



# BERGQUIST LIQUI FORM TLF 10000

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## PRODUCT DESCRIPTION

BERGQUIST LIQUI FORM TLF 10000 provides the following product characteristics:

<b>Technology</b>	Silicone
<b>Appearance</b>	Red gel
<b>Product Benefits</b>	<ul style="list-style-type: none"> <li>• Excellent thermal cycling performance</li> <li>• High gap stability</li> <li>• Minimal resin bleed</li> <li>• Low thermal impedance</li> <li>• Excellent dispense properties</li> <li>• Low stress</li> <li>• Bondline thickness control</li> </ul>
<b>Cure</b>	Pre-cure gel
<b>Application</b>	Thermal Management Material, Thermal Gel
<b>Operating Temperature Range</b>	-60 to 200°C

BERGQUIST LIQUI FORM TLF 10000 thermally conductive gel interface material is designed to meet the demanding requirements in certain telecom market applications. Its unique formulation assures a balanced mix of high thermal conductivity, good dispensing efficiency and high thermal reliability.

This material is specially designed to provide effective electronic component cooling capability for 5G base station and remote antenna assembly where a highly reliable vertical gap stability is required. BERGQUIST LIQUI FORM TLF 10000 is pre-cured, requiring no mixing or refrigeration.

## TYPICAL PROPERTIES OF CURED MATERIAL

### Physical Properties

Viscosity, Pa·s:	
Low shear rate, 1.0 s <sup>-1</sup> , ASTM D2196	1,492
High shear rate, 100 s <sup>-1</sup> , ASTM D5099	349
Dispense Rate, grams/minute <sup>(1)</sup>	22
Outgassing, % total mass loss, ASTM E595, %	0.5
Shelf life @ 0 to 35°C, 50% RH, days	180
Flammability, tested in-house to UL 94 standards	UL 94 V-0

## Electrical Properties

Volume Resistivity, 500 V DC, ASTM D257, ohm-meter	9.0×10 <sup>+13</sup>
Dielectric Strength, ASTM D149, V/mm	7,080
Dielectric Constant @ 1,000 Hz	8.4

## Thermal Properties

Thermal Conductivity, ASTM D5470, W/(m-K) 10

(1) 30cc syringe, 90 psi (621 kPa), 0.100" orifice no attachment

## GENERAL INFORMATION

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

## CONFIGURATIONS AVAILABLE

BERGQUIST LIQUI FORM TLF 10000 is supplied in:

Cartridges	150cc
Pail	1 gallon

## STORAGE

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

Optimal Storage: 0 to 35°C 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
N/mm <sup>2</sup> x 145 = psi
N/mm <sup>2</sup> = MPa
N·m x 8.851 = lb·in
N·m x 0.738 = lb·ft
N·mm x 0.142 = oz·in
mPa·s = cP

## Not for product specifications

The technical data contained herein are intended as reference only. Please contact your local Henkel representative for assistance and recommendations on the specifications of this product.



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