Technical Data Sheet

BERGQUIST® GAP FILLER TGF 2100LVO

May 2025

Product description

BERGQUIST® GAP FILLER TGF 2100LVO provides the following product characteristics:

Technology	Silicone
Appearance - Part A	Pale red
Appearance - Part B	White
Appearance (cured)	Pale red
Cure	Room temperature cure or Heat cure
Application	Thermal management, Cure in place Gap Filler (2K)
Mix Ratio by weight: Part A : Part B	1:1
Mix ratio by volume: Part A: Part B	1:1
Operating temperature, °C	-40 to 150

* Long term, continuous temperature of exposure. Higher temperature possible, application dependent.

BERGQUIST® GAP FILLER TGF 2100LVO is a low volatile silicone, 2-part room temperature curable gap filler suitable for use in a wide range of electronic assembly applications. With a minimum of 2.2 W/(m.K) thermal conductivity and excellent wet-out property, this versatile solution is the best choice to optimize heat dissipation in a wide range of electronic's applications.

This material is an exceptional choice for use in automotive, industrial and consumer electronic applications.

Features and benefits

- Thermal conductivity: >2.2 W/(m.K)
- Low volatile outgassing (LVO)
- Outstanding dispensing flow behavior
- Versatile for wide range of applications

Typical applications

- Automotive control modules
- ADAS applications
- Power conversion components such as OBC, DCDC, Inverters
- Applications that require low and controlled siloxane content
- High throughput manufacturing

Typical properties of uncured material

BERGQUIST® GAP FILLER TGF 2100LVO Part A

Viscosity, Pa.s:	
Low shear rate 1.0 s^{-1}, DIN 53019	350
Shelf-Life @ 25°C, days	180*

*Final shelf-life under investigation

BERGQUIST® GAP FILLER TGF 2100LVO Part B

Viscosity, Pa.s:	
Low shear rate 1.0 s^{-1}, DIN 53019	350
Shelf-Life @ 25°C, days	180*

*Final shelf-life under investigation

Mixed properties

Bondline thickness, Internal*, µm	100
Density, ASTM D792, g/cc	2.9
Working time @ 25°C, ASTM D4473, min	120
Working time @ 50°C, ASTM D4473, min	15

*Adaptive compression speed, 0.1 MPa max stress, 25 mm diameter plate

Typical curing performance

Cure schedule, ASTM D4473	
@ 25°C, hour	10
@ 50°C, min	60
@ 100°C, min	<5

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, ASTM D2240, Shore OO	80
Heat capacity, ASTM D1269, J/(g.K)	0.90×
Flammability, UL 94	V-0×
Siloxane content:	
ΣD4 – D6, ASTM F2466, ppm	ND*
ΣD7 – D10, ASTM F2466, ppm	< 40

×Official/Final rating pending

*ND: Not Detectable

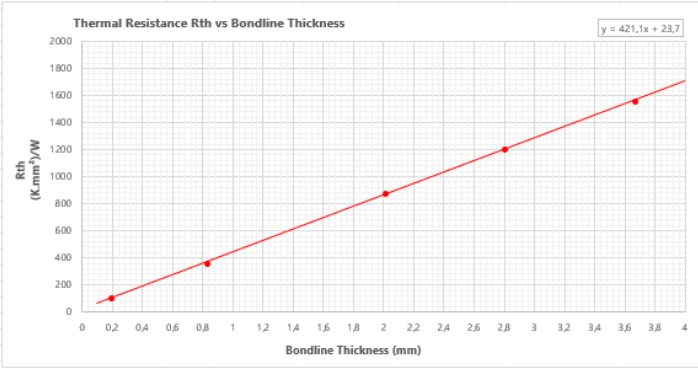
Electrical properties

Dielectric constant, ASTM D150	7.2
Volume resistivity, DC, ASTM D257, Ω.m	$>10^{10}$
Dielectric strength, AC, ASTM D149, kV/mm	> 8

Thermal properties

Thermal conductivity, ASTM D5470, W/(m.K)	2.2
Thermal resistance, ASTM D5470, (K.cm²)/W:	
@ 0.2 mm	110
@ 1.0 mm	440
@ 2.0 mm	870

Thermal Resistance Rth vs Bondline Thickness



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 the specifications of this product.

Configurations available

BERGQUIST® GAP FILLER TGF 2100LVO is available in the following configurations:

Cartridges, cc	50; 400; 1,200
Pail kits, gallons	6
Glass-bead configuration available, µm (mils)	none; 178 (7); 254 (10)

Storage

Store product in unopened container in controlled environment, ideally between 5 and 25°C.

Optimal storage: 20°C for a 6-month shelf life in original packaging.

Material removed from containers may be contaminated during use. Do not return product to the original container. Henkel 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 Henkel representative.

Shipping conditions

Short periods of time above the recommended storage temperature have not been shown to affect material's properties, negatively.

Conversions

(°C x 1.8) + 32 = °F
kV/mm x 25.4 = V/mil
mm / 25.4 = inches
µm / 25.4 = mil
N x 0.225 = lb
N/mm x 5.71 = lb/in
N/mm² x 145 = psi
MPa x 145 = psi
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 2