2008

MQ325B — FERTILIZERS AND RELATED CHEMICALS (SULFURIC ACID, NITRIC ACID, PHOSPHORIC ACID, ETC.)

DEFINITIONS AND SPECIAL INSTRUCTIONS

1. Scope of survey

This survey covers all manufacturers of inorganic fertilizer chemicals, phosphatic fertilizer materials and sulfuric acid in the United States, except manufacturers of spent sulfuric acid recovered by hydrolysis and evaporation.

2. Data to be reported

Companies with more than one establishment manufacturing the products covered by this survey are requested to complete a separate form for each location. If you have not received a separate report form for each of your establishments, please call the contact listed on the front of the report form or write to the U.S. Census Bureau for additional forms.

a. Columnar structure of the report

When posting your data to the original report, please be sure to report the information in the correct columns:

Column 1 — Production (quantity)

Column 2 — Quantity of shipments

Column 3 - Value of shipments

Column 4 — Consumption

Column 5 — Stocks

b. Units of measure

Report all quantities in equivalent short tons of the basis specified. For example, if you produced 100 tons gross weight of a solid monoammonium phosphate with a $45\,\%\,\,P_2O_5$ content, you would report 100 short tons gross weight and 45 short tons 100% P_2O_5 content. If it is not possible to report in terms of the basis and unit of measure requested, please indicate precisely the basis and unit of measure which actually apply to the reported figures.

c. Production

Report total quantity produced of each specified product, whether sold, transferred, added to inventory, or used in further processing. Unless otherwise specified, when two or more physical forms of a specific chemical are listed, report production for each form, including quantities which are subsequently used in producing other physical modifications of the chemical. Include products made elsewhere for this establishment on a contract basis from materials supplied by you. Exclude quantities produced under toll agreement (where raw materials are furnished to you by another firm and the finished product is returned to that firm).

Sulfuric acid, gross production — Report the quantities produced from all sources and available for use or for sale, except for the amounts recovered by processes other than by decomposition or fortification.

Include:

Amounts produced from the oxidation of sulfur or sulfurbearing materials.

Quantities of sulfuric acid produced from the decomposition of sludge, alkylation acid and other spent acids.

Quantities of sulfuric acid produced by the fortification of spent acid.

Exclude:

Amounts of sulfuric acid recovered by hydrolysis and evaporation (concentration).

Intermediate production where sulfuric acid is not withdrawn from the system.

Sulfuric acid produced from decomposition — Report the quantity of sulfuric acid produced from the decomposition of alkylation acid and other spent acids, including sulfuric acid sludge, to sulfur dioxide (SO₂).

Include:

Sulfuric acid decomposed from spent acids from your own operation.

Sulfuric acid decomposed from spent acids received from outside sources.

Exclude:

Spent acid recovered by hydrolysis and evaporation

d. Quantity and value of shipments

Report physical shipments of all products sold, transferred to other establishments within your company, or shipped on consignment, whether for domestic or export sale. 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 your own branches should be assigned the same value as comparable sales to unaffiliated customers, i.e., the value includes an appropriate allocation of company overhead and profit.

Exclude:

Products bought and resold without further manufacture or packaging.

e. Consumption

Report the total quantity of all specified chemicals produced in the reporting establishment and used in further processing within this establishment. If consumption of any

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DEFINITIONS AND SPECIAL INSTRUCTIONS — Continued

e. Consumption - Continued

specified chemicals results in a new product covered by this survey, report quantity produced in Column 1 for that product.

Exclude:

Products purchased or received from other plants of your company and consumed.

f. Stocks

Report total stocks on hand at the producing plant at the end of the quarter. Stocks held at producing plants should be reported separately for each plant. In addition, a separate report should be filed for stocks of these chemicals held at locations other than producing plants. Stocks of phosphatic fertilizer materials should include both cured and uncured materials. Prior quarter stocks plus current quarter production minus current quarter shipments minus current quarter consumption should approximate current quarter ending stocks. This check should be performed on non-total item codes.

g. Additive Checks

The following additive checks should be performed to ensure that detail items sum to the correct total items:

3000 = ? 3004 + 3008 + 3010 + 3020 3000 = ? 3100 + 3300 5441 = ? 5461 + 5471 5441 = ? 5481 + 5491 6101 = ? 6111 + 6121 6201 = ? 6241 + 6251 + 6261 + 6281 + 6291 6301 = ? 6321 + 6341 7001 = ? 7021 + 7031 7101 = ? 7161 + 7171 + 7181 + 7191

3. Definitions

The product detail for this survey, as shown in the Reference List, is defined according to standard nomenclature for this industry.

