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AA-BOND 2123

Metal/Steel Repair Epoxy Adhesive

Technical Product Bulletin

PRODUCT DESCRIPTION:

AA-BOND 2123 is a versatile steel metal/epoxy adhesive formulation developed for modern industrial repair, casting and bonding applications where a steel-like or cast iron finish is required.

AA-BOND 2123 is easy-to-use adhesive system contains no solvents and cures fairly rapidly at room temperature to a hard, low shrinkage solid, which bonds readily to steel, aluminum, and other metals, wood, concrete, glass, ceramics and many plastics.

AA-BOND 2123 is tough and durable, resistant to water, mild acids and alkalis, salts and salt solutions, lubricating oils, petroleum solvents, gasoline, jet fuels, alcohol and many other organic and inorganic materials, While it may be attracted to a magnet, it is essentially an electrical insulator which can be readily drilled, cut, sawed and machined with regular metal working tools Typical repair applications: jigs, molds, dies, fixtures, plumbing, automotive, castings, aircraft, ships, marine, salvage.

PRODUCT PROPERTIES:

Appearance	Steel Grey
Cure Type	Room temperature or Heat cure
Benefits	• Casting • Jigs • Molds • Forming Dies • Plumbing Repairs • Tool and dies patching • Automotive repairs • Industrial maintenance
Mix Ratio by weight	100:10 / Resin: Hardener
Substrates	Most metals, ceramic, glass and plastics
Typical Applications	Modern industrial repair, casting and bonding applications where a steel-like or cast iron finish is required.

UNCURED PROPERTIES:

Viscosity @ 25 °C, cps	32,000 @Temperature 77.0 °F, 25°C
Thixotropic Index	1.0
Specific Gravity, mixed	2.34
Reactive solids contents, %	100
Pot Life	30 minutes

CURED PROPERTIES:

Hardness, Shore D	88
Machinability	Good
Magnetic	Yes

CURE SCHEDULE:

4 Hours	@ 65°C
24 Hours	@ 25°C

THERMAL PROPERTIES:

CTE, linear	21.1 µin/in-°F @Temperature 68.0 °F
Thermal Conductivity	4.09 BTU-in/hr-ft²-°F
Operating Temperature	-60 to 135 °C
Glass Transition Temp, Tg	110 °C / 230 °F
Shrinkage	0.080 %

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 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.

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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