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**COOL-GEL
 CGL7019**

**Non-silicone Compound
 Form Gel @ 80°C
 Best Thermal Conductivity**

IDEAL FOR:

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

DESCRIPTION:

CGL7019 is a reworkable, diamond filled, electrically insulating and thermally conductive paste which exhibits outstanding thermal transfer in comparison to most adhesives. This thixotropic compound has the highest thermal conductivity. It forms gel-like structure upon heating to @80°C and prevents material spreading to other sites. Thermal resistance of less than 0.06°C/W-sq.in. has been consistently obtained for relatively thick interface layers.

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

AVAILABILITY:

CGL7019 is available in syringes for automatic needle dispense applications or in jars.

APPLICATION PROCEDURES:

- (1) If frozen, thaw for 30 minutes before opening jar.
- (2) Dispense adhesive onto clean substrate. Syringe application may require >50psi pressure.
- (3) If desired, cure according to the recommended schedule only when necessary.*

TYPICAL PROPERTIES*

Electrical Resistivity	>1X10¹⁴ ohm-cm
Lap-Shear Strength	< 300 psi < 2.1 N/mm²
Device Push-off Strength	< 300 psi < 2.1 N/mm²
Hardness (Type)	Gel
Cured Density (gm/cc)	2.5
Thermal Conductivity	70 Btu-in/hr-ft²-°F 10 W/m-°C
Maximum Continuous Operation Temp. (°C)	150
Avg. Viscosity(0.5 rpm, 24°C)	200,000 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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