

## GYPSUM

(Data in thousand metric tons, unless otherwise noted)

**Domestic Production and Use:** In 1999, crude gypsum output exceeded 19.4 million tons valued at \$134 million. The top producing States were Oklahoma, Iowa, Texas, Michigan, California, Nevada, and Indiana, which together accounted for 72% of total output. Overall, 32 companies produced gypsum at 61 mines in 19 States, and 11 companies calcined gypsum at 65 plants in 27 States. Most of domestic consumption, which totaled about 31.8 million tons, was accounted for by manufacturers of wallboard and plaster products. More than 4 million tons for cement production, almost 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 remaining uses. Capacity at operating wallboard plants in the United States was 30 billion square feet per year, while sales were more than 29 billion square feet, representing capacity utilization greater than 98%.

<b>Salient Statistics—United States:</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999<sup>e</sup></b>
Production: Crude	16,600	17,500	18,600	19,000	19,400
Byproduct <sup>1</sup>	2,300	2,500	2,700	3,000	3,300
Calcined <sup>2</sup>	16,700	17,000	17,200	19,400	20,600
Wallboard products (million square feet)	24,000	23,700	24,400	26,900	29,100
Imports, crude, including anhydrite	8,160	8,050	8,420	8,680	9,200
Exports, crude, not ground or calcined	79	136	174	166	108
Consumption, apparent <sup>3</sup>	27,000	27,900	29,500	30,500	31,800
Price: Average crude, f.o.b. mine, dollars per ton	7.29	7.10	7.11	7.20	6.92
Average calcined, f.o.b. plant, dollars per ton	17.37	16.88	17.58	18.00	17.02
Stocks, producer, crude, yearend	1,100	1,200	1,200	1,500	1,500
Employment, mine and calcining plant, number <sup>e</sup>	6,500	6,300	6,000	6,000	6,000
Net import reliance <sup>4</sup> as a percent of apparent consumption	30	29	28	28	29

**Recycling:** A relatively small amount of gypsum wallboard is recycled.

**Import Sources (1995-98):** Canada, 68%; Mexico, 23%; Spain, 8%; and other, 1%.

<b>Tariff:</b>	<b>Item</b>	<b>Number</b>	<b>Normal Trade Relations</b>
			<b>12/31/99</b>
	Gypsum; anhydrite	2520.10.0000	Free.

**Depletion Allowance:** 15% (Domestic and foreign).

**Government Stockpile:** None.

## GYPSUM

**Events, Trends, and Issues:** Construction of new homes, commercial buildings, and office space continued to stimulate wallboard demand and boosted domestic consumption of gypsum. Some forecasts indicate that gypsum demand in North American markets will remain high 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 90% 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. Several large wallboard plants under construction and designed to use only byproduct gypsum will accelerate substitution significantly as they become operational within a few years.

### **World Mine Production, Reserves, and Reserve Base:**

	Mine production		Reserves <sup>5</sup>	Reserve base <sup>5</sup>
	1998	1999 <sup>e</sup>		
United States	19,000	19,400	700,000	Large
Australia	2,100	2,200		
Canada	8,100	8,200	450,000	Large
China	9,000	9,200		
Egypt	2,000	2,000		
France	4,500	4,500		
India	2,400	2,500		
Iran	9,000	9,000		
Italy	2,000	2,000		
Japan	5,300	5,300		
Mexico	7,045	7,100		
Poland	1,000	1,000		
Spain	7,400	7,400		
Thailand	9,000	9,000		
United Kingdom	2,000	2,000		
Other countries	<u>17,200</u>	<u>17,500</u>		
World total (rounded)	107,000	108,000	Large	Large

Reserves and reserve base are large in major producing countries, but data are not available.

**World Resources:** Domestic resources are adequate, but are unevenly distributed. There are no significant gypsum deposits on the eastern seaboard of the United States, where large imports from Canada augment domestic supplies for wallboard manufacturing in large metropolitan markets. 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. There is no practical substitute for gypsum in portland cement. Byproduct gypsum generated by various industrial processes is becoming more important as a substitute for mined gypsum in wallboard manufacturing, cement production, and agricultural applications.

<sup>e</sup>Estimated.

<sup>1</sup>Only byproduct reported as sold or used.

<sup>2</sup>From domestic crude.

<sup>3</sup>Defined as crude + total reported byproduct use + net import reliance.

<sup>4</sup>Defined as imports - exports + adjustments for industry stock changes.

<sup>5</sup>See Appendix C for definitions.