

# Nickel/Copper Alloy Powder (Ni70/Cu30)

**Formula:** Ni70/Cu30

**Percentage Purity:** 98%

**Maximum Particle Size:** 150 $\mu$ m

**Weight:** 100g

**Production Method:** Atomised

**UOM Code:** 121-254-50

**SKU:** 1000031985-group

**Product Code:** NI07-PD-000111

## Material Properties for Alloys

### Mechanical Properties

Element	Value
Hardness - Brinell	100-260
Elongation at break( % )	50
Modulus of elasticity( GPa )	160-180
Izod impact strength( J m <sup>2</sup> )	90-160
Tensile strength( MPa )	480-1200

### Electrical Properties

Element	Value
Electrical resistivity( $\mu$ Ohmcm )	48

### Thermal Properties

Element	Value
Melting point( C )	1300-1350
Specific heat( J K <sup>-1</sup> kg <sup>-1</sup> )	420@23°C
Thermal conductivity( W m <sup>-1</sup> K <sup>-1</sup> )	26@23°C
Coefficient of thermal expansion( $\times 10^{-6}$ K <sup>-1</sup> )	13.6-14@20-100°C

### Physical Properties

Element	Value
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Density( gcm<sup>3</sup> ) 8.9