

THERM-A-GAP™ GEL 45

High Performance Good Flow Rate
Fully Cured Dispensable GEL



THERM-A-GAP GEL 45 is part of the Parker Chomerics family of fully cured, one component silicone-based, dispensable thermal interface materials.

With a 4.5 W/m-K thermal conductivity, it is designed for high performance heat transfer from electronics components to cooling features and meant to be used across industries and applications.

As with all Parker Chomerics thermal gels, it is optimized for automated dispensing at various packaging sizes while retaining properties for easy rework and field repair situations. With a high flow rate and high thermal conductivity, THERM-A-GAP GEL 45 lends itself to high volume applications.

The paste-like consistency of THERM-A-GAP GEL 45 enables very tightly controlled dispensing and accurate material placement during assembly. It requires low compressive force to deflect under assembly pressure, subjecting components, solder joints and PCB leads to minimal stress.



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Product Features

- Thermal conductivity: 4.5 W/m-K
- High flow rate: 55 g/min
- No secondary curing required
- Low thermal impedance
- Very low compression force
- Reworkable
- Single component
- Room temperature storage

Typical Applications

- Telecommunications equipment
- Consumer electronics
- Computing components (CPUs, GPUs, memory)
- Power electronics and modules
- Energy storage devices
- Automotive control units and sensors



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THERM-A-GAP™ GEL 45 Product Information

Typical Properties†		GEL 45	Test Method
Physical	Color	Black	Visual
	Flow Rate, grams/min - 30cc syringe with no tip attachment 0.100" orifice, 90psi (621 kPa)	55	Chomerics
	Specific Gravity	3.1	ASTM D792
	Typical minimum bondline thickness, in (mm)	0.0035 (0.089)	Chomerics
Thermal	Thermal Conductivity, W/m-K	4.5	ASTM D5470
	Heat Capacity, J/g-K	1	ASTM E1269
	Coefficient of Thermal Expansion, ppm/K	150	ASTM E831
	Operating Temperature Range, °F (°C)	-67 to 392 °F (-55 to 200 °C)	Chomerics
Electrical	Dielectric Strength, Vac/mil (Kvac/mm)	200 (8.0)	ASTM D149
	Volume Resistivity, ohm-cm	10 ¹⁴	ASTM D257
	Dielectric Constant @ 1000 kHz at 0.030" (0.76mm) thick	9.0	ASTM D150
	Dissipation Factor @ 1000 kHz at 0.030" (0.76mm) thick	0.040	Chomerics
Regulatory	Flammability Rating (See UL File E140244 for Details)	V-0	UL 94
	RoHS Compliant	Yes	Chomerics Certification
	Outgassing, % TML (% CVCM)	0.23 (0.06)	ASTM E595
	Shelf Life, months from date of manufacture	18	Chomerics
	Storage Conditions, °F (°C) @ 50% Relative Humidity	50 to 90 (10 to 32)	Chomerics

† Typical properties: these are not to be construed as specifications.

THERM-A-GAP™ GEL 45 Ordering Information

Part Number	Typical Standard Fill Volume (cc)	Typical Standard Fill Mass (g)	Packaging Description
65-00-GEL45-0010	10	31	10cc Luer-Lock™ manual syringe
65-02-GEL45-0030	27	84	30cc EFD plastic cartridge
65-02-GEL45-0180	150	465	6oz (180cc) EFD plastic cartridge
65-00-GEL45-0300	300	930	12oz (300cc) aluminum cartridge
65-1P-GEL45-2500	2500	7750	1 U.S. gal. pail
65-5P-GEL45-8065	8065	25000	5 U.S. gal. pail

Request a Sample

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Where to Buy

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