

# Fertilizers and Related Chemicals: Third Quarter 2006

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

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U.S. Department of Commerce  
Economics and Statistics Administration  
U.S. CENSUS BUREAU

Table 1. Summary of Production of Principal Fertilizers and Related Chemicals: 2004 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:								
First quarter 2006 to third quarter 2006.....	7,923	4,939	2,123	5,255	4,411	8,830	5,460	29,497
First quarter 2005 to third quarter 2005.....	8,955	6,781	2,181	5,700	4,698	9,665	6,316	31,363
<b>2006</b>								
Third quarter.....	2,701	1,689	697	1,870	1,606	2,993	1,816	9,878
Fertilizer year (third quarter 2005-second quarter 2006).....	10,287	7,729	2,845	6,782	5,316	12,068	7,548	39,685
Second quarter.....	2,879	1,783	756	1,839	1,614	2,965	1,875	9,960
First quarter.....	2,343	1,467	670	1,546	1,191	2,872	1,769	9,659
<b>2005 1/</b>								
Total.....	11,181	8,421	2,906	7,398	5,806	12,610	8,142	40,956
Fourth quarter.....	2,226	1,640	725	1,698	1,108	2,945	1,826	9,593
Third quarter.....	2,839	2,839	694	1,699	1,403	3,286	2,078	10,473
Fertilizer year (third quarter 2004-second quarter 2005).....	12,121	7,741	2,933	7,536	6,599	12,747	8,498	42,020
Second quarter.....	3,272	1,937	765	1,961	1,625	3,163	2,144	10,470
First quarter.....	2,844	2,005	722	2,040	1,670	3,216	2,094	10,420
<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

1/Data for 2005 and 2004 have been revised based on the summary report, MQ325B(05)-5, "Fertilizers and Related Chemicals," issued August 2006.

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	Third quarter 2006						Second quarter 2006			
		Total production	Total shipments, including interplant transfers			Total production	Total shipments, including interplant transfers				
			Quantity	Value	Stocks 1/		Quantity	Value	Stocks 1/		
Ammonia:											
3253111120	Synthetic, anhydrous (100 percent).....	b/ 2,701,475	b/ 805,001	b/ 216,595	b/ 344,176	b/ 2,878,879	b/ 1,128,390	b/ 318,882	b/ 313,403		
3253111121	Fertilizer use.....	b/ 2,423,346	(D)	(D)	c/ 295,010	b/ 2,564,983	(D)	(D)	c/ 257,397		
3253111131	Other uses.....	278,129	(D)	(D)	a/ 49,166	313,896	(D)	(D)	a/ 56,006		
Ammonium nitrate (100 percent):											
3253111201	Original melt liquor 2/.....	b/ 1,689,203	b/ 774,584	b/ 152,749	b/ 140,132	b/ 1,782,749	b/ 889,987	b/ 186,566	c/ 174,318		
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/ 913,477	(X)	(X)	(D)	a/ 945,810	(X)	(X)	(D)		
3253111221	High density prill and granular.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)		
3253111226	Low density prill and grained.....	b/ 477,312	b/ 534,886	b/ 112,823	c/ 19,113	b/ 491,075	c/ 568,742	b/ 130,098	c/ 36,666		
3253111231	All other (e.g., liquor sales, production loss, other).....	c/ 144,070	(D)	(D)	a/ 8,994	c/ 133,564	(D)	(D)	a/ 7,000		
3253111240	Ammonium sulfate (synthetic and byproduct, other than coke oven), total (100 percent).....	696,700	584,817	74,188	115,076	756,315	587,368	77,394	154,823		
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).....	908,813	570,755	117,831	165,022	881,684	645,618	r/ 144,475	r/ 145,762		
3253111256	UAN solutions (ammonium nitrate/urea solutions).....	b/ 889,740	b/ 554,941	b/ 113,569	(D)	b/ 866,644	c/ 633,453	c/r/ 141,127	(D)		
3253111251	All other solutions (e.g., CAN17, AN20, AAN, other) and solutions containing free ammonia 3/.....	c/ 19,073	c/ 15,814	b/ 4,262	(D)	c/ 15,040	c/ 12,165	c/ 3,348	(D)		
3253111111	Nitric acid (100 percent) 4/.....	b/ 1,869,945	c/ 560,379	c/ 74,956	(X)	b/ 1,839,402	c/ 581,447	c/ 77,763	(X)		
3253114101	Urea original melt liquor.....	a/ 1,605,935	b/ 547,113	b/ 134,476	b/ 144,415	a/ 1,614,247	b/ 628,975	b/ 152,064	b/ 161,696		
3253114111	Consumed in the manufacture of urea-ammonium nitrate solutions.....	a/ 663,073	(D)	(D)	(D)	a/ 604,539	(D)	(D)	(D)		
3253114121	Prills.....	(D)	(D)	(D)	(D)	a/ 184,646	(D)	(D)	(D)		
3253114131	Granular.....	a/ 753,910	b/ 306,937	b/ 64,661	b/ 89,717	a/ 799,660	b/ 371,495	b/ 80,620	b/ 97,293		
3253114141	All other (liquor sales, melamine, feedstock, other).....	(D)	(D)	(D)	(D)	a/ 25,402	(D)	(D)	(D)		
3253121111	Phosphoric acid (100 percent P2O5).....	2,992,829	745,392	219,833	147,434	2,964,827	725,867	216,243	146,818		
By use:											
3253121211	Fertilizer.....	2,760,077	a/ 670,525	a/ 179,446	140,295	2,729,541	a/ 653,108	a/ 177,209	140,914		
3253121221	Animal feed (e.g., defluorinated and industrial) (e.g., refined/technical).....	232,752	74,867	40,387	7,139	235,286	72,759	39,034	5,904		
By grade:											
3253121311	Ortho (less than 65 percent P2O5) (includes merchant grade and all others).....	2,671,447	a/ 422,852	a/ 114,135	127,427	2,667,488	a/ 427,082	a/ 117,048	128,962		
3253121321	Super (more than 65 percent P2O5).....	321,382	322,540	105,698	20,007	297,339	298,785	99,195	17,856		
3253124100	Superphosphate and other phosphatic fertilizer materials:										
	Gross weight.....	3,871,716	4,019,450	814,847	490,453	4,011,819	4,036,215	802,813	589,577		
	Nitrogen content.....	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)		
	Phosphoric oxide content (100 percent P2O5).....	1,815,971	1,891,180	(X)	(X)	1,874,762	1,906,665	(X)	(X)		
3253124131	Monoammonium phosphates:										
	Gross weight.....	a/ 1,108,628	a/ 1,190,619	a/ 259,731	93,383	1,049,559	r/ 1,110,612	241,772	r/ 163,196		
	Nitrogen content.....	b/ 173,415	(X)	(X)	(X)	b/ 161,297	(X)	(X)	(X)		
	Phosphoric oxide content (100 percent P2O5).....	554,345	598,396	(X)	(X)	534,337	567,625	(X)	(X)		
3253124211	Diammonium phosphates:										
	Gross weight.....	2,450,457	2,541,642	496,520	339,003	2,676,558	2,688,043	515,837	373,985		
	Nitrogen content.....	404,441	(X)	(X)	(X)	r/ 438,640	(X)	(X)	(X)		
	Phosphoric oxide content (100 percent P2O5).....	1,098,968	1,139,773	(X)	(X)	1,197,969	1,204,461	(X)	(X)		
3253124222	Other ammonium phosphates: 5/										
	Gross weight.....	b/ 312,631	a/ 287,189	a/ 58,596	c/ 58,067	b/ 285,702	a/ 237,560	a/r/ 45,204	a/ 52,396		
	Nitrogen content.....	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)		
	Phosphoric oxide content (100 percent P2O5).....	162,658	c/ 153,011	(X)	(X)	c/r/ 142,456	c/r/ 134,579	(X)	(X)		
3251881100	Sulfuric acid (100 percent): 4/										
	Total gross.....	a/ 9,877,903	b/ 3,134,988	b/ 174,604	a/ 437,270	a/ 9,959,866	b/ 3,247,440	b/ 182,477	a/ 528,933		
By feedstock:											
3251881111	Elemental sulfur.....	a/ 8,278,012	b/ 1,845,695	c/ 102,420	(X)	a/ 8,409,317	b/r/ 1,959,635	c/r/ 111,177	(X)		
3251881121	Smelting metallic sulfide ore.....	560,737	594,495	a/ 23,276	(X)	594,075	596,059	a/ 20,942	(X)		
3251881131	Decomposition of alkylation and other spent acid.....	b/ 826,238	b/ 531,670	a/ 39,663	(D)	c/ 779,769	b/ 507,101	a/ 39,891	(D)		
3251881141	Other.....	a/ 212,916	a/ 163,128	a/ 9,245	(X)	a/ 176,705	a/ 184,645	b/r/ 10,467	(X)		

