

## Materion Beryllium Copper Alloy M25 Wire; 1/2HT (TH02) Temper; 1.3-12.7 mm Diameter (UNS C17300)

Category : Metal , Nonferrous Metal , Beryllium Alloy , Copper Alloy

### Material Notes:

Treatment required for max strength: 1.5 hrs @ 315-330°C Tabulated properties apply to products after age hardening. Information supplied by Brush Wellman.Brush Engineered Materials Inc. changed its name to Materion Corporation in March 2011.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Materion-Beryllium-Copper-Alloy-M25-Wire-12HT-TH02-Temper-13-127-mm-Diameter-UNS-C17300.php](http://www.lookpolymers.com/polymer_Materion-Beryllium-Copper-Alloy-M25-Wire-12HT-TH02-Temper-13-127-mm-Diameter-UNS-C17300.php)

Physical Properties	Metric	English	Comments
Density	8.36 g/cc	0.302 lb/in <sup>3</sup>	

Mechanical Properties	Metric	English	Comments
Tensile Strength, Ultimate	1270 - 1490 MPa	184000 - 216000 psi	
Tensile Strength, Yield	1170 - 1450 MPa	170000 - 210000 psi	
Elongation at Break	>= 2.0 %	>= 2.0 %	
Modulus of Elasticity	131 GPa	19000 ksi	

Thermal Properties	Metric	English	Comments
CTE, linear	17.0 Åµm/m-Å°C	9.44 Åµin/in-Å°F	
	@Temperature 20.0 - 200 Å°C	@Temperature 68.0 - 392 Å°F	
Thermal Conductivity	105 W/m-K	729 BTU-in/hr-ft <sup>2</sup> -Å°F	
Melting Point	870 - 980 Å°C	1600 - 1800 Å°F	
Solidus	870 Å°C	1600 Å°F	
Liquidus	980 Å°C	1800 Å°F	

Component Elements Properties	Metric	English	Comments
Beryllium, Be	1.8 - 2.0 %	1.8 - 2.0 %	
Co + Ni	>= 0.20 %	>= 0.20 %	
Co + Ni + Fe	<= 0.60 %	<= 0.60 %	
Copper, Cu	97.5 %	97.5 %	as balance
Lead, Pb			

Component Elements Properties	0.20 - 0.60 % Metric	0.20 - 0.60 % English	Comments
Electrical Properties	Metric	English	Comments
Electrical Resistivity	0.00000610 - 0.00000780 ohm-cm	0.00000610 - 0.00000780 ohm-cm	22-28% IACS Conductivity

## Contact Songhan Plastic Technology Co.,Ltd.

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