

# Incoloy® 800 Rod

**Formula:** Ni32.5/Cr21/Fe

**Diameter:** 10mm

**Length:** 100mm

**Temper:** Annealed

**UOM Code:** 020-940-94

**SKU:** 1000002475-group

**Product Code:** NI12-RD-000130

## Material Properties for Alloys

### Mechanical Properties

Element	Value
Hardness - Brinell	180-250
Elongation at break( % )	45
Modulus of elasticity( GPa )	196
Izod impact strength( J m <sup>2</sup> )	160
Tensile strength( MPa )	400-900

### Electrical Properties

Element	Value
Electrical resistivity( μOhmcm )	20
Temperature coefficient( K <sup>-1</sup> )	-

### Thermal Properties

Element	Value
Melting point( C )	1350-1420
Specific heat( J K <sup>-1</sup> kg <sup>-1</sup> )	460@23°C
Thermal conductivity( W m <sup>-1</sup> K <sup>-1</sup> )	11.5-12.9@23°C
Coefficient of thermal expansion( x10 <sup>-6</sup> K <sup>-1</sup> )	14.2-15.8@20-100°C

### Physical Properties

Element	Value
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Density( gcm<sup>3</sup> ) 7.95