

# ALPHA<sup>®</sup> HiTech CF12-4485B

## Edgebond Epoxy


### DESCRIPTION

**ALPHA HiTech CF12-4485B** is a one-component, low-temperature cure, edgebond epoxy system. It is designed to provide protection to the solder joint during mechanical stress. Edgebond is an excellent low-cost option to conventional underfilling process because capillary flow is not required. It provides the user with a balanced set of the following features and benefits:

- Excellent adhesion on FR4 board
- Lower temperature cure capability
- Halogen-free
- Complies with RoHS Directive 2011/65/EU

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

### APPLICATION GUIDELINES

Storage	Thawing	Application	Curing
<ol style="list-style-type: none"><li>1. Store at 1 to 10 °C to guarantee product stability</li><li>2. Upright Position, tip facing the bottom</li></ol> 	<ol style="list-style-type: none"><li>1. Remove the syringe from the refrigerator.</li><li>2. Set aside at room temperature for 2 hours.</li><li>3. Do not open the cap before the product is sufficiently thawed.</li><li>4. Product should not be refrozen after thawed.</li><li>5. To prevent contamination of unused product, do not return any material to its original container.</li></ol>	<b>ALPHA HiTech CF12-4485B</b> can be effectively dispensed at room temperature condition.	<p>For full property development, cure at the following conditions in a convection oven:</p> <p>≥30min @ 110 °C; ≥20min @ 120 °C; ≥15min @ 130 °C; ≥10min @ 150 °C.</p>

## TECHNICAL DATA

Category	Results
<b>Typical Uncured Material Properties</b>	
Chemistry	Epoxy
Appearance	Black Paste
Viscosity (RVDV-II Brookfield, 30rpm @25 °C, cP)	5,000 to 7,000
Specific Gravity	1.1 to 1.2
Pot Life @ 25 °C, days	7
Shelf Life at 1 to 10 °C, months	6
Available Packaging	30cc & 50cc syringe
<b>Typical Cured Materials Properties</b>	
Glass Transition (T <sub>g</sub> ), °C via TMA	105
CTE ( $\alpha_1$ ), <T <sub>g</sub> , ppm	56
CTE ( $\alpha_2$ ), >T <sub>g</sub> , ppm	191
Hardness (Shore D)	80 to 90

## SAFETY & WARNING

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**

## 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 safety directory assistance: US 1 202 464 2554, Europe + 44 1235 239 670, Asia + 65 3158 1074, Brazil 0800 707 7022 and 0800 172 020, Mexico 01800 002 1400 and (55) 5559 1588

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