Indium Spooled Wire

Formula: In
Percentage Purity: 99.999%
Product Shape: Spooled
Diameter: 1mm
Length: 5m
Temper: As Drawn
CAS Number: 7440-74-6
UOM Code: 958-042-75
SKU: 1000124419
Product Code: IN00-WR-000130

Material Properties for Metals

Atomic Properties

Element	Value
Atomic number	49
Crystal structure	Face centred tetragonal
Electronic structure	Kr $4d^{1}$? $5s^{2}$ $5p^{1}$
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

Element	Value
Poisson's ratio	0.45
Poisson's ratio	0.45
Bulk modulus(GPa)	35.3
Bulk modulus(GPa)	35.3
Tensile modulus(GPa)	10.6
Tensile modulus(GPa)	10.6
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(x10?? K?¹)	24.8@0-100°C