

## FELDSPAR

(Data in thousand metric tons, unless otherwise noted)

**Domestic Production and Use:** U.S. feldspar production in 2002 had an estimated value of about \$46 million. The three largest producers accounted for about two-thirds of the output, with six other companies supplying the remainder. Operations in North Carolina provided about 40% of the output; facilities in California, Virginia, Georgia, Oklahoma, Idaho, and South Dakota, in estimated descending order of output, produced 60%. 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 shipments went to at least 30 States and to foreign destinations, including Canada and Mexico. In pottery and glass, feldspar functions as a flux. Estimated 2002 end-use distribution of domestic feldspar was glass, 69%, and pottery and other, 31%.

<b>Salient Statistics—United States:</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002<sup>e</sup></b>
Production, marketable <sup>e</sup>	820	875	790	800	820
Imports for consumption	7	7	7	6	5
Exports	13	10	11	5	8
Consumption, apparent <sup>e</sup>	814	872	786	801	817
Price, average value, marketable production, dollars per ton <sup>e</sup>	50.00	49.00	56.00	55.00	56.00
Stocks, producer, yearend <sup>1</sup>	NA	NA	NA	NA	NA
Employment, mine and preparation plant, number <sup>e</sup>	400	400	400	400	400
Net import reliance <sup>2</sup> as a percentage of apparent consumption	E	E	E	(3)	E

**Recycling:** Insignificant.

**Import Sources (1998-2001):** Mexico, 95%; and other, 5%.

<b>Tariff: Item</b>	<b>Number</b>	<b>Normal Trade Relations 12/31/02</b>
Feldspar	2529.10.0000	Free.

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

**Government Stockpile:** None.

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**Events, Trends, and Issues:** Glass containers continued to be the largest end use of feldspar. U.S. shipments of glass containers were about 1% higher in the first 8 months of 2002 than in the comparable period of 2001, according to the U.S. Census Bureau. Beer is the largest product category for glass containers in the United States and Canada. This has been a growing market, partly because of a continuing shift by brewers from cans to glass. In 2001, glass comprised 45% of the packaged beer segment in the United States.<sup>4</sup>

Demand for glass containers in international markets reportedly also continued to grow. Driving factors included the conversion of returnable bottles to recyclable glass bottles and the growth of several regional wine industries, especially in Australia and Italy.<sup>4</sup>

Housing and building construction was the other major market for feldspar, used in ceramic tile, insulation, and vitreous plumbing fixtures. U.S. housing starts for the first 8 months of 2002 were about 5% higher than in the comparable period of 2001, according to the U.S. Census Bureau. The pace of construction may have moderated to some degree in the latter months of 2002, according to the National Association of Home Builders.

### World Mine Production, Reserves, and Reserve Base:

	Mine production		Reserves and reserve base <sup>5</sup>
	2001	2002 <sup>e</sup>	
United States <sup>e</sup>	800	820	Detailed reserve and reserve base information is not available.
Argentina	60	60	
Australia	50	50	
Brazil	60	60	
Czech Republic	300	400	
Colombia	55	55	
Egypt	300	300	
France	650	650	
Germany	450	450	
Greece	95	95	
Iran	250	250	
India	110	110	
Italy	2,600	2,600	
Japan	50	50	
Korea, Republic of	300	390	
Mexico	350	350	
Norway	73	75	
Portugal	120	120	
South Africa	67	82	
Spain	450	450	
Thailand	550	700	
Turkey	1,200	1,200	
Venezuela	140	140	
Other countries	438	440	
World total (may be rounded)	9,500	9,900	

**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. There is ample geologic evidence that resources are large, although not always conveniently accessible to the principal centers of consumption.

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

<sup>e</sup>Estimated. E Net exporter. NA Not available.

<sup>1</sup>Change in stocks assumed to be zero for apparent consumption and net import reliance calculations.

<sup>2</sup>Defined as imports - exports + adjustments for Government and industry stock changes.

<sup>3</sup>Less than ½ unit.

<sup>4</sup>Grahl, C.L., 2002, Flat, specialty glass reflect weak economy; container glass markets remain strong: Ceramic Industry, v. 152, no. 9, August, p. 40.

<sup>5</sup>See Appendix C for definitions.