

Inorganic Chemicals

Summary

2000

Issued July 2001

MQ325A(00)-5

Current
Industrial
Reports

Information about the scope of the survey, methodology, explanation of terms and historical notes for this survey may be found in the introduction of the 1998 Manufacturing Profiles, issued December 2000.

Current data are released electronically on Internet for all individual surveys as they become available. Use: <http://www.census.gov/econ/www/manumenu.html>. Individual reports can be accessed by choosing "Current Industrial Reports (CIR's)," clicking on "Report Number Index;" from the "Industrial Products by Numeric Index," choose the survey of interest. Follow the menu to view the PDF file or to download the worksheet file (WK format) to your personal computer.

These data are also available through the U.S. Department of Commerce and STAT-USA Electronic Bulletin Board by subscription. To access, dial 202-482-3870 and follow the prompts to register. Also, you may call 202-482-1986 or 1-800-STAT-USA, for further information. The Internet address is: www.stat-usa.gov/.

NOTE

Data are now published on the new North American Industry Classification System (NAICS) basis and therefore are not always comparable to the old Standard Industrial Classification (SIC) code. For further information on NAICS, see www.census.gov/epcd/www/naics.html.

SUMMARY OF FINDINGS

Alkalies and chlorine (NAICS 325181) production decreased 5.8 percent to 37,135.8 thousand short tons in 2000, from 39,424.0 thousand short tons in 1999. Chlorine (NAICS 3251811) production decreased 2.6 percent to 24,543.2 thousand short tons in 2000, from 25,193.8 thousand short tons in 1999. Sodium hydroxide (NAICS 3251814011) production decreased 12.7 percent to 11,517.7 thousand short tons in 2000, from 13,198.8 thousand short tons in 1999. Finished sodium bicarbonate (NAICS 3251817031) production decreased 3.7 percent to 536.3 thousand short tons in 2000, from 557.1 thousand short tons in 1999.

Titanium dioxide (NAICS 3251311) production increased 3.6 percent to 1,547.3 thousand short tons in 2000, from 1,493.5 thousand short tons in 1999.

Hydrochloric acid (NAICS 3251884025, 4031) production increased 2.1 percent to 4,717.6 thousand short tons in 2000, from 4,620.2 thousand short tons in 1999. Aluminum sulfate, commercial (NAICS 3251887051) production decreased 6.0 percent to 1,090.8 thousand short tons in 2000, from 1,159.7 thousand short tons in 1999. Sodium chlorate (NAICS 325188A141) production increased 14.8 percent to 939.5 thousand short tons in 2000, from 818.4 thousand short tons in 1999.

Address inquiries concerning these data to Primary Goods Industries Branch, Manufacturing and Construction Division (MCD), Washington, DC 20233-6900, or call Tim Althouse, 301-457-4830.

For mail or fax copies of this publication, please contact the Information Services Center, MCD, Washington, DC 20233-6900, or call 301-457-4673.

U S C E N S U S B U R E A U

Helping You Make Informed Decisions

U.S. Department of Commerce
Economics and Statistics Administration
U.S. Census Bureau



Table 1a. Summary of Production of Principal Inorganic Chemicals: 2000
[Short tons]

Quarter and year	Chlorine gas (100 percent) (3251811011)	Sodium hydroxide, total liquid (100 percent) (3251814011)	Titanium dioxide, commodity weight (3251311000)	Hydrochloric acid (100 percent) (3251884025, 4031)	Aluminum sulfate commercial (17 percent Al ₂ O ₃) (3251887051)	Sodium sulfate, high purity (100 percent Na ₂ SO ₄) (325188A1A1) 1/	Finished sodium bicarbonate (58 percent NaHCO ₃) (3251817031) 2/	Sodium chlorate (100 percent) (325188A141)
2000								
Total.....	13,130,668	11,517,698	1,547,262	4,717,638	1,090,777	509,195	536,335 r/	939,450
Fourth quarter.....	3,197,289	2,786,289	374,919	1,160,062	265,596	114,648	134,207	235,559
Third quarter.....	3,268,373	2,819,996	398,579	1,154,048	306,791	139,999	138,216 r/	226,692
Second quarter.....	3,313,090	2,931,442	394,380	1,146,788	280,194	119,480	138,822 r/	227,560
First quarter.....	3,351,916 r/	2,979,971	379,384	1,256,740	238,196	135,068	125,090 r/	249,639

r/Revised by 5 percent or more from previously published data.

Table 1b. Summary of Production of Principal Inorganic Chemicals: 1999 and 1998
[Short tons]

Quarter and year	Chlorine gas (100 percent) (3251811011)	Sodium hydroxide, total liquid (100 percent) (3251814011)	Titanium dioxide, commodity weight (3251311000)	Hydrochloric acid (100 percent) (3251884021, 4025, 4031)	Aluminum sulfate commercial (17 percent Al ₂ O ₃) (3251887051)	Sodium sulfate (100 percent Na ₂ SO ₄) (325188A1A1, A1A4)	Calcium phosphates (100 percent) (325188G047, G051, G054, 325312424)	Sodium chlorate (100 percent) (325188A141)
1999								
Total.....	13,352,756	13,198,820	1,493,458	4,620,195	1,159,717	659,883	1,993,390	818,426
Fourth quarter.....	3,467,896	3,378,584	397,035 r/	1,237,758	295,151	172,600	509,590	226,266
Third quarter.....	3,306,692	3,364,057	372,070	1,188,367	324,732	161,709	480,753	189,997
Second quarter.....	3,261,043	3,266,531	371,258	1,106,465	305,040	161,629	518,478	199,108
First quarter.....	3,317,125	3,189,648	353,095	1,087,605 r/	234,794	163,945	484,569	203,055
1998								
Total.....	12,841,273	13,112,525	1,458,657	4,658,730	1,165,811	629,267	1,981,614	779,226
Fourth quarter.....	3,202,314	3,325,420	346,406	1,178,995	279,526	168,238	507,481	256,123
Third quarter.....	3,197,233	3,251,375	357,847	1,213,825	321,655	151,572	490,838	174,823
Second quarter.....	3,191,628	3,208,573	384,249	1,114,344	289,014	156,354	486,259	174,251
First quarter.....	3,250,098	3,327,157	370,155	1,151,566	275,616	153,103	497,036	174,029

r/Revised by 5 percent or more from previously published data.

1/Prior to first quarter 2000, data were collected for "Sodium sulfate (100 percent Na₂SO₄) (325188A1A1, A1A4)."

2/Prior to first quarter 2000, data were collected for "Calcium phosphates (100 percent) (325188G047, G051, G054, 325312424)."

Table 2. Summary of Primary Production of Specified Inorganic Chemicals: 2000 and 1999
[Short tons]

Product code	Product description	Year	Total production (quantity)	Total shipments, including interplant transfers	
				Quantity	Value
TOTAL					
Chlorine and alkalis:					
Chlorine (100 percent):					
3251811011	Gas 1/.....	2000.....	a/ 13,130,668	8,434,876	875,452
		1999.....	13,352,756		
3251811021	Liquid.....	2000.....	a/ 11,412,517	a/ 10,432,544	a/ 1,264,759
		1999.....	11,840,996	(X)	(X)
Sodium hydroxide (caustic soda) (100 percent) all processes:					
3251814011	Liquid 2/.....	2000.....	a/ 11,517,698	(X)	(X)
		1999.....	13,198,820	(X)	(X)
3251817011	Potassium hydroxide (caustic potash) (88 to 92 percent), liquid 2/.....	2000.....	538,554	(D)	(D)
		1999.....	474,304	(X)	(X)
3251817031	Finished sodium bicarbonate (58 percent NaHCO3).....	2000.....	536,335	495,187	(D)
		1999.....	557,076	(X)	(X)
2123913111	Sodium carbonate, natural (soda ash) (58 percent) 3/.....	2000.....	11,293	(X)	(X)
		1999.....	11,296	(X)	(X)
Chlorine bleaches and other inorganic bleaching compounds:					
325188G0P4	Industrial, liquid and dry.....	2000.....	(S)	(S)	(S)
		1999.....	(X)	(X)	(X)
Acids:					
Hydrochloric (100 percent):					
3251884025	From chlorine and hydrogen.....	2000.....	a/ 408,045	250,128	37,993
		1999.....	420,420	(X)	(X)
3251884031	Byproduct and other 4/.....	2000.....	a/ 4,309,593	a/ 3,041,714	(D)
		1999.....	4,199,775	(X)	(X)
3251884041	Hydrocyanic, including anhydrous (100 percent).....	2000.....	a/ 661,771	(D)	b/ 99,600
		1999.....	(X)	(X)	(X)
Aluminum oxide and aluminum compounds:					
3313110100	Aluminum oxide (except natural alumina) (100 percent Al2O3).....	2000.....	(D)	(D)	a/ 466,150
		1999.....	4,426,596	(X)	(X)
3251887021	Aluminum chloride, anhydrous (100 percent).....	2000.....	(D)	(D)	(D)
		1999.....	5,698	(X)	(X)
3251887031	Aluminum hydroxide, trihydrate (100 percent).....	2000.....	(S)	(S)	(S)
		1999.....	(X)	(X)	(X)
Aluminum sulfate:					
3251887051	Commercial (17 percent aluminum oxide) 5/.....	2000.....	b/ 1,090,777	b/ 1,055,650	b/ 116,089
		1999.....	1,159,717	(X)	(X)
3251887061	Iron-free (17 percent aluminum oxide).....	2000.....	a/ 362,667	a/ 356,789	a/ 28,612
		1999.....	(X)	(X)	(X)
3251887071	Aluminates (sodium aluminate, potassium aluminate, etc.) (100 percent).....	2000.....	b/ 419,377	b/ 352,086	b/ 61,761
		1999.....	(X)	(X)	(X)
Potassium and sodium compounds:					
325188A111	Potassium iodide (100 percent).....	2000.....	(S)	(S)	(S)
		1999.....	(X)	(X)	(X)
325188A117	Potassium pyrophosphate (tetrapotassium pyrophosphate) (anhydrous, 100 percent).....	2000.....	(D)	b/ 24,385	b/ 22,622
		1999.....	30,595	(X)	(X)

