Technical Data Sheet

BERGQUIST GAP PAD TGP 10000ULM

February 2020

PRODUCT DESCRIPTION

A 10.0 W/m-K, extremely soft Gap Pad with exceptional thermal performance at low pressures.

Technology	Silicone
Appearance	Gray
Application	Thermal management, TIM (Thermal Interface Material)
Operating Temperature Range	-60 to 200ºC
UL Flammability Rating	UL 94 V-0

FEATURES AND BENEFITS

- Thermal Conductivity: 10 W/m-K
- High-compliance, low compression stress
- Ultra low modulus

BERGQUIST GAP PAD TGP 10000ULM is an extremely soft gap filling material rated at a thermal conductivity of 10.0 W/m-K. It is specially formulated for high performance applications requiring low assembly stress. The material offers exceptional thermal performance at low pressures due to the unique filler package and ultra low modulus resin formulation.

BERGQUIST GAP PAD TGP 10000ULM is highly conformal to rough or irregular surfaces, allowing excellent wet-out at the interface. Protective liners are supplied on both sides allowing for ease of use.

TYPICAL APPLICATIONS

- Telecommunications (routers, switches, base stations)
- Optical transceivers
- ASICs and DSPs

TYPICAL PROPERTIES OF CURED MATERIAL

Physical Properties		
Hardness, Shore 000, ASTM D2240		75
Inherent Surface Tack		2
Density, ASTM D792, g/cc		3
Heat Capacity, ASTM E1269, J/g-K		0.8
Shelf life, days		180
Young's Modulus	kPa (psi)	173 (25)
Electrical Properties		
Volume Resistivity, ASTM D257, ohm-meter		2.5×10^{11}
Dielectric Constant, ASTM D150, 1,000Hz		9.1
Dielectric Breakdown Voltage:		
40 mil sample, VAC		3,200
Thermal Properties		
Thermal Conductivity, ASTM D5470, W/(m-K)		10

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 10000ULM is available in the following configurations:

Sheet size	8" x 8"
Standard Thicknesses	0.040, 0.060, 0.080, 0.100, 0.125 inch (1.0, 1.5, 2.0, 2.5, 3.18 mm)

STORAGE

Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

Optimal Storage: 5 to 28ºC, 10 to 50% RH for 180 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

(°C x 1.8) + 32 = °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/mm²
MPa = N/mm²
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.

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Reference 2