Beryllium Foil

Formula: Be
Percentage Purity: 99%
Thickness: 0.125mm
Length 1: 10mm
Length 2: 10mm
CAS Number: 7440-41-7
UOM Code: 726-977-33
SKU: 1000035567-group
Product Code: BE00-FL-000129

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
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Bulk modulus(GPa)	110

Element	Value
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(x10?? K?¹)	12@0-100°C