

STRONTIUM STATISTICS¹
U.S. GEOLOGICAL SURVEY

[All values in metric tons (t) strontium content unless otherwise noted]

Last modification: December 5, 2012

Year	Production	Shipments	Imports	Exports	Stocks	Apparent consumption	Unit value (\$/t)	Unit value (98\$/t)	World production
1916	100	NA	NA	NA	NA	100	NA	NA	NA
1917	1,610	NA	677	NA	NA	2,290	34.3	437	NA
1918	160	NA	1,090	NA	NA	1,250	2.27	24.50	NA
1919	0	NA	885	NA	NA	885	39.6	373	NA
1920	0	NA	447	NA	NA	447	34.6	282	NA
1921	0	NA	326	NA	NA	326	13.5	123	NA
1922	0	NA	196	NA	NA	196	11.2	109	NA
1923	0	NA	1,030	NA	NA	1,030	127	1,210	NA
1924	0	NA	NA	NA	NA	950	150	1,400	NA
1925	0	NA	877	NA	NA	877	173	1,610	NA
1926	0	NA	877	NA	NA	877	173	1,590	NA
1927	0	NA	877	NA	NA	877	173	1,620	NA
1928	0	NA	877	NA	NA	877	173	1,650	NA
1929	0	NA	877	NA	NA	877	173	1,650	NA
1930	0	NA	412	NA	NA	412	254	2,480	NA
1931	0	NA	331	NA	NA	331	252	2,700	NA
1932	0	NA	92	NA	NA	92	230	2,740	NA
1933	0	NA	586	NA	NA	586	56.6	709	NA
1934	0	NA	551	NA	NA	551	48.6	591	NA
1935	0	NA	590	NA	NA	590	50.8	605	NA
1936	0	NA	916	NA	NA	916	66.0	774	NA
1937	0	NA	1,250	NA	NA	1,250	52.7	597	NA
1938	0	NA	200	NA	NA	200	176	2,030	NA
1939	0	NA	1,220	NA	NA	1,200	47.5	557	NA
1940	933	NA	1,100	NA	NA	2,030	26.2	305	NA
1941	1,880	NA	1,710	NA	NA	3,590	38.8	430	NA
1942	1,610	NA	4,120	NA	NA	5,730	35.1	351	NA
1943	3,010	NA	6,720	NA	NA	9,730	37.1	350	NA
1944	1,200	NA	2,310	NA	NA	3,510	37.5	347	NA
1945	1,110	NA	1,470	NA	NA	2,580	34.5	313	NA
1946	97	NA	1,790	NA	NA	1,890	36.9	309	NA
1947	0	NA	5,620	NA	NA	5,620	43.2	316	NA
1948	0	NA	8,670	NA	NA	8,670	64.5	436	NA
1949	0	NA	3,740	NA	NA	3,740	47.3	324	NA
1950	0	NA	3,440	NA	NA	3,440	41.4	280	NA
1951	0	NA	5,590	NA	NA	5,590	54.5	342	19,100
1952	0	NA	3,790	NA	NA	3,790	49.2	303	9,950
1953	20	NA	2,750	NA	NA	2,770	45.1	275	6,140
1954	5	NA	1,310	NA	NA	1,320	40.7	247	4,230
1955	71	NA	2,440	NA	NA	2,510	52.6	320	7,380
1956	1,610	NA	3,760	NA	NA	5,370	51.2	307	16,100
1957	W	W	2,600	NA	NA	2,600	50.3	292	11,800
1958	W	W	2,670	NA	NA	2,670	53.4	301	10,100
1959	W	W	3,240	NA	NA	3,240	69.7	390	9,710
1960	0	0	2,460	NA	NA	2,460	60.8	335	11,500
1961	0	0	3,950	NA	NA	3,950	61.8	337	12,600
1962	0	0	2,980	NA	NA	2,980	63.3	342	11,700
1963	0	0	6,460	NA	NA	6,460	57.6	307	17,000
1964	0	0	8,610	NA	NA	8,610	58.9	310	23,800
1965	0	0	3,880	NA	NA	3,880	57.0	295	14,000
1966	0	0	4,590	NA	NA	4,590	58.2	293	16,700

