BREAKING NEWS - Goodfellow acquires two new companies. Find Out More

Indium Spooled Wire

Formula: In
Percentage Purity: 99.999%
Product Shape: Spooled
Diameter: 0.5mm
Length: 1m
Temper: As Drawn
CAS Number: 7440-74-6
UOM Code: 190-110-68
SKU: 1000074344
Product Code: IN00-WR-000120

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

Element	Value
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
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

Element	Value
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($x10^{-6}\ K^{-1}$)	24.8@0-100°C