



Manufacturer: ÅngströmBond®

Product Name:

ÅngströmBond® AB9123EP High Temperature Epoxy, Heat Cure (4g)

Manufacturer Part Number: AB9123EP-4G

Click here for more details on the ÅngströmBond® AB9123EP High Temperature Epoxy, Heat Cure (4g)

<u>ÅngströmBond</u>®

Advanced Polymers for High Tech Applications

ÅngströmBond[®] 9123 EP High Temperature Fiber Optic Epoxy, Extended Pot Life

Description:

ÅngströmBond^{*} 9123 is a very fast curing, high temperature optical connector adhesive. This low viscosity system produces a very high strength bond for glass, metal, ceramics and most plastics. This epoxy utilizes the most popular chemistries used for terminating connectors. Its very high glass transition temperature allows it to pass the most stringent pistoning specifications. It has excellent temperature cycling capabilities and will withstand high humidity environments. **Extended Pot Life** 7-8 hours.

Typical Physical Properties:

Color:

00101.	
Mixed: Cured:	straw/pale yellow reddish/amber
Specific Gravity, g/cc:	1.12-1.20
Mixed Viscosity @ 25°C, cps:	1800-2200
Hardness, Shore D:	84-88
Mix Ratio by Weight, Resin to Hardener:	100/10
Dielectric Strength, (Volts/mil:)	> 400
Solids Content, %:	100
Lap Shear Strength, psi (Al/Al:)	< 2900
Glass Transition, °C:	95 - 120
Service Temperature Range, °C:	-65 to 175

Handling Characteristics:

Working Life:			7-8 Hours			
Minim	um Cure Sc	hedu	le, by l	DSC:		
@100°C @120°C @150°C				5-15 Minutes 2 Minutes 1 Minute		
^				- 11 - 1- 41		-1:66 4

Cure schedules can vary slightly with different applications. Please use these numbers as a basis to develop a schedule suitable for the application.

Higher temperature curing for longer time will result in higher Glass Transition values.

Adhesives

Higher temperature curing for longer time will result in higher Lap Shear Strength values.

Typical Physical Properties depend on curing time and temp.

Application Directions:

Bi-pack Packages: Burst seal. Knead the package (multiple passes over the edge of a table works well) until a uniform color is achieved and the material is thoroughly mixed. Ensure all material from the corners of the bi-pack are mixed in. 15-20 passes over the edge of a table are recommended. Cut open end of package to dispense.

De-airing:

De-airing of mixed epoxy should be done to remove any entrapped air. Vacuum de-gas or centrifuge is recommended.

Handling:

To ensure better performance of the potted or encapsulated components, adequate cleaning of components should be performed to remove contamination such as dust, moisture, salt and oils that can cause poor adhesion.

Storage:

Two component epoxy resin systems should be stored at room temperature between 68°F and 85°F is ideal. Refrigeration is not recommended. Most two-component epoxy resin systems are naturally susceptible to crystallization, especially when stored at temperatures below the recommended storage temperatures. Do not store epoxy materials near sources of heat. All materials should be kept in the original packaging to prevent foreign matter contamination and moisture entry. Premixed and frozen syringes should be stored at -40C in a freezer until ready to use. Thaw the material at room temperature before using.

ÅngströmBond[®] is a registered trademark of Fiber Optic Center, Inc., New Bedford MA, USA

Fiber Optic Center^{IM}, Inc. MAKES NO EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS OR OTHERWISE, with respect to its products. In addition, while the information herein is believed to be reliable, no warranty is expressed or implied regarding the accuracy of the data or the results to be obtained from the use thereof. All recommendations or suggestion for use are made without guarantee – inasmuch as conditions of use are beyond our control. The properties given are typical values, and are not intended for use in preparing specifications. Users should make their own test to determine the suitability of this product for their own purposes.

Contact the professionals at Fiber Optic Center for a quote or to get more details.

<u>focenter.com</u> • 508-992-6464 | (800) 473-4237 • <u>sales@focenter.com</u> 23 Centre Street • New Bedford, MA 02740 USA