Inorganic Chemicals: 2005

Summary

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SUMMARY OF FINDINGS

Chlorine, gas and liquid (NAICS 3251811111, 1121) production decreased 16.0 percent to 21,088.4 thousand short tons in 2005, from 25,115.7 thousand short tons in 2004. Sodium hydroxide (NAICS 3251814111) production decreased 11.4 percent to 9,392.0 thousand short tons in 2005, from 10,603.8 thousand short tons in 2004. Potassium hydroxide (NAICS 3251817111) production increased by less than 0.4 percent to 581.2 thousand short tons in 2005, from 579.1 thousand short tons in 2004. Finished sodium bicarbonate (NAICS 3251817131) production increased 0.4 percent to 640.6 thousand short tons in 2005, from 637.8 thousand short tons in 2004.

Hydrochloric acid (NAICS 3251884125, 4131) production decreased 12.9 percent to 5,091.1 thousand short tons in 2005, from 5,844.1 thousand short tons in 2004. Aluminum sulfate, commercial (NAICS 3251887151) production decreased 0.5 percent to 1,066.3 thousand short tons in 2005, from 1,071.4 thousand short tons in 2004. Sodium sulfate, high purity (NAICS 325188A1A1) production decreased 0.3 percent to 515.1 thousand short tons in 2005, from 516.8 thousand short tons in 2004. Sodium chlorate (NAICS 325188A141) production decreased 5.8 percent to 577.0 thousand short tons in 2005, from 612.7 thousand short tons in 2004.

For general CIR information, explanation of general terms and historical note, see the appendix.

Address inquiries concerning these data to Primary Goods Industries Branch, Manufacturing and Construction Division, (MCD), Washington, DC 20233-6900, or call Mai Le, 301-763-4797.
For mail or fax copies of this publication, please contact the Information Services Center, MCD, Washington, DC 20233-6900, or call 301-763-4673.

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

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

Quarter and year	Chlorine gas (100 percent) (3251811111)	Sodium hydroxide, total liquid (100 percent) (3251814111)	Hydro-chloric acid (100 percent) (3251884125, 4131)	Aluminum sulfate commercial (17 percent Al2O3) (3251887151)	Sodium sulfate, high purity (100 percent Na2SO4) (325188A1A1)	Finished sodium bicarbonate (58 percent NaHCO3) (3251817131)	Sodium chlorate (100 percent) (325188A141)
2005							
Total	11,328,690	9,392,020	r/ 5,091,121	1,066,307	515,092	640,587	r/ 577,021
Fourth quarter	2,754,601	2,263,452	r/ 1,172,106	r/ 247,379	130,691	161,761	r/ 147,547
Third quarter	2,517,596	2,068,015	r/ 1,146,110	299,742	132,586	165,203	r/ 127,889
Second quarter	2,880,297	2,422,235	r/ 1,323,359	274,403	118,530	163,730	r/ 151,843
First quarter	3,176,196	2,638,318	1,449,546	r/ 244,783	133,285	149,893	r/ 149,742
2004							
Total	13,590,484	10,603,810	5,844,059	1,071,354	516,811	637,783	r/ 612,749
Fourth quarter	3,419,494	2,676,981	1,456,427	261,815	125,334	165,978	r/ 141,839
Third quarter	3,447,424	2,707,098	1,478,178	296,234	139,627	167,378	r/ 169,472
Second quarter	3,418,418	2,641,595	1,485,298	274,410	133,193	159,842	r/ 150,267
First quarter	3,305,148	2,578,136	1,424,156	238,895	118,657	144,585	r/ 151,171

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

Table 2. Summary of Primary Production and Shipments of Specified Inorganic Chemicals: 2005 and 2004
[Quantity in short tons unless otherwise noted. Value in thousands of dollars.]

