

# Inconel® 600 Spherical Powder

**Formula:** Ni72/Cr16/Fe 8

**Maximum Particle Size:** 45µm

**Weight:** 50g

**Product Shape:** Spherical

**Production Method:** Gas Atomised

**UOM Code:** 086-463-74

**SKU:** 1000012424-group

**Product Code:** NI02-PD-000130

## Material Properties for Alloys

### Mechanical Properties

Element	Value
Hardness - Brinell	120-290
Elongation at break( % )	50
Modulus of elasticity( GPa )	157
Izod impact strength( J m <sup>2</sup> )	160
Shear strength( MPa )	420-570
Tensile strength( MPa )	600-1200

### Magnetic Properties

Element	Value
Initial permeability	1.01
Curie temperature( C )	-124

### Electrical Properties

Element	Value
Electrical resistivity( µOhmcm )	103

### Thermal Properties

Element	Value
Melting point( C )	1370-1425

<b>Element</b>	<b>Value</b>
Specific heat( J K <sup>-1</sup> kg <sup>-1</sup> )	444@23°C
Thermal conductivity( W m <sup>-1</sup> K <sup>-1</sup> )	14.8@23°C
Coefficient of thermal expansion( x10 <sup>-6</sup> K <sup>-1</sup> )	11.5-13.3@20-100°C

## **Physical Properties**

<b>Element</b>	<b>Value</b>
Density( gcm <sup>-3</sup> )	8.42