

TALC AND PYROPHYLLITE¹

(Data in thousand metric tons unless otherwise noted)

Domestic Production and Use: Three companies operated five talc producing mines in three States during 2020, and domestic production of crude talc was estimated to have decreased by 12% to 510,000 tons valued at almost \$21 million. Talc was mined in Montana, Texas, and Vermont. Total sales (domestic and export) of talc by U.S. producers were estimated to be 430,000 tons valued at about \$100 million, a 17% decrease from those in 2019. Talc produced and sold in the United States was used in ceramics (including automotive catalytic converters) (22%), paint (19%), paper (17%), plastics (11%), rubber (4%), roofing (3%), and cosmetics (2%). The remaining 22% was for agriculture, export, insecticides, and other miscellaneous uses.

One company in North Carolina mined and processed pyrophyllite in 2020. Domestic production was withheld to avoid disclosing company proprietary data and was estimated to have decreased from that in 2019. Pyrophyllite was sold for refractory, paint, and ceramic products.

Salient Statistics—United States:	2016	2017	2018	2019	2020^e
Production, mine	578	610	648	578	510
Sold by producers	528	528	547	515	430
Imports for consumption	378	336	313	281	210
Exports	239	220	273	234	180
Consumption, apparent ²	667	644	586	562	459
Price, average, milled, dollars per metric ton ³	197	214	227	240	240
Employment, mine and mill, number: ⁴					
Talc	223	206	208	202	185
Pyrophyllite	30	31	30	31	31
Net import reliance ⁵ as a percentage of apparent consumption	21	18	7	8	6

Recycling: Insignificant.

Import Sources (2016–19): Pakistan, 42%; Canada, 27%; China, 18%; and other, 13%. Large quantities of crude talc are thought to have been mined in Afghanistan before being milled in and exported from Pakistan.

Tariff:	Item	Number	Normal Trade Relations 12–31–20
Natural steatite and talc:			
	Not crushed, not powdered	2526.10.0000	Free.
	Crushed or powdered	2526.20.0000	Free.
	Talc, steatite, and soapstone; cut or sawed	6815.99.2000	Free.

Depletion Allowance: Block steatite talc: 22% (domestic), 14% (foreign). Other talc and pyrophyllite: 14% (domestic and foreign).

Government Stockpile: None.

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Events, Trends, and Issues: Canada, China, and Pakistan were the principal sources for United States talc imports in recent years. Imports from Pakistan have increased in recent years, and imports from China have stayed at about one-third of previous levels. Canada and Mexico continued to be the primary destinations for United States talc exports, collectively receiving about one-half of exports. Imports and exports of talc and related materials are estimated to have decreased by at least 20% in 2020 compared with those of 2019. Primarily owing to the global COVID-19 pandemic, U.S. talc consumption, production, and sales decreased in 2020 from those of 2019.

Ceramic tile and sanitaryware formulations and the technology for firing ceramic tile changed over recent decades, reducing the amount of talc required for the manufacture of some ceramic products. For paint, the industry shifted its focus to production of water-based paint (a product for which talc is not well suited because it is hydrophobic) from oil-based paint in order to reduce volatile emissions. Paper manufacturing began to decrease beginning in the 1990s, and some talc used for pitch control was replaced by chemical agents. For cosmetics, manufacturers of body dusting powders shifted some of their production from talc-based to corn-starch-based products. The paper industry has traditionally been the largest consumer of talc worldwide; however, plastics are expected to overtake paper as the predominant end use within the next several years, as papermakers in Asia make greater use of talc substitutes and as the use of talc in automobile plastics increases.

World Mine Production and Reserves: Reserves for India and the Republic of Korea were revised based on Government and industry sources.

	Mine production		Reserves ⁶
	<u>2019</u>	<u>2020^e</u>	
United States (crude)	578	510	140,000
Brazil (crude and beneficiated) ⁷	660	650	45,000
Canada (unspecified minerals)	240	220	NA
China (unspecified minerals)	1,400	1,300	82,000
Finland	330	320	Large
France (crude)	450	430	Large
India ⁷	920	900	106,000
Italy (includes steatite)	165	150	NA
Japan ⁷	160	150	100,000
Korea, Republic of ⁷	330	320	81,000
Pakistan	183	170	NA
Other countries (includes crude) ⁷	<u>728</u>	<u>700</u>	<u>Large</u>
World total (rounded) ⁷	6,140	5,800	Large

World Resources:⁶ The United States is self-sufficient in most grades of talc and related minerals, but lower priced imports have replaced domestic minerals for some uses. Talc occurs in the United States from New England to Alabama in the Appalachian Mountains and the Piedmont region, as well as in California, Montana, Nevada, Texas, and Washington. Domestic and world identified resources are estimated to be approximately five times the quantity of reserves.

Substitutes: Substitutes for talc include bentonite, chlorite, feldspar, kaolin, and pyrophyllite in ceramics; chlorite, kaolin, and mica in paint; calcium carbonate and kaolin in paper; bentonite, kaolin, mica, and wollastonite in plastics; and kaolin and mica in rubber.

^eEstimated. NA Not available.

¹All statistics exclude pyrophyllite unless otherwise noted.

²Defined as sold by producers + imports – exports.

³Average ex-works unit value of milled talc sold by U.S. producers, based on data reported by companies.

⁴Includes only companies that mine talc or pyrophyllite. Excludes office workers and mills that process imported or domestically purchased material.

⁵Defined as imports – exports.

⁶See Appendix C for resource and reserve definitions and information concerning data sources.

⁷Includes pyrophyllite.