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DIE ATTACH
ME7863

Solvent Free
Low Moisture Absorption
Low Ionic Impurities
High Temperature Curing

IDEAL FOR:

Die Attach
 High Speed Automated Processing
 Hermetically Sealed Packages

DESCRIPTION:

ME7863 is a one part, quartz filled cyanate ester die attach adhesive. It was designed for solder-sealed ceramic packages. It can withstand temperatures up to 300°C without thermal degradation.

ME7863 has processing characteristics required in high speed automation. Its unique chemistry results in very low moisture absorption, high adhesive strength and low CTE.

AVAILABILITY:

ME7863 is available in syringes for automatic dispense applications or in jars.

APPLICATION PROCEDURES:

- (1) Thaw to room temperature before opening container.
 - (2) Dispense adhesive onto clean substrate with a suitable pattern to
 - (3) Cure according to the recommended schedule, i.e. B-Stage followed by a cure schedule.
- NOTE: The monomer contained in this product is subject to crystallization even at room temperature. If product is thawed and remains crystallized, simply place in 40 C environment for as long as needed to return product to the liquid state i.e. usually not more that 15 - 20 minutes.

TYPICAL PROPERTIES*

Electrical Resistivity (NA °C/)	NA	ohm-cm
Dielectric Strength (Volts/mil)	>750	
Glass Transition Temp.(°C)	240	
Current Carrying Capabilities	NA	
Lap-Shear Strength	>1000 psi >6.9 N/mm ²	
Device Push-off Strength	>2500 psi >17.2 N/mm ²	
Hardness (Type)	95 (D)	
Cured Density (gm/cc)	1.6	
Thermal Conductivity	>6.9 Btu-in/hr-ft ² -°F >1.0 W/m-°C	
Linear Thermal Expansion Coeff. (ppm/°C)	20	
Maximum Continuous Operation Temp. (°C)	250	
Avg. Viscosity(5.0 rpm, 25°C) (Brookfield DV-1,Spindle CP51)	65,000 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:

Temperature	Time	Pressure
125 C	2 hour	
150 C	1 hour	

Post Cure If Required

Pot Life is 8 hrs @ 25°C

1 cP = 10⁻³ Pa·s = 1 mPa·s; 145psi=.99974MPa=.99974 N*mm²; 1lb = 4.448N;
 1 inch=25.4 mm; 1V/mil= 39.3701 V/mm; 1 lb-in = 0.11298 N-m

SHELF LIFE:

Storage temperature	Shelf Life
-40°C	1 yr

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