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(Data in thousand metric tons unless otherwise noted)

Domestic Production and Use: In 2013, clay and shale production was reported in 40 States. About 180 companies operated approximately 750 clay pits or quarries. The leading 20 firms supplied about 61% of the tonnage and 85% of the value for all types of clay sold or used in the United States. In 2013, sales or use was estimated to be 25.9 million tons valued at $1.58 billion. Uses for specific clays were estimated to be as follows: ball clay—44% floor and wall tile, 18% sanitaryware, and 38% other uses; bentonite—33% absorbents, 20% drilling mud, 11% iron ore pelletizing, 13% foundry sand bond, and 23% other uses; common clay—45% brick, 23% lightweight aggregate, 24% cement, and 8% other uses; fire clay—40% heavy clay products and 60% refractory products and other uses; fuller's earth—72% absorbent uses and 28% other uses; and kaolin—48% paper and 52% other uses.

Salient Statistics—United States:[1]	2009	2010	2011	2012	2013[e]
Production (sold or used):					
Ball clay	831	912	886	973	1,000
Bentonite	3,650	4,600	4,990	4,980	4,950
Common clay	12,500	11,900	11,700	11,700	11,800
Fire clay	320	216	215	183	185
Fuller's earth[2]	2,010	2,050	1,950	1,980	2,040
Kaolin	5,290	5,950	5,950	5,980	5,950
Total[2, 3]	24,500	25,600	25,700	25,800	25,900
Imports for consumption:					
Artificially activated clay and earth	27	28	31	31	20
Kaolin	281	510	549	472	310
Other	17	17	13	21	60
Total[3]	325	555	593	524	390
Exports:					
Ball clay	35	45	49	74	65
Bentonite	709	953	1,020	1,040	950
Fire clay[4]	328	404	371	289	290
Fuller's earth	90	100	102	105	100
Kaolin	2,290	2,470	2,490	2,450	2,500
Clays, not elsewhere classified	374	382	209	213	300
Total[3]	3,830	4,360	4,240	4,170	4,200
Consumption, apparent	21,000	21,800	22,100	22,200	22,100
Price, average, dollars per ton:					
Ball clay	45	46	46	46	47
Bentonite	57	58	61	62	65
Common clay	13	12	12	10	10
Fire clay	37	28	29	27	27
Fuller's earth	103	98	100	92	92
Kaolin	135	137	143	146	151
Employment, number:					
Mine	875	828	810	900	820
Mill	4,540	4,400	4,200	4,350	4,350
Net import reliance[5] as a percentage of apparent consumption	E	E	E	E	E

Recycling: Insignificant.

Import Sources (2009–12): Brazil, 83%; Canada, 6%; Mexico, 4%; and other, 7%.

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Tariff: Item	Number	Normal Trade Relations 12–31–13
Kaolin and other kaolinitic clays, whether or not calcined	2507.00.0000	Free.
Bentonite	2508.10.0000	Free.
Fire clay	2508.30.0000	Free.
Common blue clay and other ball clays	2508.40.0110	Free.
Decolorizing and fuller's earths	2508.40.0120	Free.
Other clays	2508.40.0150	Free.
Chamotte or dina's earth	2508.70.0000	Free.
Activated clays and earths	3802.90.2000	2.5% ad val.
Expanded clays and other 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); clay used in the manufacture of drain and roofing tile, flower pots, and kindred products, 5% (Domestic and foreign); clay from which alumina and aluminum compounds are extracted, 22% (Domestic); and ball clay, bentonite, china clay, sagger clay, and clay used or sold for use dependent on its refractory properties, 14% (Domestic).

Government Stockpile: None.

Events, Trends, and Issues: Increased commercial and residential housing construction was likely to result in slightly increased sales of common clay for heavy clay products and ball clay for ceramic tile and sanitaryware manufacture. Bentonite sales declined slightly because sales to most markets, except pet litter, appeared to have declined. Fuller's earth saw slight gains, mainly because of sales increases for pet litters and fluid purification applications. Kaolin production decreased slightly because refractory markets declined slightly and paper markets remained unchanged.

World Mine Production and Reserves:[6] Global reserves are large and distributed throughout many countries, but country-specific data are not available.

	Mine production					
	Bentonite		Fuller's earth		Kaolin	
	2012	2013[e]	2012	2013[e]	2012	2013[e]
United States (sales)	4,980	4,950	[2]1,980	[2]2,040	5,980	5,950
Brazil (beneficiated)	567	570	—	—	1,950	2,050
Czech Republic (crude)	221	220	—	—	3,320	3,300
Germany (sales)	375	350	—	—	4,900	4,500
Greece (crude)	800	1,200	—	—	—	—
Italy	110	100	3	3	640	640
Mexico	54	50	108	100	163	160
Spain	115	110	591	590	303	300
Turkey	400	400	—	—	1,200	2,000
Ukraine (crude)	210	210	—	—	1,300	1,600
United Kingdom (sales)	—	—	—	—	900	900
Uzbekistan (crude)	15	15	—	—	7,000	7,000
Other countries	2,100	2,100	299	270	8,540	8,600
World total (rounded)	9,950	10,300	[2]2,980	[2]3,000	36,200	37,000

World Resources: Resources of all clays are extremely large.

Substitutes: Clays compete with calcium carbonate in filler and extender applications; diatomite, organic litters, polymers, silica gel, and zeolites in absorbent applications; and various siding types in building construction.

[e]Estimated. E Net exporter. — Zero.
[1]Excludes Puerto Rico.
[2]Excludes attapulgite.
[3]Data may not add to totals shown because of independent rounding.
[4]Also includes refractory-grade kaolin.
[5]Defined as imports – exports.
[6]See Appendix C for resource/reserve definitions and information concerning data sources.