

# Recommended Nuclear Decay Data

Sr-85

Decay Mode: EC		Half-Life: (64.849 ± 0.004) d		[2]	
Radiation Type		Energy (keV)	Intensity (%)	Ref.	
Auger-L		1.68	108.2	23	[3]
Auger-K		11.4	28.7	7	[3]
X-ray L	Σ	1.7	0.16	6	[2]
X-ray Kα	Σ	13.37	50.1	2	[2]
X-ray Kβ	Σ	15.0	8.7	2	[2]
γ		514.01	98.4	4	[2]
γ		868.06	0.012	2	[2]

# Recommended Nuclear Decay Data

## ■ Decay Mode

$\alpha$	Alpha
$\beta^-$ , $\beta^+$	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  $\geq 1\%$ .

## ■ 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
$\alpha$	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 $K\alpha$ , $K\beta$	K X-rays
$\gamma$	Gamma ray
$\gamma$ Annih.	Annihilation radiation
$\Sigma$	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:

$$1.2 \quad 56 \quad = \quad 1.2 \pm 5.6$$
$$1.23 \quad 56 \quad = \quad 1.23 \pm 0.56$$

## ■ References

- [1] PTB-6.11-97-1, Braunschweig, Oktober 1997
- [2] PTB-Ra-16/5, Braunschweig, Mai 2000
- [3] LMRI. Table de radionuclides. 1982 ff
- [4] NCRP Report No.58, 2nd Edition, February 1985
- [5] Table de Radionuclides, BNM-CEA/DTA/LPRI Commissariat à l'Énergie Atomique – France 1999
- [6] National Nuclear Data Center USA, Brookhaven National Laboratory Upton N.Y.
- [7] Table of Isotopes, 8th Edition, 1996
- [8] BNM-CEA/DTA/DAMRI Nuclear and Atomic Decay Data ; 19/12/98

## Eckert & Ziegler Nuclitec GmbH

Gieselweg 1  
38110 Braunschweig  
Deutschland

Tel. +49 5307 932-555  
Fax +49 5307 932-194  
www.nuclitec.de