## ASBESTOS

(Data in metric tons unless otherwise noted)
Domestic Production and Use: Asbestos has not been mined in the United States since 2002, so the United States is dependent on imports to meet manufacturing needs. Asbestos consumption in the United States was estimated to be $1,880 \mathrm{t}$, based on asbestos imports through July 2008 . Roofing products were estimated to account for $76 \%$ of U.S. consumption and other applications, $24 \%$.

| Salient Statistics-United States: | 2004 | 2005 | 2006 | 2007 | $2008{ }^{\text {e }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Production (sales), mine | - | - | - | - | - |
| Imports for consumption | 3,450 | 2,530 | 2,230 | 1,730 | 1,880 |
| Exports ${ }^{1}$ | 1,580 | 1,510 | 3,410 | 815 | 451 |
| Consumption, estimated | 3,450 | 2,530 | 2,230 | 1,730 | 1,880 |
| Price, average value, dollars per ton ${ }^{2}$ | 234 | 561 | 451 | 473 | 868 |
| Net import reliance ${ }^{3}$ as a percentage of estimated consumption | 100 | 100 | 100 | 100 | 100 |

Recycling: None.
Import Sources (2004-07): Canada, 82\%; and other, 18\%.

## Tariff: Item

Asbestos other than crocidolite Crocidolite

## Number

2524.90.0000
2524.10.0000

## Normal Trade Relations

12-31-08
Free.
Free.

Depletion Allowance: 22\% (Domestic), 10\% (Foreign).
Government Stockpile: None.

## ASBESTOS

Events, Trends, and Issues: There was no production of asbestos in the United States. U.S. exports decreased to an estimated 451 tons in 2008 from 815 tons in 2007. Exports are likely to include some nonasbestos materials and reexports, as U.S. production of asbestos ceased in 2002. Imports increased to 1,880 tin 2008 from 1,730 tons in 2007. Domestic use of asbestos increased to 1,880 tons in 2008 from 1,730 tons in 2007. All the asbestos used in the United States was chrysotile. Canada remained the leading supplier of asbestos for domestic consumption.

The Mine Safety and Health Administration reduced the permissible asbestos exposure limit to 0.1 fiber per cubic centimeter ( $\mathrm{f} / \mathrm{cc}$ ) from $2 \mathrm{f} / \mathrm{cc}$ for an 8 -hour time-weighted average. The 15-minute excursion limit for metal and nonmetal mines was reduced to $1 \mathrm{f} / \mathrm{cc}$ from 10 fibers per milliliter, and the 1-hour excursion limit for coal mines was reduced to $1 \mathrm{f} / \mathrm{cc}$ from $10 \mathrm{f} / \mathrm{cc}$ during each 8-hour day.

Health research and asbestos cleanup continued in Libby, MT, where vermiculite contaminated with asbestos was mined and processed, and at several vermiculite processing plants across the country.

South Africa enacted a ban on the use, processing, manufacturing, and trade of asbestos or asbestos-containing materials, with some exemptions.

World Mine Production, Reserves, and Reserve Base:

|  | Mine production |  | Reserves $^{4}$ | Reserve base $^{4}$ |
| :--- | ---: | ---: | ---: | ---: |
|  | $\underline{\mathbf{2 0 0 7}}$ | $\underline{\mathbf{2 0 0 8}}$ |  |  |
| United States | $\underline{-}$ | Small | Large |  |
| Brazil | 230,000 | 220,000 | Moderate | Moderate |
| Canada | 185,000 | 175,000 | Large | Large |
| China | 380,000 | 380,000 | Large | Large |
| Kazakhstan | 300,000 | 300,000 | Large | Large |
| Russia | 925,000 | 925,000 | Large | Large |
| Zimbabwe | 100,000 | 100,000 | Moderate | Moderate |
| Other countries | 80,000 | $\underline{75,000}$ | Moderate | Large |
| $\quad$ World total (rounded) | $2,200,000$ | $2,180,000$ | Large | Large |

World Resources: The world has 200 million tons of identified resources of asbestos. U.S. resources are large but are composed mostly of short-fiber asbestos, for which use is more limited than long-fiber asbestos in asbestosbased products.

Substitutes: Numerous materials substitute for asbestos in products. Substitutes include calcium silicate, carbon fiber, cellulose fiber, ceramic fiber, glass fiber, steel fiber, 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 considered to be possible asbestos substitutes for products in which the reinforcement properties of fibers were not required.

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[^0]:    ${ }^{\mathrm{e}}$ Estimated. - Zero.
    ${ }^{1}$ Probably includes nonasbestos materials and reexports.
    ${ }^{2}$ Average value for U.S. chrysotile imports, all grades combined. Prices for individual commercial products are no longer published.
    ${ }^{3}$ Defined as imports - exports + adjustments for Government and industry stock changes; however, imports account for all domestic consumption.
    ${ }^{4}$ See Appendix C for definitions.

