# $^{246}$Md

In 1996, Ninov et al. discovered $^{246}$Md as reported in the paper "Identification of new mendelevium and einsteinium isotopes in bombardments of $^{209}$Bi with $^{40}$Ar" (1996Ni09). $^{40}$Ar beams were accelerated to 4.78, 4.93, and 5.12 A·MeV with the GSI UNILAC accelerator and bombarded $^{209}$Bi targets to form $^{246}$Md in (3n) fusion-evaporation reactions. Recoil products were separated with the velocity filter SHIP and implanted in a position sensitive PIPS detector which also recorded subsequent $\alpha$ decay and spontaneous fission. "From these data we obtained for $^{246}$Md an $\alpha$ energy of $E_\alpha$ = (8740±20) keV and a half-life of $T_{1/2}$ = (1.0±0.4) s, and for $^{242}$Es $E_\alpha$ = (7920±20) keV and $T_{1/2} = (16^{+6}_{-4})$ s."

Adapted from reference (2013Th02)


1996Ni09 V. Ninov, F. P. Hessberger, S. Hofmann, H. Folger *et al.*, Z. Phys. A **356**, 11 (1996).

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"