



BERGQUIST LIQUI FORM TLF 6000

August 2019

PRODUCT DESCRIPTION

Thermally Conductive, One-Part, Liquid Formable Gel Material.

Technology	Silicone
Appearance (Part A)	Gray paste
Application	Thermal management, TIM (Thermal Interface Material)
Application Method	Dispense from cartridge
Operating Temperature Range	-60 to 200°C

FEATURES AND BENEFITS

- Thermal Conductivity: 6.0 W/m-K
- · Dispensable pre-cured gel
- Stable viscosity in storage and in the application
- Excellent chemical stability and mechanical stability

BERGQUIST LIQUI FORM TLF 6000 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 6000 is pre-cured, requiring no mixing or refrigeration.

TYPICAL APPLICATIONS

- RRU/AAU/BBU in wireless in telecom wireless infrastructure
- Filling various gaps between heat-generating devices to heat sinks
- Devices requiring low assembly pressure
- High value assemblies with rework

TYPICAL PROPERTIES OF UNCURED MATERIAL

Density, ASTM D792, g/cc	3.2
Shelf Life @ 25°C, days	365

TYPICAL PROPERTIES OF CURED MATERIAL **Physical Properties**

Viscosity, Pa·s:

Low shear rate, 1.0 s ⁻¹ , ASTM D2196	1,500
High shear rate, 100 s ⁻¹ , ASTM D5099	750
Dispense Rate, EFD 30cc syringe, 90psi (1), grams/minute (1)	12
Outgassing, % total mass loss, ASTM E595, %	0.07
Flammability @ 1.0 mm, tested in-house	UL 94 V-0

Electrical Properties

Volume Resistivity, 5 V DC, ASTM D257, ohm-meter	3.25×10 ⁺¹⁰	
Dielectric Strength , ASTM D149, V/mm	5,400	
Dielectric Constant @ 1,000 Hz	5.7	

Thermal Properties

Thermal Conductivity, ASTM D5470, W/(m-K) 6.0

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 Henkel representative for assistance and recommendations on the specifications of this product.

CONFIGURATIONS AVAILABLE

BERGQUIST LIQUI FORM TLF 6000 is supplied in:

Cartridges	150cc plastic cartridge

STORAGE

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

Optimal Storage: 25°C for a 365 day shelf life, in sealed containers with moisture barrier packaging.



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

Conversions

 $(^{\circ}C \times 1.8) + 32 = ^{\circ}F$ 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/mm² x 145 = psi N/mm² = 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

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Reference 1