



# BERGQUIST GAP PAD TGP 1100SF

Known as BERGQUIST GAP PAD 1000SF

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## PRODUCT DESCRIPTION

Thermally Conductive, Silicone-Free Gap Filling Material.

|                                    |                                                      |
|------------------------------------|------------------------------------------------------|
| <b>Technology</b>                  | Silicone free                                        |
| <b>Appearance</b>                  | Green                                                |
| <b>Reinforcement Carrier</b>       | Fiberglass                                           |
| <b>Thickness, ASTM D374</b>        | 0.254 to 3.175mm                                     |
| <b>Inherent Surface Tack</b>       | 2 (1 or 2 sided)                                     |
| <b>Application</b>                 | Thermal management, TIM (Thermal Interface Material) |
| <b>Operating Temperature Range</b> | -60 to 125°C                                         |

## FEATURES AND BENEFITS

- Thermal Conductivity: 0.9 W/m-K
- No silicone outgassing
- No silicone extraction
- Reduced tack on one side to aid in application assembly
- Electrically isolating

BERGQUIST GAP PAD TGP 1100SF is a thermally conductive, electrically insulating, silicone-free polymer specially designed for silicone-sensitive applications. The material is ideal for applications with high standoff and flatness tolerances.

BERGQUIST GAP PAD TGP 1100SF is reinforced for easy material handling and added durability during assembly. The material is available with a protective liner on both sides of the material. The topside has reduced tack for ease of handling.

## TYPICAL APPLICATIONS

- Digital disk drives / CD-ROM
- Automotive modules
- Fiber optics modules

## TYPICAL PROPERTIES OF CURED MATERIAL

Young's modulus is calculated using 0.01 in/min, step rate of strain with a sample size 0.79 inch<sup>2</sup>.

## Physical Properties

|                                                                           |                       |
|---------------------------------------------------------------------------|-----------------------|
| Hardness, Shore 00, Thirty second delay value, 40 ASTM D2240, Bulk rubber |                       |
| Heat Capacity, ASTM E1269, J/g-K                                          | 1.1                   |
| Density, Bulk rubber, ASTM D792, g/cc                                     | 2.0                   |
| Flammability, UL 94                                                       | V-1                   |
| Young's Modulus, ASTM D575                                                | kPa 234<br>(psi) (34) |

## Electrical Properties

|                                              |                    |
|----------------------------------------------|--------------------|
| Dielectric Breakdown Voltage, ASTM D149, VAC | >6,000             |
| Dielectric Constant, ASTM D150, 1,000Hz      | 5.0                |
| Volume Resistivity, ASTM D257, ohm-meter     | 1×10 <sup>10</sup> |

## Thermal Properties

|                                           |     |
|-------------------------------------------|-----|
| Thermal Conductivity, ASTM D5470, W/(m-K) | 0.9 |
|-------------------------------------------|-----|

## GENERAL INFORMATION

**For safe handling information on this product, consult the Safety Data Sheet, (SDS).**

## Not for product specifications

The technical data contained herein are intended as reference only. Please contact your local quality department for assistance and recommendations on specifications for this product.

## CONFIGURATIONS AVAILABLE

BERGQUIST GAP PAD TGP 1100SF is available in the following configurations:

- Sheet form and die-cut parts

Natural tack both sides with fiberglass.

## STORAGE

Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

Optimal Storage: 25°C (±3), 50% RH (±10) for a 12 months shelf life. Material removed from containers may be contaminated during use. Do not return product to the original container. Henkel Corporation cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Technical Service Center or Customer Service Representative.



**Conversions**

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$   
 $\text{kV/mm} \times 25.4 = \text{V/mil}$   
 $\text{mm} / 25.4 = \text{inches}$   
 $\text{N} \times 0.225 = \text{lb}$   
 $\text{N/mm} \times 5.71 = \text{lb/in}$   
 $\text{psi} \times 145 = \text{N/mm}^2$   
 $\text{MPa} = \text{N/mm}^2$   
 $\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$   
 $\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$   
 $\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$   
 $\text{mPa}\cdot\text{s} = \text{cP}$

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