

100% NICKEL STRIP

DATASHEET

100% nickel for use as an intermediate layer in bimetals.

CHEMICAL COMPOSITION

	Si %	Fe %	Mn %	Ni %
Nominal composition				
Min				99.2
Max	0.2	0.25	0.3	-

MECHANICAL PROPERTIES

Thickness	Yield strength	Tensile strength	Elongation
	R _{p0.2}	R _m	A
mm	MPa	MPa	%
1.0	160	400	35

PHYSICAL PROPERTIES

Density g/cm ³	8.9
Electrical resistivity at 20°C Ω mm ² /m	0.09

TEMPERATURE FACTOR OF RESISTIVITY

Temperature °C	20	100	200	300	400	500	600
Ct	1.00	1.40	2.08	2.97	3.81	4.23	4.65

COEFFICIENT OF THERMAL EXPANSION

Temperature °C	Thermal Expansion x 10 ⁻⁶ /K
20 - 100	13.3

THERMAL CONDUCTIVITY

Temperature °C	
	100
W m ⁻¹ K ⁻¹	70

SPECIFIC HEAT CAPACITY

Temperature °C	20
$\text{kJ kg}^{-1} \text{K}^{-1}$	0.48
Melting point °C	1450
Max continuous operating temperature in air °C	1000
Magnetic properties	The material is magnetic.

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