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**COOL-GEL  
 CGL7058**

**Form Gel Upon Curing  
 High Flow  
 Very Low Thermal Resistance**

**IDEAL FOR:**

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

**DESCRIPTION:**

CGL7058 is a reworkable, aluminum nitride crystallite filled, electrically insulating and thermally conductive gel. It 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 upon curing at elevated temperature to prevent any possible spreading to other components.

This medium viscosity, low thixotropic paste flows readily upon heating to elevated temperature. It is ideal for potting larger parts for thermal transfer and mechanical shock absorption.

**AVAILABILITY:**

CGL7058 is available in 2-component packages of various size.

**APPLICATION PROCEDURES:**

- ( 1 ) Thaw for 30 minutes before opening jar if stored frozen.
- ( 2 ) Dispense paste onto clean substrate. Syringe application may require >50psi pressure.
- ( 3 ) Gel is functional as thermal interface as dispensed. Paste will gel in situ during operation.

**TYPICAL PROPERTIES\***

|  |  |
|--|--|
| <b>Electrical Resistivity</b>                  | <b>&gt;1x10<sup>14</sup> ohm-cm</b>                          |
| <b>Lap-Shear Strength</b>                      | <b>&lt; 300 psi<br/>&lt; 2.1 N/mm<sup>2</sup></b>            |
| <b>Device Push-off Strength</b>                | <b>&lt; 300 psi<br/>&lt; 2.1 N/mm<sup>2</sup></b>            |
| <b>Hardness (Type)</b>                         | <b>Gel</b>   |
| <b>Cured Density (gm/cc)</b>                   | <b>2.3</b>   |
| <b>Thermal Conductivity</b>                    | <b>&gt;30 Btu-in/hr-ft<sup>2</sup>-°F<br/>&gt;4.3 W/m-°C</b> |
| <b>Maximum Continuous Operation Temp. (°C)</b> | <b>175</b>   |
| <b>Avg. Viscosity(5.0 rpm, 24°C)</b>           | <b>20,000 cp</b>   |

\* 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> |
|--------------------|-------------|
| 40°C               | 1 da        |
| 80°C               | 8 hr        |
| 100°C              | 1 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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