine	879 867	704 576	755 133	214 906	207 500
United Kingdom	38 103	23 410	19 831	13 808	9 223
Yugoslavia, Federal Republic of	200 312	164 488	72 259	110 093	89 659
Egypt	74 000	30 084	33	...	...
Ivory Coast	3 825	3 170	1 536	2 050	3 000
Mauritius					
Guano	2 001	1 000	1 800	20	...
Nigeria	14 004	451	1 000	...	...
South Africa	556 506	424 235	280 807	330 568	172 207
Canada	1 083 389	1 161 024	612 478	145 454	79 801
Cuba	*5 000	*5 000	*6 000	*6 000	...
Mexico	1 729 588	2 138 524	1 725 683	2 973 659	1 263 195
USA	904 221	807 333	744 739	672 982	856 188
Brazil	675 561	780 896	619 379	745 519	742 833
Chile	19 791	13 459	5 942	1 292	8 488
Colombia	80 225	88 276	71 000	69 400	58 500
Peru	...	4 130	9 237	18 043	70 685
Uruguay	17 955	56 587	40 348	45 700	45 300
Venezuela	71 516	72 755	163 320	111 070	76 303
Bangladesh	138 110	188 900	177 800	185 800	216 000
India (a)	2 667 811	3 099 453	3 137 653	4 280 824	*5 000 000
Indonesia	680 023	787 528	731 329	391 102	989 010
Iran	346 253	393 494	409 550	352 560	...
Israel	...	5 500	12 800	51 500	89 900
Japan	1 030 763	976 372	932 946	899 269	770 645
Kazakhstan	73 900	7 800	27 710	45	8
Korea, Republic of	1 640 561	1 517 860	1 481 853	1 420 228	1 275 037
Lebanon	261 843	406 731	377 221	768 444	604 858
Malaysia					
Phosphate rock	602 900	560 200	728 900	635 900	552 100
Guano	5 122	1 645	1 372	1 056	...
Pakistan	154 000	143 950	159 346	274 200	329 300
Philippines	331 258	557 645	547 526	296 951	765 462
Saudi Arabia	4 030	6 330	1 007	2 465	...
Sri Lanka	1 380	6 653	6 521	2 600	12 300
Taiwan	265 234	235 394	224 137	178 245	170 001
Thailand	120 400	250 347	194 752	216 268	301 760
Uzbekistan	530 000	400 000	430 000	338 000	360 100
Vietnam	----	----	9 100	18 000	17 800

Imports of Phosphate Rock

tonnes

Country	1997	1998	1999	2000	2001
Australia	999 006	1 100 805	673 812	764 385	908 871
New Zealand	845 581	836 591	917 227	1 024 403	1 219 662

Note(s) :-

(a) Years ended 31 March following that stated

Mine Production of Platinum Group Metals

kilograms (metal content)

Country	1997	1998	1999	2000	2001
Russia					
Platinum (a)	27 300	37 300	14 000	35 800	31 300
Palladium (a)	160 800	168 000	171 100	161 700	140 000
Other platinum metals	*13 500	*13 500	*13 700	*14 100	*14 500
South Africa					
Platinum	115 861	116 483	130 745	114 459	129 746
Palladium	55 675	56 608	63 600	55 818	62 142
Other platinum metals	24 930	27 052	*30 300	36 493	36 859
Zimbabwe					
Platinum	345	2 730	390	504	435
Palladium	245	1 855	278	360	313
Other platinum metals	27	189	30	40	35
Canada					
Platinum	4 600	5 500	5 400	6 000	7 100
Palladium	7 200	8 600	8 500	9 500	11 300
Other platinum metals	600	700	700	600	800
USA					
Platinum	*2 610	*3 240	*2 920	*3 110	*3 610
Palladium	*8 430	*10 580	*9 800	*10 260	*12 100
Colombia	406	411	488	339	674
Australia					
Platinum	315	155	90	171	174
Palladium	429	827	816	812	828
World Total	423 000	454 000	453 000	450 000	452 000

Note(s):

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

Exports of Platinum Group Metals

kilograms

Country	1997	1998	1999	2000	2001
Austria					
Platinum & platinum metals	600	700	1 200	100	300
Waste & scrap	400	600	600	100	86 700
Azerbaijan					
Waste & scrap (a)	*24 300	*50	...	...	*89 200
Belarus					
Waste & scrap	(a) *50	(a) *3 900	(a) *1 400	16 077	(a) *2 900
Belgium-Luxembourg					
Platinum	12 087	10 200	4 500	2 800	3 000
Platinum metals	34 533	22 700	18 000	10 000	8 300
Waste & scrap	£1 502 000	£2 655 000	£7 859 000	£16 486 000	£21 569 000
Bulgaria					
Waste & scrap (a)	*400	*25 900	*58 400	*34 400	*16 900
Croatia					
Platinum & platinum metals	£499 000	£74 000	£108 000	£78 000	...
Czech Republic					
Waste & scrap (a)	*300	*11 500	*12 100	*34 000	*86 900
Denmark					
Platinum & platinum metals	134	330	38	295	751
Estonia					
Waste & scrap	129 705	154 786	133 252	176 740	216 839
France					
Platinum	5 900	5 500	5 600	5 800	6 900
Platinum metals	11 180	13 900	9 000	14 400	7 000
Waste & scrap	15 900	12 300	18 806	76 100	91 300
Georgia					
Waste & scrap	(a) *900	(a) *100	(a) *400	54 975	(a) *3 200
Germany					
Platinum	20 300	21 300	22 000	23 500	28 500
Palladium	17 800	21 000	21 900	19 900	19 600
Other platinum metals	1 600	2 800	3 200	4 300	3 400
Waste & scrap	329 400	620 300	671 500	575 900	1 040 875
Irish Republic					
Platinum & platinum metals	1 643	2 719	303	239	74
Waste & scrap	688	2 828	4 572	3 559	12 292
Italy					
Platinum	1 113	739	3 604	3 443	31 775
Platinum metals	2 522	3 107	3 863	6 159	6 133
Waste & scrap	237	671	932	2 167	23 155
Latvia					
Waste & scrap	270	----	582	550	2
Lithuania					
Waste & scrap	91	45	7 164	6 750	9 867
Netherlands					
Platinum	£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	23 800
Norway					
Platinum & platinum metals	5 943	6 049	6 853	5 668	6 659
Waste & scrap	...	6	96	851	2 639
Poland					
Platinum & platinum metals	45	139	42	795	...
Russia					
Platinum & platinum metals	*£641 000 000	£1 240 000 000	*£1 298 000 000	*£1 979 000 000	...
Waste & scrap (a)	*335 600	*152 000	*17 900	*25 900	*70 200
Slovenia					
Platinum & platinum metals	...	996	382	201	322
Spain					
Platinum & platinum metals	1 447	5 943	22	4 617	256
Waste & scrap	549	184	471	216	616
Sweden					
Platinum & platinum metals	£700 000	£1 300 000	£1 939 000	£897 000	£952 000
Switzerland					
Platinum	63 863	73 859	66 473	61 609	63 640
Palladium	81 953	67 180	108 573	100 220	44 317
Other platinum metals	533	438	364	257	324
Waste & scrap	32 302	19 367	17 305	57 207	49 289

Exports of Platinum Group Metals

kilograms

Country	1997	1998	1999	2000	2001
Ukraine					
Waste & scrap (a)	*37 400	*35 200	*66 500	*117 400	*22 800
United Kingdom					
Platinum	66 576	22 838	24 122	31 660	31 859
Palladium	21 113	59 018	13 388	17 018	22 845
Other platinum metals	16 170	17 057	5 356	7 537	5 604
Waste & scrap	203 889	953 343	924 221	1 156 462	1 124 414
South Africa					
Platinum	(e) 187 167	(e) 193 502	(e) 198 713	113 861	116 551
Palladium	...	...	...	47 832	50 970
Other platinum metals	...	...	...	37 251	25 833
Waste & scrap (a)	*105 700	*174 400	*112 500	...	...
Canada					
Ores & concentrates (b)	8 934	8 884	6 957	12 081	10 831
Platinum metals	6 927	7 112	6 291	5 757	4 540
USA					
Ores & concentrates (b)	710	748	240	476	...
Platinum	31 511	27 367	27 710	30 847	...
of which, re-exports	8 510	13 077	8 365	5 884	...
Palladium	61 127	70 841	68 727	76 345	...
of which, re-exports	18 632	34 600	23 901	23 665	...
Other platinum metals	1 403	3 885	4 548	5 439	...
of which, re-exports	547	2 167	3 584	3 157	...
Waste & scrap	13 251	19 744	42 803	21 503	27 425
China					
Platinum & platinum metals	3 363	2 911	2 443	6 473	13 455
Hong Kong					
Platinum & platinum metals (c)	1 946	2 733	3 594	2 740	1 940
Waste & scrap (c)	1 203	979	1 942	1 484	1 595
India					
Platinum & platinum metals (d)	3 666	2 910	12 079	18 557	...
Indonesia					
Platinum & platinum metals	65	110	284	11 279	10 922
Israel					
Platinum & platinum metals	£150 000	£73 000	£117 000	£203 000	...
Waste & scrap (a)	*10 300	*7 500	*1 700	*45 200	*174 300
Japan					
Platinum	9 002	8 492	8 005	8 905	10 201
Platinum metals	20 472	17 967	16 355	20 909	39 249
Waste & scrap	13 822	41 546	4 862	77 168	2 841
Kazakhstan					
Waste & scrap (a)	...	*42 800	*8 100	*40 100	*1 100
Korea, Republic of					
Platinum & platinum metals	13 805	51 746	2 399	1 734	2 901
Waste & scrap	8 597	4 891	95 683	139 669	394 405
Singapore					
Platinum & platinum metals (c)	9 130	2 069	800	344	465
Waste & scrap	...	960	1 894	1 666	106
Taiwan					
Platinum & platinum metals	307	167	123	9 521	1 017
Waste & scrap	18 619	1 323	205	0	51 246
Uzbekistan					
Waste & scrap (a)	*31 500	*400	*1 400	*600	*900
Australia					
Platinum & platinum metals	1 165	1 616	...	1 794	446
Waste & scrap	£3 322 000	£602 157	£956 000	£680 000	£181 000
New Zealand					
Platinum & platinum metals	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) Years ended 31 March following that stated

(e) Platinum and platinum metals

Imports of Platinum Group Metals

kilograms

Country	1997	1998	1999	2000	2001
Austria					
Platinum & platinum metals	7 100	4 000	4 400	1 600	600
Belarus					
Platinum & platinum metals (b)	*50	*100	*100	...	----
Belgium-Luxembourg					
Platinum	4 900	8 400	100	...	500
Platinum metals	108 900	11 300	...	...	500
Waste & scrap	£9 466 000	£19 060 000	...	£54 153 000	£129 469 000
Croatia					
Platinum & platinum metals	511	...	415	649	2 989
Cyprus					
Platinum & platinum metals	1 447	316	513	415	110
Czech Republic					
Platinum & platinum metals (b)	*400	*100	*100	...	...
Denmark					
Platinum & platinum metals	1 612	1 325	232	740	381
Waste & scrap	13	1 194	755	4	77
Estonia					
Waste & scrap	...	13 219	...	5 040	8 171
Finland					
Platinum & platinum metals	99	175	110	425	248
France					
Platinum	16 900	12 700	19 500	11 400	12 600
Platinum metals	19 400	26 400	21 000	27 300	22 800
Waste & scrap	2 100	7 500	4 700	28 800	104 000
Germany					
Platinum	26 900	21 700	29 100	38 900	39 800
Palladium	31 700	29 400	22 400	34 400	25 200
Other platinum metals	4 300	4 300	4 200	5 100	4 600
Waste & scrap	2 238 400	2 687 900	3 185 800	3 957 300	5 274 800
Greece					
Platinum & platinum metals	...	...	709	372	1 001
Hungary					
Platinum & platinum metals	123	50	87	88	117
Irish Republic					
Platinum & platinum metals	83 046	46 402	3 192	1 410	...
Italy					
Platinum	5 772	7 158	7 594	10 925	9 394
Platinum metals	26 070	32 112	31 738	34 483	30 150
Waste & scrap	980	792	938	255	988
Netherlands					
Platinum	£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	657	400	300	300	4 100
Norway					
Platinum & platinum metals	633	863	1 248	1 138	1 231
Waste & scrap	1 651	1 376	1 073	1 327	641
Poland					
Platinum & platinum metals	85	3 497	206	1 550	...
Waste & scrap	...	...	17 750	2 609	...
Portugal					
Waste & scrap	130	6	4 301	1 804	13
Slovenia					
Platinum & platinum metals	...	140	646	656	1 411
Spain					
Platinum & platinum metals	15 629	15 986	2 902	4 186	4 830
Waste & scrap	104	62	250	2 742	166
Sweden					
Platinum & platinum metals	£5 094 000	£7 553 000	£5 721 000	£5 196 000	...
Waste & scrap	...	...	7 000	6 000	1 000
Switzerland					
Platinum	56 369	61 421	32 678	59 331	68 461
Palladium	65 435	78 486	93 200	87 714	94 074
Other platinum metals	429	384	285	521	538
Waste & scrap	5 957	5 628	9 801	34 405	19 435
Turkey					
Platinum & platinum metals	399	582	72	259	321

Imports of Platinum Group Metals

kilograms

Country	1997	1998	1999	2000	2001
Ukraine					
Platinum & platinum metals (b)	*600	*600	*500	...	...
United Kingdom					
Platinum	15 809	17 407	24 785	35 968	17 825
Palladium	25 190	27 272	21 775	34 022	19 724
Other platinum metals	6 967	8 829	5 722	9 715	5 602
Waste & scrap	705 721	384 379	432 493	593 208	729 250
South Africa					
Platinum & platinum metals	6 735	27 683	13 895	...	...
Waste & scrap	2 720 501	2 762 116	1 014 431	9 321	8
Canada					
Platinum & platinum metals (c)	12 670	10 357	8 856	...	15 060
USA					
Platinum	76 300	97 013	106 288	77 211	80 170
Palladium	148 377	174 615	197 001	172 796	159 600
Rhodium	14 643	13 281	15 535	13 137	12 400
Other platinum metals	13 492	11 338	13 984	23 611	11 357
Waste & scrap	5 382	5 419	...	7 654	3 960
Brazil					
Platinum	2 168	2 136	2 717	6 645	13 327
Palladium	3 636	2 286	3 446	3 451	3 047
Other platinum metals	715	334	629	854	722
China					
Platinum & platinum metals	4 117	3 720	6 476	7 041	10 586
Dubai					
Platinum & platinum metals	37	749	124	...	...
Hong Kong					
Platinum & platinum metals	20 650	29 389	42 763	43 200	53 436
Waste & scrap	584	535	893	1 036	1 232
India					
Platinum & platinum metals (a)	1 105	1 693	2 607	4 970	...
Indonesia					
Platinum & platinum metals	...	1 498	257	426	13 644
Israel					
Platinum & platinum metals	£1 697 000	£1 329 000	£1 447 000	£2 933 000	...
Japan					
Platinum	66 187	72 323	69 295	56 059	53 031
Palladium	103 376	80 976	87 885	87 189	54 162
Rhodium	2 129	2 431	3 611	6 118	4 759
Other platinum metals	6 774	7 314	7 321	8 174	6 991
Waste & scrap	256 613	538 538	390 992	480 021	345 828
Korea, Republic of					
Platinum & platinum metals	20 824	8 939	14 125	17 234	20 178
Waste & scrap	...	22	24 234	740	22 099
Malaysia					
Platinum & platinum metals	11 491	5 897	...	...	...
Singapore					
Platinum & platinum metals	16 932	6 343	10 251	21 114	15 637
Taiwan					
Platinum & platinum metals	10 171	4 172	4 335	4 608	4 277
Thailand					
Platinum & platinum metals	16 430	...	10 068	16 008	7 151
Australia					
Platinum & platinum metals	5 507	8 658	...	2 489	1 388
Waste & scrap	£1 000	£36 000	£81 000	£66 000	...
New Zealand					
Platinum & platinum metals	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) BGS estimates, based on known exports from certain countries

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

Production of Potashtonnes (K₂O content)

Country	1997	1998	1999	2000	2001
Belarus	4 202 000	4 481 000	4 553 000	3 786 000	4 495 000
France					
Potassic salts	665 300	417 100	311 300	321 000	244 000
Germany					
Potassic salts	3 443 600	3 580 347	3 543 360	3 407 467	3 550 000
Russia	3 596 000	3 461 000	4 312 000	3 079 000	4 744 000
Spain					
Chloride	638 835	494 166	549 516	521 984	470 700
Ukraine	52 200	33 600	11 800	19 300	*15 000
United Kingdom					
Chloride	564 500	608 400	494 700	600 800	531 900
Canada					
Chloride	8 989 000	9 201 000	8 304 000	9 202 000	8 224 000
USA					
Potassic salts	1 400 000	1 300 000	1 200 000	1 300 000	1 200 000
Brazil					
Chloride	270 825	315 606	336 623	351 748	357 232
Chile					
Chloride	*245 000	*285 000	*345 000	*360 000	*420 000
Nitrate	*45 000	*47 000	*49 000	*53 000	*57 000
China	185 600	213 000	218 000	275 000	395 000
Israel					
Chloride	1 488 000	1 668 000	1 701 600	1 747 800	1 774 400
Jordan	849 405	916 385	1 080 114	1 161 593	1 177 521
World Total	26 600 000	27 000 000	27 000 000	26 200 000	27 700 000

Exports of Potash

Country	1997	1998	1999	2000	2001
Belarus					
Chloride (a)	2 878 300	2 911 700	3 022 700	2 840 000	3 309 500
Belgium-Luxembourg					
Fertiliser salts	4 020	4 989	3 923	7 299	3 172
Sulphate (b)	*349 000	*335 000	*297 000	*342 300	...
Chloride	191 480	177 146	138 232	183 220	184 145
Other potassic fertilisers	7 428	6 503	4 909	4 537	4 561
Finland					
Sulphate (b)	*17 500	*47 400	*66 300	*6 900	*12 800
France					
Sulphate	1 806	1 962	729	576	508
Chloride	261 541	177 019	138 839	97 419	134 868
Other potassic fertilisers	1 583	1 153	18 196	44 925	988
Germany					
Fertiliser salts (a) (d)	2 873 050	2 916 848	2 898 276	2 856 180	2 916 428
Hungary					
Potassic fertilisers	14 417	11 832	2 073	2 776	6 617
Italy					
Potassic fertilisers	9 382	38 095	2 060	1 965	804
Latvia					
Chloride (b) (c)	*149 000	*125 000	...	...	...
Lithuania					
Potassic fertilisers	15 855	35 296	10 993	9 386	9 243
Netherlands					
Potassic fertilisers	94 800	105 000	74 000	43 552	...
Poland					
Potassic fertilisers	6 000	1 000	1 135	270	...
Russia					
Fertiliser salts	1 000	5 156	5 622	6 600	...
Sulphate (b)	*26 000	*58 000	*77 000	*98 000	*43 000
Chloride	4 909 164	5 031 735	5 496 356	(b) *6 033 000	(b) *5 754 000
Other potassic fertilisers (b)	*192 000	*278 000	*213 000	*130 000	*91 000
Spain					
Sulphate	63 136	74 346	54 473	62 178	57 091
Chloride	667 967	427 674	464 464	542 664	418 155
Sweden					
Sulphate	110 894	92 095	78 326	78 362	141 298
Ukraine					
Chloride (b)	*179 000	*201 000	*225 200	*224 800	...
Other potassic fertilisers (b)	*4 500	*35 000	*8 500	*32 400	*15 300
United Kingdom					
Chloride	*540 000	570 681	*420 000	*630 000	*530 000
Other potassic fertilisers	4 164	1 200	1 112	1 143	1 141
Canada					
Fertiliser salts	32 516	8 463	8 451	4 205	10 815
Chloride	14 545 380	14 252 452	14 322 978	15 109 200	13 570 083
Other potassic fertilisers	20 260	16 803	30 207	26 840	19 112
USA					
Sulphate	692 000	746 000	601 000	608 000	577 000
Chloride	365 000	364 000	462 000	296 000	296 000
Chile					
Fertiliser salts	164 257	169 181	130 248	155 921	172 546
Sulphate	-----	32 221	97 011	153 323	157 438
Chloride	72 684	112 259	202 830	177 502	92 605
China					
Fertiliser salts	*100 000	*105 000	*110 000	*110 000	...
Sulphate	10 755	21 473	1 397	5 709	14 210
Chloride	587 010	452 094	860 051	590 258	330 781
Israel					
Chloride (a)	1 471 800	1 450 200	1 341 600	1 513 200	1 413 300
Other potassic fertilisers (b)	*91 800	*128 400	*10 900	*49 000	...
Jordan					
Fertiliser salts	1 419 101	1 486 194	1 664 886	1 881 049	1 896 000
Chloride	15 206	8 781	6 964	21 443	...

Exports of Potash

tonnes

Country	1997	1998	1999	2000	2001
Korea, Republic of					
Sulphate	92 878	53 283	25 835	26 742	21 096
Singapore					
Chloride (c)	35 282	37 193	144 298	...	15 812
Other potassic fertilisers (c)	6 793	3 571	3 707	...	1 639
Taiwan					
Sulphate	104 133	63 939	61 112	74 548	81 019

Note(s):

- (a) K₂O 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

Country	1997	1998	1999	2000	2001
Austria					
Fertiliser salts (a)	5 098	8 781	5 281	...	...
Sulphate (a)	4 453	5 591	6 118	...	...
Chloride (a)	57 371	60 691	64 807	...	...
Other potassic fertilisers (a)	1 215	1 508	1 418	...	...
Belgium-Luxembourg					
Fertiliser salts	28 948	33 135	29 987	33 302	22 677
Sulphate	154 895	111 311	138 679	179 570	183 131
Chloride	1 288 361	1 087 291	1 122 857	1 105 179	1 014 654
Other potassic fertilisers	19 777	17 384	17 478	20 398	18 801
Bulgaria					
Potassic fertilisers	54 700	47 502	13 298	20 717	...
Croatia					
Chloride	182 206	136 730	103 534	168 656	144 977
Czech Republic					
Potassic fertilisers	106 364	93 279	78 380	98 553	92 242
Denmark					
Sulphate	30 816	22 042	15 642	15 981	11 689
Chloride	154 139	152 495	189 877	160 991	135 815
Other potassic fertilisers	9 881	7 062	15 330	11 746	12 535
Estonia					
Potassic fertilisers	2 852	2 857	3 500	16 660	24 891
Finland					
Chloride (a)	97 200	101 200	91 300	149 400	168 200
France					
Fertiliser salts	12 715	1 045	1 622	1 916	1 660
Sulphate	101 910	90 079	93 584	95 023	80 698
Chloride	1 686 159	2 028 433	1 778 253	1 682 073	1 444 445
Other potassic fertilisers	33 015	30 028	27 100	25 318	25 096
Germany					
Chloride (a)	67 527	66 333	53 632	47 925	52 131
Other potassic fertilisers (a)	1 617	2 237	1 872	2 386	2 561
Greece					
Sulphate	164 451	102 220	82 587	109 584	25 433
Chloride	12 472	42 680	22 835	23 925	27 415
Other potassic fertilisers	8 400	10 986	11 075	3 880	2 251
Hungary					
Potassic fertilisers	116 522	96 263	70 417	108 643	112 995
Iceland					
Sulphate	701	6 877	38	7	392
Chloride	2 707	6 987	7 267	24	2 979
Irish Republic					
Chloride	184 488	186 347	105 305	76 443	36 186
Other potassic fertilisers	3 506	3 406	1 336	1 485	2 170
Italy					
Sulphate	79 936	94 700	95 951	90 920	87 150
Chloride	524 284	508 389	420 286	448 256	425 575
Other potassic fertilisers	23 545	19 055	21 943	19 572	17 701
Latvia					
Potassic fertilisers	11 698	12 697	13 055	18 747	20 692
Lithuania					
Fertiliser salts	3 023	8 643	10 494	12 989	6 264
Chloride	71 555	67 304	76 275	77 322	116 995
Other potassic fertilisers	10 445	3 256	4 516	8 460	450
Macedonia					
Potassic fertilisers	9 442	12 307	11 660	13 768	9 202
Netherlands					
Potassic fertilisers	551 200	550 000	462 500	319 100	265 172
Norway					
Sulphate	187 970	234 934	182 419	204 059	211 169
Chloride	342 143	353 059	355 237	335 274	331 063
Poland					
Chloride (c)	824 000	761 000	706 564	770 508	742 114
Portugal					
Sulphate	2 370	2 423	799	6 133	1 950
Chloride	87 941	67 242	72 648	55 774	55 972
Romania					
Potassic fertilisers	83 763	60 987	82 029	71 909	76 786

Imports of Potash

tonnes

Country	1997	1998	1999	2000	2001
Russia					
Potassic fertilisers	1 340	1 352	878	1 140	...
Slovakia					
Potassic fertilisers	66 098	49 900	22 913	30 294	821
Spain					
Sulphate	14 812	20 244	23 631	21 804	32 543
Chloride	337 638	414 794	333 473	313 204	268 306
Other potassic fertilisers	1 329	1 072	8 525	5 378	2 862
Sweden					
Sulphate	...	...	20 071	5 380	3 958
Chloride	11 808	10 825	65 185	87 518	54 531
Other potassic fertilisers	4 747	4 676	4 678	5 150	4 651
Switzerland					
Sulphate	2 365	2 240	3 767	2 844	1 815
Chloride	18 607	18 616	17 748	21 100	19 144
Other potassic fertilisers	5 052	2 988	3 204	2 738	1 922
Turkey					
Sulphate	19 554	27 796	23 429	15 152	26 753
Chloride	100 000	125 183	116 065	101 485	82 849
Ukraine					
Potassic fertilisers	61 316	39 868	55 053	39 707	...
United Kingdom					
Fertiliser salts	25 038	18 325	20 628	18 050	16 154
Chloride	331 300	209 519	232 983	255 572	335 398
Other potassic fertilisers	12 066	12 308	6 236	10 890	14 506
Yugoslavia, Federal Republic of					
Potassic fertilisers	55 570	58 057	30 693	82 169	45 872
Algeria					
Potassic fertilisers	31 268	58 389	62 841	74 728	...
Cameroon					
Potassic fertilisers (a)	----	5 000	6 900	10 300	8 000
Congo					
Potassic fertilisers	...	1 132	670	1 058	1 365
Egypt					
Potassic fertilisers (a)	10 500	14 200	6 700	12 500	13 900
Ivory Coast					
Potassic fertilisers	83 598	101 464	82 742	41 697	*40 000
Kenya					
Potassic fertilisers	3 306	25 683	2 789	2 625	...
Mauritius					
Potassic fertilisers	31 814	24 520	27 208	29 830	32 020
Morocco					
Sulphate	29 331	49 526	48 101	45 543	...
Chloride	48 057	64 215	36 130	37 048	...
Nigeria					
Potassic fertilisers	9 813	15 446	1 403	4 344	...
Reunion					
Potassic fertilisers (a)	----	900	1 600	900	1 200
Senegal					
Potassic fertilisers	...	15 542	32 947	12 177	16 573
South Africa					
Sulphate	33 734	29 495	16 163	18 618	25 790
Chloride	227 503	238 069	256 629	299 643	243 524
Other potassic fertilisers	11 832	8 124	6 221	448	2 040
Tunisia					
Potassic fertilisers	12 121	8 063	8 064	9 565	...
Zimbabwe					
Sulphate	38 925	...	20 506	26 870	...
Chloride	59 018	...	45 261	7 996	...
Belize					
Potassic fertilisers	346	543	100	803	...
Canada					
Sulphate	75 905	78 484	64 728	52 627	...
Chloride	4 851	4 854	4 256	6 558	...
Other potassic fertilisers	5 711	8 884	10 906	46 528	...

