

CLAYS

(Data in thousand metric tons, unless otherwise noted)

Domestic Production and Use: In 1998, clays were produced in most States except Alaska, Delaware, Hawaii, Idaho, New Hampshire, Rhode Island, Vermont, and Wisconsin. The leading 21 firms supplied 50% of the tonnage, and 219 firms provided the remainder. Together, these firms operated approximately 766 mines. The estimated value of all marketable clay produced was about \$2.14 billion. Major domestic uses for specific clays were estimated as follows: ball clay—30% floor and wall tile, 21% sanitaryware, 10% pottery, and 39% other uses; bentonite—26% foundry sand bond, 23% drilling mud, 17% pet waste absorbent, 15% iron ore pelletizing, and 9% other uses; common clay—52% brick, 23% cement, and 16% lightweight aggregate; fire clay—53% refractories and 47% other uses; fuller's earth—75% absorbent uses, 8% insecticide dispersant, and 17% other uses; and kaolin—56% paper, 14% refractories, 7% fiberglass, 5% paint, and 18% other uses.

Salient Statistics—United States:¹	1994	1995	1996	1997	1998^e
Production, mine:					
Ball clay	1,050	993	935	1,040	1,130
Bentonite	3,290	3,820	3,740	4,020	4,030
Common clay	25,900	25,600	26,200	24,500	24,900
Fire clay ²	458	583	505	649	604
Fuller's earth	2,640	2,640	2,600	2,370	2,500
Kaolin	<u>8,770</u>	<u>9,480</u>	<u>9,180</u>	<u>9,410</u>	<u>9,770</u>
Total ³	42,000	43,100	43,100	42,000	43,000
Imports for consumption	36	35	45	64	75
Exports	4,620	4,680	4,830	5,080	5,100
Consumption, apparent	37,600	38,500	38,300	37,000	38,000
Price, average, dollars per ton:					
Ball clay	43	46	44	46	46
Bentonite	41	36	36	42	40
Common clay	5	6	5	6	8
Fire clay	25	22	21	15	19
Fuller's earth	92	101	106	107	110
Kaolin	116	117	120	120	120
Stocks, yearend ⁴	NA	NA	NA	NA	NA
Employment, number: ^e Mine	4,500	3,950	4,900	4,900	4,800
Mill	9,000	9,000	9,000	9,000	8,900
Net import reliance ⁵ as a percent of apparent consumption	E	E	E	E	E

Recycling: Insignificant.

Import Sources (1994-97): Mexico, 33%; United Kingdom, 19%; Canada, 9%; China, 8%; and other, 31%.

Tariff:	Item	Number	Normal Trade Relations (NTR) 12/31/98	Non-NTR⁶ 12/31/98
	Kaolin and other kaolinitic clays, whether or not calcined	2507.00.0000	6.5¢/t	\$2.46/t.
	Bentonite	2508.10.0000	7.9¢/t	\$3.20/t.
	Fuller's and decolorizing earths	2508.20.0000	4.9¢/t	\$1.48/t.
	Fire clay	2508.30.0000	9.8¢/t	\$1.97/t.
	Common blue and other ball clays	2508.40.0010	9.4¢/t	\$1.97/t.
	Other clays	2508.40.0050	9.4¢/t	\$1.97/t.
	Chamotte or dinas earth	2508.70.0000	Free	Free.
	Activated clays and earths	3802.90.2000	2.5% ad val.	0.6¢ per kg + 30% ad val.
	Expanded clays and mixtures	6806.20.0000	1% ad val.	30% ad val.

Depletion Allowance: Kaolin, ball clay, bentonite, fuller's earth, and fire clay, 14% (Domestic), 14% (Foreign); clay used for extraction of alumina or aluminum compounds, 22% (Domestic); clay and shale used for making brick, tile, and lightweight aggregate, 7.5% (Domestic), 7.5% (Foreign); clay used in making drainage and roofing tile, flowerpots, and kindred products, 5% (Domestic), 5% (Foreign).

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Government Stockpile: None.

Events, Trends, and Issues: The total tonnage of clays sold or used by domestic producers increased slightly in 1998. There was an increase in sales and/or use for ball clay, bentonite, common clay, fuller's earth, and kaolin. Imports for consumption increased to 75,000 tons. Mexico and the United Kingdom were the major sources for imported clays. Exports increased to 5.1 million tons. Canada, Finland, Japan, and the Netherlands were major markets for exported clays. U.S. apparent consumption was estimated to be 38 million tons.

World Mine Production, Reserves, and Reserve Base: Not available.

World Resources: Clays are divided for commercial purposes into ball clay, bentonite, common clay, fire clay, fuller's earth, and kaolin. Resources of these types of clay are extremely large except for lesser resources of high-grade ball clay and sodium-bentonite. Resources of kaolin in Georgia are estimated to be 5 to 10 billion tons.

Substitutes: Limited substitutes and alternatives, such as calcium carbonate and talc, are available for filler and extender applications.

^eEstimated. E Net exporter. NA Not available.

¹Excludes Puerto Rico.

²Refractory uses only.

³Data may not add to total shown because of independent rounding.

⁴Data on stocks are not available and are assumed to be zero for apparent consumption and net import reliance calculations.

⁵Defined as imports - exports + adjustments for Government and industry stock changes.

⁶See Appendix B.