

⁹⁸Pd

“Formation and properties of neutron-deficient isotopes of rhodium and palladium” by Aten Jr and De Vries-Hamerling describes the identification of ⁹⁸Pd 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. “We have since found by means of milking experiments that the palladium-mother of the 9-minutes rhodium can also be obtained from ruthenium irradiated with 24 MeV helium ions, which rules out the mass number 96, as the latter can only be formed by an ($\alpha,4n$) process. Therefore it seems likely that the 9-minutes period is due to ⁹⁸Rh and its 17-minutes mother to ⁹⁸Pd” Earlier, Aten Jr and De Vries-Hamerling had measured a 15(3) min half-life but could only assign it to either ⁹⁶Pd or ⁹⁸Pd ([1953At27](#)).

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

- [1953At27](#) A. H. W. Aten Jr., *Physica* **19**, 1200 (1953).
[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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