Thulium Foil/Sheet

Thulium foil with blue/IR emission properties for layered photonic devices, laser components, filters, and dopant sources in optical and electronic systems. **SKU:** 1000010869-group
Product Code: TM00-FL-000108

Material Properties for Metals

Atomic Properties

Element	Value
Atomic number	69
Crystal structure	Hexagonal close packed
Electronic structure	Xe $4f^{13}$ $6s^{2}$
Valences shown	2,3
Atomic weight(amu)	168.9342
Thermal neutron absorption cross-section(Barns)	115
Atomic radius - Goldschmidt(nm)	0.174
Ionisation potential(No./eV)	1/ 6.18
Ionisation potential(No./eV)	3/ 23.71
Ionisation potential(No./eV)	2/ 12.05

Mechanical Properties

Element	Value
Hardness - Brinell	53
Material condition	Polycrystalline
Poisson's ratio	0.235
Bulk modulus(GPa)	40.5
Tensile modulus(GPa)	76

Electrical Properties

Element	Value
Electrical resistivity(µOhmcm)	90@20°C
Temperature coefficient($K?^{1}$)	0.00195@0-100°C

Physical Properties

Element	Value
Boiling point(C)	1947
Density(gcm?³)	9.322@25°C

Thermal Properties

Element	Value
Melting point(C)	1545
Latent heat of evaporation(J g?¹)	1456
Latent heat of fusion(J g?¹)	109
Specific heat(J K?¹ kg?¹)	160@25°C
Thermal conductivity(W m?¹ K?¹)	16.9@0-100°C
Coefficient of thermal expansion(x10?? K?¹)	11.6@0-400°C