BERGQUIST

Technical Data Sheet

Gap Filler 2000 (Two-Part)

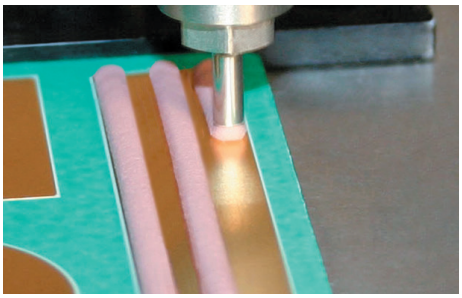
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PRODUCT DESCRIPTION

Thermally Conductive, Liquid Gap Filling Material

FEATURES AND BENEFITS

- Thermal conductivity: 2.0 W/m-K
- Ultra-conforming, designed for fragile and low-stress applications
- Ambient and accelerated cure schedules
- 100% solids – no cure by-products
- Excellent low and high temperature mechanical and chemical stability



Gap Filler 2000 is a high performance, thermally conductive, liquid gap filling material supplied as a two-component, room or elevated temperature curing system.The material provides a balance of cured material properties and good compression set (memory).The result is a soft, form-in-place elastomer ideal for coupling “hot” electronic components mounted on PC boards with an adjacent metal case or heat sink. Before cure, it flows under pressure like grease.After cure, it won’t pump from the interface as a result of thermal cycling and is dry to the touch.

Unlike cured Gap Filling materials, the liquid approach offers infinite thickness with little or no stress during displacement and assembly. It also eliminates the need for specific pad thickness and die-cut shapes for individual applications.

Gap Filler 2000 is intended for use in thermal interface applications when a strong structural bond is not required. As cured, Gap Filler 2000 is formulated to have pliable low-modulus, properties.

Note: To build a part number, visit our website at www.bergquistcompany.com.

TYPICAL PROPERTIES OF GAP FILLER 2000

PROPERTY	IMPERIAL VALUE	METRIC VALUE	TEST METHOD
Color / Part A	Pink	Pink	Visual
Color / Part B	White	White	—
Viscosity as Mixed (cps)(1)	300,000	300,000	ASTM D2196
Density (g/cc)	2.9	2.9	ASTM D792
Mix Ratio	1:1	1:1	—
Shelf Life @ 25°C (months)	6	6	—
PROPERTY AS CURED			
Color	Pink	Pink	Visual
Hardness (Shore 00)(2)	70	70	ASTM D2240
Heat Capacity (J/g-K)	1.0	1.0	ASTM D1269
Continuous Use Temp (°F) / (°C)	-76 to 392	-60 to 200	—
ELECTRICAL AS CURED			
Dielectric Strength (V/mil)	500	500	ASTM D149
Dielectric Constant (1000 Hz)	7	7	ASTM D150
Volume Resistivity (Ohm-meter)	10^{11}	10^{11}	ASTM D257
Flame Rating	V-O	V-O	U.L. 94
THERMAL AS CURED			
Thermal Conductivity (W/m-K)	2.0	2.0	ASTM D5470
CURE SCHEDULE	**SCHEDULE 1**	**SCHEDULE 2**	**SCHEDULE 3**
Pot Life @ 25°C (3)	15 min	60 min	600 min (10 hr)
Cure @ 25°C (4)	1-2 hours	3-4 hours	3 days
Cure @ 100°C (4)	5 min	15 min	1 hour

1) Brookfield RV, Heli-Path, Spindle TF @ 20 rpm, 25°C.
2) Thirty second delay value Shore 00 hardness scale.
3) Time for viscosity to double.
4) Cure schedule (rheometer - time to read 90% cure)

TYPICAL APPLICATIONS INCLUDE

- Automotive electronics
- Telecommunications
- Computer and peripherals
- Thermally conductive vibration dampening
- Between any heat-generating semiconductor and a heat sink

CONFIGURATIONS AVAILABLE

- Supplied in cartridge and kit form

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