Product code	Product description	2005 Total production (quantity)	2005 Total shipments, including interplant transfers Quantity	2005 Total shipments, including interplant transfers Value	2004 Total production (quantity)	2004 Total shipments, including interplant transfers Quantity	2004 Total shipments, including interplant transfers Value
	Chlorine and alkalies:						
	Chlorine (100 percent):						
3251811111	Gas 1/	11,328,690	8,390,391	1,659,195	13,590,484	10,979,968	1,554,848
	Fourth quarter	a/ 2,754,601	2,131,798	a/ 457,540	a/ 3,419,494	a/ 2,830,170	437,270
	Third quarter	a/ 2,517,596	1,892,002	a/ 369,999	a/ 3,447,424	a/ 2,837,774	421,728
	Second quarter	a/ 2,880,297	2,097,763	409,514	a/ 3,418,418	a/ 2,747,049	a/ 374,834
	First quarter	a/ 3,176,196	2,268,828	422,142	a/ 3,305,148	a/ 2,564,975	a/ 321,016
3251811121	Liquid	9,759,703	9,397,161	1,990,266	11,525,169	12,394,019	1,885,576
	Fourth quarter	a/ 2,394,469	2,351,638	a/ 531,671	a/ 2,909,621	a/ 3,169,138	a/ 532,597
	Third quarter	a/ 2,198,757	2,109,588	a/ 437,145	a/ 2,919,606	a/ 3,162,211	a/ 506,188
	Second quarter	2,505,537	2,375,315	494,728	a/ 2,889,685	a/ 3,111,195	a/ 459,372
	First quarter	2,660,940	2,560,620	526,722	a/ 2,806,257	a/ 2,951,475	a/ 387,419
3251814111	Liquid 2/	9,392,020	(X)	(X)	10,603,810	(X)	(X)
	Fourth quarter	a/ 2,263,452	(X)	(X)	a/ 2,676,981	(X)	(X)
	Third quarter	a/ 2,068,015	(X)	(X)	a/ 2,707,098	(X)	(X)
	Second quarter	a/ 2,422,235	(X)	(X)	a/ 2,641,595	(X)	(X)
	First quarter	a/ 2,638,318	(X)	(X)	a/ 2,578,136	(X)	(X)
3251817111	Potassium hydroxide (caustic potash) (88 to 92 percent), liquid 2/	581,244	809,471	203,474	579,075	805,426	209,067
	Fourth quarter	(D)	(D)	(D)	153,730	205,632	51,153
	Third quarter	(D)	(D)	(D)	148,852	213,043	54,051
	Second quarter	154,231	222,697	56,768	145,313	185,837	52,050
	First quarter	156,914	200,619	52,407	131,180	200,914	51,813
3251817131	Finished sodium bicarbonate (58 percent NaHCO3)	640,587	549,584	142,643	637,783	546,746	144,783
	Fourth quarter	a/ 161,761	c/ 136,523	c/ 35,977	165,978	c/ 142,447	c/ 37,413
	Third quarter	a/ 165,203	c/ 140,128	c/ 36,527	167,378	143,170	38,328
	Second quarter	a/ 163,730	c/ 142,767	c/ 36,662	159,842	138,174	36,256
	First quarter	a/ 149,893	c/ 130,166	c/ 33,477	144,585	122,955	32,786
2123913111	Sodium carbonate, natural (soda ash) (58 percent) 3/	12,076	(X)	(X)	11,846	(X)	(X)
	Fourth quarter	2,993	(X)	(X)	3,055	(X)	(X)
	Third quarter	3,055	(X)	(X)	r/ 3,082	(X)	(X)
	Second quarter	r/ 3,077	(X)	(X)	2,792	(X)	(X)
	First quarter	2,951	(X)	(X)	r/ 2,917	(X)	(X)
	Chlorine bleaches and other inorganic bleaching compounds:						
325188G1P4	Industrial, liquid and dry	r/ 478,081	r/ 513,130	r/ 367,087	r/ 547,230	516,275	r/ 326,611
	Fourth quarter	c/r/ 111,138	c/r/ 115,991	c/r/ 80,268	c/r/ 121,791	c/ 111,344	c/r/ 65,770
	Third quarter	c/r/ 144,528	c/r/ 154,123	c/r/ 114,127	c/r/ 154,163	c/r/ 146,220	c/r/ 95,233
	Second quarter	c/r/ 122,436	c/r/ 133,771	c/r/ 97,171	c/r/ 136,604	c/r/ 132,023	c/r/ 84,827
	First quarter	c/r/ 99,979	c/r/ 109,245	c/r/ 75,521	c/r/ 134,672	c/r/ 126,688	c/ 80,781
	Acids:						
	Hydrochloric (100 percent):						
3251884125	From chlorine and hydrogen	r/ 306,919	r/ 150,695	r/ 30,208	421,267	164,583	34,182
	Fourth quarter	b/r/ 67,237	b/r/ 26,439	b/r/ 6,157	b/ 97,792	a/ 42,823	a/ 9,027
	Third quarter	b/r/ 64,113	b/r/ 25,266	b/r/ 5,719	b/ 101,712	a/ 40,717	a/ 8,741
	Second quarter	b/r/ 76,478	a/r/ 42,087	a/r/ 8,143	b/ 109,308	a/ 39,619	a/ 8,221
	First quarter	b/r/ 99,091	a/r/ 56,903	a/r/ 10,189	b/ 112,455	a/ 41,424	a/ 8,193
3251884131	Byproduct and other 4/	r/ 4,784,202	r/ 3,616,331	141,445	5,422,792	4,054,347	236,685
	Fourth quarter	b/r/ 1,104,869	a/r/ 872,028	a/ 35,866	b/ 1,358,635	b/ 1,039,520	c/ 61,085
	Third quarter	a/r/ 1,081,997	a/r/ 821,651	a/ 29,015	b/ 1,376,466	a/ 1,016,493	c/ 58,407
	Second quarter	a/ 1,246,881	a/r/ 920,336	a/ 34,240	b/ 1,375,990	a/ 1,027,181	c/ 60,557
	First quarter	a/ 1,350,455	a/r/ 1,002,316	a/ 42,324	b/ 1,311,701	a/ 971,153	c/ 56,636
3251884141	Hydrocyanic, including anhydrous (100 percent)	r/ 321,561	243,623	r/ 216,934	379,270	244,496	182,596
	Fourth quarter	b/r/ 89,244	c/ 69,603	b/r/ 60,907	b/ 80,951	c/ 64,597	b/ 48,446
	Third quarter	b/r/ 76,743	c/ 49,611	b/r/ 46,930	b/ 88,032	b/ 62,155	b/ 46,268
	Second quarter	b/r/ 74,974	b/ 63,058	b/r/ 54,871	b/ 113,909	b/ 57,255	b/ 42,968
	First quarter	b/r/ 80,600	c/ 61,351	b/r/ 54,226	b/ 96,378	b/ 60,489	b/ 44,914
	Aluminum oxide and aluminum compunds:						
3313110100	Aluminum oxide (except natural alumina) (100 percent Al2O3)	(D)	(D)	r/ 1,410,187	(D)	(D)	1,107,507
	Fourth quarter	(D)	(D)	b/r/ 415,988	(D)	(D)	b/ 287,917
	Third quarter	(D)	(D)	b/r/ 344,134	(D)	(D)	b/ 294,995
	Second quarter	(D)	(D)	b/r/ 352,413	(D)	(D)	b/ 261,419
	First quarter	(D)	(D)	b/r/ 297,652	(D)	(D)	b/ 263,176

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[Quantity in short tons unless otherwise noted. Value in thousands of dollars.]