Continued

Table 2. Summary of Primary Production of Specified Inorganic Chemicals: 2000 and 1999
[Short tons]

Product code	Product description	Year	Total production (quantity)	Total shipments, including interplant transfers		
				Quantity	Value	
325188A124	Potassium phosphates (100 percent by weight).....	2000.....	(D)	(D)	a/	18,738
		1999.....	(X)	(X)		(X)
325188A141	Sodium chlorate (100 percent).....	2000.....	a/ 939,450	a/ 950,820	a/	278,181
		1999.....	818,426	(X)		(X)
325188A147	Sodium hydrosulfide (sodium sulfhydrate (100 percent).....	2000.....	b/ 95,973	(D)		(D)
		1999.....	(X)	(X)		(X)
325188A151	Sodium hydrosulfite (100 percent).....	2000.....	(D)	(D)		(D)
		1999.....	(D)	(X)		(X)
325188A157	Sodium phosphates: Dibasic (produced for sale) (100 percent) 6/.....	2000.....	(D)	(D)		(D)
		1999.....	(X)	(X)		(X)
325188A164	Tetrabasic (pyro) (100 percent).....	2000.....	14,180	13,802	a/	11,609
		1999.....	11,891	(X)		(X)
325188A167	Meta (100 percent).....	2000.....	a/ 49,026	42,924		(D)
		1999.....	44,495	(X)		(X)
325188A171	Acid pyro (100 percent).....	2000.....	20,364	(D)		(D)
		1999.....	(X)	(X)		(X)
325188A174	Tripoly (100 percent).....	2000.....	(D)	(D)		(D)
		1999.....	(D)	(X)		(X)
325188A177	Other sodium phosphates, including mono- and tribasic.....	2000.....	(X)	(X)		(D)
		1999.....	(X)	(X)		(X)
325188A181	Sodium silicate (soluble silicate glass, liquid and solid) (anhydrous) 7/.....	2000.....	b/ 1,140,101	b/ 606,957		(D)
		1999.....	1,092,934	(X)		(X)
325188A184	Metasilicate pentahydrate (100 percent).....	2000.....	40,362	32,144		9,865
		1999.....	37,635	(X)		(X)
325188A187	Metasilicate anhydrous (100 percent).....	2000.....	32,793	b/ 33,050	a/	15,009
		1999.....	31,807	(X)		(X)
325188A1A1	Sodium sulfate (100 percent): High purity.....	2000.....	b/ 509,195	b/ 526,300	b/	55,169
		1999.....	508,593	(X)		(X)
325188A1A7	Sodium sulfite (100 percent).....	2000.....	(D)	(D)		(D)
		1999.....	(X)	(X)		(X)
325188G041	Other inorganic chemicals: Calcium carbonate (precipitated) (100 percent).....	2000.....	a/ 2,187,749	(D)	a/	284,009
		1999.....	(X)	(X)		(X)
325188G044	Calcium chloride (100 percent).....	2000.....	b/ 1,387,154	b/ 967,559	b/	88,960
		1999.....	(X)	(X)		(X)
325188G047	Calcium phosphates: Monobasic (21 percent minimum P) (100 percent).....	2000.....	(D)	(D)		(D)
		1999.....	(D)	(X)		(X)
325188G051	Dibasic (18.5 percent minimum P) (100 percent).....	2000.....	485,531	474,735		169,963
		1999.....	560,710	(X)		(X)
3253124241	Tribasic (deflourinated phosphate rock) (18.0 percent minimum P) 8/: Animal feed grade (deflourinated phosphate rock) (100 percent).....	2000.....	472,366	475,089		98,198
		1999.....	460,448	(X)		(X)

Continued

Table 2. Summary of Primary Production of Specified Inorganic Chemicals: 2000 and 1999
[Short tons]

Product code	Product description	Year	Total production (quantity)	Total shipments, including interplant transfers		
				Quantity	Value	
325998H1E4	Carbon, activated 9/ Granular carbons (dry weight) 10/.....	2000.....	b/ 110,049	a/ 109,629	b/ 155,330	
		1999.....	95,558	(X)	(X)	
325998H1E7	Pulverized carbons (dry weight).....	2000.....	b/ 67,189	a/ 89,229	b/ 62,544	
		1999.....	71,117	(X)	(X)	
325188G081	Hydrogen peroxide (100 percent by weight).....	2000.....	(S)	(S)	(S)	
		1999.....	376,688	(X)	(X)	
325188G084	Iodine (100 percent) (quantity in pounds).....	2000.....	(D)	(D)	a/ 24,277	
		1999.....	(X)	(X)	(X)	
325188G087	Ferric chloride (100 percent).....	2000.....	(S)	b/ 207,649	(S)	
		1999.....	(X)	(X)	(X)	
325188G091	Iron oxides and hydroxides, excluding iron oxide pigments (100 percent).....	2000.....	(D)	(D)	(D)	
		1999.....	(X)	(X)	(X)	
325188G0A1	Magnesium chloride (100 percent).....	2000.....	(D)	(D)	(D)	
		1999.....	(X)	(X)	(X)	
325188G0B1	Manganese dioxide (100 percent).....	2000.....	a/ 62,898	a/ 58,036	a/ 69,241	
		1999.....	(X)	(X)	(X)	
325188G0F1	Phosphorus oxychloride (100 percent).....	2000.....	b/ 37,181	(D)	(D)	
		1999.....	36,833	(X)	(X)	
325188G0F4	Phosphorus pentasulfide (100 percent).....	2000.....	(D)	(D)	(D)	
		1999.....	(D)	(X)	(X)	
325188G0F7	Phosphorus trichloride (chloride) (100 percent).....	2000.....	(D)	(D)	(D)	
		1999.....	142,638	(X)	(X)	
325188G0G7	Silicon tetrachloride (sitet) (100 percent SiCl4).....	2000.....	(D)	(D)	(D)	
		1999.....	35,768	(X)	(X)	
325188G0K1	Sulfur dioxide (100 percent).....	2000.....	b/ 83,215	b/ 67,886	b/ 13,317	
		1999.....	(X)	(X)	(X)	
325188G0M1	Zinc sulfate (100 percent).....	2000.....	(D)	(D)	(D)	
		1999.....	(X)	(X)	(X)	
3251311000	Titanium dioxide (composite and pure) (commodity weight) 11/.....	2000.....	1,547,262	(X)	(X)	
		1999.....	1,493,458	(X)	(X)	
FIRST QUARTER						
Chlorine and alkalis:						
Chlorine (100 percent):						
3251811011	Gas 1/.....	2000.....	3,351,916	1,938,784	r/ 177,595	
		1999.....	3,317,125	(X)	(X)	
3251811021	Liquid.....	2000.....	2,943,834	2,697,338	a/r/ 311,401	
		1999.....	3,012,964	(X)	(X)	
Sodium hydroxide (caustic soda) (100 percent) all processes:						
3251814011	Liquid 2/.....	2000.....	a/r/ 2,979,971	(X)	(X)	
		1999.....	3,189,648	(X)	(X)	
3251817011	Potassium hydroxide (caustic potash) (88 to 92 percent), liquid 2/.....	2000.....	140,510	(D)	45,633	
		1999.....	129,466	(X)	(X)	
3251817031	Finished sodium bicarbonate (58 percent NaHCO3).....	2000.....	125,090	a/ 118,526	(D)	
		1999.....	132,153	(X)	(X)	

Continued

Table 2. Summary of Primary Production of Specified Inorganic Chemicals: 2000 and 1999
[Short tons]

