



# BERGQUIST GAP PAD TGP 2400

Known as BERGQUIST GAP PAD 2500S20  
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## PRODUCT DESCRIPTION

Highly Conformable, Thermally Conductive, Reinforced "S-Class" Gap Filling Material.

<b>Technology</b>	Silicone
<b>Appearance</b>	Light yellow
<b>Reinforcement Carrier</b>	Fiberglass
<b>Thickness, ASTM D374</b>	0.254 to 6.35 mm
<b>Inherent Surface Tack</b>	2 (1 side)
<b>Application</b>	Thermal management, TIM (Thermal Interface Material)
<b>Operating Temperature Range</b>	-60 to 200°C

## FEATURES AND BENEFITS

- Thermal Conductivity: 2.4 W/m-K
- Low "S-Class" thermal resistance at ultra-low pressures
- Ultra conformable, "gel-like" modulus
- Designed for low-stress applications
- Fiberglass reinforced for puncture, shear and tear resistance

BERGQUIST GAP PAD TGP 2400 is a thermally conductive, reinforced material rated at a thermal conductivity of 2.4 W/m-K. The material is a filled-polymer material yielding extremely soft, elastic characteristics. The material is reinforced to provide easy handling, converting, added electrical isolation and tear resistance.

BERGQUIST GAP PAD TGP 2400 is well suited for low pressure applications that typically use fixed standoff or clip mounting. BERGQUIST GAP PAD TGP 2400 maintains a conformable yet elastic nature that allows for excellent interfacing and wet-out characteristics, even to surfaces with high roughness and/or topography.

BERGQUIST GAP PAD TGP 2400 is offered with inherent natural tack on both sides of the material allowing for stick-in-place characteristics during application assembly. It is also available with a non-tack side.

Please see the "Standard Options" section for description. BERGQUIST GAP PAD TGP 2400 is supplied with protective liners on both sides. The top side has reduced tack for ease of handling.

## TYPICAL APPLICATIONS

- Between processors and heat sinks
- Between graphics chips and heat sinks
- DVD and CDROM electronics cooling
- Area where heat needs to be transferred to a frame, chassis or other type of heat spreader

## 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, ASTM D2240, Bulk rubber	20
Heat Capacity, ASTM E1269, J/g-K	1.0
Density, Bulk rubber, ASTM D792, g/cc	3.1
Flammability, UL 94	V-0
Young's Modulus, ASTM D575	kPa 35 (psi) (5)

### Electrical Properties

Dielectric Breakdown Voltage, ASTM D149, VAC	>3,000
Dielectric Constant, ASTM D150, 1,000Hz	6.6
Volume Resistivity, ASTM D257, ohm-meter	1×10 <sup>11</sup>

### Thermal Properties

Thermal Conductivity, ASTM D5470, W/(m-K)	2.4
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### Thermal Impedance vs. Strain

Thermal Impedance, °C-in <sup>2</sup> /W, 0.040" <sup>(1)</sup> :	
10% Deflection	0.75
20% Deflection	0.68
30% Deflection	0.61

(1) The ASTM D5470 test fixture was utilized. The recorded values include the interfacial thermal resistance. The values are provided for reference only. Actual application performance is directly related to the surface roughness, flatness and pressure applied

## 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.



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**CONFIGURATIONS AVAILABLE**

BERGQUIST GAP PAD TGP 2400 is available in the following configurations:

- Sheet form and die-cut parts

**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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## Reference 1