



# BERGQUIST GAP PAD TGP 3000ULM

February 2020

## PRODUCT DESCRIPTION

A 3.0 W/m-K, extremely soft Gap Pad with exceptional thermal performance at low pressures.

<b>Technology</b>	Silicone
<b>Appearance</b>	Blue
<b>Application</b>	Thermal management, Gap Pad
<b>Operating Temperature Range</b>	-60 to 200°C

## FEATURES AND BENEFITS

- Thermal Conductivity: 3.0 W/m-K
- High-compliance, low compression stress
- Ultra low modulus
- Non-fiberglass option for applications that require an additional reduction in stress

## TYPICAL APPLICATIONS

- Telecommunications (routers, switches, base stations)
- Optical transceivers
- ASICs and DSPs

BERGQUIST GAP PAD TGP 3000ULM is a soft gap filling material rated at a thermal conductivity of 3 W/m-K. It is specially formulated for high performance applications requiring low assembly stress. The material offers exceptional thermal performance at low pressures due to the unique filler package and ultra low modulus resin formulation.

BERGQUIST GAP PAD TGP 3000ULM is highly conformal to rough or irregular surfaces, allowing excellent wet-out at the interface. Protective liners are supplied on both sides allowing for ease of use. The top side has minimal tack for ease of handling.

## TYPICAL PROPERTIES OF CURED MATERIAL

### Physical Properties

Hardness, Shore 00, ASTM D2240	20
Density, ASTM D792, g/cc	2.9
Inherent Surface Tack 2 sided	2 sided
Heat Capacity, ASTM E1269, J/g-K	0.8
Young's modulus	KPa 105 (psi) (25)
Shelf life, days	365
Flammability, UL 94	V-0

## Electrical Properties

Volume Resistivity, ASTM D257, ohm-meter	$1 \times 10^{12}$
Dielectric Constant, ASTM D150, 1,000Hz	9.2
Dielectric Breakdown Voltage, 0.04 inch sample, VAC	>6,000

## Thermal Properties

Thermal Conductivity, ASTM D5470, W/(m-K)	3.0
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## Thermal Performance vs. Pressure

Thermal Impedance, ASTM D5470, °C-in <sup>2</sup> /W:	
@ 10% deflection	0.55
@ 20% deflection	0.49
@ 30% deflection	0.43

## 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 3000ULM is available in the following configurations:

- Sheet for: 8" x 16"
- Standard material thicknesses: 0.040, 0.060, 0.080, 0.100, 0.125, 0.160 inch (1.0, 1.5, 2.0, 2.5, 3.18, 4.0 mm)

## 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 365 days 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**

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

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**Reference 1**

Americas  
+1.888.943.6535

Europe  
+32.1457.5611

Asia  
+86.21.2891.8000

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