

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
C _t	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
$kJ kg^{-1} K^{-1}$	0.48

Melting point °C	1450
Max continuous operating temperature in air °C	1000
Magnetic properties	The material is magnetic.

Disclaimer: Recommendations are for guidance only, and the suitability of a material for a specific application can be confirmed only when we know the actual service conditions. Continuous development may necessitate changes in technical data without notice. This datasheet is only valid for Kanthal materials.