

UNITED STATES DEPARTMENT OF
COMMERCE NEWS

WASHINGTON D.C. 20233

**ECONOMICS AND STATISTICS ADMINISTRATION
BUREAU OF THE CENSUS**

CURRENT INDUSTRIAL REPORTS

**ANNUAL REPORT ON
FERTILIZER MATERIALS
MA28B**

1996

Issued August 1997

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SCOPE OF SURVEY: The statistics in this publication were collected on annually form MA28B. This survey covers establishments manufacturing inorganic fertilizer chemicals, phosphatic fertilizer materials, and sulfuric acid; except spent sulfuric acid recovered by hydrolysis and evaporation. The panel for this survey consist of all known producers of these products, approximately 244 establishments.

SURVEY METHODOLOGY: Data for the 1996 annual may include estimates for reports not received in time for tabulation. Data for missing reports are "imputed" based on year-to-year movement shown by reporting firms. Data cells with imputation greater than 20 percent are footnoted.

REVISIONS: Data for prior periods may be revised due to corrected data from respondents, including data for reports received too late to include in the original publication. Data revised by more than 5 percent are footnoted.

OBTAINING REPORTS: Current data are released electronically on Internet for all individual surveys as they become available. Use the <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 Individual Products by Numeric Index," choose the survey of interest. Follow the menu to view the text (ASCII) file or to download the worksheet file (WK format) to your personal computer.

To access the annual fertilizer materials report directly use the address <http://www.census.gov/ftp/pub/cir/www/ma28g.html>.

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; or call 202-482-1986 for further information.

NEXT SCHEDULED REPORT: The 1997 annual report will be released August 1998.

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SUMMARY OF FINDINGS

United States production of sulfuric acid in 1996 totaled 47,770.3 thousand short tons (100 percent H₂SO₄), approximately 1 percent above the 1995 figure of 47,519.3 thousand short tons. Value of shipments (including interplant transfers) in 1996 amounted to \$571.7 million, as compared to the 1995 value of \$539.3 million.

Value of shipments of synthetic ammonia, nitric acid, and ammonium compounds increased 3 percent to \$3,817.6 million in 1996 from the 1995 level of \$3,705.2 million. Shipments of urea increased 7.3 percent to \$911.9 million in 1996, and shipments of phosphoric acid increased 1 percent to \$1,226.8 million.

Production of superphosphate and other phosphatic fertilizer materials for 1996 increased 1.8 percent to 10,549.4 thousand short tons (100 percent P₂O₅). Value of shipments amounted to \$3,934.3 million in 1996, as compared to the 1995 value of \$3,594.3 million.

Table 1. Shipments and production of principal fertilizer materials: 1992 TO 1996

(Quantity in thousands of short tons; value in millions of dollars)

Product code	Product description	Year	Total production	Total shipments including interplant transfers	
				Quantity on board, plant	Value, freight
28731 31	Ammonia, synthetic anhydrous (1).....	1996	17,762.1	9,919.1	1,689.6
		1995	17,402.2	9,722.8	1,661.6
		1994	17,869.1	10,525.3	1,540.8
		1993	17,195.2	10,435.5	1,174.3
		1992	17,924.2	10,642.5	1,095.4
28731 44	Ammonium nitrate, original melt liquor (2).....	1996	9,026.0	(X)	(X)
		1995	8,489.1	(X)	(X)
		1994	8,567.6	(X)	(X)
		1993	8,280.9	(X)	(X)
		1992	7,980.6	(X)	(X)
28731 57	Ammonium sulfate (1).....	1996	2,662.0	2,543.5	213.6
		1995	2,646.7	2,551.7	195.3
		1994	2,584.1	2,484.9	168.8
		1993	2,432.4	2,416.9	150.4
		1992	2,391.0	2,239.3	139.6
28732 --	Urea (100%).....	1996	8,528.0	5,781.4	911.9
		1995	8,116.7	5,242.8	848.3
		1994	8,360.3	5,456.9	726.1
		1993	8,329.6	5,254.8	629.6
		1992	8,766.3	5,343.0	695.7
28731 11	Nitric acid (100%).....	1996	9,204.8	1,460.9	196.9
		1995	8,839.0	1,291.1	168.2
		1994	8,713.7	931.8	116.5
		1993	8,253.9	678.0	88.5
		1992	8,136.0	672.0	85.4
28741 81	Phosphoric acid (100% P2O5).....	1996	13,210.0	4,401.8	1,226.8
		1995	13,133.8	4,409.3	1,219.5
28741 85		1994	12,792.0	4,227.7	1,103.1
		1993	11,515.1	3,687.5	969.3
		1992	12,825.9	4,375.0	1,181.5
28193 --	Sulfuric acid, gross (100%).....	1996	47,770.3	13,014.8	571.7
		1995	47,519.3	12,677.7	539.3
		1994	44,861.9	11,767.2	461.9
		1993	39,838.5	11,362.0	515.9
		1992	44,523.7	10,950.2	528.7
28742 --	Superphosphates and other fertilizer materials (100% P2O5).....	1996	10,549.4	10,497.9	3,934.3
		1995	10,364.2	10,231.0	3,594.3
		1994	10,041.6	9,966.9	2,920.7
		1993	8,800.9	8,813.8	2,057.3
		1992	9,696.0	9,665.6	2,530.1

r) Revised by 5 percent or more from previously published figures. (X) Not applicable.

