GYPSUM

(Data in thousand metric tons, unless otherwise noted)

Domestic Production and Use: In 2001, domestic production of crude gypsum was estimated at 18.8 million tons with an estimated valued of $159 million. The top producing States were, in descending order, Oklahoma, Iowa, Nevada, Michigan, Texas, New Mexico, California, and Indiana, which together accounted for 72% of total output. Overall, 30 companies produced gypsum at 56 mines in 19 States, and 10 companies calcined gypsum at 64 plants in 29 States. Most of domestic consumption, which totaled approximately 33.2 million tons, was accounted for by manufacturers of wallboard and plaster products. More than 3.8 million tons for cement production, approximately 2 million tons for agricultural applications, and small amounts of high-purity gypsum for a wide range of industrial processes, such as smelting and glassmaking, accounted for the remaining uses. At the beginning of 2001, capacity of operating wallboard plants in the United States was 35.2 billion square feet[1] per year, and sales were more than 34.5 billion square feet[1], representing capacity utilization of at least 98%.

Salient Statistics—United States:	1997	1998	1999[2]	2000[2]	2001[e]
Production:					
Crude	18,600	19,000	22,400	19,500	18,800
Synthetic[3]	2,700	3,000	5,200	5,200	6,100
Calcined[4]	17,200	19,400	22,300	21,000	17,700
Wallboard products (million square feet[1])	24,400	26,900	28,700	26,100	29,600
Imports, crude, including anhydrite	8,420	8,680	9,340	9,210	8,460
Exports, crude, not ground or calcined	174	166	112	161	198
Consumption, apparent[5]	29,500	30,500	36,800	33,700	33,200
Price:					
Average crude, f.o.b. mine, dollars per ton	7.11	6.92	6.99	8.44	8.46
Average calcined, f.o.b. plant, dollars per ton	17.58	17.02	17.07	16.81	16.84
Stocks, producer, crude, yearend	1,200	1,500	1,500	1,500	1,500
Employment, mine and calcining plant, number[e]	6,000	6,000	6,000	6,000	5,900
Net import reliance[6] as a percentage of apparent consumption	28	28	25	27	25

Recycling: A portion of more than 4 million tons of gypsum waste, generated every year by wallboard manufacturing, wallboard installation, and building demolition, was recycled. The recycled gypsum was used chiefly for agricultural purposes and new wallboard. Other potential markets for recycled gypsum waste are in cement production, as a stucco additive, in sludge drying, in water treatment, in grease absorption, and for marking athletic fields.

Import Sources (1997-2000): Canada, 68%; Mexico, 23%; Spain, 8%; and other, 1%.

Tariff: Item	Number	Normal Trade Relations 12/31/01
Gypsum; anhydrite	2520.10.0000	Free.

Depletion Allowance: 14% (Domestic and foreign).

Government Stockpile: None.

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GYPSUM

Events, Trends, and Issues: Housing starts leveled out and declined slightly during some months of 2001. This suggests that the trend of annual increases in U.S. gypsum consumption has come to an end or at least slowed. However, construction rates for new office and commercial buildings continued to stimulate wallboard demand. Some forecasts indicate that gypsum demand in North American markets will remain level for the next few years. This demand, however, will depend principally on the strength of the construction industry, particularly in the United States, where more than 95% of the gypsum consumed is used for wallboard products, building plasters, and the manufacture of portland cement. Federal funding that was authorized in 1998 for road building and repair through 2003 will continue to spur gypsum consumption in the cement industry. More large wallboard plants under construction and designed to use only synthetic gypsum will accelerate substitution significantly as they become operational within the next 2 years.

World Mine Production, Reserves, and Reserve Base:

	Mine production		Reserves[7]	Reserve base[7]
	2000	2001[e]		
United States	19,500	18,800	700,000	Large
Australia	3,800	4,000		
Canada	8,550	9,000	450,000	Large
China	6,800	6,800		
Egypt	2,000	2,200		
France	4,500	4,500		
India	2,210	2,220		
Iran	11,000	11,000		
Italy	1,300	1,300	Reserves and reserve	
Japan	5,600	6,000	base are large in major	
Mexico	7,000	7,600	producing countries, but	
Poland	1,700	1,300	data are not available.	
Spain	7,500	7,500		
Thailand	5,830	6,000		
United Kingdom	1,500	1,400		
Other countries	17,200	20,100		
World total (rounded)	106,000	110,000	Large	Large

World Resources: Domestic resources are adequate but unevenly distributed. Large imports from Canada augment domestic supplies for wallboard manufacturing on the eastern seaboard of the United States, where there are no significant gypsum deposits. Large imports from Mexico augment domestic supplies for wallboard manufacturing on the U.S. western seaboard. Large deposits occur in the Great Lakes region, midcontinental region, and California. Foreign resources are large and widely distributed; more than 90 countries produce gypsum.

Substitutes: Other construction materials may be substituted for gypsum, especially cement, lime, lumber, masonry, and steel. Gypsum has no practical substitute in the manufacturing of portland cement. Synthetic gypsum generated by various industrial processes including flue gas desulfurization of stack emissions, is becoming very important as a substitute for mined gypsum in wallboard manufacturing, cement production, and agricultural applications. In 2001, synthetic gypsum accounted for more than 15% of the total domestic gypsum supply.

[e]Estimated.

[1]The standard unit used in the U.S. wallboard industry is square feet. Multiply square feet by (9.29×10^{-2}) to convert to square meters.

[2]Some data revised to correspond with new information published in the USGS Mineral Industry Surveys Annual Review of gypsum for 2000.

[3]Data refer to amount sold or used, not produced.

[4]From domestic crude.

[5]Defined as crude + total synthetic reported used + net import reliance.

[6]Defined as imports - exports + adjustments for industry stock changes.

[7]See Appendix C for definitions.