

Europium Spooled Wire

Formula: Eu

Percentage Purity: 99.95%

Product Shape: Spooled

Diameter: 1mm

Length: 0.05m

Temper: Hard

CAS Number: 7440-53-1

UOM Code: 368-617-01

SKU: 1000086044-group

Product Code: EU00-WR-000110

Material Properties for Metals

Atomic Properties

Element	Value
Atomic number	63
Crystal structure	Body centred cubic
Electronic structure	Xe 4f ⁷ 6s ²
Valences shown	2, 3
Atomic weight(amu)	151.96
Thermal neutron absorption cross-section(Barns)	4100
Photo-electric work function(eV)	2.5
Natural isotope distribution(Mass No./%)	153/ 52.2
Natural isotope distribution(Mass No./%)	151/ 47.8
Atomic radius - Goldschmidt(nm)	0.204
Ionisation potential(No./eV)	1/ 5.67
Ionisation potential(No./eV)	2/ 11.25

Mechanical Properties

Element	Value
Material condition	Polycrystalline
Poisson's ratio	0.286
Bulk modulus(GPa)	12.1
Tensile modulus(GPa)	14.7

Element**Value**

Hardness - Vickers(kgf mm²) 20

Electrical Properties**Element****Value**

Electrical resistivity(μOhmcm) 90.0@25@25°C

Temperature coefficient(K⁻¹) 0.0048@0-100°C

Physical Properties**Element****Value**

Boiling point(C) 1597

Density(gcm³) 5.243@25°C

Thermal Properties**Element****Value**

Melting point(C)

822

Latent heat of evaporation(J g⁻¹)

1155

Latent heat of fusion(J g⁻¹)

63.4

Specific heat(J K⁻¹ kg⁻¹)

176@25°C

Thermal conductivity(W m⁻¹ K⁻¹)

13.9@0-100°C

Coefficient of thermal expansion($\times 10^{-6}$ K⁻¹) 32@0-100°C