Inconel® 718 Spherical Powder

Gas-atomised PH Ni53/Cr19/Fe18 superalloy powder for LPBF, thermal spray & HIP — rocket engine components, turbine blades & AM microstructure development. **SKU:** 1000006134-group
Product Code: NI13-PD-000130

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
Thermal conductivity(W m?¹ K?¹)	11.2@23°C
Coefficient of thermal expansion(x10?? K?¹)	13@20-100°C

Physical Properties

Element	Value
Density(gcm?³)	8.19