TALC AND PYROPHYLLITE

(Data in thousand metric tons unless otherwise noted)

Domestic Production and Use: Domestic talc production in 2011 was estimated to be 615,000 tons valued at \$20 million. Three companies operated six talc-producing mines in three States in 2011. These three companies accounted for more than 99% of the U.S. talc production. Three other companies, two in California and one in Virginia, worked from stocks. Montana was the leading producer State, followed by Texas and Vermont. Sales of talc were estimated to be 572,000 tons valued at \$90 million. Talc produced and sold in the United States was used for ceramics, 24%; paper, 22%; paint, 19%; roofing, 10%; plastics, 9%; cosmetics, 4%; rubber, 2%; and other, 10%. About 290,000 tons of talc was imported with a likely 30,000 to 40,000 tons retained as stocks. Of the remainder, more than 75% was used for plastics, cosmetics, and paint applications, in decreasing order by tonnage. The total estimated use of talc in the United States, with imported talc included, was plastics, 26%; ceramics, 17%; paint, 16%; paper, 16%; cosmetics, 7%; roofing, 6%; rubber, 3%; and other, 9%. One company in California and one company in North Carolina mined pyrophyllite. Production of pyrophyllite increased slightly from that of 2010. Consumption was, in decreasing order by tonnage, in refractory products, ceramics, and paint.

Salient Statistics—United States:1	2007	2008	2009	2010	2011 ^e
Production, mine	769	706	511	604	615
Sold by producers	720	667	512	567	572
Imports for consumption	221	193	134	242	275
Exports	271	244	188	224	220
Shipments from Government stockpile		0			
excesses		(²)	_	_	
Consumption, apparent	719	655	457	622	670
Price, average, processed, dollars per metric ton	114	125	111	150	157
Employment, mine and mill	430	350	285	280	300
Net import reliance ³ as a percentage of					
apparent consumption	E	E	Е	3	8

Recycling: Insignificant.

Import Sources (2007–10): China, 47%; Canada, 37%; Japan, 6%; and other, 10%.

Number	Normal Trade Relations 12-31-11	
2526.10.0000	Free.	
2526.20.0000	Free.	
6815.99.2000	Free.	
	2526.20.0000	

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

Government Stockpile:

Stockpile Status—9-30-11⁴ (Metric tons)

	Uncommitted	Authorized	Disposal plan	Disposals
Material	inventory	for disposal	FY 2011	FY 2011
Talc, block and lump	865	865	907 ⁵	_
Talc. ground	621	621		

TALC AND PYROPHYLLITE

Events, Trends, and Issues: The talc and pyrophyllite industries continued to be hampered by the slow economic recovery in the United States. While some industry sectors, such as automotive and general manufacturing, improved slightly in 2011, housing remained stagnant. This affected sales of talc for such product applications as adhesives, caulks, ceramics, joint compounds, paint, and roofing. As a result, U.S. production and sales of talc increased only slightly from those of 2010 and remained far below levels attained just prior to the 2008 recession.

Exports declined 11% in 2011 as Europe continued to struggle with its economic issues, the economy in China slowed, and shipments to Mexico, whose ceramic industries were major exporters to the United States, declined. Belgium, China, and Mexico accounted for the largest share of the decrease in exports. Mexico remained the leading destination for U.S. talc exports, accounting for 30% of the tonnage. Canada, the second leading export destination, accounted for 25% of the export tonnage.

U.S. imports increased 20% from those of 2010. Increased imports from China and Pakistan accounted for a major share of the increase. In 2011, Australia, Canada, China, and Pakistan supplied approximately 90% of the talc imported into the United States. Imports from Australia and Pakistan increased significantly in 2011 because of increased imports by two companies, one affiliated with an Australian talc producer and another, a mineral trading company. Not all of the talc imported into the United States was believed to have entered commerce; it is likely that 30,000 to 40,000 tons was used to replenish inventories.

Sales of pyrophyllite were likely to have increased slightly for refractory products. The slow recovery of industries that use pyrophyllite to manufacture ceramics and paints limited further growth in pyrophyllite sales in 2011.

The leading global producer of talc, with operations in Australia, Asia, Europe, and North America, was sold to an investment firm in France. The French firm was involved in industrial minerals through its mining of calcium carbonate, diatomite, feldspar, kaolin, mica, perlite, refractory products, and silica, and reported that talc would complement its product offerings.

The second leading producer of talc, with talc mines in Finland, was sold to a London-based investment firm. The sale included calcium carbonate as well as the talc operations.

World Mine Production and Reserves:

	Mine p	Reserves ⁶	
	<u>2010</u>	<u>2011^e</u>	
United States ¹	604	615	140,000
Brazil	410	420	230,000
China	2,000	2,000	Large
Finland	500	500	Large
France	420	420	Large
India	637	650	75,000
Japan	364	360	100,000
Korea, Republic of	706	700	14,000
Other countries	<u>1,570</u>	<u>1,570</u>	<u>Large</u>
World total (rounded)	7,210	7,200	Large

<u>World Resources</u>: The United States is self-sufficient in most grades of talc and related minerals. Domestic and world resources are estimated to be approximately five times the quantity of reserves.

<u>Substitutes</u>: Substitutes for talc include bentonite, chlorite, 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, E Net exporter, — Zero.

¹Excludes pyrophyllite.

²Less than ½ unit.

³Defined as imports – exports + adjustments for Government and industry stock changes.

⁴See Appendix B for definitions.

⁵Included talc, block and lump, and talc, ground.

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