

SULFUR STATISTICS¹
U.S. GEOLOGICAL SURVEY
[All values are in metric tons (t) sulfur content unless otherwise noted]
Last modification: April 1, 2014

Year	Production	Imports	Exports	Shipments	Stocks	Apparent consumption	Unit value (\$/t)	Unit value (98\$/t)	World production
1900	86,100	328,000	NA	NA	NA	652,000	9.73	191	1,420,000
1901	242,000	375,000	NA	NA	NA	767,000	5.12	100	1,420,000
1902	208,000	389,000	NA	NA	NA	770,000	4.48	84.50	4,390,000
1903	233,000	400,000	NA	NA	NA	791,000	4.69	85.30	4,540,000
1904	334,000	338,000	NA	61,000	NA	549,000	10.20	186	1,320,000
1905	326,000	336,000	NA	165,000	NA	620,000	14.30	259	1,420,000
1906	405,000	368,000	22,600	188,000	NA	768,000	14.90	270	1,320,000
1907	292,000	330,000	36,500	276,000	NA	721,000	20.40	357	1,320,000
1908	465,000	348,000	28,300	210,000	NA	804,000	16.20	294	1,220,000
1909	378,000	368,000	37,700	262,000	NA	702,000	18.20	331	1,320,000
1910	348,000	424,000	31,200	255,000	NA	767,000	17.70	311	1,420,000
1911	431,000	521,000	28,600	258,000	NA	254,000	17.70	311	1,420,000
1912	1,080,000	505,000	58,700	310,000	NA	279,000	17.10	289	1,630,000
1913	782,000	439,000	92,000	324,000	NA	249,000	17.30	285	1,830,000
1914	735,000	529,000	102,000	347,000	NA	272,000	17.90	292	1,070,000
1915	896,000	499,000	49,500	299,000	NA	286,000	16.60	268	1,290,000
1916	1,100,000	631,000	141,000	779,000	NA	670,000	15.70	235	1,440,000
1917	1,680,000	477,000	165,000	1,140,000	NA	984,000	21.10	268	1,980,000
1918	1,880,000	246,000	145,000	1,290,000	NA	1,150,000	21.70	234	2,140,000
1919	1,570,000	192,000	231,000	689,000	NA	461,000	14.90	140	1,800,000
1920	1,680,000	164,000	489,000	1,540,000	1,120,000	1,060,000	19.50	159	1,590,000
1921	1,970,000	106,000	290,000	970,000	NA	679,000	17.50	160	2,230,000
1922	1,930,000	137,000	496,000	1,370,000	NA	872,000	16.10	156	2,090,000
1923	2,150,000	129,000	482,000	1,640,000	3,050,000	1,170,000	15.80	151	2,380,000
1924	1,310,000	122,000	492,000	1,560,000	2,740,000	1,070,000	16.00	153	3,860,000
1925	1,500,000	135,000	642,000	1,960,000	2,290,000	1,250,000	14.80	138	4,780,000
1926	1,990,000	179,000	592,000	2,400,000	NA	1,510,000	17.20	158	5,490,000
1927	2,470,000	126,000	816,000	2,410,000	NA	1,290,000	17.50	164	5,890,000
1928	2,400,000	229,000	716,000	2,460,000	2,030,000	1,400,000	16.80	160	5,690,000
1929	2,810,000	253,000	887,000	2,800,000	1,930,000	1,590,000	16.90	161	6,200,000
1930	3,000,000	180,000	619,000	2,350,000	3,300,000	1,400,000	16.70	163	6,400,000
1931	2,490,000	172,000	426,000	1,730,000	3,080,000	972,000	16.30	175	5,180,000
1932	1,110,000	124,000	366,000	1,350,000	3,560,000	761,000	16.80	199	3,760,000
1933	1,690,000	188,000	540,000	1,930,000	3,350,000	1,130,000	16.60	209	4,570,000
1934	1,750,000	185,000	526,000	1,960,000	3,150,000	1,120,000	16.00	194	5,080,000
1935	2,000,000	196,000	420,000	2,010,000	3,150,000	1,240,000	15.70	187	5,690,000
1936	2,440,000	211,000	576,000	2,370,000	3,150,000	1,430,000	15.90	187	5,390,000
1937	3,210,000	257,000	700,000	2,910,000	3,450,000	1,810,000	16.20	183	5,990,000
1938	2,820,000	166,000	601,000	2,040,000	4,270,000	1,060,000	14.50	168	5,590,000
1939	2,550,000	250,000	663,000	2,660,000	4,060,000	1,620,000	14.20	167	7,320,000
1940	3,260,000	227,000	779,000	3,030,000	4,270,000	1,850,000	14.30	166	7,930,000
1941	3,710,000	209,000	773,000	3,920,000	3,960,000	2,380,000	14.60	161	7,520,000
1942	4,080,000	173,000	595,000	3,690,000	4,370,000	2,510,000	14.30	143	8,030,000
1943	3,230,000	142,000	693,000	3,560,000	3,860,000	2,570,000	14.10	133	6,710,000
1944	3,940,000	88,400	686,000	4,210,000	3,560,000	2,950,000	15.00	139	6,600,000
1945	4,440,000	91,200	958,000	4,460,000	3,560,000	2,950,000	15.60	141	6,200,000
1946	4,570,000	89,200	1,270,000	4,800,000	3,250,000	3,590,000	15.20	127	7,320,000
1947	5,190,000	61,700	1,370,000	5,580,000	3,430,000	4,290,000	16.00	117	8,640,000
1948	5,600,000	52,400	1,320,000	5,720,000	3,280,000	4,500,000	16.30	110	9,450,000
1949	5,480,000	59,000	1,480,000	5,500,000	3,150,000	4,160,000	16.30	112	9,960,000
1950	6,080,000	102,000	1,500,000	6,340,000	2,700,000	5,070,000	17.80	120	10,800,000