(1) Excludes data for byproduct ammonia liquor and ammonium sulfate published by the Department of Energy.

(2) Represents total amount of original solution produced for all purposes.

Table 2. Production and shipments of fertilizer materials: 1996 AND 1995

[Quantity in thousands of short tons; value in millions of dollars]

Product code	Chemical and basis	1996			1995		
		Total Production	Total Shipments Including Interplant Transfers		Total Production	Total Shipments Including Interplant Transfers	
			Quantity	Value		Quantity	Value
28193 --	Sulfuric acid, gross (new and fortified).....	47,770.3	13,014.8	571.7	47,519.3	12,677.7	539.3
	<i>By feedstock:</i>						
28193 32	Elemental sulfur.....	39,625.3	7,269.1	373.3	38,268.4	7,203.9	357.8
28193 34	Smelting metallic sulfide ore.....	3,900.7	3,416.9	50.7	3,764.5	3,358.0	r/ 56.7
28193 36	Decomposition of alkylation & other spent acid.....	3,590.2	2,091.5	135.3	r/ 4,937.4	1,934.3	115.7
28193 38	Other.....	654.1	237.2	12.5	549.0	181.5	9.2
	<i>By grade:</i>						
28193 11	Oleum under 40 percent.....	1,304.3	888.3	60.6	1,313.7	849.2	44.3
28193 21	Oleum 40 percent and over 40 percent.....	226.5	256.5	14.4	253.3	259.6	14.5
28193 31	Other than oleum (1).....	46,239.5	11,870.0	496.8	45,952.2	11,569.0	480.5
28731 --	Synthetic ammonia, nitric acid, and ammonium compounds.....	(X)	(X)	3,817.6	(X)	(X)	3,705.2
28731 11	<i>Nitric acid (100% HNO3).....</i>	9,204.8	1,460.9	196.9	8,839.0	1,291.1	168.2
28731 31	<i>Ammonia, synthetic anhydrous (100% NH3)(3)....</i>	17,762.1	9,919.1	1,689.6	17,402.2	9,722.8	1,661.6
28731 30	Fertilizer use.....	15,456.6	8,286.9	1,371.4	15,176.2	8,194.7	1,405.4
28731 32	Other uses.....	2,305.5	1,632.3	318.2	r/ 2,226.0	r/ 1,528.1	r/ 256.2
	<i>Ammonium nitrate:</i>						
28731 44	Original melt liquor (100% NH4 NO3)(4).....	9,026.0	4,335.2	652.7	8,489.1	4,467.9	636.0
	Consumed in the manufacture of:						
28731 45	Other nitrogen solutions (100% NH4 NO3).....	406.2	(X)	(X)	588.4	(X)	(X)
28731 46	Ammonium nitrate-urea solutions.....	4,195.3	(X)	(X)	3,491.3	(X)	(X)
28731 47	High density prill and granular.....	2,505.2	2,469.6	363.4	2,496.6	2,578.9	344.1
28731 48	Low density prill and grained.....	1,556.2	1,539.5	346.1	1,585.5	1,562.9	247.0
28731 49	All other (liquor sales, etc.).....	363.2	326.1	43.3	327.3	326.1	44.9
28731 57	<i>Ammonium sulfate, synthetic and byproduct other than coke oven (100% (NH4)2 SO4)(3).....</i>	2,662.0	2,543.5	213.6	2,646.7	2,551.7	195.3
28731 56	Synthetic.....	(D)	(D)	(D)	(D)	(D)	(D)
28731 58	Byproduct, other than coke oven.....	(D)	(D)	(D)	(D)	(D)	(D)
28731 55	<i>Nitrogen solutions (100% N) (including mixtures containing urea).....</i>	3,649.8	3,665.7	1,006.1	3,602.9	3,593.9	983.4
28731 66	Ammonium nitrate/urea solutions.....	3,529.3	3,547.2	983.0	3,432.9	3,466.1	961.6
28731 68	All other compounds and solutions (e.g. CAN17, AN20, AAN and others) and solutions containing free ammonia, including data for solutions containing two or more products such as (a) ammonia, ammonium-nitrate; (b) ammonia, urea; (c) ammonia, ammonium-nitrate, urea.....	120.5	118.5	23.1	170.0	127.9	21.8
28731 69	<i>Other ammonium compounds (including ammonium chloride, gray and white).....</i>	(X)	(X)	58.7	(X)	(X)	r/ 60.7
28732 --	Urea original melt liquor (100%).....	8,528.0	5,781.4	911.9	8,117.1	5,266.1	849.9
	<i>Consumed in the manufacture of:</i>						
28732 17	Urea-ammonium nitrate solutions.....	2,761.2	(X)	(X)	2,618.6	(X)	(X)
28732 19	Prills.....	2,736.4	2,746.3	397.7	2,589.5	2,458.6	352.2
28732 20	Granular.....	2,765.1	2,750.4	479.5	2,667.5	2,564.0	470.2
28732 23	All other (liquor sales, melamine, feedstock, other).....	265.3	284.7	34.7	r/ 241.5	243.4	27.4

