



AI TECHNOLOGY INC
 70 Washington Road
 Princeton Jct., NJ 08550
 (609) 799-9388 fax (609) 799-9308
 E-Mail: ait@aitechnology.com
 Internet: http://www.aitechnology.com

COOL-GEL
CGL8010-XT

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:

CGL8010-XT 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:

CGL8010-XT 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) 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	< 300 psi < 2.1 N/mm²
Device Push-off Strength	< 300 psi < 2.1 N/mm²
Hardness (Type)	Gel
Cured Density (gm/cc)	5.0
Thermal Conductivity	>60 Btu-in/hr-ft²-°F >8.6 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

The information contained herein is believed to be reliable. All recommendations or suggestions are made without guarantee inasmuch as conditions and methods of commercial use are beyond our control. 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 to be used in manufacturing and in the final product. Under no circumstance shall A.I. Technology be liable for accidental, consequential or other damages arising from the use or handling of this product.

While AI Technology owns all proprietary rights of material formulations of its products, specific usage in the manufacturing of certain products may involve patent rights of other companies.