

# Iron/Nickel Alloy Spherical Powder (Fe58/Ni42)

**Formula:** Fe58/Ni42

**Maximum Particle Size:** 45 $\mu$ m

**Weight:** 1000g

**Product Shape:** Spherical

**Production Method:** Gas Atomised

**UOM Code:** 048-468-00

**SKU:** 1000006853-group

**Product Code:** FE13-PD-000111

## Material Properties for Alloys

### Mechanical Properties

Element	Value
Elongation at break( % )	30
Modulus of elasticity( GPa )	21.5
Tensile strength( MPa )	566

### Electrical Properties

Element	Value
Electrical resistivity( $\mu$ Ohmcm )	68
Temperature coefficient( K <sup>-1</sup> )	-

### Magnetic Properties

Element	Value
Curie temperature( C )	380

### Thermal Properties

Element	Value
Melting point( C )	1450
Specific heat( J K <sup>-1</sup> kg <sup>-1</sup> )	502@23°C
Coefficient of thermal expansion( $\times 10^{-6}$ K <sup>-1</sup> )	4.8@30-100°C

## Physical Properties

Element	Value
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Density( gcm <sup>3</sup> )	8.11
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