

ALPHA[®] HiTech[™] SM42-120P


Surface Mount Adhesive

DESCRIPTION

ALPHA HiTech SM42-120P is a one component, fast curable surface mount adhesive designed for screen print and 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 2011/65/EU
- Halogen Free

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 SM42-120P can be effectively screen printed at room temperature condition. It is also applicable for the dispensing process.	For full property development, cure at 120°C and hold for a minimum of 120 seconds or at 150°C and hold for a minimum of 80 seconds (convection oven).	While ALPHA HiTech SM42-120P 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 .

ALPHA[®] HiTech[™] SM42-120P

Surface Mount Adhesive

TECHNICAL DATA

Category	Tentative Specification
Typical Uncured Material Properties	
Product Name	SM42-120P
Chemistry	Epoxy
Appearance	Red Paste
Viscosity (Malcom PC-10A, 30rpm @25 °C, Poise)	550 - 700
Specific Gravity	1.2 – 1.4
Thixotropic Index	≥ 3.0
Pot Life @ 25°C, days	7
Shelf Life at 1 - 10 °C, months	6
Available Packaging	20cc, 30cc syringes; 300cc cartridge
Typical Cured Materials Properties	
Glass Transition (T _g), °C via DSC	110 ± 10
CTE (α ₁), <T _g , ppm via TMA	65 ± 10
CTE (α ₂), >T _g , 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

*Note: Values are tentative until specification limits have been established and finalized.

ALPHA[®] HiTech[™] SM42-120P

Surface Mount Adhesive

CONTACT INFORMATION

To confirm this is the most recent issue, please contact Alpha Assembly Solutions
AlphaAssembly.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
---	--	---

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.

DISCLAIMER: All statements, technical information and recommendations contained herein are based on tests we believe to be reliable, but the accuracy or completeness thereof is not guaranteed. No statement or recommendation shall constitute a representation unless set forth in an agreement signed by officers of seller and manufacturer. NO WARRANTY OR MERCHANTABILITY OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS MADE. The following warranty is made in lieu of such warranties and all other warranties, express, implied, or statutory. Products are warranted to be free from defects in material and workmanship at the time sold. The sole obligation of seller and manufacturer under this warranty shall be to replace any product defective at the time sold. Under no circumstances shall manufacturer or seller be liable for any loss, damage or expense, direct or consequential, arising out of the inability to use the product. Notwithstanding the foregoing, if products are supplied in response to a customer request that specifies operating parameters beyond those stated above, or if products are used under conditions exceeding said parameters, the customer by acceptance or use thereof assumes all risk of product failure and of all direct, indirect and consequential damages that may result from use of the products under conditions, and agrees to exonerate, indemnify and hold harmless MacDermid Incorporated therefrom. No suggestion for product use nor anything contained herein shall be construed as a recommendation to use any product in infringement of any patent rights, and seller and manufacturer assume no responsibility or liability for any such infringement.