Europium Powder

Europium powder supplies reactive rare?earth metal for alloying, luminescent compounds, catalysis, and advanced materials research. **SKU:** 1000086036-group
Product Code: EU00-PD-000115

Material Properties for Metals

Atomic Properties

Element	Value
Atomic number	63
Crystal structure	Body centred cubic
Electronic structure	Xe 4f? 6s²
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
Hardness - Vickers(kgf mm?²)	20

Electrical Properties

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

Element	Value
Temperature coefficient(K?¹)	0.0048@0-100°C

Physical Properties

Element	Value
Boiling point(C)	1597
Density(gcm?³)	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(x10?? K?¹)	32@0-100°C