DIATOMITE

(Data in thousand metric tons unless otherwise specified)

Domestic Production and Use: In 2025, production of diatomite, also known as diatomaceous earth, was estimated to be 720,000 tons with an estimated processed value of $420 million, free on board (f.o.b.) plant. Six companies produced diatomite at 13 mining areas and 9 processing facilities in California, Nevada, Oregon, and Washington. Approximately 60% of diatomite was used in filtration products. The remaining 40% was used in absorbents, lightweight aggregates, fillers, and other applications. A small amount, less than 1%, was used for specialized pharmaceutical and biomedical purposes. The unit value of diatomite varied widely in 2025, from approximately $10 per metric ton when used as a lightweight aggregate in portland cement concrete to more than $1,000 per metric ton for limited specialty markets, including art supplies, cosmetics, and deoxyribonucleic acid (DNA) extraction. The price for diatomite used for filtration was approximately $580 per metric ton.

Salient Statistics—United States:	**2021**	**2022**	**2023**	**2024**	**2025[e]**
Production[1]	998	827	849	721	720
Imports for consumption	14	14	12	14	13
Exports	69	64	54	64	58
Consumption, apparent[2]	943	777	807	671	680
Price, average value, f.o.b. plant, dollars per metric ton	410	416	580	575	580
Employment, mine and plant, number[e]	370	370	370	370	370
Net import reliance[3] as a percentage of apparent consumption	E	E	E	E	E

Recycling: None.

Import Sources (2021–24): Canada, 55%; Mexico, 17%; Germany, 11%; Argentina, 6%; and other, 11%.

Tariff: Item	**Number**	**Normal Trade Relations 12–31–25**
Siliceous fossil meals, including diatomite	2512.00.0000	Free.

Depletion Allowance: 14% (domestic and foreign).

Government Stockpile: None.

Events, Trends, and Issues: The amount of domestically produced diatomite sold or used by producers in 2025 was estimated to be 720,000 tons, compared with 721,000 tons in 2024. Apparent consumption in 2025 was an estimated 675,000 tons, compared with 671,000 tons in 2024. Imports were estimated to have decreased by 7% compared with those in 2024. Exports were estimated to have decreased by 9% compared with those in 2024. The United States remained the leading global producer and consumer of diatomite. Filtration (including the cleansing of greases and oils and the purification of beer, liquors, water, and wine) continued to be the leading end use for diatomite. An important application for diatomite is the removal of microbial contaminants, such as bacteria, protozoa, and viruses in public water systems. Diatomite continued to be widely used as an inert carrier for pesticides and as an anticaking agent in animal feeds. Caution in the processing and use of diatomite was suggested because many forms contain crystalline silica, which is known to cause cancer, birth defects, or other reproductive harm to humans when exposed to levels above permissible limits.

Prepared by **Rob Crangle [(703) 648–6410, rcrangle@usgs.gov]**

DIATOMITE

In 2025, the United States accounted for an estimated 29% of total world production, followed by Denmark with 15%, France with 10%, Argentina with 8%, and China and Turkey, each with 6%. Smaller quantities of diatomite were mined in 22 additional countries. World production of diatomite in 2025 was estimated to be 2.5 million tons, compared with 2.53 million tons in 2024.

World Mine Production and Reserves: Significant revisions were made to the 2024 production for Argentina, China, Denmark, the Republic of Korea, Turkey, and the United States based on company and Government reports.

	Mine production[e]		Reserves[4]
	2024	2025	
United States[1]	[6]721	720	250,000
Argentina	185	190	NA
China	140	140	120,000
Denmark (processed)[5]	380	380	NA
France	250	250	NA
Germany	50	50	NA
Japan	40	40	NA
Korea, Republic of	120	120	2,200
Mexico	100	100	NA
New Zealand	40	40	NA
Peru	99	99	NA
Russia	50	50	NA
Spain	50	50	57,000
Turkey	150	150	44,000
Other countries	152	160	NA
World total (rounded)	2,530	2,500	Large

World Resources:[4] Diatomite deposits form from an accumulation of amorphous hydrous silica cell walls of dead diatoms in oceanic and fresh waters. Diatomite is also known as kieselguhr (Germany), moler (an impure Danish form), and tripolite (after an occurrence near Tripoli, Libya). Because U.S. diatomite occurrences are at or near Earth's surface, recovery from most deposits is achieved through low-cost, open pit mining. Outside the United States, however, underground mining is fairly common owing to deposit location and topographic constraints. World resources of crude diatomite are adequate for the foreseeable future.

Substitutes: Many materials can be substituted for diatomite. However, the unique properties of diatomite assure its continued use in many applications. Expanded perlite and silica sand compete for filtration. Filters made from manufactured materials, notably ceramic, polymeric, or carbon membranes and filters made with cellulose fibers are becoming competitive as filter media. Alternate filler materials include clay, ground limestone, ground mica, ground silica sand, perlite, talc, and vermiculite. For thermal insulation, materials such as special brick, various clays, expanded perlite, exfoliated vermiculite, and mineral wool can be used. Transportation costs will continue to determine the maximum economic distance that most forms of diatomite may be shipped and still remain competitive with alternative materials.

[e]Estimated. E Net exporter. NA Not available.

[1]Processed ore sold or used by producers.

[2]Defined as production + imports – exports.

[3]Defined as imports – exports.

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

[5]Includes sales of moler production.

[6]Reported.