$^{15}_{8}\mathrm{O}_{7}$

1 Decay Scheme

O-15 disintegrates by 99.9% beta-plus transition to the ground state of the stable nuclide N-15.
L'oxygène 15 se désintègre pour 99,9% par émission bêta plus vers le niveau fondamental de l'azote 15.

2 Nuclear Data

$T_{1/2}(^{15}\mathrm{O}\ )$: 2,041 (6) min
$Q^{+}(^{15}\mathrm{O}\ )$: 2757,0 (13) keV

2.1 β^{+} Transitions

	Energy keV	Probability × 100	Nature	lg ft
$\beta^{+}_{0,0}$	1735,0 (13)	99,885 (6)	Allowed	3,6

2.2 Electron Capture Transitions

	Energy keV	Probability × 100	Nature	P_K	P_L
$\epsilon_{0,0}$	2757,0 (13)	0,115 (6)	Allowed	0,926 (6)	0,074 (6)

3 Atomic Data

3.1 N

ω_K : 0,0044 (4)

4 Electron Emissions

		Energy keV	Electrons per 100 disint.
$\beta^+_{0,0}$	max:	1735,0 (13)	99,885 (6)
$\beta^+_{0,0}$	avg:	736,7 (6)	

5 Photon Emissions

5.1 Gamma Emissions

	Energy keV	Photons per 100 disint.
$\gamma^{\pm}$	511	199,770 (12)

6 Main Production Modes

$\mathrm{N}-14(\mathrm{p},\gamma)\mathrm{O}-15$

$\mathrm{N}-14(\mathrm{d},\mathrm{n})\mathrm{O}-15$

$\mathrm{C}-12(\alpha,\mathrm{n})\mathrm{O}-15$

$\mathrm{N}-15(\mathrm{p},\mathrm{n})\mathrm{O}-15$

$\mathrm{O}-16(\mathrm{He}-3,\alpha\gamma)\mathrm{O}-15$

$\left\{\begin{array}{l}\mathrm{Ne}-20(\gamma,\mathrm{n}\alpha)\mathrm{O}-15\\ \text{Possible impurities : } \mathrm{C}-11,\ \mathrm{Ne}-19\end{array}\right.$

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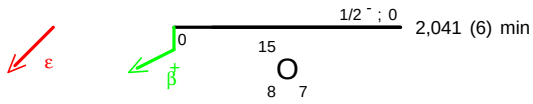
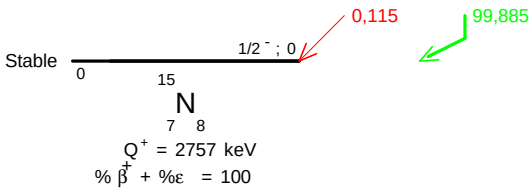

1/2 - ; 0
2,041 (6) min
ε
0
β+
15
O
8 7


0,115
99,885
Stable
1/2 - ; 0
0
15
N
7 8
Q+ = 2757 keV
% β+ + %ε = 100