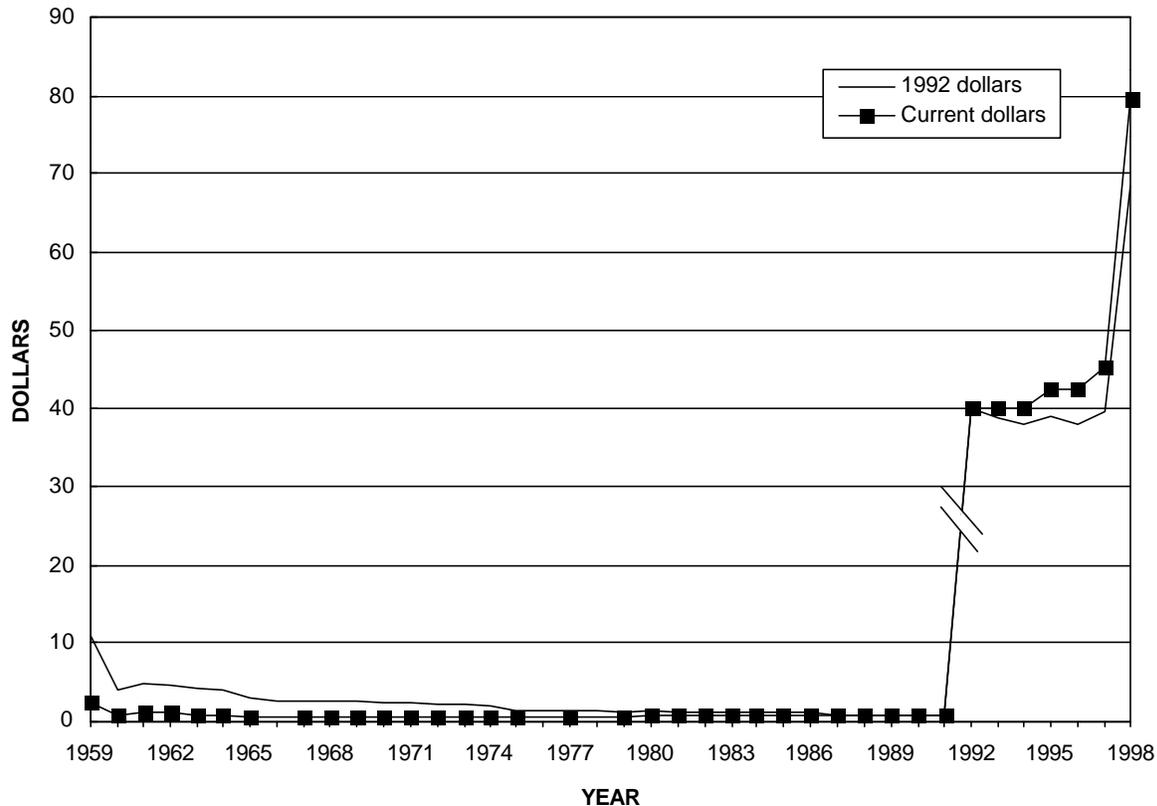


**Annual Average Primary Rubidium Price**  
(Dollars per gram)



Rubidium was discovered in 1861 but had extremely limited industrial use until the 1920's (Perel'man, 1965, p. 1). Small quantities of rubidium-containing minerals were mined in the United States prior to the mid-1960's, but rubidium is no longer mined domestically. Historically, the most important use for rubidium has been in research and development, primarily in chemical and electronic applications.

Owing to the small size of the industry, quoted rubidium prices are those of individual companies. The price varies directly with the purity of the material and inversely with the quantity purchased. Rubidium metal has been marketed in purities ranging from 99.5% to 99.8%. The annual prices presented in the graph and table may not be comparable from year to year owing to differences in purities, quantity of material purchased, and/or the source of the price. For

example, prior to 1963, most of the prices published in the U.S. Bureau of Mines Minerals Yearbooks were for purchases of less than 1 pound of rubidium metal. Some pre-1963 prices, along with the prices published for 1963 through 1988, were for the purchase of at least 1 pound of rubidium metal. The price when buying a 1 pound of metal is significantly lower than the other prices, owing to discounts for the large quantity purchased. For this report, prices were subsequently converted to a per-gram equivalent. The prices for 1992 through 1998 represent the price charged for a 1-gram ampoule of 99.8%-pure rubidium metal.

#### Reference Cited

Perel'man, F.M., 1965, Rubidium and caesium: New York, The Macmillan Co., 144 p.

**Annual Average Primary Rubidium Price**  
(Dollars per gram)

Year	Price	Year	Price	Year	Price	Year	Price
1959	2.26	1969	0.66	1979	0.61	1989	0.74
1960	0.86	1970	0.66	1980	0.74	1990	0.74
1961	1.00	1971	0.66	1981	0.74	1991	0.74
1962	1.00	1972	0.66	1982	0.74	1992	40.00
1963	0.90	1973	0.66	1983	0.74	1993	40.00
1964	0.90	1974	0.66	1984	0.74	1994	40.00
1965	0.63	1975	0.66	1985	0.74	1995	42.40
1966	NA	1976	NA	1986	0.74	1996	42.40
1967	0.63	1977	0.61	1987	0.74	1997	45.40
1968	0.63	1978	NA	1988	0.74	1998	79.70

NA Not available

Note: The data in the table above were compiled from information in various U.S. Bureau of Mines Minerals Yearbooks, U.S. Bureau of Mines Mineral Commodity Summaries, and U.S. Geological Survey Mineral Commodity Summaries. It is believed that the data in the previously mentioned publication represents, and/or were obtained from the following sources:

1959, Average of the price for purities ranging from 99.0% to 99.8% attributed to American Potash & Chemical Corp. & Penn Rare Metals Co.

1960, 99+% Rubidium metal, 10-pound lots.

1961-62, MSA Research Corp. 99.0% rubidium metal, 50-gram lots.

1963-64, Average of the range of prices for 99+% rubidium metal, *in* American Metal Market.

1965, Average of the range of prices for 99.5% rubidium, 1- to 9-pound lots attributed to the Penn Rare Metals Division of Kawecki Chemical Co.

1967-68, Average of the range of prices for 99.5% rubidium, 1- to 9-pound lots attributed to the Penn Rare Metals Division of Kawecki Chemical Co.

1969-75, U.S. Bureau of Mines Minerals Yearbook citation for 99.5+% rubidium metal.

1977, Average of the range of prices for 99.5% rubidium metal attributed to unidentified industry sources.

1979, Average of the range of prices for 99.5% rubidium metal attributed to unidentified industry sources.

1980-85, KBI Division, Cabot Corp., average of the yearend price for technical- and high-purity-grade rubidium metal.

1986-88, KBI Division, Cabot Corp., average of the yearend price for technical- and high-purity-grade rubidium metal in lots under 50 pounds.

1989-91, KBI Division, Cabot Corp.

1992-98, Alfa Aesar and other chemical catalogs. Prices for purchases of 99.8% rubidium metal in 1-gram ampoules.