

## Atom Adhesives AA-BOND F113 Epoxy Adhesive

Category : Polymer , Thermoset , Epoxy , Epoxy Adhesive

### Material Notes:

AA-BOND F113 is an Optically Clear, low viscosity , High impact epoxy adhesives developed for bonding and small volume potting of plastic or glass optical fibers, lenses and prisms, LED displays, and other optical components. AA-BOND F113 is recommended for laminating, bonding, and sealing applications where excellent wetting, good pot life and improved impact strength properties are required. AA-BOND F113 is two parts adhesive easily mixed and cured at room temperature and develops strong bond to glass and glass fibers, ceramics, many metals and most rigid plastics. AA-BOND F113 bonds offer resistance to mechanical impact and thermal shock, and is also resistant to weather, water, gases and vapors, petroleum products, and mild acids and alkalis. Appearance: ClearCure Type: Heat cure or Room TemperatureBenefits:Low viscosityThermal shock and impact resistantLow stress connections Mix Ratio by weight: 100:30/Resin:Hardener Typical Application: Fiber optic assembly, multimode and single mode connectors, small potting and sealing applicationsInformation provided by Atom Adhesives

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Atom-Adhesives-AA-BOND-F113-Epoxy-Adhesive.php](http://www.lookpolymers.com/polymer_Atom-Adhesives-AA-BOND-F113-Epoxy-Adhesive.php)

Physical Properties	Metric	English	Comments
Specific Gravity	1.23 g/cc	1.23 g/cc	uncured
Water Absorption at Saturation	0.070 % @Time 86400 sec	0.070 % @Time 24.0 hour	cured
Viscosity	175 cP	175 cP	uncured

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	78	78	
Adhesive Bond Strength	27.6 MPa @Temperature 65.0 °C, Time 7200 sec	4000 psi @Temperature 149 °F, Time 2.00 hour	Lap shear, alum to alum

Thermal Properties	Metric	English	Comments
CTE, linear	62.0 µm/m-°C	34.4 µin/in-°F	
Maximum Service Temperature, Air	100 °C	212 °F	
Minimum Service Temperature, Air	-60.0 °C	-76.0 °F	
Glass Transition Temp, Tg	45.0 °C	113 °F	

Optical Properties	Metric	English	Comments
Refractive Index	1.51	1.51	cured

Optical Properties	Metric	English	Comments
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Electrical Properties	Metric	English	Comments
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Volume Resistivity	9.00e+8 ohm-cm	9.00e+8 ohm-cm	
Dielectric Constant	4.8	4.8	
	@Frequency 1000 Hz	@Frequency 1000 Hz	
Dielectric Strength	16.9 kV/mm	430 kV/in	

Processing Properties	Metric	English	Comments
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Cure Time	60.0 - 120 min	1.00 - 2.00 hour	
	@Temperature 65.0 °C	@Temperature 149 °F	
	1440 min	24.0 hour	
	@Temperature 25.0 °C	@Temperature 77.0 °F	
Pot Life	2.00 min	2.00 min	uncured

Descriptive Properties	Value	Comments
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Thixotropic Index	1	
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## Contact Songhan Plastic Technology Co.,Ltd.

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