

## ASBESTOS

(Data in metric tons unless otherwise specified)

**Domestic Production and Use:** In 2025, U.S. consumption of unmanufactured asbestos fibers<sup>1</sup> was estimated to be 50 tons, a record low for the 20th and 21st centuries. All consumption was from stockpiles; the last asbestos mine in the United States closed in 2002, and imports of asbestos fibers were fully banned in May 2024. The chloralkali industry, which uses asbestos in nonreactive semipermeable diaphragms that prevent chlorine generated at the anode of an electrolytic cell from reacting with sodium hydroxide generated at the cathode, has accounted for 100% of domestic asbestos fiber consumption since no later than 2015. Most of the remaining chloralkali plants that use asbestos diaphragms will be required by the U.S. Environmental Protection Agency (EPA) to transition to alternative materials by 2029, with the remainder to follow by 2036. An unknown quantity of asbestos is consumed annually within imported manufactured products. As of yearend 2025, sheet gaskets were the only asbestos-containing articles permitted to be imported into the United States.<sup>2</sup> However, the expiration dates of domestic asbestos uses may be modified in the future as a result of legal proceedings in 2025.

<b>Salient Statistics—United States:<sup>3</sup></b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025<sup>e</sup></b>
Imports for consumption <sup>4</sup>	41	224	—	—	—
Exports <sup>5</sup>	—	—	—	—	—
Consumption, estimated <sup>6</sup>	310	290	150	115	50
Price, average U.S. customs unit value of imports, dollars per ton	1,880	2,630	NA	NA	NA
Net import reliance <sup>7</sup> as a percentage of estimated consumption	100	100	100	100	100

**Recycling:** None.

**Import Sources (2021–24):** Brazil, 100%. The U.S. Census Bureau reported imports from China, Germany, and Poland during this time period, but bill of lading information, data reported by the Government of China, and asbestos bans in Germany and Poland suggest that these shipments were misclassified.

<b>Tariff: Item</b>	<b>Number</b>	<b>Normal Trade Relations 12–31–25</b>
Crocidolite	2524.10.0000	Free.
Amosite	2524.90.0010	Free.
Chrysotile:		
Crudes	2524.90.0030	Free.
Milled fibers, group 3 grades	2524.90.0040	Free.
Milled fibers, group 4 and 5 grades	2524.90.0045	Free.
Other	2524.90.0055	Free.
Other, asbestos	2524.90.0060	Free.

**Depletion Allowance:** 22% (domestic), 10% (foreign).

**Government Stockpile:** None.

**Events, Trends, and Issues:** In the United States, consumption of unmanufactured asbestos fibers decreased significantly during the past several decades, from a record high of 803,000 tons in 1973 to 500 tons or less in each year since 2018. Health and liability issues associated with asbestos use resulted in the displacement of asbestos from traditional markets by alternative materials and new technology. Domestic consumption was expected to decrease to zero by no later than 2036, when all chloralkali plants will be required by the EPA to stop using asbestos diaphragms in the production process for chlorine and sodium hydroxide. The final permitted application of asbestos within imported manufactured products—sheet gaskets used in the disposal of nuclear materials—will be fully banned by yearend 2037.<sup>2</sup> However, the expiration dates of asbestos applications in the United States may be modified in the future as a result of legal proceedings in 2025.

In Brazil, the State of Goias passed a law in August 2024 that set a 5-year deadline for the suspension of asbestos mining and processing activities. The deadline period will begin once the only producer of asbestos in Brazil reaches an agreement with the State on a mine closure plan. No agreement was in place as of September 30, 2025. In February 2023, the Supreme Federal Court of Brazil upheld a 2017 ruling that the extraction, sale, and use of asbestos were unconstitutional.

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Worldwide consumption of unmanufactured asbestos fibers was an estimated 930,000 tons in 2025, a decrease of nearly 55% from approximately 2 million tons in 2000. Global demand for asbestos products was expected to continue for the foreseeable future, particularly for cement pipe, roofing sheets, and other construction materials in Asia.

