Adopted Levels   2004Ti06

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	J. H. Kelley, C. G. Sheu, J. L. Godwin, et al.	NP A745 155 (2004)	31-Mar-2004

$Q(\beta^-)=1.598\times10^4$ *5*; $S(n)=-1.25\times10^3$ *5*   2012Wa38

Note: Current evaluation has used the following Q record 14816   60-100   60   2003Au03.

The ground state of ^{9}He is poorly defined. At present the description of the ground state is dominated by observations reported in $^{9}\text{Be}(^{11}\text{Be},^{8}\text{He}+\text{n})$ (2001Ch31) which find that ^{9}He is unstable to $^{8}\text{He}+\text{n}$ decay by <0.20 MeV; Δ' M=39.770 MeV *60*.

Other reactions reporting states which had been previously identified with the ^{9}He ground state are $^{9}\text{Be}(\pi^-,\pi^+)$ (1987Se05) and $^{9}\text{Be}(^{14}\text{O},^{14}\text{C})$ (1999Bo26). In these previous measurements, it appears that an excited state at $^{9}\text{He}^*(1.0)$ [≈1.2 MeV above the $^{8}\text{He}+\text{n}$ threshold] had been observed and identified as the ground state.

^{9}He Levels

Cross Reference (XREF) Flags

A	$^{9}\text{Be}(^{11}\text{Be},^{8}\text{He}+\text{n})$
B	$^{9}\text{Be}(\pi^-,\pi^+)$
C	$^{9}\text{Be}(^{14}\text{C},^{14}\text{O})$:1
D	$^{9}\text{Be}(^{14}\text{C},^{14}\text{O})$:2

E(level)	J^{π}	$T_{1/2}$	XREF	Comments
0.0	$1/2^+$		A	%n=100 T=5/2
≈1.1×10³ [†]	$1/2^-$	0.10 MeV *6*	BCD	Γ: From $^{9}\text{Be}(^{14}\text{C},^{14}\text{O})$ (1999Bo26). Decay mode is probably %n=100 based on $Q(\beta^-)$ value; no mode is reported.
≈2.26×10³ [†]		0.7 MeV *2*	B D	Γ: From $^{9}\text{Be}(^{14}\text{C},^{14}\text{O})$ (1999Bo26). Decay mode is probably %n=100 based on $Q(\beta^-)$ value; no mode is reported.
4.20×10³ ? [†] *15*			D	Decay mode is probably %n=100 based on $Q(\beta^-)$ value; no mode is reported.
≈5.0×10³ [†]			B D	Decay mode is probably %n=100 based on $Q(\beta^-)$ value; no mode is reported.
8.0×10³ ? [†]			B	Decay mode is probably %n=100 based on $Q(\beta^-)$ value; no mode is reported.

[†] Decay mode not specified.