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Flexible Epoxy Adhesive
High Thermal Conductivity
2-Component, Premixed Frozen
Stress-Free Bonding and Reworkable

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IDEAL FOR:

- **High Power Die and Component Attach**
- **Substrate Attach**
- **Heatsink Attach**
- **Large Area Bonding**
- **Bonding Adherends with Mismatched CTE's**

DESCRIPTION:

EG7658 is a reworkable, aluminum nitride filled, electrically insulating and thermally conductive epoxy paste adhesive. It which exhibits outstanding flexibility for bonding materials with highly mismatched CTE's (ie., alumina to aluminum, silicon to copper). The high thermal conductivity and flexibility make it excellent for bonding high-powered, large area die and components.

EG7658 can be reworked using temperatures higher than the cure temperature from 80-150ºC to soften the bond line . Use a tool adequate to break the bond and remove. Clean any residue with a solvent which will not damage the parts. Caution: AlN under high humidity and temperature may cause corrosion to copper or other non-noble metal.

AVAILABILITY:

EG7658 is available in syringes for automatic needle dispense applications or in jars. Upon request, the material can be shipped premixed and frozen.

APPLICATION PROCEDURES:

(1) Store Part A and Part B at ambient. Part A has higher vicosity.

(2) Mix A and B 1:1 by weight.

(3) Cure according to one of the recommended cure schedules.

PRIMA-BOND

EG7658

TYPICAL PROPERTIES*

Electrical Resistivity (150 ºC/ 60 minutes)	**>1x10 ^{14} ohm-cm**
Dielectric Strength (Volts/mil)	**> 750**
Glass Transition Temp.(ºC)	**-25 ±10%**
Current Carrying Capabilities	**NA**
Lap-Shear Strength	**>1000 psi**
	>6.9 N/mm²
Device Push-off Strength	**>1800 psi**
	>12.4 N/mm²
Cured Density (gm/cc)	**2.3 ±10%**
Thermal Conductivity	**25 Btu-in/hr-ft²-ºF ±10%**
	3.6 W/m-ºC ±10%
Linear Thermal Expansion Coeff. (ppm/ºC)	**120**
Maximum Continuous Operation Temp. (ºC)	**<150**
Avg. Viscosity(0.5 rpm, 25ºC) (Brookfield DV-1, Spindle CP51)	**290,000 cp ±20%**

* 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:

Temperature	Time
80ºC	8 hr
100ºC	4 hr
125ºC	2 hr
150ºC	1 hr

**If material is premixed and frozen, thaw for 30 minutes, apply and cure according to one of the recommended cure schedules.

***Shelf life is for unmixed components. If premixed: -40ºC for 6 months. After mixing, pot life is 4 hours at 25ºC.

SHELF LIFE:

Storage temperature	Shelf Life
25ºC	***1 yr

CAUTION: This product may cause skin irritation. Avoid skin contact. If contact does occur, wash immediately with soap and water. Please refer SDS for more details.