

## Tra-Con Tra-Bond F118 Fiber Optic Epoxy Adhesive

Category : Polymer , Adhesive , Thermoset , Epoxy

### Material Notes:

TRA-BOND F118 is an impact resistant, fiber-optic adhesive designed for use in any optical connector. This two-part epoxy remains at a constant viscosity for a minimum of 30 minutes. This allows more connectors to be produced from one mix. Low stress, TRA-BOND F118 is an excellent choice for multi and single mode connectors where excessive curing temperatures may cause cracking. It can be cured at room temperature overnight or as fast as 15 minutes at 65°C. The blue color facilitates easy polishing and its cured properties prevent pistoning. This 100% solid system can be used for small potting and sealing applications where resistance to thermal shock and impact are required. This system can be supplied in many different packages including 2 gram (or larger) BIPAX kits, pre-mixed and frozen syringes or 1 gram MINIPAX. Variations on viscosity (or other properties) are available upon request. TRA-BOND F118 has a usable working time of 30 minutes for fiber optic connector installation and 1 hour in potting or sealing applications. Longer cures may be required for development of full mechanical properties in potting or sealing applications. Sufficient cure is developed for polishing connectors in 15 minutes at 65°C. TRA-BOND F118 will complete its cure at room temperature with no pistoning. Information provided by Tra-Con Inc.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Tra-Con-Tra-Bond-F118-Fiber-Optic-Epoxy-Adhesive.php](http://www.lookpolymers.com/polymer_Tra-Con-Tra-Bond-F118-Fiber-Optic-Epoxy-Adhesive.php)

Physical Properties	Metric	English	Comments
Specific Gravity	1.18 g/cc	1.18 g/cc	Mixed
Viscosity	65000 cP @Temperature 25.0 °C	65000 cP @Temperature 77.0 °F	After mixing

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	82	82	
Adhesive Bond Strength	23.4 MPa	3400 psi	Lap shear, alum to alum
Izod Impact, Notched	0.117 J/cm	0.220 ft-lb/in	

Thermal Properties	Metric	English	Comments
CTE, linear	60.0 µm/m-°C	33.3 µin/in-°F	Below Tg
Maximum Service Temperature, Air	130 °C	266 °F	
Minimum Service Temperature, Air	-60.0 °C	-76.0 °F	
Glass Transition Temp, Tg	105 °C	221 °F	Ultimate Tg

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+11 ohm-cm	1.00e+11 ohm-cm	

Processing Properties	Metric	English	Comments
Cure Time	15.0 min	0.250 hour	1 drop applications
	@Temperature 90.0 °C	@Temperature 194 °F	
	60.0 min	1.00 hour	
	@Temperature 65.0 °C	@Temperature 149 °F	
	1080 min	18.0 hour	
	@Temperature 25.0 °C	@Temperature 77.0 °F	

Descriptive Properties	Value	Comments
Color	Dark Blue	Hardener/Mixed
	White	Resin
Mix Ratio, parts by weight	100/30	Resin/Hardener

## Contact Songhan Plastic Technology Co.,Ltd.

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