Product code	Product description	Year	Total production (quantity)	Total shipments, including interplant transfers	
				Quantity	Value
2123913111	Sodium carbonate, natural (soda ash) (58 percent) 3/.....	2000.....	2,634	(X)	(X)
		1999.....	2,713	(X)	(X)
Chlorine bleaches and other inorganic bleaching compounds:					
325188G0P4	Industrial, liquid and dry.....	2000.....	(S)	(S)	(S)
		1999.....	(X)	(X)	(X)
Acids:					
3251884025	Hydrochloric (100 percent): From chlorine and hydrogen.....	2000.....	a/ 114,048	68,770	10,064
		1999.....	96,691	(X)	(X)
3251884031	Byproduct and other 4/.....	2000.....	a/ 1,142,692	a/ 821,333	(D)
		1999.....	990,914	(X)	(X)
3251884041	Hydrocyanic, including anhydrous (100 percent).....	2000.....	b/ 197,777	(S)	(S)
		1999.....	(X)	(X)	(X)
Aluminum oxide and aluminum compounds:					
3313110100	Aluminum oxide (except natural alumina) (100 percent Al2O3).....	2000.....	(D)	(D)	a/ 124,738
		1999.....	1,170,342	(X)	(X)
3251887021	Aluminum chloride, anhydrous (100 percent).....	2000.....	(D)	(D)	(D)
		1999.....	(D)	(X)	(X)
3251887031	Aluminum hydroxide, trihydrate (100 percent).....	2000.....	(S)	(S)	(S)
		1999.....	(X)	(X)	(X)
Aluminum sulfate:					
3251887051	Commercial (17 percent aluminum oxide) 5/.....	2000.....	b/ 238,196	b/r/ 234,261	b/ 27,511
		1999.....	r/ 234,794	(X)	(X)
3251887061	Iron-free (17 percent aluminum oxide).....	2000.....	a/r/ 75,681	b/r/ 75,412	a/r/ 7,200
		1999.....	(X)	(X)	(X)
3251887071	Aluminates (sodium aluminate, potassium aluminate, etc.) (100 percent).....	2000.....	b/r/ 93,103	b/r/ 81,351	b/ 15,168
		1999.....	(X)	(X)	(X)
Potassium and sodium compounds:					
325188A111	Potassium iodide (100 percent).....	2000.....	(S)	(S)	(S)
		1999.....	(X)	(X)	(X)
325188A117	Potassium pyrophosphate (tetrapotassium pyrophosphate) (anhydrous, 100 percent).....	2000.....	b/ 6,998	a/ 5,914	(S)
		1999.....	6,881	(X)	(X)
325188A124	Potassium phosphates (100 percent by weight).....	2000.....	(D)	(D)	a/ 4,547
		1999.....	(X)	(X)	(X)
325188A141	Sodium chlorate (100 percent).....	2000.....	a/r/ 249,639	a/r/ 251,647	a/r/ 69,006
		1999.....	203,055	(X)	(X)
325188A147	Sodium hydrosulfide (sodium sulfhydrate) (100 percent).....	2000.....	b/ 22,471	(S)	(S)
		1999.....	(X)	(X)	(X)
325188A151	Sodium hydrosulfite (100 percent).....	2000.....	(D)	(D)	(D)
		1999.....	(D)	(X)	(X)
Sodium phosphates:					
325188A157	Dibasic (produced for sale) (100 percent) 6/.....	2000.....	(D)	(D)	a/ 3,805
		1999.....	(X)	(X)	(X)
325188A164	Tetrabasic (pyro) (100 percent).....	2000.....	4,373	3,899	a/ 3,289
		1999.....	3,248	(X)	(X)
325188A167	Meta (100 percent).....	2000.....	a/ 11,302	10,156	b/ 7,505
		1999.....	9,310	(X)	(X)

Continued

Table 2. Summary of Primary Production of Specified Inorganic Chemicals: 2000 and 1999
[Short tons]

Product code	Product description	Year	Total production (quantity)	Total shipments, including interplant transfers		
				Quantity	Value	
325188A171	Acid pyro (100 percent).....	2000.....	a/ 5,144	a/ 4,801	(S)	
		1999.....	(X)	(X)	(X)	
325188A174	Tripoly (100 percent).....	2000.....	(D)	(D)	(D)	
		1999.....	(D)	(X)	(X)	
325188A177	Other sodium phosphates, including mono- and tribasic.....	2000.....	(X)	(X)	(S)	
		1999.....	(X)	(X)	(X)	
325188A181	Sodium silicate (soluble silicate glass, liquid and solid) (anhydrous) 7/.....	2000.....	b/ 278,806	b/ 156,527	(S)	
		1999.....	278,155	(X)	(X)	
325188A184	Metasilicate pentahydrate (100 percent).....	2000.....	10,194	a/ 9,032	a/ 2,600	
		1999.....	10,740	(X)	(X)	
325188A187	Metasilicate anhydrous (100 percent).....	2000.....	8,508	b/ 8,214	b/ 3,359	
		1999.....	8,870	(X)	(X)	
325188A1A1	Sodium sulfate (100 percent): High purity.....	2000.....	b/r/ 135,068	b/ 120,306	b/ 10,252	
		1999.....	126,683	(X)	(X)	
325188A1A7	Sodium sulfite (100 percent).....	2000.....	(D)	(D)	(D)	
		1999.....	(X)	(X)	(X)	
Other inorganic chemicals:						
325188G041	Calcium carbonate (precipitated) (100 percent).....	2000.....	a/r/ 529,719	a/ 520,294	a/ 68,522	
		1999.....	(X)	(X)	(X)	
325188G044	Calcium chloride (100 percent).....	2000.....	b/r/ 275,499	b/r/ 194,297	b/ 19,384	
		1999.....	(X)	(X)	(X)	
325188G047	Calcium phosphates: Monobasic (21 percent minimum P) (100 percent).....	2000.....	(D)	(D)	a/ 60,170	
		1999.....	219,839	(X)	(X)	
325188G051	Dibasic (18.5 percent minimum P) (100 percent).....	2000.....	133,990	127,224	a/ 38,817	
		1999.....	143,581	(X)	(X)	
3253124241	Tribasic (deflourinated phosphate rock) (18.0 percent minimum P) 8/: Animal feed grade (deflourinated phosphate rock) (100 percent).....	2000.....	126,847	122,036	25,434	
		1999.....	115,285	(X)	(X)	
325998H1E4	Carbon, activated 9/: Granular carbons (dry weight) 10/.....	2000.....	b/ 25,453	a/ 24,175	b/ 34,428	
		1999.....	24,293	(X)	(X)	
325998H1E7	Pulverized carbons (dry weight).....	2000.....	b/ 16,384	a/ 19,761	b/ 13,823	
		1999.....	15,537	(X)	(X)	
325188G081	Hydrogen peroxide (100 percent by weight).....	2000.....	(S)	(S)	(S)	
		1999.....	89,135	(X)	(X)	
325188G084	Iodine (100 percent) (quantity in pounds).....	2000.....	(D)	(D)	a/ 6,316	
		1999.....	(X)	(X)	(X)	
325188G087	Ferric chloride (100 percent).....	2000.....	(S)	(S)	(S)	
		1999.....	(X)	(X)	(X)	
325188G091	Iron oxides and hydroxides, excluding iron oxide pigments (100 percent).....	2000.....	b/r/ 11,882	b/ 10,323	(D)	
		1999.....	(X)	(X)	(X)	
325188G0A1	Magnesium chloride (100 percent).....	2000.....	(D)	(D)	(D)	
		1999.....	(X)	(X)	(X)	

Continued

Table 2. Summary of Primary Production of Specified Inorganic Chemicals: 2000 and 1999
[Short tons]