Imports of Potash

Country	1997	1998	1999	2000	2001
Costa Rica					
Sulphate	19 897	9 513	6 526	8 677	9 593
Chloride	74 262	81 474	90 823	67 851	43 063
Other potassic fertilisers	28 001	45 150	50 039	41 385	14 368
Cuba					
Sulphate	17 700	11 902	38 103	11 202	...
Chloride	89 475	50 307	93 568	40 736	*80 000
Dominican Republic					
Potassic fertilisers	31 300	27 500	24 000	24 200	22 800
El Salvador					
Potassic fertilisers	12 461	14 803	14 899	16 907	10 254
Guatemala					
Potassic fertilisers	69 156	66 494	63 405	61 251	...
Honduras					
Potassic fertilisers	26 182	27 453	18 521	31 952	...
Jamaica					
Potassic fertilisers	14 274	10 675	17 081	13 264	*6 000
Martinique					
Potassic fertilisers	10 231	17 548	12 188	12 074	...
Mexico					
Sulphate	57 248	65 261	45 686	50 438	...
Chloride	215 677	215 751	201 754	171 426	...
Other potassic fertilisers	21 806	40 733	22 347	49 287	...
Nicaragua					
Fertiliser salts	9 425	11 408	4 886	6 210	4 963
Potassic fertilisers	3 693	3 591	2 197	1 947	2 565
Panama					
Potassic fertilisers	17 625	11 308	4 281	5 466	...
USA					
Fertiliser salts	30 516	8 820	8 991	6 011	10 820
Sulphate	56 235	94 574	85 986	74 930	113 351
Chloride	9 037 671	9 139 970	8 816 574	9 215 383	8 717 740
Other potassic fertilisers	33 751	42 024	28 436	33 282	23 672
Argentina					
Sulphate	11 523	10 656	5 268	11 219	9 233
Chloride	37 765	27 988	20 263	29 211	26 060
Other potassic fertilisers	12 170	12 100	13 010	15 750	6 053
Brazil					
Sulphate	60 118	54 907	42 979	29 240	23 980
Chloride	3 558 455	3 270 975	3 190 826	4 342 672	4 077 329
Chile					
Sulphate	7 309	11 603	3 107	360	430
Chloride	63 086	83 033	61 694	66 958	73 203
Other potassic fertilisers	22 349	40 572	38 963	28 344	35 706
Colombia					
Sulphate	28 248	30 513	28 337	30 803	37 999
Chloride	256 845	332 912	312 743	334 335	305 822
Ecuador					
Chloride	60 306	69 212	80 153	92 076	84 931
Other potassic fertilisers	6 204	11 320	15 010	24 986	39 213
Peru					
Chloride	28 226	36 448	30 266	23 467	52 407
Other potassic fertilisers	22 061	22 087	22 316	13 086	25 230
Uruguay					
Potassic fertilisers	18 930	17 162	12 838	21 244	14 038
Venezuela					
Sulphate	1 400	22 993	12 729	18 702	36 772
Chloride	31 428	35 442	69 270	94 122	119 612
Bangladesh					
Potassic fertilisers (d)	220 419	264 000	310 000	...	...
China					
Fertiliser salts	*110 000	*65 000	*50 000	*50 000	...
Sulphate	628 128	534 354	197 238	190 791	257 243
Chloride	4 625 909	5 120 377	5 195 481	5 991 550	5 168 203
Other potassic fertilisers	20 039	39	1	2	1

Imports of Potash

tonnes

Country	1997	1998	1999	2000	2001
Dubai					
Chloride	3 800	2 814	1 035	...	...
India					
Sulphate (b)	18 691	20 904	13 632	10 208	...
Chloride (b)	1 613 979	1 946 072	2 686 028	2 000 811	...
Other potassic fertilisers (b)	135 829	392 120	54 344	112 500	...
Indonesia					
Sulphate	7 471	5 560	...	4 984	10 030
Chloride	610 172	217 011	...	359 454	426 019
Other potassic fertilisers	6 001	26 296	(e) (f) 563 300	29 540	24 277
Iran					
Potassic fertilisers (a)	29 600	51 700	109 000	47 500	83 000
Japan					
Sulphate	195 075	186 179	154 310	154 262	173 361
Chloride	926 442	794 725	747 781	731 893	677 445
Other potassic fertilisers	78 079	83 926	66 032	67 680	79 247
Jordan					
Potassic fertilisers	792	2 000	1 256	3 939	894
Kazakhstan					
Potassic fertilisers	...	18 608	34 700	29 105	36 893
Korea, Republic of					
Chloride	688 715	573 396	595 954	622 006	561 165
Other potassic fertilisers	13 131	14 868	32 444	11 604	10 940
Lebanon					
Potassic fertilisers	...	4 988	3 566	3 667	2 917
Malaysia					
Sulphate	5 960	6 206	...	8 499	36 039
Other potassic fertilisers	1 093 398	1 161 863	(e) 1 263 200	1 232 510	984 109
Oman					
Potassic fertilisers	3 257	2 895	3 808	6 827	5 352
Pakistan					
Potassic fertilisers (a)	400	16 600	12 600	...	...
Philippines					
Sulphate	4 554	1 398	17	280	...
Chloride	209 692	201 882	218 974	180 097	205 713
Saudi Arabia					
Sulphate	9 152	8 266	36 920	24 514	...
Other potassic fertilisers	7 153	7 727	9 159	6 601	...
Singapore					
Chloride	27 868	33 551	67 355	15 054	13 726
Other potassic fertilisers	6 093	17 379	4 144	3 125	4 846
Sri Lanka					
Chloride	46 525	78 773	53 129	...	...
Other potassic fertilisers	31 445	11 887	32 541	...	...
Taiwan					
Chloride	328 237	321 719	278 542	311 033	287 979
Thailand					
Sulphate	16 787	6 819	7 551	6 578	10 312
Chloride	230 282	240 385	289 250	258 519	328 169
Vietnam					
Potassic fertilisers (a)	51 700	135 200	211 700	332 300	247 100
Australia					
Sulphate	23 793	46 969	19 062	33 716	24 367
Chloride	363 813	324 797	339 328	297 548	326 454
Other potassic fertilisers	6 394	10 145	17 873	4 249	9 060
New Zealand					
Sulphate	8 241	21 212	9 573	10 812	28 564
Chloride	229 895	147 620	196 912	257 368	194 245

Note(s) :-

- (a) K₂O 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
- (f) Including chloride

Production of Rare Earth Minerals

Country	1997	1998	1999	2000	2001
USA					
Bastnaesite (a)	*10 000	*5 000	*5 000	*5 000	*5 000
China (a)	53 250	65 000	70 000	75 500	...
India					
Monazite	*5 000	*5 000	*5 000	*5 000	...
Malaysia					
Monazite	688	517	1 147	818	643
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	1997	1998	1999	2000	2001
Austria					
Cerium compounds	485	416	1 169	1 420	...
Other rare earth compounds	1 260	1 111	1 767	5 714	...
Metals	619	725	643	558	...
Belgium-Luxembourg					
Rare earth compounds	217	385	97	260	1 060
Ferro-cerium & other pyrophoric alloys	14	17	18	37	9
Metals	131	310	107	264	265
Estonia					
Rare earth compounds	(b) *800	(b) *500	2 855	27	784
France					
Rare earth compounds	1 252	1 521	...	1 151	638
Ferro-cerium & other pyrophoric alloys	192	...	164	129	105
Metals	163	201	212	33	26
Germany					
Rare earth compounds	144	112	98	106	225
Ferro-cerium & other pyrophoric alloys	6	0	2	4	0
Metals	29	20	15	31	16
Irish Republic					
Rare earth compounds	21	92	443	87	182
Ferro-cerium & other pyrophoric alloys	...	...	61	100	...
Italy					
Metals	12	31	5	11	18
Netherlands					
Metals	69	89	43	63	15
Turkey					
Ferro-cerium & other pyrophoric alloys	78	184	54	...	0
United Kingdom					
Cerium compounds	407	463	374	317	415
Other rare earth compounds	595	261	254	354	329
Ferro-cerium & other pyrophoric alloys	11	15	23	26	9
Metals	70	70	352	60	51
USA					
Cerium compounds	6 010	4 912	4 169	3 962	4 490
Other rare earth compounds	1 660	1 725	1 684	1 759	1 680
Metals	826	737	1 211	1 372	742
China					
Ores & concentrates	300	----	38	----	...
Cerium compounds	13 826	16 694	17 534	19 861	20 987
Other rare earth compounds	31 275	48 922	38 129	36 648	28 522
Ferro-cerium & other pyrophoric alloys	294	117	523	166	...
Metals	8 207	6 097	8 293	12 537	8 090
Hong Kong					
Cerium compounds	----	356	455	96	158
India					
Rare earth compounds (a)	299	155	5	964	...
Japan					
Cerium compounds	849	656	1 230	1 429	1 743
Other rare earth compounds	532	348	329	1 038	2 507
Metals	403	383	289	199	197
Kazakhstan					
Metals	110	11	1	8	4
Korea, Republic of					
Rare earth compounds	40	202	...	193	191
Malaysia					
Ores & concentrates	1 170	564	4 245	1 225	700
Ferro-cerium & other pyrophoric alloys	301	365	722	532	844
Metals	117	127	142	89	...

Exports of Rare Earths

Country	1997	1998	1999	2000	2001
Singapore					
Rare earth compounds	...	98	134	460	460
Ferro-cerium & other pyrophoric alloys	142	116	101	170	107
of which, re-exports	131	78	71	152	68
Metals	...	144	156	156	151
Taiwan					
Rare earth compounds	430	85	304	305	69
Metals	103	2	6	4	0
Thailand					
Ores & concentrates	----	120	1 311	60	----
Ferro-cerium & other pyrophoric alloys	157	...	1 687	1 721	2 004
Australia					
Cerium compounds	9	89	...	51	1

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	1997	1998	1999	2000	2001
Austria					
Cerium compounds	780	192	1 169	1 781	2 287
Other rare earth compounds	715	1 505	1 767	3 188	5 534
Metals	673	769	643	929	409
Belgium-Luxembourg					
Cerium compounds	424	574	606	572	831
Other rare earth compounds	64	67	...	78	375
Ferro-cerium & other pyrophoric alloys	17	16	2	55	89
Metals	376	551	353	287	279
France					
Cerium compounds	11 028	19 647	16 540	18 159	15 049
Other rare earth compounds	906	1 369	...	679	1 407
Ferro-cerium & other pyrophoric alloys	61	...	26	8	14
Metals	412	430	281	382	230
Germany					
Cerium compounds	2 178	2 593	1 928	1 390	1 351
Other rare earth compounds	726	463	2 921	4 674	7 555
Ferro-cerium & other pyrophoric alloys	4	4	19	6	27
Metals	530	522	625	895	564
Hungary					
Rare earth compounds	194	163	198	188	216
Irish Republic					
Metals	...	2	61	66	66
Italy					
Rare earth compounds	505	518	...	755	669
Metals	19	8	23	27	...
Netherlands					
Cerium compounds	...	78	55	93	138
Other rare earth compounds	...	518	...	2 972	3 793
Ferro-cerium & other pyrophoric alloys	...	...	23	490	406
Metals	68	200	79	105	57
Norway					
Rare earth compounds	46	96	...	10	1
Metals	414	506	734	751	775
Poland					
Rare earth compounds	77	82	70	79	70
Metals	45	5	4	23	...
Spain					
Rare earth compounds	370	385	407	456	522
Ferro-cerium & other pyrophoric alloys	59	...	40	27	44
Metals	14	7	34	14	59
Sweden					
Metals	31	61	18	18	28
Turkey					
Rare earth compounds	289	225	125	170	104
Ferro-cerium & other pyrophoric alloys	193	140	20	7	1
United Kingdom					
Cerium compounds	1 916	2 039	2 265	2 388	2 227
Other rare earth compounds	398	378	543	466	403
Ferro-cerium & other pyrophoric alloys	3	85	9	14	1
Metals	323	136	107	226	172
South Africa					
Rare earth compounds	262	418	557	497	328
Metals	...	1	43	22	21
Canada					
Cerium compounds	553	418	310	...	437
Other rare earth compounds	191	241	174	...	180
USA					
Cerium compounds	2 768	6 798	5 984	6 472	5 760
Other rare earth compounds	13 493	13 599	17 935	20 174	19 990
Ferro-cerium & other pyrophoric alloys	136	131	136	135	132
Metals	426	794	1 485	2 059	1 183

Imports of Rare Earths

Country	1997	1998	1999	2000	2001
Brazil					
Cerium compounds	408	287	360	355	239
Other rare earth compounds	850	1 190	859	1 537	2 858
Metals	747	533	703	958	801
China					
Ores & concentrates	22	4	2 854	...	...
Rare earth compounds	855	992	1 415	1 030	706
Ferro-cerium & other pyrophoric alloys	97	84	493	71	...
Metals	226	277	162	384	201
Hong Kong					
Rare earth compounds	540	525	608	246	250
Metals	329	340	174	116	164
India					
Rare earth compounds (a)	151	147	86	168	...
Metals (a)	36	46	95	77	...
Indonesia					
Rare earth compounds	194	...	526	338	148
Ferro-cerium & other pyrophoric alloys	21	24	72	92	...
Japan					
Cerium compounds	8 405	8 207	8 757	10 537	8 266
Other rare earth compounds	10 215	10 424	1 948	9 596	7 741
Metals	2 696	3 727	4 659	7 077	3 346
Jordan					
Ferro-cerium & other pyrophoric alloys	54	8	60	89	...
Korea, Republic of					
Cerium compounds	749	731	1 249	2 071	2 413
Other rare earth compounds	336	677	...	1 854	1 750
Metals	72	7	12	14	11
Oman					
Rare earth compounds	32	----	----	----	...
Singapore					
Rare earth compounds	824	635	914	1 287	1 019
Ferro-cerium & other pyrophoric alloys	731	728	906	948	1 170
Taiwan					
Ores & concentrates	72	63	37	19	...
Rare earth compounds	2 808	2 678	2 751	3 711	4 630
Ferro-cerium & other pyrophoric alloys	71	66	11	1	1
Metals	764	1 077	1 288	2 077	616
Thailand					
Rare earth compounds	206	...	209	626	324
Ferro-cerium & other pyrophoric alloys	94	...	...	...	...
Metals	2	6	63	104	36
Australia					
Rare earth compounds	97	103	...	77	92
Metals	12	9	5	2	7

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	1997	1998	1999	2000	2001
Albania					
Sea salt	22 732	15 865	24 689	20 596	...
Armenia	22 642	24 911	26 955	30 030	28 766
Austria					
Rock salt	1 103	1 343	1 481	1 280	1 384
Salt in brine	704 000	734 000	808 000	939 000	896 000
Azerbaijan	2 500	3 518	2 978	3 801	*4 000
Belarus (i)	1 203 162	798 000	529 100	437 400	447 000
Bosnia & Herzegovina	...	...	...	325 200	439 106
Bulgaria	1 600 000	2 400 000	1 300 000	1 700 000	1 931 000
Croatia	16 620	31 062	18 477	33 668	32 737
Denmark	540 000	463 000	558 000	586 500	587 000
France					
Rock salt	315 000	470 000	634 000	536 000	596 000
Brine salt	1 368 000	1 313 000	1 438 000	1 476 000	1 452 000
Salt in brine	4 051 000	4 482 000	4 051 000	3 300 000	3 584 000
Sea salt	1 199 000	1 262 000	1 115 000	1 294 000	1 536 000
Other salt	417 000	211 000	270 000	----	----
Germany					
Rock salt	6 306 000	5 548 000	7 221 000	5 360 000	5 326 000
Brine salt	1 128 000	1 123 000	1 184 000	1 206 000	1 211 000
Salt in brine	5 420 000	5 440 000	5 589 000	6 023 000	6 196 000
Greece	173 886	207 060	176 867	244 709	208 776
Italy					
Rock salt & brine salt	3 594 549	3 413 522	3 338 162	3 339 761	*3 300 000
Netherlands	5 601 000	5 573 000	5 400 000	5 564 000	5 717 000
Poland					
Rock salt	790 700	748 100	923 200	841 340	786 609
Brine salt	2 468 700	2 535 700	2 487 700	2 652 042	2 688 929
Portugal					
Rock salt	595 997	597 065	558 807	584 516	625 785
Sea salt	73 987	79 033	90 675	74 027	76 653
Romania	2 612 000	2 220 114	2 196 915	2 307 806	2 224 890
Russia	2 060 000	2 220 000	3 180 000	3 170 000	*2 800 000
Slovakia	100 500	100 471	119 000	121 700	123 000
Slovenia	*5 000	*5 000	*5 000	5 000	2 000
Spain					
Rock salt	2 305 062	2 286 230	2 425 338	2 328 464	*2 500 000
Sea salt	1 192 935	1 321 059	1 400 152	1 436 345	(h) *1 600 000
Other salt	95 708	92 408	95 346	105 187	...
Switzerland	430 000	374 000	541 000	452 000	401 000
Turkey					
Rock salt	85 743	93 931	89 377	84 080	45 661
Sea salt	532 003	438 864	618 856	592 283	485 044
Other salt	1 726 253	1 636 831	1 437 894	1 450 008	1 254 750
Ukraine	2 622 900	2 310 970	2 185 300	2 286 500	*2 300 000
United Kingdom					
Rock salt	*1 800 000	*700 000	*1 500 000	*1 700 000	*1 900 000
Brine salt	*1 300 000	*1 200 000	*1 200 000	*1 200 000	*1 200 000
Salt in brine (a)	3 561 000	*3 500 000	*3 000 000	*3 000 000	*3 000 000
Yugoslavia, Federal Republic of					
Rock salt	...	8 539	8 444	10 182	8 624
Sea salt	28 000	19 305	17 066	32 246	26 383
Algeria					
Brine salt & sea salt	136 357	172 025	163 748	183 723	184 682
Angola	*30 000	*30 000	*30 000	*30 000	*30 000
Benin	----	----	*15 000	*15 000	*15 000
Botswana	184 533	199 300	233 069	184 800	178 646
Burkina Faso	*5 000	*5 000	*5 000	*5 000	*5 000
Cape Verde	3 957	...	*2 000	*2 000	*2 000
Djibouti	272	82 876	127 283	135 933	173 099
Egypt (j)	1 232 000	1 380 000	*1 200 000	*1 200 000	...
Eritrea	252 072	114 136	9 368	47 498	*49 900
Ethiopia (d)	18 840	70 000	70 000	70 000	...
Ghana	*50 000	*50 000	*50 000	*50 000	*50 000
Guinea	...	...	*15 000	*15 000	*15 000
Kenya	6 280	21 742	44 886	16 359	5 664

Production of Salt

Country	1997	1998	1999	2000	2001
Libya	*30 000	*30 000	*30 000	*40 000	*40 000
Madagascar	36 762	26 746	26 000	36 000	26 000
Mali	*5 000	*6 000	*6 000	*6 000	*6 000
Mauritania	*6 000	*6 000	*6 000	*6 000	*6 000
Mauritius (c)	6 000	6 200	7 435	6 000	*6 000
Morocco	257 500	126 571	156 158	162 385	233 815
Mozambique	*60 000	*60 000	*40 000	*38 000	*42 000
Namibia	492 780	536 080	503 479	542 948	564 841
Niger	*3 000	*2 000	*2 000	*2 000	*2 000
Senegal	*120 000	138 000	145 000	124 000	141 000
Sierra Leone	1 345	2 325	1 300	4 083	2 889
Somalia	*1 000	*1 000	*1 000	*1 000	*1 000
South Africa	326 803	352 490	388 380	345 632	356 582
Sudan	*50 000	72 211	117 148	*120 000	*120 000
Tanzania	72 511	75 000	35 893	70 000	65 000
Tunisia (c)	437 000	466 000	455 000	620 000	712 400
Uganda	*10 000	*5 000	*5 000	*5 000	*5 000
Bahamas (i)	1 029 000	1 077 000	828 000	...	...
Canada					
Rock salt	10 948 027	10 783 788	9 997 353	9 298 285	11 406 229
Other salt (e)	2 586 181	2 511 758	2 680 416	2 695 422	2 209 062
Costa Rica	*37 000	*37 000	*37 000	*37 000	*35 000
Cuba	163 600	134 600	159 100	177 000	*180 000
Dominican Republic					
Rock salt	10 479	5 672	5 436	12 221	*12 000
Sea salt	*50 000	*50 000	*50 000	*50 000	*50 000
El Salvador (c)	43 243	40 346	33 634	32 444	31 609
Guatemala (c)	*50 000	*50 000	*50 000	*50 000	*50 000
Honduras	*25 000	*25 000	*25 000	*25 000	*25 000
Mexico	7 932 772	8 412 063	8 235 621	8 884 370	8 501 137
Netherlands Antilles (i)	432 225	487 373	*500 000	*500 000	*500 000
Nicaragua (c)	13 619	15 132	15 619	16 100	17 710
Panama (c)	29 349	24 914	6 312	11 392	24 422
USA					
Rock salt (f)	12 200 000	12 700 000	14 700 000	13 600 000	14 600 000
Salt in brine (f)	21 400 000	21 100 000	22 700 000	22 500 000	20 400 000
Evaporated salt (f)	6 960 000	6 980 000	6 980 000	7 140 000	7 210 000
Argentina	841 029	751 695	1 263 423	*1 000 000	*1 000 000
Brazil					
Rock salt	1 452 000	1 484 257	1 430 041	1 448 000	*1 500 000
Sea salt	5 064 000	5 288 000	4 528 000	4 626 000	*4 500 000
Chile	5 488 135	6 207 266	6 074 426	5 082 911	5 989 416
Colombia					
Rock salt	141 923	165 699	156 933	177 687	184 278
Sea salt	232 085	330 404	304 433	282 189	351 046
Peru	79 492	220 310	230 393	247 619	418 954
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)	31 874	33 986	...	...	...
Cambodia	*40 000	*40 000	*40 000	*40 000	*40 000
China	31 623 000	25 530 000	31 166 000	35 182 800	34 547 500
India					
Rock salt	3 100	2 400	3 000	2 600	2 500
Sea salt	10 751 500	8 471 100	9 775 700	11 219 100	10 295 000
Other salt	3 496 500	3 390 900	4 674 000	4 429 600	3 986 500
Indonesia	*680 000	*650 000	*680 000	*680 000	*680 000
Iran (g)	1 382 753	1 501 704	1 263 397	*1 560 000	*1 985 000
Iraq	*250 000	*250 000	*250 000	*225 000	*225 000
Israel					
Rock salt	573 000	292 000	...	...	...
Sea salt	311 000	326 000	(k) 538 000	(k) 526 000	(k) 537 000
Japan (m)	1 329 000	1 293 000	1 327 000	1 374 000	1 358 000
Jordan (b)	61 000	290 204	504 776	344 094	321 000
Kazakhstan	35 911	179 931	36 534	36 283	260 874
Korea, Dem. P.R. of	*590 000	*550 000	*500 000	*500 000	*500 000

Production of Salt

tonnes

Country	1997	1998	1999	2000	2001
Korea, Republic of	*770 000	*780 000	*800 000	*800 000	*800 000
Kuwait	...	41 006	38 745	...	...
Laos	18	3 894	1 759	1 618	2 634
Lebanon	*4 000	*4 000	*4 000	*4 000	*4 000
Mongolia	...	...	*100 000	*100 000	*100 000
Myanmar (b) (c)	*35 000	*35 000	*35 000	*35 000	*35 000
Oman	13 048	13 778	11 230	11 700	13 900
Pakistan					
Rock salt (j)	1 010 605	1 037 951	1 019 044	1 359 776	1 261 141
Sea salt (j)	19 821	14 712	16 429	12 006	12 750
Philippines (c)	686 514	727 754	704 347	589 528	236 987
Saudi Arabia					
Rock salt & brine salt	260 000	387 000	484 000	409 000	...
Sri Lanka	103 731	82 483	96 709	70 107	130 272
Syria	119 000	178 000	104 000	106 000	*106 000
Taiwan	270 548	201 136	294 284	273 374	252 555
Tajikistan	*40 000	*40 000	*40 000	*40 000	*40 000
Thailand					
Rock salt	554 891	546 096	739 502	792 250	852 565
Other salt	*100 000	*100 000	*100 000	*100 000	...
Turkmenistan	215 272	220 026	223 095	201 000	218 000
Uzbekistan	*60 000	*60 000	*60 000	*60 000	*60 000
Vietnam	743 000	867 000	653 000	590 000	575 000
Yemen, Republic of	136 000	147 000	*140 000	*150 000	*150 000
Australia (l)	8 883 000	9 033 000	9 888 000	8 847 000	9 244 000
New Zealand	70 000	130 000	29 000	130 350	31 315
World Total	205 200 000	197 200 000	209 700 000	210 900 000	211 700 000

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) Including other salt
(i) Exports
(j) Years ended 30 June of that stated
(k) Salt; all forms
(l) Excluding Victoria and the Northern Territory
(m) Years ended 31 March following that stated

Exports of Salt

Country	1997	1998	1999	2000	2001
Albania	1 925	251	20	273	(a) *200
Armenia	3 863	2 000	1 515	3 235	...
Belarus	1 203 162	797 847	529 132	437 400	447 000
Belgium-Luxembourg	420 425	30 165	45 977	40 176	68 728
Bosnia & Herzegovina (a)	*10 100	*11 500	*32 100	*35 000	...
Bulgaria	4 900	1 809	2 121	2 423	1 234
Croatia	9 141	2 493	2 283	1 508	1 609
Cyprus	926	5 699	2 941	530	236
Czech Republic	17 046	16 031	13 967	13 252	7 135
Denmark	327 368	275 254	347 207	367 871	327 344
France	673 761	591 511	693 027	452 653	423 727
Germany	2 576 659	2 750 863	2 984 868	2 753 620	3 023 135
Greece	21 649	29 445	41 469	40 445	34 429
Hungary	1 839	437	236	446	230
Iceland	3 314	2 437	1 929	4 068	1 238
Italy	186 050	265 377	307 128	168 498	170 027
Lithuania	3 620	4 928	2 061	1 496	1 822
Macedonia	361	170	823	552	316
Netherlands	3 059 922	2 039 700	2 910 915	2 863 204	2 689 600
Norway	5 118	9 567	7 929	4 114	1 994
Poland	390 700	337 700	422 351	426 860	375 944
Portugal	25 600	13 048	3 362	1 892	3 656
Romania	585 665	439 530	492 524	465 106	349 112
Russia	15 577	13 108	23 109	23 430	...
Slovakia	50 938	52 000	46 826	39 930	50 441
Slovenia	3 300	4 769	4 817	3 957	3 513
Spain	714 877	669 534	732 727	845 033	785 056
Sweden	1 884	1 989	1 829	8 420	1 849
Switzerland	38 160	35 844	22 002	15 388	10 146
Turkey	13 061	17 674	20 778	36 334	31 967
Ukraine	1 367 601	1 012 089	928 343	1 097 450	...
United Kingdom	284 571	485 815	276 402	307 899	299 607
Algeria	9 520	25 803	41 900	28 400	40 900
Botswana	107 291	18 512	171 926	157 270	209 207
Djibouti	272	82 876	127 283	135 933	173 099
Egypt	269 661	294 096	268 218	...	518 492
Ghana	*25 000	28 540	36 960	...	...
Kenya	109 375	123 796	97 578	161 204	...
Madagascar	827	-----	2 136	60	...
Morocco	11 189	2 737	20 190	37 747	...
Namibia	37 276	62 384	12 074	16 513	...
Senegal	83 588	81 903	119 900	119 914	146 286
South Africa	2 639	1 826	2 138	1 048	1 168
Tanzania	8 426	13 083	7 288	13 909	18 180
Tunisia	347 679	394 410	391 352	462 853	...
Uganda	451	1 806	614	287	671
Zimbabwe	...	...	15 429	24 297	...
Bahamas	1 029 000	1 077 000	828 000	...	...
Canada	3 635 862	4 190 782	3 849 203	3 495 106	4 634 307
Dominican Republic	41 251	*42 000	*42 000	108 936	119 396
Jamaica	3 209	2 139	5 184	4 801	...
Mexico	6 105 698	6 442 297	6 864 532	7 564 321	6 797 282
Netherlands Antilles	432 225	487 373	*500 000	*500 000	*500 000
Trinidad & Tobago	6 639	6 981	7 000	4 600	4 025
USA	771 095	728 642	893 571	643 169	1 124 596
Argentina	50 455	40 503	36 676	34 826	27 867
Brazil	273 469	444 608	516 331	760 770	770 615
Chile	3 037 461	2 059 050	2 828 208	2 560 137	4 195 736
Colombia	61 681	76 007	34 672	17 349	59 381
Peru	539 441	294 484	635 103	449 015	728 034
Venezuela	20 454	38 339	4 527	3 139	6 379
China	235 058	332 649	392 355	552 033	946 517
Hong Kong (c)	13 311	1 495	1 454	2 725	2 594
India (b)	244 359	190 651	315 913	737 997	...

