

# ALPHA® HiTech™ CF12-4485B

**Cornerfill Epoxy** 

#### **DESCRIPTION**

**ALPHA HiTech CF12-4485B** is a one-component, low temperature cure, cornerfill epoxy system. It is designed to provide protection to the solder joint during mechanical stress. Cornerfill 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**

Storage			Thawing	Application	Curing	Safety
1.	Store at 1 to	1.	Remove the	ALPHA	For full	While <b>ALPHA</b>
	10°C to		syringe from the	HiTech	property	HiTech CF12-4485B
	guarantee		refrigerator.	CF12-4485B	development,	is not considered
	product	2.	Set aside at	can be	cure at the	toxic, its use in
	stability		room	effectively	following	typical production
			temperature for	dispensed at	conditions in a	processes will
2.	Upright		2 hours.	room	convection	generate a small
	Position, tip	3.	Do not open the	temperature	oven:	amount of reaction
	facing the		cap before the	condition.		and decomposition
	bottom		product is		≥30min @	vapors. These
			sufficiently		110°C;	vapors should be
			thawed.			adequately
-		4.	Product should		≥20min @	exhausted from the
	SUSTE		not be refrozen		120°C;	work area.
			after thawed.		.45 : 6	It is recommended
		5.	To prevent contamination		≥15min @	that the
			of unused		130°C;	company/operator
			product, do not		>40i @	read and review the
			return any		≥10min @	Safety Data Sheets
			material to its		150°C.	for the appropriate
			original			health and safety
			container.			warnings before use.
						Safety Data Sheets
						are available at
						AlphaAssembly.com

MacDermid Alpha 

ELECTRONICS SOLUTIONS



## **TECHNICAL DATA**

Category	Specification					
Typical Uncured Material Properties						
Chemistry	Ероху					
Appearance	Black Paste					
Viscosity (RVDV-II Brookfield, 30rpm @25°C, cP)	5,000 – 7,000					
Specific Gravity	1.1 – 1.2					
Pot Life @ 25°C, days	7					
Shelf Life at 1 - 10°C, months	6					
Available Packaging	30cc & 50cc syringe					
Typical Cured Materials Properties						
Glass Transition (Tg), °C via TMA	105					
CTE (α₁), <tg, ppm<="" td=""><td>56</td></tg,>	56					
CTE $(\alpha_2)$ , >Tg, ppm	191					
Hardness (Shore D)	80 - 90					

#### **CONTACT INFORMATION**

## To confirm this document is the most recent version, please contact Assembly@MacDermidAlpha.com

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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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