

Table 17.5 from (1971AJ02): Energy levels of ^{17}O

E_x in ^{17}O (MeV \pm keV)	$J^\pi; T$	τ_m or $\Gamma_{\text{c.m.}}$ (keV)	Decay	Reactions
0	$\frac{5}{2}^+; \frac{1}{2}$			1, 2, 5, 6, 8, 9, 10, 12, 14, 19, 20, 22, 29, 30, 31, 32, 33, 34, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48
0.87081 ± 0.22	$\frac{1}{2}^+$	$\tau_m = 258.6 \pm 2.6$ psec	γ	1, 2, 5, 6, 8, 9, 10, 14, 19, 20, 22, 29, 31, 32, 34, 41, 42, 43, 44, 45, 46, 47, 48
3.055 ± 2.5	$\frac{1}{2}^-$	$\tau_m = 120_{-60}^{+80}$ fsec	γ	5, 6, 8, 9, 12, 14, 22, 29, 31, 34, 41, 42, 45, 46
3.841 ± 3	$\frac{5}{2}^-$	$\tau_m \leq 25$ fsec	γ	5, 6, 8, 9, 12, 14, 19, 20, 29, 31, 37, 41, 42, 45, 46
4.554 ± 6	$\frac{3}{2}^-$	$\Gamma = 40 \pm 5$	n	5, 6, 8, 9, 14, 19, 20, 23, 29, 37, 41, 42, 46
5.083 ± 10	$\frac{3}{2}^+$	95 ± 5	n	8, 9, 14, 19, 23, 29, 41, 42
5.217 ± 5	$\frac{7}{2}^- \rightarrow \frac{11}{2}^-$	< 8		6, 8, 9, 14, 19, 20, 29, 37, 41, 46
5.377 ± 3	$\frac{3}{2}^-$	28 ± 7	n	6, 14, 19, 23, 29, 41, 42, 46
5.696 ± 3	$\frac{7}{2}^-$	3.4	n	6, 8, 9, 14, 19, 20, 23, 29, 37, 41, 46
5.731 ± 3	$\frac{1}{2}^+$	< 1	n	5, 6, 8, 9, 14, 23, 29, 46
5.867 ± 3	$\frac{3}{2}^+$	6.6	n	6, 8, 9, 14, 19, 23, 29, 46
5.935 ± 3	$\frac{1}{2}^-$	23 ± 10	n	5, 8, 9, 14, 19, 23, 29, 46
6.356 ± 8	$\frac{1}{2}^+$	135	n	5, 6, 14, 19, 23
6.859 ± 3		< 1	n	5, 6, 8, 9, 14, 19, 23, 29, 46

Table 17.5 from (1971AJ02): Energy levels of ^{17}O (continued)

E_x in ^{17}O (MeV \pm keV)	$J^\pi; T$	τ_m or $\Gamma_{\text{c.m.}}$ (keV)	Decay	Reactions
6.970 \pm 3		< 1	n	8, 9, 14, 19, 23, 46
7.166 \pm 2.4	$\frac{5}{2}^-$	2.7 \pm 1	n, α	5, 7, 8, 9, 14, 19, 23, 28
7.29	$\frac{3}{2}^+$	500	n	23
7.378 \pm 2.4	$\frac{5}{2}^+$	0.5	n, α	5, 6, 7, 8, 9, 14, 20, 23, 28, 46
7.379 \pm 3	$\frac{5}{2}^-$	1.1	n	5, 6, 8, 9, 14, 19, 23, 28
(7.53)	$(\frac{3}{2})$	600	n	23
7.569 \pm 7	$\frac{7}{2}^-$	≤ 4	n, α	5, 6, 7, 8, 9, 14, 19, 28
7.67	$\frac{3}{2}^-$	400	n	19, 23
7.684 \pm 5	$\frac{7}{2}^-$	18	n, α	5, 7, 8, 9, 23, 28
(7.69)	$\frac{3}{2}^+$	3	n	8, 9, 23, 28
7.751 \pm 14	$(\frac{11}{2}^-)$			6, 8, 19, 20, 21, 37, 46
7.947 \pm 20	$\frac{1}{2}^-$	79 \pm 10	n, α	7, 23, 28
8.090 \pm 9	$\frac{3}{2}^+$	71 \pm 8	n, α	7, 19, 20, 23, 28
8.213 \pm 9	$\frac{3}{2}^-$	71 \pm 5	n, α	7, 19, 20, 23, 28, 29
8.347 \pm 5	$\frac{1}{2}^+$	9 \pm 3	n, α	7, 23, 28, 29
8.402 \pm 5	$\frac{5}{2}^+$	4 \pm 3	n, α	7, 23, 28
8.467 \pm 5	$\frac{7}{2}^+$	7 \pm 3	n, α	5, 7, 8, 9, 20, 23, 28
8.502 \pm 5	$\frac{5}{2}^-$	5 \pm 3	n, α	7, 8, 9, 19, 23, 28
(8.568 \pm 10)			n	23
8.703 \pm 8	$\frac{3}{2}^-$	50 \pm 3	n, α	6, 7, 8, 9, 19, 23, 28
8.87 \pm 20	$\frac{7}{2}^-$	6	n, α	7, 8, 9, 19, 20, 23
8.90 \pm 15	$\frac{3}{2}^+$	101 \pm 3	n, α	6, 7, 8, 9, 19, 20, 28
8.961 \pm 4	$\frac{7}{2}^-$	21 \pm 3	n, α	6, 7, 8, 9, 19, 20, 23, 28
9.14 \pm 30	$(\frac{9}{2}^-)$			6, 19, 20, 21
9.16 \pm 15	$\frac{1}{2}^-$	4 \pm 3	n, α	7, 28
9.18	$\frac{7}{2}^-$	3	α	7
9.19	$\frac{5}{2}^+$	5.5 \pm 1	n, α	7, 23, 28

