

Praseodymium Foil (Light Tight)

Formula: Pr

Percentage Purity: 99%

Temper: As Rolled

Thickness: 0.5mm

Length 1: 25mm

Length 2: 25mm

CAS Number: 7440-10-0

UOM Code: 034-361-41

SKU: 1000004500-group

Product Code: PR00-FL-000140

Material Properties for Metals

Atomic Properties

Element	Value
Atomic number	59
Crystal structure	Hexagonal close packed
Electronic structure	Xe 4f ³ 6s ²
Valences shown	3,4
Atomic weight(amu)	140.9077
Thermal neutron absorption cross-section(Barns)	11.5
Atomic radius - Goldschmidt(nm)	0.183
Ionisation potential(No./eV)	1/ 5.42
Ionisation potential(No./eV)	2/ 10.55
Ionisation potential(No./eV)	4/ 38.95
Ionisation potential(No./eV)	5/ 57.45
Ionisation potential(No./eV)	3/ 21.62

Mechanical Properties

Element	Value
Material condition	Polycrystalline
Poisson's ratio	0.312
Bulk modulus(GPa)	31.2
Tensile modulus(GPa)	35.2

Element	Value
Hardness - Vickers(kgf mm ²)	40
Tensile strength(MPa)	110
Yield strength(MPa)	103

Electrical Properties

Element	Value
Electrical resistivity(μOhmcm)	68@20@20°C
Temperature coefficient(K ⁻¹)	0.00171@0-100°C

Physical Properties

Element	Value
Boiling point(C)	3512
Density(gcm ³)	6.782@20°C

Thermal Properties

Element	Value
Melting point(C)	931
Latent heat of evaporation(J g ⁻¹)	2343
Latent heat of fusion(J g ⁻¹)	80
Specific heat(J K ⁻¹ kg ⁻¹)	192@25°C
Thermal conductivity(W m ⁻¹ K ⁻¹)	12.5@0-100°C
Coefficient of thermal expansion($\times 10^{-6}$ K ⁻¹)	4.8@0-100