Product code	Product description	2005 Total production (quantity)	2005 Total shipments, including interplant transfers Quantity	2005 Total shipments, including interplant transfers Value	2004 Total production (quantity)	2004 Total shipments, including interplant transfers Quantity	2004 Total shipments, including interplant transfers Value
3251887121	Aluminum chloride, anhydrous (100 percent)	r/ 25,997	(D)	(D)	26,806	(D)	(D)
	Fourth quarter	c/r/ 6,536	(D)	(D)	c/ 7,346	(D)	(D)
	Third quarter	c/r/ 6,175	(D)	(D)	c/ 6,813	(D)	(D)
	Second quarter	c/r/ 6,396	(D)	(D)	c/ 7,200	(D)	(D)
	First quarter	c/r/ 6,890	(D)	(D)	c/ 5,447	(D)	(D)
3251887131	Aluminum hydroxide, trihydrate (100 percent)	r/ 854,836	r/ 797,267	233,962	890,621	844,238	197,836
	Fourth quarter	b/r/ 208,250	b/r/ 191,399	b/ 59,259	c/ 226,962	b/ 214,036	b/ 48,193
	Third quarter	b/r/ 217,564	b/r/ 204,907	b/ 60,269	b/ 235,487	b/ 228,592	b/ 51,853
	Second quarter	b/r/ 217,154	b/r/ 207,133	b/ 59,868	c/ 201,900	c/ 187,246	b/ 51,140
	First quarter	b/r/ 211,868	b/r/ 193,828	b/ 54,566	c/ 226,272	b/ 214,364	b/ 46,650
	Aluminum sulfate:						
3251887151	Commercial (17 percent aluminum oxide) 5/	1,066,307	1,058,594	r/ 146,453	1,071,354	1,055,336	123,705
	Fourth quarter	a/r/ 247,379	a/ 252,276	a/r/ 41,189	a/ 261,815	a/ 258,718	a/ 30,842
	Third quarter	a/ 299,742	a/ 297,395	a/r/ 39,510	a/ 296,234	a/ 291,868	a/ 34,823
	Second quarter	a/ 274,403	a/ 270,073	a/r/ 34,783	a/ 274,410	a/ 269,462	a/ 32,540
	First quarter	a/r/ 244,783	a/r/ 238,850	a/r/ 30,971	a/ 238,895	a/ 235,288	a/ 25,500
3251887161	Iron-free (17 percent aluminum oxide)	r/ 332,836	r/ 334,463	r/ 28,704	r/ 367,089	r/ 368,970	r/ 27,954
	Fourth quarter	a/r/ 83,820	a/r/ 84,420	a/r/ 7,279	a/r/ 91,760	a/r/ 92,258	a/r/ 7,205
	Third quarter	a/r/ 83,835	a/r/ 84,338	a/r/ 7,284	a/r/ 96,912	a/r/ 97,562	a/r/ 7,542
	Second quarter	a/r/ 82,766	a/r/ 82,782	a/r/ 7,025	a/r/ 92,291	a/r/ 92,498	a/r/ 6,801
	First quarter	a/r/ 82,415	a/r/ 82,923	a/r/ 7,116	a/r/ 86,126	a/r/ 86,652	a/r/ 6,406
3251887171	Aluminates (sodium aluminate, potassium aluminate, etc.) (100 percent)	358,653	352,959	58,773	380,611	374,965	59,423
	Fourth quarter	85,765	83,439	14,357	97,501	96,240	16,050
	Third quarter	88,501	88,068	14,442	98,176	97,000	15,749
	Second quarter	100,265	98,647	15,654 a/	97,338 a/	95,947 a/	15,624
	First quarter	84,122	r/ 82,805	14,320	87,596	85,778	12,000
	Potassium and sodium compounds:						
325188A111	Potassium iodide (100 percent)	379	(D)	(D)	338	266	4,426
	Fourth quarter	121	(D)	(D)	93 b/	69 b/	1,152
	Third quarter	79	(D)	(D)	72 a/	63 a/	1,019
	Second quarter	85	(D)	(D)	106 b/	74 b/	1,244
	First quarter	94	(D)	(D)	67 a/	60 b/	1,011
325188A117	Potassium pyrophosphate (tetra-potassium pyrophosphate) (anhydrous, 100 percent)	r/ 23092	r/ 23,192	r/ 24,378	32,174	35,231	26,087
	Fourth quarter	c/r/ 6,931	c/r/ 6,773	b/r/ 6,867	c/ 6,723	c/ 4,239	c/ 3,340
	Third quarter	c/r/ 6,796	c/r/ 6,759	b/r/ 6,856	c/ 8,191	c/ 5,077	c/ 3,841
	Second quarter	c/r/ 4,929	c/r/ 5,518	c/r/ 5,873	c/ 8,857	c/ 16,672	b/ 12,047
	First quarter	c/r/ 4,436	c/r/ 4,142	c/r/ 4,782	c/ 8,403	c/ 9,243	c/ 6,859
325188A124	Potassium phosphates (100 percent by weight)	r/ 24,836	r/ 24,132	r/ 28,850	28,206	29,143	30,408
	Fourth quarter	b/r/ 6,800	b/ 6,680	a/r/ 7,903	b/ 5,886	a/ 4,471	a/ 3,520
	Third quarter	b/r/ 6,356	b/r/ 6,418	a/r/ 7,626	a/ 7,277	a/ 5,117	a/ 4,199
	Second quarter	b/r/ 5,692	b/ 6,076	a/r/ 7,376	b/ 7,826	b/ 11,248	a/ 12,703
	First quarter	b/r/ 5,988	b/r/ 4,958	a/r/ 5,945	a/ 7,217	a/ 8,307	9,986
325188A141	Sodium chlorate (100 percent)	r/ 577,021	r/ 573,246	r/ 171,401	r/ 612,749	r/ 610,811	r/ 180,833
	Fourth quarter	r/ 147,547	r/ 145,481	r/ 43,632	a/r/ 141,839	a/r/ 155,154	r/ 45,862
	Third quarter	r/ 127,889	r/ 134,198	r/ 39,514	b/r/ 169,472	a/r/ 157,036	r/ 46,147
	Second quarter	r/ 151,843	r/ 144,612	r/ 44,752	a/r/ 150,267	a/r/ 156,207	r/ 45,895
	First quarter	r/ 149,742	r/ 148,955	r/ 43,503	a/r/ 151,171	a/r/ 142,414	r/ 42,929
325188A147	Sodium hydrosulfide (sodium sulfhydrate) (100 percent)	(D)	(D)	(D)	(D)	(D)	(D)
	Fourth quarter	(D)	(D)	(D)	(D)	(D)	(D)
	Third quarter	(D)	(D)	(D)	(D)	(D)	(D)
	Second quarter	(D)	(D)	(D)	(D)	(D)	(D)
	First quarter	(D)	(D)	(D)	(D)	(D)	(D)
325188A151	Sodium hydrosulfite (100 percent)	(D)	(D)	(D)	(D)	(D)	(D)
	Fourth quarter	(D)	(D)	(D)	(D)	(D)	(D)
	Third quarter	(D)	(D)	(D)	(D)	(D)	(D)
	Second quarter	(D)	(D)	(D)	(D)	(D)	(D)
	First quarter	(D)	(D)	(D)	(D)	(D)	(D)

Table 2. Summary of Primary Production and Shipments of Specified Inorganic Chemicals: 2005 and 2004
[Quantity in short tons unless otherwise noted. Value in thousands of dollars.]

