GYPSUM

(Data in thousand metric tons unless otherwise specified)

Domestic Production and Use: In 2023, domestic production of crude gypsum was estimated to be 22 million tons with a value of about $264 million. The leading crude gypsum-producing States were estimated to be California, Iowa, Kansas, Nevada, Oklahoma, and Texas. Overall, 47 companies produced or processed gypsum in the United States at 46 mines in 15 States. The majority of domestic consumption, which totaled approximately 45 million tons, was used by agriculture, cement production, and manufacturers of wallboard and plaster products. Small quantities of high-purity gypsum, used in a wide range of industrial processes, accounted for the remaining tonnage. At the beginning of 2023, the production capacity gypsum panel manufacturing in the United States was about 34 billion square feet[1] per year. Total wallboard sales in 2023 were estimated to be 27 billion square feet.

Salient Statistics—United States:	2019	2020	2021	2022	2023[e]
Production:					
Crude	21,600	21,300	20,800	22,300	22,000
Synthetic[2]	14,400	13,000	14,000	14,500	15,000
Calcined[3]	17,900	17,900	18,600	18,700	18,000
Wallboard products sold, million square feet[1]	25,900	26,200	27,300	28,200	27,000
Imports, crude, including anhydrite	6,140	6,030	6,520	6,870	8,100
Exports, crude, not ground or calcined	37	32	42	39	45
Consumption, apparent[4]	42,100	40,300	41,300	43,700	45,000
Price, average, dollars per metric ton:					
Crude, free on board (f.o.b.) mine	8.6	8.6	11	11	12
Calcined, f.o.b. plant	34	35	42	50	52
Employment, mine and calcining plant, number[e]	4,500	4,500	4,500	4,500	4,500
Net import reliance[5] as a percentage of apparent consumption	14	15	16	16	18

Recycling: Approximately 700,000 tons per year of gypsum scrap that was generated by wallboard manufacturing was recycled onsite. The recycling of wallboard from new construction and demolition sources also took place, although those amounts are unknown. Recycled gypsum was used primarily for agricultural purposes and feedstock for the manufacture of new wallboard. Other potential markets for recycled gypsum include athletic-field marking, cement production (as a stucco additive), grease absorption, sludge drying, and water treatment.

Import Sources (2019–22): Spain, 34%; Mexico, 32%; Canada, 29%; Turkey, 4%; and other, 1%.

Tariff: Item	Number	Normal Trade Relations 12–31–23
Gypsum, anhydrite	2520.10.0000	Free.

Depletion Allowance: 14% (domestic and foreign).

Government Stockpile: None.

Events, Trends, and Issues: U.S. crude gypsum production was estimated to have decreased slightly, whereas apparent consumption increased by 3% compared with that in 2022. U.S. gypsum imports increased by an estimated 18% compared with those in 2022. Exports, although very low compared with imports, increased by an estimated 15%.

Demand for gypsum depends principally on construction industry activity, particularly in the United States, where most gypsum consumed is used for agriculture, building plasters, the manufacture of portland cement, and wallboard products. According to the U.S. Census Bureau, housing starts through September 2023 were at a seasonally adjusted annual rate of 1,358,000, 7% less than the 1,463,000 starts from January through September 2022.

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GYPSUM

The United States, the world's leading crude gypsum producer, produced an estimated 22 million tons (14%). Iran was the second-leading producer with an estimated 16 million tons (10%) of crude production, followed by China and Oman with 12 million tons (8%) each. Increased use of wallboard in Asia, coupled with new gypsum product plants, spurred increased production in the region. As wallboard becomes more widely used, worldwide gypsum production is expected to increase.

World Mine Production and Reserves: Reserves for China, Iran, Pakistan, and Thailand were revised based on Government information.

	Mine production[e]		Reserves[6]
	2022	2023	
United States	[7]22,300	22,000	700,000
Algeria	2,500	2,500	NA
Brazil	2,900	2,900	450,000
Canada	2,400	2,400	450,000
China	12,000	12,000	2,100,000
France	2,000	2,400	350,000
Germany	5,200	5,200	NA
India	4,300	4,300	37,000
Iran	16,000	16,000	900,000
Japan	4,300	4,300	NA
Mexico	5,400	5,400	NA
Oman	12,000	12,000	NA
Pakistan	1,800	1,800	760,000
Russia	4,100	4,100	NA
Saudi Arabia	4,000	4,000	NA
Spain	11,000	11,000	NA
Thailand	10,400	10,000	910,000
Turkey	9,300	10,000	200,000
Ukraine	1,800	1,500	NA
Uzbekistan	2,000	2,000	NA
Other countries	19,000	19,000	NA
World total (rounded)	155,000	160,000	Large

World Resources:[6] Reserves are large in major producing countries, but data for most are not available. Domestic gypsum resources are adequate but unevenly distributed. Large imports from Canada augment domestic supplies for wallboard manufacturing in the United States, particularly in the eastern and southern coastal regions. Imports from Mexico supplement domestic supplies for wallboard manufacturing along portions of the United States west coast. Large gypsum deposits occur in the Great Lakes region, the midcontinent region, and several Western States. Foreign resources are large and widely distributed; gypsum production was estimated for 77 countries in 2023.

Substitutes: In such applications as stucco and plaster, cement and lime may be substituted for gypsum; 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 very important as a substitute for mined gypsum in wallboard manufacturing, cement production, and agricultural applications (in descending order by tonnage). In 2023, synthetic gypsum was estimated to account for about 33% of the total domestic gypsum supply.

[e]Estimated. NA Not available.

[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. Source: The Gypsum Association.

[2]Synthetic gypsum used; the majority of these data were obtained from the American Coal Ash Association.

[3]From domestic crude and synthetic gypsum.

[4]Defined as crude production + synthetic used + imports – exports.

[5]Defined as imports – exports.

[6]See Appendix C for resource and reserve definitions and information concerning data sources.

[7]Reported.