

## <sup>240</sup>Cm

In 1949, Seaborg et al. reported the discovery of <sup>240</sup>Cm in the paper “The new element curium (atomic number 96)” (1949Se01). <sup>240</sup>Cm was produced by bombarding plutonium targets with 40 MeV  $\alpha$  particles from the Berkeley 60 in. cyclotron forming <sup>240</sup>Cm in the reaction <sup>239</sup>Pu( $\alpha$ ,3n). Following chemical separation,  $\alpha$  particles were measured in a parallel-plate ionization chamber. “These isotopes are: (1) <sup>96</sup>242, which emits  $\alpha$  particles with a range  $4.75\pm 0.1$  cm in air and decays with a half life of  $5.0\pm 0.1$  months; and (2) <sup>96</sup>240, which emits  $\alpha$  particles with a range of  $4.95\pm 0.1$  cm in air and decays with a half life of  $26.8\pm 0.3$  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)”