

¹³⁴Sb β⁻ decay (10.07 s) [1972Ke21](#),[1982He06](#),[1995Om01](#)

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	A. A. Sonzogni	NDS 103, 1 (2004)	31-Jul-2004

Parent: ¹³⁴Sb: E=0.0+x; J^π=(7⁻); T_{1/2}=10.07 s 5; Q(β⁻)=8394 42; %β⁻ decay=100.0

[1995Om01](#): measured γ, γγ(θ), γβ, T_{1/2}; Osiris mass separator.

[1972Ke21](#): measured γ, γγ, T_{1/2}; source: ²³⁵U(n,F), Osiris mass separator.

¹³⁴Te Levels

E(level) [†]	J ^π [‡]	T _{1/2} [‡]	Comments
0.0	0 ⁺	41.8 min 8	
1279.11 10	2 ⁺	<0.17 ns	
1576.11 15	4 ⁺	1.36 ns 11	
1691.32 18	6 ⁺	164.1 ns 9	
2397.63 20	(6) ⁺	<16 ps	
2462.3 [#]	2 ⁺	<1 ns	
2554.5 [#]	(4 ⁺)		
2631.5 [#]	(1) ⁺	<1 ns	
2727.3 8	(5 ⁺)	<20 ps	
4013.3 [#]	(9 ⁻)	0.703 ns 26	
4269.7 [#]	4,5,6		
4298.8 [#]	(7 ⁻)	<16 ps	
4323.2 [#]	(5 ⁻)		
4402.5 [#]	(5 ⁺)		
4458.4 [#]			
4501.2 [#]			
4504.1 [#]			
4557.5 [#]	(8 ⁺)		J ^π : from ²⁴⁸ Cm SF decay, other: (6 ⁻) 1995Om01 .
4562.6 [#]	(8 ⁻)		

[†] From least-squares fit to Eγ when possible.

[‡] From Adopted Levels.

[#] Observed only by [1995Om01](#).

β⁻ radiations

E(decay)	E(level)	Iβ ⁻ [†]	Log ft	Comments
(5.67×10 ³ 4)	2727.3	≈4	≈8.9 ^{1u}	av Eβ= 2489 52
6.01×10 ³ 11	2397.63	54 3	5.95 3	av Eβ= 2665 52
(6.70×10 ³ 4)	1691.32	42 7	6.27 8	av Eβ= 2999 52

[†] Absolute intensity per 100 decays.

^{134}Sb β^- decay (10.07 s) 1972Ke21,1982He06,1995Om01 (continued) $\gamma(^{134}\text{Te})$ I γ normalization: From $\Sigma I(\gamma+ce)=100$ to g.s..

E_γ	I_γ &	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult.‡	α^a	Comments
115.2† 1	49† 3	1691.32	6 ⁺	1576.11	4 ⁺	E2	1.039	$\alpha(K)=0.757$; $\alpha(L)=0.2252$; $\alpha(M)=0.0465$; $\alpha(N+..)=0.01042$ $\alpha(K)\text{exp}=0.767$; $\alpha(L)\text{exp}=0.224$
297.0† 1	97† 5	1576.11	4 ⁺	1279.11	2 ⁺	E2	0.0399	$\alpha(K)=0.0332$; $\alpha(L)=0.00540$; $\alpha(M)=0.00109$; $\alpha(N+..)=0.00025$ $\alpha(K)\text{exp}=0.0316$
329.3#	1.5#	2727.3	(5 ⁺)	2397.63	(6 ⁺)			
706.3† 1	57† 3	2397.63	(6 ⁺)	1691.32	6 ⁺	M1,E2		$\alpha(K)\text{exp}=0.00316$
822#	0.4#	2397.63	(6 ⁺)	1576.11	4 ⁺			
1151.6#	2.3#	2727.3	(5 ⁺)	1576.11	4 ⁺			
1279.1† 1	100† 5	1279.11	2 ⁺	0.0	0 ⁺	[E2]	0.00086	$\alpha(K)=0.00074$
1614.9@		4013.3	(9 ⁻)	2397.63	(6 ⁺)	(E3)@		$I_\gamma(1614.9)/I_\gamma(2321.9)=0.159$ (1995Om01).
2321.9@		4013.3	(9 ⁻)	1691.32	6 ⁺	(E3)@		$I_\gamma(1614.9)/I_\gamma(2321.9)=0.159$ (1995Om01).

† From 1972Ke21.

‡ From $\alpha(\text{exp})$ and RUL, unless otherwise noted.

From 1982He06.

@ From 1995Om01 from $\gamma\gamma(\theta)$.

& Absolute intensity per 100 decays.

^a Total theoretical internal conversion coefficients, calculated using the BrIcc code (2008Ki07) with Frozen orbital approximation based on γ -ray energies, assigned multiplicities, and mixing ratios, unless otherwise specified.

^{134}Sb β^- decay (10.07 s) 1972Ke21,1982He06,1995Om01

Decay Scheme

Intensities: I_γ per 100 parent decays

Legend

- $I_\gamma < 2\% \times I_\gamma^{\text{max}}$
- $I_\gamma < 10\% \times I_\gamma^{\text{max}}$
- $I_\gamma > 10\% \times I_\gamma^{\text{max}}$
- Coincidence

