

### **Product Data Sheet**

## Liquid-Dispensed Silicone Thermal Pad / GapFiller

# SilCool TIA265GF (XE14-D0034)

SilCool TIA265GF (XE14-D0034) is a 2-component, soft, thermally conductive silicone material that is designed to dissipate heat from electronic devices. Its non-slumping pasty consistency provides physical stability for optimized processing. TIA26GF can be used as liquid dispensed alternative to pre-fabricated Thermal Pads, for a broad array of thermal designs in electronic applications.

### **KEY FEATURES**

- High thermal conductivity
- Fast, low temperature cure
- Convenient 1:1 mix ratio by weight
- Retains softness after cure to contribute to stress relief during thermal cycling
- Good slump resistance (stays in place)
- Repairable
- Typical Operating Temp Range -40° to 150°C

### TYPICAL PROPERTIES

UNCURED PROPERTIES		TIA 265GF XE14-D0034 (A)	TIA 265GF XE14-D0034 (B)
Appearance (Part A & B)		pink	pale pink
Viscosity *1	Pa⋅s	230	225
Mix ratio by weight		1 : 1	
Viscosity *1 after mixing	Pa⋅s	184	
Thixo Index		2.6	
Work Life @ 23°C	Hours	1	
Cure conditions	Hours		
@ 70°C		1	
@ 23°C		24	
CURED PROPERTIES (1 hour @ 70°C)			
Appearance		pink	
Density (23°C)	g/cm³	3.26	
Thermal conductivity *2	W/m·K	6.7	
Thermal resistance *3	mm²•K/W	33.8	
Minimum bond line thickness	μm	200	
Hardness (Type E)		27	
Hardness (Shore 00)		54	
Tensile strength	MPa	0.025	
Elongation	%	60	
Dielectric strength	kV/mm	14	
Low volatile (D <sub>4</sub> -D <sub>10</sub> )	ppm	100	

<sup>\*1:</sup> Plate-plate rheometer / \*2: Hot disk method / \*3: ASTM 5470

Typical properties / These values are not intended for use in preparing specifications.





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### TYPICAL APPLICATIONS

Thermal interface for electronic components in Automotive, Consumer, Telecommunication, Lighting and Industrial applications

### **GENERAL CONSIDERATIONS:**

While the typical operating temperature for silicone materials ranges from -45°C to 150°C, the long-term maintenance of its initial properties is dependent upon design related stress considerations, substrate materials, frequency of thermal cycles, and other factors.

### HANDLING AND SAFETY

- Materials such as water, sulfur, nitrogen compounds, organic metallic salts, phosphorus compounds, etc. contained in the surface of the substrate can inhibit curing. A sample patch should always be conducted before proceeding to determine compatibility.
- Wear eye protection when handling uncured rubber as it can irritate eyes. In case of eye contact, immediately flush eyes well with water and contact a physician.
- Maintain adequate ventilation in the work place at all times.

### STORAGE AND PACKAGING

- Store in a cool, dry place out of direct sunlight
- Keep out of the reach of children
- Packaging: 400cc cartridge, 200z SEMCO Cartridge, 20l plastic pail

### **OPTION for GLASS BEADS**

 Glass Bead versions for BLT control can be made available upon request (typically sizes 180µ and 250µ)

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