Indium Spooled Wire

Formula: In
Percentage Purity: 99.999%
Product Shape: Spooled
Diameter: 0.75mm
Length: 5m
Temper: As Drawn
CAS Number: 7440-74-6
UOM Code: 712-505-11
SKU: 1000124383
Product Code: IN00-WR-000125

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
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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