

ALPHA[®] HiTech[™] SM42-1311

Surface Mount Adhesive

DESCRIPTION

ALPHA HiTech SM42-1311 is a one component, fast curable surface mount adhesive designed for dispensing application. It provides the user with a balanced set of the following features and benefits:

- Excellent thermal resistance
- Excellent adhesion
- Excellent workability
- Non – Sagging
- Complies with RoHS Directive EU/2015/863
- Halogen Free

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

APPLICATION

Storage	Thawing	Application	Curing	Safety
1. Store at 1-10°C to guarantee product stability 2. Upright Position, tip facing the bottom 	1. Remove the syringe from the refrigerator 2. Set aside at room temperature for 2 hours. 3. Do not open the cap before the product is sufficiently thawed. 4. To prevent contamination of unused product, do not return any material to its original container.	ALPHA HiTech SM42-1311 is designed for use on high-speed dispensing application at room temperature condition.	For full property development, cure at 120°C and hold for a minimum of 120 seconds or 150°C and hold for a minimum of 80 seconds (convection oven).	While ALPHA HiTech SM42-1311 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. Consult the SDS for additional safety information. The most recent version of the SDS is available from AlphaAssembly.com .

TECHNICAL DATA

Category	Tentative Specification
Typical Uncured Material Properties	
Product Name	SM42-1311
Chemistry	Epoxy
Appearance	Red Paste
Viscosity (Malcom PC-10A, 30rpm @25°C, Poise)	350 - 550
Specific Gravity	1.1 – 1.3
Thixotropic Index	≥ 5.0
Pot Life @25°C, days	14
Shelf Life @1 - 10°C, months	6
Shelf Life @25°C, days	14
Available Packaging	20cc, 30cc syringes
Typical Cured Materials Properties	
Glass Transition (Tg), °C via TMA	≥ 90
CTE (α ₁), <Tg, ppm via TMA	60 ± 10
CTE (α ₂), >Tg, ppm via TMA	190 ± 20
Corrosion, 96-hr @40°C, 95%RH	None
Moisture Absorption, 24-hr @H ₂ O/25°C, wt%	≤ 1.0
Insulation Resistance, 96-hr @85°C, 85%RH	≥1 X 10 ¹²
Hardness (Shore D)	80 - 90

CONTACT INFORMATION

To confirm this document is the most recent version, please contact

Assembly@MacDermidAlpha.com

www.macdermidalpha.com

North America 300 Atrium Drive Somerset, NJ 08873, USA 800.367.5460	Europe Unit 2, Genesis Business Park Albert Drive Woking, Surrey, GU21 5RW, UK 01483.758400	Asia 8/F., Paul Y. Centre 51 Hung To Road Kwun Tong, Kowloon, Hong Kong 852.3190.3100
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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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