Terbium Sputtering Target

Terbium sputtering target with high purity and magneto?optical behaviour for thin?film deposition of storage media, magnetostrictive sensors, phosphor layers, and spintronic or optical devices. **SKU:** 1000207461-group
Product Code: TB00-ST-000100

Material Properties for Metals

Atomic Properties

Element	Value
Atomic number	65
Crystal structure	Hexagonal close packed
Electronic structure	Xe 4f? $6s^2$
Valences shown	3,4
Atomic weight(amu)	158.9254
Thermal neutron absorption cross-section(Barns)	30
Photo-electric work function(eV)	3
Atomic radius - Goldschmidt(nm)	0.177
Ionisation potential(No./eV)	2/ 11.52
Ionisation potential(No./eV)	1/ 5.85

Mechanical Properties

Element	Value
Material condition	Polycrystalline
Poisson's ratio	0.265
Bulk modulus(GPa)	40.8
Tensile modulus(GPa)	57.5
Hardness - Vickers(kgf $mm?^2$)	60

Electrical Properties

Element	Value
Electrical resistivity(µOhmcm)	116@20°C

Physical Properties

Element	Value
Boiling point(C)	3123
Density(gcm?³)	8.272@20°C

Thermal Properties

Element	Value
Melting point(C)	1356
Latent heat of evaporation(J g?¹)	1840
Latent heat of fusion(J g?¹)	103
Specific heat(J K?¹ kg?¹)	183@25°C
Thermal conductivity(W m?¹ K?¹)	11.1@0-100°C
Coefficient of thermal expansion(x10?? K?¹)	7@0-100°C