

## 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 2009 was about \$16 million. Domestic output came from 18 producers in 7 States. Pumice and pumicite were mined in Arizona, California, Idaho, New Mexico, Oregon, Nevada, and Kansas, in descending order of production. Approximately 50% of all production came from Arizona and California. About 78% of mined pumice was used toward the production of construction building block. Horticulture consumed nearly 6%; concrete admixture and aggregate, 5%; abrasives, 1%; and the remaining 10% was used for absorbent, filtration, landscaping, laundry stone washing, and other applications.

<b><u>Salient Statistics—United States:</u></b>	<b><u>2005</u></b>	<b><u>2006</u></b>	<b><u>2007</u></b>	<b><u>2008</u></b>	<b><u>2009<sup>e</sup></u></b>
Production, mine <sup>1</sup>	1,270	1,540	1,270	791	800
Imports for consumption <sup>2</sup>	240	109	37	65	39
Exports <sup>e, 2</sup>	15	18	9	15	11
Consumption, apparent	1,500	1,630	1,300	841	828
Price, average value, dollars per ton, f.o.b. mine or mill	31.00	28.85	22.85	20.13	20.00
Employment, mine and mill, number	100	110	110	110	110
Net import reliance <sup>3</sup> as a percentage of apparent consumption	15	6	2	6	3

**Recycling:** Not available.

**Import Sources (2005-08):** Greece, 72%; Turkey, 21%; Iceland, 2%; Mexico, 2% and other, 3%.

<b><u>Tariff: Item</u></b>	<b><u>Number</u></b>	<b><u>Normal Trade Relations</u></b> <b><u>12-31-09</u></b>
Pumice, crude or in irregular pieces, including crushed	2513.10.0010	Free.
Pumice, except crude or crushed	2513.10.0080	Free.

**Depletion Allowance:** 5% (Domestic and foreign).

**Government Stockpile:** None.

## PUMICE AND PUMICITE

**Events, Trends, and Issues:** The amount of domestically produced pumice and pumicite sold or used in 2009 increased slightly to 800,000 tons, compared with 791,000 tons in 2008. Imports decreased by nearly 40% compared with those of 2008. Approximately 95% of pumice imports originated from Greece and Montserrat to supply markets in the Eastern United States and Gulf Coast regions. This is the first year there have been significant levels of pumice imports from Montserrat. Apparent consumption decreased slightly in 2009 compared with that of 2008.

In 2009, a stabilization for pumice demand in the construction industry led to a slight increase in pumice and pumicite domestic mine production, despite a decrease in apparent consumption. Although pumice and pumicite are plentiful in the Western United States, legal challenges and public land designations could limit access to known deposits. Pumice and pumicite production is sensitive to mining and transportation costs. An increase in fuel prices would likely lead to increases in production expenditures; imports and competing materials could become more attractive than domestic products.

All domestic pumice and pumicite mining in 2009 was accomplished through open pit methods, generally in remote areas where land-use conflicts were not severe. Although the generation and disposal of reject fines in mining and milling resulted in local dust issues at some operations, the environmental impact was restricted to a relatively small geographic area.

### **World Mine Production and Reserves:**

	Mine production		Reserves <sup>4</sup>
	<u>2008</u>	<u>2009<sup>e</sup></u>	
United States <sup>1</sup>	791	800	Large in the United States. Quantitative estimates of reserves for most countries are not available.
Algeria	575	575	
Cameroon	600	600	
Chile	1,100	1,000	
Ecuador	750	800	
Ethiopia	280	280	
Greece	2,250	2,250	
Iran	1,500	1,500	
Italy	3,020	3,000	
New Zealand	350	350	
Saudi Arabia	700	700	
Spain	600	600	
Syria	901	900	
Turkey	4,000	4,200	
Other countries	<u>1,900</u>	<u>2,040</u>	
World total (rounded)	19,300	19,600	

**World Resources:** The identified U.S. resources of pumice and pumicite are concentrated in the West and estimated to be more than 25 million tons. The estimated total resources (identified and undiscovered) in the Western and Great Plains States are at least 250 million tons and may total more than 1 billion tons. Turkey and Italy are the leading producers of pumice and pumicite, followed by Greece, Iran, Chile, Syria, and the United States. There are large resources of pumice and pumicite on all continents.

**Substitutes:** The costs of transportation determine the maximum economic distance pumice and pumicite can be shipped and still remain competitive with alternative materials. Competitive resources that may be substituted for pumice and pumicite include crushed aggregates, diatomite, expanded shale and clay, and vermiculite.

<sup>e</sup>Estimated. NA Not available.

<sup>1</sup>Quantity sold and used by producers.

<sup>2</sup>The data for the 2006 imports for consumption and the 2004-07 exports are based on revised U.S. Census Bureau information.

<sup>3</sup>Defined as imports – exports + adjustments for Government and industry stock changes.

<sup>4</sup>[See Appendix C for definitions.](#) Reserve base estimates were discontinued in 2009; see [Introduction](#).