

²³³Np

In 1950, Magnusson et al. discovered ²³³Np as described in the paper “New isotopes of neptunium” (1950Ma14). ²³³Np was populated with 15 MeV deuterons from the Berkeley 60-inch cyclotron on ²³³U targets. Decay and absorption curves were measured with a Geiger counter following chemical separation. In addition, α -spectra were recorded with an argon-filled ionization chamber. “The isotope Np²³³ decays predominantly by electron-capture with a 35 ± 3 -min. half-life; it has an alpha-decay half-life roughly determined to be ca. 10 yr. corresponding to a K/ α -branching ratio of 1.5×10^5 and the alpha-particles have an energy of 5.53 Mev.”

Adapted from reference (2013Fr02)

1950Ma14 L. B. Magnusson, S. G. Thompson, and G. T. Seaborg, Phys. Rev. **78**, 363 (1950).

2013Fr02 C. Fry and M. Thoennessen, At. Data Nucl. Data Tables **99**, 96 (2013).

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