

Lithium Rod

Formula: Li

Percentage Purity: 99%

Diameter: 12.7mm

Length: 165mm

CAS Number: 7439-93-2

UOM Code: 455-547-99

SKU: 1000125889-group

Product Code: LI00-RD-000115

Material Properties for Metals

Atomic Properties

Element	Value
Atomic number	3
Crystal structure	Body centred cubic
Electronic structure	He 2s ¹
Valences shown	1
Atomic weight(amu)	6.941
Thermal neutron absorption cross-section(Barns)	63
Photo-electric work function(eV)	2.4
Natural isotope distribution(Mass No./%)	6/ 7.5
Natural isotope distribution(Mass No./%)	7/ 92.5
Atomic radius - Goldschmidt(nm)	0.157
Ionisation potential(No./eV)	2/ 75.6
Ionisation potential(No./eV)	3/ 122.4
Ionisation potential(No./eV)	1/ 5.39

Mechanical Properties

Element	Value
Material condition	Polycrystalline
Poisson's ratio	0.36
Bulk modulus(GPa)	11.1
Tensile modulus(GPa)	4.91
Hardness - Vickers(kgf mm ²)	5

Electrical Properties

Element	Value
Electrical resistivity(μOhmcm)	9.29@20@20°C
Temperature coefficient(K^{-1})	0.00435@0-100°C
Thermal emf against Pt (cold 0C - hot 100C)(mV)	1.82

Physical Properties

Element	Value
Boiling point(C)	1342
Density(gcm^{-3})	0.534@20°C

Thermal Properties

Element	Value
Melting point(C)	180.5
Latent heat of evaporation(J g^{-1})	19600
Latent heat of fusion(J g^{-1})	422
Specific heat($\text{J K}^{-1} \text{kg}^{-1}$)	3560@25°C
Thermal conductivity($\text{W m}^{-1} \text{K}^{-1}$)	84.8@0-100°C
Coefficient of thermal expansion($\times 10^{-6} \text{K}^{-1}$)	56@0-100°C