

^{35}K ϵp decay (178 ms) 1980Ew02

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Ninel Nica, Balraj Singh		NDS 113, 1563 (2012)	28-May-2012

Parent: ^{35}K : E=0.0; $J^\pi=3/2^+$; $T_{1/2}=178$ ms 8; $Q(\epsilon\text{p})=5978.16$ 52; % ϵp decay=0.37 15

$^{35}\text{K}-T_{1/2}$: From 1998Sc19.

$^{35}\text{K}-Q(\epsilon\text{p})$: From 2011AuZZ. Other: 5982 20 (2003Au03).

$^{35}\text{K}-\%\epsilon\text{p}$ decay: From 1980Ew02.

1980Ew02: $^{45}\text{Sc}(\text{P},8\text{n}3\text{p})$ E=600 MeV (spallation reaction), on ScC_2 target held At 2000° \text{C}; chemical, mass separation, Ge(Li) and surface barrier Si detectors. Measured $E\gamma$, $I\gamma$, γ -delayed P, Ep, Ip.

1998Sc19: fragmentation of 500 MeV/nucleon ^{40}Ca beam on ^9Be target, projectile fragment separator. Measured $T_{1/2}$.

 ^{34}Cl Levels

$E(\text{level})^\dagger$	$J^\pi{}^\ddagger$	$T_{1/2}{}^\ddagger$
0	0^+	1.5266 s 4
146.36? 3	3^+	31.99 min 3
461.00? 4	1^+	

† Adopted values.

Delayed Protons (^{34}Cl)

$E(p)$	$E(^{34}\text{Cl})$	$I(p)^\dagger$	$E(^{35}\text{Ar})$
1282 20		5.4 10	
1705 20		14.1 20	
1875 20		8.1 14	
2575 20		3.4 10	
2807 20		1.9 6	
1425 [‡] 20	146.36?	33.6 27	7504
1555 [‡] 20	0	13.8 17	7504
1980 [‡] 20	461.00?	5.7 10	8395
2282 [‡] 20	146.36?	7.7 13	8395
2425 [‡] 20	0	6.4 13	8395

† For absolute intensity per 100 decays, multiply by 0.0037 15.

‡ Placement of transition in the level scheme is uncertain.

$^{35}\text{K} \epsilon\text{p decay (178 ms)}$ 1980Ew02Decay Scheme

I(p) Intensities: Relative I(p)

