

⁹⁹Pd

“Formation and properties of neutron-deficient isotopes of rhodium and palladium” by Aten Jr and De Vries-Hamerling describes the identification of ⁹⁹Pd in 1955 ([1955At34](#)). Ruthenium targets were bombarded with 24 and 52 MeV α particles from the Amsterdam cyclotron. Beta- and γ -ray spectra were measured following chemical separation. “A number of experiments have been carried out in which the 4.5 hours rhodium, supposed to be ⁹⁹Rh, is milked from the palladium fraction, obtained by irradiating ruthenium with 52 MeV helium ions... The half-life of the palladium mother (⁹⁹Pd if the mass of the 4.5 hours rhodium is correct) was found to be 24 minutes, with an error which may be between 5 and 10 minutes.”

Adapted from reference ([2013Ka01](#))

[1955At34](#) A. H. W. Aten Jr. and T. de Vries-Hamerling, *Physica* **21**, 597 (1955).
[2013Ka01](#) J. Kathawa, C. Fry, and M. Thoennessen, *At. Data Nucl. Data Tables* **99**, 22 (2013).

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