ALPHA® HITECH® AD13-9100A

Low Temperature Adhesive

Restricted - Preliminary

DESCRIPTION

ALPHA HITECH AD13-9100A is a one-component adhesive that can bond various types of substrates together. The balanced set of features and benefits for this material are:

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

FEATURES & BENEFITS

- Low curing temperature at 70˚C
- Very Soft material
- Good dispensibility
- Good adhesion strength
- Halogen-Free
- Complies with RoHS Directive EU/2015/863; amending Annex II to 2011/65/EU

TECHNICAL DATA

Category	Specification
Typical Uncured Material Properties	
Color	Black
Viscosity, cps (via Brookfield DV2T #52, 20rpm @ 25°C)	1,800 to 2,800
Specific Gravity	1.1 to 1.2
Pot Life @ 25°C, days	7
Shelf Life at ≤ -20°C, months	6
Available Packaging	50 cc

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

**Please contact your local sales representative for other packaging configurations.

Category	Typical Values
Typical Cured Materials Properties	
Glass Transition Temperature (Tg), °C (via TMA)	23

CTE (α_1) <Tg, ppm/°C	48	
CTE (α_2) >Tg, ppm/°C	220	
Hardness (Shore A)	70 to 80	
Halogens, ppm (per 3rd Party Lab testing)	Br	Not Detected
	Cl	540
	F	Not Detected

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

PROCESSING GUIDELINES

Storage

1. Stored at ≤ -20 ℃ to maintain product stability.
2. Upright position, tip facing bottom.



Thawing

1. Take the syringe out from the freezer.
2. Set aside at room temperature for 2 hours.
3. Do not open the cap before a product is fully thawed.

Caution:

1. Do not refreeze thawed product.
2. To prevent contamination of unused product, do not return any material to its original container.

Curing

- ≥ 20 minutes @ 70 ℃ (Convection Oven)

The recommendations above are offered as a process window guideline based on typical assembly process. The optimum process setting will need to be assessed for each individual process due to the variation in assembly processes across the electronics industry.

Please contact Alpha technical representatives for further process / application support.

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 AlphaAssembly.com**

CONTACT INFORMATION

To confirm this document is the most recent version, please contact Assembly@MacDermidAlpha.com

www.macdermidalpha.com

North America	Europe	Asia
300 Atrium Drive Somerset, NJ 08873, USA 800.367.5460	Unit 2, Genesis Business Park Albert Drive Woking, Surrey, GU21 5RW, UK 01483.758400	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 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

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 OF MERCHANTABILITY, WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY 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 noncompliant product at the time sold. Under no circumstances shall manufacturer or seller be liable for any loss, damage or expense, direct, indirect, incidental 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, incidental and consequential damages that may result from use of the products under such conditions, and agrees to exonerate, indemnify, defend and hold harmless MacDermid, Incorporated and its affiliates therefrom. No suggestion for product use nor anything contained herein shall be construed as a recommendation to use any product in a manner that infringes any patent or other intellectual property rights, and seller and manufacturer assume no responsibility or liability for any such infringement.

© 2019 MacDermid, Inc. and its group of companies. All rights reserved. "(R)" and "TM" are registered trademarks or trademarks of MacDermid, Inc. and its group of companies in the United States and/or other countries.