

¹⁸N

¹⁸N was observed by Chase et al. in 1964 in “New isotope of nitrogen: N¹⁸” (1964Ch19). Neutrons of 19 MeV from the reaction T(d,n)⁴He produced by the Lockheed 3.5 MeV Van de Graaff accelerator irradiated a water sample containing enriched ¹⁸O. ¹⁸N was formed in the (n,p) charge exchange reaction. Gamma- and β-rays of the activated samples were measured with NaI(Tl) scintillators and a plastic scintillator ΔE-E telescope, respectively. “This decay curve, along with many other similar curves, gives a weighted average half-life for N¹⁸ of 0.63±0.03 sec.”

Adapted from reference (2012Th01)

1964Ch19 L. F. Chase Jr., H. A. Grench, R. E. McDonald, and F. J. Vaughn, Phys. Rev. Lett. **13**, 665 (1964).

2012Th01 M. Thoennessen, At. Data Nucl. Data Tables **98**, 43 (2012).

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