BERGQUIST

Technical Data Sheet

Gap Filler 1000SR (Two-Part)

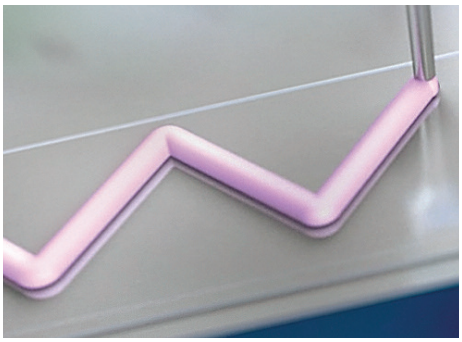
September 2011

PRODUCT DESCRIPTION

Thermally Conductive, Liquid Gap Filler Material

FEATURES AND BENEFITS

- Thermal Conductivity: 1.0 W/m-K
- Excellent slump resistance (stays in place)
- Ultra-conforming, with excellent wet-out for low stress interface applications
- 100% solids - no cure by-products
- Excellent low and high temperature mechanical and chemical stability



Gap Filler 1000SR is a two-part, thermally conductive, liquid gap filling material that features superior slump resistance. The mixed system will cure at room temperature and can be accelerated with the addition of heat.

Unlike cured thermal pad materials, a liquid approach offers infinite thickness variations with little or no stress to sensitive components during assembly. As cured, Gap Filler 1000SR provides a soft, thermally conductive, form-in-place elastomer that is ideal for fragile assemblies or for filling unique and intricate air voids and gaps.

Gap Filler 1000SR exhibits low level natural tack characteristics and is intended for use in applications where a strong structural bond is not required.

TYPICAL PROPERTIES OF GAP FILLER 1000SR

PROPERTY	IMPERIAL VALUE	METRIC VALUE	TEST METHOD
Color / Part A	Violet	Violet	Visual
Color / Part B	White	White	Visual
Viscosity, High Shear (Pa-s) (1)	20	20	ASTM D5099
Density (g/cc)	2.0	2.0	ASTM D792
Mix Ratio	1:1	1:1	—
Shelf Life @ 25°C (months)	6	6	—
PROPERTY AS CURED			
Color	Violet	Violet	Visual
Hardness (Shore 00) (2)	75	75	ASTM D2240
Heat Capacity (J/g-K)	1.0	1.0	ASTM D1269
Continuous Use Temp (°F) / (°C)	-76 to 347	-60 to 175	—
ELECTRICAL AS CURED			
Dielectric Strength (V/mil)	500	500	ASTM D149
Dielectric Constant (1000 Hz)	5.1	5.1	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)	1.0	1.0	ASTM D5470
CURE SCHEDULE			
Pot Life @ 25°C (min) (3)	60	60	-
Cure @ 25°C (hrs) (4)	20	20	-
Cure @ 100°C (min) (4)	10	10	-

1) Capillary Viscosity, Initial, 4500 sec^{-1}. Part A and B measured separately.
2) Thirty second delay value Shore 00 hardness scale.
3) ARES Parallel Plate Rheometer - Working life as liquid, time for modulus to double.
4) ARES Parallel Plate Rheometer - Estimated time to read 90% cure.

TYPICAL APPLICATIONS INCLUDE

- Automotive electronics
- Computer and peripherals
- Between any heat-generating semiconductor and a heat sink
- Telecommunications

CONFIGURATIONS AVAILABLE

- Supplied in cartridge or kit form

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