Exports of Salt

tonnes

Country	1997	1998	1999	2000	2001
Indonesia	15 081	23 252	849	3 218	122 076
Iran (e)	88 966	112 756	97 666	102 300	...
Israel (a)	*125 000	*133 000	*98 000	*82 700	...
Japan	2 046	1 925	2 044	1 337	1 250
Jordan	18 333	144 749	256 126	112 226	69 171
Kazakhstan	(a) *31 000	19 237	13 149	9 653	6 243
Korea, Republic of	34 734	19 483	16 852	17 313	13 286
Kuwait	3 182	4 264	180	226	...
Malaysia	9 100	14 600	11 000	18 222	...
Pakistan (d)	40 042	145 315	60 116	70 760	...
Saudi Arabia	10 062	12 294	12 024	11 904	...
Singapore	5 990	3 497	2 644	2 872	3 303
of which, re-exports	5 572	3 381	2 318	2 694	1 737
Syria	12 124	3 542	186	...	...
Thailand	60 608	91 016	94 222	83 613	81 200
Turkmenistan (a)	...	*36 000	*37 000	*40 000	*23 800
Yemen, Republic of	6 652	58 139	14 931	24 957	...
Australia	8 187 274	8 700 065	8 472 082	8 230 814	8 794 320
New Zealand	18 969	23 396	27 188	23 946	27 149

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

Country	1997	1998	1999	2000	2001
Albania	3 179	6 028	9 298	8 796	...
Austria	83 561	82 949	146 444	122 300	59 742
Azerbaijan	44 000	61 512	58 141	57 213	49 415
Belarus	53 000	54 374	21 196	26 648	19 100
Belgium-Luxembourg	3 614 738	3 602 237	3 373 286	3 675 526	3 285 692
Bulgaria	106 200	145 000	177 500	125 322	...
Croatia	110 510	79 927	121 907	85 873	84 219
Cyprus	6 699	13 318	9 888	9 002	11 616
Czech Republic	628 270	552 813	814 794	649 768	602 712
Denmark	273 186	249 388	379 402	245 086	255 671
Estonia	68 975	69 177	76 817	71 313	72 431
Faeroe Islands	18 235	16 284	18 622	22 471	...
Finland	413 004	404 295	371 534	427 247	366 217
France	599 152	559 453	581 948	533 225	457 520
Georgia	...	...	11 587	18 583	...
Germany	1 792 547	1 583 346	1 514 180	2 062 758	1 824 730
Greece	144 966	149 344	102 191	131 417	98 438
Greenland	4 071	3 042	4 188	3 352	3 933
Hungary	551 789	418 601	551 648	527 154	395 106
Iceland	87 194	94 408	88 912	104 726	95 441
Irish Republic	100 635	90 066	110 287	82 940	107 438
Italy	673 571	656 656	581 887	565 098	771 298
Latvia	81 501	91 179	108 065	88 877	91 525
Lithuania	167 029	168 245	176 715	142 384	157 181
Macedonia	29 153	26 523	37 628	32 387	27 991
Malta	1 682	3 132	1 919	1 285	1 900
Moldova	52 164	39 151	44 054	38 941	34 689
Netherlands	452 393	324 111	502 862	98 806	224 608
Norway	683 521	703 443	753 514	691 422	718 394
Poland	81 700	74 200	116 447	113 806	95 520
Portugal	90 057	105 823	75 053	104 476	116 508
Romania	1 236	644	774	6 242	23 077
Russia	840 626	625 397	479 981	570 447	...
Slovakia	129 300	160 100	186 687	193 174	158 752
Slovenia	120 618	91 314	143 054	98 702	107 755
Spain	25 460	37 542	60 771	44 723	31 179
Sweden	808 890	947 996	1 072 731	910 232	908 355
Switzerland	4 685	5 114	16 756	9 040	7 216
Turkey	4 660	7 643	10 706	26 341	12 118
United Kingdom	242 368	237 284	261 434	...	...
Yugoslavia, Federal Republic of	268 677	217 349	174 945	179 426	151 245
Benin	25 200	24 000	*24 000	*24 000	...
Botswana	2 138	2 167	2 281	3 222	3 460
Burkina Faso	36 996	39 941	31 207	34 967	41 684
Burundi	3 561	12 167	16 080	12 359	...
Cameroon	*38 800	60 864	61 840	81 196	60 958
Central African Republic	*3 300	*3 300	*3 300	*3 300	...
Congo	6 275	10 860	2 178	4 442	12 705
Egypt	2 369	2 860	3 849	*4 000	7 040
Ethiopia (d)	786	120 062	77 402	*70 000	...
Gabon	*3 800	*3 800	*3 800	*3 800	...
Ghana	358	618	522	576	377
Ivory Coast	79 208	75 403	78 491	71 345	...
Kenya	6 800	150 200	27 803	36 418	...
Malawi	22 000	21 000	*21 000	*21 000	...
Mauritius	1 400	1 667	3 292	6 298	5 401
Morocco	6 781	13 873	8 820	4 052	...
Niger	30 500	32 582	32 000	*32 000	...
Nigeria	358 403	375 491	307 042	59 520	...
Reunion	*2 900	*2 900	*2 900	*2 900	...
Rwanda	16 609	16 388	...	...	...
Sierra Leone	*5 000	*5 000	*4 000	3 676	6 333
South Africa	84 602	119 775	60 596	59 777	30 288
Tanzania	8 779	22 260	26 593	10 622	10 235
Togo	11 128	6 079	2 166	3 283	...
Uganda	41 913	108 080	80 731	61 719	70 732
Zimbabwe	80 155	81 293	79 292	135 983	...

Imports of Salt

tonnes

Country	1997	1998	1999	2000	2001
Barbados	2 180	1 848	2 101	1 693	2 105
Belize	1 031	1 261	1 166	1 456	1 592
Canada	1 269 550	978 145	1 375 423	1 141 593	1 644 123
Costa Rica	15 057	23 442	34 581	28 642	29 419
Dominica	825	*550	949	545	569
El Salvador	4 984	3 581	2 554	8 334	5 263
Guadeloupe	2 259	2 577	2 471	2 231	2 461
Guatemala	7 265	4 902	6 634	4 238	4 664
Honduras	2 122	1 915	3 312	4 200	...
Jamaica	11 784	23 201	29 248	28 246	...
Martinique	2 365	2 196	2 467	2 425	2 349
Mexico	63 715	64 858	71 880	90 603	106 733
Netherlands Antilles	*500	424	355	*500	...
Nicaragua	1 323	1 210	7 325	4 076	1 244
Panama	6 661	3 186	3 594	2 687	5 462
St. Lucia	645	704	621	649	564
St. Pierre & Miquelon	1 183	1 141	1 105	1 941	2 173
Trinidad & Tobago	24 525	23 472	26 000	19 663	16 089
USA	9 166 803	8 815 490	8 854 293	8 947 914	12 891 621
Brazil	363 730	207 418	215 593	191 348	108 097
Colombia	79 569	73 563	57 326	45 413	72 042
Ecuador	...	47 029	52 140	7 547	31 429
French Guiana	571	*500	568	521	555
Paraguay	19 480	13 895	9 271	20 135	18 731
Peru	1 447	1 088	2 331	3 125	3 506
Suriname	2 088	2 306	1 607	3 184	...
Uruguay	85 565	87 424	70 392	73 338	52 156
Venezuela	147 293	211 518	97 836	120 021	84 103
Abu Dhabi	3 211	3 386	7 360	...	...
Bahrain	10 295	12 366	22 882	5 263	5 054
Bangladesh (b)	56 568	17 500	19 000	*20 000	...
China	6 299	4 432	3 532	2 660	3 999
Dubai	10 974	12 746	14 348	...	...
Hong Kong	64 086	60 345	58 640	57 796	54 405
India (c)	1 236	88	13 250	17 754	...
Indonesia	748 440	907 997	1 867 271	1 445 967	1 596 167
Japan	7 917 873	7 914 304	8 236 050	7 972 374	7 845 953
Kazakhstan	*10 000	9 746	18 019	20 894	11 471
Korea, Dem. P.R. of (a)	*61 000	*78 000	*35 000	*35 000	*19 000
Korea, Republic of	1 874 890	2 144 680	2 356 280	2 370 352	2 601 484
Kuwait	10 482	11 191	10 965	13 194	...
Kyrgyzstan	*14 600	8 602	4 766	9 761	7 156
Laos	31 877	...	...	...	...
Lebanon	...	25 534	38 383	32 944	31 780
Macao	2 119	2 385	2 185	2 256	...
Malaysia	390 900	341 300	405 000	368 560	...
Oman	3 335	4 248	14 254	14 596	28 448
Philippines	352 914	110 629	396 684	567 213	423 893
Saudi Arabia	11 530	18 194	17 119	16 974	...
Singapore	139 094	55 711	85 621	114 252	106 894
Sri Lanka	...	6 354	6 020	...	...
Taiwan	991 491	1 301 310	1 129 618	1 733 219	1 801 432
Thailand	55 242	1 137	67 978	67 906	161 341
Australia	12 522	12 310	14 071	14 988	14 869
Fiji	*5 000	*5 000	*5 000	*5 000	*5 000
New Caledonia	1 199	972	1 187	1 085	1 142
New Zealand	118 865	65 071	71 692	118 532	79 357
Papua New Guinea	21 895	6 639	6 000	5 200	...
Solomon Islands	1 803	*1 500	*1 500	*1 500	*1 500

Note(s) :-

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

(b) Years ended 30 June of that stated

(c) Years ended 31 March following that stated

(d) Years ended 7 July of that stated

Production of Sillimanite Minerals

Country	1997	1998	1999	2000	2001
France					
Andalusite	67 200	79 000	57 000	*80 000	*60 000
Spain					
Andalusite	*220	*250	*240	*260	*250
South Africa					
Andalusite	236 990	232 646	136 949	182 674	193 225
Zimbabwe					
Kyanite	1 113	3 780	5 038	10 970	95 798
USA					
Kyanite (b)	*90 000	90 000	90 000	90 000	90 000
Brazil					
Kyanite (c)	...	47	171	...	...
China					
Andalusite	...	...	...	15 000	20 000
Kyanite	...	...	...	50 720	27 700
Sillimanite	...	(b) 113 000	...	20 800	163 100
India					
Kyanite (a)	6 068	6 134	6 191	4 733	3 850
Sillimanite (a)	12 458	12 123	14 933	15 498	14 618
Australia					
Sillimanite	----	26	274	110	70

Note(s):

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

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

Exports of Sillimanite Minerals

tonnes

Country	1997	1998	1999	2000	2001
Belgium-Luxembourg	941	2 663	4 357	6 081	6 368
France	56 347	51 279	42 872	48 687	56 510
Germany	7 440	8 081	4 779	7 026	8 092
Italy	352	487	147	100	248
Netherlands	2 669	6 787	12 293	7 318	10 932
United Kingdom	7 442	6 677	6 896	6 742	6 895
South Africa					
Andalusite	156 810	144 277	110 642	129 831	132 983
Canada					
Mullite	4 703	4 332	4 660	5 185	4 891
USA					
Sillimanite minerals	36 234	30 143	29 499	22 619	12 632
Mullite	20 100	37 918	32 000	28 870	32 041
China	9 675	7 687	12 463	14 506	46 649
India (a)	545	679	311	682	...
Japan	4 577	2 474	3 347	3 625	2 876
Taiwan	510	732	622	481	431

Note(s):

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

(a) Years ended 31 March following that stated

Imports of Sillimanite Minerals

Country	1997	1998	1999	2000	2001
Austria	2 414	11 483	2 447	1 471	3 531
Belgium-Luxembourg	6 430	9 199	10 059	13 899	10 972
Czech Republic	2 767	3 281	2 557	4 049	3 785
Denmark	1 658	3 306	1 250	2 842	3 518
Finland	108	62	62	168	298
France	3 286	3 091	3 339	2 864	2 518
Germany	43 196	58 525	52 924	56 898	56 821
Irish Republic	1 800	3 809	3 820	9 521	14 377
Italy	50 912	70 741	77 567	28 898	15 859
Netherlands	7 622	28 365	17 799	25 485	29 657
Norway	3 017	2 314	2 542	2 609	4 793
Poland	15 643	14 519	8 404	10 173	12 576
Portugal	616	716	491	568	566
Slovakia	1 785	...	2 910	3 668	1 770
Spain	14 865	17 956	16 687	20 724	12 885
Sweden	7 557	7 363	4 334	11 519	14 145
Switzerland	352	440	366	456	350
Turkey	3 523	...	2 622	1 343	3 920
United Kingdom					
Sillimanite minerals	53 877	47 985	37 870	28 081	28 470
Mullite	12 922	8 417	7 432	5 198	5 174
Zimbabwe	...	...	3 807	2 553	...
Canada	*20 000	22 181	19 057	25 012	30 574
Mexico					
Sillimanite minerals	2 810	2 300	2 003	2 229	1 633
Mullite	3 207	3 785	4 714	5 318	5 170
USA	14 006	15 596	11 877	12 818	9 000
China	1 643	1 096	4 115	1 519	3 106
Hong Kong	27 304	15 770	44 695	45 562	11 873
India (a)	1 364	1 424	3 342	1 174	...
Indonesia	240	1 742	379	1 317	1 437
Japan					
Sillimanite minerals	27 722	24 879	12 590	21 407	20 209
Mullite	6 464	4 826	5 041	6 560	10 329
Korea, Republic of					
Sillimanite minerals	12 160	10 784	10 470	10 681	12 273
Mullite	5 462	2 670	3 489	4 191	3 857
Taiwan					
Sillimanite minerals	8 400	7 810	5 782	5 996	3 307
Mullite	547	538	879	762	920
Thailand					
Mullite	7 177	832	1 370	1 483	895
Australia	6 778	4 406	2 553	3 660	4 453

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	1997	1998	1999	2000	2001
Bulgaria	31 530	23 790	*25 000	*25 000	*25 000
France	2 402	1 027	1 140	723	929
Greece	37 300	44 000	38 976	30 644	62 400
Irish Republic	13 300	10 800	10 400	16 700	8 700
Italy	4 400	2 500	*2 000	*1 000	*1 000
Macedonia	*10 000	*10 000	*10 000	*10 000	*10 000
Poland	1 084 200	1 143 690	1 160 355	1 163 600	1 230 700
Portugal	33 900	31 880	26 450	20 430	23 100
Romania	*18 000	*18 000	*18 000	*18 000	*18 000
Russia (a)	395 000	353 000	380 000	*400 000	*400 000
Spain	142 520	99 910	355 758	...	...
Sweden	304 048	299 051	341 584	328 737	306 029
Turkey	90 000	87 000	*90 000	193 000	197 000
Yugoslavia, Federal Republic of (a)	42 640	34 474	7 643	9 068	5 745
Algeria	*1 500	*1 500	*1 500	*1 500	*1 500
Ethiopia (b)	200	*500	689	1 018	1 051
Ghana	2 700	3 600	4 000	3 600	3 400
Morocco	261 000	307 000	277 900	246 000	238 000
Namibia	41 000	13 980	-----	8 790	18 000
South Africa	144 005	144 482	151 959	144 100	109 584
Tunisia	100	2 500	4 000	3 700	*3 700
Zambia	7 219	6 936	6 076	*6 000	*6 000
Zimbabwe	5 923	6 681	5 396	3 799	3 449
Canada	1 223 953	1 195 943	1 246 357	1 212 386	1 275 620
Dominican Republic	12 407	7 409	3 140	...	...
Honduras	42 809	42 898	46 473	52 485	46 760
Mexico	2 674 979	2 686 021	2 466 981	2 620 495	2 759 985
Nicaragua	1 077	1 946	1 780	1 589	2 532
Panama	2 178	*2 000	*2 000	*2 000	*2 000
USA	2 180 000	2 064 800	1 950 900	2 059 500	*1 740 000
Argentina	52 550	35 768	73 785	78 271	152 802
Bolivia	387 200	403 961	422 540	433 590	409 720
Brazil	10 000	10 000	10 000	10 000	10 000
Chile	1 091 311	1 340 199	1 380 711	1 242 194	1 348 667
Colombia	3 515	5 218	7 593	7 970	7 242
Peru	2 090 311	2 024 570	2 231 390	2 437 706	2 673 834
China	1 300 000	1 299 000	1 378 714	1 569 145	2 013 250
India (a) (c)	53 925	55 409	53 641	46 150	57 672
Indonesia	279 161	348 974	292 331	314 032	348 332
Iran	*20 000	18 800	21 400	*20 000	*20 000
Japan	87 180	94 472	94 004	103 781	80 397
Kazakhstan (a)	389 576	535 987	645 609	855 000	*900 000
Korea, Dem. P.R. of	*50 000	*50 000	*50 000	*50 000	*50 000
Malaysia	9 647	7 285	2 744	4	3
Mongolia	*21 000	*21 000	*21 000	*21 000	*21 000
Myanmar (a) (c)	4 040	3 643	2 159	2 019	*700
Philippines	20 744	18 220	18 214	23 569	29 591
Saudi Arabia	17 200	13 843	10 472	9 390	*9 300
Thailand	-----	-----	-----	-----	1 159
Uzbekistan	*50 000	50 500	61 100	*60 000	*60 000
Australia	1 106 000	1 474 000	1 720 000	2 059 000	1 970 000
Fiji	2 654	1 787	2 159	1 475	2 109
New Zealand	31 684	22 681	24 308	22 886	27 118
Papua New Guinea	49 165	59 294	66 542	79 197	69 368
Solomon Islands	...	1 466	2 138	*700	-----
World Total	15 937 000	16 543 000	17 229 000	18 390 000	19 121 000

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 7 July of that stated

(c) Years ended 31 March following that stated

Exports of Silver

Country	1997	1998	1999	2000	2001
Austria					
Metal	54 900	57 500	133 700	50 900	116 900
Belgium-Luxembourg					
Ores & concentrates	500	239 000	22 500	18 000	...
Metal	1 229 800	773 400	53 900	8 600	27 300
Bulgaria					
Metal (d)	*14 300	*18 800	*27 000	...	...
Denmark					
Metal	60 194	97 904	20 456	12 445	17 229
Finland					
Metal	25 785	7 447	8 300	12 708	...
France					
Metal	908 700	725 000	615 700	532 500	658 600
Waste & scrap	1 098 369	612 503	...	...	...
Germany					
Metal	1 168 100	2 022 300	2 252 100	2 306 500	2 446 100
Greece					
Metal	...	...	2 741	3 047	215
Hungary					
Metal	456	489	457	746	1 204
Italy					
Metal	453 461	569 198	447 420	478 031	399 772
Macedonia					
Metal (d)	*11 000	*9 300	*6 200	...	...
Norway					
Metal	102 917	92 509	122 387	112 502	74 774
Poland					
Metal	929 000	1 032 000	1 054 000	1 041 874	1 094 153
Portugal					
Metal	4 687	416	277	5	...
Russia					
Metal (d)	...	*1 217 100	*420 000	...	...
Slovakia					
Metal (d)	*2 900	*3 100	...	...	...
Slovenia					
Metal	...	39 716	38 866	1 020	1 775
Spain					
Metal	360 915	423 041	27 952	369 220	14 145
Sweden					
Metal	260 000	282 000	308 000	315 000	291 000
Switzerland					
Metal	2 440 242	3 124 694	2 028 365	2 480 600	1 627 403
Turkey					
Metal	...	647	352	45	75
United Kingdom					
Metal	3 187 801	2 053 193	1 405 307	3 461 018	2 282 355
Yugoslavia, Federal Republic of					
Metal	36 000	7 106	661	0	8 180
Morocco					
Metal	270 741	...	...	...	...
Namibia					
Metal	40 188	13 980	----	16 527	...
South Africa (f)					
Metal	179 321	130 614	154 349	155 819	122 450
Canada					
Ores & concentrates (e)	216 990	149 445	108 608	182 634	172 072
Metal	1 262 953	1 625 501	1 708 630	1 614 447	1 686 484
Dominican Republic					
Metal	12 407	7 409	3 140	...	...
Honduras					
Concentrates (e)	42 809	42 898	46 473	52 485	46 760
Mexico					
Ores & concentrates	1 378 586	3 496 444	6 406 000	4 796 793	...
Metal	...	2 345 477	3 594 800	2 554 985	5 902 000
USA					
Ores & concentrates (b)	35 003	13 917	91 749	70 400	...
Metal	4 044 085	3 055 422	1 074 903	959 469	1 179 000
Waste & scrap	1 021 496	1 064 176	1 314 128	1 661 260	1 810 000

Exports of Silver

kilograms

Country	1997	1998	1999	2000	2001
Bolivia					
Ores & concentrates	2 307 449	1 641 817	1 737 576	2 175 434	2 123 398
Metal	72 310	79 256	73 206	55 692	30 063
Brazil					
Metal	58 534	48 772	35 385	37 249	117 856
Chile					
Metal	731 261	779 744	765 042	550 249	682 316
Peru					
Metal	686 932	792 233	1 008 168	1 118 221	1 191 300
China					
Metal	26 688	88 574	308 335	191 399	...
Hong Kong					
Metal	50 419	345 428	1 399 377	1 449 748	1 382 232
of which, re-exports	50 359	250 087	672 083	628 221	1 176 059
India					
Metal (c)	5 149	2 775	67	762	...
Indonesia					
Ores & concentrates	...	...	58 083	1 400 012	1 054 799
Metal	55 788	164 350	170 468	213 618	134 402
Israel					
Metal (d)	*8 500	*1 600	...	...	...
Japan					
Metal	316 901	368 422	456 783	844 270	783 771
Waste & scrap	164 140	187 317	252 129	359 419	...
Kazakhstan					
Metal	254 209	582 600	636 300	...	905 400
Korea, Dem. P.R. of					
Metal (d)	...	*7 300	*19 100	...	...
Korea, Republic of					
Metal	249 024	454 500	426 346	535 973	829 570
Kyrgyzstan					
Metal	...	(d) *2 500	2 919	6 014	...
Malaysia					
Metal	1 833	1 050	3 473	53 430	...
Oman					
Metal	3 471	617	-----	62	...
Philippines					
Ores & concentrates (b)	7 803	6 640	...	...	...
Metal	5 470	6 868	...	...	...
Singapore					
Metal	1 290 904	827 385	695 506	732 643	1 030 649
of which, re-exports	1 257 720	768 599	681 321	719 973	968 583
Taiwan					
Metal	12 206	2 867	6 008	6 897	28 657
Thailand					
Metal	30 298	...	8 800	599 806	9 041
Uzbekistan					
Metal (d)	*32 800	*1 300	...	...	...
Australia					
Metal (g)	215 817	374 792	428 000	427 000	535 000
New Zealand					
Metal (a)	3 563	2 704	...	...	...
Papua New Guinea					
Metal	45 426	65 247	64 500	79 197	69 368

