

# Mineral Industry Surveys

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## **BISMUTH IN THE FIRST, SECOND, AND THIRD QUARTER 2008**

Bismuth consumption in the United States for the third quarter of 2008 was estimated to be 411 metric tons (t), which was about 83% higher than that of the third quarter of 2007. Imports of bismuth for the first three quarters of 2008 totaled 1,470 t, a decrease of 11% compared with those of the comparable period of 2007. Through the first 9 months of 2008, Belgium, China, and the United Kingdom were the leading suppliers of bismuth to the United States.

The New York dealer price for bismuth, as published in Platts Metals Week, started January 2008 at \$12.75 to \$13.75 per pound. The price rose during the second quarter, then declined in the third quarter, ending at \$9.40 to \$11.00 per pound in late September 2008.

In July, six Chinese bismuth producers in Hunan Province formalized a plan announced earlier in the year to establish the Hunan Bismuth Industry Co. The producers were Hunan Shizhuyuan Nonferrous Co., Hunan Jinwang Enterprise Co.,

Xinhualian Mining Co., Yangshan County Luzai Kongwen Bangshan Lead and Zinc Mine, Yongxing County Tianyuan Nonferrous Metals Co., and Anren County Yongsheng Lead Co. These six firms had a combined capacity of 3,200 metric tons per year of bismuth, which accounted for about 30% of China's bismuth metal output. The consortium announced that its goals were to cushion price declines, discourage price speculation, and improve China's stature in the world bismuth market. Some industry sources believe that this consolidation was a response to the 2007 merger between European bismuth refiners MCP Aramayo Ltd. and Sidech S.A. (Ryan's Notes, 2008).

### **Reference Cited**

Ryan's Notes, 2008, Six Chinese Bi producers join together: Ryan's Notes, v. 14, no. 27, July 7, p. 5.

TABLE 1  
SALIENT BISMUTH STATISTICS<sup>1</sup>

(Kilograms unless otherwise specified)

	2007	2008			
		First quarter	Second quarter	Third quarter	Year to date
Consumption <sup>2</sup>	2,650,000	464,000	430,000	411,000	1,310,000
Exports <sup>3</sup>	421,000	64,100	135,000	84,600	283,000
Imports for consumption	3,070,000	601,000	472,000	396,000	1,470,000
Price per pound, dealer, average of period	\$14.07	\$14.16	\$15.23	\$11.42	\$13.60
Stocks, end of period, consumer	130,000	127,000	161,000	145,000	XX

XX Not applicable.

<sup>1</sup>Data are rounded to no more than three significant digits.

<sup>2</sup>Estimated, based on net imports.

<sup>3</sup>Comprises bismuth metal and the bismuth content of alloys and waste and scrap.

TABLE 2  
BISMUTH METAL CONSUMED  
IN THE UNITED STATES, BY USE<sup>1,2</sup>

(Kilograms)

Use	2007	2008			
		First quarter	Second quarter	Third quarter	Year to date
Chemicals <sup>3</sup>	744,000	246,000	211,000	211,000	668,000
Bismuth alloys	709,000	13,500	12,300	12,900	38,800
Metallurgical additives	1,160,000	197,000	193,000	123,000	513,000
Other	44,800	7,930	13,500	63,800	85,200
Total	2,650,000	464,000	430,000	411,000	1,310,000

<sup>1</sup>Data are rounded to no more than three significant digits, may not add to totals shown.

<sup>2</sup>Estimated, based on net imports.

<sup>3</sup>Includes industrial and laboratory chemicals, cosmetics, and pharmaceuticals.

TABLE 3  
U.S. EXPORTS OF BISMUTH METAL, ALLOYS AND WASTE AND SCRAP, BY COUNTRY<sup>1</sup>

(Kilograms, metal content)

Country	2007			2008	
	Year	December	Fourth quarter	January	February
Argentina	14,500	--	9,150	--	--
Australia	338	--	--	--	319
Austria	103	--	--	--	--
Belgium	66,200	--	6,330	--	--
Brazil	3,750	--	117	--	3,860
Canada	63,800	140	6,930	4,860	1,810
China	3,880	--	2,570	--	--
Columbia	--	--	--	--	--
Costa Rica	818	--	--	--	533
Cyprus	--	--	--	--	--
Czech Republic	1,320	50	50	--	--
Dominican Republic	7,640	--	302	--	--
Egypt	104	--	--	--	--
France	16,900	--	--	--	--
Germany	9,400	--	4,500	1,690	--
Honduras	108	--	108	--	--
Hong Kong	2,410	--	1,100	--	508
India	533	--	--	--	91
Ireland	314	--	--	--	124
Israel	8,730	--	--	1,450	--
Italy	36	--	--	--	--
Japan	14,900	--	929	--	--
Korea, Republic of	--	--	--	--	--
Malaysia	100	--	--	--	--
Mexico	31,700	5,190	12,600	5,200	3,950
Saudi Arabia	27	--	--	--	--
Singapore	30,200	350	7,560	3,870	--
South Africa	--	--	--	--	--
Spain	--	--	--	163	--
Sweden	1,010	--	711	279	--
Taiwan	638	--	638	--	--
Thailand	3,240	--	2,430	1,170	1,140
United Arab Emirates	12,400	--	--	--	--
United Kingdom	41,400	--	--	--	--
Vietnam	84,700	--	--	--	--
Total	421,000	5,730	56,100	18,700	12,300

See footnotes at end of table.

