



ToughMet® 3 A Strip

Materion Brush Performance Alloys' ToughMet® 3 strip is a high-performance, spinodal copper nickel tin alloy designed to provide optimal formability and tribological characteristics. This material is primarily used in wear resistant bearings and controlled fragmentation devices.

CHEMICAL COMPOSITION (weight percent)

Alloy	Nickel	Tin	Copper
ToughMet 3	15	8	Balance

PHYSICAL PROPERTIES

Elastic Modulus	Poisson's Ratio	Electrical Conductivity	Coefficient of Thermal Expansion	Density	Magnetic Permeability
18.5 x 10 ⁶ psi 128 kN/mm ²	0.3	<7% IACS <4 MS/m	8.9 x 10 ⁻⁶ in/in/°F 16.1 x 10 ⁻⁶ m/m/°C	0.325 lb/in ³ 9.00 g/cm ³	<1.101

MECHANICAL PROPERTIES

0.2% Offset Yield Strength (Typical)		Ultimate Tensile Strength (Typical)		Elongation (Minimum)
(ksi)	(N/mm ²)	(ksi)	(N/mm ²)	
25 - 45	172 - 310	64 - 85	440 - 585	32

*Converted from 271 HBW

STANDARD AVAILABILITY

Annealed strip: 0.006" (0.15 mm) to 0.090" (2.23 mm) by up to 12" (300 mm) wide coil

SPECIFICATIONS

UNS C72900

RELATED INFORMATION

Additional information on ToughMet® 3 strip 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.



Materion Brush Performance Alloys

6070 Parkland Boulevard
Mayfield Heights, OH 44124 USA
phone: 216.486.4200 fax: 216.383.4005
email: BrushAlloys-info@materion.com

MATERION CORPORATION

www.materion.com/alloys

AD0038_0311

ToughMet® is a Registered Trademark of Materion Brush Inc.
© 2011 Materion Brush Inc.