

# Inconel® X750 Disk

**Formula:** Ni74/Cr15/Fe 7/Ti/Al/Nb

**Temper:** As Rolled

**Thickness:** 0.075mm

**Diameter:** 43mm

**UOM Code:** 100-297-26

**SKU:** 1000014227-group

**Product Code:** NI16-FL-000150

## Material Properties for Alloys

### Mechanical Properties

Element	Value
Hardness - Brinell	150-280
Elongation at break( % )	20
Modulus of elasticity( GPa )	210
Shear strength( MPa )	118-152
Tensile strength( MPa )	700-1250

### Magnetic Properties

Element	Value
Initial permeability	1.002
Curie temperature( C )	-193

### Electrical Properties

Element	Value
Electrical resistivity( $\mu\text{Ohmcm}$ )	122-124

### Thermal Properties

Element	Value
Melting point( C )	1390-1425
Specific heat( J K <sup>-1</sup> kg <sup>-1</sup> )	431@23°C
Thermal conductivity( W m <sup>-1</sup> K <sup>-1</sup> )	12@23°C

<b>Element</b>	<b>Value</b>
Coefficient of thermal expansion( $\times 10^{-6} \text{ K}^{-1}$ )	12.6@20-100°C

## **Physical Properties**

<b>Element</b>	<b>Value</b>
Density( $\text{gcm}^{-3}$ )	8.25