

## Tra-Con Tra-Cast 3109 Low Cost Epoxy Casting System

Category : Polymer , Adhesive , Thermoset , Epoxy

### Material Notes:

TRA-CAST 3109 is a versatile epoxy casting system developed for solvent-free production casting, potting, encapsulating, and coating applications where low cost, easy handling and flowability, and excellent mechanical and electrical properties are required. Color coded for easy mixing and pouring, this formulation cures to a tough, rigid, low-shrinkage solid in a matter of hours at room temperature and is dimensionally stable over a wide temperature range. TRA-CAST 3109, with its good exotherm, pot life and pouring characteristics, is especially suited for large mass (up to 1 gallon) castings, as well as for other industrial and electronic large-pour applications. It develops excellent adhesion to rigid plastics and laminates, metals, and ceramics, has a low coefficient of thermal expansion, and is readily machined and shaped with ordinary shop tools. The fully cured epoxy system is an excellent electrical insulator and is compatible with electrical components, has good resistance to water, weather, gases and vapors, and from chemical compounds including mild acids and alkalis, many corrosive salts and salt solutions, jet fuels, petroleum product and lubricants, and other organic and inorganic materials.

Information provided by Tra-Con Inc.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Tra-Con-Tra-Cast-3109-Low-Cost-Epoxy-Casting-System.php](http://www.lookpolymers.com/polymer_Tra-Con-Tra-Cast-3109-Low-Cost-Epoxy-Casting-System.php)

Physical Properties	Metric	English	Comments
Specific Gravity	1.57 g/cc	1.57 g/cc	Mixed
Viscosity	93000 cP @Temperature 25.0 °C	93000 cP @Temperature 77.0 °F	After mixing

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	79	79	
Compressive Strength	87.6 MPa	12700 psi	

Thermal Properties	Metric	English	Comments
CTE, linear	48.0 $\mu\text{m}/\text{m}\cdot\text{°C}$ @Temperature 20.0 °C	26.7 $\mu\text{in}/\text{in}\cdot\text{°F}$ @Temperature 68.0 °F	
Maximum Service Temperature, Air	140 °C	284 °F	
Minimum Service Temperature, Air	-60.0 °C	-76.0 °F	

Electrical Properties	Metric	English	Comments
Volume Resistivity	7.50e+14 ohm-cm	7.50e+14 ohm-cm	
Dielectric Constant	4.77 @Frequency 1000 Hz	4.77 @Frequency 1000 Hz	

Electrical Properties	Metric //mm	English In	Comments
Dissipation Factor	0.0030	0.0030	
	@Frequency 1000 Hz	@Frequency 1000 Hz	

Processing Properties	Metric	English	Comments
Cure Time	360 min	6.00 hour	4 hrs @ 25°C + 2 hrs @ 65°C
	1440 min	24.0 hour	
	@Temperature 25.0 °C	@Temperature 77.0 °F	
Pot Life	60 min	60 min	

Descriptive Properties	Value	Comments
Color	Black	
Mix Ratio, parts by weight	100/26	Resin/Hardener

## 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