

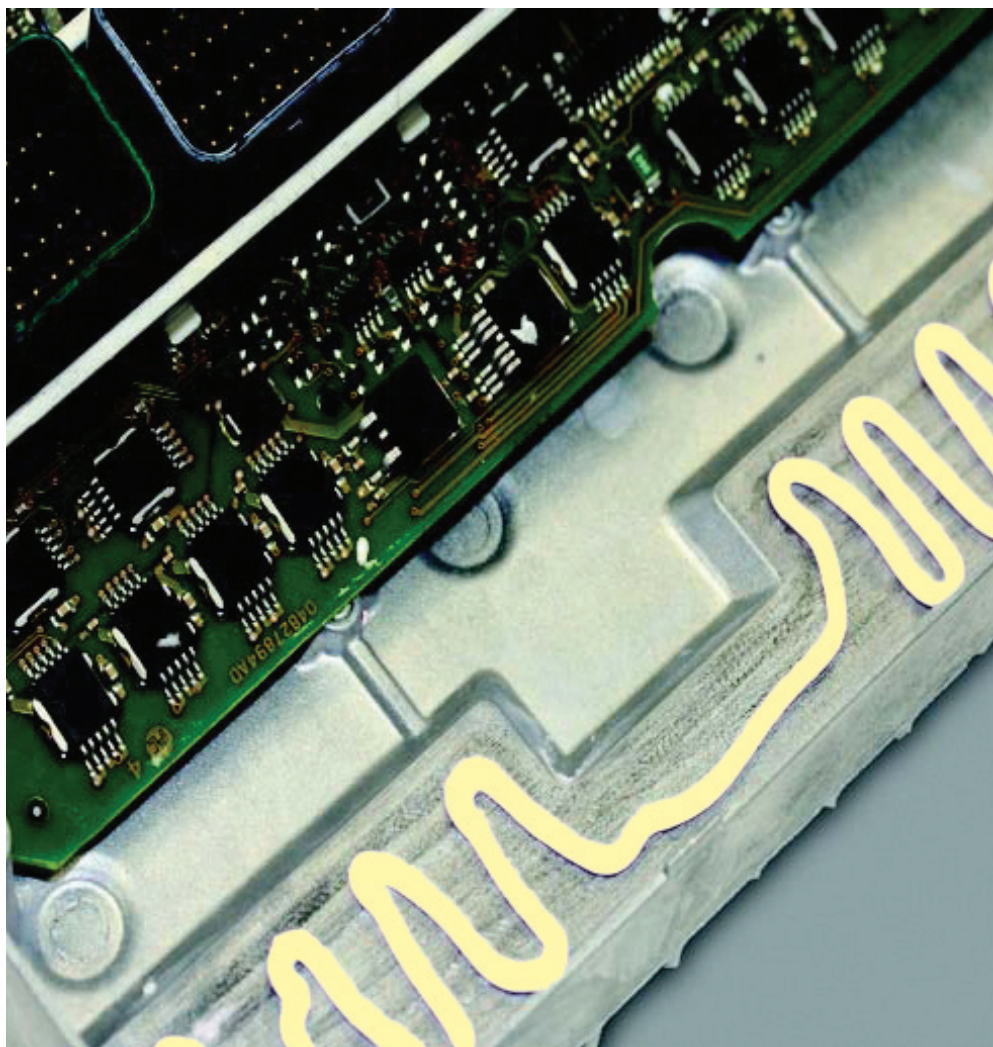
THERM-A-GAP™ GEL25NS

Non-silicone Fully Cured Dispensable GEL

Customer Value Proposition:

Parker Chomerics cured non-silicone GEL25NS has been designed to eliminate silicone contamination and provide maximum thermal performance in devices requiring minimal thermal resistance and high component reliability. The dispensable gel is compatible with soldering chemicals and components can be repainted with ease. This unique, pre-cured material has no silicone staining or pump out. This single component product requires no mixing or curing providing superior design flexibility.

- Provides low thermal impedance at thin and thick gaps, allowing use of common heat spreaders.
- Deflects easily under very low compressive forces, reducing the stress on the components with lower failure rates.
- It is ideal for filling variable gaps between multiple components and a common heat sink.



