

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

Extra Clean in Ionics
Solvent-Free
Electrically Insulating
Thermally Conductive
IDEAL FOR:
High Thermal Dissipation
Die and Component Attach

Automated Assembly

DESCRIPTION:

ME7265 is a rapid curing thermally conductive and insulating epoxy adhesive for die and substrate attach applications. This paste is solvent free. It is designed for automated, inline bonding processing. Its is engineered to combine high bond strength and molecular flexibility that helps to absorb interfacial stresses for long-term reliability.

ME7265 is low in ionic impurities and meets all requirements for MIL-Std 883 Method 5011.5 specification for dielectric adhesive.

AVAILABILITY:

ME7265 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.
- (2) Dispense adhesive onto clean substrate with a suitable pattern to assure full die coverage.
- ($\bf 3$) Cure according to one of the recommended cure schedules.

PRIMA-BOND ME7265

TYPICAL PROPERTIES*

Electrical Resistivity	>1x10 ¹⁴	ohm-cm
(150°C/ 30 min)		
Dielectric Strength (Volts/mil)	>750	
Glass Transition Temp.(°C)	75 ±10%	

Current Carrying Capabilities

Lap-Shear Strength >1000 psi

>6.87 N/mm²

Device Push-off Strength >2400 psi

>16.6 N/mm²

Hardness (Type) 70 (D) $\pm 10\%$ Cured Density (gm/cc) 1.8 $\pm 10\%$

Thermal Conductivity 7.0 Btu-in/hr-ft²-of ±10%

1.0 W/m-°C ±10%

Linear Thermal Expansion 45 ±15%

-10 <u>-</u>10

Coeff. (ppm/°C)

Maximum Continuous Operation Temp. (°C)<150

Pot Life >7 days

Avg. Viscosity(5.0 rpm, 25°C) 50,000 cp ±20%

(Brookfield DV-1,Spindle CP51)

Thixotropic Index 3.0±20%

CURE SCHEDULES:

<u>Temperature</u>	<u>Time</u>	<u>Pressure</u>
	4	
100°C	hr	
125°C	90 min	
150°C	30 min	
175°C	10 min	

Ambient floor life (pot-life) is 5 days or more.

SHELF LIFE:

Storage temperature	Shelf Life
-40°C	12 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.

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.

PRODUCT DATA SHEET Ver 2.4 0/7/20/2022

^{*} 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.