

**PRODUCT DESCRIPTION:**

AA-BOND F112 is an impact resistant, fiber-optic adhesive.

AA-BOND F112 is two-part, low viscosity epoxy has the distinct advantage of remaining below 3000 cps for a minimum of 40 minutes.

AA-BOND F112 allows more connectors to be produced from one mix. Low stress, AA-BOND F112 is an excellent choice for multimode connectors and single mode connectors where excessive curing temperatures may cause cracking.

AA-BOND F112 can be cured at room temperature overnight or as fast as 15 minutes at 90°C. The blue color facilitates easy polishing and its cured properties prevent pistoning. This product is a 100% solid system that can be used for small potting and sealing applications where resistance to thermal shock and impact are required.

**THERMAL PROPERTIES:**

CTE, linear	34.4 µin/in-°F
Glass Transition Temp, Tg	216 °F
Operating Temperature	-60 to 100 °C

**PRODUCT CHARACTERISTICS:**

Appearance	Dark Blue
Components	2 component - requires mixing
Mix Ratio, by weight	100/30 Resin:Hardener
Benefits	<ul style="list-style-type: none"> <li>Low viscosity</li> <li>Thermal shock and impact resistant</li> <li>Low stress connections</li> </ul>
Cure Type	Room Temperature or Heat Cure
Typical Applications	Fiber optic assembly, multimode and single mode connectors, small potting and sealing applications

**CURE SCHEDULE:**

24 hours	@ 25°C (Room temperature)
1 hour	@ 65°C
15 minutes	@ 90°C

**CURED PROPERTIES:**

Glass Transition Temperature (Tg), ultimate, °C	102
Refractive Index	1.51
Water Absorption %	0.07

**UNCURED PROPERTIES:**

Viscosity @ 25 °C, cps	1800 @Temperature 25 °C, 77 °F
Thixotropic Index	1.0
Specific Gravity, cured	1.2
Pot Life	30 minutes
Shelf life	1 year

**MECHANICAL PROPERTIES:**

Hardness, Shore D	85
Adhesive Bond Strength Lap shear, alum to alum	2500 psi 24 hrs @ 25°C
	3000 psi 1 hr @ 65°C
	4300 psi 15 min @ 90°C

**GENERAL INFORMATION:**

For safe handling information on this product, consult the Material Safety Data Sheet, (MSDS).

**HOW TO USE:**

- Carefully clean and dry all surfaces to be bonded
- Apply this completely mixed adhesive to the prepared surfaces, and gently press these surfaces together. Contact pressure is adequate for strong, reliable bonds; however, maintain contact until adhesive is completely cured.
- Some separation of components is common during shipping and storage. For this reason, it is recommended that the contents of the shipping container be thoroughly mixed prior to use.
- Some ingredients in this formulation provided may crystallize when subjected to low temperature storage. A gentle warming cycle of 52°C for 30 minutes prior to mixing components may be necessary. Crystallized epoxy components do not react as well as liquid components and should be re-dissolved prior to use for best results.

**AVAILABILITY:**

This epoxy can be supplied in many different packages.

**Atom Adhesives**

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