

⁸³Y

⁸³Y was discovered by Maxia et al. in the 1962 paper “The Neutron-Deficient Yttrium Isotopes ⁸²Y, ⁸³Y and ⁸⁴Y” (1962Ma44). A beam of approximately 120 MeV ¹²C from the Berkeley Heavy-Ion Linear Accelerator was used to bombard powdered arsenic metal targets. The isotopes were produced in the fusion evaporation reactions ⁷⁵As(¹²C,4n)⁸³Y. Half-lives were determined by measuring β -particles with an end-window, flowing methane-proportional counter. “Consideration of the data from several experiments utilizing different production modes of yttrium and different milk times leads to an average value of 8 ± 2 min for the half-life of ⁸³Y.” A previously reported half-life of 3.5(5) h (1952Ca29) for ⁸³Y was incorrect.

Adapted from reference (2012Ny02)

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