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Product Features:

- No silicone contamination
- Free of paint wetting impairment substances (PWIS) according to Automotive Standard
- Easily dispensable
- Pre-cured / No pump out
- High bulk thermal conductivity
- Low thermal impedance
- Ultra low compression force
- High tack surface & reworkable
- Proven long-term reliability

Typical Applications:

- Automotive Electronic Control Units (ECU's)
- Vision Control Systems
- LED's
- Power Supplies & Semiconductors
- Memory & Power Modules
- Microprocessors / Graphics Processors
- Flat Panel Displays & Consumer Electronics

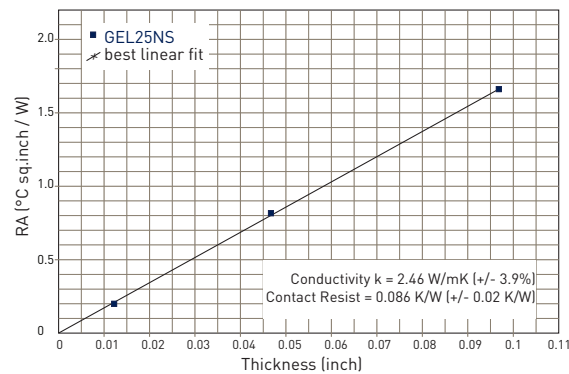
Product Information

Table 1 - Typical Properties

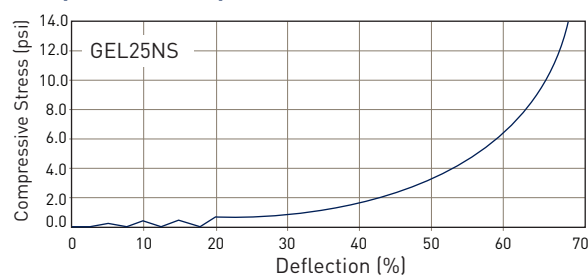
Typical Properties		GEL25NS	Test Methods
Physical	Color	Yellow	Visual
	Flow Rate, g/min - 30cc syringe with no tip, 0.01" orifice, 90psi (621 kPa)	15	Chomerics
	Specific Gravity	2.6	ASTM D792
	Percent Deflection versus Compression (See graph below)	40 % Deflection at ≤ 3 psi	Modified ASTM C165 Dispensed 1.0 cc of material Brought 1" x 1" probe down to 0.100" Test rate 0.025 in/min
	Typical minimum bondline thickness, inches (mm)	0.004 (0.10)	Chomerics
Thermal	Thermal Conductivity, W/m-K	2.1	ASTM D5470
	Heat Capacity, J/g-K	0.96	ASTM E1269 (25°C \pm 2°C - DSC)
	Coefficient of Thermal Expansion, ppm/K	≤ 300	ASTM E831
	Temperature Range, °F (°C)	-58 to 257 (-55 to 125)	Chomerics
Electrical	Dielectric Strength, Vac / mil (kVac/mm)	200 (8.0)	Chomerics
	Volume Resistivity, ohm-cm	10^{14}	ASTM D257
	Dielectric Constant @100 kHz	6.7	ASTM D150
	Dissipation Factor @ 100 kHz	0.018	Chomerics
Regulatory	Flammability Rating	V-0	Chomerics test to UL 94
	RoHS Compliant	Yes	Chomerics Certification
	Outgassing, % TML, % CVCM (Collected Volatile Condensable Material)	0.23 (0.04)	ASTM E595
	Shelf Life, months from date of manufacture	12	Chomerics
	Testing for Substances That Impair Paint Wetting Ability	Pass	Automotive Standard

The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

Graph 1 - Impedance vs Thickness



Graph 2 - Compression vs % Deflection



Installation Guidelines:

Therm-A-Gap™ GEL25NS is supplied in syringes, cartridges and tin pails. Simply dispense the desired amount onto components or cooling plates. The gel is reworkable and excess material can be easily wiped off.

Part Numbering Information:

- 65-00-GEL25NS-0010-M 10cc syringe
- 65-00-GEL25NS-0030-M 30CC syringe
- 65-00-GEL25NS-0055-M 55CC syringe
- 65-00-GEL25NS-0180-M 180CC cartridge
- 65-00-GEL25NS-0300-M 300CC cartridge
- 65-00-GEL25NS-0610-M 610CC cartridge
- 69-11-GEL25NS-10KG-M 10kg pail

Storage Conditions:

The Gel 25NS material should be stored between 10 °C and 40 °C at 50% RH.

It is recommended to allow a 24 hour conditioning period at the dispensing / manufacturing location once the material is moved out of the storage area.

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