

²⁴⁹Cf

In 1954, Ghiorso et al. from Berkeley reported the discovery of ²⁴⁹Cf in the article “New isotopes of americium, berkelium and californium” (1954Gh24). ²⁴⁹Bk was produced by neutron irradiation of ²³⁹Pu in the Materials Testing Reactor. ²⁴⁹Cf was then populated in the decay of ²⁴⁹Bk. The resulting activities were measured following chemical separation. “From the amount of Cf²⁴⁹ alpha activity which grew from a known amount of Bk²⁴⁹, the alpha half-life of the Cf²⁴⁹ was found to be about 400 years.” Less than a week later Diamond et al. independently reported a half-life of 550(150) y for ²⁴⁹Cf (1954Di11).

Adapted from reference (2013Fr02)

- 1954Di11 H. Diamond, L. B. Magnusson, J. F. Mech, C. M. Stevens *et al.*, Phys. Rev. **94**, 1083 (1954).
1954Gh24 A. Ghiorso, S. G. Thompson, G. R. Choppin, and B. G. Harvey, Phys. Rev. **94**, 1081 (1954).
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”