

1 Half-life, Q-value and Decay mode

$T_{1/2}$:	14.82	(19)	d
Q_{β^-}	:	356	(5)	keV
β^-	:	100		%

2 β^- Transitions

	Energy keV	Probability $\times 100$	Nature	$\log ft$
$\beta_{0,3}^-$	200 (5)	<0.01	2nd forbidden	>10.1
$\beta_{0,2}^-$	235 (5)	<0.01	1st forbidden unique	>9.9
$\beta_{0,1}^-$	316 (5)	68.8 (20)	Allowed	6.87
$\beta_{0,0}^-$	356 (5)	31.2 (20)	1st forbidden	7.38

3 Electron Emissions

		Energy keV	Electrons per 100 disint.	Energy keV
eAL	(Ac)	5.87 - 19.69	15.7 (7)	
ec _{1,0} L	(Ac)	20.24 - 24.22	29.2 (8)	
ec _{1,0} M	(Ac)	35.09 - 36.87	7.2 (12)	
ec _{1,0} N	(Ac)	38.82 - 39.78	1.86 (27)	
$\beta_{0,3}^-$	max:	200 (5)	<0.01	avg: 54.0 (15)
$\beta_{0,2}^-$	max:	235 (5)	<0.01	avg: 70.5 (16)
$\beta_{0,1}^-$	max:	316 (5)	68.8 (20)	avg: 88.3 (16)
$\beta_{0,0}^-$	max:	356 (5)	31.2 (20)	avg: 100.7 (16)

4 Photon Emissions

4.1 X-Ray Emissions

		Energy keV	Photons per 100 disint.
XL	(Ac)	10.8701 — 18.9228	13.6 (6)

4.2 Gamma Transitions and Emissions

	Energy keV	$P_{\gamma+ce}$ $\times 100$	Multipolarity	α_T	P_γ $\times 100$
$\gamma_{1,0}(\text{Ac})$	40.09 (5)	68.8 (17)	E1	1.293 (19)	30.0 (7)

5 References

- A.C.ENGLISH, T.E.CRANSHAW, P.DEMERS, J.A.HARVEY, E.P.HINCKS, J.V.JELLEY, A.N.MAY, Phys. Rev. 72 (1947) 253
(Half-life)
- F.HAGEMANN, L.I.KATZIN, M.H.STUDIER, G.T.SEABORG, A.GHIORSO, Phys. Rev. 79 (1950) 435
(Half-life)
- L.B.MAGNUSSON, F.WAGNER JR., D.W.ENGELKEMEIR, M.S.FREEDMAN, Report ANL-5386, Argonne National Laboratory (1955)
(Gamma-ray energies emission probabilities)
- F.S.STEPHENS, Report UCRL-2970, Univ. California (1955)
(Gamma-ray energies emission probabilities)
- J.K.DICKENS, J.W.McCONNELL, Radiochem. Radioanal. Lett. 47 (1981) 331
(Gamma-ray energies emission probabilities)
- R.G.HELMER, C.W.REICH, M.A.LEE, I.AHMAD, Int. J. Appl. Radiat. Isotop. 37 (1986) 139
(Gamma-ray emission probabilities)
- I.AHMAD, J.E.GINDLER, A.M.FRIEDMAN, R.R.CHASMAN, T.ISHII, Nucl. Phys. A472 (1987) 285
(Gamma-ray energies)
- G.J.MILLER, J.C.McGEORGE, I.ANTHONY, R.O.OWENS, Phys. Rev. C36 (1987) 420
(Half-life)
- Y.A.AKOVALI, Nucl. Data Sheets 60 (1990) 617
(Decay scheme and levels)
- E.SCHÖNFELD, H.JANSSEN, Nucl. Instrum. Methods Phys. Res. A369 (1996) 527
(Atomic data)
- G.AUDI, A.H.WAPSTRA, C.THIBAUT, Nucl. Phys. A729 (2003) 129
(Q)
- T.KIBÉDI, T.W.BURROWS, M.B.TRZHASKOVSKAYA, P.M.DAVIDSON, C.W.NESTOR JR., Nucl. Instrum. Methods Phys. Res. A589 (2008) 202
(Theoretical ICC)