**World Mine Production and Reserves:** In addition to the countries listed, Zimbabwe may have produced asbestos from old mine tailings; the status of these operations was unknown. Significant revisions were made to the 2024 production for some countries based on company and Government reports. Reserves for China, Kazakhstan, and the United States were revised based on company and Government reports.

	Mine production		Reserves <sup>8</sup>
	<u>2024</u>	<u>2025<sup>e</sup></u>	
United States	—	—	—
Brazil	<sup>9</sup> 166,890	150,000	11,000,000
China	<sup>e</sup> 250,000	250,000	7,100,000
Kazakhstan	225,700	250,000	20,000,000
Russia	306,900	310,000	110,000,000
World total (rounded)	949,000	960,000	150,000,000

**World Resources:**<sup>8</sup> Reliable evaluations of global asbestos resources have not been published recently, and available information was insufficient to make accurate estimates for most countries. However, world resources are large and more than adequate to meet anticipated demand in the foreseeable future. Resources in the United States are composed mostly of short-fiber asbestos for which use in asbestos-based products is more limited than long-fiber asbestos.

**Substitutes:** Numerous materials substitute for asbestos, including calcium silicate, carbon fibers, cellulose fibers, ceramic fibers, glass fibers, steel fibers, wollastonite, and several organic fibers such as aramid, polyethylene, polypropylene, and polytetrafluoroethylene. Several nonfibrous minerals or rocks, such as perlite, serpentine, silica, and talc, are also considered to be possible asbestos substitutes for products in which the reinforcement properties of fibers are not required. Membrane cells and mercury cells are alternatives to asbestos diaphragms used in the chloralkali industry.

<sup>a</sup>Estimated. NA Not available. — Zero.

<sup>1</sup>Refers to a group of silicate minerals that consist of bundles of separable fibers with high length-to-width ratios. The six asbestos minerals with a history of use in commercial products are actinolite, amosite, anthophyllite, chrysotile, crocidolite, and tremolite. Chrysotile has been the only type of asbestos with significant commercial use in the 21st century.

<sup>2</sup>Source: U.S. Environmental Protection Agency, 2024, Asbestos part 1; Chrysotile asbestos; Regulation of certain conditions of use under the Toxic Substances Control Act (TSCA): Federal Register, v. 89, no. 61, March 28, p. 21970–22010. (Accessed September 19, 2025, at <https://www.govinfo.gov/content/pkg/FR-2024-03-28/pdf/2024-05972.pdf>.)

<sup>3</sup>Includes unmanufactured asbestos fibers (chrysotile) only; excludes asbestos contained in manufactured products.

<sup>4</sup>Modified from reported U.S. Census Bureau data. Additional imports from China were reported in 2021 (59 tons) and 2022 (99 tons), but bill of lading information and data reported by the Government of China suggest that these shipments were misclassified. The U.S. Census Bureau also reported imports of 2 tons from Poland in 2023, 4 tons from Germany in 2024, and 20 tons from Germany through July 2025, but asbestos bans in these countries and in the United States since May 2024 suggest that these shipments were misclassified.

<sup>5</sup>Nonzero exports were reported by the U.S. Census Bureau in each year from 2021 through 2025, but these shipments likely consisted of materials misclassified as asbestos, reexports, and (or) waste products because asbestos has not been mined in the United States since 2002.

<sup>6</sup>Estimated as a 5-year rolling average of imports for consumption. Information regarding the quantity of industry stocks was unavailable.

<sup>7</sup>Defined as imports – exports ± adjustments for industry stock changes. All consumption was from imports and unreported stockpiles.

<sup>8</sup>See Appendix C for resource and reserve definitions and information concerning data sources.

<sup>9</sup>Export sales reported by the only producer of asbestos in Brazil.