

**Technical Data Sheet** 

# **BERGQUIST GAP PAD TGP 2202SF**

Known as BERGQUIST GAP PAD 2202SF April 2019

## **PRODUCT DESCRIPTION**

Silicone-Free Formulation, High Performance Thermally Conductive Material.

Technology	Silicone free
Appearance	Gray
Reinforcement Carrier	0.5 mil PET film
Thickness, ASTM D374	0.254 to 3.175mm , ASTM D374
Inherent Surface Tack	1 (2 sides)
Application	Thermal management, TIM (Thermal Interface Material)
Operating Temperature Range	-40 to 125°C

## FEATURES AND BENEFITS

- Thermal Conductivity: 2.0 W/m-K
- Silicone-free formulation
- Minimal compression set
- 0.5 mil film provides tack-free surface
- · Tacky side allows for ease of handling and placement

BERGQUIST GAP PAD TGP 2202SF is a high performance, 2.0 W/m-K, thermally conductive gap filling material. The BERGQUIST GAP PAD TGP 2202SF compound is siliconefree by design and offers exceptionally low interfacial resistances to adjacent surfaces.

BERGQUIST GAP PAD TGP 2202SF is specifically designed for silicone-sensitive applications. The material's construction features a 0.5 mil PET film on one side and natural tack on the other. The natural tack eliminates the need for an additional adhesive layer.

### TYPICAL APPLICATIONS

- Hard drives
- Optical applications
- Set top boxes

## TYPICAL PROPERTIES OF CURED MATERIAL

#### **Physical Properties**

Hardness, Shore 00	70
, Thirty second delay value @ 250 mil, 23°C	
, ASTM D2240, Bulk rubber	
Density, ASTM D792, g/cc	2.8
Flammability, UL 94	V-0

#### **Electrical Properties**

Dielectric Constant, ASTM D150, 1,000Hz	6.0
Volume Resistivity, ASTM D257, ohm-meter	1×10 <sup>11</sup>

#### **Thermal Properties**

Thermal Conductivity, ASTM D5470, W/(m-K) 2.0

The ASTM D5470 text fixture was used. The recorded value includes interfacial thermal resistance. These values are given to the customer 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 2202SF is available in the following configurations:

- Sheet form
- We produce thousands of specials. Tooling charges vary depending on tolerances and complexity of the part.
- Custom thicknesses available upon request
- 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:  $25^{\circ}$ 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 x 25.4 = V/mil mm / 25.4 = inches N x 0.225 = lb/F N/mm x 5.71 = lb/in psi x 145 = N/mm<sup>2</sup> MPa = N/mm<sup>2</sup> N·m x 8.851 = lb·in N·m x 0.738 = lb·ft N·mm x 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.

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 3



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



## Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный) **Факс:** 8 (812) 320-02-42 **Электронная почта:** <u>org@eplast1.ru</u> **Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.