

PUMICE AND PUMICITE

(Data in thousand metric tons unless otherwise noted)

Domestic Production and Use: In 2016, 10 operations in five States produced pumice and pumicite. Estimated production¹ was 310,000 tons with an estimated processed value of about \$10.2 million, f.o.b. plant. Pumice and pumicite were mined in Oregon, Idaho, California, New Mexico, and Kansas, in descending order of production. About 50% of mined pumice was used in the production of construction building block and 20% was used for horticultural purposes. The remainder was consumed in abrasives, concrete admixtures and aggregates, and other uses, including absorbent, filtration, laundry stone washing, and road use.

<u>Salient Statistics—United States:</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016^e</u>
Production, mine ¹	338	269	269	310	310
Imports for consumption	67	72	60	64	85
Exports ^e	13	13	14	11	8
Consumption, apparent	392	329	315	362	387
Price, average value, dollars per ton, f.o.b. mine or mill	31.85	34.65	38.52	32.68	33.00
Employment, mine and mill, number	140	140	140	140	140
Net import reliance ² as a percentage of apparent consumption	14	18	15	15	20

Recycling: Not available.

Import Sources (2012–15): Greece, 92%; Iceland, 6%; and Mexico, 2%.

<u>Tariff: Item</u>	<u>Number</u>	<u>Normal Trade Relations</u> <u>12–31–16</u>
Pumice, crude or in irregular pieces, including crushed	2513.10.0010	Free.
Pumice, other	2513.10.0080	Free.

Depletion Allowance: 5% (Domestic and foreign).

Government Stockpile: None.

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Events, Trends, and Issues: The amount of domestically produced pumice and pumicite sold or used in 2016 was essentially unchanged from that in 2015, but was 15% greater than that in 2014. Imports increased and exports decreased compared with those of 2015. Almost all imported pumice originated from Greece in 2016, and primarily supplied markets in the eastern and gulf coast regions of the United States. Turkey and Italy are the leading global producers of pumice and pumicite.

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. Although unlikely in the short term, an increase in fuel prices would likely lead to increases in production costs; imports and competing materials could become attractive substitutes for domestic products.

All known domestic pumice and pumicite mining in 2016 was accomplished through open pit methods, generally in remote areas where land-use conflicts were not significant obstacles. 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 ³
	2015	2016 ^e	
United States ¹	310	310	Large in the United States. Quantitative estimates of reserves for most countries are not available.
Algeria ⁴	350	350	
Cameroon ⁴	360	360	
Chile ⁴	830	830	
Ecuador ⁴	175	180	
Ethiopia	600	600	
France ⁴	276	280	
Greece ⁴	720	720	
Guadeloupe	200	200	
Italy ⁴	4,040	4,000	
Saudi Arabia ⁴	480	480	
Spain	195	200	
Syria ⁴	257	260	
Turkey	6,700	6,700	
Uganda	742	740	
Other countries ⁴	711	710	
World total (rounded)	16,900	16,900	

World Resources: The identified U.S. resources of pumice and pumicite are concentrated in the Western States 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. Large resources of pumice and pumicite have been identified 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 materials that may be substituted for pumice and pumicite include crushed aggregates, diatomite, expanded shale and clay, and vermiculite.

^eEstimated.

¹Quantity sold and used by producers.

²Defined as imports – exports.

³See [Appendix C](#) for resource and reserve definitions and information concerning data sources.

⁴Includes pozzolan and (or) volcanic tuff.