



BERGQUIST GAP PAD TGP 18000SF

April 2024

PRODUCT DESCRIPTION

A 18 W/m-K, silicone free Gap Pad with exceptional thermal performance.

Technology	Silicone Free
Appearance	Blue-gray
Application	Thermal management, TIM (Thermal Interface Material)
Operating Temperature Range	-40 to 150°C

FEATURES AND BENEFITS

- Thermal Conductivity: 18 W/m-K
- No silicone outgassing
- No silicone extraction
- No mobile polymer bleed
- Electrically insulating

BERGQUIST GAP PAD TGP 18000SF is a gap filling material rated at a thermal conductivity of 18 W/m-K. It is specially formulated for high performance applications requiring silicone free solutions. The material offers exceptional thermal performance at typical pressures due to the unique filler package. Available with one side PSA for enhanced handling and fixturing.

TYPICAL APPLICATIONS

- Telecommunications (routers, switches, base stations)
- Optical transceivers
- ASICs and DSPs
- Storage
- Automotive modules
- Power converters, motor controls
- Aerospace modules
- LEDs and Lasers

TYPICAL PROPERTIES

Physical Properties

Hardness, Shore 00, ASTM D2240	85
Density, ASTM D792, g/cc	1.7
Shelf life, days	365
Peak Stress @ 10% Strain*, ASTM D575, psi	86

Electrical Properties

Volume Resistivity, ASTM D257, Ohm-meter	1.05×10 ¹⁰
Dielectric Constant, ASTM D150, 1,000Hz	4.4
Dielectric Strength, VAC V/mil	170

Thermal Properties

Thermal Conductivity, ASTMD5470, W/m-K	18
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Note: Optimal thermal performance at 10% strain.

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 18000SF is available in the following configurations, custom part sizes available upon request:

Sheet size	6" x 6" **
Standard Thickness	20, 40, 60, 80, 100, 125 mils

** 4"x6" size for 20mils thickness

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 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.

Note: One side surface tack optional, material not naturally tacky

* Measured on 40mils thick pads



Conversions

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

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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