

^{228}Np

Kreek et al. described the observation of ^{228}Np in the 1994 paper “Electron-capture delayed fission properties of ^{228}Np ” (1994Kr13). A stack of 23 ^{233}U foils were irradiated with a 50 MeV proton beam from the Berkeley 88-inch cyclotron forming ^{228}Np in the (p,6n) reaction. Electron-capture delayed fission was measured following chemical separation. “ECDF was studied in ^{228}Np produced via the $^{233}\text{U}(p,6n)^{228}\text{Np}$ reaction. The fission properties and half-life were measured with a rotating-wheel system. The half-life of this isotope was determined to be 61.4 ± 1.4 s from measurements of the fission activity.” Previously, Kuznetsov et al. had assigned a 60 sec half-life to either ^{227}Np or ^{228}Np (1966Ku13).

Adapted from reference (2013Fr02)

- 1966Ku13 V. I. Kuznetsov, N. K. Skobelev, and G. N. Flerov, Soviet J. Nucl. Phys. **4**, 202 (1967).
1994Kr13 S. A. Kreek, H. L. Hall, K. E. Gregorich, R. A. Henderson *et al.*, Phys. Rev. C **50**, 2288 (1994).
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”