Product code	Product description	Year	Total production (quantity)	Total shipments, including interplant transfers		
				Quantity		Value
325188G0B1	Manganese dioxide (100 percent).....	2000.....	(S)	(S)	(S)	(S)
		1999.....	(X)	(X)	(X)	(X)
325188G0F1	Phosphorus oxychloride (100 percent).....	2000.....	b/r/ 9,364	(D)	(D)	(D)
		1999.....	a/ 9,473	(X)	(X)	(X)
325188G0F4	Phosphorus pentasulfide (100 percent).....	2000.....	12,451	12,149	12,023	
		1999.....	(D)	(X)	(X)	
325188G0F7	Phosphorus trichloride (chloride) (100 percent).....	2000.....	(D)	(D)	(D)	(D)
		1999.....	a/ 44,600	(X)	(X)	(X)
325188G0G7	Silicon tetrachloride (sitet) (100 percent SiCl4).....	2000.....	(D)	(D)	(D)	(D)
		1999.....	(D)	(X)	(X)	(X)
325188G0K1	Sulfur dioxide (100 percent).....	2000.....	(S)	(S)	(S)	(S)
		1999.....	(X)	(X)	(X)	(X)
325188G0M1	Zinc sulfate (100 percent).....	2000.....	a/ 14,295	a/ 11,444	a/ 6,757	
		1999.....	(X)	(X)	(X)	
3251311000	Titanium dioxide (composite and pure) (commodity weight) 11/.....	2000.....	379,384	(X)	(X)	(X)
		1999.....	353,095	(X)	(X)	(X)
SECOND QUARTER						
Chlorine and alkalis:						
Chlorine (100 percent):						
3251811011	Gas 1/.....	2000.....	3,313,090	2,185,458	r/ 237,524	
		1999.....	3,261,043	(X)	(X)	(X)
3251811021	Liquid.....	2000.....	2,898,151	2,664,751	a/ 332,579	
		1999.....	2,915,746	(X)	(X)	(X)
Sodium hydroxide (caustic soda) (100 percent) all processes:						
3251814011	Liquid 2/.....	2000.....	a/ 2,931,442	(X)	(X)	(X)
		1999.....	3,266,531	(X)	(X)	(X)
3251817011	Potassium hydroxide (caustic potash) (88 to 92 percent), liquid 2/.....	2000.....	140,427	(D)	49,848	
		1999.....	131,893	(X)	(X)	(X)
3251817031	Finished sodium bicarbonate (58 percent NaHCO3).....	2000.....	138,822	127,042	35,432	
		1999.....	138,019	(X)	(X)	(X)
2123913111	Sodium carbonate, natural (soda ash) (58 percent) 3/.....	2000.....	2,789	(X)	(X)	(X)
		1999.....	2,842	(X)	(X)	(X)
Chlorine bleaches and other inorganic bleaching compounds:						
325188G0P4	Industrial, liquid and dry.....	2000.....	(S)	(S)	(S)	(S)
		1999.....	(X)	(X)	(X)	(X)
Acids:						
3251884025	Hydrochloric (100 percent): From chlorine and hydrogen.....	2000.....	a/ 101,854	65,026	9,739	
		1999.....	103,344	(X)	(X)	(X)
3251884031	Byproduct and other 4/.....	2000.....	a/ 1,044,934	a/ 745,851	(D)	
		1999.....	1,003,121	(X)	(X)	(X)
3251884041	Hydrocyanic, including anhydrous (100 percent).....	2000.....	172,589	(S)	b/ 22,890	
		1999.....	a/r/ (X)	(X)	(X)	(X)
Aluminum oxide and aluminum compounds:						
3313110100	Aluminum oxide (except natural alumina) (100 percent Al2O3).....	2000.....	(D)	(D)	a/ 110,968	
		1999.....	1,279,404	(X)	(X)	(X)

Continued

Table 2. Summary of Primary Production of Specified Inorganic Chemicals: 2000 and 1999
[Short tons]

Product code	Product description	Year	Total production (quantity)	Total shipments, including interplant transfers		
				Quantity		Value
3251887021	Aluminum chloride, anhydrous (100 percent).....	2000..... 1999.....	(D) (D)	(D) (X)	(D) (X)	
3251887031	Aluminum hydroxide, trihydrate (100 percent).....	2000..... 1999.....	(S) (X)	(S) (X)	(S) (X)	
Aluminum sulfate:						
3251887051	Commercial (17 percent aluminum oxide) 5/.....	2000..... 1999.....	b/ 280,194 305,040	b/r/ b/r/	269,511 (X)	b/r/ 29,334 (X)
3251887061	Iron-free (17 percent aluminum oxide).....	2000..... 1999.....	b/ 71,841 (X)	b/r/ b/r/	74,070 (X)	a/ 7,182 (X)
3251887071	Aluminates (sodium aluminate, potassium aluminate, etc.) (100 percent).....	2000..... 1999.....	b/r/ 100,881 (X)	b/ b/	85,103 (X)	b/ 15,346 (X)
Potassium and sodium compounds:						
325188A111	Potassium iodide (100 percent).....	2000..... 1999.....	b/ 130 (X)	a/ a/	157 (X)	b/ 2,053 (X)
325188A117	Potassium pyrophosphate (tetrapotassium pyrophosphate) (anhydrous, 100 percent).....	2000..... 1999.....	b/ 8,581 8,059	a/ a/	6,037 (X)	b/ 5,164 (X)
325188A124	Potassium phosphates (100 percent by weight).....	2000..... 1999.....	(D) (X)	(D) (X)	a/ 4,357 (X)	
325188A141	Sodium chlorate (100 percent).....	2000..... 1999.....	a/r/ 227,560 199,108	a/r/ a/r/	234,923 (X)	a/r/ 69,720 (X)
325188A147	Sodium hydrosulfide (sodium sulfhydrate) (100 percent).....	2000..... 1999.....	b/ 31,680 (X)	(D) (X)	(D) (X)	(D) (X)
325188A151	Sodium hydrosulfite (100 percent).....	2000..... 1999.....	(D) (D)	(D) (X)	(D) (X)	(D) (X)
Sodium phosphates:						
325188A157	Dibasic (produced for sale) (100 percent) 6/.....	2000..... 1999.....	(D) (X)	(D) (X)	(D) (X)	(D) (X)
325188A164	Tetrabasic (pyro) (100 percent).....	2000..... 1999.....	4,532 2,279	3,594 (X)	3,062 (X)	
325188A167	Meta (100 percent).....	2000..... 1999.....	a/ 13,132 12,132	10,120 (X)	7,452 (X)	
325188A171	Acid pyro (100 percent).....	2000..... 1999.....	a/ 5,233 (X)	(D) (X)	(D) (X)	(D) (X)
325188A174	Tripoly (100 percent).....	2000..... 1999.....	(D) (D)	(D) (X)	(D) (X)	(D) (X)
325188A177	Other sodium phosphates, including mono- and tribasic.....	2000..... 1999.....	(X) (X)	(X) (X)	(S) (X)	
325188A181	Sodium silicate (soluble silicate glass, liquid and solid) (anhydrous) 7/.....	2000..... 1999.....	b/ 277,539 274,248	b/ b/	144,986 (X)	(D) (X)
325188A184	Metasilicate pentahydrate (100 percent).....	2000..... 1999.....	10,255 8,435	7,163 (X)	2,502 (X)	
325188A187	Metasilicate anhydrous (100 percent).....	2000..... 1999.....	6,932 6,694	b/ b/	8,225 (X)	b/ 3,399 (X)
Sodium sulfate (100 percent):						
325188A1A1	High purity.....	2000..... 1999.....	b/r/ 119,480 126,196	r/ r/	142,008 (X)	a/r/ 15,109 (X)

Continued

Table 2. Summary of Primary Production of Specified Inorganic Chemicals: 2000 and 1999
[Short tons]

