

¹⁵⁴Pm

¹⁵⁴Pm was discovered by Wille and Fink in the 1958 paper “Two new promethium isotopes; cross sections of some samarium isotopes for 14.8-MeV neutrons” (1958Wi42). Enriched ¹⁵⁴Sm₂O₃ was bombarded with 14.8-MeV neutrons produced in the reaction ³H(d,n)⁴He from the Arkansas Cockroft-Walton accelerator. Decay and absorption curves were measured. “When highly enriched samples of Sm¹⁵² and Sm¹⁵⁴ are irradiated with 14.8-MeV neutrons, activities having half-lives of 6.5±0.5 min and 2.5 ±0.5 min are observed. On the basis of yields and cross bombardments, these are assigned to new isotopes Pm¹⁵² and Pm¹⁵⁴, respectively.”

Adapted from reference (2012Ma48)

1958Wi42 R. G. Wille and R. W. Fink, Phys. Rev. **112**, 1950 (1958).

2012Ma48 E. May and M. Thoennessen, At. Data Nucl. Data Tables **98**, 960 (2012).

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