Product code	Product description	2005 Total production (quantity)	2005 Total shipments, including interplant transfers Quantity	2005 Total shipments, including interplant transfers Value	2004 Total production (quantity)	2004 Total shipments, including interplant transfers Quantity	2004 Total shipments, including interplant transfers Value
	Sodium phosphates:						
325188A157	Dibasic (produced for sale) (100 percent) 6/	r/ 19,350	18,721	20,181	23,865	18,525	20,701
	Fourth quarter	a/r/ 4,937	a/ 4,621	5,045	b/ 5,684	a/ 4,538	5,047
	Third quarter	a/r/ 5,111	a/ 4,744	5,011	b/ 5,941	a/ 4,683	5,284
	Second quarter	a/r/ 5,013	a/ 4,586	4,993	b/ 6,323	4,454	4,890
	First quarter	r/ 4,289	a/ 4,770	5,132	a/ 5,917	4,850	5,480
325188A164	Tetrabasic (pyro) (100 percent)	r/ 14,460	r/ 13,228	r/ 12,626	13,829	17,570	10,709
	Fourth quarter	(D)	(D)	(D)	c/ 3,248	c/ 4,537	c/ 2,806
	Third quarter	(D)	(D)	(D)	c/ 3,913	c/ 4,593	c/ 2,876
	Second quarter	(D)	(D)	(D)	(D)	(D)	(D)
	First quarter	b/r/ 4,139	b/r/ 3,675	b/r 3,457	(D)	(D)	(D)
325188A167	Meta (100 percent)	r/ 37,763	34,653	r/ 35,528	38,529	33,954	32,777
	Fourth quarter	r/ 8,464	7,146	r/ 7,466	a/ 8,697	8,367	8,169
	Third quarter	r/ 10,573	8,787	r/ 8,980	a/ 9,119	7,455	7,322
	Second quarter	r/ 9,796	8,955	r/ 9,088	a/ 9,030	9,071	8,807
	First quarter	r/ 8,930	9,765	r/ 9,994	a/ 11,683	9,061	8,479
325188A171	Acid pyro (100 percent)	r/ 39,546	r/ 37,982	36,602	40,056	38,169	31,085
	Fourth quarter	a/r/ 10,816	a/r/ 9,638	9,232	a/ 11,550	a/ 10,627	a/ 8,768
	Third quarter	a/r/ 8,797	a/r/ 9,481	9,205	a/ 10,470	a/ 10,562	a/ 8,722
	Second quarter	a/r/ 10,583	a/r/ 9,608	9,332	a/ 9,711	a/ 8,699	a/ 7,007
	First quarter	a/r/ 9,350	r/ 9,255	8,833	a/ 8,325	a/ 8,281	a/ 6,588
325188A174	Tripoly (100 percent)	(D)	(D)	(D)	(D)	(D)	(D)
	Fourth quarter	(D)	(D)	(D)	(D)	(D)	(D)
	Third quarter	(D)	(D)	(D)	(D)	(D)	(D)
	Second quarter	(D)	(D)	(D)	(D)	(D)	(D)
	First quarter	(D)	(D)	(D)	(D)	(D)	(D)
325188A177	Other sodium phosphates, including mono- and tribasic	(X)	(X)	r/ 15,758	(X)	(X)	22,871
	Fourth quarter	(X)	(X)	r/ 4,291	(X)	(X)	6,092
	Third quarter	(X)	(X)	a/r/ 3,374	(X)	(X)	5,948
	Second quarter	(X)	(X)	a/r/ 3,680	(X)	(X)	(D)
	First quarter	(X)	(X)	a/r/ 4,413	(X)	(X)	(D)
325188A181	Sodium silicate (soluble silicate glass, liquid, and solid) (anhydrous) 7/	1,136,022	r/ 687,618	r/ 209,788	1,225,952	723,336	205,363
	Fourth quarter	b/ 278,016	a/r/ 180,024	b/r/ 54,770	b/ 302,903	a/ 179,434	b/ 49,583
	Third quarter	b/ 276,487	a/r/ 166,416	b/r/ 52,347	b/ 310,875	a/ 182,107	b/ 55,697
	Second quarter	b/ 284,636	a/r/ 177,989	b/r/ 52,437	b/ 312,846	a/ 187,559	b/ 50,120
	First quarter	b/ 296,883	a/r/ 163,189	b/r/ 50,234	b/ 299,328	a/ 174,236	b/ 49,963
325188A184	Metasilicate pentahydrate (100 percent)	33,229	31,402	9,125	34,273	30,184	8,807
	Fourth quarter	7,685	6,815	2,385	7,717	7,215	1,852
	Third quarter	8,166	7,481	2,071	9,355	8,256	2,208
	Second quarter	8,917	8,712	2,447	9,407	7,410	2,389
	First quarter	8,461	8,394	2,222	7,794	7,303	2,358
325188A187	Metasilicate anhydrous (100 percent)	31,703	29,729	13,088	29,235	29,106	10,317
	Fourth quarter	7,044	7,292	3,640	6,960	7,231	2,864
	Third quarter	7,096	7,771	3,388	6,909	6,669	2,673
	Second quarter	9,149	7,048	3,016	6,362	7,595	2,467
	First quarter	8,414	7,618	3,044	9,004	7,611	2,313
325188A1A1	Sodium sulfate (100 percent):						
	High purity	515,092	535,887	39,542	516,811	439,256	r/ 26,487
	Fourth quarter	b/ 130,691	b/ 112,055	b/ 6,424	b/ 125,334	b/ 120,706	b/ 8,507
	Third quarter	b/ 132,586	b/ 147,219	b/ 11,276	b/ 139,627	b/ 109,061	b/r/ 6,032
	Second quarter	b/ 118,530	b/ 122,438	b/ 9,421	b/ 133,193	b/ 105,184	b/r/ 5,968
	First quarter	b/ 133,285	b/ 154,175	b/ 12,421	b/ 118,657	b/ 104,305	b/r/ 5,980
325188A1A7	Sodium sulfite (100 percent)	102,598	127,767	23,484	95,245	(D)	(D)
	Fourth quarter	b/ 26,359	b/ 28,066	c/ 4,963	b/ 22,257	(D)	(D)
	Third quarter	b/ 22,998	b/ 30,938	c/ 5,790	b/ 25,885	(D)	(D)
	Second quarter	b/ 25,970	b/ 40,007	c/ 7,230	b/ 24,325	(D)	(D)
	First quarter	b/ 27,271	b/ 28,756	c/ 5,501	b/ 22,778	(D)	(D)
	Other inorganic chemicals:						
325188G141	Calcium carbonate (precipitated) (100 percent)	2,135,356	2,072,853	273,646	2,113,441	2,058,589	266,395
	Fourth quarter	a/ 534,649	a/ 515,743	a/ 67,514	a/ 559,090	a/ 545,425	a/ 69,908
	Third quarter	a/ 524,677	a/ 511,848	a/ 68,237	a/ 534,732	a/ 520,523	a/ 67,409
	Second quarter	a/ 524,034	a/ 508,994	a/ 67,114	a/ 517,676	503,437	a/ 65,638
	First quarter	a/ 551,996	a/ 536,268	a/ 70,781	a/ 501,943	489,204	a/ 63,440

