



BERGQUIST GAP FILLER TGF 4500CVO

High dispense rate, controlled volatility performance Gap Filler

For applications where robust thermal control and minimal volatiles are necessary, liquid thermal interface materials (TIMs) must provide a balance between high performance and efficient processability. Highly-filled systems that offer effective heat dissipation often result in high viscosity liquid TIMs that are difficult to dispense. To accommodate for this, a standard practice is to integrate low molecular weight binders to reduce viscosity. However, this approach can create contaminating volatiles harmful for mechanical contacts, optical components and within sensitive environments.

Combining excellent thermal performance, a high dispense rate and controlled volatility, BERGQUIST GAP FILLER TGF 4500CVO liquid Gap Filler TIM is Henkel's solution to this industry challenge. Designed as a two-component material, the thermal Gap Filler is built on a silicone chemistry platform that is easily dispensed for high-throughput operations. BERGQUIST GAP FILLER TGF 4500CVO has a high thermal conductivity of 4.5 W/m-K, provides very low assembly stress, thoroughly wets out for optimized heat transfer and can be used without fear of contamination.



BERGQUIST GAP FILLER TGF 4500CVO

Product	Properties	Typical value
BERGQUIST GAP FILLER TGF 4500CVO	Thermal conductivity	4.5 W/m·K
	Hardness (shore 00)	70
	Viscosity (Low Shear) 1/s	Part A –522 Pa·s // Part B –361 Pa·s
	Viscosity (High Shear) 1/3000s	Part A –13 Pa·s // Part B –22 Pa·s
	Full cure	30 min. @ 85 °C
	Dielectric strength	>10 kV/mm
	Application temperature	–50 to 200 °C
	Mixing ratio	1:1

FEATURES

- » <300 ppm volatile silicones for sensitive applications
- » Accurate dispensing of 300 g/minute (pattern dependent)
- » Thermal conductivity of 4.5 W/mk
- » Two-component, silicone chemistry platform
- » Slump-resistant
- » Good wet out to various surfaces and topographies

TYPICAL APPLICATIONS

- » Industrial automation/ power conversion
- » Automotive electronics
- » Computer and peripherals
- » Between any heat-generating semiconductor and a heat sink

BENEFITS

- » Eliminates contamination concerns; safe and effective for use with optical components, mechanical devices and sensitive environments such as semiconductor packaging operations
- » High throughput, optimized viscosity for automated dispensing processes
- » Improved device performance through high thermal conductivity and thorough wet out/gap filling
- » Safe for delicate devices with low assembly stress and low strain on PCBs and solder joints
- » Improved supply chain versatility, application adaptability, cost-effectiveness and performance as compared to thermal pads of similar thermal conductivity

CONFIGURATIONS AVAILABLE for BERGQUIST GAP FILLER TGF 4500CVO

Cartridges	50 cc	200 cc	400 cc	1,200 cc
Pail Kits	6 gallons			

Reach out to our experts to partner up in solutions for thermal management.

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