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U.S. GEOLOGICAL SURVEY
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Year	Production	Imports	Exports	Shipments	Stocks	Apparent consumption	Unit value (\$/t)	Unit value (98\$/t)	World production
1951	6,300,000	110,000	1,330,000	6,010,000	2,880,000	4,900,000	19.60	123	11,400,000
1952	6,390,000	149,000	1,360,000	6,200,000	3,210,000	4,910,000	19.70	121	12,100,000
1953	6,350,000	93,800	1,290,000	6,390,000	3,180,000	5,130,000	24.30	148	11,700,000
1954	6,780,000	137,000	1,700,000	6,580,000	3,390,000	4,990,000	24.20	147	12,800,000
1955	7,140,000	209,000	1,660,000	7,220,000	3,350,000	5,720,000	25.50	155	15,500,000
1956	7,940,000	394,000	1,700,000	7,150,000	4,120,000	5,840,000	24.10	145	17,000,000
1957	7,120,000	680,000	1,620,000	6,610,000	4,650,000	5,640,000	21.90	127	17,000,000
1958	6,240,000	767,000	1,630,000	6,190,000	4,690,000	5,350,000	23.40	132	16,100,000
1959	6,270,000	789,000	1,660,000	6,970,000	4,010,000	6,010,000	23.10	129	17,200,000
1960	6,770,000	902,000	1,820,000	6,840,000	3,840,000	5,960,000	22.80	125	19,600,000
1961	7,290,000	982,000	1,620,000	6,950,000	4,890,000	5,990,000	22.80	124	20,600,000
1962	6,870,000	1,150,000	1,560,000	6,810,000	5,010,000	6,340,000	21.50	116	21,300,000
1963	6,750,000	1,490,000	1,640,000	6,830,000	4,760,000	6,710,000	19.60	104	21,900,000
1964	7,210,000	1,610,000	1,960,000	7,990,000	4,290,000	7,370,000	19.80	104	23,500,000
1965	8,340,000	1,670,000	2,680,000	9,310,000	3,480,000	8,110,000	22.10	114	25,200,000
1966	9,300,000	1,700,000	2,410,000	9,920,000	2,750,000	9,290,000	25.30	127	26,500,000
1967	9,280,000	1,670,000	2,230,000	9,960,000	1,990,000	9,400,000	32.10	156	28,400,000
1968	9,890,000	1,740,000	1,630,000	9,060,000	2,700,000	9,220,000	39.00	182	29,500,000
1969	9,690,000	1,820,000	1,580,000	9,070,000	3,390,000	9,320,000	26.60	118	30,700,000
1970	9,710,000	1,690,000	1,460,000	8,100,000	3,890,000	9,380,000	22.80	95.70	41,900,000
1971	9,730,000	1,450,000	1,560,000	8,450,000	4,190,000	9,320,000	17.20	69.20	42,700,000
1972	10,400,000	1,210,000	1,880,000	9,690,000	3,860,000	10,000,000	16.80	65.40	45,500,000
1973	11,100,000	1,240,000	1,800,000	10,000,000	3,990,000	10,400,000	17.60	64.50	48,200,000
1974	11,600,000	2,180,000	2,710,000	10,600,000	4,020,000	11,000,000	28.40	94.00	51,200,000
1975	11,400,000	1,930,000	1,370,000	9,120,000	5,210,000	10,800,000	44.90	136	50,700,000
1976	10,900,000	1,760,000	1,290,000	9,150,000	5,650,000	10,900,000	45.70	131	50,900,000
1977	10,700,000	2,010,000	1,200,000	9,660,000	5,560,000	11,700,000	44.40	119	52,300,000
1978	11,200,000	2,180,000	866,000	9,820,000	5,350,000	12,600,000	45.20	113	52,100,000
1979	12,100,000	2,490,000	2,040,000	11,600,000	4,240,000	13,700,000	55.80	125	53,200,000
1980	11,900,000	2,520,000	1,780,000	11,500,000	3,090,000	13,700,000	89.10	176	55,000,000
1981	12,100,000	2,640,000	1,470,000	10,100,000	3,630,000	12,800,000	111	200	53,600,000
1982	9,790,000	2,050,000	1,040,000	7,940,000	4,220,000	10,100,000	108	183	50,600,000
1983	9,290,000	1,840,000	1,050,000	9,150,000	3,220,000	11,000,000	87.20	143	49,800,000
1984	10,700,000	2,700,000	1,370,000	10,200,000	2,420,000	12,700,000	94.30	148	52,500,000
1985	11,600,000	2,250,000	1,410,000	9,940,000	2,800,000	12,000,000	106	161	53,800,000
1986	11,100,000	1,600,000	1,920,000	9,910,000	2,750,000	10,600,000	105	156	53,700,000
1987	10,500,000	1,850,000	1,270,000	9,790,000	2,320,000	11,300,000	89.80	129	57,000,000
1988	10,700,000	2,310,000	1,270,000	10,800,000	1,110,000	12,700,000	86.00	118	59,200,000
1989	11,600,000	2,670,000	1,070,000	10,300,000	1,300,000	12,700,000	86.60	114	58,900,000
1990	11,600,000	3,120,000	1,020,000	10,200,000	1,420,000	13,100,000	80.10	100	57,800,000
1991	10,800,000	3,620,000	1,250,000	11,100,000	1,190,000	13,500,000	71.50	85.50	54,600,000
1992	10,700,000	3,380,000	1,010,000	11,000,000	809,000	13,400,000	48.10	55.90	50,700,000
1993	11,000,000	2,840,000	703,000	10,500,000	1,380,000	12,600,000	31.90	35.90	51,600,000
1994	11,500,000	2,350,000	945,000	11,700,000	1,160,000	13,100,000	30.10	33.10	53,400,000
1995	11,800,000	3,140,000	962,000	12,100,000	583,000	14,300,000	44.50	47.60	54,800,000
1996	11,800,000	2,640,000	893,000	11,800,000	646,000	13,600,000	34.10	35.40	55,200,000
1997	12,000,000	2,720,000	742,000	12,000,000	761,000	14,000,000	36.10	36.60	56,900,000
1998	11,700,000	2,940,000	940,000	12,200,000	283,000	14,200,000	29.10	29.10	57,400,000
1999	11,500,000	3,030,000	736,000	11,300,000	451,000	13,800,000	37.80	37.00	57,400,000
2000	10,500,000	2,790,000	849,000	10,700,000	208,000	12,700,000	24.70	23.40	59,300,000
2001	9,470,000	2,190,000	780,000	9,450,000	232,000	10,900,000	10.00	9.20	59,500,000

