

# Selenium Foil

**Formula:** Se

**Percentage Purity:** 99.95%

**Thickness:** 3mm

**Length 1:** 10mm

**Length 2:** 10mm

**CAS Number:** 7782-49-2

**UOM Code:** 597-278-91

**SKU:** 1000180596-group

**Product Code:** SE00-FL-000100

## Material Properties for Metals

### Atomic Properties

Element	Value
Atomic number	34
Crystal structure	Hexagonal
Electronic structure	Ar 3d <sup>10</sup> 4s <sup>2</sup> 4p <sup>4</sup>
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( $\mu\text{Ohmcm}$ )	12@20@20°C

## Physical Properties

Element	Value
Boiling point( C )	685
Density( $\text{gcm}^3$ )	4.79@20°C

## Thermal Properties

Element	Value
Melting point( C )	217
Latent heat of evaporation( $\text{J g}^{-1}$ )	333
Latent heat of fusion( $\text{J g}^{-1}$ )	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