

DIATOMITE

(Data in thousand metric tons unless otherwise noted)

Domestic Production and Use: In 2006, domestic production of diatomite was estimated at 653,000 tons with an estimated processed value of \$179 million, f.o.b. plant. Production was from 7 diatomite-producing companies with 11 mining areas and 9 processing facilities in California, Oregon, Nevada, and Washington. California and Nevada were the principal producing States and accounted for about 78% of U.S. production in 2006. Estimated end uses of diatomite were filter aids, 75%; fillers, 11%; absorbents, 7%; and other (mostly cement manufacture and thermal insulation), 7%.

<u>Salient Statistics—United States:</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006^e</u>
Production ¹	624	599	620	653	655
Imports for consumption	(2)	(2)	1	1	1
Exports	128	136	143	142	145
Consumption, apparent	496	463	478	512	510
Price, average value, dollars per ton, f.o.b. plant	270	255	258	264	274
Stocks, producer, yearend ^e	36	36	36	40	40
Employment, mine and plant, number ^e	1,000	1,000	1,000	1,000	1,000
Net import reliance ³ as a percentage of apparent consumption	E	E	E	E	E

Recycling: None.

Import Sources (2002-05): France, 60%; Italy, 21%; Spain, 9%; Mexico, 8%; and other, 2%.

<u>Tariff:</u>	<u>Item</u>	<u>Number</u>	<u>Normal Trade Relations</u>
	Siliceous fossil meals, including diatomite	2512.00.0000	<u>12-31-06</u> Free.

Depletion Allowance: 4% (Domestic and foreign).

Government Stockpile: None.

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Events, Trends, and Issues: The amount of domestically produced diatomite sold or used in 2006 increased slightly compared with that of 2005. Filtration (including the purification of beer, liquors, and wine and the cleansing of greases and oils) continued to be the largest end use for diatomite, also known as diatomaceous earth (D.E.). Other applications include the removal of microbial contaminants, such as bacteria, protozoa, and viruses, in public water systems, and the filtration of human blood plasma. Emerging applications for diatomite include pharmaceutical processing and use as an insecticide that is nontoxic to humans.

World Mine Production, Reserves, and Reserve Base:

	Mine production		Reserves ⁴	Reserve base ⁴
	<u>2005</u>	<u>2006^e</u>		
United States ¹	653	655	250,000	500,000
Chile	30	27	NA	NA
China	410	420	110,000	410,000
Commonwealth of Independent States	80	80	NA	13,000
Czech Republic	35	35	4,500	4,800
Denmark ⁵ (processed)	234	234	NA	NA
France	75	75	NA	2,000
Germany	55	55	NA	NA
Japan	130	130	NA	NA
Mexico	60	60	NA	2,000
Peru	35	35	2,000	5,000
Romania	30	2	NA	NA
Spain	35	35	NA	NA
Other countries	<u>156</u>	<u>181</u>	<u>550,000</u>	<u>NA</u>
World total (rounded)	2,020	2,020	920,000	Large

World Resources: World resources of crude diatomite are adequate for the foreseeable future, but the need for diatomite to be near markets because of transportation costs encourages development of new sources for the material.

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. Synthetic filters, notably ceramic, polymeric, or carbon membrane filters and filters made with cellulose fibers, are also 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 various clays, exfoliated vermiculite, expanded perlite, mineral wool, and special brick can be used.

^eEstimated. E Net exporter. NA Not available.

¹Processed ore sold and used by producers.

²Less than ½ unit.

³Defined as imports – exports + adjustments for Government and industry stock changes.

⁴[See Appendix C for definitions.](#)

⁵Includes sales of moler production.