ANTIMONY

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

<u>Domestic Production and Use</u>: There was no antimony mine production in the United States in 2010. Primary antimony metal and oxide was produced by one company in Montana, using foreign feedstock. The estimated distribution of antimony uses was as follows: flame retardants, 35%; transportation, including batteries, 23%; chemicals, 16%; ceramics and glass, 12%; and others, 14%.

Salient Statistics—United States:	<u>2006</u>	<u>2007</u>	<u>2008</u>	2009	2010 ^e
Production:			<u> </u>	· <u></u>	·
Mine (recoverable antimony)		W			_
Smelter:					
Primary	W	W	W	W	W
Secondary	3,520	3,480	3,180	3,020	3,100
Imports for consumption	23,200	21,900	29,000	20,200	22,000
Exports of metal, alloys, oxide,					
and waste and scrap	2,140	1,950	2,200	2,100	1,900
Consumption, apparent ²	24,300	23,700	28,800	19,800	21,600
Price, metal, average, cents per pound ³	238	257	280	236	370
Stocks, yearend	2,120	1,900	1,490	1,420	1,500
Employment, plant, number ^e	10	10	10	15	15
Net import reliance⁴ as a percentage of					
apparent consumption	86	85	94	92	93

<u>Recycling:</u> Traditionally, the bulk of secondary antimony has been recovered as antimonial lead, most of which was generated by and then consumed by the battery industry. Changing trends in that industry in recent years, however, have generally reduced the amount of secondary antimony produced; the trend to low-maintenance batteries has tilted the balance of consumption away from antimony and toward calcium as an additive.

Import Sources (2006–09): Metal: China, 68%; Mexico, 14%; Peru, 8%; and other, 10%. Ore and concentrate: Bolivia, 59%; China, 28%; and other, 13%. Oxide: China, 53%; Mexico, 32%; Belgium, 8%; and other, 7%. Total: China, 56%; Mexico, 28%; Belgium, 7%; and other, 9%.

Tariff: Item	Number	Normal Trade Relations 12-31-10	
Ore and concentrates	2617.10.0000	Free.	
Antimony oxide	2825.80.0000	Free.	
Antimony and articles thereof,			
including waste and scrap	8110.00.0000	Free.	

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

Government Stockpile: None.

ANTIMONY

Events, Trends, and Issues: In 2010, antimony production from domestic source materials was derived mostly from the recycling of lead-acid batteries. Recycling supplied only a minor portion of estimated domestic consumption, and the remainder came from imports. In recent years, the number of primary antimony smelters has been reduced, as smelters in New Jersey and Texas were closed in 2004. Only one domestic smelter in Montana continued to make antimony products. This domestic smelter, through its wholly owned Mexican subsidiary, received approval to build an ore-processing plant near its antimony-silver deposit in Mexico. The antimony materials produced there would provide feedstock for the Montana facility.

Two actions caused production reductions in China, the world's leading antimony producer. In March, the Government stated it would not approve any new projects for antimony before June 30, 2011; also in March, the Government shut down about 100 antimony smelters in China's dominant antimony-producing region, an action aimed at closing illegal mines and curbing pollution.

The price of antimony rose substantially during 2010. The price started the year at about \$2.90 per pound and finished October at about \$5.25 per pound. Industry observers attributed the strong price increase to production interruptions in China.

Several new antimony mine projects were being developed in Australia, Canada, and Laos.

<u>World Mine Production and Reserves</u>: Reserves for China, Russia, and Thailand (in "Other countries") were changed based on new information from Government and other sources.

	Mine p	Reserves ⁵	
	2009	<u>2010^e</u>	
Bolivia	3,000	3,000	310,000
China	140,000	120,000	950,000
Russia (recoverable)	3,500	3,000	350,000
South Africa	2,800	3,000	21,000
Tajikistan	2,000	2,000	50,000
Other countries	<u>3,300</u>	4,000	<u> 150,000</u>
World total (rounded)	155,000	135,000	1,800,000

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

<u>Substitutes</u>: Compounds of chromium, tin, titanium, zinc, and zirconium substitute for antimony chemicals in paint, pigments, and enamels. Combinations of cadmium, calcium, copper, selenium, strontium, sulfur, and tin can be used as substitutes for hardening lead. Selected organic compounds and hydrated aluminum oxide are widely accepted substitutes as flame retardants.

^eEstimated. W Withheld to avoid disclosing company proprietary data. — Zero.

¹Gross weight, for metal, alloys, waste, and scrap.

²Domestic mine production + secondary production from old scrap + net import reliance.

³New York dealer price for 99.5% to 99.6% metal, c.i.f. U.S. ports.

⁴Defined as imports - exports + adjustments for Government and industry stock changes.

⁵See Appendix C for resource/reserve definitions and information concerning data sources.