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

Country	1997	1998	1999	2000	2001
Austria					
Metal	88 100	125 200	254 500	136 700	138 500
Belgium-Luxembourg					
Ores & concentrates	13 800	16 900	1 188 000	1 970 200	...
Metal	2 544 300	2 366 500	1 558 500	928 500	875 300
Bulgaria					
Metal (c)	*100	*900	...	...	...
Croatia					
Metal	5 527	...	2 560	4 292	4 573
Cyprus					
Metal	10 512	11 168	8 312	11 631	9 624
Czech Republic					
Metal (c)	*48 200	*80 700	*86 700	...	...
Denmark					
Metal	143 604	109 846	18 075	23 506	19 137
Estonia					
Metal	(c) *10 400	(c) *4 000	7 513	8 175	8 089
Faeroe Islands					
Metal	224	275	243	328	...
Finland					
Metal	91 170	72 799	74 314	87 460	89 015
France					
Metal	1 786 800	1 326 300	1 223 400	1 439 100	1 421 400
Waste & scrap	241 900	682 847	...	...	...
Germany					
Ores & concentrates	1 041 400	5 027 600	4 540 700	2 005 800	...
Metal	1 233 100	1 728 800	1 481 600	1 584 400	1 894 000
Greece					
Metal	...	...	52 252	39 023	25 686
Hungary					
Metal	1 641	8 132	12 908	17 843	19 541
Iceland					
Metal	600	700	400	700	500
Irish Republic					
Metal	37 893	15 907	3 307	3 115	2 940
Italy					
Metal	1 245 426	1 171 220	1 453 167	2 226 980	2 030 362
Lithuania					
Metal	£130 000	£128 000	£109 000	£129 000	...
Netherlands					
Metal	£13 305 000	£18 131 000	£25 764 000	£13 873 000	£12 117 066
Norway					
Metal	104 085	128 173	147 328	128 551	84 784
Poland					
Metal	...	1 000	1 000	22 562	22 372
Portugal					
Metal	98 115	81 514	540	...	599
Slovakia					
Metal	(c) *8 000	22 226	11 349	13 002	...
Slovenia					
Metal	11 325	61 000	58 000	36 769	32 378
Spain					
Ores & concentrates	28 165	33 340	35 452	31 406	43 638
Metal	702 290	813 653	187 098	941 883	175 430
Sweden					
Metal	145 000	176 000	239 000	148 000	153 000
Switzerland					
Metal	1 836 921	1 569 782	1 972 530	2 748 848	1 476 601
Turkey					
Metal	38 757	53 677	52 101	136 321	90 014
Ukraine					
Metal (c)	*500	*1 100	...	...	...
United Kingdom					
Metal	3 310 292	6 772 335	2 589 012	2 541 673	3 471 871

Imports of Silver

kilograms

Country	1997	1998	1999	2000	2001
South Africa					
Metal	20 436	17 737	19 986	47 487	48 922
Tunisia					
Metal	14 702	12 772	15 932	...	...
Canada					
Ores & concentrates (b)	276 855	242 298	339 075	421 860	329 897
Metal	302 593	235 852	138 654	...	158 610
Costa Rica					
Metal	148	1 920	281	392	3 218
Jamaica					
Metal	260	856	112	...	...
Mexico					
Ores & concentrates	...	...	1 879 689	3 780 235	...
Metal	36 526	53 034	191 470	138 105	231 422
Panama					
Metal	3 303	2 318	1 603	7 501	2 461
USA					
Ores & concentrates (b)	413 663	425 900	254 929	184 249	...
Metal	2 702 658	3 630 615	3 524 227	4 595 230	3 517 800
Waste & scrap	1 528 969	1 783 572	1 650 424	1 122 018	1 110 000
Argentina					
Metal	25 922	...	54 454	70 103	62 035
Brazil					
Metal	226 606	176 853	193 437	218 466	300 980
Chile					
Metal	1 130	1 059	...	595	...
Uruguay					
Metal	8 400	8 100	7 900	...	...
Abu Dhabi					
Metal	283	----	403	...	...
China					
Ores & concentrates	47 067	1 513 479	551 020	290 645	1 442 835
Metal	125 421	156 479	299 830	283 739	315 523
Dubai					
Metal	2 624 906	986 627	775 524	...	...
Hong Kong					
Metal	250 072	204 899	406 976	464 657	1 710 307
India					
Metal (a)	2 659 959	3 586 416	3 553 069	3 717 485	...
Indonesia					
Metal	8 752	...	7 408	43 557	10 251
Israel					
Metal (c)	*93 700	*85 300	...	...	...
Japan					
Ores & concentrates	21 143 000	12 401 000	14 076 000	14 189 000	14 872 000
Metal	1 787 141	1 098 083	1 427 911	2 051 348	1 874 511
Waste & scrap	18 296 905	17 679 525	11 692 212	10 977 147	...
Jordan					
Metal	106	403	1 740	248	...
Kazakhstan					
Metal	...	14 100	2 400	...	...
Korea, Republic of					
Metal	340 196	73 322	217 691	264 421	217 444
Kuwait					
Metal	250 000	225 000	...	...	...
Malaysia					
Metal	165 550	321 964	344 178	...	...
Oman					
Metal	79 609	478 219	767 388	1 043 264	...
Pakistan					
Metal	£5 200 000	£200 000	£206 000	£149 000	...
Philippines					
Metal	6 717	2 251	...	...	...
Saudi Arabia					
Metal	7 214	2 067	4 655	6 000	...

Imports of Silver

Country	1997	1998	1999	2000	2001
Singapore					
Metal	728 498	450 818	349 299	637 232	475 383
Taiwan					
Metal	481 051	262 574	315 240	480 119	393 251
Thailand					
Metal	526 308	...	893 520	1 911 529	851 527
Australia					
Metal	£4 262 000	£15 603 000	£19 834 000	£1 503 000	£4 673 000
New Zealand					
Metal	1 071 000	96 000	933 000	...	23 996

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	1997	1998	1999	2000	2001
Austria					
Recovered (d)	49 494	52 862	49 753	50 377	50 135
Belarus					
Recovered (d)	20 000	20 000	20 000	20 000	21 653
Belgium					
Recovered (c) (d)	430 000	428 000	408 000	410 000	417 000
Bulgaria					
Pyrites	25 000	30 000	20 000	----	----
Recovered (c)	128 000	134 000	131 000	209 000	203 000
Recovered (d)	25 000	25 000	30 000	30 000	30 000
Croatia					
Recovered (d)	15 000	15 000	15 000	9 000	7 000
Czech Republic					
Recovered (d)	42 000	45 000	45 000	45 000	40 000
Denmark					
Recovered (d)	3 875	3 312	3 729	4 041	3 981
Finland					
Pyrites	325 000	340 000	370 000	360 000	260 000
Recovered (c)	307 000	296 000	299 000	283 000	227 000
Recovered (d)	50 000	45 000	42 000	46 000	46 000
France					
Recovered (d)	958 800	868 800	825 000	801 600	837 700
Recovered (e)	*100 000	261 000	*250 000	*260 000	*260 000
Germany					
Recovered (c)	79 800	90 191	84 400	80 128	80 000
Recovered (d)	1 497 500	1 612 143	1 696 353	1 611 792	1 640 000
Recovered (e)	45 000	48 528	42 440	42 518	40 000
Greece					
Recovered (d)	145 000	150 000	148 000	150 000	153 000
Hungary					
Recovered (d)	33 906	38 332	*36 000	*34 000	43 000
Italy					
Recovered (d)	380 000	425 000	485 000	490 000	540 000
Lithuania					
Recovered (d)	...	...	25 000	28 000	47 000
Macedonia					
Recovered (c)	20 000	20 000	29 000	26 000	26 000
Netherlands					
Recovered (c)	127 000	131 000	129 000	123 000	126 000
Recovered (d)	450 000	432 000	445 000	428 000	384 000
Norway					
Recovered (c)	*90 000	*90 000	*95 000	*90 000	*95 000
Recovered (d)	18 000	14 000	12 000	18 000	18 000
Poland					
Frasch	1 676 000	1 348 000	1 175 000	1 369 259	942 252
Recovered (c)	256 400	*260 000	277 800	*278 600	*280 000
Recovered (d)	43 900	56 600	73 500	16 483	27 602
Portugal					
Pyrites	*5 000	*5 000	...	...	...
Recovered	*30 000	*30 000	32 000	28 000	35 000
Romania					
Pyrites	52 000	50 073	48 127	9 883	2 201
Recovered	43 000	46 000	41 000	35 000	41 000
Russia					
Pyrites	417 000	254 000	307 000	404 000	386 000
Recovered (d)	2 973 652	3 972 852	4 443 284	4 948 298	5 239 515
Recovered (e)	344 000	411 000	510 000	438 000	458 000
Sulphur ore	9 410	...	6 151	9 630	13 216
Slovakia					
Recovered (c)	7 000	6 000	5 000	5 000	5 000
Recovered (d)	20 000	21 000	24 000	51 000	57 000
Spain					
Pyrites	445 201	405 373	391 130	94 222	64 700
Recovered (c)	456 000	461 000	455 000	454 000	461 000
Sweden					
Recovered (c)	71 000	73 000	65 000	*95 000	*160 000
Recovered (d)	63 408	57 551	56 989	58 521	54 530
Sulphur ore	57 773	...	...	...	...

Production of Sulphur and Pyrites

tonnes (sulphur content)

Country	1997	1998	1999	2000	2001
Turkey					
Pyrites	63 000	...	91 000	45 000	26 000
Recovered (d) (e)	137 000	145 000	122 000	118 000	126 000
Ukraine					
Sulphur ore	99 700	96 949	79 979	88 000	83 000
United Kingdom					
Recovered (c)	39 200	40 500	26 600	51 400	62 500
Recovered (d)	177 000	184 000	136 000	140 000	111 000
Yugoslavia, Federal Republic of					
Recovered (c)	33 000	46 000	46 000	46 000	46 000
Algeria					
Recovered (d)	20 000	20 000	16 000	12 000	7 000
Egypt					
Recovered (d)	...	...	...	60 000	78 000
Libya					
Recovered (d)	*13 000	*13 000	*13 000	*13 000	...
Namibia					
Pyrites	47 300	14 100	----	6 000	28 500
South Africa					
Pyrites	167 253	152 379	141 427	145 650	...
Recovered (a) (c) (d)	351 000	299 514	264 209	302 819	*320 000
Zambia					
Pyrites	31 000	29 000	26 000	...	...
Recovered (c)	52 000	52 000	52 000	52 000	52 000
Zimbabwe					
Pyrites	20 200	22 200	23 300	29 000	21 700
Recovered	*5 000	...	...	...	...
Canada					
Recovered (c)	1 073 128	1 152 726	1 159 812	1 159 162	*1 160 000
Recovered (d)	8 407 686	8 541 291	8 812 609	8 679 770	8 267 000
Cuba					
Recovered (d)	*5 000	*5 000	*5 000	*5 000	*5 000
Mexico					
Recovered (c)	417 000	474 000	474 000	474 000	572 000
Recovered (d)	923 000	912 000	856 000	851 000	878 000
Netherlands Antilles					
Recovered (d)	28 616	35 000	34 000	38 000	38 000
Trinidad & Tobago					
Recovered (d)	*15 000	*15 000	8 400	14 900	24 400
USA					
Frasch	*2 820 000	*1 800 000	1 780 000	900 000	...
Recovered (c)	1 550 000	1 610 000	1 320 000	1 030 000	*1 000 000
Recovered (d)	7 650 000	8 220 000	8 220 000	8 380 000	*8 200 000
Argentina					
Recovered (c)	23 000	23 000	23 000	23 000	23 000
Brazil					
Pyrites	22 783	25 719	23 232	23 720	...
Recovered (c)	175 511	186 806	217 119	217 238	...
Recovered (d)	33 823	36 973	57 962	81 762	...
Chile					
Recovered (c)	768 000	899 000	1 037 000	1 096 000	1 160 000
Colombia					
Recovered (d)	14 872	*15 000	*16 000	*16 000	*16 000
Sulphur ore	53 541	52 727	89 024	91 996	*80 000
Ecuador					
Recovered (d)	14 900	18 900	17 200	20 800	...
Sulphur ore	*4 000	*4 000	*4 000	*4 000	...
Peru					
Recovered (c)	*60 000	*60 000	*60 000	*60 000	*60 000
Venezuela					
Recovered (d)	319 000	425 000	350 000	320 000	320 000

Production of Sulphur and Pyrites

tonnes (sulphur content)

Country	1997	1998	1999	2000	2001
Abu Dhabi					
Recovered (d)	...	967 000	1 089 000	1 122 000	1 488 000
Bahrain					
Recovered (d)	66 202	61 873	67 230	73 060	*70 884
China					
Pyrites	6 043 520	3 654 490	3 294 000	3 000 000	3 094 000
Recovered	1 424 430	1 556 000	1 716 000	1 797 000	1 961 000
Sulphur ore	*300 000	228 000	240 000	250 000	260 000
India					
Pyrites (f)	27 600	19 500	2 100	----	...
Recovered (c)	131 000	196 000	261 000	359 000	458 000
Recovered (d) (e)	51 000	60 000	101 000	376 000	451 000
Indonesia					
Recovered (c)	----	----	154 000	212 000	212 000
Recovered (d)	5 000	5 000	10 000	60 000	95 000
Sulphur ore	*3 500	*3 400	3 450	*3 500	...
Iran					
Recovered (d)	815 000	889 000	963 000	963 000	933 000
Iraq					
Recovered (d)	285 000	325 000	300 000	300 000	300 000
Israel					
Recovered (d)	30 000	32 000	31 000	38 000	35 000
Japan					
Pyrites	39 000	23 000	41 000	----	----
Recovered (c) (g)	1 424 000	1 410 000	1 513 000	1 567 000	1 519 000
Recovered (d)	2 013 000	2 083 000	2 060 000	2 072 000	2 025 000
Kazakhstan					
Recovered (c)	139 000	212 000	245 000	294 000	294 000
Recovered (d)	778 000	935 500	1 111 000	1 244 700	1 469 400
Korea, Dem. P.R. of					
Pyrites	45 000	40 000	21 000	18 000	18 000
Recovered (c)	18 000	20 000	16 000	16 000	16 000
Korea, Republic of					
Recovered (c)	338 000	476 000	528 000	572 000	665 000
Recovered (d)	613 000	656 000	630 000	679 000	690 000
Kuwait					
Recovered (d)	664 000	665 000	639 000	512 000	524 000
Oman					
Recovered (d)	*30 000	*30 000	*30 000	*30 000	...
Pakistan					
Recovered (b)	22 002	18 988	21 166	22 812	*17 000
Philippines					
Recovered (c)	103 000	132 000	133 000	134 000	170 000
Recovered (d)	20 000	20 000	20 000	20 000	20 000
Qatar					
Recovered (d)	73 000	146 000	155 000	190 868	220 624
Saudi Arabia					
Recovered (d)	1 700 543	1 880 105	1 939 758	2 101 391	2 350 000
Singapore					
Recovered (d)	220 000	180 000	261 000	265 000	230 000
Syria					
Recovered (d)	30 000	30 000	30 000	30 000	30 000
Taiwan					
Recovered	163 964	184 325	194 811	205 588	223 659
Thailand					
Recovered (c)	46 000	46 000	46 000	46 000	46 000
Recovered (d)	130 000	180 000	180 000	180 000	210 000
Turkmenistan					
Sulphur ore	9 227	11 937	5 405	3 709	5 628
Uzbekistan					
Recovered (c)	163 000	163 000	163 000	163 000	163 000
Recovered (d)	250 000	270 000	283 000	285 000	300 000
Australia					
Recovered (c)	474 000	507 000	441 000	654 000	735 000
Recovered (d)	22 000	22 000	25 000	30 000	45 000

Production of Sulphur and Pyrites

tonnes (sulphur content)

Country	1997	1998	1999	2000	2001
Total Pyrites	7 800 000	5 100 000	4 800 000	4 166 000	4 101 000
Total Frasch	4 500 000	3 100 000	3 000 000	2 300 000	1 800 000
Total Recovered	44 900 000	48 500 000	50 100 000	51 600 000	53 000 000
Total Sulphur Ore	500 000	500 000	500 000	500 000	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	1997	1998	1999	2000	2001
Austria					
Sulphur, sublimed & precipitated	6 064	3 012	4 907	5 998	6 707
Belgium-Luxembourg					
Pyrites	1 695	1 880	1 832	2 392	55
Sulphur	10 582	13 424	8 493	12 427	41 761
Sulphur, sublimed & precipitated	103	208	171	240	239
Croatia					
Sulphur, crude	1 700	3 322	3 375	7 152	6 386
Czech Republic					
Sulphur	2 102	2 549	1 835	4 294	2 398
Sulphur, sublimed & precipitated	6 227	6 465	1 546	5 875	3 069
Denmark					
Sulphur	4 654	3 517	4 717	2 406	1 044
Finland					
Pyrites (c)	*499 500	*501 900	*337 200	*288 100	*250 700
France					
Sulphur, crude	540 537	503 616	475 879	444 447	559 527
Sulphur, refined	9 199	10 792	3 082	4 959	1 354
Sulphur, sublimed & precipitated	860	694	3 060	818	753
Germany					
Pyrites	495	375	480	457	511
Sulphur, crude	924 574	1 059 498	1 113 801	1 013 806	976 781
Sulphur, refined	22 143	22 936	18 278	31 354	36 859
Sulphur, sublimed & precipitated	319	367	342	18 962	14 862
Greece					
Sulphur	331	471	267	436	52
Hungary					
Sulphur, sublimed & precipitated	10 975	18 742	...	25	...
Italy					
Pyrites	8 667	9 237	6 616	22 810	9 455
Sulphur	74 497	50 376	69 344	107 740	179 324
Sulphur, sublimed & precipitated	230	278	136	176	352
Lithuania					
Sulphur	11 348	8 985	2 158	354	5 660
Netherlands					
Pyrites	98 621	64 161	85 665	119 675	93 095
Sulphur, crude	207 261	132 707	150 612	52 565	186 059
Sulphur, refined	(b) ...	80 293	69 659	84 609	105 723
Sulphur, sublimed & precipitated	38	181	50	46	26
Norway					
Sulphur, sublimed & precipitated	12 139	10 355	10 827	10 694	11 504
Poland					
Sulphur	1 127 300	832 700	801 354	1 023 400	773 373
Portugal					
Sulphur	5 056	11 349	16 837	7 367	14 009
Romania					
Sulphur	6 810	2 388	3 350	320	79
Russia					
Pyrites	18 518	28 044	16 221	14 113	...
Sulphur	1 723 936	1 773 308	2 642 574	3 110 639	1 762 500
Sulphur, sublimed & precipitated	142	1	...	71	...
Slovakia					
Sulphur	14 700	17 100	...	259	121
Spain					
Pyrites	37	51 795	57	25	47
Sulphur, crude	27 454	43 139	45 887	40 984	49 385
Sulphur, refined	10 618	9 295	12 640	20 960	19 318
Sulphur, sublimed & precipitated	612	366	465	474	52
Sweden					
Sulphur	14 857	3 938	934	2 056	1 453
Sulphur, sublimed & precipitated	85	85	73	----	2
Turkey					
Sulphur, sublimed & precipitated	2 072	2 673	1 108	434	880
Ukraine					
Sulphur	24 789	24 879	23 163	37 385	...
United Kingdom					
Sulphur, crude	22 423	51 809	50 897	10 824	...
Sulphur, sublimed & precipitated	14 624	140	277	379	386

Exports of Sulphur and Pyrites

Country	1997	1998	1999	2000	2001
Yugoslavia, Federal Republic of Pyrites	16 453	18 228	752	----	9 544
Egypt Sulphur, crude	1 679	1 312	1 552	*1 600	1 428
Morocco Sulphur, crude	6 709	3 001	...	...	...
Namibia Pyrites	956	73	----	----	...
South Africa Sulphur	24 492	46 717	57 844	37 075	32 361
Canada Sulphur	6 465 467	5 145 955	5 024 568	4 841 305	3 361 501
Mexico Sulphur	482 188	586 645	513 301	507 270	463 874
Netherlands Antilles Sulphur	28 616	35 000	34 000	38 000	38 000
USA Pyrites	5 580	2 160	55 904	48 646	3 548
Sulphur, crude	651 088	853 250	656 372	692 791	675 223
Sulphur, refined	131 974	52 898	58 808	62 827	(b) ...
Sulphur, sublimed & precipitated	45 137	36 887	26 042	24 986	36 586
Colombia Sulphur	968	2 181	977	1 107	1 161
Venezuela Sulphur	1 747	3 105	...	...	...
Bahrain Sulphur	24 293	55 796	60 069	57 487	81 046
China Pyrites	20 056	36 759	6 229	9 107	15 850
Sulphur	324	5 206	3 120	5 065	7 329
Sulphur, sublimed & precipitated	807	1 156	935	1 713	1 994
India Sulphur, sublimed & precipitated (a)	1 710	2 837	3 045	3 137	...
Iran Sulphur	473 000	634 700	634 000	651 100	535 200
Japan Sulphur, crude	983 480	1 080 709	1 057 959	1 053 536	1 217 739
Sulphur, sublimed & precipitated	1 054	915	812	468	308
Jordan Sulphur, crude	93 448	157 254	249 135	49 755	...
Kazakhstan Sulphur	(c) *205 000	222 315	146 818	150 000	2 812
Korea, Republic of Sulphur, crude	200 704	255 023	253 900	280 846	240 956
Sulphur, sublimed & precipitated	1 115	1 275	1 338	1 562	1 879
Kuwait Sulphur	579 000	596 000	613 000	...	...
Qatar Sulphur	58 447	146 300	145 000	190 000	226 300
Saudi Arabia Sulphur	1 634 800	1 854 400	2 025 600	2 189 300	2 057 200
Singapore Sulphur, crude	57 519	80 464	66 939	92 517	81 949
Sulphur, sublimed & precipitated	79 337	52 194	65 459	54 703	23 033
Taiwan Sulphur	423	573	3 199	537	527
Sulphur, sublimed & precipitated	562	625	616	583	489
Thailand Sulphur	6 361	295	444	623	489
Sulphur, sublimed & precipitated	66	16	404	481	346
United Arab Emirates Sulphur	900 000	910 000	1 132 200	1 056 000	1 439 700

Exports of Sulphur and Pyrites

tonnes

Country	1997	1998	1999	2000	2001
Australia					
Sulphur	2 206	1 663	1 219	...	728
Sulphur, sublimed & precipitated	117	342	125	140	200
New Zealand					
Sulphur, crude	2 205	3 298	1 228	2 059	945

Note(s):

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

Imports of Sulphur and Pyrites

Country	1997	1998	1999	2000	2001
Austria					
Pyrites	546	1 096	373	731	1 040
Sulphur, crude	45 600	60 091	45 155	...	...
Sulphur, refined	4 151	5 157	8 328	15 346	22 055
Sulphur, sublimed & precipitated	1 546	5 306	4 477	3 642	314
Azerbaijan					
Sulphur	*6 000	8 474	7 914	18 500	6 851
Belarus					
Sulphur	*180 000	196 705	183 680	168 304	135 177
Belgium-Luxembourg					
Sulphur, crude	203 751	186 424	213 641	182 044	162 134
Sulphur, refined	158 558	192 737	214 285	207 656	277 195
Sulphur, sublimed & precipitated	2 033	1 974	5 699	16 252	178
Bulgaria					
Sulphur	6 165	2 400	109	159	...
Croatia					
Sulphur, crude	71 669	49 409	41 367	65 234	53 025
Sulphur, sublimed & precipitated	397	173	141	278	299
Cyprus					
Sulphur	1 301	1 728	1 583	1 300	1 222
Czech Republic					
Sulphur	91 456	75 514	57 111	68 252	56 621
Sulphur, sublimed & precipitated	20 768	26 279	53 084	46 615	45 665
Denmark					
Sulphur	15 140	9 564	10 963	8 000	9 358
Finland					
Sulphur	5 863	27 597	22 605	38 785	35 387
France					
Pyrites	1 701	2 474	3 260	12 396	4 229
Sulphur, crude	134 934	117 946	113 106	97 992	55 620
Sulphur, refined	39 964	16 355	12 456	75 859	68 001
Sulphur, sublimed & precipitated	6 072	11 152	18 845	25 216	8 194
Germany					
Pyrites	206 363	163 625	87 902	84 043	77 260
Sulphur	58 912	46 141	8 626	21 207	31 498
Sulphur, sublimed & precipitated	1 196	1 639	2 248	2 133	1 837
Greece					
Sulphur, crude	162 421	153 871	196 341	127 790	90 126
Sulphur, sublimed & precipitated	139	5	28	0	16
Hungary					
Sulphur	7 104	2 479	1 208	7 270	4 339
Sulphur, sublimed & precipitated	96	129	97	289	287
Italy					
Pyrites	13 960	18 791	5 022	13 177	9 174
Sulphur, crude	173 701	194 008	56 043	123 667	43 335
Sulphur, refined	4 305	4 524	9 565	5 887	8 086
Sulphur, sublimed & precipitated	217	2 316	355	770	3 939
Lithuania					
Sulphur	132 900	178 045	227 009	263 058	66 675
Moldova					
Sulphur, sublimed & precipitated	...	533	412	300	183
Netherlands					
Pyrites	...	69 520	41 736	73 366	151
Sulphur	61 199	24 989	52 231	21 193	30 101
Sulphur, sublimed & precipitated	10 120	16 712	5 094	27 801	34 161
Norway					
Pyrites	206 857	254 119	213 347	216 882	151 438
Sulphur	4 353	911	927	----	1 542
Sulphur, sublimed & precipitated	965	68	1	2	2
Poland					
Sulphur	100	8 300	46 014	49 273	70 246
Sulphur, sublimed & precipitated	...	...	505	560	239
Portugal					
Sulphur	2 644	2 469	2 378	2 302	3 306
Sulphur, sublimed & precipitated	703	4 576	1 709	7	103
Romania					
Sulphur, crude	41 736	43 195	27 314	54 047	22 311
Sulphur, sublimed & precipitated	25	824	80	69	146

Imports of Sulphur and Pyrites

tonnes

Country	1997	1998	1999	2000	2001
Russia					
Sulphur	244 862	159 698	147 694	9 870	...
Sulphur, sublimed & precipitated	340	271	186	221	...
Slovakia					
Sulphur	34 515	39 078	18 057	15 022	21 142
Slovenia					
Sulphur	44 119	49 628	44 682	47 621	51 734
Spain					
Sulphur, crude	54 908	41 258	39 836	174 499	221 786
Sulphur, refined	9 504	4 359	1 654	8 261	5 869
Sulphur, sublimed & precipitated	261	167	186	209	220
Sweden					
Pyrites	346	3 526	376	389	482
Sulphur	96 511	91 838	92 577	70 113	69 293
Sulphur, sublimed & precipitated	2 323	1 855	2 224	5 600	7 141
Switzerland					
Pyrites	275	301	304	220	217
Sulphur	39 107	40 601	39 081	40 195	40 754
Sulphur, sublimed & precipitated	73	52	46	67	24
Turkey					
Pyrites	34 644	17 437	87	12	36
Sulphur, crude	170 473	126 446	133 554	107 173	67 396
Sulphur, sublimed & precipitated	116	93	71	96	73
Ukraine					
Sulphur	332 662	371 493	348 423	239 265	*240 000
United Kingdom					
Sulphur, crude	371 962	196 327	190 439	211 888	170 055
Sulphur, sublimed & precipitated	495	2 420	213	94	390
Yugoslavia, Federal Republic of					
Sulphur, crude	1 808	1 429	703	1 534	504
Algeria					
Sulphur	849	2 759	3 243	4 125	2 700
Cameroon					
Sulphur, sublimed & precipitated	...	100	590	201	6
Egypt					
Sulphur	302 774	211 856	91 682	...	2 508
Sulphur, sublimed & precipitated	17 876	540	404	...	973
Ethiopia					
Sulphur	687	8	852	88	...
Sulphur, sublimed & precipitated	500	32	70	...	...
Gabon					
Sulphur	4 000	1 500	1 300	----	...
Kenya					
Sulphur	900	840	8 069	11 575	...
Sulphur, sublimed & precipitated	...	429	639	621	...
Morocco					
Sulphur	2 962 609	2 639 586	2 854 275	2 860 921	2 702 500
Namibia					
Sulphur	20 000	57 200	45 000	----	...
Niger					
Sulphur	17 362	14 483	15 414	10 930	16 500
Nigeria					
Sulphur	10 700	10 000	20 300	16 700	10 800
Sulphur, sublimed & precipitated	15 908	9 120	173	366	...
Senegal					
Sulphur	324 100	378 068	246 769	207 425	502 355
South Africa					
Sulphur, crude	539 704	531 432	696 552	699 867	678 004
Sulphur, sublimed & precipitated	659	291	244	228	151
Tunisia					
Sulphur	1 692 993	1 529 990	1 570 351	1 651 734	1 396 900
Sulphur, sublimed & precipitated	1 018	1 001	1 339	1 184	...
Zimbabwe					
Sulphur	10 676	14 568	32 480	*33 000	...