Table 17.5 from (1971AJ02): Energy levels of ^{17}O (continued)

E_x in ^{17}O (MeV \pm keV)	$J^\pi; T$	τ_m or $\Gamma_{\text{c.m.}}$ (keV)	Decay	Reactions
9.45	$\geq \frac{3}{2}$	140	n	23
9.50	$\frac{5}{2}^-$	15 ± 1	n, α	5, 7, 19, 28
9.705 ± 5	$\frac{7}{2}^+$	16 ± 1	n, α	6, 7, 19, 23
9.78	$\frac{3}{2}^+$	45	n, α	7, 19, 20, 23
9.88	$\frac{9}{2}^+$	12 ± 1	n, α	6, 7, 19, 20, 23, 28
9.95	$\frac{5}{2}^+$	107	n, α	7, 28
10.13	$\frac{5}{2}^+$	138	n, α	7
10.157 ± 7	$\frac{7}{2}^-$	42	n, α	7, 19, 23, 28
10.24	$\frac{7}{2}^+$	122	n, α	7, 28
10.32	$(\frac{5}{2}^+, \frac{7}{2}^-)$		n, α	7
10.422 ± 10		14 ± 3	n, α	7
10.49	$(\frac{5}{2}^+, \frac{7}{2}^-)$	75 ± 30	n, α	7
10.549 ± 6	$(\frac{7}{2}^-, \frac{9}{2}^+)$	47 ± 15	n, α	7, 19, 23, 24, 28
10.70	$(\frac{7}{2}^+)$	≤ 25	α	6, 7
10.769 ± 10	$(\frac{1}{2}^+, \frac{7}{2}^-)$	80 ± 20	n, α	7, 24, 28
10.909 ± 7	$\frac{5}{2}$	57 ± 15	n, α	7, 19, 23, 24, 28
11.026 ± 10	$T = \frac{1}{2}$	45 ± 10	n, α	7, 19, 24, 28
11.082 ± 6	$(\frac{1}{2})^-; \frac{3}{2}$	< 20		6, 19, 24, 41, 43
11.225 ± 10		100 ± 30	n, α	5, 7, 19, 28
11.51	$\geq \frac{3}{2}$	190	n, (α)	19, 23, 24, 28
11.615 ± 10		120 ± 30	n, α	7, 19, 24, 28
11.748 ± 10		40 ± 25	n, α	7, 28
11.813 ± 15		12 ± 3	n, α	6, 7, 28
11.97	$\geq \frac{3}{2}$	270	n	23
12.002 ± 15			n, α	6, 7, 24, 28
12.11 ± 20		150 ± 50	n, α	6, 7, 24
12.271 ± 15		100 ± 30	n, α	6, 7, 28
12.38 ± 20	$\geq \frac{1}{2}$	130	n, α	7, 23
12.417 ± 15			n, α	7
12.471 ± 5	$(\frac{3}{2})^-; \frac{3}{2}$		n	6, 24, 43

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E_x in ^{17}O (MeV \pm keV)	$J^\pi; T$	τ_m or $\Gamma_{\text{c.m.}}$ (keV)	Decay	Reactions
12.592 \pm 15		75 \pm 30	n, α	7, 23
12.666 \pm 15		\approx 75	n, α	7, 23, 24
12.81 \pm 25			n, α	7
12.92 \pm 20		\gtrsim 150	n, α	7
12.950 \pm 8	$\frac{1}{2}^+; \frac{3}{2}$			6, 24, 43
12.994 \pm 8	$T = \frac{3}{2}$		n, α	6, 7, 43
13.073 \pm 15		16 \pm 4	n, α	7
13.481 \pm 15		\approx 120	n, α	7
13.606 \pm 15		250 \pm 100	n, α	7, 23
13.640 \pm 5	$(\frac{5}{2})^+; \frac{3}{2}$			6, 43
14.219 \pm 8	$T = \frac{3}{2}$			29, 43
14.282 \pm 12	$T = \frac{3}{2}$			6, 29, 43
14.62	$(\geq \frac{3}{2})$	340	n	6, 23
14.80	$(T = \frac{3}{2})$			6
14.99	$(\frac{5}{2}^+)$	\approx 150	n, d, α	17, 23
15.101 \pm 8	$T = \frac{3}{2}$		p, d, α	16, 17, 43
15.6		\approx 200	p, d, α	16, 17
20.5	$(\frac{1}{2}^+)$		n, ^3He	11, 23
21.1			n, ^3He	11
21.7	$(\frac{5}{2}^+)$		$^3\text{He}, \alpha$	11
22.1	$(\frac{1}{2}^-, \frac{3}{2}^-, \frac{7}{2}^-)$		n, $^3\text{He}, \alpha$	11
23.0	$(\frac{1}{2}^+)$		^3He	11