TABLE 3—Continued  
 U.S. EXPORTS OF BISMUTH METAL, ALLOYS AND WASTE AND SCRAP, BY COUNTRY<sup>1</sup>

(Kilograms, metal content)

	2008				
	July	August	September	Third quarter	Year to date
Argentina	--	--	--	--	8,340
Australia	--	--	--	--	319
Austria	--	--	--	--	140
Belgium	--	--	--	--	--
Brazil	--	--	1,080	1,080	15,500
Canada	2,140	2,850	686	5,680	49,400
China	--	528	2,170	2,700	2,700
Columbia	--	--	1,030	1,030	2,060
Costa Rica	533	--	--	533	2,130
Cyprus	--	--	--	--	51
Czech Republic	--	--	--	--	3,400
Dominican Republic	1,850	--	--	1,850	8,050
Egypt	500	20	--	520	520
France	--	--	--	--	13,600
Germany	--	--	--	--	3,280
Honduras	--	--	--	--	--
Hong Kong	--	--	325	325	1,190
India	--	--	--	--	770
Ireland	--	--	--	--	124
Israel	--	1,790	--	1,790	3,240
Italy	--	--	--	--	--
Japan	--	--	--	--	3,290
Korea, Republic of	--	--	--	--	54
Malaysia	--	--	--	--	--
Mexico	12,000	5,200	5,700	22,900	57,500
Saudi Arabia	--	--	--	--	1,470
Singapore	31	--	35	66	8,630
South Africa	25	25	--	50	50
Spain	--	--	--	--	163
Sweden	--	--	33	33	794
Taiwan	--	--	--	--	40
Thailand	3,150	--	597	3,740	9,700
United Arab Emirates	--	20	--	20	20
United Kingdom	--	18,100	--	37,000	72,500
Vietnam	--	--	18,900	5,280	14,400
Total	20,200	28,600	35,800	84,600	283,000

-- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.

TABLE 4  
U.S. IMPORTS FOR CONSUMPTION OF BISMUTH METAL, BY COUNTRY<sup>1</sup>

(Kilograms)

Country	2007			2008							
	Year	December	Fourth quarter	January	February	March	First quarter	April	May	June	Second quarter
Belgium	1,020,000	87,500	242,000	74,100	74,300	39,600	188,000	54,700	44,300	10,900	110,000
Canada	13,200	964	4,700	76	1,820	1,980	3,870	796	885	50	1,730
China	437,000	45,500	61,000	97,800	81,000	84,700	263,000	108,000	93,900	101,000	303,000
France	23,300	--	--	--	--	23,100	23,100	--	--	--	--
Germany	52,800	850	850	--	--	--	--	--	--	600	600
Hong Kong	347	347	347	19,100	--	--	19,100	--	105	--	105
Italy	277	--	--	--	--	--	--	50	--	--	50
Japan	--	--	--	--	72	--	72	--	--	--	--
Mexico	420,000	40,000	100,000	40,000	--	--	40,000	--	--	--	--
Netherlands	87	--	--	--	19	20	39	10	6	--	16
Peru	3,710	350	--	--	--	29,300	29,300	26,400	--	--	26,400
Poland	--	--	--	--	80	--	80	--	--	--	--
Spain	775	400	775	--	825	--	825	--	--	--	--
United Kingdom	1,110,000	74,400	203,000	7,720	7,660	17,900	33,200	--	29,700	--	29,700
Other	1	--	1	--	--	--	--	--	--	6	6
Total	3,070,000	250,000	613,000	239,000	166,000	196,000	601,000	190,000	169,000	112,000	472,000

  

Country	2008				
	July	August	September	Third quarter	Year to date
Belgium	30,600	30,400	37,200	98,200	396,000
Canada	293	818	1,870	2,980	8,590
China	47,900	110,000	44,000	202,000	769,000
France	--	--	--	--	23,100
Germany	96	--	--	96	696
Hong Kong	--	--	--	--	19,200
Italy	--	--	--	--	50
Japan	--	32	--	32	104
Mexico	--	--	--	--	40,000
Netherlands	--	--	83	83	138
Peru	--	--	--	--	55,700
Poland	--	--	--	--	80
Spain	--	--	--	--	825
United Kingdom	11,600	67,600	12,900	92,100	155,000
Other	--	--	--	--	6
Total	90,400	209,000	96,100	396,000	1,470,000

-- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.