Imports of Sulphur and Pyrites

Country	1997	1998	1999	2000	2001
Canada					
Pyrites	13 870	28 452	25 434	30 339	25 424
Sulphur, crude	46 518	51 368	48 554	48 099	53 362
Sulphur, sublimed & precipitated	485	1 207	610	813	660
Cuba					
Sulphur	259 836	177 989	154 798	162 312	164 400
El Salvador					
Sulphur	5 389	2 849	2 357	4 731	5 142
Guatemala					
Sulphur	2 707	3 194	2 394	4 157	1 991
Jamaica					
Sulphur	6 374	6 271	6 566	6 600	...
Mexico					
Sulphur, crude	669 104	645 476	632 950	660 321	388 420
Sulphur, sublimed & precipitated	1 463	1 044	1 225	289	659
USA					
Sulphur, crude	1 507 026	1 292 188	1 249 239	1 004 545	740 250
Sulphur, sublimed & precipitated	1 585	2 198	4 182	502	694
Argentina					
Sulphur	105 193	86 711	95 759	112 850	77 769
Brazil					
Sulphur	1 509 913	1 325 069	1 419 409	1 583 840	1 482 913
Chile					
Sulphur	14 493	16 719	13 554	8 956	2 853
Colombia					
Sulphur	81 278	81 531	65 293	67 406	70 032
Ecuador					
Sulphur	456	2 401	2 120	4 403	4 171
Paraguay					
Sulphur	3 000	3 000	2 000	1 702	...
Peru					
Sulphur	4 139	4 838	4 789	11 189	8 768
Uruguay					
Sulphur	22 455	19 471	19 565	14 018	17 018
Bangladesh					
Sulphur (b)	43 545	30 000	35 000	*35 000	...
China					
Sulphur	356 964	941 076	1 979 401	2 732 944	3 370 050
Sulphur, sublimed & precipitated	384 070	241 132	154 811	89 474	9 542
Hong Kong					
Sulphur, sublimed & precipitated	710	529	204	500	464
India					
Sulphur, crude (a)	1 617 256	1 583 023	2 024 090	1 802 402	1 957 300
Sulphur, sublimed & precipitated (a)	1 144	1 098	841	959	...
Indonesia					
Sulphur, crude	327 545	356 042	286 160	257 110	344 104
Sulphur, sublimed & precipitated	15 840	11 315	44 230	27 169	32 987
Israel					
Sulphur	467 500	595 000	575 500	561 100	...
Japan					
Pyrites	42 019	44 477	4 166	6 243	9 773
Sulphur	572	389	34	535	488
Sulphur, sublimed & precipitated	1 433	1 225	1 133	1 298	1 198
Jordan					
Sulphur, crude	340 266	410 723	799 577	533 003	399 973
Korea, Republic of					
Pyrites	22 296	36 762	14 086	639	3 362
Sulphur	226 600	243 888	225 321	217 491	203 320
Sulphur, sublimed & precipitated	207	171	117	130	150
Kuwait					
Pyrites	...	10 503	38 192	24 693	...
Lebanon					
Sulphur	79 631	121 724	101 244	142 229	152 100
Sulphur, sublimed & precipitated	...	210	482	498	108

Imports of Sulphur and Pyrites

tonnes

Country	1997	1998	1999	2000	2001
Malaysia					
Sulphur, crude	20 200	84 900	87 200	46 294	42 249
Sulphur, sublimed & precipitated	2 262	9 214	...	10 845	15 288
Pakistan					
Sulphur (b)	25 036	20 071	16 107	41 471	...
Philippines					
Sulphur, crude	90 395	111 550	137 350	165 019	138 059
Sulphur, sublimed & precipitated	6 435	56	288	2 318	376
Saudi Arabia					
Pyrites	9 691	----	2 346	44	...
Singapore					
Sulphur, crude	83	1 311	71	92	82
Sulphur, sublimed & precipitated	77	24	28	5	112
Sri Lanka					
Sulphur, crude	1 123	1 352	1 331	----	400
Sulphur, sublimed & precipitated	54	86	137	...	...
Syria					
Sulphur, crude	32 029	10 306	33 716	*30 000	...
Taiwan					
Sulphur	301	407	450	151	477
Sulphur, sublimed & precipitated	182 328	144 490	132 529	152 530	63 210
Thailand					
Sulphur, refined	46 648	95 994	73 210	144 482	111 891
Sulphur, sublimed & precipitated	276	157	5 674	4 837	520
Vietnam					
Sulphur	35 400	88 700	87 600	97 600	103 800
Australia					
Pyrites	1 122	1 828	168	194	272
Sulphur	158 739	230 408	244 825	326 526	480 347
Sulphur, sublimed & precipitated	171	283	599	1 418	663
New Zealand					
Sulphur, crude	191 575	180 091	178 045	255 211	236 776
Sulphur, sublimed & precipitated	763	554	510	529	342

Note(s) :-

(a) Years ended 31 March following that stated

(b) Years ended 30 June of that stated

Production of Talc

Country	1997	1998	1999	2000	2001
Austria	141 984	137 114	129 576	133 060	137 776
Finland	435 000	495 000	509 000	502 000	477 000
France	362 200	391 200	405 300	409 000	417 000
Germany	13 035	15 473	*15 000	*15 000	...
Greece	100	150	2 860	2 300	2 073
Italy	140 816	133 557	123 503	121 068	*120 000
Macedonia	*1 000	*1 000	*1 000	*1 000	*1 000
Norway	*28 000	*26 000	26 758	26 660	24 626
Portugal	8 236	9 882	9 554	9 895	8 362
Romania	7 578	8 134	8 229	7 850	7 237
Russia	97 561	78 956	107 690	105 549	111 645
Slovakia	6 100	2 820	1 900	1 800	2 600
Spain	118 355	110 150	117 581	115 154	119 000
Sweden	25 000	24 000	19 000	20 000	14 000
Turkey					
Pyrophyllite	38 000	37 000	48 358	54 278	*50 000
United Kingdom	5 749	4 937	6 256	4 832	4 947
Egypt (d)	30 282	35 119	*35 000	*35 000	*35 000
Morocco					
Talc	3 060	3 324	2 975	4 069	5 454
Pyrophyllite	16 790	22 565	11 680	24 359	20 757
South Africa					
Talc	12 574	11 328	7 873	5 600	3 030
Pyrophyllite	10 610	11 500	13 277	11 989	14 047
Zimbabwe	1 023	1 039	1 081	989	1 273
Canada	73 000	71 000	78 000	86 000	57 000
Mexico	13 586	18 843	18 981	20 569	77 650
USA	1 050 000	971 000	925 000	851 000	853 000
Argentina					
Talc	13 380	14 585	8 971	*8 000	*8 000
Pyrophyllite	4 242	3 450	3 400	*3 400	*3 400
Brazil					
Talc (b)	265 042	258 695	216 454	309 963	*300 000
Agalmatolite (b)	111 083	98 445	105 306	131 784	*130 000
Pyrophyllite (b)	18 259	11 173	11 451	*10 000	*10 000
Chile	3 986	3 772	2 231	2 421	4 177
Colombia	14 832	*15 000	*15 000	*15 000	*15 000
Peru	6 735	11 165	12 085	9 668	11 165
Uruguay	1 133	972	2 905	2 093	1 695
Venezuela	*32 000	*32 000	*32 000	*32 000	*32 000
Bhutan	*3 000	*3 200	*3 400	*3 700	*3 800
China	4 068 900	1 745 000	1 136 000	1 975 070	2 555 500
India					
Pyrophyllite (e)	102 875	91 924	106 268	148 346	146 051
Steatite (e)	474 957	481 554	557 112	595 724	548 845
Indonesia					
Pyrophyllite	32 594	22 611	...	...	...
Iran (a)	29 178	30 100	44 136	...	...
Japan					
Talc	*53 000	*50 000	*50 000	*50 000	*45 000
Pyrophyllite	620 344	496 605	437 834	433 411	403 137
Korea, Dem. P.R. of	*180 000	*150 000	*120 000	*120 000	*120 000
Korea, Republic of					
Talc	25 751	24 411	15 313	11 344	47 712
Pyrophyllite	994 366	843 609	754 657	917 972	1 101 825
Nepal (c)	6 809	5 553	6 257	5 852	3 923
Pakistan (d)	45 414	48 927	67 670	47 977	50 733
Taiwan	1 331	73	1 816	----	130
Thailand					
Talc	7 139	2 172	4 960	7 390	6 838
Pyrophyllite	304 524	40 241	38 053	46 011	59 602

Production of Talc

tonnes

Country	1997	1998	1999	2000	2001
Australia					
Talc (d)	185 601	199 315	190 037	178 545	175 000
Pyrophyllite (d)	337	702	347	1 727	*1 500
World Total	10 200 000	7 300 000	6 600 000	7 700 000	8 400 000

Note(s):

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

Exports of Talc

Country	1997	1998	1999	2000	2001
Austria	146 131	157 732	159 206	129 226	162 302
Belgium-Luxembourg	74 238	77 276	79 086	86 536	81 767
Finland (a)	*141 000	*145 000	*182 000	*212 000	*130 000
France	209 299	216 966	213 881	229 681	191 750
Germany	6 041	6 273	4 215	5 216	6 048
Greece	116	972	1 597	1 413	31 989
Italy	78 612	80 228	87 787	98 344	89 839
Macedonia	844	612	695	562	557
Netherlands	58 185	70 522	87 984	162 006	145 951
Norway	36 512	35 488	33 688	31 249	30 480
Russia	1 144	257	732	1 002	...
Slovakia	4 500	2 600	1 777	1 510	1 549
Spain	49 945	43 887	55 137	58 247	63 657
Sweden	24 243	18 351	17 964	10 884	5 138
Switzerland	870	721	606	1 048	1 070
Turkey	165	208	122	56	120
United Kingdom	3 100	4 574	3 175	3 812	4 034
Egypt	5 887	8 481	4 233	...	17 185
South Africa					
Talc	56	104	96	40	16
Pyrophyllite	*6 000	*7 000	*8 000	*8 000	*7 000
Canada	26 276	29 661	44 447	58 506	45 791
USA	188 902	158 872	150 654	163 472	141 986
Brazil	3 914	3 925	6 028	7 074	6 299
Peru	5 454	5 670	5 665	6 052	5 004
China	1 021 001	766 019	732 480	804 431	799 297
Hong Kong (c)	10 375	9 650	7 311	6 501	2 436
India (b)	27 361	32 224	12 378	24 285	...
Japan	7 755	5 222	6 830	8 920	11 640
Korea, Republic of					
Talc	2 402	1 099	445	1 429	2 761
Pyrophyllite	253 195	152 290	175 757	151 463	129 941
Singapore	1 931	1 563	2 184	1 561	1 709
of which, re-exports	1 922	1 544	1 576	914	744
Taiwan	4 809	6 377	6 984	9 026	10 851
Thailand	2 873	2 589	3 621	2 945	3 232
Australia	91 307	2 796	111 610	134 188	163 804

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	1997	1998	1999	2000	2001
Austria	19 304	15 748	42 804	25 441	50 199
Belarus	...	1 567	1 252	1 346	1 672
Belgium-Luxembourg	96 181	98 211	92 906	104 074	105 971
Croatia	1 366	1 007	1 094	1 055	1 395
Cyprus	240	233	255	186	181
Czech Republic	6 669	6 313	7 802	8 659	9 082
Denmark	11 877	12 991	13 668	13 476	13 156
Finland	866	5 927	4 934	4 881	4 027
France	40 503	49 837	36 144	41 304	41 095
Germany	228 450	213 254	212 333	258 529	244 678
Greece	4 614	7 014	5 129	10 325	6 528
Hungary	8 181	9 077	9 245	10 224	9 698
Irish Republic	986	1 083	1 210	1 783	1 848
Italy	92 190	94 832	101 338	99 879	133 646
Netherlands	81 171	116 447	181 949	167 896	89 378
Norway	14 868	16 776	11 795	12 722	8 762
Poland	21 600	14 900	15 061	13 450	14 274
Portugal	12 511	14 432	15 284	14 873	14 354
Romania	553	520	678	804	1 038
Russia	3 301	5 091	6 961	9 521	...
Slovakia	600	500	382	433	711
Slovenia	...	4 417	3 382	3 639	3 990
Spain	43 173	49 177	60 767	60 728	63 627
Sweden	25 309	30 967	31 823	42 571	34 297
Switzerland	14 284	14 183	15 836	15 159	15 385
Turkey	6 933	8 576	8 443	12 809	7 026
United Kingdom	83 013	76 744	57 439	61 975	66 737
Yugoslavia, Federal Republic of	960	1 049	819	1 040	1 250
Algeria	2 750	2 169	2 029	2 801	...
Egypt	638	2 705	3 149	...	1 593
Ethiopia	135	73	144	409	...
Ghana	950	826	956	23 815	897
Kenya	...	3 565	4 998	3 267	...
Morocco	2 789	2 698	3 596	2 725	...
Nigeria	1 629	3 050	3 508	3 900	...
Senegal	...	265	449	1 023	1 115
South Africa	6 328	6 670	5 021	4 213	4 114
Tunisia	3 082	2 668	4 103	3 604	...
Canada	55 281	47 459	57 960	61 786	69 118
Costa Rica	1 344	2 593	1 800	2 146	1 975
El Salvador	662	793	658	545	790
Guatemala	563	575	549	666	962
Honduras	259	494	609	449	...
Jamaica	515	334	446	329	...
Mexico	117 138	114 554	118 834	110 244	163 909
Panama	1 023	913	908	1 376	947
Trinidad & Tobago	575	556	...	485	498
USA	115 166	157 564	194 812	255 761	167 936
Argentina	4 101	4 684	7 932	5 156	4 972
Brazil	9 495	10 591	10 763	10 096	8 065
Chile	7 824	6 732	...	...	...
Colombia	5 109	5 763	3 616	4 790	5 001
Ecuador	2 090	2 254	1 395	2 016	2 943
Peru	1 056	897	1 023	1 206	980
Venezuela	7 223	4 320	9 768	5 136	12 908
China	8 179	8 971	10 274	14 171	9 833
Dubai	3 309	3 273	3 443	...	...
Hong Kong	5 498	3 331	7 832	12 653	8 497
Indonesia	88 156	50 920	48 382	81 486	65 852
Japan	579 930	453 587	404 581	403 286	362 623
Jordan	1 976	2 278	2 210	1 877	2 339
Korea, Republic of					
Talc	210 047	143 386	78 119	94 013	71 609
Pyrophyllite	10 983	7 293	11 651	23 951	24 198

Imports of Talc

Country	1997	1998	1999	2000	2001
Lebanon	...	1 488	1 520	1 334	1 549
Malaysia	58 800	50 479	...	46 150	...
Pakistan (a)	1 648	12 155	2 476	3 159	...
Philippines	16 785	18 937	23 746	26 902	23 985
Saudi Arabia	4 906	5 285	9 156	6 514	...
Singapore	29 604	12 057	14 079	14 713	14 056
Sri Lanka	2 500	2 195	2 323	...	...
Syria	3 909	12 378	4 171	...	...
Taiwan	132 001	133 462	136 148	138 474	102 316
Thailand	48 169	51 503	60 451	67 763	69 082
Australia	1 712	668	1 277	1 103	988
New Zealand	2 620	2 685	3 146	2 620	2 956

Note(s) :-

(a) Years ended 30 June of that stated

Production of Tantalum and Niobium Minerals

tonnes

Country	1997	1998	1999	2000	2001
Burundi					
Columbite-tantalite	46	30	42	31	123
Ethiopia					
Tantalite (a)	80	80	50	66	47
Mozambique					
Tantalite	...	...	...	----	27
Nigeria					
Tantalite	*25	*25	*25	*25	*25
Columbite	496	9	...	...	...
Rwanda					
Columbite-tantalite	269	378	147	561	241
Uganda					
Columbite-tantalite	...	----	----	3	11
Zimbabwe					
Columbite-tantalite	1	6	3	4	23
Canada					
Pyrochlore	5 700	5 600	5 800	6 000	7 800
Tantalite	180	190	173	190	277
Brazil					
Pyrochlore	42 255	(b) 51 000	(b) 42 100	63 117	...
Columbite-tantalite	*1 000	*3 100	*2 400	4 012	...
Djalmaite	...	14	23	84	...
China					
Columbite-tantalite	...	175	201	217	357
Malaysia					
Struverite	391	521	675	969	8 430
Australia					
Tantalite	1 010	1 150	1 300	1 800	2 400
World total concentrates	51 500	62 300	52 900	77 100	87 000
Nb content	*20 700	*24 600	*20 700	*30 100	*30 800
Ta content	*970	*1 720	*1 540	*2 400	*3 430

Note(s):

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

Country	1997	1998	1999	2000	2001
Austria					
Tantalum	43	47	66	118	98
Czech Republic					
Tantalum	601	551	417	276	106
France					
Tantalum	39	5	31	59	32
Germany					
Niobium & tantalum ores	72	191	308	739	379
Tantalum	165	154	246	336	258
Italy					
Tantalum	21	1	2	14	3
Portugal					
Tantalum	1	----	19	33	24
Russia					
Tantalum	7	10	6	12	...
Turkey					
Tantalum	20	12	15	1	----
United Kingdom					
Tantalum	349	290	354	569	395
Ethiopia					
Tantalum	30	60	85	43	...
Rwanda					
Columbite & tantalite	224	239	...	...	...
Zimbabwe					
Tantalum	20	15	15	...	...
Canada					
Niobium & tantalum ores (a)	31	8	172	207	345
USA					
Tantalum ores & concentrates	91	391	403	328	530
Tantalum	455	486	553	572	647
Brazil					
Columbite-tantalite	323	217	75	148	437
China					
Tantalum	123	176	239	308	211
Japan					
Tantalum	219	242	302	385	348
Kazakhstan					
Tantalum	100	97	197	93	...
Korea, Republic of					
Tantalum	...	16	19	69	49
Malaysia					
Columbite & tantalite	195	160	499	202	...
Singapore					
Tantalum (b)	...	251	49	411	111
Taiwan					
Tantalum	15	19	2	5	4
Thailand					
Tantalum ores & concentrates	2 740	...	341	450	...
Tantalum	68	46	85	156	81
Tin slags	4 107	816	290	...	----
Australia					
Tantalum	264	290	128	166	312

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	1997	1998	1999	2000	2001
Austria					
Tantalum	1	4	1	2	12
Czech Republic					
Tantalum	179	155	170	250	147
France					
Tantalum	17	27	15	16	20
Germany					
Tantalum	235	183	203	298	259
Irish Republic					
Tantalum	10	23	22	23	7
Netherlands					
Tantalum	...	...	41	72	63
Poland					
Tantalum	2	2	22	5	14
United Kingdom					
Tantalum	1 463	1 375	1 119	979	1 610
USA					
Tantalum concentrates	908	1 218	992	2 068	2 240
Niobium concentrates	131	70	95	151	126
Tantalum	400	829	945	1 108	1 281
Niobium	423	563	468	606	1 050
China					
Tantalum	135	203	257	356	219
Hong Kong					
Tantalum	3	8	61	95	12
India					
Niobium & tantalum ores (a)	266	143	133	2	...
Japan					
Niobium ores & concentrates	29	57	56	64	...
Tantalum	128	154	287	409	251
Korea, Republic of					
Tantalum	26	35	38	65	46
Taiwan					
Tantalum	2	2	6	50	6
Thailand					
Tantalum	6	13	23	29	23
Australia					
Tantalum	12	11	2	10	4

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	1997	1998	1999	2000	2001
Portugal	3 566	2 958	2 163	1 246	1 201
Russia	7 500	7 000	5 200	6 600	5 500
United Kingdom	2 396	448	----	----	----
Burundi	15	9	13	7	4
Nigeria	2 800	1 900	*1 500	*2 000	1 300
Rwanda	155	440	359	400	248
Bolivia	12 898	11 308	12 417	12 503	12 039
Brazil	19 065	14 607	13 200	13 773	13 048
Peru (a)	27 953	25 907	30 618	37 410	38 182
China	67 500	70 100	80 100	99 400	93 000
Indonesia	55 174	53 959	47 754	51 629	56 250
Kazakhstan	500	500	500	500	----
Laos	1 030	595	404	578	530
Malaysia	5 065	5 754	7 339	6 307	4 972
Mongolia	10	----	----	----	----
Myanmar	335	*90	*130	*180	*80
Thailand	550	1 460	2 450	1 700	1 720
Vietnam	*4 800	*4 500	*4 500	*4 500	*4 500
Australia	10 168	10 204	10 011	9 106	9 840
World Total	221 000	212 000	219 000	248 000	242 000

Note(s):

(a) Recoverable

Tin

Smelter Production of Tin

tonnes

Country	1997	1998	1999	2000	2001
Russia	9 200	4 100	4 000	5 200	5 100
Nigeria	70	*100	*100	*100	*600
Mexico	1 188	1 083	1 262	1 204	1 115
Bolivia (a)	16 853	11 102	11 166	9 353	11 292
Brazil	17 525	14 342	12 787	13 823	12 109
Peru	8 759	13 928	17 342	17 357	25 070
China	67 700	79 300	90 800	110 200	104 900
India	3 700	3 700	*3 600	*3 600	*3 600
Indonesia	52 577	53 997	48 340	46 432	44 600
Malaysia	34 823	27 201	28 913	26 228	30 417
Thailand	11 984	15 353	17 306	17 076	22 387
Vietnam	2 790	2 320	1 693	1 803	1 700
Australia	605	655	585	735	1 094
World Total	228 000	227 000	238 000	253 000	264 000

Note(s):

(a) Refined, including alloys

Exports of Tin

Country	1997	1998	1999	2000	2001
Austria					
Unwrought (a)	102	78	106	51	80
Scrap	179	241	294	167	206
Belgium-Luxembourg					
Unwrought	7 642	7 518	7 097	8 031	7 897
Unwrought alloys	211	309	206	433	338
Scrap	479	81	167	108	116
Czech Republic					
Unwrought (a)	219	15	109	20	38
Denmark					
Scrap	137	153	114	113	94
Estonia					
Scrap	8	172	336	592	54
Finland					
Unwrought alloys	238	90	63	17	91
Scrap	64	148	101	173	83
France					
Unwrought	160	233	283	282	350
Unwrought alloys	715	651	359	378	627
Scrap	2 805	3 165	2 274	1 612	1 484
Germany					
Unwrought	426	395	854	575	1 089
Unwrought alloys	648	1 065	826	1 108	1 178
Scrap	559	568	509	309	507
Irish Republic					
Scrap	45	154	78	207	304
Italy					
Unwrought (a)	152	543	200	248	268
Scrap	185	243	140	195	222
Netherlands					
Unwrought	743	7 466	6 818	2 976	1 845
Unwrought alloys	691	568	816	449	102
Scrap	265	1 308	563	483	511
Portugal					
Concentrates	6 927	6 257	4 155	2 332	2 395
Russia					
Concentrates	2 538	2 303	4 315	3 241	790
Unwrought (a)	7 608	2 103	792	1 747	1 660
Spain					
Unwrought (a)	691	1 544	257	669	218
Scrap	654	169	91	94	111
Sweden					
Unwrought (a)	260	361	282	390	329
Scrap	115	415	462	305	125
Switzerland					
Unwrought (a)	105	80	95	64	84
Scrap	171	127	136	97	105
United Kingdom					
Concentrates	3 646	1 292	173	121	59
Unwrought	281	3 396	88	146	426
Unwrought alloys	1 759	2 100	2 239	2 993	2 485
Scrap	875	1 356	3 631	1 322	2 256
Burundi					
Concentrates	20 935	----	18 408	9 978	5 398
Nigeria					
Unwrought	*100	*100	*100	*100	...
Rwanda					
Concentrates	327	219	...	...	...
South Africa					
Scrap	312	197	7 355	14 516	26 365
Canada					
Unwrought (a)	988	467	577	557	438
Scrap	740	2 946	1 340	929	2 849
USA					
Unwrought (a)	6 043	6 284	8 075	8 721	5 188
of which, re-exports	1 380	1 228	1 341	2 101	834
Scrap	7 507	9 504	8 544	5 977	3 356

