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**COOL-GEL
 CGL8050**

**Non-Silicone Compound
 Form Gel @ 80°C
 Very High Thermal Conductivity**

IDEAL FOR:

- Thermal Grease Replacement**
- Thermal Potting Compound (Low Ionic Impurities)**
- Power Device and Heatsink Interface**

DESCRIPTION:

CGL8050 is a reworkable, silver powder filled, thermally conductive paste which exhibits outstanding thermal transfer relative to most adhesives. It may be used as is to replace traditional thermal greases. It forms a gel-like structure at elevated temperature to prevent any possible spreading to other components.

While it has some holding strength, mechanical supports are recommended for devices that may subject the gel/component to creep as well as other applied mechanical stresses.

AVAILABILITY:

CGL8050 is available in syringes for automatic needle dispense applications or in jars.

APPLICATION PROCEDURES:

- (1) Thaw for 30 minutes before opening jar.
- (2) Dispense gel onto clean substrate. Syringe application may require >50psi pressure.
- (3) Cool-Gel yield low thermal resistance as applied. It will cure insitu or according to the recommended schedule, only when necessary.**

TYPICAL PROPERTIES*

| | |
|---|--|
| Electrical Resistivity | <1x10 ⁻⁴ ohm-cm |
| Lap-Shear Strength | |
| Device Push-off Strength | < 300 psi < 2.1 N/mm ² |
| Hardness (Type) | Gel |
| Cured Density (gm/cc) | 5.0 |
| Thermal Conductivity | >60 Btu-in/hr-ft ² -°F >8.6 W/m-°C |
| Maximum Continuous Operation Temp. (°C) | 150 |
| Avg. Viscosity(5.0 rpm, 24°C) | 20,000 cp |

* Properties given are typical values and not intended for use in preparing specifications. The user is advised to evaluate the product in the manner the product is intended to be used in manufacturing and in the final product.

CURE SCHEDULES:

| <u>Temperature</u> | <u>Time</u> |
|--------------------|-------------|
| 80°C | 16 hr |

** Generally no curing is necessary for normal applications. Curing is recommended only when extreme care must be exercised for possible contamination in neighboring sites.

SHELF LIFE:

| <u>Storage temperature</u> | <u>Shelf Life</u> |
|----------------------------|-------------------|
| -40°C | 1 yr |
| 25°C | 1 mo |

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