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**COOL-GEL
 CGL7018**

Form Gel @ 80°C
High Thixotropy
Very Low Thermal Resistance

IDEAL FOR:

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

DESCRIPTION:

CGL7018 is a reworkable, aluminum nitride filled, electrically insulating and thermally conductive paste which exhibits outstanding thermal transfer in comparison 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 and other applied mechanical stresses.

AVAILABILITY:

CGL7018 is available in syringes for automatic needle dispense applications or in jars.

APPLICATION PROCEDURES:

- (1) Thaw for 30 minutes before opening jar.
- (2) Dispense adhesive onto clean substrate. Syringe application may require >50psi pressure.
- (3) Cure according to one of the recommended schedules 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)	2.3
Thermal Conductivity	29 Btu-in/hr-ft²-°F 4.1 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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