GYPSUM

(Data in thousand metric tons, unless otherwise noted)

<u>Domestic Production and Use</u>: In 1996, output of crude gypsum was 17 million tons valued at \$125 million. Leading States were Oklahoma, Iowa, Texas, Nevada, Michigan, California, and Indiana, which together accounted for 70% of total output. Thirty companies mined crude gypsum at 57 mines in 19 States, and 12 companies calcined gypsum at 69 plants in 28 States. Of the total supply of crude gypsum (26.5 million tons, including 1.5 million tons of byproduct gypsum), 20. million tons was calcined for gypsum products, and 6 million tons was used mainly as cement retarder or as agricultural land plaster. Calcined gypsum was sold as prefabricated product or as industrial or building plaster. Sales of gypsum reached 4 million tons for use in cement and 2 million tons for agriculture and other uses.

Capacity at operating gypsumboard plants in the United States was 25.1 billion square feet per year while sales were 24.6 billion square feet, representing a capacity utilization of 98%.

Salient Statistics—United States:	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u> 1995</u>	<u>1996°</u>
Production: Crude	14,800	15,800	17,200	16,600	17,000
Byproduct	630	846	950	1,220	1,500
Calcined	15,100	15,200	16,700	16,700	17,700
Prefabricated products (million square feet)	19,200	21,400	23,200	22,500	24,000
Imports, crude, including anhydrite	7,180	7,390	8,470	8,160	8,000
Exports, crude, not ground or calcined	98	69	89	79	100
Consumption, crude, apparent ¹	22,300	24,000	26,300	26,400	26,500
Price: Average crude, f.o.b. mine,					
dollars per ton	6.82	6.74	6.70	7.29	7.50
Average calcined, f.o.b.					
plant, dollars per ton	16.58	17.88	17.23	17.37	18.00
Stocks, producer, crude, yearend	2,350	2,320	2,600	2,100	2,000
Employment, mine and calcining plant, number	6,700	6,700	6,700	6,700	6,700
Net import reliance ² as a percent					
of apparent consumption	31	31	31	32	30

Recycling: A relatively small amount of byproduct gypsum generated in flue gas desulfurization, phosphate rock acidulation, and other chemical processes is used for agricultural and wallboard purposes.

Import Sources (1992-95): Canada, 70%; Mexico, 23%; Spain, 4%; and other, 3%.

Tariff: Item	Number	Most favored nation (MFN)	Non-MFN ³	
· · · · · · · · · · · · · · · · · · ·		12/31/96	12/31/96	
Gypsum; anhydrite	2520.10.0000	Free	Free.	

Depletion Allowance: 14% (Domestic), 14% (Foreign).

Government Stockpile: None.

GYPSUM

Events, Trends, and Issues: Some forecasts indicate that gypsum demand in North American markets will rise by approximately 3% per year throughout the 1990's. This demand will be driven primarily by the construction industry, particularly in the United States where more than 90% of the gypsum consumed is used for wallboard products, building plasters, and the manufacture of portland cement.

Utilization of byproduct gypsum from industrial processes and electric utility flue gas wastes will remain low. More favorable economic circumstances that support byproduct gypsum as a replacement for natural gypsum (e.g., rising ore costs) are necessary to encourage further substitution.

World Mine Production, Reserves, and Reserve Base:

Mine production			Reserves⁴	Reserve base⁴	
	199 <u>5</u>	1996°	NC3CI VC3	NOSCI VO DASC	
United States	16,600	17,000	700,000	Large	
Australia	2,000	2,100			
Canada	7,960	8,200	450,000	Large	
China	11,000	12,000		_	
Egypt	1,200	1,200			
France	5,000	5,000			
India	1,600	1,900			
Iran	8,230	8,500			
Italy	1,200	1,200	Reserv	Reserves and reserve	
Japan	3,900	4,000	base a	re large in major	
Mexico	4,920	5,000	produc	ing countries, but	
Poland	950	1,000	data ar	e not available.	
Spain	7,500	7,500			
Thailand	8,530	8,600			
United Kingdom	2,500	2,800			
Other countries	<u>15,000</u>	<u> 14,000</u>			
World total (rounded)	98,100	100,000	Large	Large	

<u>World Resources</u>: Domestic resources are adequate, but are unevenly distributed. There are no significant gypsum deposits on the eastern seaboard of the United States, and large imports from Canada augment the domestic supply of crude ore in industrial areas. Large deposits occur in the Great Lakes region, midcontinent region, California, and other States. Foreign resources are adequate, but are not evenly distributed.

<u>Substitutes</u>: Other construction materials may be substituted for gypsum, especially cement, lime, lumber, masonry, and steel. There is no practical substitute for gypsum in portland cement. Byproduct gypsum now substitutes for crude gypsum in special agricultural applications, and several producers use some byproduct gypsum in place of crude gypsum for cement set-retarding and manufacturing wallboard.

eEstimated

¹Defined as crude + byproduct + net import reliance.

²Defined as imports - exports + adjustments for industry stock changes.

³See Appendix B.

⁴See Appendix C for definitions.