

## PERLITE

(Data in thousand metric tons unless otherwise noted)

**Domestic Production and Use:** In 2015, domestic production of processed crude perlite was estimated to be 483,000 tons with a value of \$28.5 million. Crude ore production was from seven mines operated by six companies in five Western States. New Mexico continued to be the leading producing State. Processed crude perlite was expanded at 59 plants in 28 States. Domestic consumption was 613,000 tons. The applications for expanded perlite were building construction products, 51%; horticultural aggregate, 19%; fillers, 15%; and filter aid, 10%. The remaining 5% included specialty insulation and miscellaneous uses.

<b>Salient Statistics—United States:</b>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015<sup>e</sup></u>
Production, processed crude perlite	420	393	419	451	483
Imports for consumption <sup>e</sup>	193	150	187	166	170
Exports <sup>e</sup>	36	38	51	46	40
Consumption, apparent	577	505	555	576	613
Price, average value, dollars per ton, f.o.b. mine	56	52	55	57	59
Employment, mine and mill	95	95	117	119	122
Net import reliance <sup>1</sup> as a percentage of apparent consumption	27	22	25	24	21

**Recycling:** Not available.

**Import Sources (2011–14):** Greece, 96%; Turkey, 2%; and other, 2%.

<b>Tariff: Item</b>	<b>Number</b>	<b>Normal Trade Relations <u>12–31–15</u></b>
Vermiculite, perlite and chlorites, unexpanded	2530.10.0000	Free.

**Depletion Allowance:** 10% (Domestic and foreign).

**Government Stockpile:** None.

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**Events, Trends, and Issues:** Perlite is a siliceous volcanic rock that expands up to 20 times its original volume when quickly heated. Expanded perlite is used to provide moisture retention and aeration when added to soil. Construction applications for expanded perlite are numerous because it is lightweight, fire resistant, and an excellent insulator. The amount of processed crude perlite sold or used from U.S. mines increased for the third consecutive year—to the highest level since 2005. Increased demand for perlite-based construction products, fillers, and filter aids during 2014 and 2015 was met by increased domestic production and net import reliance, as a percent of apparent consumption reached its lowest level since 2009. Horticultural applications also increased, owing to increased popularity of and demand for perlite in hydroponic growing medium. Novel and small markets for perlite have increased during the last 10 years; one of the more notable applications is using perlite as a filter aid to assist with controlling road runoff.

According to estimated data, the world's leading producers were, in descending order of production, Turkey, Greece, and the United States with 41%, 26%, and 18% of the world production, respectively. Although China was the source country for nearly 15% of the world's processed crude perlite exports, insufficient production data for China and several other countries are unavailable to make reliable estimates of their production.

Domestic perlite mining generally takes place in remote areas, and its environmental impact is modest. The mineral fines, overburden, and reject ore produced during ore mining and processing are used to reclaim the mined-out areas, and, therefore, little waste remains. Airborne dust is captured by baghouses, and there is practically no runoff to contribute to water pollution.

**World Processed Perlite Production and Reserves:** The reserves estimates for Hungary and Turkey were revised based on new information from official Government sources.

	Production		Reserves <sup>2</sup>
	2014	2015 <sup>e</sup>	
United States	451	483	50,000
Greece	680	700	50,000
Hungary	65	70	28,000
Italy	60	60	NA
Japan	200	200	NA
Turkey	1,000	1,100	57,000
Other countries	70	70	NA
World total (rounded)	2,530	2,680	NA

**World Resources:** Insufficient information is available to make reliable estimates of resources in perlite-producing countries.

**Substitutes:** In construction applications, diatomite, expanded clay and shale, pumice, and slag can be substituted for perlite. For horticultural uses, vermiculite, coco coir, and pumice are alternative soil additives and are sometimes used in conjunction with perlite.

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

<sup>1</sup>Defined as imports – exports.

<sup>2</sup>See [Appendix C](#) for resource/reserve definitions and information concerning data sources.