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AA-BOND 2112

RIGID STAKING COMPOUND EPOXY ADHESIVE

Technical Product Bulletin

PRODUCT DESCRIPTION:

AA-BOND 2112 is a thixotropic epoxy system recommended for critical electronics, aerospace and industrial bonding, laminating and reinforcing applications requiring an adhesive with high-fill, non-sag characteristics.

AA-BOND 2112 solvent-free adhesive is easily mixed and used for staking components to printed circuit boards for enhanced mechanical rigidity, and for bonding, laminating and repair applications involving metals, glass, ceramics, wood and many plastics.

AA-BOND 2112 hardens to a tough, enamel-like coating offering good chemical resistance as well as superior physical and mechanical properties. The cured adhesive provides good electrical insulation and resistance to weather, galvanic action, petroleum products and lubricants, alcohol, salts, mild acids and alkalis, and other organic and inorganic compounds.

GENERAL PROPERTIES:

Appearance	Milky Translucent
Cure Type	Room temperature or Heat cure
Benefits	Tough enamel like cure Bonds variety of substrates Good electrical insulation Weather resistant
Mix Ratio by weight	100:22 / Resin:Hardener
Substrates	Metals, glass, ceramics, wood and many plastics
Typical Application	Printed circuit board repair, staking components, bonding, laminating and repair applications

PHYSICAL PROPERTIES:

Viscosity @ 25 °C, mPa·s (cP)	60,000 cPs
Thixotropic Index	6.5
Specific Gravity, mixed	1.2
Reactive solids contents, %	100
Pot Life	30 minutes
Shelf life	1 Year

GENERAL INFORMATION:

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

MECHANICAL PROPERTIES:

Hardness, Shore D	90
Adhesive Bond Strength	1900 psi (Alum to Alum)
Izod Impact, Notched	0.750 ft-lb/in

THERMAL PROPERTIES:

CTE, linear	55.0 µm/m-°C @ Temperature 20.0 °C
Operating Temperature	-60 to 125 °C
Glass Transition Temp, Tg	93°C, 199°F

CURE SCHEDULE:

4 hours	@ 65°C
24 hours	@ 25°C

ELECTRICAL PROPERTIES:

Volume Resistivity	6.00e+13 ohm-cm
Dielectric Constant	4.6
Dissipation Factor	0.010 @Frequency 1000 Hz

HOW TO USE:

1. Carefully clean and dry all surfaces to be bonded.

2. Apply the 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.

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