

# Fertilizers and Related Chemicals: First Quarter 2006

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**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 Fertilizers and Related Chemicals: 2003 to 2006  
[1,000 of short tons]

Quarter and year	Ammonia, synthetic anhydrous (3253111120) (100 percent)	Ammonium nitrate, original melt liquor (3253111201)	Ammonium sulfate (3253111240) (100 percent)	Nitric acid (3253111111) (100 percent)	Urea original melt liquor (3253114101) (100 percent)	Phosphoric acid (3253121111) (100 percent P2O5)	Phosphatic fertilizer materials (3253124100) (100 percent P2O5)	Sulfuric acid (3251881100) (100 percent)
Year-to-date:								
Second quarter 2005 to first quarter 2006.....	10,249	6,490	2,788	6,486	5,257	12,397	7,968	39,176
Second quarter 2004 to first quarter 2005.....	11,637	7,408	2,913	7,215	6,458	12,755	8,575	41,779
<b>2006</b>								
First quarter.....	2,247	1,431	653	1,447	1,167	2,903	1,824	9,271
<b>2005</b>								
Total.....	10,731	7,005	2,842	6,977	5,721	12,754	8,258	40,130
Fourth quarter.....	2,189	1,594	709	1,590	1,120	2,976	1,825	9,408
Third quarter.....	2,775	1,578	677	1,590	1,377	3,321	2,118	10,273
Fertilizer year (third quarter 2004-second quarter 2005).....	11,772	7,632	2,902	7,332	6,528	12,825	8,575	41,579
Second quarter.....	3,038	1,887	749	1,859	1,593	3,197	2,201	10,224
First quarter.....	2,729	1,946	706	1,938	1,631	3,260	2,114	10,225
<b>2004 1/</b>								
Total.....	12,058	7,230	3,006	7,129	6,345	12,691	8,736	41,919
Fourth quarter.....	2,975	1,977	717	1,847	1,707	3,321	2,194	10,696
Third quarter.....	3,030	1,822	729	1,688	1,597	3,047	2,066	10,434
Fertilizer year (third quarter 2003-second quarter 2004).....	11,683	6,663	2,979	7,309	6,210	12,686	9,027	41,709
Second quarter.....	2,903	1,663	761	1,742	1,523	3,127	2,201	10,424
First quarter.....	3,150	1,768	799	1,852	1,518	3,196	2,275	10,365
<b>2003 1/</b>								
Total.....	11,331	6,328	2,871	7,189	6,374	12,537	8,837	41,144
Fourth quarter.....	3,086	1,754	762	2,042	1,618	3,247	2,348	10,618
Third quarter.....	2,544	1,478	657	1,673	1,551	3,116	2,203	10,302
Fertilizer year (third quarter 2002-second quarter 2003).....	12,618	6,729	2,979	7,373	7,156	12,361	8,668	40,377
Second quarter.....	3,015	1,589	737	1,771	1,699	3,023	2,117	10,170
First quarter.....	2,686	1,507	715	1,703	1,506	3,151	2,169	10,054

1/Data for 2004 and 2003 have been revised based on the summary report, MQ325B(04)-5, "Fertilizer Materials and Related Products," issued September 2005.

Note: Detail may not add to total due to independent rounding.

Table 2. Production, Shipments, Consumption, and Stocks of Fertilizers and Related Chemicals  
[Quantity in short tons. Value in thousands of dollars]

