

# Product Data Sheet

## Liquid-Dispensed Silicone Thermal Pad / GapFiller SilCool\* TIA268GF (XE14-C7413)

TIA268GF (XE14-C7413) 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. XE14-C7413 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 PROPERTIES

UNCURED PROPERTIES		XE14-C7413 (A)	XE14-C7413 (B)
Appearance (Part A & B)		pink	pale pink
Viscosity *1	Pa·s	240	255
Mix ratio by weight		1 : 1	
Viscosity *1 after mixing	Pa·s	250	
Thixo Index		1.5	
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/cm <sup>3</sup>	2.9	
Thermal conductivity *2	W/m·K	6.8	
Thermal resistance *3	mm <sup>2</sup> ·K/W	10 (at min. BLT)	
Minimum Bond Line Thickness	µm	35-55	
Hardness (Type E)		35	
Hardness (Shore 00)		60	
Tensile strength	MPa	0.05	
Elongation	%	60	
Dielectric strength	kV/mm	15	
Low volatile (D <sub>4</sub> -D <sub>10</sub> )	ppm	100	

\*1: 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 INSTRUCTIONS:

### 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

- Store in a cool, dry place out of direct sunlight
- Keep out of the reach of children

### OPTION for GLASS BEADS

- Glass Bead versions for BLT control can be made available upon request (typically sizes 180 $\mu$  and 250 $\mu$ )

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