

^{32}P β^- decay (14.266 d) 2002Un02,1994Co02,1979Pr14

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jun Chen	NDS 201,1 (2025)	31-Oct-2024

Parent: ^{32}P : $E=0$; $J^\pi=1^+$; $T_{1/2}=14.266$ d 4; $Q(\beta^-)=1710.66$ 4; $\% \beta^-$ decay=100

^{32}P - $T_{1/2}$: From ^{32}P Adopted Levels.

^{32}P - $Q(\beta^-)$: From 2021Wa16.

Half-life measurements: 2002Un02, 1994Co02, 1979Pr14, 1977Mu07, 1977Be59, 1969La34, 1969Pe04, 1966Go16, 1961Ma46, 1959Ro51, 1958Da10, 1957An03, 1950Ba94, 1953Lo09, 1951Si25, 1948KI28, 1940Mu01, 1938Ca01, 1938Ca02, 1937Ne02, 1936Si01, 1935Pr01, 1934Am01.

2000Ga56: measurement of effect on half-life by chiral molecular solvents with right-handed and left-handed polarizations. The authors report a maximum change of 1.52% in $T_{1/2}$ with values ranging from 14.28 d 8 (standard value from literature used as reference for sample in water) to 14.07 d 8 for right handed 2-phenylbutyric acid. These measurements need to be verified independently.

β^- -endpoint energy measurements: 2001Ko07, 1993Gr17, 1979Pr14, 1976Mo12, 1971Ze04, 1971Pe03, 1971Bo01, 1969FI02, 1968Fi04, 1966Ca10, 1963Bo31, 1961Fe10, 1961Ni02, 1958Jo33, 1958Da10, 1957Ri41, 1956Po07, Antoneva (Izv Akad Nauk Fiz 18,93 (1954)), 1952Je12, 1950Ba94, 1950Ag01, 1950Wa76, 1949La06, 1946Si09, 1938Ca02, 1937Ne02.

Internal Bremsstrahlung measurement: 2022Au02.

Additional information 1.

From RADLIST code, deduced energy balance=1710.6 keV 2 as compared to 1710.66 keV 4 from Q value.

 ^{32}S Levels

<u>E(level)</u>	<u>J^π</u> [†]
0	0^+

[†] From Adopted Levels.

 β^- radiations

<u>E(decay)</u>	<u>E(level)</u>	<u>$I\beta^-$</u> [†]	<u>Log ft</u>	Comments
(1710.7 14)	0	100	7.8999 1	av $E\beta=694.587$ 19

[†] Absolute intensity per 100 decays.