



1 Decay Scheme

Pb-209 disintegrates by 100% beta minus decay directly to the ground state of Bi-209.

Le plomb 209 se désintègre par émission bêta moins directement vers le niveau fondamental du bismuth 209.

2 Nuclear Data

$T_{1/2}({}^{209}\text{Pb})$:	3,277	(15)	h
$T_{1/2}({}^{209}\text{Bi})$:	19	(2)	10^{18} a
$Q^{-}({}^{209}\text{Pb})$:	644,0	(12)	keV

2.1 β^{-} Transitions

	Energy keV	Probability $\times 100$	Nature	lg ft
$\beta_{0,0}^{-}$	644,0 (12)	100	1st forbidden non-unique	5,54

3 Electron Emissions

	Energy keV	Electrons per 100 disint.
$\beta_{0,0}^{-}$	max: 644,0 (12)	100
$\beta_{0,0}^{-}$	avg: 197,35 (42)	

4 Main Production Modes

Tl – $209(\beta^-)\text{Pb} - 209$

Pb – $208(n,\gamma)\text{Pb} - 209$

Pb – $208(d,p)\text{Pb} - 209$

5 References

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