

# Fertilizers and Related Chemicals: First Quarter 2007

Issued June 2007

MQ325B(07)-1

Current data are released electronically on Internet for all individual surveys as they become available. Use: <http://www.census.gov/mcd/>. Individual reports can be accessed by choosing "Current Industrial Reports (CIR)," clicking on "CIRs by Subsector;" then choose the survey of interest. Follow the menu to view the PDF file or to download the worksheet file (XLS format) to your personal computer.

These data are also available on Internet through the U.S. Department of Commerce and STAT-USA by subscription. The Internet address is: [www.stat-usa.gov/](http://www.stat-usa.gov/). Follow the prompts to register. Also, you may call 202-482-1986 or 1-800-STAT-USA, for further information.

## Current Industrial Reports

Address inquiries concerning these data to Primary Goods Industries Branch, Manufacturing and Construction Division, (MCD), Washington, DC 20233-6900, or call Bridgett Parker-Bell, 301-763-6618.

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

*Helping You Make Informed Decisions*

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

Table 1. Summary of Production of Principal Fertilizers and Related Chemicals: 2005 to 2007  
[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)
<b>2007</b>								
First quarter.....	2,950	2,040	775	2,103	1,514	2,938	1,808	9,656
<b>2006</b>								
Total.....	11,142	6,947	2,870	7,316	5,987	11,800	7,184	39,578
Fourth quarter.....	r/ 2,980	1,960	744	2,016	1,560	2,927	1,710	9,986
Third quarter.....	2,940	1,737	700	1,915	1,622	3,036	1,830	9,973
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

