

ALPHA[®] HiTech[™] CU32-380

Low Viscosity Underfill


DESCRIPTION

ALPHA HiTech CU32-380 is a one-component capillary underfill designed for the protection of assembled chip packages onto printed circuit boards. It provides the user with a balanced set of the following features and benefits:

- Low Viscosity, enabling fast and efficient flow properties
- Low Moisture Absorption
- Releases stress over a large area, primary stress is CTE mismatch between component and board
- Excellent Resistance to impact forces; No impact bend failure on boards after 10,000 cycles
- Excellent Resistance Drop Shock
- Halogen Free
- Complies with RoHS Directive 2011/65/EU

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

APPLICATION

Storage	Thawing	Application	Curing	Safety
1. Store at <-20°C to guarantee product stability. 2. Upright Position, tip facing the bottom 	1. Remove the syringe from the freezer. 2. Set aside at room temperature for 2 hours. 3. Do not open the cap before the product is sufficiently thawed. 4. Product should not be refrozen after thawed. 5. To prevent contamination of unused product, do not return any material to its original container.	ALPHA HiTech CU32-380 can be effectively dispensed at room temperature condition.	For full property development, cure at 130°C and hold for a minimum of 8 minutes (convection oven).	While ALPHA HiTech CU32-380 is not considered toxic, its use in typical underfill processes will generate a small amount of reaction and decomposition vapors. These vapors should be adequately exhausted from the work area. It is recommended that the company/operator read and review the Safety Data Sheets for the appropriate health and safety warnings before use. Safety Data Sheets are available at AlphaAssembly.com

TECHNICAL DATA

Category	Specification
Typical Uncured Material Properties	
Appearance	Black
Viscosity @ 25°C (RVDV-II Brookfield #4 @20rpm, cP)	300 - 800
Flashpoint, °C	>200
Pot Life @ 25°C, days	3
Shelf Life at ≤ -20°C, months	6
Available Packaging	10cc, 30cc syringes
Typical Cured Materials Properties	
Glass Transition (T _g), °C via TMA	89 ± 5
CTE (α ₁), <T _g , ppm	57 ± 10
CTE (α ₂), >T _g , ppm	199 ± 20
Hardness (Shore D)	80 - 90
Storage Modulus @25°C (Gpa via DMA)	1.27

CONTACT INFORMATION

To confirm this document is the most recent version, please contact

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Also read carefully warning and safety information on the Safety Data Sheet. This data sheet contains technical information required for safe and economical operation of this product. READ IT THOROUGHLY PRIOR TO PRODUCT USE. Emergency directory assistance: Chemtrec 1 - 800 - 424 - 9300.

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