

1 Half-life, Q-value and Decay mode

| | | | | |
|---------------|---|------|------|-----|
| $T_{1/2}$ | : | 1.30 | (3) | min |
| Q_{β^-} | : | 5482 | (12) | keV |
| β^- | : | 100 | | % |

2 β^- Transitions

| | Energy keV | Probability $\times 100$ | Nature | $\log ft$ |
|------------------|---------------|-----------------------------|----------------------|-----------|
| $\beta_{0,11}^-$ | 1380 (12) | ~ 2 | | 6.2 |
| $\beta_{0,10}^-$ | 1603 (12) | ~ 7 | | 5.9 |
| $\beta_{0,9}^-$ | 1860 (12) | ~ 24 | | 5.6 |
| $\beta_{0,8}^-$ | 2024 (12) | ~ 10 | Allowed | 6.1 |
| $\beta_{0,7}^-$ | 2413 (12) | ~ 10 | 2nd forbidden unique | 6.4 |
| $\beta_{0,3}^-$ | 4290 (12) | ~ 31 | Allowed | 6.9 |
| $\beta_{0,2}^-$ | 4386 (12) | ~ 13 | Allowed | 7.3 |

3 Electron Emissions

| | | Energy keV | Electrons per 100 disint. | Energy keV |
|----------------------|------|---------------------|------------------------------|---------------|
| ec _{3,2} K | (Pb) | ~ 9 | ~ 16 | |
| ec _{3,2} L | (Pb) | 81.1392 - 83.9648 | ~ 12 | |
| ec _{3,2} M | (Pb) | 93.1493 - 94.5160 | ~ 3.2 | |
| ec _{2,1} K | (Pb) | 208 (3) | 5.3 (7) | |
| ec _{2,1} L | (Pb) | 280.1392 - 282.9648 | 3.15 (42) | |
| ec _{2,1} M | (Pb) | 292.1493 - 293.5160 | 0.81 (11) | |
| ec _{2,1} N | (Pb) | 295.1064 - 295.8637 | 0.205 (27) | |
| ec _{1,0} K | (Pb) | 711.6 (3) | 0.803 (12) | |
| ec _{1,0} L | (Pb) | 783.7 - 786.6 | 0.1746 (25) | |
| ec _{1,0} M | (Pb) | 795.7 - 797.1 | 0.0421 (6) | |
| ec _{1,0} N | (Pb) | 798.7 - 799.5 | 0.01066 (16) | |
| ec _{4,1} K | (Pb) | 982 (20) | 0.022 (9) | |
| ec _{-1,1} L | (Pb) | 67.1392 - 69.9648 | ~ 20 | |
| ec _{-1,1} M | (Pb) | 79.1493 - 80.5160 | ~ 6 | |
| ec _{-1,2} K | (Pb) | 268 (10) | 0.88 (45) | |
| ec _{-1,2} L | (Pb) | 340.1392 - 342.9648 | 0.15 (8) | |
| ec _{-1,2} M | (Pb) | 352.1493 - 353.5160 | 0.035 (18) | |
| ec _{-1,3} K | (Pb) | 294 (10) | 0.55 (37) | |
| ec _{-1,3} L | (Pb) | 366.1392 - 368.9648 | 0.09 (6) | |
| ec _{-1,3} M | (Pb) | 378.1493 - 379.5160 | 0.022 (15) | |
| $\beta_{0,11}^-$ | max: | 1380 (12) | ~ 2 | avg: 477 (13) |
| $\beta_{0,10}^-$ | max: | 1603 (12) | ~ 7 | avg: 568 (14) |
| $\beta_{0,9}^-$ | max: | 1860 (12) | ~ 24 | avg: 674 (10) |
| $\beta_{0,8}^-$ | max: | 2024 (12) | ~ 10 | avg: 743 (10) |
| $\beta_{0,7}^-$ | max: | 2413 (12) | ~ 10 | avg: 907 (7) |

| | | Energy keV | | Electrons per 100 disint. | Energy keV |
|-----------------|------|---------------|------|------------------------------|----------------|
| $\beta_{0,3}^-$ | max: | 4290 | (12) | ~ 31 | avg: 1721 (11) |
| $\beta_{0,2}^-$ | max: | 4386 | (12) | ~ 13 | avg: 1763 (5) |