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Year	Production	Imports	Exports	Shipments	Stocks	Apparent consumption	Unit value (\$/t)	Unit value (98\$/t)	World production
2002	9,330,000	2,910,000	757,000	9,320,000	181,000	11,500,000	11.80	10.70	62,000,000
2003	9,650,000	3,160,000	907,000	9,690,000	206,000	11,900,000	28.70	25.40	64,100,000
2004	10,100,000	3,630,000	1,020,000	10,100,000	185,000	12,800,000	32.60	28.10	66,400,000
2005	9,500,000	3,700,000	794,000	9,480,000	160,000	12,400,000	30.80	25.70	68,500,000
2006	9,060,000	3,750,000	716,000	8,960,000	221,000	12,000,000	32.90	26.60	67,000,000
2007	9,150,000	3,790,000	1,030,000	9,180,000	187,000	11,900,000	32.90	25.90	67,800,000
2008	9,300,000	4,690,000	1,040,000	9,280,000	208,000	12,900,000	264	200	68,000,000
2009	8,940,000	2,110,000	1,510,000	8,860,000	231,000	9,520,000	1.70	1.30	66,700,000
2010	9,110,000	3,640,000	1,520,000	9,170,000	167,000	11,300,000	70.20	52.50	67,400,000
2011	8,950,000	4,140,000	1,420,000	8,930,000	176,000	11,700,000	176.00	128.00	68,600,000
2012	9,000,000	3,860,000	1,900,000	9,030,000	132,000	11,000,000	136.00	96.70	68,100,000

NA Not available.

