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High Strength
Rapid Curing
100% Solid
Insulating
Epoxy Paste Adhesive

IDEAL FOR:

Rapid to Snap Curing

Die-Attach

Automated Assembly

DESCRIPTION:

ME7635-RC is an thermally conductive insulating epoxy adhesive for die-attach applications. This thixotropic paste is solvent free. (TI is approx. 3.0). It is designed for automated, inline bonding processing.

ME7635-RC is low in ionic impurities (<60 ppm total) and meets all requirements for MIL-Std 883D 5011.4 specification for dielectric adhesive. Fast curing can be achieved from 80°C and higher temperatures.

AVAILABILITY:

ME7635-RC is available in syringes for automatic needle dispense applications or in jars.

APPLICATION PROCEDURES:

- (1) Thaw for 30 minutes before opening jar or using syringes.
- (${\bf 2}$) Dispense adhesive onto clean substrate with a suitable pattern to assure full die coverage.
- (${\bf 3}$) Cure according to one of the recommended schedules.

COOL-BOND ME7635-RC

TYPICAL PROPERTIES*

Electrical Resistivity >1x10¹⁴ ohm-cm (150 °C/ 2 min)

Dielectric Strength (Volts/mil) >750
Glass Transition Temp.(°C) 60 ±10%

Current Carrying Capabilities

Lap-Shear Strength >1500 psi

>10.3 N/mm²

Device Push-off Strength >3200 psi

>22.0 N/mm²

Hardness (Type) 80 (D) $\pm 10\%$ Cured Density (gm/cc) 1.9 $\pm 10\%$

Thermal Conductivity 9 Btu-in/hr-ft²-°F ±10%

1.2 W/m-°C ±10%

Linear Thermal Expansion 40 ±15%

Coeff. (ppm/°C)

Maximum Continuous Operation Temp. (°C) <150

Pot Life 5 day at 25°C

Avg. Viscosity(5 rpm, 24°C) 38,000 cp ±20%

(Brookfield DV-1,spindle CP51)

Thixotropic Index 2.5

CURE SCHEDULES:

<u>Temperature</u>	<u>Tir</u>	<u>ime</u>	<u>Presure</u>
80°C	30 min		
100°C	15	15 min	
125°C	6	min	
150°C	3	min	

Bond strength at 150C for 2 hours is the same as 3 min.

SHELF LIFE:

Storage temperature	Shelf Life
-40°C	1 yr
25°C	1 mo

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 2.2 6/26/2019

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