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	Third quarter 2006						Second quarter 2006									
		Total production		Total shipments, including interplant transfers			Total production		Total shipments, including interplant transfers								
				Quantity	Value	Stocks 1/			Quantity	Value	Stocks 1/						
	By grade:																
3251881212	Oleum grades.....	b/	416,185	b/	296,918	b/	14,723	b/	30,236	b/	414,229	b/	307,577	b/	16,889	b/	35,301
3251881231	Other than oleum grades.....	a/	9,461,718	b/	2,838,070	b/	159,881	a/	407,034	a/	9,545,637	b/	2,939,863	b/	165,588	a/	493,632
3251881311	Spent acid used in fortification.....		(D)		(X)		(X)		(D)		(D)		(X)		(X)		(D)
	Total new acid 6/.....		9,051,665		(X)		(X)		(X)		9,180,097		(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 3253124222 includes product codes 3253124111 and 3253124121.

6/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: Second Quarter 2006  
[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
325311120	Ammonia, synthetic, anhydrous.....	382,002	2,611,676	1,835,550	284,315	103,938	4,440,975	41.3
3253111201	Ammonium nitrate, original melt liquor.....	153,126	1,617,283	324,131	158,139	31,373	1,905,028	17.0
3253111240	Ammonium sulfate.....	145,463	686,118	95,351	140,453	218,772	567,707	16.8
3253111250	Nitrogen solutions, including mixtures 5/.....	190,357	799,850	388,290	132,233	6,868	1,239,396	31.3
3253114101	Urea original melt liquor.....	163,174	1,464,421	935,085	146,688	264,891	2,151,101	43.5
3253121111	Phosphoric acid.....	146,019	2,689,647	24,005	133,191	139,093	2,587,387	0.9
3253124211	Diammonium phosphates 6/.....	261,763	2,428,133	2,498	339,274	1,564,716	788,404	0.3
3251881100	Sulfuric acid.....	535,908	9,035,441	678,282	483,117	46,791	9,719,723	7.0

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 HTSUSA 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).