



## **Manufacturer:** ÅngströmBond®

# **Product Name:**

ÅngströmBond® AB9123 High Temperature Epoxy, Heat Cure, Pre-Mixed and Frozen (3cc Syringe)

### **Manufacturer Part Number:**

AB9123-3CC

Click here for more details on the ÅngströmBond® AB9123 High Temperature Epoxy, Heat Cure, Pre-Mixed and Frozen (3cc Syringe)



Adhesives

Advanced Polymers for High Tech Applications

ÄngströmBond® 9123 High Temperature Fiber Optic Epoxy

#### Description:

AngströmBond® 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

#### **Typical Physical Properties:**

Color:

Mixed: straw/pale yellow reddish/amber Cured: Specific Gravity, g/cc: 1.12-1.20 Mixed Viscosity @ 25°C, cps: 1800-2200

80-88

Hardness, Shore D: Mix Ratio by Weight,

100/10 Resin to Hardener: > 400 Dielectric Strenath. (Volts/mil:) Solids Content. %: 100 Lap Shear Strength, psi (AI/AI:) < 2900 Glass Transition, °C: 95 - 120 Service Temperature Range, °C: -60 to 175

#### **Handling Characteristics:**

Working Life: 3 - 4 Hours Minimum Cure Schedule, by DSC:

@100°C 5 Minutes @120°C 2 Minutes @150°C 1 Minute

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.

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

Typical Physical Properties depend on curing time and

#### Application Directions:

Bi-pack Packages: Safely remove the divider clip from the package or burst the dividing 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. 20-25 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 65°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

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