Table 2. Production and shipments of fertilizer materials: 1996 AND 1995
 [Quantity in thousands of short tons; value in millions of dollars]

Product code	Chemical and basis	1996			1995		
		Total Production	Total Shipments Including Interplant Transfers		Total Production	Total Shipments Including Interplant Transfers	
			Quantity	Value		Quantity	Value
28741 --	Phosphoric acid (100% P2O5).....	13,210.0	4,401.8	1,226.8	13,133.8	4,409.3	1,219.5
28741 81	<i>Thermal.....</i>	306.5	156.7	124.0	318.6	162.3	139.3
28741 85	<i>Wet.....</i>	12,903.5	4,245.1	1,102.8	12,815.2	4,247.0	1,080.3
	<i>By use:</i>						
28741 86	<i>Fertilizer.....</i>	11,877.6	(D)	(D)	11,914.4	(D)	(D)
28741 87	<i>Feed and other.....</i>	1,026.0	(D)	(D)	900.7	(D)	(D)
	<i>By grade:</i>						
28741 88	<i>Ortho (less than 65% P2O5).....</i>	11,479.6	3,026.9	776.8	11,658.5	3,294.3	804.5
28741 89	<i>Super (65% or more P2O5).....</i>	1,423.9	1,218.3	326.1	1,153.6	952.7	275.8
28742 --	Superphosphates and other phosphatic fertilizer materials:						
	Gross weight.....	20,758.7	20,425.1	(X)	20,531.3	20,197.5	(X)
	Phosphoric oxide content (100% P2O5).....	10,549.4	10,497.9	3,934.3	10,364.2	10,231.0	3,594.3
28742 15	Normal and enriched superphosphates:						
	AND						
28742 41	Concentrated superphosphates:						
	Gross weight.....	1,841.3	1,604.5	(X)	1,830.7	1,611.3	(X)
	Phosphoric oxide content (100% P2O5).....	822.8	763.2	307.9	807.8	767.7	214.6
28742 51	Monoammonium phosphates:						
	Gross weight.....	3,305.1	3,889.0	(X)	2,841.4	2,791.7	(X)
	Phosphoric oxide content (100% P2O5).....	1,782.8	1,759.8	657.9	1,528.8	1,497.6	527.2
28742 52	Diammonium phosphates:						
	Gross weight.....	15,033.3	14,293.6	(X)	15,349.6	15,265.8	(X)
	Phosphoric oxide content (100% P2O5).....	7,590.2	7,617.2	2,853.4	7,739.3	7,669.7	2,770.0
28742 55	Other ammonium phosphates:						
	AND						
28742 61	Other phosphatic fertilizer materials:						
	Gross weight.....	636.2	638.1	(X)	561.2	528.7	(X)
	Phosphoric oxide content (100% P2O5).....	353.6	357.6	115.1	288.2	295.9	82.4

(D) Data withheld to avoid disclosing figures for individual companies. (r) Revised by 5 percent or more from previously published figures. (X) Not applicable.

- (1) Figures for "Other than oleum" include "Chamber process acid."
- (2) Includes unspecified amounts of nitric acid produced but not withdrawn from the system.
- (3) Excludes data for byproduct ammonia liquor and ammonium sulfate published by the Department of Energy.
- (4) Represents total amount of original solution produced, including amounts used for fertilizer, explosives, and other uses and amounts consumed in manufacturing other products such as nitrogen solutions (product code 28731 55).
- (5) "Ammonium nitrate/calcium nitrate solutions" (product code 28731 73) and "All other two component products" (product code 28731 67) are combined with "solutions containing ammonia" (product code 28731 65) to avoid disclosing data for individual companies.
- (6) Value for gross weight and (100% P2O5) are the same value for each 28742 product code.

Table 3. Quantities of selected fertilizer materials produced and consumed in the same plant: 1996 and 1995

Product code	Product description	Basis	Consumed in producing plants (thousands of short tons)	
			1996	1995
28193	Sulfuric acid, gross (new and fortified).....	100% H ₂ SO ₄	33,500.6	34,998.8
28731 11	Nitric acid.....	100% HNO ₃	7,962.3	7,888.1
28731 30				
28731 32	Ammonia (synthetic) anhydrous (1).....	100% HN ₃	7,754.9	7,418.4
	Ammonium nitrate:			
28731 45	Other nitrogen solutions (2).....	100% NH ₄ NO ₃	406.2	588.4
28731 46	Urea-ammonium nitrate solutions.....	do.....	4,195.3	3,491.3
28731 47	High density prill and grained.....	do.....	(D)	152.1
28731 48	Low density prill and granular.....	do.....	(D)	(D)
28731 49	All other.....	do.....	71.9	(D)
28731 57	Ammonium sulfate (1).....	00% (NH ₄) ₂ SO ₄	(D)	(D)
	Urea:			
28732 17	Urea-ammonium nitrate solutions.....	100% Urea	2,761.2	2,616.9
28732 19	Prills.....	do.....	(D)	(D)
28732 20	Granular.....	do.....	53.5	29.8
28732 23	All other.....	do.....	(D)	(D)
	Phosphoric acid.....	100% P ₂ O ₅	8,855.1	8,748.6
28741 81	Thermal.....	do.....	(D)	(D)
28741 85	Wet.....	do.....	(D)	(D)
28742	Superphosphates and other fertilizer materials.....	do.....	37.7	51.5

(D) Data withheld to avoid disclosing figures for individual companies. r) Revised by 5 percent or more from previously published figures.

