



# BERGQUIST® LIQUI FORM TLF LF3500AB

June 2025

PRODUCT DESCRIPTION

BERGQUIST® LIQUI FORM TLF LF3500AB provides the following product characteristics:

Technology	Silicone
Appearance	Black
Product benefits	<ul style="list-style-type: none"><li>Thermal conductivity: 3.5 W/m-k</li><li>Dispensable pre-cured gel</li><li>Stable viscosity in storage and in applications</li><li>Excellent chemical stability and mechanical stability</li></ul>
Cure	Pre-cured gel
Operating temperature, °C	60 to 200
Application	Thermal management TIM (Thermal interface material)
Typical application	<ul style="list-style-type: none"><li>Handheld devices</li><li>Bare die to heat spreader lid</li><li>Filling various gaps between heat-generating devices to heatsink</li><li>Devices requiring low assembly pressure</li><li>High value assemblies with rework</li><li>BGA, PGA, PPGA</li></ul>
Flammability rating	UL 94V-0

BERGQUIST® LIQUI FORM TLF LF3500AB is a high conductivity gel thermal interface material designed for demanding applications that require a balance between dispensability and low component stress during assembly and also in the application.

BERGQUIST® LIQUI FORM TLF LF3500AB is a one-part, highly conformable gel with thixotropic properties. The material is precured and requires no curing, mixing or refrigeration. Its unique formulation assures excellent thermal performance, low applied stress and reliable long-term performance.

BERGQUIST® LIQUI FORM TLF LF3500AB is thixotropic and has a natural tack ensuring it forms around the component and stays in place in the application.

TYPICAL PROPERTIES

Physical properties

Density, g/cc	3.1
Viscosity @ 25°C, Pa*sec.	
Low shear rate, 100 s <sup>-1</sup> , Capillary rheometer	300
High shear rate, 1 s <sup>-1</sup> , Parallel plate rheometer	1500
Shelf life, @25°C, days	365

Outgassing properties

Total mass loss, ASTM 595, %	0.21
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Electrical properties

Volume resistivity, ASTM D257, Ohm-m	10 <sup>11</sup>
Dielectric strength, ASTM D149, kV/mm	10
Dielectric constant, ASTM D150, @1 kHz	8.1
Flammability rating, UL rating	94V-0

Thermal properties

Thermal conductivity, ASTM D5470, W/m-K	3.5
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GENERAL INFORMATION

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

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials.

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 the specifications of this product.

Thawing

- If refrigerated, allow container to reach room temperature before use.
- DO NOT open the container before contents reach 25°C temperature. Any moisture that collects on the thawed container should be removed prior to opening the container.

Storage

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

Optimal storage: 25°C

Material removed from the package may be contaminated during use. Do not return product to the original package. 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** $(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$  $\text{kV/mm} \times 25.4 = \text{V/mil}$  $\text{mm} / 25.4 = \text{inches}$  $\mu\text{m} / 25.4 = \text{mil}$  $\text{N} \times 0.225 = \text{lb}$  $\text{N/mm} \times 5.71 = \text{lb/in}$  $\text{N/mm}^2 \times 145 = \text{psi}$  $\text{MPa} \times 145 = \text{psi}$  $\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$  $\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$  $\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$  $\text{mPa}\cdot\text{s} = \text{cP}$ **Disclaimer**

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Reference 1