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1967	0	2,050	2,230	NA	15,600	4,640	55.3	270	10,400
1968	0	1,870	5,140	NA	13,700	6,060	59.5	279	12,800
1969	0	1,430	11,100	NA	12,300	14,400	53.8	239	47,000
1970	0	1,340	14,800	NA	10,900	17,400	55.8	234	59,900
1971	0	NA	18,100	NA	10,900	18,100	64.2	258	112,000
1972	0	NA	12,500	NA	10,900	13,400	84.8	331	100,000
1973	0	7,270	13,800	NA	3,680	14,100	173	635	93,300
1974	0	3,680	19,800	NA	NA	13,600	214	707	98,400
1975	0	0	10,200	NA	NA	12,200	206	624	53,100
1976	0	0	16,900	NA	NA	15,200	226	647	69,400
1977	0	0	18,000	NA	NA	18,000	163	438	95,300
1978	0	0	18,500	NA	NA	18,500	218	545	92,600
1979	0	0	20,300	NA	NA	20,700	260	584	95,800
1980	0	0	16,800	NA	NA	16,400	259	512	95,000
1981	0	0	22,000	NA	NA	17,400	315	565	125,000
1982	0	0	14,100	NA	NA	15,200	277	468	139,000
1983	0	0	20,300	NA	NA	20,600	238	390	152,000
1984	0	0	21,800	NA	NA	21,800	353	554	140,000
1985	0	0	18,600	NA	NA	18,600	487	738	163,000
1986	0	0	17,600	NA	NA	17,600	528	785	153,000
1987	0	0	21,900	NA	NA	21,900	500	717	183,000
1988	0	0	25,900	NA	NA	25,900	494	681	226,000
1989	0	0	22,600	1,640	NA	21,000	578	760	275,000
1990	0	0	33,200	1,660	NA	31,500	518	646	240,000
1991	0	0	24,100	1,040	NA	23,100	555	664	199,000
1992	0	0	32,700	498	NA	32,200	518	602	195,000
1993	0	0	26,900	222	NA	26,700	659	743	201,000
1994	0	0	35,600	959	NA	34,600	554	609	274,000
1995	0	0	33,500	881	NA	32,600	700	749	311,000
1996	0	0	32,100	226	NA	31,900	715	743	306,000
1997	0	0	38,500	236	NA	38,300	782	794	264,000
1998	0	0	35,600	407	NA	35,200	836	836	264,000
1999	0	0	40,500	2,290	NA	38,200	806	789	358,000
2000	0	0	37,400	3,750	NA	33,700	876	830	396,000
2001	0	0	32,100	265	NA	31,800	893	822	399,000
2002	0	0	26,600	68	NA	26,500	983	891	444,000
2003	0	0	24,300	222	NA	24,100	884	784	492,000
2004	0	0	17,300	214	NA	17,100	620	535	525,000
2005	0	0	12,500	38	NA	12,500	793	662	509,000
2006	0	0	9,530	89	NA	9,440	975	788	524,000
2007	0	0	9,090	69	NA	9,020	1,250	983	518,000
2008	0	0	11,500	70	NA	11,400	1,240	939	655,000
2009	0	0	12,300	94	NA	12,200	746	567	398,000
2010	0	0	11,000	72	NA	10,900	1,290	964	404,000
2011	0	0	17,300	18	NA	17,300	1,160	841	375,000

NA Not available. W Withheld to avoid disclosing company proprietary data.

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

Strontium Worksheet Notes

Data Sources

Sources of data for the strontium 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), and Mineral Commodity Summaries (MCS) and its predecessor, Commodity Data Summaries (CDS). The years of publication and corresponding years of data coverage are listed in the References section below.

Production

Production data for 1916 to the most recent year represent the strontium content in strontium minerals, such as celestite, that were produced from domestic mines. Data for 1957–59 were withheld in order to avoid disclosing proprietary data. Data are reported in the MR and the MYB.

Shipments

Shipment data for 1967–70 and 1973–74 represent the quantities of stockpile-grade celestite that were shipped annually from the National Defense Stockpile to domestic recipients. Data for 1957–59 were withheld in order to avoid disclosing proprietary data. Data are reported in the MYB.

Imports

Import data for 1917 to the most recent year represent the strontium in strontium carbonate, chromate, metal, minerals, nitrate, salts, sulfate, and other unspecified compounds that were imported into the United States. For 1924, import data were not available. Data are reported in the MR and the MYB.

Exports

Export data for 1989 to the most recent year represent the strontium content in strontium carbonate exported from the United States. Data are reported in the MYB.

Stocks

Stock data for 1967–73 represent the quantities of stockpile-grade celestite that were held annually within the National Defense Stockpile. Data are reported in the MYB.

Apparent Consumption

Apparent consumption data for 1916–23, 1925–66, and 1984–93 were estimated with the following equation:

$$\text{APPARENT CONSUMPTION} = \text{PRODUCTION} + \text{IMPORTS} - \text{EXPORTS}.$$

Strontium was not produced domestically and import and export data were not available, for 1924. Apparent consumption datum for 1924 was estimated using interpolation based on the import data series from 1923 and 1925. Data are rounded to two significant figures. Apparent consumption data for 1967–77 are reported in the CDS and data for 1978–96 are reported in the MCS. For 1997 to the most recent year, data are reported in the MYB.

Unit Value (\$/t)

Unit value is defined as the value of 1 metric ton (t) of strontium apparent consumption. Unit value data for 1917 to the most recent year were estimated as the total value of strontium imports including, strontium carbonate, chromate, metal, minerals, nitrate, salts, sulfate, and other unspecified compounds, divided by the total tonnage of contained strontium in these imports, data are rounded to three significant figures. The general equation for the weighted average unit value is below.

$$\text{UNIT VALUE} = \text{TOTAL STRONTIUM IMPORT VALUE} / \text{TOTAL STRONTIUM IMPORT TONNAGE}.$$

Import data for 1924 were not available. Unit value was interpolated using the unit value data series from 1923 and 1925. Data are rounded to two significant figures. Fluctuations in the unit value series are not necessarily indicative of changes in value but, instead, may reflect variations in type, quantity, and quality of the strontium imports. This is apparent for the period 1923–33 when the increase in unit value was a result of high imports of value-added intermediate products rather than strontium minerals.

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 production data for 1951 to the most recent year were reported in the MYB. Data for 1951 to the most recent year represent total world production of celestite.

References

- U.S. Bureau of Mines, 1927–33, Mineral Resources of the United States, 1924–31.
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Recommended Citation Format:

- U.S. Geological Survey, [year of last update, e.g., 2005], [Mineral commodity, e.g., Gold] statistics, *in* Kelly, T.D., and Matos, G.R., comps., Historical statistics for mineral and material commodities in the United States: U.S. Geological Survey Data Series 140, Accessed [date], at <http://pubs.usgs.gov/ds/2005/140/>.

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