

## <sup>92</sup>Tc

The first identification of <sup>92</sup>Tc was made in 1964 by van Lieshout et al., presented in their paper “The Level Structure of Mo<sup>92</sup>” (1964Va05). An enriched <sup>92</sup>Mo target was bombarded with 17 MeV deuterons from the synchrotron at the Instituut voor Kernfysisch Onderzoek, Amsterdam. <sup>92</sup>Tc was identified with a scintillation spectrometer following chemical separation. “The total decay energy of Tc<sup>92</sup> to Mo<sup>92</sup> is 7.9±0.2 MeV, a value which is substantially in agreement with the one deduced from beta decay energy systematics.” A 4.5(5) min half-life was reported earlier and was assigned to either <sup>92</sup>Tc or <sup>93</sup>Tc (1948Mo18). In another measurement the 4.5 min half-life was assigned to <sup>93</sup>Tc while a 47 min half-life was assigned to <sup>92</sup>Tc (1948Ku26).

Adapted from reference (2012Ny02)

- 1948Ku26 D. N. Kundu and M. L. Pool, Phys. Rev. **74**, 1775 (1948).  
1948Mo18 E. E. Motta and G. E. Boyd, Phys. Rev. **73**, 1470 (1948).  
1964Va05 R. van Lieshout, S. Monaro, G. B. Vingiani, and H. Morinaga, Phys. Lett. **9**, 164 (1964).  
2012Ny02 A. Nystrom and M. Thoennessen, At. Data Nucl. Data Tables **98**, 95 (2012).

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