(1) Excludes data for byproduct ammonia liquor and ammonium sulfate published by the Department of Energy.

(2) Excludes amount converted to solid nitrate.

Table 4. Summary of selected fertilizer materials, interplant transfers : 1996 and 1995

[Quantity in thousands of short tons; value in millions of dollars]

Product code	Product description	Basis	Year	Interplant transfers	
				Quantity	Value, freight on board plant
28193 --	Sulfuric acid, gross (new and fortified).....	100% H2SO4.....	1996	2,102.2	42.5
			1995	1,800.0	38.7
28193 11	Oleum under 40 percent.....	do.....	1996	(D)	(D)
			1995	(D)	(D)
28193 21	Oleum 40 percent and over 40 percent.....	do.....	1996	(D)	(D)
			1995	(D)	(D)
28193 31	Other than oleum (1).....	do.....	1996	2,061.7	40.9
			1995	1,756.6	36.4
28731 31	Ammonia, synthetic anhydrous (2).....	100% NH3.....	1996	928.5	158.9
			1995	892.6	121.2
28731 30	Fertilizer use.....	do.....	1996	(D)	(D)
			1995	(D)	(D)
28731 32	Other uses.....	do.....	1996	(D)	(D)
			1995	(D)	(D)
28731 57	Ammonium sulfate (2).....	100% (NH4)2 SO4.....	1996	(D)	(D)
			1995	(D)	(D)
28731 11	Nitric acid.....	100% HNO3.....	1996	(D)	(D)
			1995	(D)	(D)
28732 --	Urea.....	100% Urea.....	1996	(D)	(D)
			1995	(D)	(D)
28741 81	Phosphoric acid.....	100% P2O5.....	1996	1,877.9	418.5
28741 85			1995	1,745.5	391.2
28742 --	Superphosphates and other phosphatic fertilizer materials.....	do.....	1996	(D)	(D)
			1995	(D)	(D)

(D) Data withheld to avoid disclosing figures for individual companies.

(1) Data for "Other than oleum" includes chamber process acid.

(2) Excludes data for byproduct ammonia liquor and ammonium sulfate published by the Department of Energy.

Table 5. Total shipments, including interplant transfers, of sulfuric acid, by states, 1996 and 1995
 [Quantity in thousands of short tons of 100% H₂SO₄; value in millions of dollars]

State	1996		1995	
	Quantity	Value	Quantity	Value
United States.....	13,014.8	571.7	12,677.7	553.3
Arizona.....	(D)	(D)	(D)	(D)
California.....	935.8	(D)	766.3	39.2
Florida.....	879.7	26.5	806.6	26.4
Georgia.....	419.9	18.7	338.5	15.2
Illinois.....	(D)	(D)	(D)	(D)
Louisiana.....	2,006.4	113.4	2,009.7	106.3
New Jersey.....	(D)	(D)	(D)	(D)
Ohio.....	352.4	27.1	340.7	27.6
Texas.....	1,893.5	114.5	1,857.1	94.9
Virginia.....	(D)	(D)	(D)	(D)
Washington.....	(D)	(D)	(D)	(D)
Other states.....	3,995.9	160.7	4,151.5	160.4

(D) Data withheld to avoid disclosing figures for individual companies.

Table 6 Production of new sulfuric acid, by states, 1996 and 1995
 [Thousands of short tons of 100% H₂SO₄]

State	1996 (1)	1995 (1)
United States.....	44,180.2	42,581.9
Arizona.....	2,402.5	2,222.4
California.....	1,353.9	r/ 1,189.4
Florida.....	20,893.9	20,478.6
Georgia.....	577.5	514.3
Illinois.....	(D)	(D)
Louisiana.....	6,169.6	6,357.5
Missouri.....	(D)	(D)
New Jersey.....	(D)	(D)
New Mexico.....	(D)	(D)
Ohio.....	420.3	451.0
Oklahoma and Texas.....	4,198.8	r/ 4,116.9
Virginia.....	(D)	(D)
Washington.....	(D)	(D)
Other states.....	5,885.8	r/ 4,854.4

(D) Data withheld to avoid disclosing figures for individual companies.

(1) Includes data for Government-owned, privately-operated plants.

