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POLYCAST 140 MT FR **Castable Heat Sink, UL 94v0 Epoxy Compound**

DESCRIPTION:

PC 140 MT FR is an epoxy casting compound with high thermal conductivity. When cured properly, it also provides Class F operating properties. **PC 140 MT FR is UL 94v0 approved under file # E264175.**

PROPERTIES - UNCURED:

	<u>Part A</u>	<u>Part B (PC 110B)</u>
Color, Visual	Black	Dark Amber
Viscosity, cps. (ASTMD2393)	250,000	700
Specific Gravity	2.60	0.95
Mix Ratio (By Weight)		100:3-4
Mixed Viscosity, cps.		50,000
Pot Life @ 72° F		2.5 hours
Shelf Life @ 72° F, months		12

PROPERTIES - CURED:

Hardness Durometer (Shore D) (ASTMD 2240)	91
Tensile Strength, psi (ASTMD 638)	8,500
Tensile Elongation, % (ASTMD 638)	<1
Compressive Strength, psi (ASTMD 695)	18,000
Flexural Strength, psi (ASTMD 790)	13,500
Coefficient of Thermal Expansion	26×10^{-6}
Thermal Conductivity BTU-in/(ft ²)(hr)(°F)	20
Heat Distortion point (°C)	155
Service Temperature (°C)	-55 - 155
Dielectric Strength, volts/mil (ASTMD 149)	420
Dielectric Constant, 60 Hz (ASTMD 150)	6.3
Dissipation Factor, 60 Hz (ASTMD 150)	0.015
Volume Resistivity, ohm-cm	1.0×10^{15}

USE INSTRUCTIONS:

1. Premix material in the original container prior to use to insure any settled filler may be reincorporated.
2. Weigh out the required amount of PC 140 MT FR.
3. Measure out the appropriate amount of material (Part A and Part B)
4. Mix thoroughly, scraping both sides and bottom of container.
5. Evacuate mixture at 29 in. Hg for 5- 10 minutes.
6. Pour into mold or cavity.

CURE SCHEDULE:

Fast Cure - 2 hours at 120° C.
Small Mass – 95° C for 2-3 hours + 1 hour @ 120° C.
Large Mass (> 5 LBS.) – 65° C for 4 hours + 2 hours @ 120° C.
Post Cure: 4 hours at 155° C