

ALPHA[®] HiTech AD13-9521B

Low Viscosity, Low Temperature Adhesive

DESCRIPTION

ALPHA HiTech AD13-9521B is a one-component low temperature cure epoxy system. It is suitable for bonding heat-sensitive devices.

The balance set of features and benefits of this material are:

- Low Viscosity
- Fast Flowing
- Fast Cure at low temperature
- Excellent Adhesion on Nylon (PA9T), Liquid Crystal Polymer (LCP), and metal
- Halogen-free
- Complies with RoHS Directive 2011/65/EU

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

TECHNICAL DATA

Category	Results
Typical Uncured Material Properties	
Chemistry	Epoxy
Appearance	Black
Viscosity (RVDV-II Brookfield #6, 30rpm @ 25 °C, cP)	8,000 to 12,000
Thixotropic Index	1.7 to 2.1
Specific Gravity	1.0 to 1.2
Flashpoint	>200 °C
Pot Life @ 25 °C, days	3
Shelf Life at < -20 °C, months	6
Available Packaging	10cc, 30cc syringe

Category	Results
Typical Cured Materials Properties	
Glass Transition (T _g), °C via TMA	55 ± 5
CTE (α ₁), <T _g , ppm	60 ± 10
CTE (α ₂), >T _g , ppm	180 ± 20
Hardness (Shore D)	75 to 85

PROCESSING GUIDELINES

Storage & Handling	Thawing	Application	Curing	Safety
<ol style="list-style-type: none"> Freeze at < -20 °C to guarantee product stability. Upright Position, tip facing bottom 	<ol style="list-style-type: none"> Remove the syringe from the freezer. Set aside at room temperature for 2 hours. Do not open the cap before the product is sufficiently thawed. Product should not be refrozen after thawed. To prevent contamination of unused products, do not return any material to its original container. 	ALPHA HiTech AD13-9521B can be effectively dispensed at room temperature condition.	For full property development, cure at 85 °C and hold for a minimum of 30 minutes (convection oven).	While ALPHA HiTech AD13-9521B is not considered toxic. Its use in typical production processes will generate a small amount of reaction and decomposition vapors. These vapors should be adequately exhausted from the work area.

RECYCLING SERVICES

We provide safe and efficient recycling services to help companies meet their environmental and legislative requirements and at the same time, maximize the value of their waste streams.

Our service collects solder dross, solder scrap, and various forms of solder paste waste. Please contact your local sales representative for recycling capabilities in your area or [link here](#).



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 MacdermidAlpha.com/assembly-solutions/knowledge-base.**

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 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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