

BrushForm® 96 Mill Hardened Tempers

Materion Brush Performance Alloys' BrushForm® 96 Strip is a high-performance, heat treatable spinodal copper nickel tin alloy designed to provide optimal formability and strength characteristics in conductive spring applications such as electronic connectors, switches, and sensors. It is available in both pre-heat treated (mill hardened) and heat treatable (age hardenable) forms.

CHEMICAL COMPOSITION (weight percent)

Alloy	Nickel	Tin	Copper
BrushForm® 96	8.5 - 9.5	5.5 - 6.5	Balance

PHYSICAL PROPERTIES*

Elastic Modulus	Density	Typical Electrical Conductivity	Coefficient of Thermal Expansion	Relative Magnetic Permeability	Poisson's Ratio
18.0 x 106 psi 124 GPa	0.322 lb/in ³ 8.91 g/cm ³	10% IACS 5.8 MS/m	9.0 ppm/°F 16.2 ppm/°C	<1.01	0.3

MECHANICAL PROPERTIES*

Temper	0.2% Offset Yield Strength ksi (MPa)	Ultimate Tensile Strength ksi (Mpa)	Minimum Elongation (%) *	Hardness (HV)	Minimum 90° Bend Formability R/T Ratio	
					Good Way (Longitudinal)	Bad Way (Transverse)
TM00	55 - 85 (379 - 586)	90 - 110 (621 - 758)	16	180 - 280	0.2	0.2
TM02	70 - 100 (483 - 689)	100 - 120 (689 - 827)	12	200 - 300	0.5	0.5
TM04	85 - 115 (586 - 793)	110 - 130 (758 - 896)	8	230 - 300	1.0	1.0
TM06	90 - 130 (621 - 896)	120 - 140 (827 - 965)	4	240 - 360	2.5	3.0
TM08	100 - 140 (689 - 965)	130 - 160 (896 - 1103)	-	260 - 380	5.0	7.0

*Percent elongation valid for strip 0.004" (0.10 mm) and thicker.

STANDARD AVAILABILITY

Mill Hardened Tempered Strip: 0.0015" (0.04mm) – 0.020" (0.5mm) gauge

SPECIFICATIONS

UNS C72700, ASTM B740

RELATED INFORMATION

Additional information on BrushForm® 96 availability, size capability and pricing can be obtained by calling 800-375-4205.

North American Service Centers – Sales Inquiries

For strip, wire and rod under 0.4" (10 mm) diameter

Elmhurst, IL

TOLL FREE: 800.323.2438
LOCAL: +(1) 630.832.9650
FAX: +(1) 630.832.9657

For plate, tube, bar, and rod 0.4" (10 mm) diameter and over

Warren, MI

TOLL FREE: 800.521.8800
LOCAL: +(1) 586.772.2700
FAX: +(1) 586.772.2472

International Sales Offices

CHINA/HONG KONG

TEL: +852.2318.1960/1907
brushalloysHK-info@materion.com

INDIA/PUNE

TEL: +(91) 99606.33744
brushalloysIN-info@materion.com

SINGAPORE/ASEAN

TEL: +(65) 6842.4456
brushalloysSG-info@materion.com

CHINA/SHANGHAI

TEL: +(86) 21.5237.2328
brushalloysCN-info@materion.com

JAPAN

TEL: +(81) 33.230.2961
brushalloysJP-info@materion.com

TAIWAN, R.O.C.

TEL: +(886) 2.2747.8800x121
brushalloysTW-info@materion.com

GERMANY

TEL: +(49) 711.830.930
brushalloysDE-info@materion.com

REPUBLIC OF KOREA

TEL: +(82) 32.811.2171
brushalloysKR-info@materion.com

UNITED KINGDOM @ IRELAND

TEL: +(44) 118.930.3733
brushalloysUK-info@materion.com

To obtain a complete list of Materion's global distributor/agent network, visit us online at www.materion.com/BrushAlloys/ContactUs.