

Table 9.2 from (84AJ01): Energy levels of ${}^9\text{Be}$

E_x ^a (MeV \pm keV)	$J^\pi; T$	$\Gamma_{\text{c.m.}}$ (keV)	Decay	Reactions
g.s.	$\frac{3}{2}^-; \frac{1}{2}$		stable	2, 3, 4, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45
1.685 \pm 15	$\frac{1}{2}^+$	≈ 150	γ, n	9, 10, 13, 16, 18, 19, 21, 23, 24, 32, 33, 36, 40, 41
2.4294 \pm 1.3	$\frac{5}{2}^-$	0.77 \pm 0.15	γ, n, α	9, 10, 12, 16, 17, 18, 19, 21, 22, 23, 24, 26, 32, 35, 36, 39, 40, 41, 42, 43
2.78 \pm 120	$\frac{1}{2}^-$	1080 \pm 110	n	9, 12, 42
3.049 \pm 9	$\frac{5}{2}^+$	282 \pm 11	γ, n	9, 13, 16, 18, 19, 20, 21, 23, 24, 32, 36, 39, 40, 41
4.704 \pm 25	$(\frac{3}{2})^+$	743 \pm 55	γ, n	9, 16, 19, 20, 21, 23, 24, 34, 40, 42
6.76 \pm 60	$\frac{7}{2}^-$	1540 \pm 200	γ, n	9, 16, 17, 18, 19, 20, 21, 23, 24, 35, 41
7.94 \pm 80	$(\frac{1}{2}^-)$	≈ 1000		12, 19
11.283 \pm 24	$(\frac{3}{2}^-)$	575 \pm 50	n	9, 12, 19, 24, 35, 36
11.81 \pm 20	$T = \frac{1}{2}$	400 \pm 30	γ, n	9, 13, 39, 42
13.79 \pm 30	$T = \frac{1}{2}$	590 \pm 60	γ, n	9, 16, 39
14.3929 \pm 1.8	$\frac{3}{2}^-; \frac{3}{2}$	0.381 \pm 0.033	γ, n, α	9, 16, 23, 36, 39
14.4 \pm 300		≈ 800		19, 36
15.10 \pm 50			γ	16, 39
15.97 \pm 30	$T = \frac{1}{2}$	≈ 300	γ	16, 39
16.671 \pm 8		41 \pm 4	γ	9, 16, 19, 36
16.975 \pm 2	$\frac{1}{2}^-; \frac{3}{2}$	< 0.47	γ, n, p, d	4, 5, 6, 16
17.298 \pm 7	$(\frac{5}{2})^-$	200	γ, n, p, d, α	5, 6, 7, 13, 16, 19
17.493 \pm 7	$\leq \frac{7}{2}^+$	47	γ, n, p, d, α	5, 6, 7, 16, 19
18.02 \pm 50			γ	16

Table 9.2 from (84AJ01): Energy levels of ${}^9\text{Be}$ (continued)

E_x ^a (MeV \pm keV)	$J^\pi; T$	$\Gamma_{\text{c.m.}}$ (keV)	Decay	Reactions
18.58 \pm 40			γ, n, p, d, α	6 , 16
19.20 \pm 50		310 \pm 80	n, p, d, t	1 , 6 , 19
19.51 \pm 50			γ	13 , 16
(19.9 \pm 200)			γ, n	13 , 19
(20.47 \pm 40)			γ, p, d	13 , 19
20.74 \pm 30		\approx 1000	γ, n, p, t	1 , 13 , 16
(21.4 \pm 200)			γ, n	13 , 19
(22.4 \pm 200)		broad	γ, n	13 , 19
(23.8 \pm 200)			γ, n	13 , 34
(27.0 \pm 500)		broad	γ, n	13
^b				

^a See also reactions [14](#) and [16](#).

^b See footnote ⁱ in [Table 9.8](#).