Table 2. Summary of Primary Production and Shipments of Specified Inorganic Chemicals: 2005 and 2004
[Quantity in short tons unless otherwise noted. Value in thousands of dollars.]

Product code	Product description	2005			2004		
		Total production (quantity)	Total shipments, including interplant transfers		Total production (quantity)	Total shipments, including interplant transfers	
			Quantity	Value		Quantity	Value
325188G144	Calcium chloride (100 percent)	1,948,738	(D)	(D)	1,747,206	900,649	139,553
	Fourth quarter	b/ 503,283	(D)	(D)	a/ 411,484	b/ 265,261	b/ 41,926
	Third quarter	b/ 520,586	(D)	(D)	b/ 415,837	b/ 208,284	b/ 32,926
	Second quarter	(D)	(D)	(D)	a/ 444,503	b/ 211,343	b/ 29,589
	First quarter	(D)	(D)	(D)	a/ 475,382	b/ 215,761	b/ 35,112
325188G147	Calcium phosphates: Monobasic (21 percent minimum P) (100 percent)	(D)	(D)	239,095	(D)	(D)	184,700
	Fourth quarter	(D)	(D)	a/ 55,237	(D)	(D)	a/ 55,624
	Third quarter	(D)	(D)	a/ 66,951	(D)	(D)	a/ 46,523
	Second quarter	(D)	(D)	a/ 56,119	(D)	(D)	41,151
	First quarter	(D)	(D)	a/ 60,788	(D)	(D)	41,402
325188G151	Dibasic (18.5 percent minimum P) (100 percent)	315,371	307,082	80,428	310,928	294,463	80,163
	Fourth quarter	81,604	75,646	19,067	78,256	77,053	20,157
	Third quarter	71,418	79,389	19,625	65,497	69,513	18,885
	Second quarter	70,363	72,785	19,911	81,024	71,536	19,630
	First quarter	91,986	79,262	21,825	86,151	76,361	a/ 21,491
3253124241	Tribasic (defluorinated phosphate rock) (18.0 percent minimum P): 8/ Animal feed grade (deflourinated phosphate rock) (100 percent)	251,873	253,576	73,020	305,658	313,026	80,192
	Fourth quarter	(D)	(D)	(D)	(D)	(D)	18,915
	Third quarter	(D)	(D)	(D)	(D)	(D)	20,002
	Second quarter	(D)	(D)	(D)	76,014	72,765	17,836
	First quarter	67,322	68,358	19,869	94,453	96,077	23,439
325998H1E4	Carbon, activated: 9/ Granular carbons (dry weight) 10/	(D)	(D)	(D)	(D)	(D)	(D)
	Fourth quarter	(D)	(D)	(D)	(D)	(D)	(D)
	Third quarter	(D)	(D)	(D)	(D)	(D)	(D)
	Second quarter	(D)	(D)	(D)	(D)	(D)	(D)
	First quarter	(D)	(D)	(D)	(D)	(D)	(D)
325998H1E7	Pulverized carbons (dry weight)	(D)	(D)	(D)	39,262	(D)	(D)
	Fourth quarter	(D)	(D)	(D)	9,527	(D)	(D)
	Third quarter	(D)	(D)	(D)	10,154	(D)	(D)
	Second quarter	(D)	(D)	(D)	10,221	(D)	(D)
	First quarter	(D)	(D)	(D)	9,360	(D)	(D)
325188G181	Hydrogen peroxide (100 percent by weight)	r/ 401,907	r/ 315,932	r/ 158,209	393,663	318,242	156,209
	Fourth quarter	b/r/ 96,464	b/r/ 51,657	b/r/ 24,429	b/ 115,762	c/ 93,384	c/ 46,025
	Third quarter	b/r/ 89,446	c/r/ 78,657	c/r/ 39,719	b/ 106,853	c/ 90,408	c/ 44,700
	Second quarter	b/r/ 111,514	c/r/ 99,204	c/r/ 50,734	b/ 81,578	b/ 68,880	b/ 33,466
	First quarter	b/r/ 104,483	c/r/ 86,414	c/r/ 43,327	b/ 89,470	b/ 65,570	b/ 32,018
325188G184	Iodine (100 percent) (quantity in pounds)	(D)	(D)	39,069	3,209,966	(D)	37,544
	Fourth quarter	(D)	(D)	10,925	(D)	(D)	9,739
	Third quarter	(D)	(D)	8,456	(D)	(D)	9,548
	Second quarter	(D)	(D)	10,125	788,588	(D)	c/ 9,114
	First quarter	(D)	(D)	9,563	(D)	(D)	c/ 9,143
325188G187	Ferric chloride (100 percent)	r/ 179,004	r/ 174,981	r/ 32,580	r/ 225,455	r/ 232,589	r/ 30,457
	Fourth quarter	c/r/ 47,464	(D)	(D)	c/r/ 47,305	(D)	(D)
	Third quarter	c/r/ 46,735	b/r/ 41,521	c/r/ 7,637	c/r/ 50,109	(D)	(D)
	Second quarter	c/r/ 41,238	b/r/ 38,088	c/r/ 7,085	c/r/ 62,544	c/r/ 56,284	c/r/ 6,006
	First quarter	c/r/ 43,567	(D)	(D)	b/r/ 65,497	b/r/ 59,692	c/r/ 6,410
325188G191	Iron oxides and hydroxides, excluding iron oxide pigments (100 percent)	(D)	(D)	(D)	(D)	(D)	(D)
	Fourth quarter	(D)	(D)	(D)	(D)	(D)	(D)
	Third quarter	(D)	(D)	(D)	(D)	(D)	(D)
	Second quarter	(D)	(D)	(D)	(D)	(D)	(D)
	First quarter	(D)	(D)	(D)	(D)	(D)	(D)
325188G1A1	Magnesium chloride (100 percent)	(D)	(D)	21,532	(D)	(D)	19,811
	Fourth quarter	(D)	(D)	c/ 7,330	(D)	(D)	5,442
	Third quarter	(D)	(D)	c/ 4,653	(D)	(D)	4,798
	Second quarter	(D)	(D)	c/ 4,529	(D)	(D)	4,776
	First quarter	(D)	(D)	5,020	(D)	(D)	4,795
325188G1B1	Manganese dioxide (100 percent)	64,440	64,179	81,553	61,971	65,844	83,580
	Fourth quarter	a/ 16,432	a/ 15,949	21,843	15,136	14,528	18,390
	Third quarter	a/ 16,200	a/ 18,458	22,994	16,902	18,504	22,041
	Second quarter	16,089	15,497	18,905	16,592	15,607	20,447
	First quarter	15,719	14,275	17,811	13,341	17,205	22,702