Product code	Chemical and basis	First quarter 2006						Fourth quarter 2005			
		Total production	Total shipments, including interplant transfers		Stocks 1/	Total production	Total shipments, including interplant transfers		Stocks 1/		
			Quantity	Value			Quantity	Value			
Ammonia:											
3253111120	Synthetic, anhydrous (100 percent).....	b/ 2,246,748	c/ 1,538,772	c/ 406,101	b/ 337,938	a/ 2,189,139	c/ 1,334,646	b/ 349,737	b/ 269,991		
3253111121	Fertilizer use.....	b/ 1,890,851	b/ 1,381,343	b/ 365,485	b/ 283,599	a/ 1,826,455	b/ 1,184,633	b/ 312,622	b/ 212,399		
3253111131	Other uses.....	c/ 355,897	b/ 157,429	a/ 40,616	c/ 54,339	a/ 362,684	b/ 150,013	b/ 37,115	a/ 57,592		
Ammonium nitrate (100 percent):											
3253111201	Original melt liquor 2/.....	1,430,849	c/ 1,131,236	c/ 222,112	c/ 164,097	b/ 1,594,319	b/ 935,834	b/ 170,587	c/r/ 144,394		
3253111211	Consumed in the manufacture of other nitrogen solutions (e.g., CAN17, AN20, AAN).....	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)		
3253111216	Liquor consumed in the manufacture of urea-ammonium nitrate solutions.....	a/ 629,330	(X)	(X)	(D)	789,960	(X)	(X)	b/r/ 52,517		
3253111221	High density prill and granular.....	(D)	(D)	(D)	(D)	(D)	b/ 154,359	a/ 29,559	(D)		
3253111226	Low density prill and grained.....	b/ 514,288	c/ 887,750	c/ 178,568	a/ 9,721	b/ 514,979	c/ 687,968	c/ 129,688	a/r/ 10,572		
3253111231	All other (e.g., liquor sales, production loss, other)...	c/ 128,337	(D)	(D)	58,316	c/ 112,042	b/ 93,507	c/ 11,340	c/ 54,265		
3253111240	Ammonium sulfate (synthetic and byproduct, other than coke oven), total (100 percent).....	653,415	a/ 582,400	75,182	138,045	709,313	546,617	71,283	175,457		
3253111241	Synthetic (direct synthesis from sulfuric acid and ammonia).....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)		
3253111246	Byproduct other than coke oven.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)		
3253111250	Nitrogen solutions, including mixtures (100 percent N).....	715,753	503,937	112,522	142,946	829,542	639,964	146,469	82,507		
3253111256	UAN solutions (ammonium nitrate/urea solutions)....	b/ 688,788	c/ 487,155	c/ 108,025	(D)	b/ 798,837	b/ 617,298	b/ 140,502	a/ 79,908		
3253111251	All other solutions (e.g., CAN17, AN20, AAN, other) and solutions containing free ammonia 3/.....	c/ 26,965	c/ 16,782	c/ 4,497	(D)	b/ 30,705	a/ 22,666	5,967	2,599		
3253111111	Nitric acid (100 percent) 4/.....	b/ 1,446,916	c/ 408,348	b/ 57,938	(X)	a/ 1,589,886	b/ 389,155	b/ 53,212	(X)		
3253114101	Urea original melt liquor.....	b/ 1,166,560	b/ 412,198	a/ 105,211	c/ 234,785	a/ 1,120,347	b/ 426,083	c/r/ 108,596	c/ 241,206		
3253114111	Consumed in the manufacture of urea-ammonium nitrate solutions.....	a/ 468,797	(D)	(D)	(D)	562,242	(D)	(D)	(D)		
3253114121	Prills.....	b/ 201,524	(D)	(D)	(D)	b/ 239,380	(D)	(D)	(D)		
3253114131	Granular.....	a/ 465,712	b/ 190,804	b/ 40,243	a/ 94,659	a/ 285,449	b/ 190,272	b/ 40,551	a/ 71,304		
3253114141	All other (liquor sales, melamine, feedstock, other).....	b/ 30,527	(D)	(D)	(D)	b/ 33,276	(D)	(D)	(D)		
3253121111	Phosphoric acid (100 percent P2O5) 5/.....	2,902,524	692,846	213,434	158,589	2,975,746	702,984	209,003	175,163		
By use:											
3253121211	Fertilizer 5/.....	2,655,987	a/ 609,768	a/ 142,411	153,329	2,722,472	615,784	a/ 157,588	168,262		
3253121221	Animal feed (e.g., defluorinated and industrial) (e.g., refined/technical) 5/.....	246,537	83,078	71,023	5,260	r/ 253,274	87,200	51,415	6,901		
By grade:											
3253121311	Ortho (less than 65 percent P2O5) (includes merchant grade and all others) 5/.....	2,537,855	a/ 369,471	a/ 105,003	136,304	a/ 2,617,567	373,655	103,658	152,765		
3253121321	Super (more than 65 percent P2O5) 5/.....	364,669	323,375	108,431	22,285	358,179	329,329	105,345	22,398		
3253124100	Superphosphate and other phosphatic fertilizer materials:										
	Gross weight.....	3,998,918	3,969,845	839,659	654,171	4,028,832	3,906,229	867,226	r/ 653,104		
	Nitrogen content.....	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)		
	Phosphoric oxide content (100 percent P2O5).....	1,823,698	1,808,129	(X)	(X)	1,825,002	1,753,843	(X)	(X)		
3253124131	Monoammonium phosphates:										
	Gross weight.....	1,174,044	1,080,099	237,422	204,378	990,921	966,861	218,485	r/ 114,449		
	Nitrogen content.....	b/ 174,690	(X)	(X)	(X)	b/ 147,554	(X)	(X)	(X)		
	Phosphoric oxide content (100 percent P2O5).....	586,919	538,709	(X)	(X)	493,874	r/ 478,863	(X)	(X)		
3253124211	Diammonium phosphates:										
	Gross weight.....	2,276,653	2,379,971	a/ 487,644	a/ 353,747	2,542,688	b/ 2,497,864	550,392	a/r/ 454,081		
	Nitrogen content.....	373,415	(X)	(X)	(X)	429,065	(X)	(X)	(X)		
	Phosphoric oxide content (100 percent P2O5).....	1,023,809	1,060,263	(X)	(X)	1,143,259	1,109,235	(X)	(X)		
3253124222	Other ammonium phosphates: 6/										
	Gross weight.....	548,221	509,775	114,593	96,046	495,223	441,504	98,349	84,574		
	Nitrogen content.....	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)		
	Phosphoric oxide content (100 percent P2O5).....	212,970	209,157	(X)	(X)	187,869	165,745	(X)	(X)		
3251881100	Sulfuric acid (100 percent): 4/										
	Total gross.....	a/ 9,270,846	b/ 2,676,557	b/ 154,043	a/ 565,803	a/ 9,408,003	b/ 2,742,991	b/ 131,950	a/ 443,976		
By feedstock:											
3251881111	Elemental sulfur.....	a/ 7,828,145	b/ 1,527,834	b/ 86,199	(X)	a/ 7,983,314	b/ 1,525,763	c/ 68,884	(X)		
3251881121	Smelting metallic sulfide ore.....	615,860	556,955	a/ 15,559	(X)	610,755	587,154	a/ 19,139	(X)		
3251881131	Decomposition of alkylation and other spent acid.....	b/ 623,476	b/ 399,105	b/ 42,926	(D)	c/ 610,407	b/ 420,092	b/ 33,735	(D)		

