

Nickel

Designation	EN / LC – 99,6	Material # / 2.4061	UNS / N02205
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This very pure nickel alloy with good electrical properties and good thermal conductivity is well suited for applications in the electrical industry. Nickel shows high tensile strength and very good corrosion resistance. Nickel can be used at up to 600°C in air.

COMPOSITION OF MATERIAL

- Ni: ≥ 99,6 %
- Cu: ≤ 0,01 %
- Fe: ≤ 1 %
- C: ≤ 0,02 %
- Mn: ≤ 0,35 %

PHYSICAL PROPERTIES

• Density	8,9 g/cm ³
• Melting point	1445 °C
• Electrical conductivity	11 m/Ω mm ² (at 20 °C R370)
• Electrical resistivity	0,09 Ω mm ² /m (at 20 °C R370)
• Thermal conductivity	79 W/K m (at 20 °C)
• Thermal capacity	0,456 J/g K (at 20 °C)
• Coefficient of thermal expansion (linear)	13·10 ⁻⁶ /K (at 20 to 300 °C)
• Modulus of elasticity (tensile)	205 GPa (at 20 °C R370)

MANUFACTURING PROGRAM	THICKNESS	WIDTH
Rolls, spools, sheets	0,01 - 0,15 mm	1 - 640 mm

*not all combinations of thickness and width are available
or different dimensions please contact our technical service*

TEMPER ACCORDING TO DIN EN 17750			TYPICAL VALUES (information only)
	Tensile strength Rm in MPa	Yield strength Rp _{0,2} in MPa	Elongation in % L ₀ = 100 mm
R370	≥ 490	< 380	> 10
R490	≥ 560	> 340	< 15
R590	≥ 590	> 550	< 3

The values in the table are valid only for foils with thickness > 0,1 mm.

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