

ANTIMONY

(Data in metric tons, antimony content, unless otherwise specified)

Domestic Production and Use: In 2024, no marketable antimony was mined in the United States. Primary antimony metal and oxide were produced by one company in Montana using imported feedstock; data were not available. Secondary antimony production came from antimonial lead recovered from spent lead-acid batteries and was intended for the lead-acid battery industry. The estimated value of secondary antimony produced in 2024 was about \$73 million. Recycling supplied about 15% of estimated domestic apparent consumption, and the remainder came from imports. In the United States, the leading uses of antimony were metal products, including antimonial lead and ammunition, 40%; flame retardants, 39%; and nonmetal products, including ceramics and glass and rubber products, 21%.

Salient Statistics—United States:

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024^e</u>
Production:					
Mine (recoverable antimony)	—	—	—	—	—
Smelter:					
Primary	254	19	W	W	W
Secondary	3,520	4,050	4,100	3,490	3,500
Imports for consumption:					
Ore and concentrates	105	31	29	6	310
Oxide	15,000	19,100	16,900	14,000	20,000
Unwrought, powder	5,200	6,970	6,510	6,060	4,100
Antimony articles ¹	318	514	1,790	1,620	330
Waste and scrap ¹	6	13	71	3	17
Exports:					
Ore and concentrates ¹	10	9	53	24	—
Oxide	1,230	1,530	2,420	1,740	2,200
Unwrought, powder	269	824	1,230	1,510	1,500
Antimony articles ¹	97	97	585	433	79
Waste and scrap ¹	11	136	26	2	53
Consumption, apparent ²	22,400	27,800	23,900	20,300	24,000
Price, metal, average, dollars per pound ³	2.67	5.31	6.18	5.49	9.50
Net import reliance ⁴ as a percentage of apparent consumption	83	85	83	83	85

Recycling: The bulk of secondary antimony is recovered at secondary lead smelters as antimonial lead, most of which was generated by, and then consumed by, the lead-acid battery industry.

Import Sources (2020–2023): Ore and concentrates: Italy, 44%; China, 23%; Belgium, 16%; India, 10%; and other, 7%. Oxide: China,⁵ 76%; Belgium, 11%; Bolivia, 6%; and other, 7%. Unwrought metal and powder: India, 25%; China,⁵ 24%; Thailand, 13%; Vietnam, 12%; and other, 26%. Total metal and oxide: China,⁵ 63%; Belgium, 8%, India, 6%; Bolivia, 5%; and other, 18%.

<u>Tariff:</u>	<u>Item</u>	<u>Number</u>	<u>Normal Trade Relations</u> <u>12–31–24</u>
	Ore and concentrates	2617.10.0000	Free.
	Antimony oxide	2825.80.0000	Free.
	Unwrought antimony; powders	8110.10.0000	Free.
	Waste and scrap	8110.20.0000	Free.
	Antimony articles	8110.90.0000	Free.

Depletion Allowance: 22% (domestic), 14% (foreign).

Government Stockpile:⁶

<u>Material</u>	<u>FY 2024</u>		<u>FY 2025</u>	
	<u>Potential acquisitions</u>	<u>Potential disposals</u>	<u>Potential acquisitions</u>	<u>Potential disposals</u>
Antimony	1,100	—	700	—

ANTIMONY

Events, Trends, and Issues: In August 2024, China's Government announced that companies would need to apply for export licenses to export antimony ore, metals, oxides, hydrides, indium antimonides, organo-antimony compounds, and gold-antimony separation technology. After that announcement, the antimony metal price nearly doubled, from \$8.91 per pound in July to \$17.50 per pound in November, according to Argus Media Group. In December 2024, China banned all exports of antimony to the United States.

In February, a mining company in Idaho was conditionally awarded additional funding from the U.S. Department of Defense to reestablish a domestic source of antimony, bringing its total Department of Defense funding to \$59.4 million. According to the company, the project has total proven and probable mineral reserves of 14.2 million tons of 0.42% antimony ore.

World Mine Production and Reserves: Reserves for China and Vietnam were revised based on Government reports.

	Mine production		Reserves ⁷
	2023	2024 ^e	
United States	—	—	⁸ 60,000
Australia	1,860	2,000	⁹ 140,000
Bolivia	3,700	3,700	310,000
Burma	^e 4,500	4,500	140,000
Canada	—	—	78,000
China	^e 62,300	60,000	670,000
Guatemala	49	50	NA
Iran	^e 500	500	NA
Kazakhstan	^e 40	40	NA
Kyrgyzstan	20	20	260,000
Laos	^e 200	200	NA
Mexico	800	800	18,000
Pakistan	250	250	26,000
Russia	13,000	13,000	350,000
Tajikistan	17,000	17,000	50,000
Turkey	^e 1,600	1,600	99,000
Vietnam	300	300	54,000
World total (rounded) ¹⁰	106,000	100,000	>2,000,000

World Resources:⁷ U.S. resources of antimony are mainly in Alaska, Idaho, Montana, and Nevada. Principal identified world resources are in Australia, Bolivia, Burma, China, Mexico, Russia, South Africa, and Tajikistan. Additional antimony resources may occur in Mississippi Valley-type lead deposits in the Eastern United States.

Substitutes: Selected organic compounds and hydrated aluminum oxide are substitutes as flame retardants. Chromium, tin, titanium, zinc, and zirconium compounds substitute for antimony chemicals in enamels, paint, and pigments. Combinations of calcium, copper, selenium, sulfur, and tin are substitutes for alloys in lead-acid batteries.

^eEstimated. NA Not available. W Withheld to avoid disclosing company proprietary data. — Zero.

¹Gross weight.

²Defined as secondary production from old scrap + imports of antimony in oxide and unwrought metal – exports of antimony in oxide and unwrought metal.

³Antimony minimum 99.65%, cost, insurance, and freight. Source: Argus Media Group, Argus Non-Ferrous Markets.

⁴Defined as imports of antimony in oxide and unwrought metal, powder – exports of antimony in oxide and unwrought metal, powder.

⁵Includes Hong Kong.

⁶See Appendix B for definitions.

⁷See Appendix C for resource and reserve definitions and information concerning data sources.

⁸Company-reported probable reserves for the Stibnite Gold Project in Idaho.

⁹For Australia, Joint Ore Reserves Committee-compliant or equivalent reserves were 20,000 tons.

¹⁰In addition to the countries listed, antimony may have been produced in other countries, but available information was inadequate to make reliable estimates of output.