

# Gap Filler 2000 (Two-Part)

High Thermally Conductive Liquid Gap Filling Material

## Features and Benefits

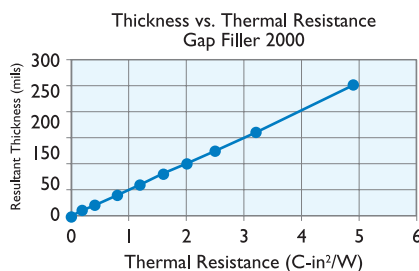
- Thermal conductivity = 2.0 W/mK
- Ultra conforming, designed for applications requiring minimal stress on components
- Ambient and accelerated cure schedules
- 100% solids – no cure by-products
- Excellent low & high temperature mechanical & chemical stability

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, thermally conductive, 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 a grease. After cure, it does not pump from the interface as a result of thermal cycling. Unlike thermal grease, the cured product is dry to the touch.

The mixed system (1:1 ratio) will cure at either ambient or elevated temperature to form a soft, thermally conductive interface material. 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. Gap Filler 2000 is formulated for low modulus, "gel-like" properties.

*Note: Resultant thickness is defined as the final gap thickness of the application.*



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) <sup>(1)</sup>	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	—
<b>PROPERTY AS CURED</b>			
Color	Pink	Pink	Visual
Hardness (Shore 00) <sup>(2)</sup>	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	—
<b>ELECTRICAL AS CURED</b>			
Dielectric Strength (V/ml)	500	500	ASTM D149
Dielectric Constant (1000 Hz)	7	7	ASTM D150
Volume Resistivity (Ohm-meter)	10 <sup>11</sup>	10 <sup>11</sup>	ASTM D257
Flame Rating	V-O	V-O	U.L. 94
<b>THERMAL AS CURED</b>			
Thermal Conductivity (W/m-K)	2.0	2.0	ASTM D5470
<b>CURE SCHEDULE</b>			
Pot Life @ 25°C <sup>(3)</sup>	15 min	60 min	600 min (10 hr)
Cure @ 25°C <sup>(4)</sup>	1-2 hours	3-4 hours	3 days
Cure @ 100°C <sup>(4)</sup>	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)

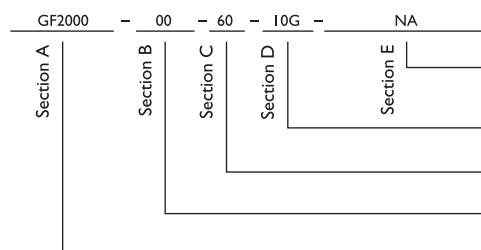
## Typical Applications Include:

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

## Configurations Available:

- For smaller quantity packaging, please contact Bergquist sales.

## 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, 200cc = 200.0cc, 400cc = 400.0  
 Kits: 1200cc = 1200.0cc, 2G = 2 gallon or 10G = 10 gallon

Pot Life: 15 = 15 min, 60 = 60 min, 600 = 600 min

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

GF2000 = Gap Filler 2000 Material

Note: To build a part number, visit our website at [www.bergquistcompany.com](http://www.bergquistcompany.com).

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



[www.bergquistcompany.com](http://www.bergquistcompany.com)

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