4 Photon Emissions

4.1 X-Ray Emissions

| | | Energy keV | | Photons per 100 disint. | |
|---------------|------|----------------|---|----------------------------|----------------|
| XL | (Pb) | 9.186 — 15.217 | | | |
| XK α_2 | (Pb) | 72.805 | | 7 (4) | } K α |
| XK α_1 | (Pb) | 74.97 | | 11 (6) | |
| XK β_3 | (Pb) | 84.451 | } | | } K β'_1 |
| XK β_1 | (Pb) | 84.937 | } | 3.8 (19) | |
| XK β'_5 | (Pb) | 85.47 | } | | |
| XK β_2 | (Pb) | 87.238 | } | | } K β'_2 |
| XK β_4 | (Pb) | 87.58 | } | 1.1 (6) | |
| XKO $_{2,3}$ | (Pb) | 87.911 | } | | |

4.2 Gamma Transitions and Emissions

| | Energy keV | $P_{\gamma+ce}$ $\times 100$ | Multipolarity | α_T | P_γ $\times 100$ |
|----------------------|---------------|---------------------------------|---------------|--------------|----------------------------|
| $\gamma_{-1,1}$ (Pb) | 83 (30) | 30 (6) | [E2] | ~ 14 | ~ 1.98 (40) |
| $\gamma_{3,2}$ (Pb) | 97 (30) | 40 (20) | M1+E2 | ~ 9 | ~ 4 (2) |
| $\gamma_{2,1}$ (Pb) | 296 (3) | 89 (11) | E2 | 0.120 (5) | 79 (10) |
| $\gamma_{-1,2}$ (Pb) | 356 (10) | 5.0 (25) | [M1] | 0.270 (22) | 4 (2) |
| $\gamma_{-1,3}$ (Pb) | 382 (10) | 3.7 (24) | [M1] | 0.223 (17) | 3 (2) |
| $\gamma_{11,9}$ (Pb) | 480 (36) | 2 (1) | | | 2 (1) |
| $\gamma_{-1,4}$ (Pb) | 670 (20) | 2 (1) | | | 2 (1) |
| $\gamma_{1,0}$ (Pb) | 799.6 (3) | 100 | E2 | 0.01042 (31) | 98.969 (30) |
| $\gamma_{7,5}$ (Pb) | 860 (30) | 6.9 (20) | | | 6.9 (20) |
| $\gamma_{-1,5}$ (Pb) | 910 (30) | 3 (2) | | | 3 (2) |
| $\gamma_{4,1}$ (Pb) | 1070 (20) | 11.9 (49) | [E1] | 0.00222 (7) | 11.9 (49) |
| $\gamma_{5,2}$ (Pb) | 1110 (20) | 6.9 (20) | | | 6.9 (20) |
| $\gamma_{9,6}$ (Pb) | 1210 (20) | 16.8 (40) | | | 16.8 (40) |
| $\gamma_{6,2}$ (Pb) | 1310 (20) | 20.8 (49) | | | 20.8 (49) |
| $\gamma_{5,1}$ (Pb) | 1410 (20) | 4.9 (20) | | | 4.9 (20) |
| $\gamma_{-1,6}$ (Pb) | 1490 (20) | 2 (1) | | | 2 (1) |
| $\gamma_{-1,7}$ (Pb) | 1540 (30) | 2 (1) | | | 2 (1) |
| $\gamma_{8,4}$ (Pb) | 1590 (30) | 2 (1) | | | 2 (1) |
| $\gamma_{-1,8}$ (Pb) | 1650 (30) | 2 (1) | | | 2 (1) |
| $\gamma_{10,4}$ (Pb) | 2010 (30) | 6.9 (20) | | | 6.9 (20) |

| | Energy keV | $P_{\gamma+ce}$ $\times 100$ | Multipolarity | α_T | P_γ $\times 100$ |
|----------------------------|---------------|---------------------------------|---------------|------------|----------------------------|
| $\gamma_{-1,9}(\text{Pb})$ | 2090 (30) | 4.9 (20) | | | 4.9 (20) |
| $\gamma_{7,1}(\text{Pb})$ | 2280 (12) | 3 (2) | | | 3 (2) |
| $\gamma_{8,2}(\text{Pb})$ | 2360 (30) | 7.9 (30) | | | 7.9 (30) |
| $\gamma_{9,3}(\text{Pb})$ | 2430 (30) | 8.9 (30) | | | 8.9 (30) |

5 References

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