

Terbium Powder

Formula: Tb

Percentage Purity: 99.9%

Maximum Particle Size: 500 μ m

Weight: 1g

CAS Number: 7440-27-9

UOM Code: 217-665-52

SKU: 1000090308-group

Product Code: TB00-PD-000110

Material Properties for Metals

Atomic Properties

Element	Value
Atomic number	65
Crystal structure	Hexagonal close packed
Electronic structure	Xe 4f ⁷ 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
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Electrical resistivity(μOhmcm) 116@20@20°C

Physical Properties

Element	Value
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Boiling point(C) 3123

Density(gcm^3) 8.272@20°C

Thermal Properties

Element	Value
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Melting point(C) 1356

Latent heat of evaporation(J g^{-1}) 1840

Latent heat of fusion(J g^{-1}) 103

Specific heat($\text{J K}^{-1} \text{kg}^{-1}$) 183@25°C

Thermal conductivity($\text{W m}^{-1} \text{K}^{-1}$) 11.1@0-100°C

Coefficient of thermal expansion($\times 10^{-6} \text{K}^{-1}$) 7@0-100°C