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CHEMICAL PROFILE

SULFURIC ACID

September 16, 1991

SUPPLY

PRODUCER-Virgin Acid	CAPACITY*
Agrico Chemical, Pierce, Fla.; Donaldsonville, La.; Uncle Sam, La. . . .	4,880
Akzo, Le Moyne, Ala.	250
American Cyanamid, Fortier, La.	600
Amoco, Texas City, Tex.	140
Arcadian, Geismar, La.	500
Atlas Powder, Joplin, Mo.	70
Boliden, Copperhill, Tenn.	900
Cargill Fertilizer, Riverview, Fla.	2,200
CF Industries, Plant City, Fla.	1,735
Chemical Marketing Services, Riverton, Wyo.; Tulsa, Okla.	110
Chevron, Rock Springs, Wyo.; Barber's Pt., Hawaii; El Segundo, Calif.	690
Citgo, Lake Charles, La.	140
Conserv, Nichols, Fla.	735
Coulton, Oregon, Ohio; Cairo, Ohio	245
Du Pont, Burnside, La.; La Porte, Tex.; Linden, N.J.; Fort Hill, Ohio; Wurtland, Ky.; Lake Charles, La.	1,600
El Dorado Chemical, El Dorado, Ark.	120
Farmland, Pierce, Fla.	1,350
General Chemical, Anacortes, Wash.; Claymont, Del.; Richmond, Calif.	800
IMC Fertilizer, Mulberry, Fla.	4,300
Kemira, Savannah, Ga.	270
Koch, Acme, N.C.; De Soto, Kan.; Pine Bend, Minn.; Wilmington, N.C.; Riverton, Wyo.	400
Marsulex, Sayreville, N.J.	590
Mobil, Pasadena, Tex.	600
Nu-West, Conda, Idaho	720
Occidental, White Springs, Fla.	3,250
Olin, Beaumont, Tex.; Shreveport, La.	450
Peridot, Augusta, Ga.; Newark, N.J.	300
Public Service Company of New Mexico, Waterflow, N.M.	100
PVS Chemicals, Chicago, Ill.; Buffalo, N.Y.	280
Rhone-Poulenc, Baton Rouge, La.; Baytown, Tex.; Dominguez, Calif.; Hammond, Ind.; Houston, Tex.; Martinez, Calif.	3,500
Rohm and Haas, Deer Park, Tex.	700
Royster, Mulberry, Fla.; Piney Pt., Fla.	1,100
Shell, Wood River, Ill.	85
Simplot, Lathrop, Calif.; Pocatello, Idaho	1,250
Southern States, Savannah, Ga.	150
Texasgulf, Aurora, N.C.	3,300
Tosco, Bartow, Fla.; Martinez, Calif.	1,050
Unocal Chemicals, Wilmington, Calif.	160
US Agri-Chemicals, Fort Meade, Fla.	1,400
US Army, Radford, Va.	210
Other (units under 50,000 tons)	220
Total virgin acid	41,450
PRODUCER-Smelter Acid	CAPACITY*
Asarco, East Helena, Mont.; El Paso, Tex.; Hayden, Ariz.	800
Big River Zinc, Sauget, Ill.	130
Climax Molybdenum, Ft. Madison, Iowa	90

Continued on Page 35

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MEETINGS CALENDAR



THIS WEEK

EUROPEAN ISOCYANATE PRODUCERS ASSOCIA-
TION, polyurethanes world congress, cosponsored
with the polyurethanes division of the Society of Plastics

Disney World Swan Hotel, Lake
October 27-29.

KAHAYA GUM JPM Imports 385 sks (39,092 lbs) (Gina) Le Havre, 8/3
 LAUREL LEAVES William E Martin 120 ctn (0 lbs) (Export Patriot) Izmir, 8/6
 LICORICE EXTRACT Meer 402 bgs (23,047 lbs) (Zim Keelung) Haifa, 8/8
 LINALOOL Euro Continental 152 dms (64,674 lbs) (Cristoforo Colomb) Fos, 8/2
 LOCUST BEAN GUM FMC 720 bgs (40,491 lbs) (Sea Land Achiever) Valencia, 8/1
 590 bdl (41,433 lbs) (Sea Land Achiever) Algeciras, 8/1

