



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

PRIMA-SOLDER
ME8412

High Strength
Solvent Free
Electrically Conductive
Epoxy Paste Adhesive

IDEAL FOR:

Conventional Die Attach
Automated Dispensing

DESCRIPTION

ME8412 is a silver filled, solvent free, electrically and thermally conductive paste. It is designed for automated, online, die attach processing.

AVAILABILITY:

ME8412 is available in syringes for automatic needle dispense applications or in jars. Viscosity and thixotropic index can be modified to meet customer needs.

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

TYPICAL PROPERTIES*

Electrical Resistivity (150 °C/ 30 minute)	<5x10 ⁻⁴ ohm-cm
Dielectric Strength (Volts/mil)	N/A
Glass Transition Temp.(°C)	130
Current Carrying Capabilities	>40 Amp/mm ²
Lap-Shear Strength	1000 psi 6.9 N/mm ²
Device Push-off Strength	2000 psi 13.8 N/mm ²
Hardness (Type)	85 (A)
Cured Density (gm/cc)	3.5
Thermal Conductivity	55 Btu-in/hr-ft ² -°F 7.9 W/m-°C
Linear Thermal Expansion Coeff. (ppm/°C)	45
Maximum Continuous Operation Temp. (°C)	150
Avg. Viscosity(0.5 rpm, 24°C) (Brookfield DV-1,spindle CP51)	185,000cp

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

SHELF LIFE:

<u>Storage temperature</u>	<u>Shelf Life</u>
-40°C	1 yr

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 A.I. 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.