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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 Mixmatched 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 tensilie 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. Part A has higher viscosity.
- ($\ensuremath{\mathtt{3}}$) Cure according to one of the recommended schedules.

PRIMA-BOND EG7655

TYPICAL PROPERTIES*

Electrical Resistivity >1x10 ¹⁴ ohm-cm

(150 °C/ 60 minutes)

Dielectric Strength (Volts/mil) > 750

Glass Transition Temp.(°C) -20 ±10%

Current Carrying Capabilities N/A

Lap-Shear Strength >1000 psi

>6.9 N/mm²

Device Push-off Strength

Thermal Conductivity

>1800 psi >12.4 N/mm²

Cured Density (gm/cc) 2.3 ±10%

12 Btu-in/hr-ft2-oF ±10%

1.7 W/m-°C ±10%

Linear Thermal Expansion

140 ±10%

Coeff. (ppm/°C)

Maximum Continuous Operation Temp. (°C) <150

Avg. Viscosity(0.5 rpm, 25°C) 280,000 cp ±20% (Brookfield DV-1, spindle CP51)

* 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	120 hr
80°C	8 hr
100°C	4 hr
125°C	2 hr
150°C	1 hr

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

SHELF LIFE:

Storage temperature

25°C

Shelf Life

***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.

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 Al Technology be liable for accidental, consequential or other damages arising from the use or handling of this product.

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PRODUCT DATA SHEET Ver 2.0 4/2/2018

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