M-P

MAGNESIUM OXIDE Armco 440 bgs (25,617 lbs) (Howell Lykes) Haifa, 8/1
 440 bgs (25,617 lbs) (Zim Keelung) Haifa, 8/8
MAGNESIUM NITRATE Cedar Chemical 792 bgs (89,508 lbs) (Margaret Lykes) Haifa, 8/3
MARJORAM Martin & Sons 550 sks (24,250 lbs) (Howell Lykes) Alexandria, 8/1
 Morris J Golombeck 250 bgs (11,574 lbs) (Zim Keelung) Piraeus, 8/8
MONOSODIUM GLUTAMATE Schweizerhall 320 dms (35,198 lbs) (Ever Growth) Keelung, 8/2
N-HEXANE Triple Crown 35 dms (0 lbs) (Gina) Hamburg, 8/3
N-PENTANE Triple Crown 34 dms (0 lbs) (Gina) Hamburg, 8/3
OLIVE OIL AJ Fritz 220 ctn (6,305 lbs) (Export Patriot) Piraeus, 8/6
 Bertolli 14,146 ctn (321,920 lbs) (Sea Land Achiever) Leghorn, 8/2
 1,980 ctn (54,782 lbs) (Zim Keelung) Leghorn, 8/8
 Catania Spagna 1,514 cs (40,538 lbs) (Howell Lykes) Naples, 8/1
 Colavita Pasta & Olive Oil 2,160 pkg (95,239 lbs) (Howell Lykes) Izmir, 8/1
 1,020 ctn (52,394 lbs) (Howell Lykes) Naples, 8/1
 3,565 pkg (101,842 lbs) (Howell Lykes) Naples, 8/1
 Ferrara Foods & Confections 910 crt (46,143 lbs) (Sea Land Achiever) Naples, 8/1
 George Delallo 2,080 ctn (44,703 lbs) (Zim Keelung) Leghorn, 8/8
 Goya Foods 1,729 cs (46,121 lbs) (Sea Land Achiever) Algeciras, 8/1
 Medint 8,110 ctn (170,911 lbs) (Export Patriot) Naples, 8/6
 Medusa 2,641 cs (96,364 lbs) (Cristoforo Colomb) La Spezia, 8/2
 200 dms (89,948 lbs) (Cristoforo Colomb) La Spezia, 8/2
 Port Jersey Distr Service 2,526 ctn (51,961 lbs) (Cristoforo Colomb) La Spezia, 8/2
 Salgado 1,000 cs (28,440 lbs) (Cristoforo Colomb) Valencia, 8/2
 Sante Vito Trdg 1,255 pkg (49,493 lbs) (Howell Lykes) Naples, 8/1
 Vitelli Elvea 2,296 ctn (88,108 lbs) (Howell Lykes) Izmir, 8/1
OXALIC ACID Formosa Container Line 720 ctn (41,071 lbs) (Ever Growth) Keelung, 08/02
PARAFORMALDEHYDE Tram Chemicals 756 bgs (82,539 lbs) (Sea Land Achiever) Valencia, 08/01
PELARGONIC ACID Exxon Chemical 80 dms (35,538 lbs) (Gina) Antwerp, 08/03
PENTAERYTHRITOL Degussa 750 bgs (37,831 lbs) (Ile de France) Bremerhaven, 08/02
PIGMENTS Pan American Container 215 pkg (9,877 lbs) (Margaret Lykes) Leghorn, 08/03
POLYTETRAFLUOROETHYLENE Ausimont 574 dms (22,575 lbs) (Cristoforo Colomb) La Spezia, 08/02
POTASSIUM BROMATE Ameribrom 100 dms (5,556 lbs) (Zim Keelung) Haifa, 08/08
POTASSIUM FLUORIDE Laporte 40 plt (29,116 lbs) (Kazimierz Pulaski) Rotterdam, 08/13
POTASSIUM HYDROXIDE Enimont Americas 880 pcs (45,106 lbs) (Sea Land Achiever) Algeciras, 08/01
POTASSIUM SODIUM TARTRATE Zusi Ambrosetti 6 plt (14,286 lbs) (Gina) Le Havre, 08/03
PSYLLIUM HUSK Meer 480 bgs (46,078 lbs) (Sea Land Achiever) Algeciras, 08/01
 Natural Nydegger Transport 1,415 bgs (128,967 lbs) (Sea Land Achiever) Algeciras, 08/01
 Meer 500 bgs (4,409 lbs) (Sea Land Achiever) Algeciras, 08/01
 Natural Nydegger Transport 1,475 lbs) (Sea Land Achiever) Algeciras, 08/01

