## **ASBESTOS**

(Data in metric tons unless otherwise noted)

<u>Domestic Production and Use</u>: Asbestos has not been mined in the United States since 2002. The United States is dependent on imports to meet manufacturing needs. Asbestos consumption in the United States was estimated to be 1,060 tons, based on asbestos imports through July 2012. The chloralkali industry accounted for an estimated 57% of U.S. consumption; roofing products, about 41%; and unknown applications, 2%.

| Salient Statistics—United States:                   | <u>2008</u> | <u>2009</u> | <u>2010</u> | <u>2011</u> | 2012 <sup>e</sup> |
|---|-------------|-------------|-------------|-------------|-------------------|
| Production (sales), mine                            | _           | _           | _           |             | _                 |
| Imports for consumption                             | 1,460       | 869         | 1,040       | 1,180       | 1,060             |
| Exports <sup>1</sup>                                | 368         | 59          | 171         | 169         | 55                |
| Consumption, estimated                              | 1,460       | 869         | 1,040       | 1,180       | 1,060             |
| Price, average value, dollars per ton <sup>2</sup>  | 746         | 787         | 786         | 931         | 1,790             |
| Net import reliance <sup>3</sup> as a percentage of |             |             |             |             |                   |
| estimated consumption                               | 100         | 100         | 100         | 100         | 100               |

Recycling: None.

Import Sources (2008–11): Canada, 87%; Zimbabwe, 5%; and other, 8%.

| Tariff: Item                        | Number       | Normal Trade Relations 12–31–12 |
|-------------------------------------|--------------|---------------------------------|
| Crocidolite                         | 2524.10.0000 | Free.                           |
| Amosite<br>Chrysotile:              | 2524.90.0010 | Free.                           |
| Ćrudes                              | 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, chrysotile                   | 2524.90.0055 | Free.                           |
| Other                               | 2524.90.0060 | Free.                           |

**Depletion Allowance:** 22% (Domestic), 10% (Foreign).

Government Stockpile: None.

## **ASBESTOS**

**Events, Trends, and Issues:** U.S. imports and consumption of asbestos declined 10% in 2012. All asbestos imported and used in the United States was chrysotile, solely sourced from Brazil. This is the first year in more than 100 years that chrysotile was not imported from Canada. There was no chrysotile produced in Canada in 2012 so domestic consumers sought other sources for their supply. The increase in the average value of all imported chrysotile was because only high-valued chrysotile was imported from Brazil; there were no imports of lower valued chrysotile from other countries in 2012. Based on current trends, U.S. asbestos consumption is likely to remain near the 1,000-ton level, as it has in the past 4 years.

## **World Mine Production and Reserves:**

|                       | Mine production |                   | Reserves⁴       |
|-----------------------|-----------------|-------------------|-----------------|
|                       | <u>2011</u>     | 2012 <sup>e</sup> |                 |
| United States         |                 |                   | Small           |
| Brazil                | 302,000         | 300,000           | Moderate        |
| Canada                | 50,000          | _                 | Large           |
| China                 | 440,000         | 440,000           | Large           |
| Kazakhstan            | 223,000         | 240,000           | Large           |
| Russia                | 1,000,000       | 1,000,000         | Large           |
| Other countries       | <u>19,000</u>   | 20,000            | <u>Moderate</u> |
| World total (rounded) | 2,030,000       | 2,000,000         | Large           |

<u>World Resources</u>: 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 asbestos-based products.

<u>Substitutes</u>: 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.

<sup>&</sup>lt;sup>e</sup>Estimated. — Zero.

<sup>&</sup>lt;sup>1</sup>Probably includes nonasbestos materials and reexports.

<sup>&</sup>lt;sup>2</sup>Average Customs value for U.S. chrysotile imports, all grades combined. Prices for individual commercial products are no longer published.

<sup>&</sup>lt;sup>3</sup>Defined as imports – exports.

<sup>&</sup>lt;sup>4</sup>See Appendix C for resource/reserve definitions and information concerning data sources.