Product code	Product description	Year	Total production (quantity)	Total shipments, including interplant transfers				
				Quantity	Value			
325188A1A7	Sodium sulfite (100 percent).....	2000..... 1999.....	(D) (X)	(D) (X)	(D) (X)			
Other inorganic chemicals:								
325188G041	Calcium carbonate (precipitated) (100 percent).....	2000..... 1999.....	a/r/ (X)	559,581 (X)	a/ (X)	550,232 (X)	a/ (X)	73,626 (X)
325188G044	Calcium chloride (100 percent).....	2000..... 1999.....	b/r/ (X)	403,524 (X)	b/r/ (X)	244,364 (X)	b/ (X)	17,132 (X)
Calcium phosphates:								
325188G047	Monobasic (21 percent minimum P) (100 percent).....	2000..... 1999.....	(D) 240,474	(D) (X)	(D) (X)	51,377 (X)	(D) (X)	51,377 (X)
325188G051	Dibasic (18.5 percent minimum P) (100 percent).....	2000..... 1999.....	123,526 154,509	114,744 (X)	43,293 (X)	(X)	43,293 (X)	
3253124241	Tribasic (deflourinated phosphate rock) (18.0 percent minimum P) 8/: Animal feed grade (deflourinated phosphate rock) (100 percent).....	2000..... 1999.....	117,061 114,392	121,855 (X)	24,689 (X)	(X)	24,689 (X)	
Carbon, activated 9/:								
325998H1E4	Granular carbons (dry weight) 10/.....	2000..... 1999.....	b/ 27,365 27,114	a/ 25,330 (X)	b/ 35,034 (X)	(X)	35,034 (X)	
325998H1E7	Pulverized carbons (dry weight).....	2000..... 1999.....	b/ 17,128 16,646	a/ 21,973 (X)	b/ 15,067 (X)	(X)	15,067 (X)	
325188G081	Hydrogen peroxide (100 percent by weight).....	2000..... 1999.....	(S) 99,160	(S) (X)	(S) (X)	(S) (X)	(S) (X)	
325188G084	Iodine (100 percent) (quantity in pounds).....	2000..... 1999.....	(D) (X)	(D) (X)	a/ 6,418 (X)	(X)	6,418 (X)	
325188G087	Ferric chloride (100 percent).....	2000..... 1999.....	b/ 58,965 (X)	b/r/ 53,328 (X)	(S) (X)	(S) (X)	(S) (X)	
325188G091	Iron oxides and hydroxides, excluding iron oxide pigments (100 percent).....	2000..... 1999.....	b/r/ 8,383 (X)	b/ 11,599 (X)	(D) (X)	(D) (X)	(D) (X)	
325188G0A1	Magnesium chloride (100 percent).....	2000..... 1999.....	(D) (X)	(D) (X)	a/ 2,113 (X)	(X)	2,113 (X)	
325188G0B1	Manganese dioxide (100 percent).....	2000..... 1999.....	13,104 (X)	12,689 (X)	14,630 (X)	(X)	14,630 (X)	
325188G0F1	Phosphorus oxychloride (100 percent).....	2000..... 1999.....	b/r/ 10,469 a/ 9,360	(D) (X)	(D) (X)	(D) (X)	(D) (X)	
325188G0F4	Phosphorus pentasulfide (100 percent).....	2000..... 1999.....	(D) 12,570	(D) (X)	(D) (X)	(D) (X)	(D) (X)	
325188G0F7	Phosphorus trichloride (chloride) (100 percent).....	2000..... 1999.....	(D) a/ 36,230	(D) (X)	(D) (X)	(D) (X)	(D) (X)	
325188G0G7	Silicon tetrachloride (sitet) (100 percent SiCl4).....	2000..... 1999.....	(D) (D)	(D) (X)	(D) (X)	(D) (X)	(D) (X)	
325188G0K1	Sulfur dioxide (100 percent).....	2000..... 1999.....	a/r/ 18,905 (X)	b/r/ 16,928 (X)	b/r/ 3,377 (X)	(X)	3,377 (X)	
325188G0M1	Zinc sulfate (100 percent).....	2000..... 1999.....	(D) (X)	(D) (X)	(D) (X)	(D) (X)	(D) (X)	
3251311000	Titanium dioxide (composite and pure) (commodity weight) 11/.....	2000..... 1999.....	394,380 371,258	(X) (X)	(X) (X)	(X) (X)	(X) (X)	

Continued

Table 2. Summary of Primary Production of Specified Inorganic Chemicals: 2000 and 1999
[Short tons]

Product code	Product description	Year	Total production (quantity)	Total shipments, including interplant transfers	
				Quantity	Value
THIRD QUARTER					
Chlorine and alkalis:					
Chlorine (100 percent):					
3251811011	Gas 1/.....	2000.....	a/ 3,268,373	2,190,417	246,322
		1999.....	3,306,692	(X)	(X)
3251811021	Liquid.....	2000.....	a/ 2,842,384	a/ 2,614,410	a/ 333,294
		1999.....	2,979,609	(X)	(X)
Sodium hydroxide (caustic soda) (100 percent) all processes:					
3251814011	Liquid 2/.....	2000.....	a/ 2,819,996	(X)	(X)
		1999.....	3,364,057	(X)	(X)
3251817011	Potassium hydroxide (caustic potash) (88 to 92 percent), liquid 2/.....	2000.....	127,402	(D)	(D)
		1999.....	117,032	(X)	(X)
3251817031	Finished sodium bicarbonate (58 percent NaHCO3).....	2000.....	138,216	127,084	a/ 35,429
		1999.....	147,702	(X)	(X)
2123913111	Sodium carbonate, natural (soda ash) (58 percent) 3/.....	2000.....	2,846	(X)	(X)
		1999.....	2,798	(X)	(X)
Chlorine bleaches and other inorganic bleaching compounds:					
325188G0P4	Industrial, liquid and dry.....	2000.....	(S)	(S)	(S)
		1999.....	(X)	(X)	(X)
Acids:					
Hydrochloric (100 percent):					
3251884025	From chlorine and hydrogen.....	2000.....	a/ 98,915	63,853	9,892
		1999.....	107,386	(X)	(X)
3251884031	Byproduct and other 4/.....	2000.....	a/ 1,055,133	a/ 732,312	37,444
		1999.....	1,080,981	(X)	(X)
3251884041	Hydrocyanic, including anhydrous (100 percent).....	2000.....	a/ 146,604	(D)	a/ 26,574
		1999.....	(X)	(X)	(X)
Aluminum oxide and aluminum compounds:					
3313110100	Aluminum oxide (except natural alumina) (100 percent Al2O3).....	2000.....	(D)	(D)	a/ 118,038
		1999.....	967,250	(X)	(X)
3251887021	Aluminum chloride, anhydrous (100 percent).....	2000.....	(D)	(D)	(D)
		1999.....	(D)	(X)	(X)
3251887031	Aluminum hydroxide, trihydrate (100 percent).....	2000.....	(S)	(S)	(S)
		1999.....	(X)	(X)	(X)
Aluminum sulfate:					
3251887051	Commercial (17 percent aluminum oxide) 5/.....	2000.....	b/ 306,791	b/ 299,054	b/r/ 32,842
		1999.....	324,732	(X)	(X)
3251887061	Iron-free (17 percent aluminum oxide).....	2000.....	a/ 108,765	a/r/ 105,385	a/ 7,595
		1999.....	(X)	(X)	(X)
3251887071	Aluminates (sodium aluminate, potassium aluminate, etc.) (100 percent).....	2000.....	b/r/ 113,962	b/ 94,061	b/ 15,853
		1999.....	(X)	(X)	(X)
Potassium and sodium compounds:					
325188A111	Potassium iodide (100 percent).....	2000.....	(S)	(S)	(S)
		1999.....	(X)	(X)	(X)
325188A117	Potassium pyrophosphate (tetrapotassium pyrophosphate) (anhydrous, 100 percent).....	2000.....	(D)	b/ 5,525	b/ 5,819
		1999.....	7,634	(X)	(X)

Continued

Table 2. Summary of Primary Production of Specified Inorganic Chemicals: 2000 and 1999
[Short tons]

Product code	Product description	Year	Total production (quantity)	Total shipments, including interplant transfers		
				Quantity	Value	
325188A124	Potassium phosphates (100 percent by weight).....	2000.....	(D)	(D)	a/r/	4,349
		1999.....	(X)	(X)		(X)
325188A141	Sodium chlorate (100 percent).....	2000.....	a/r/ 226,692	a/r/ 228,109	a/r/	70,224
		1999.....	189,997	(X)		(X)
325188A147	Sodium hydrosulfide (sodium sulfhydrate (100 percent).....	2000.....	b/ 28,330	(D)		(D)
		1999.....	(X)	(X)		(X)
325188A151	Sodium hydrosulfite (100 percent).....	2000.....	(D)	(D)		(D)
		1999.....	(D)	(X)		(X)
325188A157	Sodium phosphates: Dibasic (produced for sale) (100 percent) 6/.....	2000.....	(D)	(D)		(D)
		1999.....	(X)	(X)		(X)
325188A164	Tetrabasic (pyro) (100 percent).....	2000.....	2,099	3,754		3,187
		1999.....	3,868	(X)		(X)
325188A167	Meta (100 percent).....	2000.....	a/ 11,548	10,851		8,493
		1999.....	11,230	(X)		(X)
325188A171	Acid pyro (100 percent).....	2000.....	5,446	(D)		4,882
		1999.....	(X)	(X)		(X)
325188A174	Tripoly (100 percent).....	2000.....	(D)	(D)		(D)
		1999.....	(D)	(X)		(X)
325188A177	Other sodium phosphates, including mono- and tribasic.....	2000.....	(X)	(X)		(D)
		1999.....	(X)	(X)		(X)
325188A181	Sodium silicate (soluble silicate glass, liquid and solid) (anhydrous) 7/.....	2000.....	b/ 284,822	b/ 143,521		(D)
		1999.....	257,039	(X)		(X)
325188A184	Metasilicate pentahydrate (100 percent).....	2000.....	10,243	7,811		2,334
		1999.....	8,333	(X)		(X)
325188A187	Metasilicate anhydrous (100 percent).....	2000.....	7,554	8,268		3,488
		1999.....	6,873	(X)		(X)
325188A1A1	Sodium sulfate (100 percent): High purity.....	2000.....	b/r/ 139,999	b/ 165,453	b/r/	21,455
		1999.....	120,639	(X)		(X)
325188A1A7	Sodium sulfite (100 percent).....	2000.....	(D)	(D)		(D)
		1999.....	(X)	(X)		(X)
325188G041	Other inorganic chemicals: Calcium carbonate (precipitated) (100 percent).....	2000.....	a/r/ 543,360	(D)	a/	70,630
		1999.....	(X)	(X)		(X)
325188G044	Calcium chloride (100 percent).....	2000.....	b/r/ 320,760	b/r/ 213,683	b/	17,908
		1999.....	(X)	(X)		(X)
325188G047	Calcium phosphates: Monobasic (21 percent minimum P) (100 percent).....	2000.....	(D)	(D)		69,079
		1999.....	229,702	(X)		(X)
325188G051	Dibasic (18.5 percent minimum P) (100 percent).....	2000.....	121,398	114,252		46,183
		1999.....	133,094	(X)		(X)
3253124241	Tribasic (deflourinated phosphate rock) (18.0 percent minimum P) 8/: Animal feed grade (deflourinated phosphate rock) (100 percent).....	2000.....	112,370	110,763		23,057
		1999.....	108,720	(X)		(X)

