

## TIN

(Data in metric tons of tin content unless otherwise noted)

**Domestic Production and Use:** Tin has not been mined or smelted in the United States since 1993 and 1989, respectively. Twenty-five firms accounted for about 90% of the primary tin consumed domestically in 2013. The major uses for tin were cans and containers, 23%; construction, 18%; transportation, 17%; electrical, 12%; and other, 30%. Based on the average Platts Metals Week composite price for tin, the estimated value of primary tin consumed domestically was \$783 million, the value of imported refined tin was \$1.08 billion, and the value of old scrap recovered domestically was \$331 million.

<b>Salient Statistics—United States:</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013<sup>e</sup></b>
Production, secondary:					
Old scrap <sup>e</sup>	11,100	11,100	11,000	11,200	11,200
New scrap	2,310	2,680	2,530	2,440	2,600
Imports for consumption, refined tin	33,000	35,300	34,200	36,900	36,600
Exports, refined tin and tin alloys	3,170	5,630	5,450	5,560	5,760
Shipments from Government stockpile	—	—	—	—	—
Consumption, reported:					
Primary	24,800	25,300	25,200	24,500	26,500
Secondary	7,750	4,820	3,280	3,240	3,260
Consumption, apparent <sup>1</sup>	42,400	41,400	40,300	42,300	41,600
Price, average, cents per pound:					
New York dealer	642	954	1,216	990	1,040
Platts Metals Week composite	837	1,240	1,575	1,283	1,340
London Metal Exchange, cash	615	925	1,184	957	1,010
Kuala Lumpur	609	922	1,188	958	1,010
Stocks, consumer and dealer, yearend	7,070	6,410	5,880	6,140	6,600
Net import reliance <sup>2</sup> as a percentage of apparent consumption	74	73	73	74	73

**Recycling:** About 13,800 tons of tin from old and new scrap was recycled in 2013. Of this, about 11,200 tons was recovered from old scrap at 2 detinning plants and about 75 secondary nonferrous metal-processing plants.

**Import Sources (2009–12):** Peru, 47%; Bolivia, 17%; Indonesia, 13%; Malaysia, 9%; and other, 14%.

<b>Tariff: Item</b>	<b>Number</b>	<b>Normal Trade Relations 12–31–13</b>
Unwrought tin:		
Tin, not alloyed	8001.10.0000	Free.
Tin alloys, containing, by weight:		
5% or less of lead	8001.20.0010	Free.
More than 5% but not more than 25% of lead	8001.20.0050	Free.
More than 25% of lead	8001.20.0090	Free.
Tin waste and scrap	8002.00.0000	Free.

**Depletion Allowance:** 22% (Domestic), 14% (Foreign).

**Government Stockpile:** The Defense Logistics Agency, DLA Strategic Materials made no tin sales in fiscal year 2013.

**Stockpile Status—9–30–13<sup>3</sup>**

<b>Material</b>	<b>Uncommitted inventory</b>	<b>Authorized for disposal</b>	<b>Disposal plan FY 2013</b>	<b>Disposals FY 2013</b>
Tin	4,020	—	804	—

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**Events, Trends, and Issues:** Apparent consumption of tin in the United States decreased slightly in 2013 compared with that of 2012, and the annual average composite price of tin increased by 4%.

Indonesia, the world's leading exporter of tin, enacted new regulations in August that raised the minimum purity level of exported tin to 99.9% and required all tin ingot exports to be traded through the Indonesia Commodities and Derivatives Exchange.

**World Mine Production and Reserves:** Reserves figures were revised for Brazil based on new data from the Instituto Brasileiro de Mineracao, and reserves figures for Peru were revised based on data from the Ministerio de Energia y Minas del Peru.

	Mine production		Reserves <sup>4</sup>
	<u>2012</u>	<u>2013<sup>e</sup></u>	
United States	—	—	—
Australia	5,000	5,900	240,000
Bolivia	19,700	18,000	400,000
Brazil	10,800	11,900	700,000
Burma	11,000	11,000	NA
China	110,000	100,000	1,500,000
Congo (Kinshasa)	4,000	4,000	NA
Indonesia	41,000	40,000	800,000
Laos	800	800	NA
Malaysia	3,000	3,700	250,000
Nigeria	570	570	NA
Peru	26,100	26,100	91,000
Russia	280	300	350,000
Rwanda	2,300	1,600	NA
Thailand	300	300	170,000
Vietnam	5,400	5,400	NA
Other countries	<u>73</u>	<u>70</u>	<u>180,000</u>
World total (rounded)	240,000	230,000	4,700,000

**World Resources:** U.S. identified resources of tin, primarily in Alaska, were insignificant compared with those of the rest of the world. World resources, principally in western Africa, southeastern Asia, Australia, Bolivia, Brazil, China, Indonesia, and Russia, are extensive and, if developed, could sustain recent annual production rates well into the future.

**Substitutes:** Aluminum, glass, paper, plastic, or tin-free steel substitute for tin in cans and containers. Other materials that substitute for tin are epoxy resins for solder; aluminum alloys, copper-base alloys, and plastics for bronze; plastics for bearing metals that contain tin; and compounds of lead and sodium for some tin chemicals.

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

<sup>1</sup>Defined as old scrap + imports – exports + adjustments for Government and industry stock changes.

<sup>2</sup>Defined as imports - exports + adjustments for Government and industry stock changes.

<sup>3</sup>[See Appendix B for definitions.](#)

<sup>4</sup>[See Appendix C for resource/reserve definitions and information concerning data sources.](#)