

Inconel® 718 Foil (Light Tight)

Formula: Ni53/Fe19/Cr19/Nb/Mo/Ti

Temper: Annealed

Thickness: 0.25mm

Length 1: 100mm

Length 2: 100mm

UOM Code: 093-504-23

SKU: 1000013212-group

Product Code: NI13-FL-000100

Material Properties for Alloys

Mechanical Properties

Element	Value
Hardness - Brinell	250-410
Elongation at break(%)	15
Modulus of elasticity(GPa)	200
Tensile strength(MPa)	800-1360

Magnetic Properties

Element	Value
Initial permeability	1.0013
Curie temperature(C)	-196

Electrical Properties

Element	Value
Electrical resistivity(μOhmcm)	125

Thermal Properties

Element	Value
Maximum use temperature in air(C)	700
Melting point(C)	1260-1335
Specific heat(J K ⁻¹ kg ⁻¹)	435@23°C

Element	Value
Thermal conductivity($W m^{-1} K^{-1}$)	11.2@23°C
Coefficient of thermal expansion($\times 10^{-6} K^{-1}$)	13@20-100°C

Physical Properties

Element	Value
Density(gcm^{-3})	8.19