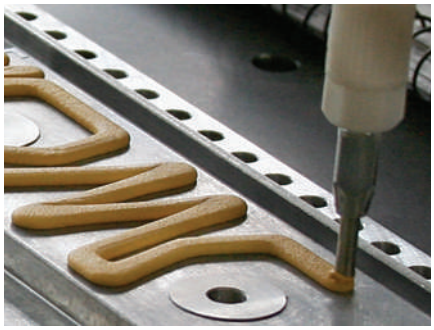
Gap Filler 1500 (Two-Part)

Thermally Conductive Liquid Gap Filling Material

Features and Benefits

- Thermal conductivity: 1.8 W/mK
- Optimized 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-in-place elastomer that is ideal for fragile assemblies and filling unique and intricate air voids and gaps.

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, High Shear (Pa-s)(1)	25	25	ASTM D5099
Density (g/cc)	2.7	2.7	ASTM D792
Mix Ratio	1:1	1:1	—
Shelf Life @ 25°C (months)	6	6	—
PROPERTY AS CURED			
Color	Yellow	Yellow	Visual
Hardness (Shore 00)(2)	50	50	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)	400	400	ASTM D149
Dielectric Constant (1000 Hz)	6.4	6.4	ASTM D150
Volume Resistivity (Ohm-meter)	10^{10}	10^{10}	ASTM D257
Flame Rating	V-O	V-O	U.L. 94
THERMAL AS CURED			
Thermal Conductivity (W/m-K)	1.8	1.8	ASTM D5470
CURE SCHEDULE	**SCHEDULE 1**	**SCHEDULE 2**	
Pot Life @ 25°C (3)	60 min	480 min (8 hr)	-
Cure @ 25°C (4)	5 hours	3 days	-
Cure @ 100°C (4)	10 min	30 min	-

1) Capillary viscosity, initial, 3000 sec^{-1}. Part A and B measured separately
2) Thirty second delay value Shore 00 hardness scale.
3) Parallel Plate Rheometer - Working life as liquid.
4) 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
- With or without glass beads

Building a Part Number

GF1500 – 00 – 60 – 10G – NA

Section A: GF1500
Section B: 00
Section C: 60
Section D: 10G
Section E: NA

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, 480 = 480 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.

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