

Thulium Sputtering Target

Formula: Tm

Percentage Purity: 99%

Thickness: 1mm

Diameter: 50mm

CAS Number: 7440-30-4

UOM Code: 242-250-27

SKU: 1000102458-group

Product Code: TM00-ST-000100

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@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($\text{J K}^{-1} \text{kg}^{-1}$)	160@25°C
Thermal conductivity($\text{W m}^{-1} \text{K}^{-1}$)	16.9@0-100°C
Coefficient of thermal expansion($\times 10^{-6} \text{K}^{-1}$)	11.6@0-400°C