Table 7. Primary production of inorganic fertilizer chemicals, by quarter: 1996 AND 1995

[Thousands of short tons]

Product code	Product description	Year	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter		
28731 31	Ammonia, synthetic anhydrous (100% NH ₃): Production.....	1996	17,762.1	4,553.5	4,364.8	4,325.4	4,518.5		
		1995	17,402.2	4,354.2	4,402.1	4,278.5	4,367.3		
		Stocks on hand, end of month.....	1996	(NA)	1,566.4	1,024.9	988.7	1,181.9	
			1995	(NA)	1,634.5	1,798.8	1,757.0	1,285.6	
28731 30	Fertilizer use: Production.....	1996	15,456.6	3,959.6	3,794.1	3,791.1	3,911.7		
		1995	15,176.2	3,864.1	3,787.0	3,735.0	3,790.1		
		Stocks on hand, end of month.....	1996	(NA)	(D)	(D)	(D)	(D)	
			1995	(NA)	1,266.2	(D)	(D)	(D)	
28731 32	Other uses: Production.....	1996	2,305.5	593.9	570.6	534.2	606.8		
		1995	r/ 2,226.0	r/ 490.1	r/ 615.1	r/ 543.6	r/ 577.2		
		Stocks on hand, end of month.....	1996	(NA)	(D)	(D)	(D)	(D)	
			1995	(NA)	(S)	(D)	(D)	(D)	
28731 44	Ammonium nitrate (100% NH ₄ NO ₃): Original melt liquor (1): Production.....	1996	9,026.0	2,326.8	2,274.8	2,102.4	2,322.0		
		1995	8,489.1	2,231.4	2,169.0	1,899.3	2,189.4		
		Stocks on hand, end of month.....	1996	(NA)	220.1	168.3	195.6	191.9	
			1995	(NA)	160.3	168.5	206.3	202.1	
		28731 45	Of total production how much was: Consumed in the manufacture of other nitrogen solutions (e.g. CAN17, AN20, AAN): Production.....	1996	406.2	85.6	81.2	102.7	136.7
				1995	588.4	141.6	152.4	142.7	151.8
Stocks on hand, end of month.....	1996			(NA)	(D)	0.9	(D)	(D)	
	1995			(NA)	(D)	(D)	(D)	(D)	
28731 46	Liquor consumed in the manufacture of urea-ammonium nitrate solutions: Production.....	1996	4,195.3	1,163.6	1,104.1	920.9	1,006.7		
		1995	3,491.3	962.2	937.5	737.6	854.1		
		Stocks on hand, end of month.....	1996	(NA)	47.1	25.1	30.6	33.6	
			1995	(NA)	(D)	15.9	(D)	23.9	
28731 47	High density prill and granular: Production.....	1996	2,505.2	626.6	638.5	567.1	672.9		
		1995	2,496.6	709.7	596.4	532.1	658.4		
		Stocks on hand, end of month.....	1996	(NA)	31.2	38.6	48.4	42.7	
			1995	(NA)	19.5	39.5	31.3	21.6	
28731 48	Low density prill and grained: Production.....	1996	1,556.2	367.2	364.2	411.2	413.6		
		1995	1,585.5	379.6	386.4	395.2	424.2		
		Stocks on hand, end of month.....	1996	(NA)	(D)	(D)	(D)	(D)	
			1995	(NA)	(D)	(D)	(D)	(D)	
28731 49	All other (e.g. liquor sales, etc.) Production.....	1996	363.2	83.9	86.8	100.4	92.2		
		1995	327.3	38.4	96.4	91.7	100.9		
		Stocks on hand, end of month.....	1996	(NA)	(D)	(D)	(D)	16.1	
			1995	(NA)	(D)	(D)	(D)	(D)	

Table 7. Primary production of inorganic fertilizer chemicals, by quarter: 1996 AND 1995

[Thousands of short tons]

Product code	Product description	Year	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
28731 56	Ammonium sulfate (100% (NH ₄) ₂ SO ₄):						
28731 58	Production.....	1996	2,662.0	633.3	657.1	686.5	685.0
		1995	2,646.7	649.2	681.5	632.5	683.5
	Stocks on hand, end of month.....	1996	(NA)	250.3	130.8	173.1	218.8
		1995	(NA)	98.7	166.9	285.1	285.9
28731 11	Nitric acid (100% HNO ₃):						
	Production.....	1996	9,204.8	2,277.0	2,287.5	2,163.4	2,476.9
		1995	8,839.0	2,349.8	2,236.9	1,983.4	2,268.9
	Stocks on hand, end of month.....	1996	(NA)	(X)	(X)	(X)	(X)
		1995	(NA)	(X)	(X)	(X)	(X)
28731 55	Nitrogen solutions (including mixtures containing urea) (100% N):						
	Production.....	1996	3,649.8	938.6	935.8	883.6	892.0
		1995	3,602.9	974.8	893.3	809.1	925.7
	Stocks on hand, end of month.....	1996	(NA)	368.2	270.4	262.1	274.0
		1995	(NA)	289.7	234.6	249.5	236.0
28731 66	Solutions containing ammonium nitrate/ urea:						
	Production.....	1996	3,529.3	908.8	906.5	845.9	868.1
		1995	3,432.9	933.3	846.2	771.4	882.0
	Stocks on hand, end of month.....	1996	(NA)	362.7	266.7	251.2	268.8
		1995	(NA)	258.0	198.7	(D)	220.6
28731 68	All other solutions (3):						
	Production.....	1996	120.5	29.8	29.3	37.7	23.8
		1995	170.0	41.5	47.1	37.7	43.7
	Stocks on hand, end of month.....	1996	(NA)	5.5	3.7	10.9	5.2
		1995	(NA)	31.7	35.9	(D)	15.3
28741 --	Phosphoric acid (100% P ₂ O ₅):						
	Production.....	1996	13,210.0	3,241.9	3,129.6	3,451.3	3,387.3
		1995	13,133.8	3,326.8	3,274.0	3,183.1	3,350.0
	Stocks on hand, end of month.....	1996	(NA)	280.6	276.6	238.9	212.2
		1995	(NA)	270.1	309.2	278.2	260.0
28741 81	Thermal:						
	Production.....	1996	306.5	78.0	75.1	78.8	74.5
		1995	318.6	79.7	77.1	51.3	110.6
	Stocks on hand, end of month.....	1996	(NA)	21.2	9.1	11.6	10.4
		1995	(NA)	10.2	8.5	8.0	7.3
28741 85	Wet:						
	Production.....	1996	12,903.5	3,163.9	3,054.4	3,372.5	3,312.8
		1995	12,815.2	3,247.1	3,196.9	3,131.8	3,239.4
	Stocks on hand, end of month.....	1996	(NA)	259.3	267.6	227.3	201.8
		1995	(NA)	259.9	300.8	270.2	252.7
	By use:						
28741 86	Fertilizer:						
	Production.....	1996	11,877.6	2,908.4	2,808.8	3,112.0	3,048.3
		1995	11,914.4	3,023.5	2,962.3	2,903.8	3,024.7
	Stocks on hand, end of month.....	1996	(NA)	(D)	(D)	(D)	(D)
		1995	(NA)	(D)	(D)	(D)	(D)

