^{118}Pd

In 1969, Weiss et al. described the observation of ^{118}Pd in "Nuclear charge distribution in symmetric fission of ^{235}U with thermal neutrons: Yields of ^{117}Ag, ^{118}Ag, and ^{118}Pd" (1969We11). A uranium solution enriched in ^{235}U was irradiated with neutrons from the Vallecitos Nuclear Test Reactor. Decay curves of the resulting activities were measured following chemical separation of the fission fragments. "The corrected counting rate of ^{118}Cd for nine Pd separations, made 1-10 sec after fission, appears in [the figure]. Separation time is defined as starting at the end of irradiation and ending at the midpoint of filtration of the fission solution through the Cu bed. The relationship between the logarithm of the counting rate and the separation time is linear. Analysis of the data by the method of least squares gives a half-life of 3.1±0.3 sec for ^{118}Pd."

Adapted from reference (2013Ka01)

1969We11 H. V. Weiss, N. E. Ballou, J. L. Elzie, and J. M. Fresco, Phys. Rev. **188**, 1893 (1969).

2013Ka01 J. Kathawa, C. Fry, and M. Thoennessen, At. Data Nucl. Data Tables **99**, 22 (2013).

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