

High Temperature Epoxy Staking Adhesive

Technical Product Bulletin

PRODUCT DESCRIPTION:

AA-BOND 2248 is a thixotropic, high temperature cure, 100% solids epoxy resin system that provides strong, tough bonds between a wide ranges of materials (includes metals, glass, ceramics, and many plastics).

AA-BOND 2248 is recommended for bonding applications up to 190°C where good high and low temperature mechanical and electrical properties are required. It is an all liquid system that is easily mixed and handled and applied at room temperature although a final high-temperature cure is REQUIRED for satisfactory bonds. Fully cured AA-BOND 2248 has excellent impact and thermal shock resistance, low permeability to gases and vapors, and outstanding resistance to water, weather, oxygen and ozone, most petroleum solvents and fuels, mild acids and alkalis, and many other organic and inorganic compounds. This system complies with specification NASA outgassing. An additional post-cure of 2 hours at 125°C is recommended when application temperatures higher than 125°C are anticipated.

PRODUCT PROPERTIES:

Color	Mixed: Tan
Components	2 components - requires mixing
Cure Type	Heat cure <ul style="list-style-type: none"> • Thixotropic. • High temperature properties • Thermal shock and impact resistant • Low permeability to gases and vapors
Benefits	
Mix Ratio by weight	100 : 19.4 Resin to Hardener
Operating Temperature	-40°C (-40°F) to +190°C (374°F)
Substrates	Most metals, Ceramics, Glass and Etc.
Typical Applications	Staking compound

UNCURED PROPERTIES:

Mixed Viscosity, Brookfield - LV #4 , 25 °C, (Cps): 12 rpm	10,000 ±1000
Specific Gravity gm/cc	Mixed: 1.2
Reactive solids contents, %	100
Pot Life	120 minutes

CURE SCHEDULE:

1-2 hours	100°C (212°F)
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CURED PROPERTIES:

Hardness, Shore D	87
Volume Resistivity ohm. cm	2.61x 10 ¹⁵
Lap Shear Strength alum to alum, PSI	2,600
Dielectric strength, KV/in	375
Glass Transition Temperature (Tg)	109°C (228.2 °F)
Water Absorption (24 hr. immersion), %	0.001
Elongation at Yield %	2
CTE, linear µin/in-°F	27.8

Outgassing DATA:

% TML	0.72
% CVCM	0.01
% WVR	0.29

GENERAL INFORMATION:

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

HOW TO USE:

1. Carefully clean and dry all surfaces to be bonded.
2. Apply AA-BOND 2248 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.
5. Allow the product to cure according to the cure schedule.

AVAILABILITY:

This epoxy can be supplied in many different packages.

Atom Adhesives

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