

Fiber optic Thermally Conductive Electrically Insulating Epoxy Adhesive

Technical Product Bulletin

PRODUCT DESCRIPTION:

AA-BOND F162 is a thixotropic electrical insulating epoxy adhesive system with low vapor pressure and outgassing characteristics.

AA-BOND F162 was specifically developed for fiber optic, laser, photonic and electronic applications requiring excellent electrical insulation in combination with effective thermal dissipation from heat-producing components.

AA-BOND F162 is two-part epoxy compound develops strong, durable, stable, high impact thermally conductive bonds at room temperature, and adheres readily to itself, and to metals, many plastics, silica, steatite, alumina, sapphire and other ceramics, glass, and to many other materials.

AA-BOND F162 provides excellent resistance to salt solutions, mild acids and alkalis and many other chemicals including petroleum solvents, lubricating oils and alcohol.

PRODUCT DESCRIPTIONS:

Color	Grey light
Cure Type	Room temperature cure or Heat cure
Benefits	Smooth paste Fiber optic Laser Photonic and electronic applications Good electrical insulation
Mix Ratio by weight	100:10 / Resin: Hardener
Substrates	Metals, Many plastics, Glass, and other materials
Operating Temperature	-30°C(-22)°C to 120 °C (257°F)
Typical Application	ALL types of fiber-optic connectors as well as LED displays, lenses and other optical components.

UNCURED PROPERTIES:

Viscosity @ 25 °C cps	56000±5000
Thixotropic Index	2.0
Specific Gravity, mixed, g/cc	2.29

CURING SCHEDULE:

2 to 4 hours	@ 65°C (149°F)
24 Hours	@ 25°C (77°F)

CURED PROPERTIES:

Thermal Conductivity W/mk	0.89
Hardness, Shore D	88

GENERAL INFORMATION:

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

HOW TO USE:

- Carefully clean and dry all surfaces to be bonded.
- Apply AA-BOND F162 completely mixed adhesive to the prepared surfaces, and gently press these surfaces together. Contact pressure is adequate for strong, reliable bond. 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 must be thoroughly mixed prior to use.
- 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.