Technical Data Sheet

BERGQUIST GAP FILLER TGF 3500LVO

Known as BERGQUIST GAP FILLER 3500LV
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PRODUCT DESCRIPTION

A thermally conductive, liquid gap filler material.

Technology	Silicone
Appearance (cured)	Light blue
Appearance - Part A	Blue
Appearance - Part B	White
Cure	Room temperature cure or Heat cure
Application	Thermal management, TIM (Thermal Interface Material)
Mix Ratio by weight: Part A: Part B	1 : 1
Mix Ratio by volume: Part A: Part B	1 : 1
Solids Content, %	100
Operating Temperature Range	-60 to 200ºC

FEATURES AND BENEFITS

- Thermal Conductivity: 3.5 W/m-K
- Low volatility for outgassing sensitive applications
- Ultra-conforming, with excellent wet-out for low stress interface applications
- 100% solids - no cure by-products

BERGQUIST GAP FILLER TGF 3500LVO is a two-part, high thermal conductivity, liquid gap filling material. This material offers the mechanical property benefits of a silicone material with the additional feature of low outgassing.

The mixed system will cure at room temperature and can be accelerated with the addition of heat.

The liquid approach offers infinite thickness variations with little to no stress to sensitive components during assembly. As cured, BERGQUIST GAP FILLER TGF 3500LVO provides a soft, form-in place elastomer that is ideal for fragile assemblies or for filling intricate air voids.

TYPICAL APPLICATIONS

- Lighting
- Automotive in-cabin electronics
- Medical electronics
- Industrial controls
- Optics

TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity, High shear, Capillary, ASTM D5099, mPa·s (cP):	
1,500/ sec, Part A and B measured separately	45,000
Density, ASTM D792, g/cc	3.1
Working Time @ 25°C, @ 240 minutes	
Shelf Life @ 25ºC , days	180

TYPICAL CURE SCHEDULE

Cure Schedule

24 hours @ 25°C
30 minutes @ 100°C

Parallel plate rheometer, see reactivity application note.

The above cure profiles are guideline recommendations. Cure conditions (time and temperature) may vary based on customers' experience and specific application requirements, as well as customer curing equipment, oven loading and actual oven temperatures.

TYPICAL PROPERTIES OF CURED MATERIAL

Physical Properties

Hardness, Shore 00, Thirty second delay value, ASTM D2240	40
Heat Capacity, ASTM D1269, J/g-K	0.8
Flammability, UL 94	V-0
Siloxane Content, ΣD4-D10 , ppm	40

Electrical Properties

Dielectric Strength, ASTM D149, V/mil	275
Dielectric Constant , ASTM D150 @ 1,000 Hz	8.0
Volume Resistivity, ASTM D257, ohm-meter	1×10^{10}

Thermal Properties

Thermal Conductivity, ASTM D5470, W/(m-K)	3.5

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.

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CONFIGURATIONS AVAILABLE

BERGQUIST GAP FILLER TGF 3500LVO is available in the following configurations:

- Cartridges
- Kits

Application:

- Mixed and dispensed using dual tube cartridge packs with static mixers and a manual or pneumatic gun
- Mixed and dispensed using industry standard high volume mixing and dispensing document

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 25ºC for a 180-day shelf life, in sealed containers with moisture barrier packaging.

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

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