

# Clear Epoxy

## Encapsulating and Potting Compound

### For high voltage applications

Protects sensitive electronic components from impact, shock, vibration, heat, conductivity, moisture, chemicals. Allows visual inspection.

### Features

- Non-porous, water and chemical resistant
- Extremely impact resistant (contains a form of nylon)
- Affords total security, once cast it can not be removed
- Excellent machining properties
- Non-conductive, an electrical insulator
- Low toxicity
- Suitable for explosion proof components (spark arresting)
- Easy and simple to mix
- Long pot life
- Can be cured in one hour at 65°C (150°F)
- This product is RoHS compliant



### Specifications:

Uncured Properties - Resin [Part A]		
Viscosity		2,500 cps
Specific Gravity		1.1273
Color		Clear (yellow tint), colorless
Uncured Properties - Hardener [Part B]		
Viscosity		11,000 cps
Specific Gravity		0.9564
Color		Clear, amber tint
Cured Properties - Physical		
Mixed Viscosity		3,300 cps
Mixed Specific Gravity		1.0577
Volume Mix Ratio (resin:hardener)		2.0:1
Mass Mix Ratio (resin:hardener)		2.3:1
Working time (100g)		60 minutes
Tensile / Elongation	ASTM D 638	3276 psi / 6.4% elongation
Compression Strength/modulus	ASTM D 695	8971 psi / 315000 psi
Flexural strength/modulus	ASTM D 790	5549 psi / 370,000 psi
Izod impact strength	ASTM D 256	0.700 ft-lbs / inch notch, 0.214" thickness

#### Disclaimer:

This information is believed to be accurate. It is intended for professional end users having the skills to evaluate and use the data properly. M.G. Chemicals Ltd. Does not guarantee the accuracy of the data and assumes no liability in connection with damages incurred while using it.



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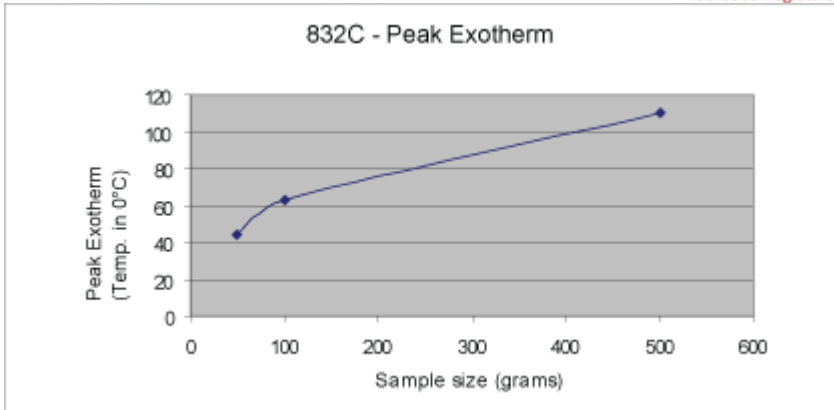
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ISO 9001 Registered Quality System QMI Certificate # 004008 Burlington, Ontario, Canada

Shore <u>Hardness</u>	ASTM D 2240	85 (initial) - 85 (10 sec) averages
Coefficient of Thermal Expansion	ASTM E 831	0.036" / 10" @ 32°F, 0.020"/10" @72°F
Lap shear strength	ASTM 1002	702 psi
Curing Time (100g)		
@ room temp.		24 hours
@ 65°C		60 minutes
@ 80°C		45 minutes
@ 100°C		35 minutes
<b>Cured Properties - Temperature</b>		
Constant Service Temperature	140°C (284°F)	
Intermediate Service Temperature	145°C (293°F)	
Heat deflection temp. 264 psi	ASTM D 648	43.548°C (92.22°F)
<b>Cured Properties - Electrical</b>		
Volume Resistivity (ASTM D257)	1.22 x 10 <sup>16</sup> ohm · cm	
Surface Resistivity (ASTM D257)	5.50 x 10 <sup>15</sup> ohm · cm	
Dielectric Constant (ASTM D150)	3.23 @ 60Hz 3.19 @ 10 <sup>3</sup> Hz 2.99 @ 10 <sup>6</sup> Hz	
Dielectric strength (0.114"thk)	ASTM D 149	425 V / mil, 60 Hz
Insulative	Yes	
Conductive	No	
<b>Chemical and Solvent Resistance</b>		
	Change after 3 days	Change after 45 days
Hydrochloric Acid	< 0%	< 1 %
Isopropyl Alcohol	< 0.3 %	< 1 %
Ethyl Lactate	< 3 %	< 7 %
Acetone	< 7%	destroyed
Xylene	< 2%	< 9 %
Iso hexanes	< 5 %	< 8 %
Mineral spirits	< 0.3 %	< 0.3 %

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Sample Size (grams)	Peak Exotherm (Temp. in °C)	Time in Minutes
50	44	155
100	63	110
500	110	65

#### Available Sizes

Catalog Number	Sizes Available	Description
832C-375ML	375 ml (12 oz.)	Liquid
832C-3L	3 L (0.8 gallon)	Liquid
832C-60L	60 L (16 gallons)	Liquid

#### Usage Instructions:

1. Individually stir Part A and Part B.
2. Thoroughly mix 2 parts of A to 1 part of B by volume.
3. Let stand for 30 minutes to allow air that has been mixed in to release. Gently stir once more to remove any foam that has accumulated on top.
4. Pour directly onto the surface to be encapsulated.
5. Let stand for 24 hours or for best results, heat cure at 65°C (149°F) for 1 hours.

#### Storage conditions:

Keep away from sources of ignition. Store in a cool, dry, well-ventilated area, away from incompatible substances.

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