

PUMICE AND PUMICITE

(Data in thousand metric tons, unless otherwise noted)

Domestic Production and Use: The estimated value of pumice and pumicite sold or used in 2000 was \$28 million. Domestic output came from 15 producers in 6 States. The principal producing States were California, Idaho, New Mexico, and Oregon, with combined production accounting for about 94% of the national total. The remaining production was from Arizona and Kansas. About 66% of the pumice was consumed for building blocks, and the remaining 34% was used in abrasives, concrete, stone-washing laundries, and other applications.

| Salient Statistics—United States: | 1996 | 1997 | 1998 | 1999 | 2000^e |
|--|-------------|-------------|-------------|-------------|-------------------------|
| Production, mine ¹ | 612 | 577 | 583 | 643 | 749 |
| Imports for consumption | 215 | 265 | 286 | 354 | 390 |
| Exports ^e | 13 | 12 | 22 | 23 | 25 |
| Consumption, apparent | 814 | 830 | 847 | 974 | 1,110 |
| Price, average value, dollars per ton, f.o.b. mine or mill | 24.19 | 27.90 | 21.59 | 27.69 | 37.38 |
| Stocks, yearend | NA | NA | NA | NA | NA |
| Employment, mine and mill, number | 70 | 70 | 75 | 85 | 85 |
| Net import reliance ² as a percent of apparent consumption | 25 | 30 | 31 | 34 | 33 |

Recycling: Not available.

Import Sources (1996-99): Greece, 88%; Turkey, 5%; Ecuador, 3%; Italy, 3%; and other, 1%.

| Tariff: Item | Number | Normal Trade Relations 12/31/00 |
|---|---------------|--|
| Crude or in irregular pieces, including crushed pumice | 2513.11.0000 | Free. |
| Other | 2513.19.0000 | Free. |

Depletion Allowance: 5% (Domestic and foreign).

Government Stockpile: None.

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Events, Trends, and Issues: The amount of pumice and pumicite sold or used in 2000 increased about 16% when compared with that of 1999. Imports increased over 10% compared with those of 1999 as more Greek pumice was brought into the eastern half of the United States. Total consumption reached a record level since pumice and pumicite data were first published separately from volcanic cinder in 1978. Consumption increased because of increased demand from lightweight-block and lightweight-concrete producers. Stone-washing laundry use of pumice continued to decline in 2000.

The average price of pumice and pumicite increased significantly from 1999 to 2000 because of the inclusion of data from a newer operation and higher reported values from several traditional suppliers.

It is estimated that in 2001 domestic mine production of pumice and pumicite will be about 750,000 tons, with U.S. apparent consumption at approximately 1,100,000 tons. Imports, mainly from Greece, continue to maintain markets in the East Coast and Gulf Coast States of the United States.

Although pumice and pumicite were plentiful in the Western United States, changes in laws and public land designations could decrease access to many deposits. Pumice and pumicite were sensitive to mining costs, and, if domestic production costs were to increase, imports and competing materials might replace pumice in many domestic markets.

All domestic mining of pumice in 2000 was by open pit methods, and generally occurred in relatively remote areas where land use conflicts were not severe. Although the generation and disposal of reject fines in mining and milling resulted in a dust problem at some operations, the environmental impact was restricted to a small geographical area.

World Mine Production, Reserves, and Reserve Base:

| | Mine production | | Reserves ³ | Reserve base ³ |
|----------------------------|-----------------|-------------------|-----------------------|---------------------------|
| | 1999 | 2000 ^e | | |
| United States ¹ | 643 | 749 | Large | Large |
| Chile | 600 | 650 | NA | NA |
| France | 460 | 500 | NA | NA |
| Germany | 600 | 600 | NA | NA |
| Greece | 1,700 | 1,700 | NA | NA |
| Italy | 4,600 | 4,600 | NA | NA |
| Spain | 600 | 600 | NA | NA |
| Turkey | 600 | 600 | NA | NA |
| Other countries | 1,800 | 1,800 | NA | NA |
| World total (rounded) | 11,600 | 11,800 | NA | NA |

World Resources: The identified U.S. domestic resources of pumice and pumicite in the West are estimated to be at least 25 million tons. The estimated resources in the Western and Great Plains States are 250 million to 450 million tons.

Substitutes: Transportation cost determines the maximum distance that pumice and pumicite can be shipped and remain competitive with alternate materials. Competitive materials that can be substituted for pumice and pumicite for several end uses include expanded shale and clay, diatomite, and crushed aggregates.

^eEstimated. NA Not available.

¹Quantity sold and used by producers.

²Defined as imports - exports + adjustments for Government and industry stock changes.

³See Appendix C for definitions.