## DIATOMITE

(Data in thousand metric tons, unless otherwise noted)

<u>Domestic Production and Use</u>: The estimated value of processed diatomite, f.o.b. plant, was \$185 million in 2000. Production was from 7 companies with 12 processing facilities in 4 States. Two companies produced more than 75% of the total. California and Nevada were the principal producing States. Estimated end uses of diatomite were filter aids, 62%; absorbents, 16%; fillers, 11%; and other (mostly cement manufacture), 11%.

Salient Statistics—United States:	1996	<u>1997</u>	<u>1998</u>	<u>1999</u>	2000 <sup>e</sup>
Production <sup>1</sup>	729	773	725	747	808
Imports for consumption	2	2	2	( <sup>2</sup> )	( <sup>2</sup> )
Exports	143	140	138	123	131
Consumption, apparent	588	635	588	625	677
Price, average value, dollars per ton,					
f.o.b. plant	242	244	248	238	228
Stocks, producer, yearend	36	36	36	36	36
Employment, mine and plant, number <sup>e</sup>	1,000	1,000	1,000	1,000	1,000
Net import reliance <sup>3</sup> as a percent					
of apparent consumption	E	E	E	E	Е

Recycling: None.

Import Sources (1996-1999): France, 87%; Italy, 9%; and other, 4%.

Tariff: Item Number Normal Trade Relations

Siliceous fossil meals, including diatomite 2512.00.0000 Free.

**Depletion Allowance**: 14% (Domestic and foreign).

Government Stockpile: None.

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**Events, Trends, and Issues:** Filtration (including for beer, wine, liquors, oils, and greases) continued to be the largest end use for diatomite, also known as diatomaceous earth (D.E.). Another application is for removal of microbial contaminants, such as bacteria, viruses, and protozoa, in public water systems. D.E. filter aids have been successfully deployed in over 200 locations throughout the United States for the treatment of potable water. Emerging small-scale applications for diatomite include pharmaceutical processing and as a nontoxic insecticide.

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

	Mine production		Reserves⁴	Reserve base⁴
	1999	2000°		
United States <sup>1</sup>	747	808	250,000	500,000
China	340	340		NA
Denmark <sup>5</sup>	185	185		NA
France	80	80	Other	2,000
Japan	190	190	countries:	NA
Korea, Republic of	35	35	550,000	NA
Mexico	70	70		2,000
Spain	36	36		NA
Former Soviet Union <sup>6</sup>	80	80		NA
Other countries	200	200		<u>NA</u>
World total (may be rounded)	1,960	2,020	800,000	Large

<u>World Resources</u>: World resources of crude diatomite are adequate for the foreseeable future, but the need for diatomite to be near markets encourages development of new sources for the material.

<u>Substitutes</u>: Many materials can be substituted for diatomite. However, the unique properties of diatomite assure its continuing use for many applications. Expanded perlite and silica sand compete for filtration purposes. Other filtration technologies use ceramic, polymeric, or carbon membrane. Alternate filler materials include talc, ground silica sand, ground mica, clay, perlite, vermiculite, and ground limestone. For thermal insulation, materials such as various clays and special brick, mineral wool, expanded perlite, and exfoliated vermiculite can be used.

<sup>&</sup>lt;sup>e</sup>Estimated. E Net exporter. NA Not available.

<sup>&</sup>lt;sup>1</sup>Processed ore sold and used by producers.

<sup>&</sup>lt;sup>2</sup>Less than ½ unit.

<sup>&</sup>lt;sup>3</sup>Defined as imports - exports + adjustments for Government and industry stock changes.

<sup>&</sup>lt;sup>4</sup>See Appendix C for definitions.

<sup>&</sup>lt;sup>5</sup>Includes sales of moler production.

<sup>&</sup>lt;sup>6</sup>As constituted before December 1991.