Exports of Tin

tonnes

Country	1997	1998	1999	2000	2001
Bolivia					
Concentrates	3 554	2 617	1 842	3 553	2 008
Unwrought	12 424	10 382	11 770	12 063	11 072
Brazil					
Unwrought (a)	12 930	6 988	6 469	7 544	6 417
Peru					
Concentrates	31 627	20 900	21 855	27 619	18 428
Unwrought	10 949	6 599	3 241	21 703	1 294
China					
Unwrought	30 663	45 489	54 159	62 418	45 803
Unwrought alloys	10 425	8 084	10 424	15 314	11 446
Dubai					
Unwrought	17	100	346	...	...
Hong Kong					
Concentrates (b)	914	132	----	250	5
Unwrought (a)	6 078	11 730	6 520	8 297	6 782
of which, re-exports	5 991	10 634	6 367	7 941	6 724
Scrap	229	270	15	21	2
India					
Unwrought (a) (c)	6 348	483	423	94	...
Indonesia					
Unwrought (a)	49 908	52 100	46 435	44 427	43 449
Scrap	181	198	791	911	395
Japan					
Unwrought (a)	211	289	310	341	267
Scrap	1 161	760	697	975	568
Jordan					
Scrap	1 720	...	...	...	...
Korea, Republic of					
Unwrought (a)	565	3 730	276	276	292
Scrap	12	37	50	173	223
Laos					
Concentrates (d)	730	551	332	584	490
Malaysia					
Unwrought (a)	31 785	27 093	27 280	24 042	...
Scrap	531	704	652	128	...
Singapore					
Concentrates (b)	1 617	2 057	5 909	3 706	16 427
Unwrought	43 502	40 655	43 768	37 145	41 168
of which, re-exports	...	38 891	42 163	35 031	39 015
Scrap	1 250	261	351	319	303
Taiwan					
Unwrought (a)	248	386	364	606	693
Scrap	760	1 529	2 314	2 868	1 023
Thailand					
Unwrought (a)	7 983	11 163	12 267	13 036	18 945
Scrap	97	148	169	51	168
Vietnam					
Unwrought	2 790	2 320	1 693	1 803	1 700
Australia					
Concentrates	17 069	15 590	16 651	14 254	15 179
Unwrought (a)	537	542	508	277	98
Scrap	1 789	1 492	681	1 510	3 650

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

Country	1997	1998	1999	2000	2001
Austria					
Unwrought (a)	806	641	820	875	838
Scrap	44	86	114	136	186
Belarus					
Unwrought (a)	...	101	168	150	120
Belgium-Luxembourg					
Unwrought	1 833	1 579	1 063	983	1 050
Unwrought alloys	584	1 062	1 227	2 128	2 208
Scrap	2 259	3 953	3 006	4 186	3 312
Croatia					
Unwrought (a)	105	74	73	74	114
Czech Republic					
Unwrought (a)	587	436	483	556	592
Estonia					
Unwrought	...	...	...	83	301
Finland					
Unwrought (a)	352	377	111	127	199
France					
Concentrates	230	1 008	203	37	65
Unwrought	8 104	8 505	7 596	7 722	8 637
Unwrought alloys	386	905	686	614	409
Scrap	1 740	1 957	1 163	1 236	1 555
Germany					
Unwrought	20 735	21 195	18 620	21 519	23 984
Unwrought alloys	782	768	473	528	847
Scrap	400	416	572	758	681
Greece					
Unwrought (a)	502	296	153	307	503
Hungary					
Unwrought (a)	332	314	443	562	292
Irish Republic					
Unwrought (a)	363	288	869	435	655
Italy					
Unwrought	5 206	6 335	5 726	6 068	6 171
Unwrought alloys	590	437	313	185	204
Netherlands					
Unwrought	12 945	13 345	10 042	5 603	4 346
Unwrought alloys	989	1 116	1 094	888	1 007
Scrap	370	793	508	1 008	609
Norway					
Unwrought	477	402	387	457	560
Unwrought alloys	81	104	130	96	111
Poland					
Unwrought	1 298	1 090	957	1 194	1 009
Portugal					
Unwrought	748	940	834	1 505	780
Unwrought alloys	276	411	92	246	210
Romania					
Unwrought (a)	434	412	204	191	333
Russia					
Concentrates	3 870	310	390	1 236	800
Unwrought (a)	181	410	1 538	2 833	2 076
Scrap	...	...	102	491	...
Slovakia					
Unwrought	8	746	836	651	624
Spain					
Concentrates	15	2	358	436	399
Unwrought	4 429	4 109	3 458	4 875	6 313
Unwrought alloys	719	497	435	600	175
Scrap	97	42	47	2 242	2 830
Sweden					
Unwrought	549	663	634	807	608
Unwrought alloys	276	308	271	358	364
Scrap	112	164	95	62	130
Switzerland					
Unwrought (a)	851	864	814	824	1 017
Turkey					
Unwrought (a)	1 234	1 335	1 267	1 864	1 275

Imports of Tin

tonnes

Country	1997	1998	1999	2000	2001
Ukraine					
Unwrought	288	48	33	408	...
United Kingdom					
Unwrought	14 768	10 753	9 120	9 190	6 857
Unwrought alloys	1 303	1 220	952	1 760	2 442
Scrap	456	477	393	388	179
Yugoslavia, Federal Republic of					
Unwrought (a)	206	123	28	106	131
Egypt					
Unwrought	209	380	232	*240	...
Ethiopia					
Unwrought	971	1 400	...	...	...
Morocco					
Unwrought (a)	120	113	76	92	...
South Africa					
Unwrought (a)	2 391	1 823	2 316	2 327	2 310
Zimbabwe					
Unwrought	76	*110	111	...	...
Canada					
Unwrought	4 659	4 223	7 663	5 397	3 650
Scrap	701	451	576	431	418
Mexico					
Concentrates	1 746	1 541	1 798	1 658	907
Unwrought	1 534	2 772	2 647	3 035	2 545
Scrap	12	55	227	137	50
USA					
Unwrought	40 580	44 105	48 012	44 937	43 253
Unwrought alloys	3 869	1 319	3 090	4 372	3 828
Scrap	1 961	4 187	2 736	2 341	3 698
Argentina					
Unwrought	1 280	1 159	1 100	979	854
Bolivia					
Concentrates	8 550	----	26	----	----
Chile					
Unwrought	797	552	439	690	709
Colombia					
Unwrought (a)	291	336	234	231	407
Peru					
Unwrought (a)	154	147	88	5	...
Venezuela					
Unwrought (a)	353	738	323	263	396
China					
Concentrates	509	692	871	2 077	3 475
Unwrought	1 138	1 040	1 291	1 629	2 812
Unwrought alloys	1 512	1 948	2 498	3 306	3 674
Dubai					
Concentrates	706	40	----	...	...
Unwrought	735	938	505	...	...
Scrap	...	...	682	...	...
Hong Kong					
Concentrates	1 699	82	----	----	23
Unwrought	5 619	8 991	4 765	4 872	3 422
Unwrought alloys	1 435	6 240	5 308	6 104	4 372
Scrap	232	226	144	35	18
India					
Concentrates (c)	5 016	144	----	8	...
Unwrought (a) (c)	4 203	3 655	3 366	3 276	...
Scrap (c)	26	76	----	182	...
Iran					
Unwrought (b)	545	231	574	726	...
Israel					
Unwrought (a)	*300	*320	*230	130	...

Imports of Tin

Country	1997	1998	1999	2000	2001
Japan					
Unwrought	28 133	23 624	25 993	28 131	21 498
Unwrought alloys	2 488	2 480	2 901	4 355	2 662
Scrap	49	143	89	196	36
Kazakhstan					
Unwrought	*710	912	1 082	1 674	1 805
Korea, Republic of					
Unwrought	12 054	11 771	12 125	14 936	13 043
Unwrought alloys	198	257	390	777	395
Malaysia					
Concentrates (d)	30 454	21 961	20 110	19 052	*27 000
Unwrought	3 225	2 608	2 618	2 263	1 649
Unwrought alloys	3 907	6 627	3 699	4 196	...
Pakistan					
Scrap	138	341	173	99	...
Philippines					
Unwrought (a)	750	557	1 388	538	100
Saudi Arabia					
Unwrought	62	51	207	190	...
Singapore					
Concentrates	917	289	578	1 278	618
Unwrought	3 930	1 879	5 007	6 775	12 828
Scrap	652	589	540	128	428
Taiwan					
Unwrought	9 857	9 088	11 052	11 255	9 397
Unwrought alloys	2 862	3 026	2 489	2 766	1 966
Scrap	437	551	229	309	125
Thailand					
Concentrates	22 031	26 451	30 675	31 059	40 147
Unwrought (a)	87	69	195	439	199
Australia					
Unwrought (a)	2 476	2 750	2 544	1 849	2 017
New Zealand					
Unwrought (a)	57	99	107	72	99

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 20 March following that stated

(c) Years ended 31 March following that stated

(d) Sn content

Production of Titanium Minerals

tonnes

Country	1997	1998	1999	2000	2001
Norway					
Ilmenite	558 000	589 534	579 623	690 900	777 000
Ukraine					
Ilmenite	...	507 435	536 542	576 749	...
Rutile	...	...	110 951	132 517	...
Egypt					
Ilmenite (c)	53 496	57 495	...	...	...
South Africa					
Ilmenite (b)	*1 853 000	*1 836 000	*1 870 000	*1 853 000	*1 751 000
Rutile	*115 000	*115 000	*123 000	*123 000	*122 000
Canada					
Ilmenite (a) (b)	*2 400 000	*2 700 000	*2 500 000	*2 400 000	*2 700 000
USA	*800 000	*800 000	*600 000	*600 000	*600 000
Brazil					
Ilmenite	184 655	115 444	234 209	284 983	...
Rutile	2 196	2 323	3 388	3 139	...
China					
Ilmenite	218 200	58 200	57 708	116 200	120 843
India					
Ilmenite (d)	332 727	377 907	387 756	429 707	433 658
Rutile (d)	14 365	16 039	17 471	18 974	17 402
Korea, Republic of					
Ilmenite	344 808	241 865	203 413	168 664	161 988
Malaysia					
Ilmenite	167 504	124 689	127 695	124 801	129 750
Sri Lanka					
Ilmenite	22 533	37 148	----	----	----
Rutile	2 968	1 930	----	----	----
Vietnam					
Ilmenite	97 000	130 000	*120 000	*130 000	*170 000
Australia					
Ilmenite	2 233 000	2 413 000	1 936 000	2 146 000	2 017 000
Rutile	233 000	244 000	179 000	208 000	206 000
Leucoxene	32 000	32 000	33 000	37 000	30 000
World Total					
Ilmenite (wt of concs)	9 800 000	10 000 000	9 200 000	9 600 000	9 800 000
Rutile (wt of concs)	479 000	490 000	434 000	486 000	481 000
All forms (TiO ₂ content)	*5 000 000	*5 100 000	*4 700 000	*4 900 000	*5 000 000

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 2001 South Africa produced an estimated 1030000 tonnes (85% TiO₂) and Canada produced 990000 tonnes (80-95% TiO₂)

(c) Years ended 30 June of that stated

(d) Years ended 31 March following that stated

Exports of Titanium

Country	1997	1998	1999	2000	2001
Austria					
Metal	239	121	194	204	298
Oxides	2 194	2 195	2 904	2 487	2 876
Belarus					
Oxides	3 000	3 332	1 458	46	----
Belgium-Luxembourg					
Metal	569	870	885	986	1 348
Oxides	243 120	259 406	265 178	312 795	286 659
Czech Republic					
Oxides	21 682	23 423	26 505	29 376	26 626
Estonia					
Metal	49	39	75	83	145
Finland					
Metal	165	87	164	311	109
Oxides (b)	*57 200	*63 800	*84 400	*76 000	*114 700
France					
Titanium minerals	1 443	868	56	565	58
Metal	4 470	4 510	4 341	5 081	5 636
Oxides	212 059	184 689	171 636	198 541	180 271
Georgia					
Metal	----	205	539	151	704
Germany					
Titanium minerals	588	11 251	670	164	475
Metal	4 092	3 570	5 007	6 578	6 257
Oxides	277 670	267 996	287 789	299 268	290 191
Greece					
Oxides	1 400	820	1 159	1 281	1 380
Italy					
Metal	3 559	4 595	4 090	4 676	5 102
Oxides	37 264	39 792	34 989	26 858	24 393
Netherlands					
Titanium minerals	8 693	2 209	3 669	1 806	1 935
Metal	1 185	1 309	1 809	1 482	1 532
Oxides	68 626	71 717	(b) *54 900	(b) *54 400	(b) *46 900
Norway					
Titanium minerals	453 000	447 000	375 000	455 450	429 000
Metal	...	130	135	176	117
Oxides (b)	*28 100	*27 100	*21 800	*24 800	*26 200
Poland					
Oxides	19 600	47 600	21 406	21 280	24 215
Russia					
Metal	33 826	27 854	14 518	15 031	(b) *19 700
Slovenia					
Oxides	32 707	31 848	35 928	42 369	32 782
Spain					
Metal	236	350	327	308	434
Oxides	55 761	51 446	66 156	74 071	79 643
Sweden					
Metal	805	1 392	1 182	1 295	1 494
Oxides	6 013	7 150	7 983	8 401	13 653
Switzerland					
Metal	233	311	305	332	465
Oxides	567	443	385	1 723	525
Turkey					
Metal	62	788	295	245	92
Ukraine					
Titanium minerals	211 877	231 419	279 580	340 389	...
Metal	1 664	1 785	5 093	6 822	(b) *4 700
Oxides	35 418	39 543	57 896	75 996	...
United Kingdom					
Metal	12 379	11 443	9 328	14 152	13 597
Oxides	158 332	165 635	190 440	209 583	207 483
Sierra Leone					
Ilmenite	...	----	2 614	----	...
Rutile	...	----	4 757	----	...

Exports of Titanium

tonnes

Country	1997	1998	1999	2000	2001
South Africa					
Titanium minerals (b)	*258 400	*322 800	*224 200	*170 000	...
Titanium slag (b)	*525 900	*549 900	*523 000	*470 000	...
Oxides (b)	*10 300	*15 200	*11 100	...	...
Canada					
Titanium minerals & slag	*800 000	*1 000 000	*900 000	*1 000 000	*1 000 000
Metal	492	930	1 038	1 015	1 433
Oxides	80 855	88 167	85 949	73 380	65 402
Mexico					
Oxides	25 406	3 600	2 800	40 306	99 069
USA					
Titanium minerals	24 359	60 374	13 127	19 945	8 399
Metal	17 175	17 449	17 275	18 176	21 235
Oxides	405 072	400 614	385 709	463 472	417 065
Brazil					
Oxides	8 155	13 320	8 095	8 332	7 128
China					
Titanium minerals	18 673	1 828	12 144	31 028	16 193
Metal	2 108	1 721	1 399	1 045	1 317
Oxides	26 904	34 572	44 772	62 072	65 507
Hong Kong					
Oxides (c)	27 083	23 703	23 430	26 632	24 749
India					
Ilmenite (a)	109 312	64 955	55 168	50 171	...
Other titanium minerals (a)	8 955	6 744	13 390	8 581	...
Oxides (a)	846	4 173	1 154	1 246	...
Israel					
Metal (b)	*300	*200	*300	*400	*400
Japan					
Metal	24 193	19 418	16 802	16 856	24 057
Oxides	94 876	97 371	108 388	92 410	82 344
Kazakhstan					
Metal	18 493	17 571	8 817	8 136	14 145
Korea, Republic of					
Titanium minerals	36 190	24 320	18 430	59 970	53 246
Oxides	16 375	20 885	21 510	29 096	29 964
Kyrgyzstan					
Metal	(b) *100	45	----	...	...
Malaysia					
Ilmenite	146 600	67 260	103 630	102 473	155 606
Oxides	56 600	50 500	48 300	47 520	...
Saudi Arabia					
Titanium minerals	...	2 493	3 548	2 087	...
Oxides	45 000	25 118	11 478	57 486	...
Singapore					
Metal	...	84	143	535	420
Oxides	42 526	39 268	43 071	38 291	38 571
of which, re-exports	7 604	5 338	17 216	6 649	...
Sri Lanka					
Ilmenite	30 000	20	...	...	...
Rutile	100	80	(d) 160	...	...
Taiwan					
Metal	391	767	1 106	831	1 261
Oxides	47 795	72 876	81 366	92 894	96 893
Thailand					
Ilmenite	3 106	----	6 708	5 520	145
Vietnam					
Titanium minerals	90 000	99 000	*110 000	*120 000	*137 000

Exports of Titanium

Country	1997	1998	1999	2000	2001
Australia					
Ilmenite	1 349 892	1 285 873	1 051 000	*1 147 000	*912 000
Rutile	207 604	217 863	171 000	*189 000	*189 000
Leucoxene	33 623	21 094	31 000	54 000	49 000
Oxides	132 155	133 619	142 585	139 780	132 104

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

Imports of Titanium

tonnes

Country	1997	1998	1999	2000	2001
Austria					
Metal	510	608	454	683	1 594
Oxides	20 658	18 986	16 942	18 838	19 343
Belarus					
Oxides	*5 500	9 231	5 271	4 887	4 880
Belgium-Luxembourg					
Ilmenite	262	413	635	18 612	71
Other titanium minerals	50 007	82 705	83 099	115 497	56 785
Titanium slag	49 146	36 414	43 252	29 418	44 909
Metal	1 030	1 363	1 666	1 341	1 791
Oxides	163 638	179 944	170 623	224 621	224 507
Bulgaria					
Titanium minerals	670	942	671	690	...
Croatia					
Oxides	2 569	2 269	2 453	1 922	2 142
Cyprus					
Oxides	1 148	963	867	881	859
Czech Republic					
Titanium minerals	55 949	61 093	67 855	75 502	78 515
Metal	84	136	453	189	111
Oxides	3 113	3 002	3 191	3 970	4 394
Denmark					
Metal	1 097	785	323	823	891
Oxides	17 451	16 203	18 273	20 517	20 799
Estonia					
Oxides	963	1 412	888	1 085	1 273
Finland					
Titanium minerals	*103 000	*108 500	*95 000	*140 000	...
Metal	100	165	82	250	112
Oxides	8 860	9 082	9 617	8 808	9 007
France					
Ilmenite	52 490	81 127	53 667	182 583	112 466
Other titanium minerals	96 119	141 575	92 682	17 288	41 040
Titanium slag	92 773	...	116 357	48 117	256 420
Metal	7 343	7 472	6 638	7 757	8 459
Oxides	123 629	124 028	127 084	143 436	127 843
Germany					
Ilmenite	236 404	345 057	315 818	387 707	272 849
Other titanium minerals	195 479	277 325	275 515	170 381	132 952
Titanium slag	127 137	...	134 790	130 353	137 542
Metal	9 426	8 560	9 430	9 595	9 774
Oxides	153 104	182 501	169 879	196 901	189 674
Greece					
Titanium minerals	600	774	689	742	529
Oxides	20 728	22 639	20 946	20 719	18 389
Hungary					
Metal	135	234	181	345	49
Oxides	6 300	6 200	6 800	7 605	6 976
Irish Republic					
Oxides	3 740	3 411	3 947	4 101	3 931
Italy					
Titanium minerals	1 654	5 145	3 973	85 910	112 828
Titanium slag	67 407	...	69 236	16 764	...
Metal	5 031	6 254	5 794	5 904	6 126
Oxides	138 209	141 229	141 100	163 705	149 841
Latvia					
Oxides	...	1 128	766	873	998
Netherlands					
Ilmenite	...	6 085	31 567	55 587	33 524
Other titanium minerals	(b) 47 130	28 515	28 239	42 479	70 438
Titanium slag	...	...	17 509	9 877	9 848
Metal	3 104	2 397	3 505	4 101	3 099
Oxides	69 661	73 719	59 198	52 786	47 008
Norway					
Titanium minerals	352	122	19	----	...
Metal	638	1 139	670	407	623
Oxides	7 540	8 948	8 807	8 626	9 617

Imports of Titanium

Country	1997	1998	1999	2000	2001
Poland					
Titanium minerals	69 800	87 200	74 439	87 393	95 674
Metal	...	...	182	186	182
Oxides	13 900	15 700	21 414	26 324	24 027
Portugal					
Oxides	17 784	18 995	18 018	17 227	17 341
Romania					
Titanium minerals	2 219	3 281	1 517	3 017	2 544
Oxides	2 617	3 633	3 684	3 992	...
Russia					
Titanium minerals	89 925	93 599	63 408	75 478	...
Metal	1 049	2 615	1 449	665	...
Oxides	29 658	28 319	43 036	51 958	...
Slovakia					
Metal	...	...	164	335	142
Oxides	2 293	2 500	1 606	2 047	530
Slovenia					
Titanium minerals	11 700	11 565	11 533	12 462	18 676
Oxides	1 700	1 976	2 107	2 444	2 282
Spain					
Ilmenite	155 093	122 165	129 460	170 723	130 991
Other titanium minerals	1 706	2 181	1 958	2 020	1 844
Metal	1 583	1 957	2 301	1 498	3 407
Oxides	76 095	79 856	73 963	87 837	99 887
Sweden					
Titanium minerals	422	700	548	225	610
Metal	367	585	1 540	1 604	1 929
Oxides	36 856	35 384	39 550	40 747	45 034
Switzerland					
Metal	481	521	391	503	641
Oxides	19 861	19 737	19 090	21 423	17 678
Turkey					
Titanium minerals	5 514	5 824	5 464	6 077	2 953
Oxides	60 872	53 710	51 135	59 446	38 734
United Kingdom					
Ilmenite	156 649	100 765	95 473	134 861	112 447
Other titanium minerals	93 122	181 420	84 841	70 348	110 526
Titanium slag	99 308	119 386	120 890	160 738	110 697
Metal	28 117	30 712	26 883	27 331	30 752
Oxides	80 138	102 697	74 434	80 087	82 852
Yugoslavia, Federal Republic of					
Oxides	1 800	2 100	1 387	792	2 580
Algeria					
Oxides	5 778	8 636	7 588	8 376	...
Cameroon					
Oxides	...	758	593	699	709
Egypt					
Titanium minerals	1 346	1 324	1 775	...	1 477
Oxides	8 969	14 856	12 487	...	936
Ethiopia					
Oxides	644	853	596	367	...
Kenya					
Oxides	...	1 978	2 001	1 883	...
Mauritius					
Oxides	...	821	811	907	851
Morocco					
Oxides	6 468	8 110	7 767	8 400	...
Nigeria					
Oxides	5 546	4 056	23 806	5 174	...
South Africa					
Metal	288	133	172	307	567
Oxides	7 427	9 803	8 209	9 962	11 796
Sudan					
Oxides	...	6 650	...	...	...
Tunisia					
Oxides	3 990	4 344	5 554	5 248	...

Imports of Titanium

tonnes

Country	1997	1998	1999	2000	2001
Canada					
Titanium minerals	8 458	4 737	4 923	6 542	8 858
Metal	1 692	1 908	1 371	3 480	1 618
Oxides	110 686	117 814	111 959	98 625	89 187
Mexico					
Ilmenite	119 540	174 418	167 767	235 941	94 091
Rutile sand	1 245	1 088	743	295	85
Titanium slag	37 343	20 001	...	8 395	...
Metal	1 530	250	287	777	1 309
Oxides	57 539	55 984	39 808	46 812	47 485
USA					
Ilmenite	565 461	402 961	402 129	473 766	523 000
Rutile (c)	345 842	386 983	343 840	438 143	324 000
Titanium slag	429 919	626 258	677 723	532 744	594 000
Metal	37 547	27 772	17 843	19 321	31 521
Oxides	194 269	199 913	224 810	218 128	208 761
Argentina					
Titanium minerals	1 948	2 321	1 804	1 543	1 323
Oxides	30 465	31 625	30 564	31 389	26 022
Brazil					
Titanium minerals	1 195	1 062	220	1 508	...
Oxides	69 578	70 433	74 482	70 754	73 652
Chile					
Oxides	10 961	10 154	8 448	10 888	11 522
Colombia					
Oxides	16 052	13 812	13 284	16 449	14 639
Uruguay					
Oxides	2 582	2 771	2 763	2 977	2 963
Venezuela					
Oxides	13 578	11 293	11 786	15 026	13 859
China					
Titanium minerals	29 850	20 520	15 540	39 647	59 210
Metal	2 315	3 201	2 269	2 297	5 148
Oxides	100 610	89 782	120 037	157 013	177 065
Dubai					
Metal	296	241	371	...	...
Oxides	12 414	12 647	10 498	...	...
Hong Kong					
Metal	...	268	129	193	271
Oxides	38 452	34 287	33 388	34 619	28 003
India					
Titanium minerals (d)	7 230	35	0	138	...
Metal (d)	222	94	129	299	...
Oxides (d)	27 729	21 083	29 871	22 976	...
Indonesia					
Titanium minerals	1 500	2 575	1 637	2 777	3 095
Metal	...	138	120	195	358
Oxides	13 240	23 106	11 147	43 831	38 354
Iran					
Titanium minerals	...	5 024	3 680	2 045	...
Oxides	...	14 130	16 719	14 487	...
Israel					
Oxides	12 833	10 424	12 125	...	...
Japan					
Titanium minerals	408 705	468 445	461 267	416 718	485 829
Metal	13 041	11 694	4 096	7 527	10 332
Oxides	102 809	82 817	79 034	80 164	75 485
Jordan					
Oxides	3 487	3 776	4 615	3 588	4 365
Kazakhstan					
Titanium minerals	*30 000	34 341	23 104	15 366	25 949
Korea, Republic of					
Rutile sand	12 259	9 383	10 081	...	...
Titanium minerals	165 097	149 357	133 383	129 144	107 059
Metal	3 582	2 712	3 838	4 042	3 834
Oxides	91 455	65 826	94 641	100 290	104 683

Imports of Titanium

Country	1997	1998	1999	2000	2001
Lebanon					
Oxides	...	3 124	3 274	2 947	3 423
Malaysia					
Titanium minerals	132 420	72 872	106 328	111 429	...
Oxides	19 447	16 200	11 531	22 064	...
Oman					
Oxides	851	1 063	960	1 332	961
Pakistan					
Oxides (a)	7 895	9 611	916	2 140	...
Philippines					
Titanium minerals	1 422	920	1 346	1 921	1 338
Oxides	29 161	19 222	27 123	28 950	3 087
Saudi Arabia					
Titanium minerals	105 695	50 157	85 253	30 090	...
Oxides	1 598	2 814	5 372	6 148	...
Singapore					
Titanium minerals	52 849	32 307	49 842	44 723	45 838
Metal	...	143	503	74	146
Oxides	21 163	18 774	23 969	22 952	29 506
Sri Lanka					
Oxides	2 300	2 451	2 392	*2 300	...
Taiwan					
Titanium minerals	117 431	103 828	99 337	114 089	113 526
Metal	3 467	2 419	2 375	3 127	4 649
Oxides	45 186	60 625	67 275	66 338	59 617
Thailand					
Rutile	6 153	(b) 4 787	3 289	2 703	(b) 7 885
Other titanium minerals	5 792	...	1 900	4 579	...
Metal	102	56	109	109	129
Oxides	42 550	26 244	33 610	42 512	41 569
Australia					
Titanium minerals	299	15 620	22	85	37
Metal	576	555	597	474	563
Oxides	330	1 082	12 104	17 733	17 894
New Zealand					
Oxides	9 639	7 699	9 849	8 457	8 638

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

Mine Production of Tungsten

tonnes (metal content)

Country	1997	1998	1999	2000	2001
Austria	1 138	1 077	1 218	1 237	1 384
Portugal (c)	1 029	821	435	743	700
Russia (c)	4 500	3 000	3 000	3 000	3 000
Rwanda	78	30	54	144	197
Uganda	----	8	0	----	17
Mexico	179	130	10	----	----
Bolivia	513	497	334	393	532
Brazil (a)	40	...	13	14	*14
Peru	226	60	----	----	----
China	25 030	23 845	20 200	23 453	27 473
Korea, Dem. P.R. of	*900	*800	*700	*700	*700
Kyrgyzstan	*100	*100	*100	*100	*100
Malaysia	...	...	...	----	268
Mongolia	33	46	27	52	63
Myanmar (b)	272	178	87	74	71
Thailand (c)	28	31	28	28	47
Uzbekistan	*250	*200	*200	192	260
Vietnam	210	----	----	----	----
World Total	34 500	30 800	26 400	30 100	34 800

Note(s):

- (a) Mainly scheelite
- (b) Including tungsten content of tin-wolframite concentrates
- (c) Wolframite and scheelite

Exports of Tungsten

Country	1997	1998	1999	2000	2001
Albania					
Ore	...	...	1 009	171	...
Austria					
Metal	1 060	830	1 399	1 062	967
Belgium-Luxembourg					
Metal	177	157	213	255	448
Carbide	96	128	28	31	26
Czech Republic					
Ore	137	106	128	61	...
Metal	116	174	133	372	413
Denmark					
Metal	18	41	9	29	10
Estonia					
Ore	5 736	711	278	224	71
Metal	...	...	309	287	307
France					
Metal	518	449	420	2 755	911
Carbide	350	...	357	394	366
Germany					
Metal	1 555	1 426	1 469	1 942	2 418
Irish Republic					
Metal	33	59	83	194	96
Italy					
Metal	373	446	196	171	245
Netherlands					
Ore	20	388	97	10	55
Metal	432	417	237	182	380
Poland					
Ores & concentrates	----	342	461	...	...
Metal	97	33	10	150	123
Portugal					
Ore	1 881	1 269	601	715	914
Metal	26	59	86	546	415
Russia					
Ore	8 843	5 446	4 639	4 906	...
Metal (d)	*510	*770	*1 350	*910	*520
Spain					
Metal	108	71	68	185	56
Sweden					
Metal	134	53	50	14	32
Carbide	255	...	227	444	561
Switzerland					
Metal	137	171	206	154	121
United Kingdom					
Metal	1 939	2 300	1 335	4 647	1 874
Carbide	270	291	481	8	20
South Africa					
Metal	233	229	241	291	334
Uganda					
Ore	40	51	35	25	75
Mexico					
Ores & concentrates	279	198	39	0	2
USA					
Metal	1 832	2 693	2 639	2 337	2 774
Ammonium paratungstate (a)	121	287	103	53	257
Carbide	1 104	1 210	701	983	1 950
Bolivia					
Ore	917	882	589	692	937
Peru					
Ores & concentrates	328	56	109	90	46
China					
Ores & concentrates	751	190	80	0	...
Metal	1 041	1 561	1 946	2 738	4 379
Ammonium paratungstate	14 596	12 675	10 507	9 276	...