Continued

Table 2. Summary of Primary Production of Specified Inorganic Chemicals: 2000 and 1999
[Short tons]

Product code	Product description	Year	Total production (quantity)	Total shipments, including interplant transfers		
				Quantity	Value	
325998H1E4	Carbon, activated 9/ Granular carbons (dry weight) 10/.....	2000.....	b/ 29,207	a/ 33,585	b/ 48,431	
		1999.....	21,718	(X)	(X)	
325998H1E7	Pulverized carbons (dry weight).....	2000.....	b/ 19,082	a/ 29,133	b/ 19,628	
		1999.....	17,962	(X)	(X)	
325188G081	Hydrogen peroxide (100 percent by weight).....	2000.....	(S) 87,351	(S)	(S)	
		1999.....		(X)	(X)	
325188G084	Iodine (100 percent) (quantity in pounds).....	2000.....	(D) 884,671	a/ 884,671	a/ 6,240	
		1999.....	(X)	(X)	(X)	
325188G087	Ferric chloride (100 percent).....	2000.....	b/ 68,360	b/ 55,792	(S)	
		1999.....	(X)	(X)	(X)	
325188G091	Iron oxides and hydroxides, excluding iron oxide pigments (100 percent).....	2000.....	(D)	(D)	(D)	
		1999.....	(X)	(X)	(X)	
325188G0A1	Magnesium chloride (100 percent).....	2000.....	(D)	(D)	(D)	
		1999.....	(X)	(X)	(X)	
325188G0B1	Manganese dioxide (100 percent).....	2000.....	15,867	13,595	15,813	
		1999.....	(X)	(X)	(X)	
325188G0F1	Phosphorus oxychloride (100 percent).....	2000.....	b/r/ 9,458	(D)	(D)	
		1999.....	a/ 8,780	(X)	(X)	
325188G0F4	Phosphorus pentasulfide (100 percent).....	2000.....	(D)	(D)	(D)	
		1999.....	12,468	(X)	(X)	
325188G0F7	Phosphorus trichloride (chloride) (100 percent).....	2000.....	(D)	(D)	(D)	
		1999.....	45,501	(X)	(X)	
325188G0G7	Silicon tetrachloride (sitet) (100 percent SiCl4).....	2000.....	(D)	(D)	(D)	
		1999.....	(D)	(X)	(X)	
325188G0K1	Sulfur dioxide (100 percent).....	2000.....	a/r/ 23,113	b/r/ 18,807	b/r/ 3,621	
		1999.....	(X)	(X)	(X)	
325188G0M1	Zinc sulfate (100 percent).....	2000.....	(D)	(D)	5,412	
		1999.....	(X)	(X)	(X)	
3251311000	Titanium dioxide (composite and pure) (commodity weight) 11/.....	2000.....	398,579	(X)	(X)	
		1999.....	372,070	(X)	(X)	
FOURTH QUARTER						
Chlorine and alkalis:						
Chlorine (100 percent):						
3251811011	Gas 1/.....	2000.....	a/ 3,197,289	2,120,217	214,011	
		1999.....	3,467,896	(X)	(X)	
3251811021	Liquid.....	2000.....	a/ 2,728,148	a/ 2,456,045	a/ 287,485	
		1999.....	2,932,677	(X)	(X)	
Sodium hydroxide (caustic soda) (100 percent) all processes:						
3251814011	Liquid 2/.....	2000.....	a/ 2,786,289	(X)	(X)	
		1999.....	3,378,584	(X)	(X)	
3251817011	Potassium hydroxide (caustic potash) (88 to 92 percent), liquid 2/.....	2000.....	130,215	(D)	(D)	
		1999.....	95,913	(X)	(X)	
3251817031	Finished sodium bicarbonate (58 percent NaHCO3).....	2000.....	134,207	122,535	34,288	
		1999.....	139,202	(X)	(X)	

Continued

Table 2. Summary of Primary Production of Specified Inorganic Chemicals: 2000 and 1999
[Short tons]

Product code	Product description	Year	Total production (quantity)	Total shipments, including interplant transfers	
				Quantity	Value
2123913111	Sodium carbonate, natural (soda ash) (58 percent) 3/.....	2000.....	3,024	(X)	(X)
		1999.....	2,944	(X)	(X)
Chlorine bleaches and other inorganic bleaching compounds:					
325188G0P4	Industrial, liquid and dry.....	2000.....	(S)	(S)	(S)
		1999.....	(X)	(X)	(X)
Acids:					
3251884025	Hydrochloric (100 percent): From chlorine and hydrogen.....	2000.....	a/ 93,228	52,479	8,298
		1999.....	112,999	(X)	(X)
3251884031	Byproduct and other 4/.....	2000.....	a/ 1,066,834	a/ 742,218	b/ 41,288
		1999.....	r/ 1,124,759	(X)	(X)
3251884041	Hydrocyanic, including anhydrous (100 percent).....	2000.....	a/ 144,801	(D)	b/ 24,389
		1999.....	(X)	(X)	(X)
Aluminum oxide and aluminum compounds:					
3313110100	Aluminum oxide (except natural alumina) (100 percent Al2O3).....	2000.....	567,357	514,748	a/ 112,406
		1999.....	1,009,600	(X)	(X)
3251887021	Aluminum chloride, anhydrous (100 percent).....	2000.....	(D)	(D)	(D)
		1999.....	(D)	(X)	(X)
3251887031	Aluminum hydroxide, trihydrate (100 percent).....	2000.....	(S)	(S)	(S)
		1999.....	(X)	(X)	(X)
Aluminum sulfate:					
3251887051	Commercial (17 percent aluminum oxide) 5/.....	2000.....	b/ 265,596	b/ 252,824	b/ 26,402
		1999.....	295,151	(X)	(X)
3251887061	Iron-free (17 percent aluminum oxide).....	2000.....	a/r/ 106,380	a/r/ 101,922	a/r/ 6,635
		1999.....	(X)	(X)	(X)
3251887071	Aluminates (sodium aluminate, potassium aluminate, etc.) (100 percent).....	2000.....	b/ 111,431	b/ 91,571	b/ 15,394
		1999.....	(X)	(X)	(X)
Potassium and sodium compounds:					
325188A111	Potassium iodide (100 percent).....	2000.....	(S)	(S)	(S)
		1999.....	(X)	(X)	(X)
325188A117	Potassium pyrophosphate (tetrapotassium pyrophosphate) (anhydrous, 100 percent).....	2000.....	(D)	b/ 6,909	b/ 5,212
		1999.....	8,021	(X)	(X)
325188A124	Potassium phosphates (100 percent by weight).....	2000.....	(D)	(D)	a/ 5,485
		1999.....	(X)	(X)	(X)
325188A141	Sodium chlorate (100 percent).....	2000.....	a/ 235,559	a/ 236,141	a/ 69,231
		1999.....	226,266	(X)	(X)
325188A147	Sodium hydrosulfide (sodium sulfhydrate) (100 percent).....	2000.....	b/ 13,492	(D)	(D)
		1999.....	(X)	(X)	(X)
325188A151	Sodium hydrosulfite (100 percent).....	2000.....	(D)	(D)	(D)
		1999.....	(D)	(X)	(X)
Sodium phosphates:					
325188A157	Dibasic (produced for sale) (100 percent) 6/.....	2000.....	(D)	(D)	(D)
		1999.....	(X)	(X)	(X)
325188A164	Tetrabasic (pyro) (100 percent).....	2000.....	a/ 3,176	b/ 2,555	(S)
		1999.....	(D)	(X)	(X)
325188A167	Meta (100 percent).....	2000.....	a/ 13,044	a/ 11,797	(D)
		1999.....	11,823	(X)	(X)

Continued

Table 2. Summary of Primary Production of Specified Inorganic Chemicals: 2000 and 1999
[Short tons]

