

Selenium Powder

Formula: Se

Percentage Purity: 99.95%

Maximum Particle Size: 250µm

Weight: 300g

CAS Number: 7782-49-2

UOM Code: 246-830-13

SKU: 1000104846-group

Product Code: SE00-PD-000110

Material Properties for Metals

Atomic Properties

Element	Value
Atomic number	34
Crystal structure	Hexagonal
Electronic structure	Ar 3d ¹⁰ 4s ² 4p ⁴
Valences shown	-2,4,6
Atomic weight(amu)	78.96
Thermal neutron absorption cross-section(Barns)	12.2
Photo-electric work function(eV)	5.9
Natural isotope distribution(Mass No./%)	76/ 9.0
Natural isotope distribution(Mass No./%)	82/ 9.2
Natural isotope distribution(Mass No./%)	74/ 0.9
Natural isotope distribution(Mass No./%)	80/ 49.8
Natural isotope distribution(Mass No./%)	77/ 7.6
Natural isotope distribution(Mass No./%)	78/ 23.5
Atomic radius - Goldschmidt(nm)	0.116
Ionisation potential(No./eV)	4/ 42.9
Ionisation potential(No./eV)	6/ 81.7
Ionisation potential(No./eV)	5/ 68.3
Ionisation potential(No./eV)	1/ 9.75
Ionisation potential(No./eV)	3/ 30.8
Ionisation potential(No./eV)	2/ 21.2

Mechanical Properties

Element	Value
Hardness - Mohs	2
Material condition	Polycrystalline
Poisson's ratio	0.447
Bulk modulus(GPa)	8.3
Tensile modulus(GPa)	58

Electrical Properties

Element	Value
Electrical resistivity(μOhmcm)	12@20@20°C

Physical Properties

Element	Value
Boiling point(C)	685
Density(gcm^3)	4.79@20°C

Thermal Properties

Element	Value
Melting point(C)	217
Latent heat of evaporation(J g^{-1})	333
Latent heat of fusion(J g^{-1})	69
Specific heat($\text{J K}^{-1} \text{kg}^{-1}$)	321@25°C
Thermal conductivity($\text{W m}^{-1} \text{K}^{-1}$)	0.5@0-100°C
Coefficient of thermal expansion($\times 10^{-6} \text{K}^{-1}$)	37@0-100°C