GYPSUM

(Data in thousand metric tons unless otherwise noted)

Domestic Production and Use: In 2004, domestic production of crude gypsum was estimated to be 18.0 million tons with an estimated value of $124 million. The leading crude gypsum producing States were, in descending order, Nevada, Oklahoma, Iowa, Texas, California, Arkansas, and Indiana, which together accounted for 78% of total output. Overall, 22 companies produced gypsum at 45 mines in 17 States, and 8 companies calcined gypsum at 56 plants in 29 States. Almost 88% of domestic consumption, which totaled approximately 39 million tons, was accounted for by manufacturers of wallboard and plaster products. Approximately 4.7 million tons for cement production, 1.0 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 2004, the capacity of operating wallboard plants in the United States was about 40 billion square feet[1] per year.

Salient Statistics—United States:	**2000**	**2001**	**2002**	**2003**	**2004[e]**
Production:					
Crude	19,500	16,300	15,700	16,700	18,000
Synthetic[2]	4,950	6,820	9,380	11,700	11,000
Calcined[3]	21,000	19,100	18,600	20,400	25,500
Wallboard products (million square feet[1])	26,100	29,500	29,900	31,500	34,200
Imports, crude, including anhydrite	9,210	8,270	7,970	8,300	10,400
Exports, crude, not ground or calcined	161	295	341	166	130
Consumption, apparent[4]	33,700	31,100	32,700	36,700	39,300
Price:					
Average crude, f.o.b. mine, dollars per ton	8.44	7.31	6.90	6.83	6.90
Average calcined, f.o.b. plant, dollars per ton	16.81	18.42	20.01	19.64	20.00
Stocks, producer, crude, yearend	1,500	1,500	1,500	1,500	1,500
Employment, mine and calcining plant, number[e]	6,000	5,900	5,900	5,900	5,900
Net import reliance[5] as a percentage of apparent consumption	27	26	23	23	26

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

Import Sources (2000-03): Canada, 68%; Mexico, 22%; Spain, 9%; and other, 1%.

Tariff: Item	**Number**	**Normal Trade Relations 12-31-04**
Gypsum; anhydrite	2520.10.0000	Free.

Depletion Allowance: 14% (Domestic and foreign).

Government Stockpile: None.

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GYPSUM

Events, Trends, and Issues: The U.S. gypsum industry began to stabilize after the period of acquisitions, mergers, and bankruptcy reorganization filings in recent years. Several companies constructed new plants and expanded capacity in existing plants in 2004, which resulted in increased efficiency of gypsum-product manufacturing facilities.

Domestic housing starts and commercial construction were both slightly higher in 2004 compared with 2003. The net result was a small overall gypsum production increase for the year. Increasing demand for gypsum depends 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. Road building and repair will continue to spur gypsum consumption in the cement industry. The construction of large wallboard plants designed to use synthetic gypsum will increase the substitution of synthetic for natural gypsum as the new plants become operational. However, because an increase in the number of powerplants that use high-sulfur coal (currently the principle source of synthetic gypsum) is not anticipated, the substitution of synthetic gypsum for natural gypsum may eventually level out and additional mining may be required to meet rising demand.

World Mine Production, Reserves, and Reserve Base:

	Mine production		Reserves[6]	Reserve base[6]
	2003	2004[e]		
United States	16,700	18,000	700,000	Large
Australia	4,000	4,000		
Austria	1,000	1,000		
Brazil	1,650	1,650	1,300,000	Large
Canada	9,000	9,000	450,000	Large
China	6,900	6,900		
Egypt	2,000	2,000		
France	3,500	3,500		
India	2,300	2,300		
Iran	11,500	11,500		
Italy	1,200	1,200	Reserves and reserve	
Japan	5,700	5,700	base are large in major	
Mexico	6,800	6,800	producing countries, but	
Poland	1,100	1,100	data are not available.	
Spain	7,500	7,500		
Russia	1,000	2,000		
Thailand	6,500	6,500		
United Kingdom	1,500	1,500		
Uruguay	1,130	1,130		
Other countries	12,500	12,500		
World total (rounded)	104,000	106,000	Large	Large

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

Substitutes: In such applications as stucco and plaster, cement and lime may be substituted; brick, glass, metallic or plastic panels, and wood may be substituted for wallboard. Gypsum has no practical substitute in the manufacturing of portland cement. Synthetic gypsum generated by various industrial processes, including flue gas desulfurization of smokestack emissions, is becoming very important as a substitute for mined gypsum in wallboard manufacturing, cement production, and agricultural applications (in descending tonnage order). In 2004, synthetic gypsum accounted for 26% 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 x 10^{-2} to convert to square meters.
[2]Data refer to the amount sold or used, not produced.
[3]From domestic crude.
[4]Defined as crude + total synthetic reported used + net import reliance.
[5]Defined as imports – exports + adjustments for industry stock changes.
[6]See Appendix C for definitions.