# Gap Filler 1500 (Two-Part)

### **Features and Benefits**

- Thermal conductivity: 1.8 W/mK
- O ptimized shear thinning characteristics for ease of dispensing
- 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 1500 is a two-part, high performance, thermally conductive liquid gap filling material, which features superior slump resistance and high shear thinning characteristics for optimized consistency and control during dispensing 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 the sensitive components during assembly. Gap Filler 1500 exhibits low level natural tack characteristics and is intended for use in applications where a strong structural bond is not required. As cured, Gap Filler 1500 provides a soft, thermally conductive, form-inplace elastomer that is ideal for fragile assemblies and filling unique and intricate air voids and gaps

## Thermally Conductive Liquid Gap Filling Material

TYPICAL PROPERTIES OF GAP FILLER 1500			
PROPERTY	IMPERIAL VALUE	METRIC VALUE	TEST METHOD
Color / Part A	Yellow	Yellow	Visual
Color / Part B	White	White	Visual
Viscosity as Mixed (cps) (1)	250,000	250,000	ASTM D2196
Density (g/cc)	2.7	2.7	ASTM D792
Mix Ratio	1:1	1:1	—
Shelf Life @ 25°C (months)	6	6	—
PRO PERTY AS CURED			
Color	Yellow	Yellow	Visual
Hardness (Shore 00) (2)	50	50	ASTM D2240
Heat Capacity (Jg-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)	400	400	ASTM D149
Dielectric Constant (1000 Hz)	6.4	6.4	ASTM D150
Volume Resistivity (Ohm-meter)	<b>10</b> <sup>10</sup>	<b>10</b> <sup>10</sup>	ASTM D257
Flame Rating	V-O	V-O	U.L. 94
THERMALASCURED			
Thermal Conductivity (W/m-K)	1.8	1.8	ASTM D5470
CURESCHEDULE			
Pot Life @ 25℃ (min) (3)	60	60	-
Cure @ 25°C (hrs)(4)	5	5	-
Cure @ 100°C (min) (4)	2	2	-
1) Brookfield RV, Heli-Path, Spindle TF @ 20 rpm, 25°C.			

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Thirty second delay value Shore 00 hardness scale.

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ARES Parallel Plate Rheometer - Working life as liquid, time for viscosity to double.

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ARESParallel Plate Rheometer - Estimated time to read 90% cure.

4) ARESPARATE Mate Rheometer - Estimated time to read 90% cure

## **Typical Applications Include:**

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

#### **Configurations Available:**

- · Supplied in cartridge or kit form
- With or without glass beads
- · Many other special or custom configurations are available upon request

#### **Building a Part Number**



#### **Standard Options**

**∢** example

NA = Selected standard option. If not selecting a standard option, insert company name, drawing number, and revision level.

Cartridges: 50cc = 50.0cc, 400cc = 400.0cc Kits: 1200cc = 1200.00cc, 10G = 10 gallon

Pot Life: 60 = 60 min

00 = No spacer beads, 07 = 0.007" spacer beads,

10 = 0.010" spacer beads

GF1500 = Gap Filler 1500 (Two-Part) Material

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

Gap Pade: U.S. Patent 5,679,457 and others

BERGQUIST

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The Bergquist Company - Asia Room 15, &/FWah Wai Industrial Centre No. 38-40, Au Pui Wan Street Fotan, Shatin, N.T. Hong Kong Ph: 852.2690.9296 Fax: 852.2690.2344 All statements technical information and recommendations herein are based on tests we believe to be reliable, and THE FOLLOWING IS MADE IN LIEU OF ALL WARRANTES EX PRESSED OR IMPLED, INCLUDING THE IMPLED WARRANTES OF MARKETABLITY AND TINESS ROR PURPOSE. Sellers' and manufacturers' only obligation shall be to replace such quantity of the product proved to be defective. Before using user shall determine the suitability of the product for its interded use, and the user assumes all risks and liability whatsover in connection therewith. NETHER SELLER NOR MANUFACTURER SHALL BE LIABLE ETHER IN TORT OR IN CONTRACT FOR ANY LOSS OR DAMAGE DIRECT, INCIDENTAL, OR CONSEQUENTIAL, INCLUDING LOSS OF PROFITS OR REVENUE ARISING OUT OFTHE USE OR THE INABILITY TO USE A PRODUCT. No statement, purchase order or recommendations by seller or purchaser not contained herein shall have any force or effect unless in an agreement signed by the officers of the seller and manufacturer. PDS GF 1500 12.08