

BOND[®] 3387B

Insulated Fast Cure Die Attach Adhesive(VS. 2025D)

BOND[®] 3387B die attach adhesive is designed for use in array packaging and leadframe. It can be fast cured, minimum bleeding, and shows good flexibility and adhesion on a variety of substrates.

Features:

- Cure: Heat Cure
- Product Benefits
 - Minimum bleed and minimal volatiles
 - Good adhesion to a variety of substrates
 - High hot/wet die shear strength
 - 260°C reflow capability for Pb-free applications
 - Non-conductive
- for the bonding of bare semiconductors (ICs) to metal lead frames, rigid printed circuit boards and ceramic substrates
- Very good adhesion to FR4, gold, leadframe and aluminum
- Typical Package Application: PBGA, FlexBGA and Stacking BGA

UNCURED PROPERTIES		TEST DESCRIPTION
Appearance	Black	
Viscosity @ 25°C	50,000~70,000cps	Brookfield RVDV-II@ 5rpm
Thixotropic Index @ 25°C	4.5	Brookfield RVDV-II@ 5rpm Visc. @ 0.5rpm/Visc @ 5rpm
Work Life by Gel Time @ 25°C	48 hours	25% increase in visc. @ 5rpm
Shelf Life @ -20°C	12 month	
CURE CONDITION		TEST DESCRIPTION
Standard Cure Condition		30 minute ramp to 150°C + 15 minutes @ 150°C
Alternate Cure condition		90 sec @ 150°C, hot plate
MECHANICAL PROPERTIES-POST CURE		TEST DESCRIPTION
Die Shear Strength @ 25°C 10 kg/die		2mmx2mm Si die on Ag/Cu LF (80milx80 mil)
PHYSIOCHEMICAL PROPERTIES-POST CURE		TEST DESCRIPTION
Weight Loss on Cure @ 200°C	<1 %	Thermo gravimetric Analysis
Glass Transition Temperature	110°C	DSC

Below Tg	60ppm/°C	Coefficient of Thermal Expansion
Above Tg	180ppm/°C	
Thermal Conductivity	0.4 W/mK	
Chloride (Cl-)	<10 ppm	Extraction
Sodium (Na+)	<10 ppm	
Potassium (K+)	<10 ppm	
Water Content @ 85°C/85°RH	<0.5%	Moisture Absorption @ Saturation,

GENERAL INFORMATION

For safe handling information on this product, consult the Material Safety Data Sheet, (MSDS).

THAWING:

1. Allow container to reach room temperature before use.
2. After removing from the freezer, set the syringes to stand vertically while thawing.
3. DO NOT open the container before contents reach 25°C temperature.
Any moisture that collects on the thawed container should be removed prior to opening the container.
4. DO NOT re-freeze. Once thawed to -20°C, the adhesive should not be re-frozen.

DIRECTIONS FOR USE

1. Thawed adhesive should be immediately placed on dispense equipment for use.
2. If the adhesive is transferred to a final dispensing reservoir, care must be exercised to avoid entrapment of contaminants and/or air into the adhesive.
3. Adhesive must be completely used within the product's recommended work life.
4. Apply enough adhesive to achieve a 25 to 50 µm wet bondline thickness, dispensed with approximately 25 to 50 % filleting on all sides of the die.
5. Alternate dispense amounts may be used depending on the application requirements.
6. Star or crossed shaped dispense patterns will yield fewer bondline voids than the matrix style of dispense pattern.

APPLICATION GUIDELINES**UNPACKING**

Transfer the syringes from the dry ice to a -20°C freezer without ANY delays. Freeze-thaw voids will form in the syringes if the syringes are repeatedly thawed and refrozen.

STORAGE

This product must be stored at -20°C. The shelf life of the material is only valid when the material has been stored at the specified storage condition. Incorrect storage conditions will degrade the performance of the material in both handling (e.g. dispensing or screen printing) and final cured properties.

THAWING

Allow the container to reach room temperature before use. After removing from the freezer, set the syringes to stand vertically while thawing.

DO NOT open the container before contents reach ambient temperature. Any moisture that collects on the thawed container should be removed prior to opening the container.