

¹³⁴Sb

The discovery of ¹³⁴Sb was reported in the 1967 article “A new antimony delayed neutron precursor,” by Tomlinson and Hurdus (1967To05). ¹³⁴Sb was produced by thermal-neutron induced fission of ²³⁵U at the Harwell LIDO reactor. Decay curves were measured with BF₃ counters surrounded by paraffin following rapid chemical separation. “The half-life obtained by Strom et al. for the half-life of ¹³⁴Sb is 11±1 s. Within experimental error, this latter value is identical to the half-life found in the present work and the mass of the delayed neutron precursor is accordingly assigned to 134.” The reference to Strom et al. mentioned in the quote listed as “to be published” was submitted two months later (1968De18). The measured half-life corresponds to an isomeric state and the ground state (0.85(10) s) was reported five years later by Kerek et al. (1972Ke21).

Adapted from reference (2013Ka01)

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