



GAP PAD TGP 800 VO

Known as GAP PAD VO
October 2018

PRODUCT DESCRIPTION

Conformable, Thermally Conductive Material for Filling Air Gaps.

| | |
|------------------------------------|--|
| Technology | Silicone |
| Appearance | Gold / Pink |
| Reinforcement Carrier | Sil-Pad |
| Thickness | 0.508 to 6.35mm , ASTM D374 |
| Inherent Surface Tack | 1 (1 or 2 sided) |
| Application | Thermal management, TIM (Thermal Interface Material) |
| Operating Temperature Range | -60 to 200°C |

FEATURES AND BENEFITS

- Thermal Conductivity: 0.8 W/m-K
- Enhanced puncture, shear and tear resistance
- Conformable gap filling material
- Electrically isolating

GAP PAD TGP 800 VO is a cost-effective, thermally conductive interface material. The material is a filled, thermally conductive polymer supplied on a rubber-coated fibreglass carrier allowing for easy material handling.

The conformable nature of GAP PAD TGP 800 VO allows the pad to fill in air gaps between PC boards and heat sinks or a metal chassis.

TYPICAL APPLICATIONS

- Telecommunications
- Computer and peripherals
- Power conversion
- Between heat-generating semiconductors and a heat sink
- Area where heat needs to be transferred to a frame, chassis, or other type of heat spreader
- Between heat-generating magnetic components and a heat sink

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, Thirty second delay value, ASTM D2240, Bulk rubber | 40 |
| Heat Capacity, ASTM E1269, J/g-K | 1.0 |
| Density, Bulk rubber, ASTM D792, g/cc | 1.6 |
| Flammability, UL 94 | V-0 |
| Young's Modulus, ASTM D575 | kPa 689 (psi) (100) |

Electrical Properties

| | |
|--|--------------------|
| Dielectric Breakdown Voltage, ASTM D149, VAC | >6,000 |
| Dielectric Constant, ASTM D150, 1,000Hz | 5.5 |
| Volume Resistivity, ASTM D257, ohm-meter | 1×10 ¹¹ |

Thermal Properties

| | |
|---|-----|
| Thermal Conductivity, ASTM D5470, W/(m-K) | 0.8 |
|---|-----|

GENERAL INFORMATION

For safe handling information on this product, consult the Safety Data Sheet, (SDS).

Not for product specifications

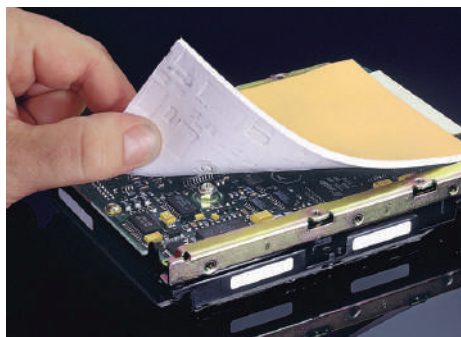
The technical data contained herein are intended as reference only. Please contact your local quality department for assistance and recommendations on specifications for this product.

CONFIGURATIONS AVAILABLE

GAP PAD TGP 800 VO is available in the following configurations:

- Sheet form
- Die-Cut parts

Natural tack both sides with fibreglass.



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

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

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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Reference 1

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