Table 2. Production, Shipments, Consumption, and Stocks of Fertilizers and Related Chemicals  
 [Quantity in short tons. Value in thousands of dollars]

Product code	Chemical and basis	First quarter 2006							Fourth quarter 2005			
		Total production		Total shipments, including interplant transfers			Total production		Total shipments, including interplant transfers			
		Quantity	Value	Quantity	Value	Stocks 1/	Quantity	Value	Stocks 1/			
3251881141	Other.....	a/ 203,365	a/ 192,663	b/ 9,359	(X)	a/ 203,527	a/ 209,982	c/ 10,192	(X)			
	By grade:											
3251881212	Oleum grades.....	b/ 373,369	b/ 237,453	b/ 11,796	b/ 35,139	a/ 369,362	b/ 247,634	b/ 10,600	b/ 25,351			
3251881231	Other than oleum grades.....	a/ 8,897,477	b/ 2,439,104	b/ 142,247	a/ 530,664	a/ 9,038,641	b/ 2,495,357	b/ 121,350	a/ 418,625			
3251881311	Spent acid used in fortification.....	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)			
	Total new acid 7/.....	8,732,300	(X)	(X)	(X)	8,798,850	(X)	(X)	(X)			

D Withheld to avoid disclosing data for individual companies. N Nitrogen content. P2O5 Phosphoric oxide content. r/Revised by 5 percent or more from previously published data.  
 X Not applicable.

