

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 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 | — |
| 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 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) | 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 | | | |
| Pot Life @ 25°C (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.
 2) Thirty second delay value Shore 00 hardness scale.
 3) ARES Parallel Plate Rheometer - Working life as liquid, time for viscosity to double.
 4) ARES Parallel Plate Rheometer - Estimated time to read 90% cure.

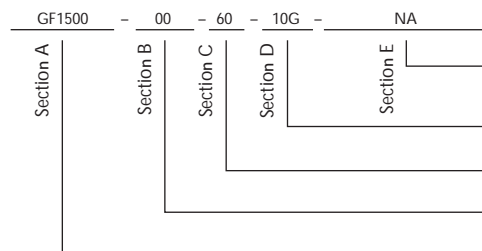
Typical Applications Include:

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

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 Pad®: U.S. Patent 5,679,457 and others



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