

FRE8585-40

# Two-Part Self-Extinguishing Epoxy

# **DESCRIPTION**

FRE8585-40 is a two-part room temperature cure, moderate viscosity, epoxy potting/casting compound which is formulated

to be self-extinguishing and pass requirements of UL 94 V-0.

Data contained herein are believed to be reliable. Fit-for-use testing should be conducted by each user.

TYPICAL PROPERTIES	TEST METHOD	<u>VALUE</u>
Flame Retardant:	· · · · · · · · · · · · · · · · · · ·	Formulated to pass 94 V-0
Mix Ratio:		
By Weight:		100: 8
Tensile Strength (psi):	ASTM D638	12,000
Elongation (%):	ASTM D638	3.5
HDP (°C):	ASTM D3418	155
Service Temperature (°C):		155
Shore D Hardness:	ASTM D2240	85
Tg (° C):	ASTM D3418	122
CTE (m/m/°C)		
Below Tg:		19x10 <sup>-6</sup>
Above Tg:		62 x10 <sup>-6</sup>
Dielectric Strength (v/mil):		480
Dielectric Constant:	ASTM D150	3.63
Weight Loss (%):		
24 hours:		1.68
48 hours:		1.86
Thermal Conductivity (W/mK):		.677
Dissipation Factor:	ASTM D150	0.028
Pot Life [100 Gram Mass at 75°F] (hours):	ASTM D2471	2.5
Cure Time (days):		2
Part A:		
Specific Gravity (g/cc):	ASTM D1475	1.65
Viscosity (cps):	ASTM D2393	13,000
Color:		Black
Part B:		
Specific Gravity (g/cc):	ASTM D1475	0.96
Viscosity (cps):	ASTM D2393	200
Color:		Amber
Mixed:		
Specific Gravity (g/cc):	ASTM D1475	1.6
Viscosity (cps):	ASTM D2393	12,000
Color:		Black

<sup>\*</sup>Filler settling may occur during storage and will need to be agitated before use

To the best of our knowledge, the information contained herein is accurate. However, STAR TECHNOLOGY, Inc., does not assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of the suitability of any material is the sole responsibility of the user. The information contained herein is considered typical properties and is not intended to be used as specifications for our products. This information is offered solely to assist purchaser in selecting the appropriate products for purchaser's own testing. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein and in the material safety data sheet, we cannot guarantee that these are the only hazards that exist. Repeated and prolonged exposure to epoxy resins can cause sensitization or other allergic responses.



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#### **APPLICATION PROCEDURES**

Carefully weigh out appropriate amounts of resin and hardener into a clean mixing container and thoroughly mix until all streaks and striations are gone. Scrape the sides and bottom frequently to ensure complete mixing.

For 1# and 2# kits, add all of Part B to Part A and mix thoroughly.

*CAUTION*: Unmixed compound from the sides or bottom of the container can cause soft spots or uncured areas in the completed piece. To prevent this, transfer the entire mixed contents to a second clean container and remix for a short time before using.

## **PRECAUTIONS**

For industrial use only. Keep away from children. Refer to the Material Safety Data Sheets (MSDS forms) pertaining to this product before using. Avoid contact with skin or eyes. In the event of an eye splash or contact, immediately flush with cold water for 15 minutes and contact a physician. If skin contact occurs, wash with mild soap and water. The wearing of safety glasses with side shields and impervious gloves is recommended.

## **WARNING STATEMENT**

May cause allergic skin reaction. Avoid all contact with skin, eyes, and clothing. Wash thoroughly after handling.

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