

²⁴⁷Md

Münzenberg et al. reported the discovery of ²⁴⁷Md in 1981 in “The new isotopes ²⁴⁷Md, ²⁴³Fm, ²³⁹Cf, and investigation of the evaporation residues from fusion of ²⁰⁶Pb, ²⁰⁸Pb, and ²⁰⁹Bi with ⁴⁰Ar” ([1981Mu12](#)). A ²⁰⁹Bi target was bombarded with a 4.8 MeV/u ⁴⁰Ar beam from the GSI UNILAC accelerator to form ²⁴⁷Md in the (2n) fusion-evaporation reaction. Recoil products were separated with the velocity filter SHIP and implanted in an array of position sensitive surface-barrier detectors which also recorded subsequent α decay and spontaneous fission. “Three new α -emitting isotopes were found: ²⁴⁷Md, ²⁴³Fm, and ²³⁹Cf. ²⁴⁷Md was identified by correlation to its known daughter decay ²⁴³Es.” The measured half-life was $2.9^{+1.7}_{-1.2}$ s.

Adapted from reference ([2013Th02](#))

[1981Mu12](#) G. Munzenberg, S. Hofmann, W. Faust, F. P. Hessberger *et al.*, *Z. Phys. A* **302**, 7 (1981).

[2013Th02](#) M. Thoennessen, *At. Data Nucl. Data Tables* **99**, 312 (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)”