^{9}Be(^{40}Ar,^{19}B) 2003Oz01,2003Ba47

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	G. C. Sheu, J. H. Kelley	ENSDF	25-Oct-2018

2000Oz01: A beam of ^{40}Ar at E≈1 GeV/nucleon impinged on a Be target (4007 mg/cm^2) at the GSI SIS/FRS facility. The ^{19}B fragments of interest were identified using the B_ρ settings along with scintillators to measured ΔE and time-of-flight. The ^{19}B production cross section was measured as roughly 4.86×10^{-10} b.

2003Ba47: Production yields for fragmentation of 140 MeV/nucleon ^{40}Ar projectiles on a berylium target were measured at the MSU/NSCL. The isotopes were separated with the A1900 separator and were identified using time-of-flight and ΔE information. The production cross section for ^{19}B was extrapolated as 2.35×10^{-6} mb or 2.13×10^{-8} mb using EPAX 1.0 (1990Su17) and EPAX 2.15 (2000Su04) empirical parametrizations, respectively.

2003Oz01: Beams of E(^{40}Ar)=94 MeV/nucleon ions bombarded either a Be target (471 mg/cm^2) or a Ta target (686 mg/cm^2) at RIKEN/RIPS. The fragments were collected with Δp/p=6% and ΔΩ=5 msr. Reaction products were identified based on ΔE, time-of-flight and magnetic rigidity (B_ρ). A production cross section of ^{19}B $\sigma_F=3.4\times10^{-11}$ b *11* on a Be target was measured.

^{19}B Levels

E(level)
0