



# FISi/ SI 500

## Thermal Encapsulant

### FEATURES & BENEFITS

- >99% Solids / VOC free
- Exceptionally fast cure
- Convenient 1:1 mix ratio
- No corrosive by-products
- Environmentally friendly
- Low shrinkage
- Virtually no exotherm
- No post-cure required
- Perfect balance between weight and thermal conductivity

### APPLICATIONS

- Batteries
- Outdoor junction boxes
- Semiconductor modules
- “Clam-shell” enclosures
- Cable splicing units
- Electronic potting

### AVAILABILITY

- 5-Gallon Pails
- 600 ml Side-by-side cartridges

### STORAGE / SHELF LIFE

SI270 may be stored in original, unopened containers at, or below, 75F for up to one (1) year.

### DESCRIPTION

FISi/ SI500 is a two-component, thermally conductive, silicone-based potting and encapsulating compound with good flowability, long work-life, flexible cure schedule and moderate hardness.

### TYPICAL PROPERTIES

Physical Property	Test Method	Performance Range
Appearance (mixed)	Visual	Pink liquid
Mix Ratio		1:1 By Volume (1:1 By Weight)
Viscosity (Mixed)	Brookfield	20,000-30,000 cps
Specific Gravity		2.50
Work-life @ 25C		15 -30 minutes
Cure Time @ 25C		3 Days
Shore Hardness	ASTM D 2240	30 Shore A
Service Temperature		-40C to 205C (-40F to 400F)
Thermal Conductivity	ASTM E 1530	2.0 W/m-K
Thermal Resistance	ASTM E 1530	24.3 x 10 <sup>-4</sup> K-m/W
Dielectric Constant	ASTM D150	4.95 @100 Hz 5.28 @ 100 kHz
Dissipation Factor	ASTM D 150	0.0377 @100Hz 0.0072 @100 kHz
Dielectric Strength	ASTM D149	350 V/mil

### ADDITIONAL INFORMATION

- Refer to Technical Bulletins for additional mixing, curing and handling procedures.
- As with any platinum-catalyzed silicone gel, the cure may be inhibited. Always check compatibility. Refer to Technical Bulletin for information.
- Not recommended for surfaces that are to be painted.

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