## DIATOMITE

(Data in thousand metric tons, unless otherwise noted)
Domestic Production and Use: 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 | 1997 | 1998 | 1999 | $\underline{2000}{ }^{\text {e }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Production ${ }^{1}$ | 729 | 773 | 725 | 747 | 808 |
| Imports for consumption | 2 | 2 | 2 | $\left(^{2}\right)$ | $\left(^{2}\right)$ |
| 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 ${ }^{\text {e }}$ | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 |
| Net import reliance ${ }^{3}$ as a percent of apparent consumption | E | E | E | E | E |

Recycling: None.
Import Sources (1996-1999): France, 87\%; Italy, 9\%; and other, 4\%.

Tariff: Item
Siliceous fossil meals, including diatomite

Number
2512.00.0000

Normal Trade Relations
12/31/00
Free.

Depletion Allowance: 14\% (Domestic and foreign).
Government Stockpile: None.

## DIATOMITE

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 |  | Reserves ${ }^{4}$ | Reserve base ${ }^{4}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | 1999 | $\underline{2000}{ }^{\text {e }}$ |  |  |
| United States ${ }^{1}$ | 747 | 808 | 250,000 | 500,000 |
| China | 340 | 340 |  | NA |
| Denmark ${ }^{5}$ | 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 ${ }^{6}$ | 80 | 80 |  | NA |
| Other countries | 200 | 200 |  | NA |
| World total (may be rounded) | 1,960 | 2,020 | 800,000 | Large |

World Resources: 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.

Substitutes: 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.

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[^0]:    ${ }^{\text {e}}$ Estimated. E Net exporter. NA Not available.
    ${ }^{1}$ Processed ore sold and used by producers.
    ${ }^{2}$ Less than $1 / 2$ unit.
    ${ }^{3}$ Defined as imports - exports + adjustments for Government and industry stock changes.
    ${ }^{4}$ See Appendix C for definitions.
    ${ }^{5}$ Includes sales of moler production.
    ${ }^{6}$ As constituted before December 1991.