R-X

REFINED OLIVE OIL Taormina Sales 1,152 tin (44,318 lbs) (Howell Lykes) Izmir, 08/01
REFINED OLIVE POMACE OIL Supreme Oil 100 dms (44,092 lbs) (Cristoforo Colomb) La Spezia, 08/02
SILICA GEL B Multifom Desiccants 192 dms (45,291 lbs) (Ile de France) Felixstowe, 08/02
SODIUM AMMONIUM VANADATE Pechiney World Trade 90 dms (39,904 lbs) (Gina) Felixstowe, 08/03
SODIUM BICHRONATE Calabrian Intl 760 bgs (39,696 lbs) (Cristoforo Colomb) Valencia, 08/02
SODIUM CYANIDE Davies Turner 238 dms (22,029 lbs) (Gina) Hamburg, 08/03

SULFURIC ACID

September 16, 1991

Continued from Page 50

Cyprus Minerals, Claypool, Ariz.	400
Doe Run Company, Herculaneum, Mo.	60
Jersey Miniere Zinc, Clarksville, Tenn.	150
Kennecott, Salt Lake City, Utah	570
Magma Copper, San Manuel, Ariz.	1,000
Phelps Dodge, Hidalgo, N.M.; Hurley, N.M.; Monmouth Junction, N.J. ..	1,400
Zinc Corporation, Bartlesville, Okla.; Monaca, Pa.	180
Total smelter acid	4,780
Grand Total	46,230

*Thousands of short tons per year of H₂SO₄, 100 percent basis. Virgin acid from elemental sulfur, stack gases and acid sludge. Smelter acid from SO₂ recovery in metallic ore mining. Of all acid produced in 1990, 75 percent was consumed captively at production points. Doe Run closed its Boss, Mo., plant earlier this year. Rhone-Poulenc began operating the former Stauffer Chemical plants in 1989. Boliden Intertrade assumed operation of Tennessee Chemicals' facility at Copperhill, Tenn., in early 1990. Beginning in January, Boliden will market about 100,000 tons per year of acid produced by Kemira. Agrico will replace two 1,600-ton-per-day plants at Uncle Sam, La., with a new 3,200-ton unit in March 1991. The company's Pierce, Fla. unit is being expanded from 1.38 million tons to 1.5 million tons. Hercules Inc. operates the Army's Radford plant. Profile last published 8/22/88; this revision 9/16/91.

DEMAND

1990: 44.0 million tons; 1991: 44.2 million tons; 1995: 45.1 million tons (Includes exports of 178,100 tons in 1990, but not imports of 1.9 million tons).

GROWTH

Historical (1981-1990): 0.9 percent per year; future: 0.5 percent per year through 1995.

PRICE

Historical (1952-1991): High, \$88.50 per ton, virgin acid, 100 percent basis, tanks, Gulf, works; low, \$21 per ton, same basis. Current: \$75 per ton, same basis (large quantity discounts are generally available).

USES

Phosphate fertilizers, 69 percent; ore processing (mostly copper leaching), 6 percent; inorganic pigments and other inorganic chemicals, 5 percent; petroleum refining, 3 percent; pulpmills and other paper products, 2 percent; synthetic rubber and other plastic materials, 2 percent; industrial organic chemicals, 2 percent; other including nitrogen fertilizers, water-treatment compounds, and soaps and detergents, 11 percent.

STRENGTH

Export demand for finished fertilizer products, particularly diammonium phosphate, has been steady at a high level. Consumption of sulfuric acid in solvent-extraction-electrowinning facilities for the production of low-cost copper increased 9 percent last year after posting a 20.5 percent gain in 1989.

WEAKNESS

There is a worldwide oversupply of acid and prices have been soft throughout the past year. Long term, the US share of the world phosphate market will likely shrink as Morocco commercializes more of its dominant phosphate rock resources.

OUTLOOK

Already the largest supplier to world markets, US phosphate fertilizer exports are expected to remain strong at least through mid-decade. Domestic phosphate consumption, which trended downward throughout most of the 1980's, still has considerable growth potential and a resumption of a slow upward trend is forecast. Sulfuric's use in copper leaching may stabilize at the higher rates of recent years.