

Adopted Levels

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	M. S. Basunia	NDS 107,2323 (2006)	15-Mar-2006

$S(p)=2.9\times 10^3$ syst; $Q(\alpha)=8.22\times 10^3$ 5 [2012Wa38](#)

Note: Current evaluation has used the following Q record 2900 syst 8100 syst [2003Au03](#).

$\Delta S(p)=600$ (syst), $\Delta Q(\alpha)=500$ (syst) [2003Au03](#).

^{237}Cf isotopes produced by $^{206}\text{Pb}(^{34}\text{S},3n)$ and $^{207}\text{Pb}(^{34}\text{S},4n)$ reactions ([1995La09](#)). Target: Enriched ^{206}Pb (94.9%) and ^{207}Pb (93.2%), targets were on cooled copper cylinder with rotational facility. Projectile: ^{34}S , $E=215$ MeV. Detector: mica fission-fragment detectors. Measured: spontaneous fission events.

 ^{237}Cf Levels

E(level)	$T_{1/2}$	Comments
0.0	2.1 s 3	<p>%SF\approx10 syst</p> <p>$T_{1/2}$: from 1995La09: deduced using the maximum-likelihood method, the uncertainty is statistical only. In Table 1 (1995La09), $T_{1/2}=2.4$ s +0.8 -0.4 from $^{207}\text{Pb}(^{34}\text{S},4n)$ and $T_{1/2}=1.9$ s 3 from $^{206}\text{Pb}(^{34}\text{S},3n)$ are presented.</p> <p>%SF: estimated using a cross section value of 0.5 nb (but 0.05 nb in 1995La09, Table 1) for the $^{206}\text{Pb}(^{34}\text{S},3n)$, $^{207}\text{Pb}(^{34}\text{S},4n)$ reactions on the assumption that SF Branching is dependent on the absolute cross sections (1995La09).</p>