

Indium Disk

Formula: In

Percentage Purity: 99.999%

Temper: As Rolled

Thickness: 0.75mm

Diameter: 10mm

CAS Number: 7440-74-6

UOM Code: 001-342-88

SKU: 1000000156-group

Product Code: IN00-FL-000168

Material Properties for Metals

Atomic Properties

Element	Value
Atomic number	49
Crystal structure	Face centred tetragonal
Electronic structure	Kr 4d ¹⁰ 5s ² 5p ¹
Valences shown	1, 2, 3
Atomic weight(amu)	114.82
Thermal neutron absorption cross-section(Barns)	194
Photo-electric work function(eV)	4.12
Natural isotope distribution(Mass No./%)	113/ 4.3
Natural isotope distribution(Mass No./%)	115/ 95.7
Atomic radius - Goldschmidt(nm)	0.157
Ionisation potential(No./eV)	3/ 28.0
Ionisation potential(No./eV)	Apr-54
Ionisation potential(No./eV)	2/ 18.9
Ionisation potential(No./eV)	1/ 5.79

Mechanical Properties

Element	Value
Material condition	Polycrystalline
Material condition	Soft
Poisson's ratio	0.45

Element	Value
Poisson's ratio	0.45
Bulk modulus(GPa)	35.3
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Tensile modulus(GPa)	10.6
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Hardness - Vickers(kgf mm ²)	10
Tensile strength(MPa)	2.6-4.5

Electrical Properties

Element	Value
Electrical resistivity(μOhmcm)	8.8@20@20°C
Superconductivity critical temperature(K)	3.41
Temperature coefficient(K ⁻¹)	0.0052@0-100°C
Thermal emf against Pt (cold 0C - hot 100C)(mV)	0.69

Physical Properties

Element	Value
Boiling point(C)	2080
Density(gcm ³)	7.3@20°C

Thermal Properties

Element	Value
Melting point(C)	156.6
Latent heat of evaporation(J g ⁻¹)	2024
Latent heat of fusion(J g ⁻¹)	28.5
Specific heat(J K ⁻¹ kg ⁻¹)	234@25°C
Thermal conductivity(W m ⁻¹ K ⁻¹)	81.8@0-100°C
Coefficient of thermal expansion($\times 10^{-6}$ K ⁻¹)	24.8@0-100°C