Table 7. Primary production of inorganic fertilizer chemicals, by quarter: 1996 AND 1995

[Thousands of short tons]

Product code	Product description	Year	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
28741 87	Feed and other: Production.....	1996	1,026.0	257.8	247.2	255.9	265.1
		1995	900.7	223.5	234.5	228.0	214.7
	Stocks on hand, end of month.....	1996	(NA)	(D)	(D)	(D)	(D)
		1995	(NA)	(D)	(D)	(D)	(D)
28741 88	By grade: Ortho (less than 65% P2O5): Production.....	1996	11,479.6	2,816.8	2,744.5	2,996.7	2,921.6
		1995	11,658.5	2,932.3	2,943.9	2,867.8	2,914.5
	Stocks on hand, end of month.....	1996	(NA)	232.6	241.5	209.0	181.0
		1995	(NA)	230.8	267.6	241.0	225.3
28741 89	Super (more than 65% P2O5): Production.....	1996	1,423.9	347.2	311.8	375.5	389.4
		1995	1,156.6	314.7	252.9	264.0	325.0
	Stocks on hand, end of month.....	1996	(NA)	26.7	26.1	18.3	20.9
		1995	(NA)	29.1	33.2	29.2	27.4
28732 --	Urea original melt liquor (100% urea): Production.....	1996	8,528.0	2,228.9	2,130.0	2,020.6	2,148.4
		1995	8,117.1	2,056.4	2,052.3	1,960.2	2,048.3
	Stocks on hand, end of month.....	1996	(NA)	300.3	239.8	239.0	212.8
		1995	(NA)	373.7	420.0	313.8	362.6
Of total production how much was:							
28732 15	Consumed in the manufacture of urea-ammonium nitrate solutions: Production.....	1996	2,761.2	741.8	713.4	623.4	682.6
		1995	2,618.6	681.5	673.2	585.6	678.2
	Stocks on hand, end of month.....	1996	(NA)	(D)	(D)	(D)	(D)
		1995	(NA)	(D)	(D)	(D)	(D)
28732 19	Prills: Production.....	1996	2,736.4	714.7	682.5	648.1	691.2
		1995	2,589.5	607.2	624.8	605.2	752.3
	Stocks on hand, end of month.....	1996	(NA)	93.0	79.1	120.2	45.7
		1995	(NA)	22.6	(D)	35.4	46.8
28732 20	Granular: Production.....	1996	2,765.1	704.6	669.3	686.5	704.6
		1995	2,667.5	704.8	692.4	713.0	557.3
	Stocks on hand, end of month.....	1996	(NA)	84.0	59.1	26.1	78.3
		1995	(NA)	273.4	274.2	165.4	189.2
28732 22	All other (solid and solution): Production.....	1996	265.3	67.8	64.8	62.6	70.1
		1995	r/ 241.5	r/ 62.9	r/ 61.8	r/ 56.3	r/ 60.5
	Stocks on hand, end of month.....	1996	(NA)	(D)	(D)	(D)	(D)
		1995	(NA)	(D)	(D)	(D)	(D)

(D) Data withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

(S) Suppressed. Data did not meet publication standards of the Bureau of the Census.

(1) Represents total amount of original solution produced, including amounts used for fertilizer, explosive, and other uses and amounts consumed in manufacturing other products, such as nitrogen solutions.

(2) Excludes data for government-owned, privately operated plants.

Note: The 1996 and 1995 stocks on hand, end of quarter, were originally published in the Current Industrial Report Series, MQ28B, "Fertilizer Materials." Detail may not add to total due to independent rounding.

