# Recommended Nuclear Decay Data

## Sb-125

| Decay Mode: β⁻Auger-L | | Half-Life: (1007.7 ± 0.4 ) d | | | [2] |
|---|---|---|---|---|---|
| Radiation Type | | Energy (keV) | Intensity (%) | | Ref. |
| Auger-L | | 3.19 | 51 | 4 | [4] |
| Auger-K | | 22.7 | 6.6 | 15 | [4] |
| ce-K-2 | | 3.69 | 51.3 | 23 | [4] |
| ce-L-1 | | 14.9 | 0.18 | 9 | [4] |
| ce-L-2 | | 30.56 | 6.87 | 22 | [4] |
| ce-M-2 | | 34.50 | 1.37 | 5 | [4] |
| ce-K-7 | | 144.52 | 0.938 | 18 | [4] |
| ce-L-7 | | 171.40 | 0.148 | 6 | [4] |
| ce-K-17 | | 396.08 | 0.347 | 11 | [4] |
| β⁻max | | 95.4 | 13.60 | 20 | [4] |
| β⁻max | | 124.6 | 5.79 | 6 | [4] |
| β⁻max | | 130.8 | 18.10 | 20 | [4] |
| β⁻max | | 241.6 | 1.620 | 20 | [4] |
| β⁻max | | 303.4 | 40.2 | 5 | [4] |
| β⁻max | | 445.7 | 7.14 | 4 | [4] |
| β⁻max | | 622.0 | 13.50 | 20 | [4] |
| X-ray L | Σ | 3.96 | 7.3 | 7 | [2] |
| X-ray Kα | Σ | 27.38 | 62.1 | 20 | [2] |
| X-ray Kβ | Σ | 31.1 | 13.0 | 5 | [2] |
| γ | Te-125m | 35.49 | 6.01 | 18 | [2] |
| γ | Te-125m | 109.28 | 0.071 | 12 | [2] |
| γ | | 116.95 | 0.284 | 9 | [2] |
| γ | | 172.72 | 0.198 | 14 | [2] |
| γ | | 176.31 | 6.82 | 21 | [2] |
| γ | | 204.14 | 0.326 | 11 | [2] |
| γ | | 208.08 | 0.241 | 8 | [2] |
| γ | | 227.89 | 0.130 | 5 | [2] |
| γ | | 321.03 | 0.411 | 13 | [2] |
| γ | | 380.45 | 1.52 | 5 | [2] |
| γ | | 407.86 | 0.184 | 7 | [2] |
| γ | | 427.88 | 29.6 | 9 | [2] |
| γ | | 443.55 | 0.302 | 10 | [2] |
| γ | | 463.37 | 10.5 | 4 | [2] |
| γ | | 600.60 | 17.9 | 6 | [2] |
| γ | | 606.72 | 5.03 | 16 | [2] |
| γ | | 635.95 | 11.3 | 4 | [2] |
| γ | | 671.45 | 1.79 | 6 | [2] |

Sb-125 with Te-125m (half-life: 57.4 d) in equilibrium

# Recommended Nuclear Decay Data

## Decay Mode

| | |
|---|---|
| α | Alpha |
| β-, β+ | Beta |
| EC | Electron capture |
| IT | Isomeric transition |

## Half-Life

| | |
|---|---|
| s | Seconds |
| m | Minutes |
| h | Hours |
| d | Days |
| y | Years |

## Energy

All energies are given in keV. Normally there are energies listed with an intensity ≥ 1 %.

## Radiation Type

| | |
|---|---|
| Auger-L/K | L or K-shell auger electron |
| ce-K-1 | K-shell conversion electron transition 1 |
| ce-L-2 | L-shell conversion electron transition 2 |
| α | Alpha particle |
| $\beta^-$ max, $\beta^+$ max | Beta particle (maximal energy) |
| $\beta^-$ av, $\beta^+$ av | Beta particle (average energy) |
| X-ray L | L X-ray |
| X-ray Kα, Kβ | K X-rays |
| γ | Gamma ray |
| γ Annih. | Annihilation radiation |
| Σ | Signifies weighted mean energies and intensities |

## Intensity

Values are given in percent. The format used for the uncertainties in the listed values can be illustrated by the following examples:

| | | | | | |
|---|---|---|---|---|---|
| 1.2 | 56 | = | 1.2 | ± | 5.6 |
| 1.23 | 56 | = | 1.23 | ± | 0.56 |

## References


[1] PTB-6.11-97-1, Braunschweig, Oktober 1997
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[4] NCRP Report No.58, 2nd Edition, February 1985
[5] Table de Radionuclidés, BNM-CEA/DTA/LPRI Commissariat à l´Énergie Atomique – France 1999
[6] National Nuclear Data Center USA, Brookhaven National Laboratory Upton N.Y.
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[8] BNM-CEA/DTA/DAMRI Nuclear and Atomic Decay Data ; 19/12/98



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