

**CESIUM STATISTICS<sup>1</sup>**  
**U.S. GEOLOGICAL SURVEY**

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

Last modification: October 3, 2008

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

<sup>1</sup>Compiled by T.D. Kelly (retired), W.E. Brooks, and D. Polyak.

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. Blank cells in the worksheet indicate that data were not available.

### 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 the years 1963–88 were recorded 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 the years 1961–62 were recorded 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 the years 1963–88 were estimated as being equal to production plus imports. It was noted in the MCS that for the years 1989 to the most recent, 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 the years 1959–65, 1967–77, and 1979–98 were recorded from the MP98. Unit value data for the years 1999 to the most recent were recorded from the MCS. Unit value data for the years 1966 and 1978 were not available from the MP98. Subsequently, unit value data for the years 1966 and 1978 were interpolated from the unit value data series. The large increase in unit value that occurs in the transition from the year 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 the years 1992 to the most recent, 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 per gram in comparison to the unit value of 1 pound 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 the years 1961–77 were recorded 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, 1997–2008, Mineral Commodity Summaries, 1997–2008.
- 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.

### 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, available online at <http://pubs.usgs.gov/ds/2005/140/>. (Accessed [date].)

### For more information, please contact:

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