

Beryllium Foil (Light Tight)

Formula: Be

Percentage Purity: 99.8%

Thickness: 0.25mm

Length 1: 50mm

Length 2: 50mm

Type: Vacuum Tight

CAS Number: 7440-41-7

UOM Code: 052-786-53

SKU: 1000007509-group

Product Code: BE00-FL-000250

Material Properties for Metals

Atomic Properties

Element	Value
Atomic number	4
Crystal structure	Hexagonal close packed
Electronic structure	He 2s ²
Valences shown	2
Atomic weight(amu)	9.01218
Thermal neutron absorption cross-section(Barns)	0.0092
Photo-electric work function(eV)	3.4
Atomic radius - Goldschmidt(nm)	0.113
Ionisation potential(No./eV)	2/ 18.2
Ionisation potential(No./eV)	1/ 9.32
Ionisation potential(No./eV)	4/ 218
Ionisation potential(No./eV)	3/ 154

Mechanical Properties

Element	Value
Material condition	Hard
Material condition	Soft
Poisson's ratio	0.02
Poisson's ratio	0.02

Element	Value
Bulk modulus(GPa)	110
Bulk modulus(GPa)	110
Tensile modulus(GPa)	318
Tensile modulus(GPa)	318
Hardness - Vickers(kgf mm ²)	150
Hardness - Vickers(kgf mm ²)	200
Tensile strength(MPa)	550
Tensile strength(MPa)	310
Yield strength(MPa)	345
Yield strength(MPa)	240

Electrical Properties

Element	Value
Electrical resistivity(μOhmcm)	3.3@20@20°C
Superconductivity critical temperature(K)	0.026
Temperature coefficient(K ⁻¹)	0.009@0-100°C

Physical Properties

Element	Value
Boiling point(C)	2470
Density(gcm ³)	1.848@20°C

Thermal Properties

Element	Value
Melting point(C)	1278
Latent heat of evaporation(J g ⁻¹)	32470
Latent heat of fusion(J g ⁻¹)	1350
Specific heat(J K ⁻¹ kg ⁻¹)	1825@25°C
Thermal conductivity(W m ⁻¹ K ⁻¹)	201@0-100°C
Coefficient of thermal expansion($\times 10^{-6}$ K ⁻¹)	12@0-100°C