

Table 10.15 from (1984AJ01):
Levels of ^{10}B from $^9\text{Be}(\text{d}, \text{n})$ and $^9\text{Be}({}^3\text{He}, \text{d})$ ^a

E_x (MeV) ^a	$^9\text{Be}(\text{d}, \text{n})$ ^b		$^9\text{Be}({}^3\text{He}, \text{d})$ ^c		$J^\pi; T$
	l_p	S_{rel}	l_p	$(2J + 1)C^2S$	
0	1	1.0	1	3.30	$3^+; 0$
0.72	1	1.97	1	2.76	$1^+; 0$
1.74	1	1.42	1	1.20	$0^+; 1$
2.15	1	0.41	1	0.82	$1^+; 0$
3.59	1	0.10	1	0.29	$2^+; 0$
4.77	(≥ 2)		1^+	0.10	$3^+; 0$
			(3) ^e	≤ 0.82	
5.11	0	0.14	$0 + 2$	0.34, 0.14	$2^-; 0$
5.16	}	0.43	1	0.86	$2^+; 1$
5.18					$1^+; 0$
5.92	1	0.49	1	2.05	$2^+; 0$
6.03			(3) ^e	≤ 0.20	4^+
6.13	(2)		(2) ^f	3.04	3^-
6.56	(3)		(2) ^f	2.01	$(4)^-$
6.89 ± 15	(1)				$1^-; 0 + 1$
7.00 ± 15	(1)				$(1, 2)^+; (0)$
7.48 ± 15	d				^g
7.56 ± 25	d				$0^+; 1$
(7.85 ± 50)	d				1^-
(8.07 ± 50)	d				$(2^-; 0)$
(8.12 ± 50)	d				

^a Values without uncertainties are from Table 10.5; others are from Table 10.15 in (1979AJ01). See that table for additional information and for references.

^b S_{rel} from experiment at $E_d = 12.0 - 16.0$ MeV. (1974KE06) have reanalyzed the results for $^{10}\text{B}^*(0, 1.74)$ and find S_{rel} (ave.) = 1.0 and 1.36. For values at other energies see Table 10.15 in (1979AJ01).

^c (1980BL02; $E({}^3\text{He}) = 18$ MeV); DWBA analysis; values shown are those obtained with one of the two optical model potentials used in the analysis. For earlier (${}^3\text{He}, \text{d}$) results see Table 10.17 in (1979AJ01).

^d State observed in (d, n) reaction; l_p not determined.

^e Angular distribution poorly fitted by DWBA (1980BL02).

^f See (1980BL02) for a discussion of these two states, including a comparison with the (d, n) data: $l_p = 2$ is slightly preferred to $l_p = 1$ on the basis of observed strengths. Neither $l_p = 2$ or 1 gives a good DWBA fit.

^g Group shown corresponds to unresolved states in ^{10}B .