

FELDSPAR

(Data in thousand metric tons, unless otherwise noted)

Domestic Production and Use: U.S. feldspar production in 2003 had an estimated value of about \$44 million. The three largest producers accounted for about 70% of the production, with six other companies supplying the remainder. Operations in North Carolina provided over 40% of the output; facilities in Virginia, California, Georgia, Oklahoma, Idaho, and South Dakota, in estimated descending order of production, produced the remainder. 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. The estimated 2003 end-use distribution of domestic feldspar was glass, 67%, and pottery and other, 33%.

Salient Statistics—United States:	1999	2000	2001	2002	2003^e
Production, marketable ^e	875	790	800	790	800
Imports for consumption	7	7	6	5	9
Exports	10	11	5	10	10
Consumption, apparent ^e	872	786	801	785	799
Price, average value, marketable production, dollars per ton ^e	49.00	56.00	55.00	54.00	55.00
Stocks, producer, yearend ¹	NA	NA	NA	NA	NA
Employment, mine and preparation plant, number ^e	400	400	400	400	400
Net import reliance ² as a percentage of apparent consumption	E	E	(3)	E	E

Recycling: Insignificant.

Import Sources (1999-2002): Mexico, 96%; and other, 4%.

Tariff: Item	Number	Normal Trade Relations 12/31/03
Feldspar	2529.10.0000	Free.

Depletion Allowance: 14% (Domestic and foreign).

Government Stockpile: None.

Events, Trends, and Issues: Glass, including containers and insulation for housing and building construction, continued to be the largest end use of feldspar in the United States. U.S. shipments of glass containers were about 5% less in the first 8 months of 2003 than in the comparable period of 2002, according to the U.S. Census Bureau.

Favorable activity in the U.S. housing construction market helped maintain feldspar usage in tile and vitreous plumbing fixtures at or above 2002 levels. U.S. housing starts for the first 8 months of 2003 were about 5% higher than in the comparable period of 2002, according to the U.S. Census Bureau.

Turkey, which began producing feldspar in the 1980s, became the world's second largest producer in 2003, after Italy (and excluding Asia). Some sources show Turkish exports of feldspar to be around 2.3 million tons in 2002. However, Turkish feldspar producers have faced some challenges in 2003, including increased costs for diesel fuel, electricity, materials, and labor. In response to increasing demand for higher quality feldspar, Turkish producers are turning to more sophisticated methods of production and ore dressing.⁴

FELDSPAR

World Mine Production, Reserves, and Reserve Base:

	Mine production	
	<u>2002</u>	<u>2003^e</u>
United States ^e	790	800
Argentina	60	60
Australia	50	50
Brazil	100	75
Colombia	55	55
Czech Republic	300	400
Egypt	350	350
France	650	650
Germany	450	450
Greece	95	100
India	110	150
Iran	250	250
Italy	2,500	2,500
Japan	50	50
Korea, Republic of	390	420
Mexico	325	330
Norway	75	75
Poland	200	200
Portugal	120	125
South Africa	57	54
Spain	450	450
Thailand	540	700
Turkey	1,200	1,700
Venezuela	140	140
Other countries	<u>493</u>	<u>270</u>
World total (rounded)	9,800	10,400

Reserves and reserve base⁵

Quantitative estimates of reserves and reserve base are not available.

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.

^eEstimated. E Net exporter. NA Not available.

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

²Defined as imports – exports + adjustments for Government and industry stock changes.

³Less than ½ unit.

⁴Crossley, Penney, 2003, A feast of feldspar: Industrial Minerals, no. 432, September, p. 36-49.

⁵See Appendix C for definitions.