



Silicone & Epoxy Technology

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## Set-Cast 1-140MTFR/111

**Set-Cast 1-140 MTFR** is an epoxy casting with high thermal conductivity. Class F specification can be met by using **Set-Cure 111**. **Set-Cast 1-140MTFR** is **UL 94VO** approved.

<b>Properties-Uncured:</b>	<b>1-140MTFR</b>	<b>Set-cure 111</b>
Color, Visual	<b>Black</b>	<b>Amber</b>
Mixed Viscosity, cps	<b>250,000</b>	<b>700</b>
Specific Gravity	<b>2.60</b>	<b>0.97</b>
Mix Ratio, by weight	<b>100:3.5</b>	
Pot Life @25 <sup>0</sup> C, hours	<b>2.5</b>	
Shelf Life @25 <sup>0</sup> , months	<b>6</b>	
An UL 94 VO requirement	<b>Passes</b>	

### Physical Properties-Cured:

Durometer (Shore D)	<b>90</b>
Tensile Strength, psi	<b>8000</b>
Tensile Elongation, %	<b>&lt;1.0</b>
Coefficient of Thermal Expansion, °C	<b>26 X 10<sup>-6</sup></b>
Thermal Conductivity, BTU-in(ft <sup>2</sup> )(hr)(°F)	<b>22</b>
Service Temperature, °C	<b>-55 to 155</b>
Compressive Strength, psi	<b>17,000</b>
Flexural Strength, psi	<b>14,000</b>
Heat Distortion Point, °C	<b>155</b>
Modulus Elasticity	

### Electrical:

Dielectric Strength, volts/Mil	<b>425</b>
Dielectric Constant, 60hz	<b>6.3</b>
Dissipation Factor, 60hz	<b>0.015</b>
Volume Resistivity, ohm-cm	<b>1.0 X 10<sup>15</sup></b>

**See back of Data Sheet for Warranty Information**

## Set Cast 1-140 MTFR ~page 2~

### Mixing Instruction:

1. Pre-mix both components in their original containers to insure consistency.
2. Pre-heat both components to 100<sup>0</sup>F, to lower viscosity for ease of mixing.
3. Measure out equal parts (by weight) of both components.
4. Mix thoroughly, scraping the sides and bottom of container
5. Evacuate @29in. Hg for void-free casting.
6. Pour into unit or cavity.

### Cure Schedule:

Small mass, 95 °C for 2-3 hours plus 1 hour @ 120 °C.

Large Mass, greater then 5 lbs, cure @ 65 °C for 4 hours plus 2 hours @120 °C.

To maximize temperature post cure S.E.T 1-140MT for 4 hours at 150 °C for service temperatures above 150 °C.

## Warranty

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