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

1/Data for 2005 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	First quarter 2007						Fourth quarter 2006					
		Total production	Total shipments, including interplant transfers			Total production	Total shipments, including interplant transfers						
			Quantity	Value	Stocks 1/		Quantity	Value	Stocks 1/				
<b>Ammonia:</b>													
325311120	Synthetic, anhydrous (100 percent).....	b/ 2,949,949	c/ 711,231	c/ 183,411	b/ 297,317	a/r/ 2,979,880	a/ 984,953	a/ 264,824	a/r/ 227,622				
325311121	Fertilizer use.....	b/ 2,603,502	c/ 630,783	c/ 160,514	b/ 269,449	a/r/ 2,639,538	(D)	(D)	a/r/ 190,488				
325311131	Other uses.....	a/ 346,447	80,448	a/ 22,897	27,868	340,342	(D)	(D)	r/ 37,134				
<b>Ammonium nitrate (100 percent):</b>													
3253111201	Original melt liquor 2/.....	2,040,154	b/ 946,708	b/ 185,920	c/ 215,207	b/ 1,960,058	b/ 867,875	b/ 166,251	b/ 167,634				
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/ 1,091,785	(X)	(X)	(D)	a/ 1,058,641	(X)	(X)	(D)				
3253111221	High density prill and granular.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)				
3253111226	Low density prill and grained.....	b/ 545,041	b/ 587,155	b/ 123,376	c/ 57,350	b/ 529,255	b/ 532,396	b/ 111,234	c/ 57,008				
3253111231	All other (e.g., liquor sales, production loss, other).....	c/ 167,474	(D)	(D)	a/ 26,288	c/ 175,446	(D)	(D)	a/ 20,753				
3253111240	Ammonium sulfate (synthetic and byproduct, other than coke oven), total (100 percent).....	775,157	636,627	84,438	a/ 94,588	743,581	567,123	76,298	139,113				
3253111241	Synthetic (direct synthesis from sulfuric acid and ammonia).....	(D)	(D)	7,959	a/ 28,345	(D)	(D)	(D)	(D)				
3253111246	Byproduct other than coke oven.....	(D)	(D)	76,479	a/ 66,243	(D)	(D)	(D)	(D)				
3253111250	Nitrogen solutions, including mixtures (100 percent N)...	1,007,263	674,327	154,470	181,597	998,453	700,253	149,935	152,941				
3253111256	UAN solutions (ammonium nitrate/urea solutions).....	986,370	656,436	149,956	(D)	a/ 976,005	a/ 677,994	a/ 143,795	(D)				
3253111251	All other solutions (e.g., CAN17, AN20, AAN, other) and solutions containing free ammonia 3/.....	20,893	17,891	4,514	(D)	b/ 22,448	a/ 22,259	a/ 6,140	(D)				
3253111111	Nitric acid (100 percent) 4/.....	b/ 2,102,559	c/ 588,311	c/ 82,473	(X)	b/ 2,015,647	c/ 568,524	c/ 79,434	(X)				
3253114101	Urea original melt liquor.....	a/ 1,514,218	b/ 393,323	b/ 122,145	b/ 83,736	a/ 1,559,817	a/ 389,493	107,101	a/ 112,099				
3253114111	Consumed in the manufacture of urea-ammonium nitrate solutions.....	a/ 722,898	(D)	(D)	(D)	a/ 726,327	(D)	(D)	(D)				
3253114121	Prills.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)				
3253114131	Granular.....	(D)	124,726	b/ 24,618	36,923	(D)	b/ 153,874	a/ 33,319	b/ 64,411				
3253114141	All other (liquor sales, melamine, feedstock, other).....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)				
3253121111	Phosphoric acid (100 percent P2O5) .....	2,937,533	736,346	210,148	145,540	2,926,989	695,805	197,675	157,663				
<b>By use:</b>													
3253121211	Fertilizer .....	b/ 2,672,001	b/ 651,220	b/ 172,128	b/ 137,400	a/ 2,676,546	a/ 605,064	a/ 158,927	a/ 148,831				
3253121221	Animal feed (e.g., defluorinated and industrial) (e.g., refined/technical) .....	265,532	85,126	38,020	8,140	250,443	90,741	38,748	8,832				
<b>By grade:</b>													
3253121311	Ortho (less than 65 percent P2O5) (includes merchant grade and all others) .....	b/ 2,655,215	b/ 450,341	b/ 116,809	a/ 125,136	a/ 2,647,230	a/ 413,731	a/ 107,453	a/ 139,990				
3253121321	Super (more than 65 percent P2O5) .....	282,318	286,005	93,339	20,404	279,759	282,074	90,222	17,673				
3253124100	Superphosphate and other phosphatic fertilizer materials:												
	Gross weight.....	3,751,447	4,093,798	815,156	292,999	3,640,231	3,983,954	768,134	367,960				
	Nitrogen content.....	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)				
	Phosphoric oxide content (100 percent P2O5).....	1,808,490	1,967,929	(X)	(X)	1,709,963	1,772,199	(X)	(X)				
3253124131	Monoammonium phosphates:												
	Gross weight.....	b/ 1,095,718	b/ 1,132,383	b/ 230,409	b/ 95,793	b/ 998,562	b/ 1,020,485	b/ 199,991	b/ 83,632				
	Nitrogen content.....	a/ 162,260	(X)	(X)	(X)	a/ 146,150	(X)	(X)	(X)				
	Phosphoric oxide content (100 percent P2O5).....	b/ 540,385	b/ 559,267	(X)	(X)	b/ 483,112	b/ 497,353	(X)	(X)				
3253124211	Diammonium phosphates:												
	Gross weight.....	b/ 2,319,990	b/ 2,635,205	b/ 520,950	b/ 145,924	b/ 2,321,305	b/ 2,629,860	b/ 501,576	b/ 230,086				
	Nitrogen content.....	b/ 423,184	(X)	(X)	(X)	b/ 426,981	(X)	(X)	(X)				
	Phosphoric oxide content (100 percent P2O5).....	b/ 1,083,941	b/ 1,226,234	(X)	(X)	b/ 1,052,192	b/ 1,101,113	(X)	(X)				
3253124222	Other ammonium phosphates: 5/												
	Gross weight.....	b/ 335,739	b/ 326,210	b/ 63,797	c/ 51,282	a/ 320,364	a/ 333,609	a/ 66,567	a/ 54,242				
	Nitrogen content.....	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)				
	Phosphoric oxide content (100 percent P2O5).....	c/ 184,164	c/ 182,428	(X)	(X)	b/ 174,659	b/ 173,733	(X)	(X)				
3251881100	Sulfuric acid (100 percent): 4/												
	Total gross.....	b/ 9,655,628	c/ 3,083,338	c/ 170,296	b/ 501,792	a/ 9,986,210	b/ 2,938,424	b/ 166,161	a/ 566,746				
<b>By feedstock:</b>													
3251881111	Elemental sulfur.....	b/ 8,385,412	c/ 1,797,757	c/ 99,344	(X)	a/ 8,652,392	b/ 1,857,250	c/ 101,422	(X)				
3251881121	Smelting metallic sulfide ore.....	b/ 579,388	c/ 672,552	c/ 26,120	(X)	b/ 448,798	b/ 449,754	c/ 18,144	(X)				
3251881131	Decomposition of alkylation and other spent acid.....	a/ 515,678	b/ 462,849	a/ 34,866	(D)	a/r/ 692,666	a/ 473,535	a/ 36,126	(D)				
3251881141	Other.....	b/ 175,150	b/ 150,180	b/ 9,966	(X)	a/ 192,354	a/ 157,885	b/ 10,469	(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	First quarter 2007						Fourth 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/ 401,148	a/ 273,520	b/ 13,334	b/ 37,153	b/ 427,918	b/ 284,883	b/ 13,557	b/ 35,032		
3251881231	Other than oleum grades.....	b/ 9,254,480	b/ 2,809,818	b/ 156,962	b/ 464,639	a/ 9,558,292	b/ 2,653,541	b/ 152,604	a/ 531,714		
3251881311	Spent acid used in fortification.....	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)		
	Total new acid 6/.....	9,139,950	(X)	(X)	(X)	9,293,544	(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: Fourth 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
3253111120	Ammonia, synthetic, anhydrous.....	243,214	2,703,302	1,782,150	206,495	(NA)	(NA)	(NA)
3253111201	Ammonium nitrate, original melt liquor....	119,647	1,778,135	208,392	152,075	(NA)	(NA)	(NA)
3253111240	Ammonium sulfate.....	104,404	674,566	70,242	126,201	(NA)	(NA)	(NA)
3253111250	Nitrogen solutions, including mixtures 5/.....	139,281	905,782	468,500	138,746	(NA)	(NA)	(NA)
3253114101	Urea original melt liquor.....	111,853	1,415,043	1,226,920	101,695	(NA)	(NA)	(NA)
3253121111	Phosphoric acid.....	134,928	2,655,321	40,922	143,030	(NA)	(NA)	(NA)
3253124211	Diammonium phosphates 6/.....	307,540	2,105,853	1,692	208,731	(NA)	(NA)	(NA)
3251881100	Sulfuric acid.....	382,688	9,059,340	386,286	514,143	60,927	9,253,244	4.2

NA Not available.

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: 2007

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: 2007 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 (2007).