CLAYS

(Data in thousand metric tons, unless otherwise noted)

<u>Domestic Production and Use</u>: In 1997, clays were produced in most States except Alaska, Delaware, Hawaii, Rhode Island, Vermont, and Wisconsin. The leading 50 firms supplied 70% of the tonnage, and 225 firms provided the remainder. Together, these firms operated approximately 739 mines. The estimated value of all marketable clay produced was about \$1.75 billion. Major domestic uses for specific clays were estimated as follows: ball clay—26% floor and wall tile, 25% sanitaryware, and 14% pottery; bentonite—23% foundry sand bond, 20% iron ore pelletizing, 18% pet waste absorbent, and 17% drilling mud; common clay—50% brick, 27% cement, and 15% lightweight aggregate; fire clay—70% refractories; fuller's earth—73% absorbent uses and 11% insecticide dispersant; and kaolin—55% paper, 13% refractories, 7% fiberglass, and 4% paint.

Salient Statistics—United States:1	<u>1993</u>	<u>1994</u>	<u> 1995</u>	<u>1996</u>	<u>1997</u> °
Production, mine:					
Ball clay	911	1,050	993	973	1,030
Bentonite	2,870	3,290	3,820	3,740	3,780
Common clay	25,300	25,900	25,600	26,200	26,900
Fire clay ²	459	458	583	505	403
Fuller's earth	2,480	2,640	2,640	2,600	2,570
Kaolin	8,830	<u>8,770</u>	9,480	9,120	<u>9,180</u>
Total ³	40,700	42,000	43,100	43,100	43,900
Imports for consumption	39	36	35	45	53
Exports	4,150	4,620	4,680	4,830	4,970
Consumption, apparent	36,600	37,600	38,500	38,300	39,000
Price, average, dollars per ton:					
Ball clay	42	43	46	44	49
Bentonite	36	41	36	36	36
Common clay	5	5	6	5	7
Fire clay	25	25	22	21	25
Fuller's earth	92	92	101	106	97
Kaolin	107	116	117	120	121
Stocks, yearend ⁴	NA	NA	NA	NA	NA
Employment, number: Mine	4,500	3,950	4,900	4,900	4,900
Mill	9,000	9,000	9,000	9,000	9,000
Net import reliance ⁵ as a percent of					
apparent consumption	E	E	Е	E	E

Recycling: Insignificant.

Import Sources (1993-96): Mexico, 35%; the United Kingdom, 19%; China, 15%; Canada, 7%; and other, 24%.

Tariff: Item	Number	Most favored nation (MFN) 12/31/97	Non-MFN ⁶ 12/31/97
Kaolin and other kaolinitic clays,			
whether or not calcined	2507.00.0000	13¢/t	\$2.46/t.
Bentonite	2508.10.0000	15.8¢/t	\$3.20/t.
Fuller's and decolorizing earths	2508.20.0000	9.8¢/t	\$1.48/t.
Fire clay	2508.30.0000	19.7¢/t	\$1.97/t.
Common blue and other ball clays	2508.40.0010	18.7¢/t	\$1.97/t.
Other clays	2508.40.0050	18.7¢/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	2% ad val.	30% ad val.

<u>Depletion Allowance</u>: 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).

Government Stockpile: None.

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Events, Trends, and Issues: The total tonnage of clays sold or used by domestic producers increased slightly in 1997. There was an increase in sales and/or use for ball clay, bentonite, common clay, and kaolin. Imports for consumption increased to 53,000 tons. Mexico and the United Kingdom were the major sources for imported clays. Exports increased to 4.97 million tons. Canada, Finland, Japan, and the Netherlands were major markets for exported clays. U.S. apparent consumption was estimated to be 39 million tons.

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

<u>World Resources</u>: 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.

<u>Substitutes</u>: Limited substitutes and alternatives, such as talc and whiting, 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.