

*** Name Origin:**

After Berkeley the home town of the University of California.

*** Sources:**

Some compounds have been made and studied. Made by bombarding americium with alpha particles.

*** Uses:**

None known

*** Additional Notes:**

Berkelium, is the eighth member of the actinide transition series, and was the fifth transuranium element synthesized. It was produced by cyclotron bombardment of milligram amounts of ^{241}Am with helium ions at Berkeley, California. The first isotope produced had a mass number of 243 and decayed with a half-life of 4.5 hours. Eleven isotopes are now known and have been synthesized. The existence of ^{249}Bk , with a half-life of 320 days, makes it feasible to isolate berkelium in weighable amounts so that its properties can be investigated with macroscopic quantities. One of the first visible amounts of a pure berkelium compound, berkelium chloride, was produced in 1962. It weighed 3 billionth of a gram. Berkelium probably has not yet been prepared in elemental form, but it is expected to be a silvery metal, easily soluble in dilute mineral acids, and readily oxidized by air or oxygen at elevated temperatures to form the oxide. X-ray diffraction methods have been used to identify the following compounds: BkO_2 , BkO_3 , BkF_3 , BkCl , and BkOCl . As with other actinide elements, berkelium tends to accumulate in the skeletal system. The maximum permissible body burden of ^{249}Bk in the human skeleton is about 0.0004 mg. Because of its rarity, berkelium presently has no commercial or technological use.