

^{242}Cm

In 1949, Seaborg et al. reported the discovery of ^{242}Cm in the paper “The new element curium (atomic number 96)” (1949Se01). ^{242}Cm was produced by bombarding plutonium targets with 32 MeV α particles from the Berkeley 60 in. cyclotron forming ^{242}Cm in the reaction $^{239}\text{Pu}(\alpha, n)$. Following chemical separation, α particles were measured in a parallel-plate ionization chamber. “These isotopes are: (1) 96^{242} , which emits α particles with a range 4.75 ± 0.1 cm in air and decays with a half life of 5.0 ± 0.1 months; and (2) 96^{240} , which emits α particles with a range of 4.95 ± 0.1 cm in air and decays with a half life of 26.8 ± 0.3 days.”

Adapted from reference (2013Fr02)

1949Se01 G. T. Seaborg, R. A. James, and A. Ghiorso, The Transuranium Elements: Research Papers, Book 2, Vol. 14B, paper 22. 2, G. T. Seaborg ed. , p. 1554 (1949).

2013Fr02 C. Fry and M. Thoennessen, At. Data Nucl. Data Tables **99**, 96 (2013).

Please cite this abstract as: “FRIB Nuclear Data Group, *Discovery of Nuclides Project*, Isotope Database, doi:[10.11578/frib/2279152](https://doi.org/10.11578/frib/2279152)”