Table 8. Production, shipments, and stocks of superphosphates and other phosphatic fertilizer materials, by quarter: 1996 and 1995
 [Thousands of short tons]

Product code	Product description	Year	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
28742 --	Superphosphates and other phosphatic fertilizer materials:						
	Production (100% P2O5).....	1996	10,549.4	2,594.0	2,423.3	2,835.4	2,696.7
		1995	10,365.2	2,593.7	2,551.4	2,529.1	2,691.0
	Shipments, including interplant transfers (100% P2O5).....	1996	10,497.9	2,466.2	2,722.1	2,741.5	2,568.2
		1995	10,231.0	2,598.3	2,422.8	2,677.7	2,532.2
	Stocks on hand, end of quarter (gross weight).....	1996	(NA)	838.9	552.4	638.6	745.5
	1995	(NA)	649.3	725.8	601.0	782.3	
28742 15	Normal and enriched superphosphates: AND						
28742 41	Concentrated superphosphates (triple) (over 40% P2O5):						
	Production (100% P2O5).....	1996	822.8	213.2	174.3	231.7	203.6
		1995	807.8	172.8	186.0	163.2	285.8
	Shipments, including interplant transfers (100% P2O5).....	1996	763.2	131.1	376.3	144.8	111.0
		1995	767.7	192.3	190.9	163.7	220.8
	Stocks on hand, end of quarter (gross weight).....	1996	(NA)	63.4	82.0	(D)	116.1
	1995	(NA)	70.0	77.8	99.4	79.9	
28742 51	Ammonium phosphates: Monoammonium phosphates:						
	Production (100% P2O5).....	1996	1,782.8	432.0	349.5	573.0	428.3
		1995	1,528.8	445.0	355.3	367.0	361.6
	Shipments, including interplant transfers (100% P2O5).....	1996	1,759.8	386.5	367.1	603.1	403.1
		1995	1,497.6	425.7	328.0	413.2	330.8
	Stocks on hand, end of quarter (gross weight).....	1996	(NA)	162.6	119.9	80.6	150.8
	1995	(NA)	155.7	223.3	134.6	150.8	
28742 52	Diammonium phosphates:						
	Production (100% P2O5).....	1996	7,590.2	1,868.4	1,814.9	1,939.4	1,967.4
		1995	7,739.3	1,892.4	1,937.1	1,933.3	1,976.5
	Shipments, including interplant transfers (100% P2O5).....	1996	7,617.2	1,882.6	1,841.1	1,909.8	1,983.8
		1995	7,669.7	1,923.8	1,790.6	2,052.1	1,903.2
	Stocks on hand, end of quarter (gross weight).....	1996	(NA)	506.0	282.9	388.5	355.6
	1995	(NA)	325.7	373.2	291.8	478.4	

Table 8. Production, shipments, and stocks of superphosphates and other phosphatic fertilizer materials, by quarter: 1996 and 1995

[Thousands of short tons]

Product code	Product description	Year	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
28742 55	Other ammonium phosphates and other						
28742 61	phosphatic fertilizer materials (1):						
	Production (100% P ₂ O ₅).....	1996	353.6	80.4	84.6	91.2	97.4
		1995	289.2	83.6	73.1	65.5	67.0
	Shipments, including interplant transfers (100% P ₂ O ₅).....	1996	357.6	66.0	137.4	83.9	70.3
		1995	295.9	56.5	113.3	48.7	77.3
	Stocks on hand, end of quarter (gross weight).....	1996	(NA)	106.9	67.7	(D)	(S)
		1995	(NA)	97.9	51.6	75.2	73.1

(D) Data withheld to avoid disclosing figures for individual companies. (NA) Not available.

(1) "Other ammonium phosphates" (28742 55) is combined with "Other phosphatic fertilizer materials" (28742 61) to avoid disclosure of figures for individual companies.

Note: The 1995 and 1994 stocks on hand, end of quarter, were originally published in the Current Industrial Report Series, MQ28B, "Fertilizer Materials." Detail may not add to total due to independent rounding.

Table 9. Production and stocks of sulfuric acid, by process, by quarter: 1996 AND 1995

[Thousands of short tons of 100% H₂SO₄]

Quarter and year	Production					Stocks (gross) at producing plants at end of period
	Sulfuric acid, gross, new and fortified			New acid (1)	Sulfuric acid produced through decomposition of alkylation and other spent acid (2)	
	Total	Oleum grades	Other than oleum grades			
1996						
Total.....	47,770.4	1,530.9	46,239.5	44,180.2	3,590.2	(NA)
First Quarter.....	11,807.9	424.6	11,383.3	11,130.1	677.8	677.6
Second Quarter.....	11,364.6	310.7	11,053.9	10,676.6	688.0	686.8
Third Quarter.....	12,437.6	446.0	11,991.6	11,279.1	1,158.5	724.5
Fourth Quarter.....	12,160.2	349.5	11,810.7	11,094.4	1,065.8	855.3
1995						
Total.....	47,519.3	1,567.1	45,952.2	42,581.9	4,937.4	(NA)
First Quarter.....	11,627.2	379.5	11,247.7	10,534.5	1,092.6	652.1
Second Quarter.....	11,877.9	390.7	11,487.2	10,542.5	1,335.4	642.1
Third Quarter.....	11,909.8	388.8	11,521.0	10,593.9	1,315.9	679.3
Fourth Quarter.....	12,104.4	408.0	11,696.4	10,911.0	1,193.4	788.2

(D) Data withheld to avoid disclosing figures for individual companies.

