U(p,^{13}B),^{232}Th(p,^{13}B) 1973Bo30

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	J. H. Kelley, C. G. Sheu and J. E. Purcell	NDS 198,1 (2024)	1-Aug-2024

1973Bo30: Proton spallation cross sections on a uranium target, were measured at the Bevatron using 4.8 GeV protons. Reaction products including ^{13}B were identified using ΔE vs E and ΔE vs time-of-flight techniques.

1991Re02: Spallation products from 800 MeV proton bombardment of a ^{232}Th target were captured by a transport line with a mass-to-charge filter and transferred to the TOFI spectrometer at LAMPF. For ^{13}B, the β-delayed neutron probability %β-n=0.3% *1* was deduced and $T_{1/2}$ = 11 ms *9* was measured. A reanalysis of the (1991Re02) data, with additional data was published in the (1994ReZZ). The reanalysis indicates Pn=0.25% *15* and $T_{1/2}$=16.7 ms *6*. See also (1994KiZU, 1995ReZZ, 2008ReZZ) for different lifetime values deduced from this dataset.

^{13}B Levels

E(level)	$T_{1/2}$	Comments
0	16.7 ms *6*	$T_{1/2}$: From (1994ReZZ).