ALPHA® HiTech® AD13-9692B

Low Temperature

DESCRIPTION

ALPHA HiTech AD13-9692B is a one component epoxy used to cure in low-temperature ranges. It is designed for bonding heat sensitive devices. It provides the user with a balanced set of the following features and benefits:

- Fast cure at low-temperature
- Excellent adhesion
- Excellent workability
- Halogen-free

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

APPLICATION GUIDELINES

Storage	Thawing	Application	Curing
1. Store at below -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 AD13-9692B** is designed for bonding heat sensitive devices, which requires low temperature curing process.	For full property development, cure at 80 °C and hold for a minimum of 30minutes (Convection oven).

TECHNICAL DATA

Category	Results
Typical Uncured Material Properties	
Product Name	**AD13-9692B**
Chemistry	Epoxy
Appearance	Black paste
Viscosity (Malcom PC-10A, 30rpm @25 °C, cps)	8,000 to 18,000
Specific Gravity	1.1 to 1.3
Thixotropic Index	4.3 to 5.3
Pot Life @ 25 °C, days	3
Shelf Life at ≤-20 °C, months	6
Available Packaging	10cc, 30cc syringes
Typical Cured Material Properties	
Glass Transition (Tg), °C via TMA	45 ± 5
CTE (α_1), <Tg, ppm via TMA	55 ± 5
CTE (α_2), >Tg, ppm via TMA	175 ± 10
Corrosion, 95-hr @40 °C, 95%RH	None
Moisture Absorption, 24-hr @H_2O/25 °C, wt%	≤ 1.0
Insulation Resistance, 96-hr@40 °C, 95%RH	≥1 X 10^{12}
Hardness (Shore D)	65 to 75

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.**

CONTACT INFORMATION

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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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