Exports of Tungsten

tonnes

Country	1997	1998	1999	2000	2001
Hong Kong					
Ore (c)	362	245	104	63	404
India					
Metal (b)	95	83	172	23	...
Israel					
Metal (d)	*340	*480	*390	*450	*560
Japan					
Metal	1 300	1 586	1 362	1 538	2 021
Korea, Republic of					
Metal	608	700	607	895	903
Carbide	1 071	1 158	...	1 133	...
Myanmar					
Ores & concentrates	42	85	----	----	...
Singapore					
Ore (c)	464	297	242	175	217
Metal	189	177	267	258	470
Taiwan					
Metal	183	319	143	95	139
Thailand					
Ore	303	65	107	40	129
Australia					
Ores & concentrates	16	20	20	22	...
Metal	52	34	2	2	40

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

Country	1997	1998	1999	2000	2001
Austria					
Ore	1 800	1 500	1 000	1 000	...
Metal	355	459	380	358	399
Carbide	...	...	278	449	703
Belgium-Luxembourg					
Metal	382	378	284	384	405
Carbide	100	122	39	36	39
Czech Republic					
Metal	125	89	52	184	136
Denmark					
Metal	17	5	41	109	5
Estonia					
Ore	5 521	198	296	132	68
Metal	...	58	327	277	408
Finland					
Metal	86	76	61	100	119
France					
Metal	393	685	877	744	889
Carbide	224	...	462	534	628
Germany					
Ore	272	479	805	77	378
Metal	2 376	3 131	3 792	4 392	4 914
Carbide	1 059	1 091	874	1 182	1 664
Irish Republic					
Metal	586	335	235	79	45
Italy					
Metal	173	278	363	292	301
Carbide	430	...	313	360	363
Netherlands					
Ore	171	405	215	397	144
Metal	*400	270	169	247	584
Carbide	...	...	218	74	77
Poland					
Ores & concentrates	121	97	137	1	...
Metal	11	28	28	178	276
Portugal					
Carbide	75	...	96	75	82
Russia					
Metal	87	158	116	87	...
Spain					
Metal	45	52	51	556	68
Sweden					
Metal	393	338	461	356	990
Carbide	839	...	933	1 036	1 239
Switzerland					
Metal	146	112	122	113	220
United Kingdom					
Metal	1 889	2 055	1 819	2 176	2 538
Carbide	1 357	2 293	752	829	1 381
Nigeria					
Metal	8	2	35	5	...
South Africa					
Metal	74	155	127	159	66
Canada					
Metal	217	201	150	215	186
USA					
Ore	8 616	8 606	4 696	3 632	4 295
Metal	2 462	2 485	2 128	2 002	2 432
Ammonium paratungstate (a)	2 100	1 920	1 920	2 270	2 720
Carbide	699	999	863	1 064	932
China					
Ore	2 564	1 474	1 950	563	791
Metal	138	127	312	404	411

Imports of Tungsten

tonnes

Country	1997	1998	1999	2000	2001
Hong Kong					
Ore	189	1	1	62	269
Metal	92	109	349	67	142
India					
Ore (b)	440	210	130	44	...
Metal (b)	294	387	161	315	...
Indonesia					
Metal	316	128	83	128	100
Japan					
Ore	1 473	1 881	1 794	1 514	951
Metal	895	750	629	1 578	1 418
Korea, Republic of					
Metal	124	170	176	266	275
Kyrgyzstan					
Metal	15	12	14	25	22
Malaysia					
Metal	793	273	...	260	...
Singapore					
Ore	103	66	17	29	211
Metal	167	147	168	229	349
Taiwan					
Metal	197	264	374	340	519
Thailand					
Metal	76	38	140	234	80
Australia					
Metal	110	96	68	115	97

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	1997	1998	1999	2000	2001
Hungary	*200	*100	----	----	----
Russia	*9 000	*9 000	*9 000	*9 000	*9 000
South Africa	15 590	18 868	17 612	18 021	...
USA	*2 700	*2 400	...	----	----
China	*15 000	*15 500	*26 000	*30 000	*30 000
Kazakhstan	*900	*1 000	*1 000	*1 000	*1 000
Australia	...	...	----	1 510	2 494
World Total	43 400	46 900	53 600	59 500	60 500

Note(s):

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

Exports of Vanadium

tonnes

Country	1997	1998	1999	2000	2001
Belgium-Luxembourg					
Vanadiferous residues	4 097	6 803	6 395	5 281	4 408
Pentoxide	4	28	8	49	26
Vanadium-titanium pig iron	149	1	...	63 577	...
Denmark					
Vanadium-titanium pig iron	13	67	108	125	...
France					
Pentoxide	2	86	322	13	10
Metal	59	2	22	16	0
Germany					
Vanadiferous residues	364	189	282	358	630
Pentoxide	296	163	183	91	83
Metal	659	581	133	336	359
Italy					
Vanadiferous residues	55	1 735	1 748	3 502	...
Netherlands					
Vanadiferous residues	...	...	687	291	207
Pentoxide	217	258	214	222	253
Metal	...	...	...	339	179
Russia					
Pentoxide	4 453	2 430	7 638	8 431	...
Metal	61	51	35	52	...
United Kingdom					
Metal	188	...	...	...	...
South Africa					
Pentoxide (a)	15 723	17 531	15 871	15 865	17 262
Mexico					
Vanadiferous residues	1 384	4 298	2 186	4 112	3 740
USA					
Pentoxide	1 108	1 165	647	996	1 055
Metal	155	346	322	106	33
China					
Pentoxide	6 465	7 586	6 167	6 872	5 077
Korea, Republic of					
Vanadiferous residues	...	2 925	4 728	3 095	6 616
Australia					
Pentoxide	...	...	...	1 674	5 088

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

Country	1997	1998	1999	2000	2001
Austria					
Vanadiferous residues	*27 000	*27 000	*29 000	*27 000	*26 000
Ores & concentrates	...	50	873	506	527
Pentoxide	3 110	2 030	2 752	2 206	1 477
Metal	45	88	6	12	0
Belgium-Luxembourg					
Vanadiferous residues	15	...	314	911	1 286
Pentoxide	3 342	1 389	1 707	3 142	2 142
Czech Republic					
Pentoxide	...	360	3 641	5 495	5 172
Metal	1	26	70	40	...
France					
Ores & concentrates	509	374	156	162	...
Pentoxide	406	476	362	461	328
Metal	875	114	264	130	54
Germany					
Vanadiferous residues	43	133	903	127	...
Pentoxide	926	918	828	614	657
Metal	24	47	18	20	60
Italy					
Pentoxide	373	447	166	74	199
Netherlands					
Vanadiferous residues	...	345	225	127	251
Pentoxide	640	2 983	1 198	1 312	653
Norway					
Metal	...	17	39	58	51
Russia					
Pentoxide	204	232	1 718	1 139	...
Metal	534	316	132	69	...
Spain					
Vanadiferous residues	122	181	...	----	...
Sweden					
Metal	58	96	59	49	77
United Kingdom					
Pentoxide	161	156	306	277	319
Metal	628	690	373	272	381
South Africa					
Pentoxide	91	116	34	22	...
Tunisia					
Pentoxide	334	92	181	161	...
Canada					
Pentoxide	2 316	2 332	1 308	689	504
USA					
Vanadiferous residues	9 543	24 069	13 840	20 250	*17 000
Pentoxide	1 425	1 381	351	1 323	861
Metal	525	11	22	47	50
Brazil					
Pentoxide	58	58	84	200	105
China					
Vanadiferous residues	3 001	10 123	7 002	6 152	5 160
Pentoxide	9	35	143	457	1 950
Metal	30	1	37	41	83
Japan					
Pentoxide	5 322	5 043	3 700	4 539	3 618
Metal	226	190	103	238	230
Korea, Republic of					
Vanadiferous residues	...	...	400	1 100	135
Pentoxide	2 259	1 705	2 535	2 852	2 151
Taiwan					
Vanadiferous residues	171	336	444	376	306
Metal	63	27	8	3	0

Imports of Vanadium

tonnes

Country	1997	1998	1999	2000	2001
Australia					
Pentoxide	232	31	31	30	21
Metal	123	10	...	11	70

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	1997	1998	1999	2000	2001
Bulgaria	20 700	17 500	10 600	10 000	10 600
Finland	31 200	30 700	19 600	16 100	20 100
Georgia	*1 000	*1 000	*1 000	*1 000	*1 000
Greece	17 627	19 851	17 943	16 834	31 737
Irish Republic	193 100	180 400	200 200	263 000	298 100
Italy	8 500	2 500	-----	-----	-----
Macedonia	21 000	24 000	21 000	25 000	20 000
Norway	6 709	960	-----	-----	-----
Poland	158 271	157 874	154 800	156 900	144 200
Romania	31 737	25 650	26 536	27 452	29 786
Russia	121 000	114 000	161 000	163 000	164 000
Spain	147 098	138 014	154 062	202 360	165 600
Sweden	155 385	164 711	174 448	176 788	156 334
Turkey	63 800	57 700	57 000	48 000	36 000
Yugoslavia, Federal Republic of	12 782	14 967	3 615	3 266	5 988
Algeria	3 700	4 600	5 200	5 500	5 700
Congo, Democratic Republic	1 686	1 234	*1 000	*200	*700
Morocco	89 141	112 000	111 703	105 082	89 338
Namibia	39 658	42 142	37 140	40 266	38 000
South Africa	71 062	69 630	69 733	62 703	61 221
Tunisia	2 967	31 200	48 900	41 200	40 098
Canada	1 076 385	1 061 645	1 020 982	1 002 242	1 052 172
Honduras	39 483	36 639	40 996	43 064	48 485
Mexico	379 252	395 391	362 807	392 791	428 828
USA	631 900	755 000	852 200	851 900	842 100
Argentina	33 357	35 560	34 192	34 858	39 703
Bolivia	154 491	152 110	146 144	149 134	141 983
Brazil	152 634	87 475	98 590	100 254	103 000
Chile	33 934	15 943	32 263	31 403	32 762
Peru	867 691	868 757	899 524	910 303	1 056 629
China	1 209 900	1 273 200	1 476 000	1 780 300	1 692 000
India	142 200	194 500	185 000	208 000	222 000
Iran	76 500	86 000	98 000	102 000	105 000
Japan	71 569	67 670	64 263	63 601	44 519
Kazakhstan	222 600	225 600	270 300	322 100	344 300
Korea, Dem. P.R. of	*60 000	*44 000	*37 000	*34 000	*28 000
Korea, Republic of	8 992	10 489	9 800	11 500	5 100
Laos	-----	-----	-----	-----	28 745
Myanmar	*500	500	300	400	500
Saudi Arabia	5 100	3 550	3 161	3 047	*3 000
Thailand	9 100	19 500	18 600	15 900	8 900
Uzbekistan	*2 000	-----	-----	-----	-----
Vietnam	*17 000	*26 000	*18 000	*16 000	*16 000
Australia	1 035 000	1 066 000	1 163 000	1 419 000	1 518 000
World Total	7 400 000	7 600 000	8 100 000	8 900 000	9 100 000

Production of Slab Zinc

tonnes

Country	1997	1998	1999	2000	2001
Belgium	213 600	205 000	232 400	263 800	256 400
Bulgaria	82 000	86 136	84 000	84 000	84 000
Finland	175 333	198 940	225 200	222 900	248 800
France	317 200	320 400	318 400	318 100	328 900
Germany	317 679	333 968	332 852	319 157	313 230
Italy	268 300	231 600	145 300	170 300	178 600
Macedonia	53 147	57 162	49 608	62 922	15 093
Netherlands	208 646	218 731	222 552	216 768	204 794
Norway	142 249	137 925	143 976	138 390	144 620
Poland	170 600	174 800	178 900	173 000	174 700
Portugal	*3 600	*4 000	*4 000	*4 000	*4 000
Romania	30 226	29 326	28 695	51 929	47 200
Russia	190 000	196 000	231 310	241 025	249 000
Spain	378 000	385 000	383 000	391 000	443 000
Turkey	37 458	35 800	27 000	----	----
Ukraine	*2 000	----	----	----	----
United Kingdom	107 704	99 600	132 800	99 600	99 600
Yugoslavia, Federal Republic of	29 454	13 600	700	8 300	13 500
Algeria	36 404	30 842	31 709	26 335	26 064
South Africa	108 463	106 662	108 000	103 250	109 000
Canada	703 798	745 131	776 927	779 892	675 576
Mexico	231 444	230 325	218 913	235 073	303 810
USA	367 100	367 600	371 300	370 700	310 700
Argentina	41 772	41 777	43 443	39 269	42 907
Brazil	192 701	183 806	194 010	198 777	200 061
Peru	171 191	174 654	196 978	199 813	201 498
China	1 434 400	1 486 300	1 703 200	1 957 000	2 037 600
India	166 000	180 000	189 000	204 000	234 000
Iran	7 000	19 000	24 000	47 000	65 000
Japan	603 112	607 899	633 383	654 384	644 358
Kazakhstan	188 996	240 728	248 754	262 570	276 949
Korea, Dem. P.R. of	*55 000	*43 000	*40 000	*37 000	*31 000
Korea, Republic of	335 488	388 584	425 965	474 829	503 315
Thailand	84 054	90 980	97 292	101 142	104 300
Uzbekistan	53 000	52 000	27 000	34 000	35 000
Australia	318 000	319 000	349 000	498 000	559 000
World Total	7 800 000	8 000 000	8 400 000	9 000 000	9 200 000

Exports of Zinc

Country	1997	1998	1999	2000	2001
Austria					
Unwrought (a)	13 108	14 955	18 948	20 746	15 461
Scrap	3 079	3 537	2 360	3 345	2 089
Belgium-Luxembourg					
Ore	1 130 638	607 159	686 666	531 616	332 101
Unwrought	143 121	105 298	87 099	102 816	89 817
Unwrought alloys	...	...	142 586	...	...
Scrap	36 920	26 148	23 481	18 849	22 938
Bulgaria					
Unwrought (a)	67 196	71 319	71 700	68 436	(b) *56 900
Czech Republic					
Unwrought (a)	3 008	758	1 861	2 865	1 619
Scrap	4 794	2 509	2 607	2 750	2 267
Denmark					
Scrap	7 038	6 069	6 804	7 351	7 178
Estonia					
Scrap	1 931	1 768	1 845	1 426	1 429
Finland					
Unwrought	128 746	155 494	186 944	176 366	175 402
Unwrought alloys	4 842	4 250	2 316	360	206
Scrap	9 344	8 363	7 016	6 668	8 159
France					
Ore	16 407	19 655	21 623	44 107	18 305
Unwrought	177 074	143 683	127 893	111 730	127 252
Unwrought alloys	7 479	15 376	25 970	29 963	30 971
Scrap	39 161	37 834	34 189	41 599	42 470
Germany					
Ore	41 710	56 509	64 299	58 100	62 741
Unwrought	49 088	53 350	58 110	66 002	71 859
Unwrought alloys	38 446	37 150	38 577	40 377	38 250
Scrap	33 795	35 691	45 412	45 218	47 388
Greece					
Ores & concentrates	32 501	42 878	29 500	32 670	57 166
Unwrought (a)	300	1 211	2 000	885	82 848
Scrap	1 552	700	527	173	120
Hungary					
Unwrought	1 153	841	928	948	108
Scrap	2 259	2 574	2 423	3 153	2 837
Irish Republic					
Ores & concentrates	347 300	315 099	338 609	331 533	381 072
Scrap	921	456	699	632	296
Italy					
Ore	18 326	24 546	24 972	30 670	37 107
Unwrought	15 616	8 731	5 633	5 731	6 624
Unwrought alloys	15 425	10 739	5 883	6 328	5 002
Scrap	9 138	6 915	10 211	10 845	9 793
Latvia					
Unwrought (b)	*2 000	*1 000	...	*200	...
Macedonia					
Ore	11 091	2 099	2 052	...	22 021
Unwrought (a)	53 655	53 067	47 159	59 242	57 206
Netherlands					
Unwrought	193 761	254 995	240 868	223 418	252 993
Unwrought alloys	40 230	45 738	2 406	98	90
Scrap	24 966	21 793	19 267	18 842	21 496
Norway					
Unwrought	124 187	116 805	121 857	116 999	113 170
Unwrought alloys	6 651	9 168	10 239	12 067	13 990
Poland					
Ore	39 780	19 900	26 329	21 200	29 223
Unwrought	59 300	67 900	91 700	75 489	85 444
Unwrought alloys	2 605	3 766	2 295	2 488	2 250
Scrap	56	440	237	897	2 497
Portugal					
Scrap	332	2 380	857	729	682
Romania					
Ore	3 286	11 302	23 737	46 410	60 681
Unwrought	14 756	18 625	18 617	46 355	44 984

Exports of Zinc

tonnes

Country	1997	1998	1999	2000	2001
Russia					
Ores & concentrates	56 583	38 436	46 092	52 180	70 165
Unwrought (a)	120 577	117 167	118 192	117 168	102 682
Scrap (b)	*1 800	*2 300	*3 000	*2 000	*400
Slovakia					
Unwrought	400	400	1 352	286	199
Scrap	500	400	580	791	732
Spain					
Ore	136 282	121 884	150 074	232 781	296 040
Unwrought	180 175	122 746	142 447	84 575	93 738
Unwrought alloys	20 259	25 988	29 440	38 900	36 413
Scrap	2 419	1 402	2 785	5 451	5 861
Sweden					
Ore	292 797	293 053	329 282	341 193	261 909
Unwrought (a)	4 193	3 172	710	609	494
Scrap	5 580	6 224	27 393	20 396	13 546
Switzerland					
Scrap	2 026	2 894	4 030	3 832	2 405
Turkey					
Ores & concentrates	96 167	101 840	100 503	128 187	85 661
Unwrought	15 511	15 702	4 838	49	2 367
Ukraine					
Unwrought (a)	23	281	1 113	1 236	(b) *200
United Kingdom					
Unwrought	10 309	10 879	15 924	12 231	15 455
Unwrought alloys	24 730	23 840	22 656	19 940	21 971
Scrap	33 723	21 877	43 025	45 202	19 157
Yugoslavia, Federal Republic of					
Unwrought (a)	20 465	1 038	845	4 041	26 693
Algeria					
Unwrought (a)	24 244	24 446	21 209	18 595	...
Kenya					
Scrap	...	1 030	905	1 043	...
Morocco					
Ore	191 172	242 270	230 540	190 333	...
Namibia					
Concentrates (c)	34 524	36 096	32 589	32 245	...
South Africa					
Unwrought	11 400	12 134	27 648	11 625	16 480
Tunisia					
Ore	6 914	31 070	74 159	91 531	...
Unwrought	...	16 635	9 050	36	...
Canada					
Ores & concentrates (c)	489 373	425 340	326 925	319 150	471 656
Unwrought	547 597	576 926	610 811	603 460	495 349
Unwrought alloys	48	381	574	1 734	1 823
Scrap	27 304	27 111	25 567	36 408	40 350
Honduras					
Ores & concentrates (c)	39 483	36 639	40 996	43 064	48 485
Mexico					
Ores & concentrates	293 516	336 269	282 514	275 502	233 696
Unwrought	61 431	65 154	73 987	89 752	151 456
Unwrought alloys	5 166	4 519	12 142	18 553	13 799
Scrap	2 727	2 131	4 498	8 242	5 441
USA					
Ore (c)	483 511	571 373	531 307	523 071	696 236
of which, re-exports	24 555	19 181	37	-----	18
Unwrought (a)	18 689	13 844	21 962	17 066	13 364
Scrap	34 744	26 676	23 581	26 472	26 744
Argentina					
Ores & concentrates	1 447	309	286	150	232
Unwrought	7 818	9 307	7 505	8 124	8 029
Bolivia					
Ore	311 324	311 792	294 519	301 096	269 470

Exports of Zinc

Country	1997	1998	1999	2000	2001
Brazil					
Unwrought	23 200	14 765	26 244	24 325	23 339
Chile					
Concentrates	80 022	45 420	51 389	69 083	57 068
Peru					
Concentrates	1 235 089	1 010 549	1 170 245	1 015 489	1 423 928
Unwrought	107 802	121 712	124 174	125 000	119 300
China					
Ores & concentrates	381 309	201 325	233 150	138 891	13 366
Unwrought	543 841	370 612	507 501	574 630	543 856
Unwrought alloys	13 167	12 282	19 641	18 766	20 108
Scrap	2 298	5 108	5 955	2 098	1 865
Dubai					
Unwrought	1 091	613	1 018	...	...
Hong Kong					
Unwrought (a)	97 120	109 077	110 351	130 064	136 784
of which, re-exports	90 808	100 634	104 026	126 161	134 751
Scrap	15 258	15 307	27 800	31 318	12 461
of which, re-exports	15 228	14 999	27 164	30 058	11 191
India					
Ore (e)	92 364	30 921	32 315	11 580	...
Unwrought (a) (e)	11 752	16 555	51	155	...
Indonesia					
Ore	28 425	39 103	39 432	38	46
Unwrought (a)	1 400	421	345	794	815
Iran					
Ores & concentrates (d)	194 807	47 658	118 769	*100 000	...
Unwrought	...	492	5 076	5 529	...
Japan					
Unwrought	23 531	46 683	70 834	51 100	72 792
Unwrought alloys	1 755	12 837	8 547	4 557	4 831
Scrap	7 093	5 876	6 487	6 599	5 291
Jordan					
Scrap	2 603	458	551	246	513
Kazakhstan					
Ore	57 964	74 538	78 300	139 766	231 691
Unwrought (a)	191 126	218 024	207 044	232 186	(b) *180 000
Korea, Dem. P.R. of					
Unwrought (a) (b)	*6 000	*2 700	*500	*200	*1 600
Korea, Republic of					
Unwrought	91 204	159 056	153 523	196 345	209 825
Unwrought alloys	369	8 151	9 321	19 113	20 963
Scrap	2 210	671	68	----	315
Laos					
Ores & concentrates	...	...	...	----	28 744
Malaysia					
Scrap	4 100	6 600	*9 000	7 785	5 520
Myanmar					
Concentrates (e)	----	2 014	373	----	...
Philippines					
Scrap	2 007	3 153	1 319	2 810	...
Saudi Arabia					
Unwrought	...	5 696	5 343	6 168	...
Scrap	3 297	2 138	3 505	2 888	...
Singapore					
Unwrought	123 959	135 404	110 009	111 030	74 508
of which, re-exports	...	133 259	108 005	108 176	69 281
Scrap	2 944	2 509	2 622	2 090	2 574
Taiwan					
Unwrought (a)	9 881	9 342	10 764	12 516	18 831
Scrap	2 504	3 788	1 911	1 980	5 267
Thailand					
Unwrought	22 117	41 174	21 959	18 660	60 369
Unwrought alloys	1 561	6 993	8 699	7 305	5 823
Scrap	3 068	1 345	873	448	510
Uzbekistan					
Unwrought (b)	*6 800	*29 800	*16 400	*41 600	*25 000

Exports of Zinc

tonnes

Country	1997	1998	1999	2000	2001
Vietnam					
Ores & concentrates	55 000	85 000	...	...	...
Australia					
Ores & concentrates	1 478 789	1 565 066	1 697 017	1 710 075	1 926 385
Unwrought	218 420	227 836	280 367	427 187	311 895
Scrap	1 145	1 312	1 191	4 217	2 088