Product code	Product description	Year	Total production (quantity)	Total shipments, including interplant transfers			
				Quantity	Value		
325188A171	Acid pyro (100 percent).....	2000.....	a/ 4,541	a/ 3,677	a/ 4,006		
		1999.....	(X)	(X)	(X)		
325188A174	Tripoly (100 percent).....	2000.....	(D)	(D)	(D)		
		1999.....	(D)	(X)	(X)		
325188A177	Other sodium phosphates, including mono- and tribasic.....	2000.....	(X)	(X)	(D)		
		1999.....	(X)	(X)	(X)		
325188A181	Sodium silicate (soluble silicate glass, liquid and solid) (anhydrous) 7/.....	2000.....	b/ 298,934	b/ 161,923	(D)		
		1999.....	283,492	(X)	(X)		
325188A184	Metasilicate pentahydrate (100 percent).....	2000.....	a/ 9,670	a/ 8,138	a/ 2,429		
		1999.....	10,127	(X)	(X)		
325188A187	Metasilicate anhydrous (100 percent).....	2000.....	b/ 9,799	b/ 8,343	a/ 4,763		
		1999.....	9,370	(X)	(X)		
325188A1A1	Sodium sulfate (100 percent): High purity.....	2000.....	b/ 114,648	(S)	(S)		
		1999.....	135,075	(X)	(X)		
325188A1A7	Sodium sulfite (100 percent).....	2000.....	(S)	(S)	(S)		
		1999.....	(X)	(X)	(X)		
325188G041	Other inorganic chemicals: Calcium carbonate (precipitated) (100 percent).....	2000.....	a/ 555,089	(D)	a/ 71,231		
		1999.....	(X)	(X)	(X)		
325188G044	Calcium chloride (100 percent).....	2000.....	b/r/ 387,371	(S)	b/ 34,536		
		1999.....	(X)	(X)	(X)		
325188G047	Calcium phosphates: Monobasic (21 percent minimum P) (100 percent).....	2000.....	(D)	(D)	77,248		
		1999.....	(D)	(X)	(X)		
325188G051	Dibasic (18.5 percent minimum P) (100 percent).....	2000.....	106,617	118,515	41,670		
		1999.....	129,526	(X)	(X)		
3253124241	Tribasic (deflourinated phosphate rock) (18.0 percent minimum P) 8/: Animal feed grade (deflourinated phosphate rock) (100 percent).....	2000.....	116,088	120,435	25,018		
		1999.....	122,051	(X)	(X)		
325998H1E4	Carbon, activated 9/: Granular carbons (dry weight) 10/.....	2000.....	b/ 28,024	a/ 26,539	b/ 37,437		
		1999.....	22,433	(X)	(X)		
325998H1E7	Pulverized carbons (dry weight).....	2000.....	b/ 14,595	a/ 18,362	b/ 14,026		
		1999.....	20,972	(X)	(X)		
325188G081	Hydrogen peroxide (100 percent by weight).....	2000.....	(S)	(S)	(S)		
		1999.....	101,042	(X)	(X)		
325188G084	Iodine (100 percent) (quantity in pounds).....	2000.....	(D)	a/ 759,635	a/ 5,303		
		1999.....	(X)	(X)	(X)		
325188G087	Ferric chloride (100 percent).....	2000.....	b/ 76,066	b/ 58,465	(S)		
		1999.....	(X)	(X)	(X)		
325188G091	Iron oxides and hydroxides, excluding iron oxide pigments (100 percent).....	2000.....	(D)	(D)	(D)		
		1999.....	(X)	(X)	(X)		
325188G0A1	Magnesium chloride (100 percent).....	2000.....	(D)	(D)	(D)		
		1999.....	(X)	(X)	(X)		

Continued

Table 2. Summary of Primary Production of Specified Inorganic Chemicals: 2000 and 1999
[Short tons]

Product code	Product description	Year	Total production (quantity)	Total shipments, including interplant transfers	
				Quantity	Value
325188G0B1	Manganese dioxide (100 percent).....	2000.....	15,157	16,452	19,010
		1999.....	(X)	(X)	(X)
325188G0F1	Phosphorus oxychloride (100 percent).....	2000.....	7,890	(D)	(D)
		1999.....	a/ 9,220	(X)	(X)
325188G0F4	Phosphorus pentasulfide (100 percent).....	2000.....	(D)	(D)	(D)
		1999.....	13,464	(X)	(X)
325188G0F7	Phosphorus trichloride (chloride) (100 percent).....	2000.....	(D)	(D)	(D)
		1999.....	a/ 16,307	(X)	(X)
325188G0G7	Silicon tetrachloride (sitet) (100 percent SiCl4).....	2000.....	(D)	(D)	(D)
		1999.....	(D)	(X)	(X)
325188G0K1	Sulfur dioxide (100 percent).....	2000.....	a/r/ 21,794	b/r/ 16,306	b/r/ 3,178
		1999.....	(X)	(X)	(X)
325188G0M1	Zinc sulfate (100 percent).....	2000.....	(D)	(D)	(D)
		1999.....	(X)	(X)	(X)
3251311000	Titanium dioxide (composite and pure) (commodity weight) 11/.....	2000.....	374,919	(X)	(X)
		1999.....	397,035	(X)	(X)

D Withheld to avoid disclosing data for individual companies. r/Revised by 5 percent or more from previously published data. S Does not meet publication standards. X Not collected in 1999.

1/Production includes amounts liquefied.

2/Liquid production figures represent total production, including quantities later evaporated to solid caustic.

3/Source: U.S. Geological Survey. Quantity reported in thousands of short tons.

4/Includes production from salt and acid.

5/Excludes quantities produced and consumed in municipalities.

6/Represents quantities produced only for sale or interplant transfer.

7/Excludes amounts produced and consumed in making meta, ortho, and sesquisilicates.

8/Includes animal feed, but excludes other grades and superphosphate or other fertilizer materials.

9/Excludes reactivated carbon.

10/Includes pelleted carbon.

11/Represents total stocks of producing companies, including amounts held at locations other than producing plants.

Note: Percent of estimation of each item is indicated as follows: a/10 to 25 percent of this item is estimated. b/26 to 50 percent of this item is estimated. c/Over 50 percent of this item is estimated.

Table 3. Production, Exports, Imports, and Apparent Consumption of Selected Inorganic Chemicals: 2000 and 1999
[Quantity in metric tons]

Product code	Product description	Year	Production (quantity)	Exports of domestic merchandise 1/	Imports for consumption 2/	Apparent consumption 3/ (quantity)	Percent imports to apparent consumption (quantity)
3251881011	Chlorine gas.....	2000.....	11,912,142	24,231	358,015	12,245,926	2.9
		1999.....	12,113,620	21,088	326,295	12,418,827	2.6
3251814011	Sodium hydroxide, total liquid (all processes)...	2000.....	10,448,856	3,572,759	900,778	7,776,875	11.6
		1999.....	11,973,970	3,160,217	846,704	9,660,457	8.8
3251817011	Potassium hydroxide, liquid.....	2000.....	488,576	68,275	37,003	457,304	8.1
		1999.....	430,289	47,341	30,539	413,486	7.4
3251817031	Finished sodium bicarbonate.....	2000.....	486,563	63,060	14,547	438,050	3.3
		1999.....	505,379	72,851	13,353	445,881	3.0
3251884025, 031	Hydrochloric acid.....	2000.....	4,279,841	60,420	69,070	4,288,491	1.6
		1999.....	4,191,441	55,041	77,192	4,213,592	1.8
3313110100	Aluminum oxide.....	2000.....	(D)	1,047,960	3,596,870	(D)	(D)
		1999.....	4,015,808	1,188,500	3,651,191	6,478,499	56.4
3251887021	Aluminum chloride.....	2000.....	(D)	19,564	1,702	(D)	(D)
		1999.....	(X)	(NA)	(NA)	(NA)	(NA)
3251887031	Aluminum hydroxide, trihydrate.....	2000.....	(S)	58,375	338,043	(S)	(S)
		1999.....	(X)	(NA)	(NA)	(NA)	(NA)
	Bleaches (sodium and calcium hypochloriate, etc.) 4/.....	2000.....	(NA)	55,156	60,421	(NA)	(NA)
		1999.....	(X)	(NA)	(NA)	(NA)	(NA)
3251887051	Aluminum sulfate (commercial).....	2000.....	989,553	7,691	23,496	1,005,357	2.3
		1999.....	1,052,095	6,673	31,640	1,077,062	2.9
3251887071	Aluminates.....	2000.....	380,459	8,816	23,131	394,774	5.9
		1999.....	(X)	(NA)	(NA)	(NA)	(NA)
325188A111	Potassium iodide.....	2000.....	(S)	27	505	(S)	(S)
		1999.....	(X)	(NA)	(NA)	(NA)	(NA)
325188A124	Potassium phosphate.....	2000.....	(D)	2,028	12,718	(D)	(D)
		1999.....	(X)	(NA)	(NA)	(NA)	(NA)
325188A141	Sodium chlorate.....	2000.....	852,269	48,983	440,461	1,243,748	35.4
		1999.....	742,476	57,602	439,386	1,124,261	39.1
	Sodium phosphate, mono- and dibasic 4/.....	2000.....	(NA)	2,278	11,187	(NA)	(NA)
		1999.....	(X)	(NA)	(NA)	(NA)	(NA)
	Sodium phosphate tribasic 4/ 5/.....	2000.....	(NA)	537	6,235	(NA)	(NA)
		1999.....	26,660	398	5,883	32,145	1.0
325188A174	Sodium phosphate tripoly.....	2000.....	(D)	23,789	82,587	(D)	(D)
		1999.....	(D)	19,277	74,400	(D)	(D)
325188A181	Sodium silicates (other than metasilicates).....	2000.....	1,034,300	30,105	37,869	1,042,063	3.6
		1999.....	991,510	32,624	25,602	984,488	2.6
325188A184, 187	Sodium metasilicates.....	2000.....	66,366	14,550	2,038	53,854	3.8
		1999.....	62,998	21,337	1,738	43,399	4.0
	Sodium sulfate 4/ 6/.....	2000.....	(NA)	48,295	75,250	(NA)	(NA)
		1999.....	598,646	47,764	76,637	627,519	12.2
325188A1A7	Sodium sulfite.....	2000.....	(D)	29,659	19,359	(D)	(D)
		1999.....	(X)	(NA)	(NA)	(NA)	(NA)
325188G041	Calcium carbonate, precipitated.....	2000.....	1,984,726	75,499	123,929	2,033,155	6.1
		1999.....	(X)	(NA)	(NA)	(NA)	(NA)