- 1/Stocks held by producing companies include amounts held at their nonproducing locations.
- 2/Production represents total amount of ammonium nitrate produced including amounts for fertilizer, explosives, and other uses, and amounts consumed in manufacturing other products, such as nitrogen solutions. Stocks represent total stocks held by producing companies, including stock of original melt liquor and amounts (liquid and solid) reported as fertilizer, explosives, and other uses.
- 3/Solutions containing two or more products such as (a) ammonia, ammonium nitrate; (b) ammonia, urea; (c) ammonia, ammonium nitrate, urea.
- 4/Includes data for government-owned, contractor-operated plants.
- 5/Product code 3253121111 includes product codes 3253121211, 3253121221, 3253121311, and 3253121321.
- 6/Product code 3253124222 includes product codes 3253124111 and 3253124121.
- 7/Total new acid equals total gross acid, minus fortified spent acid and sulfuric acid produced from the decomposition of alkylation acids and other spent acids and sludge acid.

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, Inventory, Exports, Imports, and Apparent Consumption of Selected Fertilizers and Related Chemicals: Fourth Quarter 2005  
[Metric tons]

Product code 1/	Product description	Beginning stock	Quantity produced	Imports for consumption 2/	Ending stock	Exports of domestic merchandise 3/	Apparent consumption 4/	Percent imports to apparent consumption
3253111120	Ammonia, synthetic, anhydrous .....	323,666	1,985,954	2,025,597	244,932	128,401	3,961,884	51.1
3253111201	Ammonium nitrate, original melt liquor.....	111,649	1,446,342	295,767	130,992	20,033	1,702,733	17.4
3253111240	Ammonium sulfate.....	132,425	643,478	63,121	159,172	223,162	456,690	13.8
3253111250	Nitrogen solutions, including mixtures 5/.....	74,963	752,548	874,945	74,849	4,316	1,623,291	53.9
3253114101	Urea original melt liquor.....	117,812	1,016,362	2,044,731	218,818	112,355	2,847,732	71.8
3253121111	Phosphoric acid.....	161,481	2,699,552	19,304	158,905	136,064	2,585,368	0.7
3253124211	Diammonium phosphates 6/.....	287,980	2,306,688	1,697	411,935	1,146,536	1,037,894	0.2
3251881100	Sulfuric acid.....	386,936	8,534,799	668,286	405,121	76,108	9,108,792	7.3

1/For comparison of North American Industry Classification System (NAICS)-based product codes with Schedule B export codes and HTSUSA import codes, see Table 4.

2/Source: Census Bureau report IM 145, U.S. Imports for Consumption.

3/Source: Census Bureau report EM 545, U.S. Exports.

4/Apparent consumption represents new domestic supply and is derived by subtracting exports from the total of manufacturers' production plus imports, and adjusting for changes in stocks.

5/Product code 3253111250 (gross weight) includes product codes 3253111251 and 3253111256 (gross weight).

6/Gross weight.

Table 4. Comparison of North American Industry Classification System (NAICS)-Based Products Codes with Schedule B Export Codes and HTUSA Import Codes: 2006

Product code	Product description	Export code 1/	Import code 2/
3253111120	Ammonia, synthetic, anhydrous .....	2814.10.0000	2814.10.0000
3253111201	Ammonium nitrate, original melt liquor.....	3102.30.0000	3102.30.0000
3253111240	Ammonium sulfate.....	3102.21.0000	3102.21.0000
3253111250	Nitrogen solutions, including mixtures.....	3102.80.0000	3102.80.0000
3253114101	Urea original melt liquor.....	3102.10.0000	3102.10.0000
3253121111	Phosphoric acid.....	2809.20.0010 2809.20.0020 2809.20.0030	2809.20.0010 2809.20.0020 2809.20.0030
3253124111	Normal and enriched superphosphates.....	3103.10.0010	3103.10.0010
3253124121	Concentrated superphosphates.....	3103.10.0020	3103.10.0020
3253124211	Diammonium phosphates.....	3105.30.0000	3105.30.0000
3251881100	Sulfuric acid.....	2807.00.0000	2807.00.0000

1/Source: 2006 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 (2006).