

AA-BOND FDA15

Food and Drug Application Epoxy Adhesive

Technical Product Bulletin

PRODUCT DESCRIPTION:

AA-BOND FDA15 is a low viscosity epoxy resin system specifically developed for bonding and coating applications in accordance with Title 21, U.S. Code of Federal Regulations, Food and Drug Administration Chapter 1, Sub Part B, Sections 175.105 and 175.300.

AA-BOND FDA15 is two-part adhesive is used for bonding, laminating and repair applications by manufacturers of food preparation, processing and packaging equipment, and by manufacturers of catheters, hearing aids, dental products and other biomedical instruments and devices.

AA-BOND FDA15 is an effective electrical insulator, and it provides low permeability to gases and vapors and good resistance to water, weather, galvanic action, to petroleum solvents, lubricants and fuels, to mild acids and alkalis, and to many other organic and inorganic compounds.

PRODUCT DESCRIPTIONS:

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Appearance	Clear	
Cure Type	Heat cure or Room temperature	
Benefits	 Low viscosity Effective electrical insulator Low permeability Good resistance 	
Mix Ratio by weight	100:20 / Resin:Hardener	
Substrates	Most metals, ceramic, glass and plastics	
Typical Application	Developed for bonding and coating applications.	

UNCURED PROPERTIES:

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Viscosity @ 25 °C	4,500 @Temperature 77.0 °F, 25.0 °C
Thixotropic Index	1.0
Specific Gravity, mixed	1.16 g/cc
Reactive solids contents, %	100
Pot Life	25 minutes
Volatile Organic Compounds	3.0 g/l
(VOC) Content	

MECHANICAL PROPERTIES:

Hardness, Shore D	88
Elongation at Yield	4.0 %
Lap shear strength, psi	2000 (Alum to Alum)

AVAILABILITY:

This epoxy can be supplied in many different packages.

CURED PROPERTIES:

Glass transition temperature (Tg), °C	100
Water Absorption, %	0.23
Dielectric strength, Volts/mil	420

ELECTRICAL PROPERTIES:

Volume Resistivity	2.00e+14 ohm-cm
Dielectric Constant	4.3
	@Frequency 1000 Hz
Dielectric Strength	420 kV/in
Dissipation Factor	0.020
-	@Frequency 1000 Hz

THERMAL PROPERTIES:

CTE, linear	30.6 μin/in-°F @Temperature 68.0 °F
Glass Transition Temperature Tg	100 °C 212 °F
Operating Temperature	-70 to 140 °C

CURE SCHEDULE:

1-4 Hours	@ 65°C
24 Hours	@ 25°C

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.
- Apply AA-BOND FDA15 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.
- 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 result.

Atom Adhesives

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