

**CESIUM STATISTICS<sup>1</sup>**  
**U.S. GEOLOGICAL SURVEY**  
 [All values are in metric tons (t) cesium content unless otherwise noted]  
 Last modification: April 1, 2014

Year	Production	Imports	Stocks	Apparent consumption	Unit value (\$/t)	Unit value (98\$/t)	World production
1959	NA	NA	NA	NA	2,230,000	12,500,000	NA
1960	NA	NA	NA	NA	1,190,000	6,550,000	NA
1961	NA	NA	45	NA	830,000	4,520,000	11
1962	NA	NA	45	NA	830,000	4,470,000	20
1963	NA	0.18	NA	0.18	520,000	2,770,000	NA
1964	NA	0.917	NA	0.917	520,000	2,730,000	NA
1965	0	0.392	NA	0.392	580,000	3,000,000	NA
1966	0	0	NA	0	580,000	2,910,000	NA
1967	0	1.10	NA	1.10	580,000	2,830,000	NA
1968	0	1.41	NA	1.41	580,000	2,720,000	NA
1969	0	2.42	NA	2.42	520,000	2,310,000	NA
1970	0	2.33	NA	2.33	520,000	2,180,000	NA
1971	0	1.93	NA	1.93	520,000	2,090,000	91
1972	0	5.46	NA	5.46	520,000	2,030,000	318
1973	0	1.43	NA	1.43	520,000	1,910,000	249
1974	0	2.10	NA	2.10	520,000	1,720,000	NA
1975	0	1.43	NA	1.43	520,000	1,580,000	73
1976	0	2.04	NA	2.04	520,000	1,490,000	73
1977	0	5.21	NA	5.21	660,000	1,780,000	18
1978	0	6.04	NA	6.04	580,000	1,450,000	NA
1979	0	10.5	NA	10.5	500,000	1,120,000	NA
1980	0	5.36	NA	5.36	500,000	989,000	NA
1981	0	11.1	NA	11.1	500,000	896,000	NA
1982	0	7.55	NA	7.55	660,000	1,110,000	NA
1983	0	8.72	NA	8.72	660,000	1,080,000	NA
1984	0	24.3	NA	24.3	660,000	1,040,000	NA
1985	0	22.9	NA	22.9	720,000	1,090,000	NA
1986	0	17.0	NA	17.0	720,000	1,070,000	NA
1987	0	19.3	NA	19.3	660,000	947,000	NA
1988	0	22.6	NA	22.6	660,000	910,000	NA
1989	0	NA	NA	NA	690,000	907,000	NA
1990	0	NA	NA	NA	690,000	861,000	NA
1991	0	NA	NA	NA	690,000	826,000	NA
1992	0	NA	NA	NA	38,500,000	44,700,000	NA
1993	0	NA	NA	NA	38,500,000	43,400,000	NA
1994	0	NA	NA	NA	38,500,000	42,300,000	NA
1995	0	NA	NA	NA	40,800,000	43,600,000	NA
1996	0	NA	NA	NA	40,800,000	42,400,000	NA
1997	0	NA	NA	NA	43,700,000	44,400,000	NA
1998	0	NA	NA	NA	63,300,000	63,300,000	NA
1999	0	NA	NA	NA	63,300,000	61,900,000	NA
2000	0	NA	NA	NA	63,300,000	59,900,000	NA
2001	0	NA	NA	NA	50,000,000	46,000,000	NA
2002	0	NA	NA	NA	50,000,000	45,300,000	NA
2003	0	NA	NA	NA	52,000,000	46,100,000	NA
2004	0	NA	NA	NA	54,300,000	46,900,000	NA
2005	0	NA	NA	NA	54,300,000	45,300,000	NA
2006	0	NA	NA	NA	55,900,000	45,200,000	NA
2007	0	NA	NA	NA	55,900,000	44,000,000	NA
2008	0	NA	NA	NA	58,400,000	44,200,000	NA
2009	0	NA	NA	NA	62,800,000	47,700,000	NA
2010	0	NA	NA	NA	64,000,000	47,800,000	NA
2011	0	NA	NA	NA	65,900,000	47,800,000	NA
2012	0	NA	NA	NA	68,200,000	48,400,000	NA

NA Not available.

<sup>1</sup>Compiled by T.D. Kelly (retired), W.E. Brooks, D.E. Polyak, M.A. Angulo, and C.A. Tuck.  
 Data are calculated, estimated, or reported. See notes for more information.

## Cesium Worksheet Notes

### Data Sources

The sources of data for the cesium worksheet are the mineral statistics publications of the U.S. Bureau of Mines and the U.S. Geological Survey—Minerals Yearbook (MYB); Mineral Commodity Summaries (MCS) and its predecessor, Commodity Data Summaries (CDS); and Metal Prices in the United States through 1998 (MP98). The years of publication and corresponding years of data coverage are listed in the References section below.

### Production

Production data prior to 1965 are not available. Cesium-bearing ore production data have been reported as “0” since 1965.

### Imports

Import data for 1963–88 were from the MYB. These data represent the summed gross weights of cesium chloride and other miscellaneous cesium compounds that were imported into the United States for consumption purposes. Cesium import data have not been available since 1988.

### Stocks

Stock data for 1961–62 were from the MYB. These data represent the quantity of cesium-containing materials that were held in producer and consumer stockpiles. Stock data have not been reported since 1962.

### Apparent Consumption

Apparent consumption data for 1963–88 were estimated as being equal to production plus imports. It was noted in the MCS that for 1989 to the most recent year, a few thousand kilograms of cesium were consumed annually in the United States.

### Unit Value (\$/t)

Unit value is defined as the value of 1 metric ton (t) of cesium apparent consumption. Unit value data for 1959–65, 1967–77, and 1979–98 were from the MP98. Unit value data for 1999 to the most recent year were from the MCS. Unit value data for 1966 and 1978 were not available from the MP98. Subsequently, unit value data for 1966 and 1978 were interpolated from the unit value data series. The large increase in unit value that occurs in the transition from 1991 to 1992 is the result of a change in the methodology used to determine cesium unit value. From 1959–91, unit value data were estimated to represent the average price of various imported cesium materials of a weight magnitude of at least 1 pound. From 1992 to the most recent year, unit value data were estimated to represent the price of a 1-gram ampoule of 99.98-percent-pure cesium metal. Because of its high purity, 99.98-percent-pure cesium metal has a considerably higher unit value in comparison to the unit value of various cesium materials, such as cesium chloride and other miscellaneous cesium-containing materials.

### 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 1998 U.S. dollars.

### World Production

World production data for 1961–77 were from the CDS and the MCS. These data represent the total estimated quantity of cesium-containing materials that reportedly was produced throughout the world. World production data have not been available since 1977.

### References

- U.S. Bureau of Mines, 1962–77, Commodity Data Summaries, 1962–77.
- U.S. Bureau of Mines, 1962–90, Minerals Yearbook, 1961–88.
- U.S. Bureau of Mines, 1978–95, Mineral Commodity Summaries, 1978–95.
- U.S. Geological Survey, 1997–most recent, Mineral Commodity Summaries 1997–most recent. (Available via <http://minerals.usgs.gov/minerals>.)
- U.S. Geological Survey, 1999, Metal Prices in the United States through 1998.
- U.S. Geological Survey and U.S. Bureau of Mines, 1996, Mineral Commodity Summaries, 1996.

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**For more information, please contact:**

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