

Table 12.24 from (2017KE05): Branching in $^{12}\text{B}(\beta^-)^{12}\text{C}$

Decay to $^{12}\text{C}^*$ (MeV \pm keV)	Branch (%)	$\log ft^a$	Refs.
g.s.	98.216 ± 0.028^b	4.0617 ± 0.0005	
$E_\gamma = 4.43891 \pm 0.31^c$	1.182 ± 0.019^d	5.143 ± 0.007	(1981KA31)
$7.6543 \pm 2.0^{e, f}$	0.54 ± 0.02	4.574 ± 0.017	
	1.3 ± 0.4		(1957CO59)
	1.1 ± 0.3^g		(1963AL15)
	$0.54 \pm 0.02^{h, m}$		(2009HY01)
	0.63 ± 0.11^i		(2016MU06)
10.3 ± 0.3^j	0.062 ± 0.003	4.29 ± 0.20	
	0.13 ± 0.04^k		(1958CO66)
	0.07 ± 0.02^k		(1963WI05)
$[9-12 \text{ MeV}]^n$	$\left\{ \begin{array}{l} 0.063 \pm 0.003^{h, m} \\ 0.055 \pm 0.007^{l, m} \end{array} \right.$		(2009HY01)
12.7	$(2.6 \pm 0.2) \times 10^{-4}$	3.91 ± 0.04	(2009HY01)
	$(2.6 \pm 0.2) \times 10^{-4}^{h, m}$		(2009HY01)
	$(3.2 \pm 0.7) \times 10^{-4}^{l, m}$		(2009HY01)

^a Based on $Q_m = 13369.4 \pm 1.3$ keV and $T_{1/2} = 20.20 \pm 0.02$ ms.

^b 100% minus the branching ratios measured to excited states.

^c (1967CH19)

^d See Table 12.23.

^e Based on (2012WA38) and $Q = 379.6 \pm 2.0$ keV (1973BA73).

^f See also $E_x = 7657.8 \pm 1.0$ value from (2016MU06).

^g In the original manuscript, the value $(1.7 \pm 0.5)\%$ is calculated using $\Gamma_\gamma/\Gamma = (2.9 \pm 0.3) \times 10^{-4}$ and $B(4.4) = (1.3 \pm 0.1)\%$. Here we used $\Gamma_\gamma/\Gamma = 4.16$ and $B(4.4) = (1.182 \pm 0.019)\%$.

^h Analysis of KVI data in (2009HY01).

ⁱ In the original manuscript, the value $(0.64 \pm 0.11)\%$ is calculated using $\Gamma_\gamma/\Gamma = (4.07 \pm 0.11) \times 10^{-4}$. Here we used $\Gamma_\gamma/\Gamma = (4.16 \pm 0.11) \times 10^{-4}$.

^j $\Gamma = 3.0 \pm 0.7$ MeV and $\theta_\alpha^2 \approx 1.5$ (1966SC23).

^k The analysis neglected β feeding to $^{12}\text{C}^*(12.71)$.

^l Analysis of JYFL data in (2009HY01).

^m In (2009HY01) the branching ratios are normalized to $B(4.44) = (1.28 \pm 0.04)\%$ from (1990AJ01). In the present evaluation we adopted $(1.182 \pm 0.019)\%$. In the table the (2009HY01) values have been renormalized (decreased) to the updated $B(4.44)$.

ⁿ (2009HY01) integrated the strength in the $E_x = 9-12$ MeV region rather than attributing the strength to a 10.3 MeV group, see discussion.