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**PRIMA-BOND**  
**EG7655**

**Flexible Insulating Epoxy**  
**Two Component Pastes**  
**Thermally Conductive**  
**Stress-Free Bonding**  
**Available in Pre-mixed Form**

**IDEAL FOR:**

- Heat-Sink Attach
- Substrate & Component Attaches
- Large Area Bonding
- Bonding Adherends with Mismatched CTE's

**DESCRIPTION:**

EG7655 is a reworkable, alumina filled, electrically insulating and thermally conductive epoxy paste adhesive which exhibits outstanding flexibility for bonding materials with highly mismatched CTE's (i.e., alumina to aluminum, silicon to copper). EG7655's high thermal conductivity and flexibility make it excellent for bonding large area substrates, components and heat sinks where thermal management is critical.

EG7655 exhibits reduced bond strength at 80-100°C for easier rework. The cured adhesive is flexible with Type A hardness of 80 and tensile elongation of more than 30%.

**AVAILABILITY:**

EG7655 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.
- ( 2 ) Mix A and B 1:1 by weight.
- ( 3 ) Cure according to one of the recommended schedules.

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

**TYPICAL PROPERTIES\***

Electrical Resistivity ( 150 °C/ 60 minutes )	>1x10 <sup>14</sup> ohm-cm
Dielectric Strength (Volts/mil)	> 750
Glass Transition Temp.(°C)	-20
Current Carrying Capabilities	N/A
Lap-Shear Strength	1000 psi 6.9 N/mm <sup>2</sup>
Device Push-off Strength	1800 psi 12.4 N/mm <sup>2</sup>
Cured Density (gm/cc)	2.3
Thermal Conductivity	12 Btu-in/hr-ft <sup>2</sup> -°F 1.7 W/m-°C
Linear Thermal Expansion Coeff. (ppm/°C)	140
Maximum Continuous Operation Temp. (°C)	150
Avg. Viscosity(0.5 rpm, 24°C) (Brookfield DV-1, spindle CP51)	300,000 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>
25°C	44 hr
80°C	4 hr
100°C	2 hr
125°C	1 hr
150°C	30 min

**SHELF LIFE:**

<u>Storage temperature</u>	<u>Shelf Life</u>
25°C	***1 yr

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

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