

Food and Drug Application Epoxy Adhesive Technical Product Bulletin

PRODUCT DESCRIPTION:

AA-BOND FDA2T is a thixotropic epoxy resin system specifically developed for medical device applications. It has been tested in accordance with USP biological reactivity tests, in vivo and received Class VI approval.

AA-BOND FDA2T is an effective electrical insulator, and it provides low permeability to gases and vapors and good resistance to water, weather, lubricants and fuels, to mild acids and alkalis, and many other organic and inorganic compounds.

GENERAL PROPERTIES:

Appearance	Amber	
Cure Type	Heat cure or Room Temperature	
Benefits	 Medium viscosity Electrically Insulating Low permeability to gases and vapors. Low temperature cure 	
Mix Ratio by weight	100/93 Resin:Hardener	
Typical Applications	Medical, Food preparation processing and packaging	

UNCURED PROPERTIES:

Viscosity @ 25 °C, mixed cps	25000 ±1000
Specific Gravity, mixed	1.119
Reactive solids contents, %	100
Pot Life	3 hours

CURE SCHEDULE:

1 to 4 Hours	@ 65°C
24 Hours	@ 25°C

THERMAL PROPERTIES:

CTE, linear	29.4 μin/in-°F @Temperature 68.0 °F
Glass Transition Temp, Tg	70.0 °C, 158 °F
Operating Temperature	-70 to 145 °C

CURED PROPERTIES:

Coefficient of Thermal Expansion, cm/cm/ºC	5.30×10-05
Hardness, Shore D	79
Elongation at Yield	9.0 %
Adhesive Bond Strength	1800 psi

ELECTRICAL PROPERTIES:

Volume Resistivity	1.20e+14 ohm-cm	
Dielectric Constant	3.4	
	@Frequency 1000 Hz	
Dielectric Strength	420 kV/in	
Dissipation Factor	0.020	
-	@Frequency 1000 H	

GENERAL INFORMATION:

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

HOW TO USE:

- 1. Carefully clean and dry all surfaces to be bonded.
- 2. Apply AA-BOND FDA2T 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.
- **3.** 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.
- 4. 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

Email: <u>info@atomadhesives.com</u> 200 Allens Ave, Providence, RI 02903 Phone: (888) 522-6742 - Fax: (877) 522-6742