Sulfuric acid — Represents quantities produced from all sources which are available for sale except for the amounts recovered by processes other than decomposition or fortification. Includes amounts produced from the oxidation of sulfur or sulfur bearing material and from the decomposition of spent acids. Exclude sulfuric acid recovered by hydrolysis and evaporation and intermediate production where sulfuric acid is not withdrawn from the system.

Sulfuric acid produced from decomposition (item code 3010) — Include acid produced from the decomposition of alkylation and other spent acids, including sulfuric acid sludge, to SO_2 .

Spent acid used in fortification (item code 3711) — Include spent acid used only to manufacture fortified acid.

Normal and enriched superphosphates (item code 1149) — Include all grades containing less than 40 percent available phosphoric oxide (P_2O_5).

Concentrated (triple) superphosphates (item code 1409) — Include grades containing 40 percent or more phosphoric oxide (P_2O_π) .

Monoammonium phosphates (item code 1434) — Include chemically processed nitrogen-phosphorus materials containing 50 percent or more primary nutrients and having a phosphate to nitrogen ratio of 3 to 1 or greater.

Diammonium phosphates (item code 1465) — Include chemically processed nitrogen-phosphorus materials comprising fertilizer grades containing 18 to 21 percent nitrogen (N), and 46 to 54 percent phosphoric oxide (P_2O_5) .

Other ammonium phosphates and other phosphatic fertilizer materials (item code 1574) — Include chemically processed nitrogen phosphorus materials, solid and fluid, including mixtures of monoammonium, diammonium, and ammonium sulfate. Also include ammonium phosphate-potash mixtures nitrophosphates, calcium metaphosphates, sodium phosphates, wet base goods (made by treating phosphate rock and some organic nitrogenous material with sulfuric acid), etc. Exclude feed-grade calcium phosphates.

4. Comparability

If you also report in the Annual Survey of Manufactures (Form MA-10000), the sum of values for item codes shown in column (a) should correspond to the dollar values reported under product class codes in column (b) below:

Current Industrial Reports (Form MQ325B) Item codes (a)	Annual Survey of Manufactures (Form MA10000) Product class codes (b)
5301, 6111, 6121, 6241, 6251, 6261, 6281, 6291, 6321, 6341, 7021, 7031	3253111
7161, 7171, 7181, 7191	3253114
1149,1409,1434,1465, 1574	3253124
5401, 5441	3253121
3100, 3300	3251881

5. Survey results

If you would like to view and print a copy of the final survey results, please visit:

www.census.gov/cir/www/325/mq325b.html

REFERENCE LIST

FORM MQ325B			R MATERIALS AND RELATED PRODUCTS CID, NITRIC ACID, PHOSPHORIC ACID, ETC.)	
Product code	Item code		Item description	Basis (Report in short tons)
			PHOSPHATES	
3253124111	1148	Prod., Ship., Val., Stocks	Normal and enriched superphosphates (less than 40% P ₂ O ₅)	Gross weight
3253124111	1149	Prod., Ship., Val., Cons.	Normal and enriched superphosphates	100% P ₂ O ₅ content
3253124121	1408	Prod., Ship., Val., Stocks	Concentrated superphosphates (triple) (over 40% P_2O_5)	Gross weight
3253124121	1409	Prod., Ship., Val., Cons.	Concentrated superphosphates (triple) (over 40% P_2O_5)	100% P ₂ O ₅ content
3253124131	1432	Prod., Ship., Val., Cons., Stocks	Monoammonium phosphates, solid grades, (11-48-0; 10-50-0; 11-52-0; 11-54-0; 11-55-0; 12-60-0 and similar grades, excluding sulfur)	Gross weight
3253124131	1433	Production	Monoammonium phosphates, solid grades, excluding sulfur	100% N content
3253124131	1434	Prod., Ship., Val., Cons.	Monoammonium phosphates, solid grades, excluding sulfur	100% P ₂ O ₅ content
3253124211	1461	Prod., Ship., Val., Cons., Stocks	Diammonium phosphates, solid grade (16-48-0; 18-46-0; 21-53-0)	Gross weight
3253124211	1463	Production	Diammonium phosphates, solid grade (10-49-0; 18-46-0; 21-53-0)	100% N content
3253124211	1465	Prod., Ship., Val., Cons.	Diammonium phosphates, solid grade (10-49-0; 18-46-0; 21-53-0)	100% P ₂ O ₅ content
3253124222	1570	xxxxx	Other ammonium phosphates:	
3253124222	1572	Prod., Ship., Val., Cons., Stocks	Ammonium phosphates, ammonium phosphate sulfates and other phosphatic fertilizer materials (13-39-0, 16-20-0)	Gross weight
3253124222	1573	Production	Ammonium phosphates, ammonium phosphate sulfates and other phosphatic fertilizer materials (13-39-0, 16-20-0)	100% N content
3253124222	1574	Prod., Ship., Val., Cons.	Ammonium phosphates, ammonium phosphate sulfates and other phosphatic fertilizer materials (13-39-0, 16-20-0)	100% P ₂ O ₅ content

REFERENCE LIST - Continued

FORM MQ325B				
Product code	ltem code	Item description		Basis (Report in short tons)
			ACIDS	
3251881100	3000	Prod., Ship., Val., Cons., Stocks	Sulfuric acid	100% H ₂ SO ₄
			By feedstock:	
3251881111	3004	Prod., Ship., Value	Elemental sulfur	100% H ₂ SO ₄
3251881121	3008	Prod., Ship., Value	Smelting metallic sulfide ore	100% H ₂ SO ₄
3251881131	3010	Prod., Ship., Value	Decomposition of alkylation and other spent acid	100% H ₂ SO ₄
3251881141	3020	Prod., Ship., Value	Other	100% H ₂ SO ₄
			By grade:	
3251881212	3100	Prod., Ship., Val., Cons., Stocks	Oleum grades	100% H ₂ SO ₄
3251881231	3300	Prod., Ship., Val., Cons., Stocks	Other than oleum grades	100% H ₂ SO ₄
3251881311	3711	Prod., Stocks	Spent acid used in fortification	100% H ₂ SO ₄
3251881321	3910	Stocks	New acid and fortified spent acid, stocks	100% H ₂ SO ₄
3251881331	3915	Stocks	Alkylation acid and other spent acids, including sulfuric acid sludge for decomposition	100% H ₂ SO ₄
3251881341	3920	Stock	Spent acid for fortification	100% H ₂ SO ₄
3253111111	5301	Prod., Ship., Val.	Nitric acid (Report total production of the HNO ₃ content of the original solution produced by oxidizing ammonia, including that produced as an intermediate product)	100% HNO ₃

REFERENCE LIST — Continued

FORM MQ325B		_		
Product code	ltem code		Item description	Basis (Report in short tons)
			Phosphoric acid — In addition to production and stocks, report shipments on:	
3253121111	5401	Prod., Ship., Val., Cons., Stocks	Thermal, total	100% P ₂ O ₅
3253121121	5441	Prod., Ship., Val., Cons., Stocks	Wet, total filter acid basis (Report total production of the P ₂ O ₅ content of the original solution at the filter produced by acidulating phosphate rock, including that produced as an intermediate product)	100% P ₂ O ₅
			By use:	
3253121211	5461	Prod., Ship., Val., Cons., Stocks	Fertilizer	100% P ₂ O ₅
3253121221	5471	Prod., Ship., Val., Stocks	Animal feed (e.g., defluorinated and industrial) (e.g., refined/technical)	100% P ₂ O ₅
			By grade:	
3253121311	5481	Prod., Ship., Val., Cons., Stocks	Ortho (less than $65\%\ P_2O_5$) (includes merchant grade and all others)	100% P ₂ O ₅
3253121321	5491	Prod., Ship., Val., Cons., Stocks	Super (more than 65% P ₂ O ₅)	100% P ₂ O ₅
			OTHER CHEMICALS	
3253111120	6101	Prod., Ship., Val., Cons., Stocks	Ammonia, synthetic, anhydrous (Report total production of ammonia whether used or shipped as anhydrous or converted to aqua. This figure should represent total ammonia leaving compressors and not calculated from the NH ₃ content of finished products.)	100% NH ₃
3253111121	6111	Prod., Ship., Val., Cons., Stocks	Fertilizer use	100% NH ₃
3253111131	6121	Prod., Ship., Val., Cons., Stocks	Other uses	100% NH ₃

