

⁷⁰Br

Alburger discovered ⁷⁰Br in 1978 and reported the results in “Half-Lives of ⁶²Ga, ⁶⁶As, and ⁷⁰Br” (1978A123). A 44 MeV ¹⁴N beam accelerated by the Brookhaven MP Tandem Van de Graaff bombarded an enriched ⁵⁸Ni foil. ⁷⁰Br was produced in the fusion-evaporation reaction ⁵⁶Ni(¹⁴N,2n)⁷⁰Br and identified by measuring the β -ray decay curve following activation with an NE102 scintillation detector. “Six runs were made on ⁷⁰Br totaling about 50 hours of data taking. By analysis of the results... the value adopted for the half-life of ⁷⁰Br is 80.2±0.8 ms. Although firm proof is lacking that the observed activity is in fact ⁷⁰Br, the assignment is highly probable because of the agreement of both the measured yield and the half-life with calculated estimates.”

Adapted from reference (2012Gr02)

1978A123 D. E. Alburger, Phys. Rev. C **18**, 1875 (1978).

2012Gr02 J. L. Gross, J. Claes, J. Kathawa, and M. Thoennessen, At. Data Nucl. Data Tables **98**, 75 (2012).

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