(1) Represents gross production of sulfuric acid less acid produced through decomposition and spent acid used in fortification.

(2) Spent acid fortified by the addition of sulfur trioxide.

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

Table 10. Production, exports, imports, and apparent consumption of fertilizer materials: 1996 AND 1995

[Quantity in thousands of metric tons]

Product code	Product description	Production (quantity)	Exports of domestic merchandise (quantity)(1)	Percent exports to production (quantity)	Imports for consumption (quantity)(2)	Apparent consumption (quantity)(3)	Percent imports to apparent consumption (quantity)
1996							
28731 30							
28731 32	Ammonia, synthetic anhydrous.....	16,113.7	(D)	(D)	(D)	(D)	(D)
28731 50	Ammonium nitrate, original solution.....	8,188.4	61.9	0.8	720.6	8,847.1	8.1
28731 66	Nitrogen solutions, ammonium nitrate/urea solutions.....	3,311.1	33.1	1.0	628.2	3,906.3	16.1
28731 56							
28731 58	Ammonium sulfate.....	2,414.9	824.4	34.1	373.4	1,963.9	19.0
28732 --	Urea.....	7,736.5	1,470.5	19.0	2,521.1	8,787.1	28.7
28741 81							
28741 85	Phosphoric acid.....	11,984.1	(D)	(D)	50.0	(D)	(D)
28742 15	Normal and enriched superphosphate AND						
28742 41	Concentrated superphosphate.....	1,670.4	687.6	41.2	-	982.8	-
28742 52	Diammonium phosphates.....	13,638.1	7,917.3	58.1	76.5	5,797.3	1.3
28193 --	Sulfuric acid, gross.....	43,337.0	627.5	1.4	1,629.6	44,339.1	3.7
1995							
28731 30							
28731 32	Ammonia, synthetic anhydrous.....	15,787.1	(D)	(D)	(D)	(D)	(D)
28731 50	Ammonium nitrate, original solution.....	7,701.2	89.6	1.2	720.6	8,332.2	8.6
28731 66	Nitrogen solutions, ammonium nitrate/urea solutions.....	3,268.5	4.9	0.2	628.2	3,891.8	16.1
28731 56							
28731 58	Ammonium sulfate.....	2,401.1	917.0	38.2	433.6	1,917.7	22.6
28732 --	Urea.....	7,363.8	881.3	12.0	2,936.0	9,418.6	31.2
28741 81							
28741 85	Phosphoric acid.....	11,914.9	(D)	(D)	19.5	(D)	(D)
28742 15	Normal and enriched superphosphate AND						
28742 41	Concentrated superphosphate.....	1,660.8	719.9	43.3	-	940.9	-
28742 52	Diammonium phosphates.....	13,925.0	10,058.8	72.2	21.3	3,887.5	0.5
28193 --	Sulfuric acid, gross.....	43,109.2	170.2	0.4	1,925.7	44,864.7	4.3

- Represents zero. (D) Data withheld to avoid disclosing figures for individual companies.

(1) Source: Bureau of the Census report EM 545, U.S. Exports.

(2) Source: Bureau of the Census report IM 145, U.S. Imports for Consumption.

(3) Apparent consumption is derived by subtracting exports from manufacturers' production plus imports. Apparent consumption does not include any adjustments for changes in inventories.

Note: For comparison of SIC product code numbers, HTUSA import numbers, and Schedule B export numbers, see table 11.

Table 11. Comparison of standard industrial classification based product codes with schedule B export numbers, and HTSUSA import numbers: 1996

Product code	Product description	Export number (1)	Import number (2)
28731 11	Nitric acid.....	(NA)	2808.00.0010
28731 30		2814.10.0000	2814.10.0000
28731 32	Anhydrous ammonia, synthetic.....	2814.20.0000	2814.20.0000
28731 50	Ammonium nitrate, original solution.....	3102.30.0000	3102.30.0000
28731 56			
28731 58	Ammonium sulfate.....	3102.21.0000	3102.21.0000
28731 66	Nitrogen solutions, ammonium nitrate/ urea solutions.....	3102.80.0000	3102.80.0000
28732 00	Urea.....	3102.10.0000	3102.10.0000
28742 15	Normal and enriched superphosphates.....	3103.10.0010	3103.10.0010
28742 41	Concentrated superphosphates.....	3103.10.0020	3103.10.0020
28742 51	Monoammonium phosphates.....	(NA)	3105.40.0010
28742 52	Diammonium phosphates.....	3105.30.0000	3105.30.0000
28741 81		2809.20.0010	2809.20.0010
28/41 85	Phosphoric acid.....	2809.20.0020 2809.20.0030	2809.20.0020 2809.20.0030
28193 --	Sulfuric acid, gross.....	2807.00.0000	2807.00.0000

(NA) Not available.

(1) Source: 1996 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 (1996).