Continued

Table 3. Production, Exports, Imports, and Apparent Consumption of Selected Inorganic Chemicals: 2000 and 1999
 [Quantity in metric tons]

Product code	Product description	Year	Production (quantity)	Exports of domestic merchandise 1/	Imports for consumption 2/	Apparent consumption 3/ (quantity)	Percent imports to apparent consumption (quantity)
325188G044	Calcium chloride.....	2000.....	1,258,426	63,522	255,611	1,450,516	17.6
		1999.....	(X)	(NA)	(NA)	(NA)	(NA)
	Calcium phosphates 4/ 7/.....	2000.....	(NA)	177,377	18,678	(NA)	(NA)
		1999.....	1,808,403	192,684	17,099	1,632,818	1.0
325998H1E4, 1E7	Carbon activated (granular and pulverized).....	2000.....	160,790	43,566	49,028	166,252	29.5
		1999.....	151,208	33,386	43,914	161,736	27.2
325188G081	Hydrogen peroxide.....	2000.....	(S)	44,423	70,687	(S)	(S)
		1999.....	341,731	42,015	81,735	381,451	21.4
325188G084	Iodine.....	2000.....	(D)	1,350	4,791	(D)	(D)
		1999.....	(X)	(NA)	(NA)	(NA)	(NA)
325188G091	Iron oxides and hydroxides.....	2000.....	(D)	30,904	33,002	(D)	(D)
		1999.....	(X)	(NA)	(NA)	(NA)	(NA)
325188G0A1	Magnesium chloride.....	2000.....	(D)	4,903	35,772	(D)	(D)
		1999.....	(X)	(NA)	(NA)	(NA)	(NA)
325188G0B1	Manganese dioxide.....	2000.....	57,061	3,439	51,331	104,953	48.9
		1999.....	(X)	(NA)	(NA)	(NA)	(NA)
325188G0F1, 0F7	Phosphorous, oxychloride and trichloride.....	2000.....	(D)	1,086	76	(D)	(D)
		1999.....	162,816	823	59	162,052	0.0
325188G0K1	Sulfur dioxide.....	2000.....	75,493	3,380	50,188	122,300	41.0
		1999.....	(X)	(NA)	(NA)	(NA)	(NA)
325188G0M1	Zinc sulfate.....	2000.....	(D)	5,434	13,895	(D)	(D)
		1999.....	(X)	(NA)	(NA)	(NA)	(NA)
3251311000	Titanium dioxide (composite and pure).....	2000.....	1,403,676	463,724	207,189	1,147,141	18.1
		1999.....	1,354,865	383,635	224,876	1,196,106	18.8

D Withheld to avoid disclosing data for individual companies. NA Not available. S Data does not meet publication standards.
 X Not collected in 1999.

1/Source: Census Bureau report EM 545, U.S. Exports (see Table 4).

2/Source: Census Bureau report IM 145, U.S. Imports for Consumption (see Table 4).

3/Apparent consumption represents new domestic supply and is derived by subtracting exports from the total of manufacturers' production plus imports.

4/Not comparable to 2000 Census Bureau product codes.

5/Prior to 2000, data were collected for "Sodium phosphate tribasic (325188A161)."

6/Prior to 2000, data were collected for "Sodium sulfate (325188A1A1, A1A4)."

7/Prior to 2000, data were collected for "Calcium phosphates (325188G047, G051, G054, 3253124241)."

Table 4. Comparison of North American Industry Classification System-Based Product Codes with Schedule B Export Numbers and HTUSA Import Numbers: 2000

Product code	Product description	Export number 1/	Import number 2/
3251881011	Chlorine gas.....	2801.10.0000	2801.10.0000
3251814011	Sodium hydroxide, total liquid (all processes).....	2815.11.0000 2815.12.0000	2815.11.0000 2815.12.0000
3251817011	Potassium hydroxide, liquid.....	2815.20.0050 2815.20.0090	2815.20.0050 2815.20.0090
3251817031	Finished sodium bicarbonate.....	2836.30.0000	2836.30.0000
3251884025, 031	Hydrochloric acid.....	2806.10.0000	2806.10.0000
3313110100	Aluminum oxide.....	2818.20.0000	2818.20.0000
3251887021	Aluminum chloride.....	2827.32.0000	2827.32.0000
3251887031	Aluminum hydroxide, trihydrate.....	2818.30.0000	2818.30.0000
	Bleaches (sodium and calcium hypochlorite, etc.) 3/.....	2828.10.0000 2828.90.0000	2828.10.0000 2828.90.0000
3251887051	Aluminum sulfate (commercial).....	2833.22.0000	2833.22.0000
3251887071	Aluminates.....	2841.10.0000	2841.10.0000
325188A111	Potassium iodide.....	2827.60.2000	2827.60.2000
325188A124	Potassium phosphate.....	2835.24.0000	2835.24.0000
325188A141	Sodium chlorate.....	2829.11.0000	2829.11.0000
	Sodium phosphate, mono- and dibasic 3/.....	2835.22.0000	2835.22.0000
	Sodium phosphate tribasis 3/.....	2835.23.0000	2835.23.0000
325188A174	Sodium phosphate tripoly.....	2835.31.0000	2835.31.0000
325188A181	Sodium silicates (other than metasilicates).....	2839.19.0000	2839.19.0000
325188A184, 187	Sodium metasilicates.....	2839.11.0000	2839.11.0000
	Sodium sulfate 3/.....	2833.11.1000 2833.11.5000 2833.19.0000	2833.11.1000 2833.11.5000 2833.11.5050

Continued

Table 4. Comparison of North American Industry Classification System-Based Product Codes with Schedule B Export Numbers and HTUSA Import Numbers: 2000

Product code	Product description	Export number 1/	Import number 2/
3251881011	Chlorine gas.....	2801.10.0000	2801.10.0000
3251814011	Sodium hydroxide, total liquid (all processes).....	2815.11.0000	2815.11.0000 2833.19.0000
325188A1A7	Sodium sulfite.....	2832.10.0000	2832.10.0000
325188G041	Calcium carbonate, precipitated.....	2836.50.0000	2836.50.0000
325188G044	Calcium chloride.....	2827.20.0000	2827.20.0000
	Calcium phosphates 3/.....	2835.25.0000 2835.26.0000	2835.25.0000 2835.26.0000
325998H1E4, 1E7	Carbon activated (granular and pulverized).....	3802.10.0000	3802.10.0000
325188G081	Hydrogen peroxide.....	2847.00.0000	2847.00.0000
325188G084	Iodine.....	2801.20.0000	2801.20.0000
325188G091	Iron oxides and hydroxides.....	2821.10.0050	2821.10.0050
325188G0A1	Magnesium chloride.....	2827.31.0000	2827.31.0000
325188G0B1	Manganese dioxide.....	2820.10.0000	2820.10.0000
325188G0F1, 0F7	Phosphorous, oxychloride and trichloride.....	2812.10.5010	2812.10.5010
325188G0K1	Sulfur dioxide.....	2811.23.0000	2811.23.0000
325188G0M1	Zinc sulfate.....	2833.26.0000	2833.26.0000
3251311000	Titanium dioxide (composite and pure).....	2823.00.0000 3206.11.0000 3206.19.0000	2823.00.0000 3206.11.0000 3206.19.0000

1/Source: 2000 edition, Harmonized System-based Schedule B, Statistical Classification of Domestic and Foreign Commodities Exported from the United States.

2/Source: Harmonized Tariff Schedule of the United States, Annotated (2000).

3/Not comparable to Census Bureau product codes.