

$^{100}\text{Tc}$   $\varepsilon$  decay (15.65 s) [1993Ga09,2008Sj01](#)

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh and Jun Chen		NDS 172,1 (2021)	31-Jan-2021

Parent:  $^{100}\text{Tc}$ :  $E=0.0$ ;  $J^\pi=1^+$ ;  $T_{1/2}=15.65$  s 12;  $Q(\varepsilon)=172.1$  14;  $\% \varepsilon$  decay=0.0026 4

$^{100}\text{Tc}$ - $T_{1/2}$ : From  $^{100}\text{Tc}$  Adopted Levels.

$^{100}\text{Tc}$ - $Q(\varepsilon)$ : From [2017Wa10](#).

$^{100}\text{Tc}$ - $\% \varepsilon$  decay:  $\% \varepsilon=0.0026$  4 for  $^{100}\text{Tc}$  decay ([2008Sj01](#), absolute counting method). Other: 0.0018 9 ([1993Ga09](#), x-ray measurement).

[1993Ga09](#):  $^{100}\text{Tc}$  was produced  $^{100}\text{Mo}(p,n)$ ,  $E=9$  MeV proton from the 88-inch cyclotron at LBNL.

[2008Sj01](#):  $^{100}\text{Tc}$  produced in  $^{100}\text{Mo}(p,n)$ ,  $E=10$  MeV using IGISOL facility at Jyvaskyla, and implanted in a plastic scintillator to measure  $\gamma$ -rays using a Ge detector. Deduced  $\% \varepsilon$  decay and Gamow-Teller transition probability for  $1^+$  to  $0^+$   $\beta$  transition.

[Additional information 1](#).

 $^{100}\text{Mo}$  Levels

E(level)	$J^\pi$
0.0	$0^+$
0.0	$0^+$

 $\varepsilon$  radiations

E(decay)	E(level)	$I\varepsilon^\dagger$	Log $ft$	Comments
(172.1 20)	0.0	0.0026 4	4.3 1	$\varepsilon K=0.8453$ 3; $\varepsilon L=0.12514$ 20; $\varepsilon M+=0.02953$ 6 B(GT)=0.52 6 ( <a href="#">2008Sj01</a> ).

$^\dagger$  Absolute intensity per 100 decays.