

Einsteinium Encyclopedia Article

Einsteinium

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Einsteinium

Einsteinium is an actinide series, manmade, transuranic element denoted by the atomic symbol Es. Its atomic number is 99 and the average atomic weight of its most stable isotope is 252. It is a radioactive material which has fourteen known isotopes.

The discovery of einsteinium was shrouded in mystery. When the first scientific papers describing its properties appeared in 1954, it was indicated that additional information was available about the element, but that this information could not be released. Eventually, the reason for this secrecy was explained. The element had been discovered among the products of the first fusion bomb experiment conducted at Bikini Atoll in the Pacific Ocean in November 1952. Confirmation of the element's existence was later obtained by experiments at the Oak Ridge National Laboratories. Upon irradiation with neutrons, plutonium-239 was converted to plutonium-241 which then decayed in a series of reactions to produce an isotope of element 99, with an atomic weight of 252.

Albert Ghiorso and his co-workers at the University of California at Berkeley chose to name the element *einsteinium*, after Albert Einstein. Although microgram quantities of the element have been prepared, no uses for it have yet been suggested.