



# BERGQUIST GAP FILLER TGF 3500LVO

Known as BERGQUIST GAP FILLER 3500LV  
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## PRODUCT DESCRIPTION

A thermally conductive, liquid gap filler material.

<b>Technology</b>	Silicone
Appearance (cured)	Light blue
Appearance - Part A	Blue
Appearance - Part B	White
<b>Cure</b>	Room temperature cure or Heat cure
<b>Application</b>	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 200°C

## 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 @ 25°C, days 150

## 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 their 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  $1 \times 10^{10}$

**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 25°C for a 6 month 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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