Table 2. Summary of Primary Production and Shipments of Specified Inorganic Chemicals: 2005 and 2004
[Quantity in short tons unless otherwise noted. Value in thousands of dollars.]

Product code	Product description	2005 Total production (quantity)	2005 Total shipments, including interplant transfers Quantity	2005 Total shipments, including interplant transfers Value	2004 Total production (quantity)	2004 Total shipments, including interplant transfers Quantity	2004 Total shipments, including interplant transfers Value
325188G1F1	Phosphorus oxychloride (100 percent)	(D)	(D)	(D)	(D)	(D)	(D)
	Fourth quarter	(D)	(D)	(D)	(D)	(D)	(D)
	Third quarter	(D)	(D)	(D)	(D)	(D)	(D)
	Second quarter	(D)	(D)	(D)	(D)	(D)	(D)
	First quarter	(D)	(D)	(D)	(D)	(D)	(D)
325188G1F7	Phosphorus trichloride (chloride) (100 percent)	(D)	(D)	15,191	(D)	(D)	(D)
	Fourth quarter	(D)	(D)	3,082	(D)	(D)	(D)
	Third quarter	(D)	(D)	4,371	(D)	(D)	(D)
	Second quarter	(D)	(D)	(D)	(D)	(D)	(D)
	First quarter	(D)	(D)	(D)	(D)	(D)	(D)
325188G1G7	Silicon tetrachloride (sitet) (100 percent SiC14)	(D)	(D) r/	12,708	(D)	(D)	13,376
	Fourth quarter	(D)	(D) c/r/	3,177	(D)	(D) c/	3,344
	Third quarter	(D)	(D) c/r/	3,177	(D)	(D) c/	3,344
	Second quarter	(D)	(D) c/r/	3,177	(D)	(D) c/	3,344
	First quarter	(D)	(D) c/r/	3,177	(D)	(D) c/	3,344
325188G1K1	Sulfur dioxide (100 percent)	51,817	45,078	8,093	70,215	60,700	8,937
	Fourth quarter	a/ 11,508	a/ 10,074 b/	1,860	17,213	13,999 a/	2,055
	Third quarter	a/ 14,615	a/ 12,721 b/	2,261	17,421	15,362 a/	2,225
	Second quarter	a/ 13,452	a/ 11,448 b/	2,028	15,776	14,221 b/	2,192
	First quarter	a/ 12,242	a/ 10,835 b/	1,944	b/ 19,805	b/ 17,118 c/	2,465
325188G1M1	Zinc sulfate (100 percent)	36,690	(D)	27,757	35,424	(D)	18,326
	Fourth quarter	a/ 9,677	(D) a/	6,281	a/ 9,489	(D) a/	4,958
	Third quarter	a/ 9,612	(D) a/	6,173	a/ 9,067	(D) a/	4,852
	Second quarter	a/ 7,743	(D) a/	7,560	(D)	(D) a/	3,883
	First quarter	a/ 9,658	(D) a/	7,743	(D)	(D) a/	4,633

D Withheld to avoid disclosing data for individual companies. r/Revised by 5 percent or more from previously published data. X Not applicable.

1/Production includes amounts liquefied.
2/Liquid production data 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.