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

Country	1997	1998	1999	2000	2001
Austria					
Unwrought	46 741	58 890	47 261	45 015	54 380
Unwrought alloys	17 913	18 882	16 079	16 126	22 617
Scrap	1 310	947	721	891	1 233
Belarus					
Unwrought (a)	300	1 313	2 031	2 906	2 791
Belgium-Luxembourg					
Ore	1 605 860	1 048 756	1 018 447	879 412	824 825
Unwrought	247 904	232 249	192 761	233 203	233 322
Unwrought alloys	11 221	13 567	3 474	2 049	910
Scrap	48 650	48 518	50 113	55 556	50 156
Bulgaria					
Ore	147 283	113 511	145 263	145 588	(b) *107 000
Croatia					
Unwrought (a)	2 501	3 039	2 186	2 340	2 816
Czech Republic					
Unwrought (a)	20 101	22 394	21 387	27 724	27 142
Denmark					
Unwrought	10 795	14 305	9 983	12 244	10 537
Unwrought alloys	1 707	828	707	2 428	5 070
Scrap	517	390	328	363	203
Estonia					
Scrap	6 445	6 135	6 147	5 449	6 568
Finland					
Ore	292 378	376 747	411 447	448 698	422 274
Scrap	2 089	4 046	3 235	2 424	1 882
France					
Ore	634 286	563 460	601 964	637 021	574 312
Unwrought	114 185	116 935	128 500	129 061	126 795
Unwrought alloys	43 838	46 526	35 640	49 384	39 967
Scrap	16 031	12 966	17 242	12 758	13 265
Germany					
Ore	323 616	378 135	208 729	282 566	316 009
Unwrought	236 170	258 576	252 203	251 227	261 517
Unwrought alloys	70 458	75 088	77 944	86 245	79 743
Scrap	7 839	5 826	15 262	18 021	21 487
Greece					
Unwrought (a)	25 331	22 637	20 894	24 617	31 737
Hungary					
Unwrought (a)	15 701	20 456	19 047	23 997	23 615
Irish Republic					
Unwrought (a)	3 587	3 788	2 512	3 232	3 668
Italy					
Ore	517 834	495 111	252 306	316 968	311 767
Unwrought	98 129	148 873	198 080	212 920	175 658
Unwrought alloys	33 696	40 263	53 550	38 457	42 197
Scrap	21 981	17 571	19 236	23 204	21 985
Lithuania					
Unwrought	1 889	301	304	328	...
Macedonia					
Ores & concentrates	...	...	1 290	9 314	8 217
Unwrought (a)	74 053	487	723	602	869
Netherlands					
Ore	312 478	412 481	404 839	427 101	299 374
Unwrought	119 536	159 018	125 505	171 866	152 500
Unwrought alloys	375	4 959	5 863	603	1 536
Scrap	7 875	5 470	7 265	8 849	11 413
Norway					
Ore	194 381	221 918	216 338	209 118	233 797
Unwrought (a)	2 359	3 819	2 264	1 577	190
Scrap	1 371	660	888	429	421
Poland					
Ore	72 800	94 400	100 582	95 443	118 106
Unwrought (a)	5 400	6 900	8 703	10 493	10 113
Portugal					
Unwrought	7 421	11 718	13 560	12 146	12 701
Unwrought alloys	7 976	9 590	6 631	7 413	6 907

Imports of Zinc

tonnes

Country	1997	1998	1999	2000	2001
Romania					
Ores & concentrates	----	46 016	75 015	148 679	87 597
Unwrought (a)	654	7 899	4 976	6 075	11 747
Russia					
Ore	230 577	206 605	226 951	228 886	39 272
Unwrought (a)	40 468	40 129	5 577	11 343	15 459
Slovakia					
Unwrought (a)	23 294	26 172	20 545	24 062	...
Slovenia					
Unwrought (a)	19 696	20 927	18 960	23 136	20 516
Spain					
Ore	516 042	509 558	599 672	562 965	687 733
Unwrought	3 815	822	2 082	2 507	4 529
Unwrought alloys	9 688	10 497	12 907	9 059	9 499
Scrap	2 576	2 446	2 536	3 314	2 850
Sweden					
Unwrought	30 943	37 829	28 570	22 536	27 156
Unwrought alloys	6 440	8 804	8 869	11 313	11 170
Switzerland					
Unwrought	19 098	20 126	19 243	16 257	20 567
Unwrought alloys	2 215	3 065	3 106	3 758	3 735
Turkey					
Ore	68 240	83 377	59 099	333	416
Unwrought (a)	64 941	67 404	65 380	95 229	84 091
Scrap	100	235	942	327	----
Ukraine					
Unwrought	9 122	15 470	13 562	20 774	25 471
United Kingdom					
Ores & concentrates	135 209	139 806	91 613	177 332	215 342
Unwrought	136 217	162 046	111 382	119 052	110 157
Unwrought alloys	12 035	10 908	6 293	7 133	6 363
Scrap	3 238	3 806	3 507	4 983	3 219
Yugoslavia, Federal Republic of					
Concentrates	29 746	20 216	1	22 162	11 967
Unwrought	10 581	4 149	3 744	42	1 702
Egypt					
Unwrought (a)	12 331	16 141	17 212	*17 000	...
Kenya					
Unwrought (a)	13 989	8 729	10 360	8 733	...
Morocco					
Unwrought (a)	7 138	7 815	8 463	11 134	...
Nigeria					
Unwrought (a)	59 895	7 696	7 364	16 368	...
South Africa					
Unwrought (a)	6 452	2 217	1 096	22 178	19 048
Scrap	142	307	86	756	1 615
Tanzania					
Unwrought	1 725	2 505	2 447	3 848	4 570
Togo					
Unwrought	2 287	2 648	1 738	1 620	...
Tunisia					
Unwrought (a)	6 514	6 848	4 834	2 857	...
Uganda					
Unwrought (a)	1 859	1 394	1 944	1 396	1 691
Canada					
Ores & concentrates (c)	200 720	224 943	305 416	231 714	154 011
Unwrought	18 949	13 749	12 370	14 511	11 302
Scrap	2 234	680	831	408	302
Costa Rica					
Unwrought (a)	6 649	6 643	8 206	9 864	9 526
El Salvador					
Unwrought (a)	774	399	656	971	710
Guatemala					
Unwrought (a)	2 189	4 206	3 953	3 808	6 982
Honduras					
Unwrought (a)	922	864	775	566	...

Imports of Zinc

Country	1997	1998	1999	2000	2001
Mexico					
Unwrought	12 610	24 829	46 603	35 106	797
USA					
Ore (c)	51 451	46 250	78 092	58 573	84 035
Unwrought (a)	876 447	872 056	1 068 120	928 008	927 777
Scrap	29 555	29 239	26 569	36 488	39 324
Argentina					
Ores & concentrates	18 107	8 170	8 093	15 219	9 367
Unwrought	9 326	9 161	5 485	6 967	3 096
Brazil					
Ores & concentrates	211 610	213 281	216 288	186 877	183 792
Unwrought (a)	3 388	8 389	17 853	23 228	34 310
Chile					
Unwrought (a)	8 339	8 670	8 633	11 039	12 691
Colombia					
Unwrought (a)	22 376	21 001	16 830	21 316	20 134
Ecuador					
Unwrought (a)	4 962	4 839	3 298	4 803	4 317
Uruguay					
Unwrought	1 170	1 764	1 418	1 138	1 011
Venezuela					
Unwrought	11 204	13 958	10 081	11 878	11 230
Unwrought alloys	8 269	7 803	4 037	5 971	5 259
Bangladesh					
Unwrought	22 000	28 000	*35 000	*56 000	...
China					
Ores & concentrates	166 503	52 508	44 003	77 942	652 996
Unwrought	10 800	12 090	16 091	19 496	18 513
Unwrought alloys	61 171	75 385	91 347	110 477	122 614
Scrap	23 493	25 667	42 127	47 784	35 395
Dubai					
Unwrought	6 027	5 326	4 113	...	...
Hong Kong					
Unwrought	24 977	38 344	27 250	21 370	19 638
Unwrought alloys	83 674	92 287	102 650	124 705	139 529
Scrap	11 089	12 701	13 629	21 100	7 277
India					
Ores & concentrates (d)	31 776	62 668	49 460	34 537	...
Unwrought (d)	73 892	60 830	62 023	46 054	...
Unwrought alloys (d)	1 839	1 699	3 433	2 760	...
Scrap (d)	41 943	41 344	45 480	44 592	...
Indonesia					
Unwrought	83 747	59 987	55 065	86 848	89 096
Unwrought alloys	5 652	5 667	3 748	7 480	6 959
Iran					
Unwrought (e)	19 139	6 734	6 575	3 725	...
Israel					
Unwrought (a)	16 500	*18 700	*17 000	*11 900	*7 000
Japan					
Ores & concentrates	989 373	945 295	1 123 071	1 063 555	1 165 064
Unwrought	179 672	113 370	55 335	80 762	63 582
Unwrought alloys	11 849	8 012	7 559	4 856	2 926
Jordan					
Unwrought (a)	990	1 272	1 792	1 249	2 762
Kazakhstan					
Ores & concentrates	21 403	14 495	1 434	...	...
Korea, Dem. P.R. of					
Ores & concentrates (b)	*30 000	*17 000	*28 000	*24 000	*23 000
Korea, Republic of					
Ores & concentrates	661 456	800 136	881 885	959 645	1 073 850
Unwrought (a)	68 779	71 019	111 374	128 635	97 779
Macao					
Unwrought	205	619	228	----	...
Malaysia					
Unwrought (a)	61 225	68 670	119 800	502 436	...

Imports of Zinc

tonnes

Country	1997	1998	1999	2000	2001
Pakistan					
Unwrought (a) (f)	13 530	15 029	597	1 048	...
Philippines					
Unwrought (a)	53 549	39 771	50 017	35 552	...
Saudi Arabia					
Unwrought	10 112	13 792	14 187	19 775	...
Singapore					
Unwrought	240 041	168 951	132 465	160 554	205 832
Scrap	3 685	2 181	1 857	1 455	1
Sri Lanka					
Unwrought (a)	1 558	1 836	2 145	...	...
Syria					
Unwrought	1 599	4 185	----	...	...
Taiwan					
Unwrought	228 896	240 737	272 973	294 142	276 531
Unwrought alloys	13 699	14 827	17 956	16 241	17 395
Scrap	53 718	50 027	51 656	49 125	14 430
Thailand					
Ores & concentrates	136 904	135 863	143 269	173 930	210 345
Unwrought	21 472	14 445	10 210	15 304	15 698
Unwrought alloys	6 662	7 233	8 480	8 528	8 351
Australia					
Ores & concentrates	...	10 275	54 223	107 535	106 704
Unwrought (a)	805	1 785	3 477	2 278	143
New Zealand					
Unwrought (a)	15 222	16 568	16 786	...	16 761

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

Country	1997	1998	1999	2000	2001
Russia (a)	5 500	6 293	6 200	6 300	*6 500
Ukraine	*65 000	*65 000	*69 000	*75 000	*75 000
South Africa	*310 000	*290 000	*320 000	*325 000	*247 000
USA	*120 000	*150 000	*190 000	*180 000	*170 000
Brazil (a)	19 252	21 483	27 048	28 335	19 500
China	3 428	134	1 850	29 898	25 594
India	*19 000	*19 000	*19 000	*19 000	*19 000
Indonesia	105	231	*250	*250	*250
Malaysia	4 050	3 057	1 763	3 642	3 768
Sri Lanka	12 451	8 814	----	----	----
Vietnam	...	...	...	5 000	5 400
Australia	418 000	385 000	360 000	366 000	394 000
World Total	977 000	949 000	995 000	1 038 000	966 000

Note(s):

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

(a) Including caldasite rock containing zircon and baddeleyite

Exports of Zirconium

tonnes

Country	1997	1998	1999	2000	2001
Belgium-Luxembourg					
Concentrates	464	1 587	2 119	13 216	14 979
Metal	142	167	142	365	193
Estonia					
Metal	...	...	17	65	...
France					
Concentrates	685	458	679	754	657
Germany					
Concentrates	4 461	6 174	5 704	5 428	4 161
Metal	152	229	254	241	265
Italy					
Concentrates	20 567	20 831	22 988	22 582	15 906
Metal	368	330	386	721	1 604
Netherlands					
Concentrates	17 331	7 568	6 038	1 978	1 430
Norway					
Concentrates	1 637	170	10	----	...
Portugal					
Metal	----	----	180	472	...
Russia					
Concentrates	5 200	4 877	3 969	5 316	(a) *6 500
Metal	117	170	40	343	(a) *310
Spain					
Concentrates	2 033	3 399	5 605	6 951	7 449
Ukraine					
Concentrates	18 722	15 746	36 282	32 083	...
United Kingdom					
Concentrates	4 492	3 039	333	567	1 776
Metal	281	247	382	317	380
South Africa					
Concentrates	(a) *310 300	252 705	295 247	288 641	280 143
Canada					
Metal	92	205	333	220	184
USA					
Concentrates	44 341	41 200	69 542	73 641	68 439
Metal	1 305	1 169	1 020	1 251	1 413
Brazil					
Concentrates	712	276	230	362	...
China					
Concentrates	1 770	1 419	330	158	1 084
Metal	174	140	94	22	5
Hong Kong					
Concentrates (b)	25 243	22 019	23 831	18 708	17 764
Japan					
Metal	79	58	41	159	51
Malaysia					
Concentrates	5 500	6 627	8 342	9 660	...
Taiwan					
Concentrates	79	572	881	1 322	1 659
Metal	430	621	850	782	41
Thailand					
Concentrates	100	1 740	419	1 666	1 620
Australia					
Concentrates	341 805	398 761	290 051	82 211	164 725
Metal	31	14	111	119	503

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

Country	1997	1998	1999	2000	2001
Austria					
Concentrates	591	900	1 017	1 684	1 127
Belarus					
Concentrates	*1 500	1 625	971	1 843	2 274
Belgium-Luxembourg					
Concentrates	2 782	3 062	3 531	7 954	5 657
Metal	387	1 014	535	477	670
Czech Republic					
Concentrates	2 106	3 151	3 736	3 459	3 480
Metal	170	200	174	617	486
France					
Concentrates	56 561	54 164	60 282	57 420	59 386
Metal	314	156	116	135	2 323
Germany					
Concentrates	60 265	72 300	*70 000	*70 000	...
Metal	489	496	396	412	409
Italy					
Concentrates	121 271	144 636	141 560	151 500	137 649
Metal	94	377	141	1 159	936
Netherlands					
Concentrates	28 197	26 225	32 422	30 993	27 300
Metal	155	170	88	64	53
Poland					
Concentrates	1 455	1 024	956	1 790	2 002
Metal	191	36	22	7	29
Portugal					
Concentrates	4 718	4 375	3 955	3 610	3 990
Romania					
Concentrates	215	178	110	468	685
Metal	18	...	57	18	48
Russia					
Concentrates	3 457	5 119	8 445	9 530	...
Spain					
Concentrates	104 929	98 066	108 668	115 108	133 013
Metal	164	170	114	232	163
Sweden					
Concentrates	369	506	648	602	435
Metal	...	...	122	91	66
Switzerland					
Metal	96	61	94	45	66
Turkey					
Concentrates	251	1 680	1 072	3 184	2 263
United Kingdom					
Concentrates	57 830	54 986	37 695	34 053	46 548
Metal	534	510	263	733	693
Nigeria					
Metal	29	44	5	...	...
Tunisia					
Concentrates	368	690	431	864	...
Canada					
Concentrates	6 818	8 654	5 826	7 154	8 155
Metal	358	322	280	284	379
Mexico					
Zirconium sand	17 971	19 251	17 291	16 391	13 074
USA					
Concentrates	62 361	89 542	57 626	65 186	60 624
Metal	759	894	859	1 040	717
Brazil					
Concentrates	8 707	6 632	5 504	15 012	12 288
Colombia					
Concentrates	806	2 451	3 043	2 731	3 335
China					
Concentrates	81 988	98 616	130 688	161 007	165 135
Metal	781	665	888	1 053	979

Imports of Zirconium

tonnes

Country	1997	1998	1999	2000	2001
Hong Kong					
Concentrates	27 662	23 216	23 905	18 845	17 994
India					
Concentrates (a)	7 540	4 679	3 665	3 636	...
Indonesia					
Concentrates	2 066	1 170	3 010	12 184	18 031
Metal	105	32	58	177	404
Japan					
Concentrates	90 496	78 626	74 647	86 952	84 124
Metal	714	671	654	704	557
Korea, Republic of					
Concentrates	14 259	6 252	12 494	11 246	12 207
Metal	86	135	165	168	174
Malaysia					
Concentrates	6 600	7 380	14 158	17 945	...
Philippines					
Zirconium sand	454	21	152	274	51
Metal	...	22	31	49	115
Saudi Arabia					
Concentrates	340	280	780	508	...
Singapore					
Concentrates	4 088	2 940	3 465	4 243	3 709
Taiwan					
Concentrates	11 815	15 737	15 360	19 038	13 535
Zirconium sand	10 751	10 490	10 291	14 402	...
Metal	23	71	331	112	247
Thailand					
Concentrates	2 167	2 032	21	6 713	1 645
Metal	0	...	2	31	100
Australia					
Concentrates	447	443	351	418	415
Metal	17	2	46	39	145

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	1997	1998	1999	2000	2001
Russia	*1 000	*1 000	*1 000	*1 000	*1 000
Madagascar (a)	28	30	20	25	*25
Mozambique	...	...	...	----	1
Zambia (a)	3	3	3	3	3
USA	5 770	6 080	5 070	4 510	2 480
China	*1 400	*1 400	*1 400	*1 400	*1 400
Kazakhstan	*100	(a) 221	(a) 220	(a) 431	(a) 737

Note(s):

(a) Includes ornamental and industrial products

Production of Borates

tonnes

Country	1997	1998	1999	2000	2001
Russia	*1 000 000	*1 000 000	*1 000 000	*1 000 000	*1 000 000
Turkey	1 568 571	*1 650 000	*1 400 000	*1 400 000	*1 400 000
USA (a)	1 190 000	1 170 000	1 220 000	1 070 000	1 050 000
Argentina	422 556	279 272	565 647	512 624	673 320
Bolivia	12 469	15 930	15 362	...	...
Chile	170 605	280 140	324 691	337 966	327 743
Peru	46 979	22 002	14 716	9 309	9 374
China (b)	248 300	247 100	289 400	283 000	346 500
Iran (c)	2 323	1 700	1 920	...	...
Kazakhstan	*20 000	13 100	...	28 500	*30 000

Note(s):

(a) Sold or used by producers

(b) B₂O₃ equivalent

(c) Years ended 20 March following that stated

Production of Germanium Metal

tonnes

Country	1997	1998	1999	2000	2001
Belgium	23	...	...	...	...
Ukraine	0	1	1	...	...
USA (a)	*20	*22	*20	*23	*20
China	...	14	14	14	21
Japan	1	0	1	2	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

Production of Primary Magnesium Metal

tonnes

Country	1997	1998	1999	2000	2001
France	13 800	14 700	16 200	16 500	4 800
Norway	34 200	35 400	40 800	41 400	36 000
Russia (b)	33 000	34 100	35 200	35 500	*35 000
Ukraine (b)	7 654	5 040	3	----	----
Yugoslavia, Federal Republic of	3 942	3 965	1 203	1 270	203
Canada (a)	*49 000	*60 000	*64 000	*64 000	*100 000
USA	124 800	106 100	75 000	94 000	*50 000
Brazil	*9 000	*9 000	7 968	5 723	*5 500
China	75 985	70 464	120 700	142 100	199 700
India	1 000	1 500	*1 000	*500	*500
Israel	7 400	24 500	24 300	31 700	34 000
Kazakhstan (b)	17 900	20 907	11 031	10 380	16 455

Note(s):

(a) Capacity

(b) Part of production may be integral with titanium production

Production of Nepheline Syenite

tonnes

Country	1997	1998	1999	2000	2001
Norway	303 717	319 835	304 592	330 000	330 000
Russia (b)	939 020	859 698	859 000	814 000	960 000
South Africa (a)	114 201	104 000	82 000	...	...
Canada	647 000	636 000	678 000	721 000	719 000

Note(s):

(a) Mostly used as aggregate

(b) Nepheline concentrates

Production of Perlite

tonnes

Country	1997	1998	1999	2000	2001
Armenia	160 000	220 000	90 000	140 000	20 000
Bulgaria	20 000	12 100	12 700	16 700	11 600
Georgia	*5 000	*5 000	*5 000	*5 000	*5 000
Greece	695 917	658 332	777 898	817 825	840 660
Hungary	151 785	148 455	140 787	151 069	89 900
Italy	*60 000	*60 000	*60 000	*60 000	*60 000
Russia	*45 000	*45 000	*45 000	*45 000	*45 000
Slovakia	25 019	24 238	19 460	17 022	14 910
Turkey	103 416	124 312	147 818	149 426	154 515
Ukraine	*25 000	*25 000	*25 000	*25 000	*25 000
Morocco	51 195	...	...	...	...
South Africa	403	*400	*400	*400	*400
Mexico	51 758	54 840	61 596	68 702	80 297
USA	656 000	832 000	821 000	873 000	611 000
Argentina	27 578	21 495	21 008	17 521	...
China	*370 000	*400 000	*450 000	*500 000	*550 000
India (d)	80	207	383	274	176
Iran (b)	4 200	13 320	15 069	*15 000	*15 000
Japan	288 010	*250 000	*260 000	*260 000	*260 000
Philippines	57 100	14 000	22 500	4 600	16 500
Thailand	550	3 600	6 050	5 600	8 500
Australia (a)	6 304	6 068	3 886	6 675	6 214
New Zealand	(c) 4 960	*2 000	*2 000	*2 000	*3 000

Note(s):

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

(a) Years ended 30 June of that stated

(b) Years ended 20 March following that stated

(c) Including zeolite

(d) Years ended 31 March following that stated

Production of Selenium Metal

tonnes

Country	1997	1998	1999	2000	2001
Belgium	*250	*200	*200	*200	*200
Finland	43	43	37	37	42
Germany	*115	*100	*100	*100	*100
Poland	76	67	67	65	65
Russia	*40	*40	*40	41	48
Sweden	*20	*20	*20	*20	20
Yugoslavia, Federal Republic of	45	41	26	21	14
Zambia	17	13	10	*10	*10
Canada	592	398	359	335	261
USA	353	*350	...	...	...
Chile (a)	63	29	70	47	...
Peru	13	18	23	21	16
China	*65	*65	*65	*65	*65
India (b)	13	11	6	10	10
Japan	546	550	546	612	735
Kazakhstan	*40	*40	*40	*40	*40
Philippines	38	40	35	38	43
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	1997	1998	1999	2000	2001
Botswana	199 990	195 500	233 643	191 000	251 231
Ethiopia (a)	5 009	5 272	4 409	3 805	7 543
Kenya	257 640	242 910	245 680	238 190	297 780
USA	10 700 000	10 100 000	10 200 000	10 200 000	10 300 000

Note(s):

(a) Years ended 7 July of that stated

Production of Strontium Minerals

tonnes

Country	1997	1998	1999	2000	2001
Spain	95 162	119 077	123 457	158 590	153 283
Turkey	*30 000	*30 000	*25 000	*25 000	*25 000
Mexico	134 707	118 230	164 682	157 420	145 789
Argentina (a)	3 049	2 416	2 141	*2 200	*2 200
China	*100 000	*150 000	*150 000	*200 000	*200 000
Iran (b)	5 900	----	----	...	...
Pakistan (c)	706	598	634	1 079	----

Note(s):

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

(a) May contain unbeneficiated material

(b) Years ended 20 March following that stated

(c) Years ended 30 June of that stated

Production of Tellerium Metal

tonnes

Country	1997	1998	1999	2000	2001
Canada	59	62	64	53	60
USA	50	50	50	50	50
Peru	25	22	17	22	19
Japan	25	39	35	36	39

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	1997	1998	1999	2000	2001
Czech Republic	624	611	605	498	490
France	748	508	438	319	194
Hungary	222	-----	-----	-----	-----
Portugal	17	19	10	13	4
Romania	*100	*100	*100	*50	115
Russia	*2 000	*2 000	*2 000	*2 000	*2 000
Spain	254	255	255	251	30
Ukraine	*500	*500	*500	*500	*500
Gabon	472	731	294	-----	-----
Namibia	2 903	2 778	2 687	2 713	2 239
Niger	3 492	3 713	2 916	2 898	2 919
South Africa	1 122	965	919	861	903
Canada	12 020	10 936	8 214	10 683	12 527
USA	2 171	1 810	1 773	1 522	1 015
Argentina	35	8	8	...	...
China	*500	*500	*500	*500	*500
India	*200	*200	*200	*200	*200
Kazakhstan	1 000	1 074	1 367	1 752	2 018
Pakistan	*23	*23	*23	*23	*23
Uzbekistan	1 764	2 000	2 130	2 350	2 400
Australia	5 490	4 901	5 997	7 588	7 652
World Total	35 700	33 600	30 900	34 700	35 700
World Total (U ₃ O ₈ equivalent)	42 100	39 600	36 500	40 900	42 100

Production of Vermiculite

tonnes

Country	1997	1998	1999	2000	2001
Russia	*25 000	*25 000	*25 000	*25 000	*25 000
Egypt (c)	54	*50	...	...	...
Kenya	1 418	353	164	124	-----
South Africa	211 001	221 331	217 820	208 835	160 265
Uganda	-----	-----	-----	-----	100
Zimbabwe	14 841	14 804	12 844	16 215	9 104
USA (a)	...	...	*175 000	*150 000	*150 000
Brazil (b)	22 248	31 658	40 045	31 676	...
China	...	...	92 610	...	...
India (d)	4 699	4 274	3 123	5 003	5 025
Japan	*15 000	*15 000	*15 000	*15 000	*15 000
Australia (c)	3 327	7 589	10 490	11 750	12 038

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	1997	1998	1999	2000	2001
Finland	20 700	16 700	13 883	17 000	18 399
Namibia	194	267	347	441	*450
South Africa	-----	646	200	-----	-----
Mexico	20 655	41 264	44 126	30 836	39 830
USA	*150 000	...	...	*130 000	*130 000
China	*200 000	*300 000	391 060	427 540	839 200
India (a)	97 742	94 700	117 094	121 891	134 763

Note(s):

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

(a) Years ended 31 March following that stated

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NATURAL ENVIRONMENT RESEARCH COUNCIL

Background text consisting of a dense grid of chemical and mineral names such as 'Selenium Silicon Sillimanite Silver Strontium Sulphur Talc'.