

## Tra-Con Tra-Bond 931-1 Low Viscosity Encapsulant

Category : Polymer , Adhesive , Thermoset , Epoxy

### Material Notes:

TRA-BOND 931-1 low viscosity epoxy encapsulant is designed for high reliability applications, where capillary action is desired. This encapsulant provides environmental and mechanical protection. Information provided by Tra-Con Inc.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Tra-Con-Tra-Bond-931-1-Low-Viscosity-Encapsulant.php](http://www.lookpolymers.com/polymer_Tra-Con-Tra-Bond-931-1-Low-Viscosity-Encapsulant.php)

Physical Properties	Metric	English	Comments
Specific Gravity	1.20 g/cc	1.20 g/cc	Cured
Viscosity	300 cP @Temperature 25.0 °C	300 cP @Temperature 77.0 °F	After mixing

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	88	88	
Adhesive Bond Strength	24.1 MPa	3500 psi	Lap shear, alum to alum, @ 25°C

Thermal Properties	Metric	English	Comments
CTE, linear	67.0 $\mu\text{m}/\text{m}\cdot\text{°C}$	37.2 $\mu\text{in}/\text{in}\cdot\text{°F}$	Below Tg
	240 $\mu\text{m}/\text{m}\cdot\text{°C}$	133 $\mu\text{in}/\text{in}\cdot\text{°F}$	Above Tg
Thermal Conductivity	0.200 W/m-K @Temperature 121 °C	1.39 BTU-in/hr-ft <sup>2</sup> -°F @Temperature 250 °F	
Maximum Service Temperature, Air	140 °C	284 °F	
Minimum Service Temperature, Air	-20.0 °C	-4.00 °F	
Glass Transition Temp, Tg	100 °C	212 °F	Ultimate Tg

Electrical Properties	Metric	English	Comments
Volume Resistivity	2.00e+14 ohm-cm	2.00e+14 ohm-cm	
Dielectric Strength	27.6 kV/mm	700 kV/in	
Dissipation Factor	0.026	0.026	

Chemical Properties	Metric	English	Comments
Ionic Impurities - Na (Sodium)	5.0 ppm	5.0 ppm	

Chemical Properties(Potassium)	Metric	English	Comments
Ionic Impurities - Cl (Chloride)	100 ppm	100 ppm	

Processing Properties	Metric	English	Comments
Cure Time	1443 min	24.05 hour	3 min @ 130°C + 24 hrs @ 25°C
	1445 min	24.08 hour	5 min @ 100°C + 24 hrs @ 25°C
	60.0 min	1.00 hour	
	@Temperature 100 °C	@Temperature 212 °F	

Descriptive Properties	Value	Comments
Color	Clear, Amber	
Thixotropic Index	1	
Weight Loss %	1	At 300°C
Working Life hours	6	At 25°C

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China