

Table 17.11 from (1986AJ04): Decay properties of the lowest $T = \frac{3}{2}$ states in $A = 17$ ^a

		¹⁷ O*(11.0787 ± 0.0008) ^b	¹⁷ F*(11.1928 ± 0.0021) ^c
J^π		$\frac{1}{2}^-$	$\frac{1}{2}^-$
$\Gamma_{\text{c.m.}}$ (keV)		2.4 ± 0.3 ^b	0.24 ± 0.04
Branching ratio (%) to			
¹⁶ O* (MeV)	J^π		
0	0 ⁺	81 ± 6	9.3 ± 1.3
6.05	0 ⁺	5 ± 2	< 3
6.13	3 ⁻		22 ± 2
6.92	2 ⁺		24 ± 6
7.12	1 ⁻		44 ± 4
¹³ C + α_0 or ¹³ N + α_0		7 ± 1 ^d	< 7
Partial widths [Γ_{p} or Γ_{n}] to			
¹⁶ O(0)		1.88 ± 0.12 keV	19 ± 3 eV
¹⁶ O*(6.05)			< 8 eV
¹⁶ O*(6.13)		0.12 ± 0.05 keV	45 ± 14 eV ^e
¹⁶ O*(6.92)			49 ± 19 eV ^e
¹⁶ O*(7.12)			90 ± 27 eV ^e
Γ_{α_0}		0.162 ± 0.030 keV ^f	< 19 eV ^d
Γ_{γ_1}		21.6 ± 3.6 eV ^f	6.0 ± 2.5 eV
$\theta^2(\text{g.s.})/\theta^2(6.13)$		0.31 ± 0.14	0.065 ± 0.019

^a See also Table 2 in (1973AD02) and reaction 8.

^b (1981HI01) [see for IMME parameters for six $T = \frac{3}{2}$ states].

^c For references see Table 17.11 in (1982AJ01).

^d (1976MC11).

^e Note that the total width is 200 ± 40 eV.

^f Using $[\Gamma_{\alpha_0}/\Gamma_{\text{n}_0}]^{1/2}/\Gamma_{\text{tot}} = 0.23$ (1976MC11), $\Gamma_{\alpha_0}\Gamma_{\gamma_1}/\Gamma_{\text{tot}} = 1.46 \pm 0.13$ eV (1983RA29) and the Γ_{n_0} and Γ_{tot} values shown above, these values are calculated for Γ_{α_0} and Γ_{γ_1} , and $\delta = 3.1 \pm 1.9$. However these values do not take into account any error in the measurement of $[\Gamma_{\alpha_0}\Gamma_{\text{n}_0}]^{1/2}/\Gamma_{\text{tot}}$ [F.C. Barker, private communication]. I am also indebted to C. Rangacharyulu for his comment [(A later communication with Dr. A.B. McDonald suggests that $\Gamma_{\alpha_0}\Gamma_{\text{n}_0}/\Gamma_{\text{tot}} = 0.27$ keV [$\pm \approx 20\%$] (from a re-examination of (1976MC11)). Then $\Gamma_{\alpha_0} = 0.3$ keV and $\Gamma_{\gamma_1} = 12$ eV. I am indebted to Prof. McDonald for his comments)].