

Table 14.27 from (1970AJ04): Positron decay of ^{14}O

	(1954GE38, 1955SH84)	(1961HE03)	(1961BU04)	(1962BA26)	(1963FR10, 1965FR09)	(1965KAZX, 1966SI05)
E_0^a (keV)	4145 ± 20			4124 ± 2	4085 ± 30	
E_1^a (keV)	1835 ± 8	$[1810.6 \pm 1.5]^b$	1809.7 ± 1.5	1812.6 ± 1.4^e	1821 ± 7	
$\tau_{1/2}$ (sec)	72.1 ± 0.4	70.91 ± 0.04	$[71.4 \pm 0.2]$	71.00 ± 0.13	71.3 ± 0.1	
branch ₀ (%) ^a	0.60 ± 0.10				0.65 ± 0.05	0.61 ± 0.01
branch ₁ (%) ^a	99.4 ± 0.1	$[99.4 \pm 0.1]$	$[99.4 \pm 0.1]$	$[99.4 \pm 0.1]$	99.35 ± 0.05	
branch ₂ (%) ^a						0.062 ± 0.007^d
ft_0 (sec)	$(2.0 \pm 0.3) \times 10^7$				$(1.7 \pm 0.2) \times 10^7$	$(2.14 \pm 0.03) \times 10^7^f$
ft_1 (sec)	3275 ± 75	3061 ± 10	3057 ± 20	3074 ± 10^c	3137 ± 70	3076 ± 7^g
ft_2 (sec)						1200 ± 150^d

^a End-point energies and branches, to ^{14}N (g.s.: 1^+ ; 2.31: 0^+ ; 3.95: 1^+), respectively.

^b Square brackets indicate values used for ft -calculations but not determined in present experiment.

^c Using $\tau(\text{partial}) = [71.36 \pm 0.009]$ sec; includes form-factor and screening corrections. Radiative corrections of (1959KI1C) increase ft to 3126 sec: see also (1966BA1A, 1966FR15, 1967SU1E).

^d And private communication: $0.025 \beta^+$ (1969KA1B).

^e 1809.1 ± 1.5 keV is obtained from measurements of the threshold energy of the $^{14}\text{N}(p, n)^{14}\text{O}$ reaction and the energy of $^{14}\text{N}^*(2.31)$. This value leads to a 0.8% decrease in the ft value of (1962BA26, 1968FR08).

^f $(1.9 \pm 0.2) \times 10^7$ (1969KA1B).

^g (1969KA1B).