

# ALPHA HT-130DHF-3

## Surface Mount Adhesive

### DESCRIPTION

**ALPHA HT-130DHF-3** is a one component, intermediate temperature, fast heat curable surface mount adhesive designed for use on high-speed dispenser and screen print application. Typically, it shows excellent productivity on wave-soldering process.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

### FEATURES AND BENEFITS

- One Component
- Halogen-Free
- Excellent Thermal Resistance
- Excellent Adhesion
- Excellent Workability
- No Sagging

### PRODUCT INFORMATION

<u>Chemical Type:</u>	Epoxy
<u>Packing:</u>	ALPHA HT-130DHF-3 product can be filled in various specified syringes as specified by customer
<u>Curing Method:</u>	Heat cure
<u>Typical Applications:</u>	Surface mount adhesive

### APPLICATION GUIDELINES

#### **Curing**

120 seconds @120 °C (Convection oven)

80 seconds @150 °C (Convection oven)

Optimal cure conditions will depend on curing equipment.

Cure conditions may be dissimilar based on customers working process and application requirements.

Use recommended cure condition as general guideline. Other cure conditions may yield satisfactory results.

**TECHNICAL DATA**

Category	Results
<b>Typical Properties of Uncured Material</b>	
Viscosity (Malcom PC-10A, 30rpm, @25 °C, Poise)	300 to 500
Thixotropic Index	>3.0
Specific Gravity	1.2 to 1.4
Pot Life @25 °C, days	7
Shelf Life @1 to 10 °C, months	6
<b>Physical Properties for Cured Material</b>	
Hardness (Shore D)	85 to 95
Glass Transition Temperature (Tg), DSC	>90
Coefficient of Thermal Expansion, TMA	
$\alpha_1$ , < Tg, ppm	65 ( $\pm 10$ )
$\alpha_2$ , > Tg, ppm	180 ( $\pm 20$ )
Corrosion 95 hours @ 40 °C, 95%RH	None
Moisture Absorption, wt.% 24 hours @ water/25 °C	<1.0
Insulation Resistance 95 hours @ 40 °C, 95%RH	>1 x 10 <sup>12</sup>
Surface Resistivity (ASTM D257), $\Omega$ /sq	1.40 x 10 <sup>15</sup>
Volume Resistivity (ASTM D257), $\Omega$ .cm	1.61 x 10 <sup>16</sup>
Dielectric Constant (ASTM D150),	
1 kHz	4.99
1 MHz	3.18
Dissipation Factor (ASTM D150),	
1 kHz	0.006
1 MHz	0.015
Dielectric Breakdown Voltage (ASTM D149), kV	30.3
Dielectric Breakdown Strength (ASTM D149), kV/mm	43.7

**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](http://MacdermidAlpha.com/assembly-solutions/knowledge-base).**

**STORAGE**

Optimal storage: 1 to 10 °C, Store in an unopened container, refrigerate at 1 to 10 °C. Storage greater than 10 °C can adversely affect product properties. Pot life of material is valid when stored at the suggested storage condition. Inappropriate storage may degrade the performance of the product during dispensing and final cured properties. Transfer the product from the ice pack to the fridge with NO delays. **DO NOT** open the cap before the product is sufficiently thawed. Material must be thawed at room temperature for 2 hours.

Product should not be refrigerated again, once thawed to room temperature.

**DO NOT** return product to original container.

**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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