

Technical Data Sheet

BERGQUIST GAP PAD TGP A2000

Known as BERGQUIST GAP PAD A2000 October 2018

PRODUCT DESCRIPTION

High Performance, Thermally Conductive Gap Filling Material.

Technology	Silicone	
Appearance	Gray	
Reinforcement Carrier	Fiberglass	
Thickness	0.254 to 1.016mm , ASTM D374	
Inherent Surface Tack	2 (1 sided)	
Application	Thermal management,	
	TIM (Thermal Interface Material)	
Operating Temperature Range	-60 to 200°C	

FEATURES AND BENEFITS

- Thermal Conductivity: 2.0 W/m-K
- Fiberglass reinforced for puncture, shear and tear resistance
- Electrically isolating

BERGQUIST GAP PAD TGP A2000 acts as a thermal interface and electrical insulator between electronic components and heat sinks. In the thickness range of 10 to 40 mil, BERGQUIST GAP PAD TGP A2000 is supplied with natural tack on both sides, allowing for excellent compliance to the adjacent surfaces of components.

The 40 mil material thickness is supplied with lower tack on one side, allowing for burn-in processes and easy rework.

TYPICAL APPLICATIONS

- Computer and peripherals
- Between CPU and heat spreader
- Telecommunications
- Heat pipe assemblies
- RDRAM[™] memory modules
- CDROM / DVD cooling
- Areas where heat needs to be transferred to a frame chassis or other type of heat spreader
- DDR SDRAM memory 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 inch² .

Physical Properties

Hardness, Shore 00	80	
, Thirty second delay value		
, ASTM D2240, Bulk rubber		
Heat Capacity, ASTM E1269, J/g-K		1.0
Density, Bulk rubber, ASTM D792, g/cc		2.9
Flammability, UL 94		V-0
Young's Modulus, ASTM D575	kPa	379
	(psi)	(55)
Electrical Properties		
Dielectric Breakdown Voltage, ASTM D14	>4,000	
Dielectric Constant, ASTM D150, 1,000Hz		6.0
Volume Resistivity, ASTM D257, ohm-met	1×10 ¹¹	
Thermal Properties		
Thermal Conductivity, ASTM D5470, W/(m	2.0	
Thermal Impedance, 0.040 inch		
ASTM D5470, °C-in²/W:		
10% Deflection		1.04
20% Deflection		1.0
30% Deflection		0.95

The recorded value includes interfacial thermal resistance. These 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.



CONFIGURATIONS AVAILABLE

BERGQUIST GAP PAD TGP A2000 is available in the following configurations:

- Sheet form
- Die-Cut parts
- Roll form

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

 $(^{\circ}C \ge 1.8) + 32 = ^{\circ}F$ kV/mm $\ge 25.4 =$ V/mil mm / 25.4 = inches N $\ge 0.225 =$ lb N/mm $\ge 5.71 =$ lb/in psi $\ge 145 =$ N/mm² MPa = N/mm² N·m $\ge 8.851 =$ lb·in N·m $\ge 0.738 =$ lb·ft N·mm $\ge 0.142 =$ oz·in mPa·s = cP

Disclaimer

Note:

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

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