

¹⁹²Tl

¹⁹²Tl was discovered in the 1961 paper “Thallium isotopes 192 and 193” by Andersson et al. ([1961An03](#)). Protons with energies between 75 and 105 MeV accelerated by the Uppsala synchro-cyclotron bombarded mercury targets. ¹⁹²Tl was identified in an electro-magnetic mass separator following chemical separation. “With a ¹⁹²Tl sample prepared as described in [the section], the prominent L_{II} line of a 109 keV transition and the K and L lines of a (424±1) keV E2 transition (K/L ~ 2.5) were found, all showing an about 12 min period.” The most accurate value quoted was 11.4(14) min and ascribed to the decay of an isomeric state. The possible identification of the ground state with similar half-life (9.5(15) min) was first reported two years later by Diamond and Stephens ([1963Di10](#)).

Adapted from reference ([2013Fr04](#))

- [1961An03](#) G. Andersson, I. B. Haller, and R. Ringh, J. Inorg. Nucl. Chem. **17**, 15 (1961).
[1963Di10](#) R. M. Diamond and F. S. Stephens, Nucl. Phys. **45**, 632 (1963).
[2013Fr04](#) C. Fry and M. Thoennessen, At. Data Nucl. Data Tables **99**, 365 (2013).

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