¹Compiled by D.A. Buckingham, J.A. Ober, and L.E. Apodaca.

Data are calculated, estimated, or reported. See notes for more information.

Sulfur Worksheet Notes

Data Sources

The sources of data for the sulfur worksheet are the mineral statistics publications of the U.S. Bureau of Mines and the U.S. Geological Survey—Minerals Yearbook (MYB) and its predecessor, Mineral Resources of the United States (MR). The years of publication and corresponding years of data coverage are listed in the References section below.

Production

Production is in terms of the sulfur content of Frasch, recovered, and native sulfur; pyrites; byproduct sulfuric acid; and other forms. Data for “Other Forms” were not separately reported before 1939, and then only in terms of their sulfur content; pyrites were included in this category in 1983. Sulfur content data of pyrites for 1928–49 are estimated using the published percentage sulfur content. For 1900–24, the sulfur content is estimated using the average percentage of 39.7 percent sulfur content reported for pyrites over 1925–82. Included in total pyrite production for 1922–27 is byproduct pyrite production from Tennessee and Wisconsin. The sulfur content of sulfuric acid for 1911–20 and years 1927–46 was estimated based on the quality (50° or 60° Baumé) of sulfuric acid. No sulfuric acid data are available prior to 1911. Data are from the MR and the MYB.

Imports

Imports report the sulfur content of Frasch and recovered sulfur, pyrites, and sulfuric acid. Frasch sulfur import data for 1920–30 and 1949–69 include some sulfur ores. Pyrite imports for 1900–72 are pyrites only. The sulfur content of imported pyrite for 1900–48 is estimated using the average percentage of 48.1 percent sulfur content reported for pyrites for 1949 to the most recent year. Sulfur content of imported sulfuric acid for 1913–20 is estimated based on 100 percent sulfuric acid. No sulfuric acid data are available prior to 1913. Data are from the MR and the MYB.

Exports

Exports report the sulfur content of Frasch sulfur, recovered sulfur, and sulfuric acid. Pyrite export data are not available. Data are not available for Frasch and recovered sulfur exports prior to 1906. For 1906–20, data include some crude sulfur exports. The sulfur content of exported sulfuric acid for 1913–20 is calculated base on 100 percent sulfuric acid. Data are from the MR and the MYB.

Shipments

Shipments are in terms of the sulfur content of mine shipments of Frasch, recovered, and native sulfur; pyrites; byproduct sulfuric acid; and other sulfur forms. Data are from the MR and the MYB.

Stocks

Stocks are in terms of the sulfur content of mine stocks as of the end of year, December 31. Data are from the MR and the MYB.

Apparent Consumption

Sulfur apparent consumption data are in terms of the sulfur content. Data are from the MR and the MYB. Consumption data for 1900–03 include Frasch sulfur, native sulfur, and pyrites. Data for 1904–45 include only Frasch and native sulfur consumption. For 1946 to the most recent year, consumption data include Frasch, recovered, and native sulfur; pyrites; sulfuric acid; and other forms of sulfur.

Unit Value (\$/t)

Unit value is defined as the value of 1 metric ton (t) of sulfur apparent consumption. Data for 1900–08 are estimated by using the sulfur production unit value. For 1909 to the most recent year, data are estimated using the sulfur shipments unit value.

Unit Value (98\$/t)

The Consumer Price Index conversion factor, with 1998 as the base year, is used to adjust unit value in current U.S. dollars to the unit value in constant 1998 U.S. dollars.

World Production

World sulfur production data include all forms of sulfur and are in terms of their sulfur content. Data prior to 1936 include elemental sulfur production from principal producing countries and world pyrite production. Data for 1936 to the most recent year are world production of all forms of sulfur. Data are from the MR and the MYB.

References

U.S. Bureau of Mines, 1927–34, Mineral Resources of the United States, 1924–31.

U.S. Bureau of Mines, 1933–96, Minerals Yearbook, 1932–94.

U.S. Geological Survey, 1901–27, Mineral Resources of the United States, 1900–23.

U.S. Geological Survey, 1995–present, Minerals Yearbook, v. I. (Available via <http://minerals.usgs.gov/minerals/>.)

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For more information, please contact:

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