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: 2005 and 2004
[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)
3251811111	Chlorine gas	2005	10,277,216	12,306	476,103	10,741,013	4.4
		2004	12,329,081	10,448	470,883	12,789,516	3.7
3251814111	Sodium hydroxide, total liquid (all processes)	2005	8,520,298	2,790,640	1,580,524	7,310,182	21.6
		2004	9,619,616	2,915,480	1,130,658	7,834,794	14.4
3251817111	Potassium hydroxide, liquid	2005	527,296	267,754	5,961	265,503	2.2
		2004	525,328	249,577	15,251	291,002	5.2
3251817131	Finished sodium bicarbonate	2005	581,131	63,571	17,953	535,513	3.4
		2004	578,587	68,970	16,647	526,264	3.2
3251884125, 131	Hydrochloric acid	2005	4,618,588	43,402	110,800	4,685,986	2.4
		2004	5,301,642	58,334	119,386	5,362,694	2.2
3313110100	Aluminum oxide	2005	(D)	1,151,957	1,715,911	(D)	(D)
		2004	(D)	1,179,876	1,508,511	(D)	(D)
3251887121	Aluminum chloride	2005	r/ 23,584	13,114	712	r/ 11,182	r/ 6.4
		2004	24,318	12,477	1,174	13,015	9.0
3251887131	Aluminum hydroxide, trihydrate	2005	775,494	81,562	228,330	922,262	24.8
		2004	807,958	73,332	221,204	955,830	23.1
3251887151	Aluminum sulfate (commercial)	2005	967,338	12,581	9,864	964,621	1.0
		2004	971,916	9,632	5,992	968,276	0.6
3251887171	Aluminates	2005	325,365	34,552	8,663	299,476	2.9
		2004	345,285	28,964	9,744	326,065	3.0
325188A111	Potassium iodide	2005	344	90	602	856	70.3
		2004	307	133	891	1,065	83.7
325188A124	Potassium phosphate	2005	22,531	2,667	21,861	41,725	52.4
		2004	25,588	1,850	15,982	39,720	40.2
325188A141	Sodium chlorate	2005	523,465	28,271	607,534	1,102,728	55.1
		2004	r/ 555,877	21,153	593,146	r/ 1,127,870	r/ 52.6
325188A174	Sodium phosphate tripoly	2005	(D)	9,028	128,667	(D)	(D)
		2004	(D)	8,655	121,101	(D)	(D)
325188A181	Sodium silicates (other than metasilicates)	2005	1,030,582	48,814	37,117	1,018,885	3.6
		2004	1,112,165	60,580	35,189	1,086,774	3.2
325188A184, 187	Sodium metasilicates	2005	58,905	15,490	935	44,350	2.1
		2004	57,613	16,420	422	41,615	1.0
325188A1A7	Sodium sulfite	2005	93,075	44,939	34,936	83,072	42.1
		2004	86,405	38,837	30,085	77,653	38.7
325188G141	Calcium carbonate (precipitated)	2005	1,937,163	90,570	28,596	1,875,189	1.5
		2004	1,917,282	90,492	30,248	1,857,038	1.6
325188G144	Calcium chloride	2005	1,767,866	114,730	139,680	1,792,816	7.8
		2004	1,585,039	98,243	241,606	1,728,402	14.0
325998H1E4, 1E7	Carbon activated (granular and pulverized)	2005	(D)	47,240	78,683	(D)	(D)
		2004	(D)	45,185	66,843	(D)	(D)
325188G181	Hydrogen peroxide	2005	364,604	57,840	40,304	347,068	11.6
		2004	357,125	50,235	43,602	350,492	12.4
325188G184	Iodine	2005	(D)	2,425	6,254	(D)	(D)
		2004	2,912,033	1,057	5,700	2,916,676	0.2

Table 3. Production, Exports, Imports, and Apparent Consumption of Selected Inorganic Chemicals: 2005 and 2004
[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)
325188G191	Iron oxides and hydroxides	2005	(D)	73,060	6,206	(D)	(D)
		2004	(D)	72,761	8,307	(D)	(D)
325188G1A1	Magnesium chloride	2005	(D)	6,060	72,934	(D)	(D)
		2004	(D)	5,115	83,761	(D)	(D)
325188G1B1	Manganese dioxide	2005	58,459	5,897	31,507	84,069	37.5
		2004	56,219	3,998	26,443	78,664	33.6
325188G1F1, 1F7	Phosphorous, oxychloride and trichloride	2005	(D)	875	774	(D)	(D)
		2004	(D)	207	1,116	(D)	(D)
325188G1K1	Sulfur dioxide	2005	47,008	4,247	64,243	107,004	60.0
		2004	63,698	3,352	52,641	112,987	46.6
325188G1M1	Zinc sulfate	2005	33,285	2,815	31,106	61,576	50.5
		2004	32,136	3,087	29,141	58,190	50.1

D Withheld to avoid disclosing data for individual companies. r/Revised by 5 percent or more from previously published data.

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.

Table 4. Comparison of North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2005

Product code	Product description	Export code 1/	Import code 2/
3251881111	Chlorine gas	2801.10.0000	2801.10.0000
3251814111	Sodium hydroxide, total liquid (all processes)	2815.11.0000 2815.12.0000	2815.11.0000 2815.12.0000
3251817111	Potassium hydroxide, liquid	2815.20.0050 2815.20.0090	2815.20.0050 2815.20.0090
3251817131	Finished sodium bicarbonate	2836.30.0000	2836.30.0000
3251884125, 131	Hydrochloric acid	2806.10.0000	2806.10.0000
3313110100	Aluminum oxide	2818.20.0000	2818.20.0000
3251887121	Aluminum chloride	2827.32.0000	2827.32.0000
3251887131	Aluminum hydroxide, trihydrate	2818.30.0000	2818.30.0000
3251887151	Aluminum sulfate (commercial)	2833.22.0000	2833.22.0000
3251887171	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
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
325188A1A7	Sodium sulfite	2832.10.0000	2832.10.0000
325188G141	Calcium carbonate (precipitated)	2836.50.0000	2836.50.0000
325188G144	Calcium chloride	2827.20.0000	2827.20.0000
325998H1E4, 1E7	Carbon activated (granular and pulverized)	3802.10.0000	3802.10.0000
325188G181	Hydrogen peroxide	2847.00.0000	2847.00.0000
325188G184	Iodine	2801.20.0000	2801.20.0000
325188G191	Iron oxides and hydroxides	2821.10.0050	2821.10.0050
325188G01A1	Magnesium chloride	2827.31.0000	2827.31.0000
325188G01B1	Manganese dioxide	2820.10.0000	2820.10.0000
325188G1F1, 1F7	Phosphorous, oxychloride and trichloride	2812.10.5010	2812.10.5010
325188G1K1	Sulfur dioxide	2811.23.0000	2811.23.0000
325188G1M1	Zinc sulfate	2833.26.0000	2833.26.0000
3251311100	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: 2005 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 (2005).

Appendix.
General CIR Survey Information, Explanation of General Terms and Historical Note

GENERAL

The CIR program has been providing monthly, quarterly, and annual measures of industrial activity for many years. Since 1904, with its cotton and fats and oils surveys, the CIR program has formed an essential part of an integrated statistical system involving the quinquennial economic census, manufacturing sector, and the annual survey of manufactures. The CIR surveys, however, provide current statistics at a more detailed product level than either of the other two statistical programs.