REFERENCE LIST — Continued

FORM MQ325B				
Product code	ltem code	Item description		Basis (Report in short tons)
3253111201	6201	Prod., Ship., Val., Cons., Stocks	OTHER CHEMICALS — Continued Ammonium nitrate Original melt liquor (Report total production of the ammonium nitrate content of original melt liquor chemically synthesized from ammonia and nitric acid, including that produced as an intermediate product. Quantities for item codes 6241, 6261, 6281, and 6291 should also be included in this code.	100% NH ₄ NO ₃
3253111200	6240	xxxxx	Of total production, how much was:	100% NH ₄ NO ₃
3253111211	6241	Prod., Ship., Val., Cons., Stocks	Consumed in the manufacture of other nitrogen solutions (e.g., CAN17, AN20, AAN)	100% NH ₄ NO ₃
3253111216	6251	Prod., Ship., Val., Cons., Stocks	Liquor consumed in the manufacture of urea- ammonium nitrate solutions	100% NH ₄ NO ₃
3253111221	6261	Prod., Ship., Val., Cons., Stocks	High density prill and granular	100% NH ₄ NO ₃
3253111226	6281	Prod., Ship., Val., Cons., Stocks	Low density prill and grained	100% NH ₄ NO ₃
3253111231	6291	Prod., Ship., Val., Cons., Stocks	All other (e.g., liquor sales, production loss, other)	100% NH ₄ NO ₃
3253111240	6301	Prod., Ship., Val., Cons., Stocks	Ammonium sulfate (synthetic and byproduct, other than coke oven), total	100% (NH ₄) ₂ SO ₄
3253111241	6321	Prod., Ship., Val., Cons., Stocks	Synthetic (direct synthesis from sulfuric acid and ammonia)	100% (NH ₄) ₂ SO ₄
3253111246	6341	Prod., Ship., Val., Cons., Stocks	Byproduct, other than coke oven	100% (NH ₄) ₂ SO ₄

REFERENCE LIST - Continued

		em Item description ode		Basis (Report in short tons)
3253111250 7001	Prod., Ship., Val., Cons., Stocks	Nitrogen solutions, including mixtures	100% N content	
3253111256	7021	Prod., Ship., Val., Cons., Stocks	UAN solutions (ammonium nitrate/urea solutions)	100% N content
3253111251	7031	Prod., Ship., Val., Cons., Stocks	All other solutions (e.g., CAN17, AN20, AAN, other) and solutions containing free ammonia (include data for solutions containing two or more products such as (a) ammonia, ammonium nitrate; (b) ammonia, urea; c) ammonia, ammonium nitrate, urea)	100% N
3253114101	7101	Prod., Ship., Val., Cons., Stocks	Urea original melt liquor (Report total production of urea content of original melt liquor synthesized from ammonia and carbon dioxide, including that produced as an intermediate product.	100% NH ₄ NO ₃
3253114100	7160	xxxxx	Of total production, how much was:	
3253114111	7161	Prod., Ship., Val., Cons., Stocks	Consumed in the manufacture of urea- ammonium nitrate solutions	100% Urea
3253114121	7171	Prod., Ship., Val., Cons., Stocks	Prills	100% Urea
3253114131	7181	Prod., Ship., Val., Cons., Stocks	Granular	100% Urea
3253114141	7191	Prod., Ship., Val., Cons., Stocks	All other (liquor sales, melmine, feedstock, other	100% Urea

NOTES:

5/7/08