

Table 13.30 from (1976AJ04): Beta decay of ^{13}O ^a

Decay to		$E_p(\text{cm})$ (MeV) to		Relative intensity	% of all β -decays	$\log ft$
$^{13}\text{N}^*$ (MeV)	J^π	$^{12}\text{C}^*(\text{g.s.})$	$^{12}\text{C}^*(4.4)$			
g.s.	$\frac{1}{2}^-$				88.1 ± 3.4 ^b	4.10 ± 0.02 ^b
3.51	$\frac{3}{2}^-$	observed		100	10.7 ± 3.1	4.52 ± 0.13
7.38	$\frac{5}{2}^-$	5.48 ± 0.05	not seen	0.33 ± 0.10	0.40 ± 0.19	5.22 ± 0.23
8.92	$\frac{1}{2}^-$	observed		3.5 ± 0.3		
					0.54 ± 0.16	4.73 ± 0.14
9.48	$\frac{3}{2}^-$	observed	2.56 ± 0.05	1.5 ± 0.3		
				0.8 ± 0.1		
					0.13 ± 0.04	5.18 ± 0.14
10.36	$\frac{5}{2}^-$	observed	3.12 ± 0.05	0.43 ± 0.15		
				0.05 ± 0.03 ^c		
			3.97 ± 0.05	0.13 ± 0.07	0.019 ± 0.012	5.8 ± 0.3

^a (1970ES03). In addition there is some evidence for weak proton groups with $E_p = 3.44$ and 6.38 MeV (± 0.05 MeV). See also (1965MC09).

^b The ground state ft was taken to be 1.15 times that for ^{13}B (1970ES03). (1971WI07) find $(ft)^+/(ft)^- = 1.17 \pm 0.03$: see reaction 1 in ^{13}B .

^c Calculated value from the known ratio of the elastic and inelastic widths.