The primary objective of the CIR program is to produce timely, accurate data on production and shipments of selected products. The data are used to satisfy economic policy needs and for market analysis, forecasting, and decision making in the private sector. The product-level data generated by these surveys are used extensively by individual firms, trade associations, and market analysts in planning or recommending marketing and legislative strategies, particularly if their industry is significantly affected by foreign trade. Although production and shipments information are the two most common data items collected, the CIR program collects other measures also such as inventories, orders, and consumption. These surveys measure manufacturing activity in important commodity areas such as textiles and apparel, chemicals, primary metals, computer and electronic components, industrial equipment, aerospace equipment, and consumer goods.

The CIR program uses a unified data collection, processing, and publication system. The U.S. Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic census, manufacturing sector. The manufacturing sector provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is too large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. The CIR program includes a group of mandatory and voluntary surveys. Typically the monthly and quarterly surveys are conducted on a voluntary basis. Those companies that choose not to respond to the voluntary surveys are required to submit a mandatory annual counterpart corresponding to the more frequent survey.

NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS), 1997

The adoption of the North American Industry Classification System (NAICS) in the 1997 Economic Census has had a major impact on the comparability of current and historic data. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those that left manufacturing are logging and portions of publishing. Prominent among the industries that came into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. The net effect of the classification changes are such that if the 1997 value of shipments data for all manufacturers were tabulated on an SIC basis, it would be approximately 3 percent higher.

Listed below are the NAICS sectors:

21 Mining
22 Utilities
23 Construction
31-33 Manufacturing
42 Wholesale Trade
44-45 Retail Trade
48-49 Transportation and Warehousing
51 Information
52 Finance and Insurance
53 Real Estate and Rental and Leasing
54 Professional, Scientific, and Technical Services
55 Management of Companies and Enterprises
56 Administrative and Support and Waste Management and Remediation Services
61 Educational Services
62 Health Care and Social Assistance
71 Arts, Entertainment, and Recreation
72 Accommodation and Food Services
81 Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

FUNDING

The Census Bureau funds most of the surveys. However, a number of surveys are paid for either fully or partially by other Federal Government agencies or private trade associations. A few surveys are mandated, but all are authorized by Title 13 of the United States Code.

RELIABILITY OF DATA

Survey error may result from several sources including the inability to obtain information about all cases in the survey, response errors, definitional difficulties, differences in the interpretation of questions, mistakes in recording or coding the reported data, and other errors of collection, response, coverage, and estimation. These nonsampling errors also occur in complete censuses. Although no direct measurement of the biases due to these nonsampling errors has been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data in an effort to minimize their influence.

A major source of bias in the published estimates is the imputing of data for nonrespondents, for late reporters, and for data that fail logic edits. Missing figures are imputed based on period-to-period movements shown by reporting firms. A figure is considered to be an impute if the value was not directly reported on the questionnaire, directly derived from other reported items, directly available from supplemental sources, or obtained from the respondent during the analytical review phase. Imputation generally is limited to a maximum of 10 percent for any one data cell. Figures with imputation rates greater than 10 percent are suppressed or footnoted. The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, because the actual yearly movements for nonrespondents may or may not closely agree with the imputed movements. The range of difference between the actual and imputed figures is assumed to be small. The degree of uncertainty regarding the accuracy of the published data increases as the percentage of imputation increases. Figures with imputation rates above 10 percent should be used with caution.

DATA REVISIONS

Statistics for previous years may be revised as the result of corrected figures from respondents, late reports for which imputations were originally made, or other corrections. Data that have been revised by more than 5 percent from previously published data are indicated by footnotes.

DISCLOSURE

The Census Bureau collects the CIR data under the authority of Title 13, United States Code, which specifies that the information can only be used for statistical purposes and cannot be published or released in any manner that would identify a person, household, or establishment. "D" indicates that data in the cell have been suppressed to avoid disclosure of information pertaining to individual companies.

EXPLANATION OF GENERAL TERMS

Capacity. The maximum quantity of a product that can be produced in a plant in 1 day if operating for 24 hours. Includes the capacity of idle plants until the plant is reported to be destroyed, dismantled, or abandoned.

Consumption. Materials used in producing or processing a product or otherwise removing the product from the inventory.

Exports. Includes all types of products shipped to foreign countries, or to agents or exporters for reshipment to foreign countries.

Gross shipments. The quantity or value of physical shipments from domestic establishments of all products sold, transferred to other establishments of the same company, or shipped on consignment, whether for domestic or export sale or use. Shipments of products purchased for resale are omitted. Shipments of products made under toll arrangements are included.

Interplant transfers. Shipments to other domestic plants within a company for further assembly, fabrication, or manufacture.

Inventories. The quantity or value of finished goods, work in progress, and materials on hand.

Machinery in place. The number of machines of a particular type in place as of a particular date whether the machinery was used for production, prototype, or sampling, or was idle. Machinery in place includes all machinery set up in operating positions.

Net receipts. Derived by subtracting the materials held at the end of the previous month from the sum of materials used during the current month.

Production. The total volume of products produced, including: products sold; products transferred or added to inventory after adjustments for breakage, shrinkage, and obsolescence, plus any other inventory adjustment; and products that undergo further manufacture at the same establishment.

Quantities produced and consumed. Quantities of each type of product produced by a company for internal consumption within that same company.

Quantity and value of new orders. The sales value of orders received during the current reporting period for products and services to be delivered immediately or at some future date. Also represents the net sales value of contract change documents that increase or decrease the sales value of the orders to which they are related, when the parties concerned are in substantial agreement as to the amount involved. Included as orders are only those that are supported by binding legal documents such as signed contracts or letter contracts.

Quantity and value of shipments. The figures on quantity and value of shipments represent physical shipments of all products sold, transferred to other establishments of the same company, or shipped on consignment, whether for domestic or export sale. The value represents the net sales price, f.o.b. plant, to the customer or branch to which the products are shipped, net of discounts, allowances, freight charges, and returns. Shipments to a company's own branches are assigned the same value as comparable appropriate allocation of company overhead and profit. Products bought and resold without further manufacture are excluded.

Stocks. Total quantity of ending finished inventory.

Unfilled orders (backlog). Calculated by adding net new orders and subtracting net sales from the backlog at the end of the preceding year.

HISTORICAL NOTE

Data on inorganic chemicals have been collected by the Census Bureau since 1941. Historical data may be obtained from Current Industrial Reports (called Facts for Industry before 1959) available at your local Federal Depository Library.