LCA3000X Adhesive

Product Description: Pre-form solid latent cure adhesive, pre-applied on lids and covers. Suitable for applications with high thermal expansion (CTE) mismatches. Cure profile of 60-minutes at recommended cure temperature of 150°C. Standard colors white and black

Product Storage and Handling: Can be stored at room temperature up to one year without derogation for most applications. May be stored refrigerated or frozen. Care should be taken to allow cold storage parts to reach 25°C room temperature for at least 8-hours prior to use. Must be condensation free before applying to semiconductor packages. Care should also be taken not to bump or drop cold parts to avoid adhesive chipping or flaking.

- Product Use: The following sealing conditions are recommended as a starting point. It is highly recommended that you run an optimization design of experiments for your assembly requirements.
- Cure Temp: Recommended curing temperature $150^{\circ}C \sim 175^{\circ}C (300^{\circ}F \sim 350^{\circ}F)$
- Cure Time: 60 minutes (a) 150°C (300°F)
- Pressure: Pressure will vary widely depending on your application. The recommended starting pressure is ½ Lbs per square inch of bond area.

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Ventilation: Handle with adequate ventilation during cure. Do not get in eyes or on skin. Avoid breathing any vapors. Wash thoroughly with soap and water after handling. Caution: Epoxy resins may cause eye and skin irritation or allergic dermatitis. (See MSDS Sheet)

Typical Cured Properties:

Shore D Harness @ 25°C (77°F) Tg (by DSC)	75 100°C	(212°F)
Shear Modulus @ 25°C (77°F)	616 MPa	(89.4 ksi)
Electrical Properties - tested per ASTM D149, D150:		
Dielectric Constant	3.50 @ 1 KHz	
Dissipation Factor	0.085 @ 1 KHz	
Dielectric Strength	> 280 volts/mil	
Compressive Properties per ASTM D695		
Compressive Strength @ 25°C (77°F)	75.5 MPa	(10,950 psi)
Compressive Modulus @ 25°C (77°F)	2,145 MPa	(311 ksi)
Typical Use Properties:		
Max Spike Temperature	285°C (545°F)	
(Up to 3 minutes exposure)	Note: Some discoloring may occur.	
Max long term use temperature	150°C (300°F)	
Thermal Cycling (-65°C to 150°C) (Liquid to liquid with 1-minute dwell) Ceramic to Ceramic	>40 cycles	

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Users should review the Materials Safety Data Sheet (MSDS) to determine possible health hazards, appropriate engineering controls and precautions to be observed in using the material.

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