Iridium Spooled Wire

Iridium spooled wire (2N5 to 3N) offers extreme hardness and arc erosion resistance. Ideal for spark plug electrodes and high-temperature applications. **SKU:** 1000000545-group
Product Code: IR00-WR-000102

Material Properties for Precious Metals

Atomic Properties

Element	Value
Atomic number	77
Crystal structure	Face centred cubic
Electronic structure	Xe 4f¹? 5d? 6s²
Valences shown	3, 4
Atomic weight(amu)	192.22
Thermal neutron absorption cross-section(Barns)	425
Photo-electric work function(eV)	4.6
Natural isotope distribution(Mass No./%)	191/ 37.3
Natural isotope distribution(Mass No./%)	193/ 62.7
Atomic radius - Goldschmidt(nm)	0.135

Mechanical Properties

Element	Value
Material condition	Soft
Material condition	Hard
Poisson's ratio	0.26
Poisson's ratio	0.26
Bulk modulus(GPa)	371
Bulk modulus(GPa)	371
Tensile modulus(GPa)	528
Tensile modulus(GPa)	528
Hardness - Vickers(kgf mm?²)	650
Hardness - Vickers(kgf mm?²)	200-300
Tensile strength(MPa)	550-1100
Tensile strength(MPa)	1200

Electrical Properties

Element	Value
Electrical resistivity(μOhmcm)	5.1@20°C
Superconductivity critical temperature(K)	0.11
Temperature coefficient(K?¹)	0.0045@0-100°C
Thermal emf against Pt (cold 0C - hot 100C)(mV)	0.65

Physical Properties

Element	Value
Boiling point(C)	4130
Density(gcm?³)	22.4@20°C

Thermal Properties

Element	Value
Melting point(C)	2410
Latent heat of evaporation(J g?¹)	3186
Latent heat of fusion(J g?¹)	135
Specific heat(J K?¹ kg?¹)	133@25°C
Thermal conductivity(W m?¹ K?¹)	147@0-100°C
Coefficient of thermal expansion(x10?? K?¹)	6.8@0-100°C