

## FELDSPAR

(Data in thousand metric tons unless otherwise noted)

**Domestic Production and Use:** U.S. feldspar production in 2014 had an estimated value of \$40 million. The three leading producers accounted for about 79% of production, with four other companies supplying the remainder. Producing States were North Carolina, Idaho, California, Virginia, Oklahoma, Georgia, and South Dakota, in descending order of estimated tonnage. Feldspar processors reported coproduct recovery of mica and silica sand.

Feldspar is ground to about 20 mesh for glassmaking and to 200 mesh or finer for most ceramic and filler applications. It was estimated that feldspar was transported by ship, rail, or truck to at least 30 States and to foreign destinations, including Canada and Mexico. In pottery and glass, feldspar functions as a flux. The estimated 2014 end-use distribution of domestic feldspar was glass, 60%, and ceramic tile, pottery, and other uses, 40%.

<b>Salient Statistics—United States:</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014<sup>e</sup></b>
Production, marketable <sup>e</sup>	500	580	560	550	560
Imports for consumption	2	2	2	4	8
Exports	17	17	13	18	16
Consumption, apparent <sup>e</sup>	485	565	549	536	552
Price, average value, marketable production, dollars per ton	75	78	66	73	71
Employment, mine, preparation plant, and office, number <sup>e</sup>	340	400	380	380	380
Net import reliance <sup>1</sup> as a percentage of apparent consumption	E	E	E	E	E

**Recycling:** Feldspar is not recycled by producers; however, glass container producers use cullet (recycled glass), thereby reducing feldspar consumption.

**Import Sources (2010–13):** Mexico, 50%; Turkey, 33%; Germany, 12%; and other, 5%.

<b>Tariff: Item</b>	<b>Number</b>	<b>Normal Trade Relations</b>
Feldspar	2529.10.0000	<u>12–31–14</u> Free.

**Depletion Allowance:** 14% (Domestic and foreign).

**Government Stockpile:** None.

**Events, Trends, and Issues:** Glass, including beverage containers and fiberglass insulation for housing and building construction, continued to be the leading end use of feldspar in the United States. Most feldspar consumed by the glass industry is for the manufacture of container glass. The glass container industry was moderately stable, although the trend in recent years to import less-expensive containers from China continued to present challenges to the industry. Additionally, the use of cullet, especially from ongoing growth in post-consumer “bottle-to-bottle” recycling programs, continued to compete as a substitute for primary raw materials such as feldspar, and tended to decrease the demand for them in the manufacture of glass containers.

In 2014, domestic production and sales of feldspar increased slightly from those of 2013. In Europe, consumption declined, mostly owing to continued sluggishness in the region’s construction industry; moderate to strong growth in consumption continued in Asia. Domestically, residential construction, in which feldspar is a raw material used in the production of glass and ceramic tiles, increased in 2014. Consumption of flat glass for residential construction and window replacement in existing housing continued to increase. Housing starts and completions rose by about 7% and 15%, respectively, compared with those of the same period in 2013, and increases were expected to continue in 2015.

Spending on residential construction increased by 6% during the first 9 months of 2014 compared with the same period in 2013. Spending on nonresidential construction, which accounted for about 55% of construction expenditures, also increased by 6% in the first 9 months of 2014 compared with the same period in 2013. Increased residential and nonresidential construction could lead to an increase in feldspar consumption in this sector.

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Imports of nepheline syenite, which may be substituted for feldspar in some glass and ceramics manufacture applications, increased slightly in 2014, virtually all coming from Canada.

Fiberglass consumption for thermal insulation was expected to continue to increase in line with housing and commercial building construction in the United States through 2015. Increases in spending on private and public nonresidential construction that took place in 2014 were expected to continue in 2015. Domestic feldspar consumption has been gradually shifting from ceramics toward glass markets. A growing segment in the glass industry was solar glass, used in the production of solar cells.

**World Mine Production and Reserves:** Reserves for India and Venezuela were revised based on new Government information.

	Mine production		Reserves <sup>2</sup>
	2013	2014 <sup>e</sup>	
United States <sup>e</sup>	550	560	NA
Argentina	230	215	NA
Brazil	335	330	320,000
China	2,100	2,100	NA
Czech Republic	450	440	25,000
Egypt	400	400	5,000
France	650	650	NA
Germany	205	200	NA
India	1,200	1,300	45,000
Iran	580	600	NA
Italy	4,700	4,700	NA
Japan	105	100	NA
Korea, Republic of	350	350	NA
Malaysia	450	350	NA
Mexico	380	380	NA
Poland	380	400	14,000
Portugal	113	110	11,000
Russia	240	240	NA
Saudi Arabia	168	168	NA
South Africa	191	200	NA
Spain	530	530	NA
Thailand	1,100	1,100	NA
Turkey	5,000	5,000	240,000
Venezuela	170	500	110,000
Other countries	580	600	NA
World total (rounded)	21,200	21,500	Large

**World Resources:** Identified and hypothetical resources of feldspar are more than adequate to meet anticipated world demand. Quantitative data on resources of feldspar existing in feldspathic sands, granites, and pegmatites generally have not been compiled. Ample geologic evidence indicates that resources are large, although not always conveniently accessible to the principal centers of consumption.

**Substitutes:** Imported nepheline syenite was the major alternative material. Feldspar also can be replaced in some of its end uses by clays, electric furnace slag, feldspar-silica mixtures, pyrophyllite, spodumene, or talc.

<sup>e</sup>Estimated. E Net exporter. 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.