(Data in thousand metric tons, unless otherwise noted)

Domestic Production and Use: In 2000, clay and shale production was reported in all States except Alaska, Delaware, Hawaii, Idaho, New Hampshire, Rhode Island, Vermont, and Wisconsin. About 230 companies operated approximately 650 clay pits or quarries. The leading 20 firms supplied about 50% of the tonnage and 77% of the value for all types of clay sold or used in the United States. U.S. production was estimated to be 40.6 million metric tons valued at \$1.49 billion. Major domestic uses for specific clays were estimated to be as follows: ball clay—35% floor and wall tile, 22% sanitaryware, and 43% other uses; bentonite—26% pet waste absorbent, 25% foundry sand bond, 19% drilling mud, 15% iron ore pelletizing, and 15% other uses; common clay—56% brick, 20% cement, 16% lightweight aggregate, and 8% other uses; fire clay—73% refractories and 27% other uses; fuller's earth—75% absorbent uses and 25% other uses; and kaolin—55% paper, 7% refractories, and 38% other uses.

Salient Statistics—United States:1	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u> °
Production, mine:	4 000	4 4 9 9	4 000	4.4.40	4 470
Ball clay	1,060	1,130	1,200	1,140	1,170
Bentonite	4,020	3,820	4,070	3,760	3,820
Common clay	24,600	24,500	24,800	23,700	23,700
Fire clay-	415	410	402	4/6	391
Fuller's earth Kaolin	2,370	2,350	2,500	2,910	2,400
	9,200	<u>9,400</u> 41,600	<u>9,100</u> 42,200	0,000	<u>9,030</u>
I Uldi Imports for consumption:	41,000	41,000	42,200	40,000	40,000
Artificially activated clay and earth	10	10	17	10	1/
Kaolin	30	19	57	63	14
Other	50 15	55 17	16	16	43
	<u>13</u> 64	<u>14</u> 86	<u>10</u> 90	<u>10</u> 96	<u>13</u> 78
Exports:	64	00	50	50	10
Ball clav	91	140	107	100	226
Bentonite	850	818	719	761	613
Fire clav ²	222	168	189	216	217
Fuller's earth	144	121	152	136	151
Kaolin	3,380	3,550	3,310	3,690	3,560
Clays, not elsewhere classified	390	432	329	357	363
Total ³	5,080	5,230	4,800	5,260	5,130
Consumption, apparent	36,800	36,500	37,500	35,600	35,500
Price, average, dollars per ton:					
Ball clay	47	45	40	42	42
Bentonite	42	46	43	41	42
Common clay	6	6	6	6	6
Fire clay	19	18	16	16	16
Fuller's earth	107	109	90	87	89
Kaolin	111	111	104	106	103
Stocks, yearend ^₄	NA	NA	NA	NA	NA
Employment, number:"		. =00	=	=	=
Mine	4,900	4,790	5,020	5,090	5,000
	4,500	4,580	4,220	4,290	4,250
iver import reliance as a percentage of	-	-	-	-	-
apparent consumption	E	E	E	E	E

Recycling: Insignificant.

Import Sources (1997-2000): Brazil, 43%; United Kingdom, 21%; Mexico, 17%; Canada, 7%; and other, 12%.

CLAYS

<u>Tariff</u> : Item	Number	Normal Trade Relations 12/31/01
Kaolin and other kaolinitic clays,		
whether or not calcined	2507.00.0000	Free.
Bentonite	2508.10.0000	Free.
Fuller's and decolorizing earths	2508.20.0000	Free.
Fire clay	2508.30.0000	Free.
Common blue and other ball clays	2508.40.0010	Free.
Other clays	2508.40.0050	Free.
Chamotte or dina's earth	2508.70.0000	Free.
Activated clays and earths	3802.90.2000	2.5% ad val.
Expanded clays and mixtures	6806.20.0000	Free.

Depletion Allowance: Ball clay, bentonite, fire clay, fuller's earth, and kaolin, 14% (Domestic and foreign); clay used in the manufacture of common brick, lightweight aggregate, and sewer pipe, 7.5% (Domestic and foreign); clays used in the manufacture of drain and roofing tile, flower pots, and kindred products, 5% (Domestic and foreign); clay used for alumina and aluminum compounds, 22% (Domestic).

Government Stockpile: None.

Events, Trends, and Issues: The amount of clay and shale sold or used by domestic producers decreased slightly in 2001. Small increases were reported for ball clay, bentonite, and kaolin. Fire clay and fuller's earth declined. Production of common clay and shale was unchanged. Imports for consumption decreased 19% to 78,000 tons in 2001. Brazil, Mexico, and the United Kingdom were the major sources for imported clays. Exports decreased 2% to 5.13 million tons in 2001. Canada, Finland, Japan, and the Netherlands were major markets for exported clays.

World Mine Production, Reserves, and Reserve Base: World production of bentonite was 9.9 million tons in 2001. The United States was the leading producing country with 3.82 million tons, followed by Greece with 950,000 tons, and the former Soviet Union countries with 750,000 tons combined. World production of fuller's earth was 3.8 million tons in 2001. The United States was the leading producing country with 2.4 million tons, followed by Germany with 500,000 tons. World production of kaolin was 41.2 million tons in 2001. The United States was the leading producing country with 2.4 million tons, followed by Germany with 500,000 tons. World production of kaolin was 41.2 million tons in 2001. The United States was the leading producer with 9 million tons (sales); followed by Uzbekistan with 5.5 million tons (crude); the Czech Republic, 6 million tons (crude); the United Kingdom, 2.4 million tons (processed); the Republic of Korea, 2.1 million tons (crude); Germany, 1.8 million tons (crude and sales); and Brazil, 1.7 million tons (beneficiated). Reserves and reserve base are large in major producing countries, but data are 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 1.4 billion tons.

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

"Estimated. 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.