



BERGQUIST GAP PAD TGP 4000SF

April 2024

PRODUCT DESCRIPTION

A 40 W/m-K, silicone free Gap Pad with oriented filler technology achieving ultra-high thermal conductivity.

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

FEATURES AND BENEFITS

- Thermal Conductivity: 40 W/m-K
- No silicone outgassing
- No silicone extraction
- No mobile polymer bleed
- Not electrically insulating

BERGQUIST GAP PAD TGP 4000SF is a gap filling material rated at a thermal conductivity of 40 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	56

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

* Measured on 40mils thick pads

Thermal Properties

Thermal Conductivity, ASTMD5470, W/m-K 40

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 4000SF is available in the following standard 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.



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.

Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Belgium NV, Henkel Electronic Materials NV, Henkel Nederland BV, Henkel Technologies France SAS and Henkel France SA please additionally note the following:

In case Henkel would be nevertheless held liable, on whatever legal ground, Henkel's liability will in no event exceed the amount of the concerned delivery.

In case products are delivered by Henkel Colombiana, S.A.S. the following disclaimer is applicable:

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. 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.

Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Corporation, Resin Technology Group, Inc., or Henkel Canada Corporation, the following disclaimer is applicable:

The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, **Henkel Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits.** The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Henkel Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.

Trademark usage: [Except as otherwise noted] All trademarks in this document are trademarks and/or registered trademarks of Henkel and its affiliates in the U.S. and elsewhere.

Reference 1

Americas
+1.888.943.6535

Europe
+32.1457.5611

Asia
+86.21.2891.8000

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Bergquist Company:](#)

[TGP 4000SF-0.020-00-0406](#) [TGP 4000SF-0.060-00-0606](#) [TGP 4000SF-0.040-00-0606](#) [TGP 4000SF-0.080-00-0606](#) [TGP 4000SF-0.125-00-0606](#) [TGP 4000SF-0.100-00-0606](#)

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Bergquist Company:](#)

[TGP40000SF-0.020-01-0406-NA](#) [TGP40000SF-0.080-01-0606-NA](#) [TGP40000SF-0.040-01-0606-NA](#) [TGP40000SF-0.060-01-0606-NA](#) [TGP40000SF-0.100-01-0606-NA](#) [TGP40000SF-0.125-01-0606-NA](#)