Technical Data Sheet

BERGQUIST LIQUI FORM TLF 6000HG

March 2020

PRODUCT DESCRIPTION

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

Technology	Silicone
Appearance	Gray paste
Application	Thermal management, Gel (1K)
Application Method	Dispense from cartridge
Operating Temperature Range	-60 to 200ºC

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 6000HG 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. It is most effective for gaps as narrow as </= 3mm. BERGQUIST LIQUI FORM TLF 6000HG 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 @ 25ºC , days	365

TYPICAL PROPERTIES OF CURED MATERIAL

Physical Properties

Viscosity, Pa·s:	
Low shear rate 1.0 s^{-1}, ASTM D2196	2,716
High shear rate 100 s^{-1}, ASTM D5099	617
Dispense Rate, EFD 30cc syringe, 90psi (1), grams/minute (1)	17
Outgassing, % total mass loss, ASTM E595, %	0.16
Flammability Rating, UL 94	V-0

Electrical Properties

Volume Resistivity, 500 V DC, ASTM D257, ohm-meter	4.37×10^{11}
Dielectric Strength , ASTM D149, V/mm	10,500
Dielectric Constant @ 1,000 Hz	7.95

Thermal Properties

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

(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).

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.

CONFIGURATIONS AVAILABLE

BERGQUIST LIQUI FORM TLF 6000HG is supplied in:

Cartridges	150 cc 300 cc
Pail	1 gal 5 gal

STORAGE

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

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

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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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Reference N/A