

# **CROSSLINK TECHNOLOGY INC.**

FORMULATED EPOXIES, URETHANES - CUSTOM CAST PARTS

9001
REGISTERED
QUALITY SYSTEM
SINCE 1981

TECHNICAL BULLETIN: CLR 1180 / CLH 6930

## **PRODUCT DESCRIPTION:**

AN EXCEPTIONAL EPOXY LAMINATING SYSTEM WITH EXCELLENT THERMAL AND MECHANICAL SHOCK RESISTANCE. PRODUCT IS SUITABLE FOR A VARIETY OF APPLICATIONS.

SALES SPECIFICATION	CLR 1180	CLH 6930
COLOUR	AMBER	AMBER
VISCOSITY (NOTE 1, NOTE 4)	500 - 1000 CPS @ 22 °C	100 - 300 CPS @ 22 °C
SPECIFIC GRAVITY	1.12 ± 0.02 gm/cm <sup>3</sup>	0.94 ± 0.02 gm/cm <sup>3</sup>
SHELF LIFE	12 MONTHS	12 MONTHS

### **HANDLING:**

MIX RATIO BY WEIGHT (A:B) (NOTE 2)	100:30
MIXED VISCOSITY (NOTE 4)	400 cps @ 22 °C
POT LIFE OF 200 gm. mass (NOTE 4)	40.00 Min. @ 22 °C
GEL TIME OF 200 gm. mass (NOTE 4)	50.00 Min. @ 22 °C

## **CURE SCHEDULE (NOTE 3):**

RECOMMENDED CURE SCHEDULE	48 Hrs. @ 22 °C
ALTERNATE CURE SCHEDULE	4 Hrs. @ 60 °C

# **CURED PROPERTIES: (NOT INTENDED FOR PREPARATION OF SPECIFICATIONS)**

SHORE HARDNESS       80D         TENSILE STRENGTH (psi) (ASTM D 638)       9000         TENSILE ELONGATION (%) (ASTM D 638)       8.0         TENSILE MODULUS (psi)       150000         HDT(°C) (ASTM D 648)       72         GUIDE TO OPERATING TEMPERATURE(°C)(NOTE 6)       130         LINEAR SHRINKAGE (in/in) (ASTM D 2566)       0.0050	COLOUR	AMBER
TENSILE STRENGTH (psi) (ASTM D 638)       9000         TENSILE ELONGATION (%) (ASTM D 638)       8.0         TENSILE MODULUS (psi)       150000         HDT(°C) (ASTM D 648)       72         GUIDE TO OPERATING TEMPERATURE(°C)(NOTE 6)       130         LINEAR SHRINKAGE (in/in) (ASTM D 2566)       0.0050	DENSITY (gm/cm³)	1.05
TENSILE ELONGATION (%) (ASTM D 638)  TENSILE MODULUS (psi)  HDT(°C) (ASTM D 648)  GUIDE TO OPERATING TEMPERATURE(°C)(NOTE 6)  LINEAR SHRINKAGE (in/in) (ASTM D 2566)  8.0  72  72  0.0050	SHORE HARDNESS	80D
TENSILE MODULUS (psi)  HDT(°C) (ASTM D 648)  GUIDE TO OPERATING TEMPERATURE(°C)(NOTE 6)  LINEAR SHRINKAGE (in/in) (ASTM D 2566)  150000  0.0050	TENSILE STRENGTH (psi) (ASTM D 638)	9000
HDT(°C) (ASTM D 648)  GUIDE TO OPERATING TEMPERATURE(°C)(NOTE 6)  LINEAR SHRINKAGE (in/in) (ASTM D 2566)  0.0050	TENSILE ELONGATION (%) (ASTM D 638)	8.0
GUIDE TO OPERATING TEMPERATURE(°C)(NOTE 6)  LINEAR SHRINKAGE (in/in) (ASTM D 2566)  0.0050	TENSILE MODULUS (psi)	150000
LINEAR SHRINKAGE (in/in) (ASTM D 2566) 0.0050	HDT(°C) (ASTM D 648)	72
	GUIDE TO OPERATING TEMPERATURE(°C)(NOTE 6)	130
MOISTURE ABSORBTION (% 24 Hours RT) 0.200	LINEAR SHRINKAGE (in/in) (ASTM D 2566)	0.0050
	MOISTURE ABSORBTION (% 24 Hours RT)	0.200

ELECTRICAL PROPERTIES		
DIELECTRIC CONSTANT	@1 KHz	4.10
DISSIPATION FACTOR A	@1 KHz	0.0190
DIELECTRIC STRENGTH	400 Volts/Mil	62.5 Mil/Section
VOLUME RESISTIVITY		2 X 10^16 Ω•cm

#### **NOTES**

Note1 If a filled resin, settling may occur during transportation or storage. Fillers must be remixed before use.

Note 2 Mix ratio must be within  $\pm$  2% of the stated amount and thorough mixing is required to avoid degraded final properties.

Note3 Other cure schedules may give satisfactory results, however, these should be determined by the customer for their given circumstances.

Note4 All measurements taken at 22°C unless otherwise specified.

Note5 These products may trigger allergic responses in some individuals. Prevent contact with skin, wash with plenty of soap and water immediately if contact occurs. Do not breathe vapours, provide good ventilation and exercise good housekeeping at work area. Read the Material Safety Data Sheet.

Note6 The "Guide to Operating Temperature" is based on our experience with materials of similar chemistry and/or thermal index. The ultimate suitability of this product for a given operating temperature is application dependent and may change according to the demands placed upon it in operation.

Note7 If indicated, the values under "Electrical Characteristics" may be based on supplier data for products with similar compositions. They are provided only as a guide and the recipient must test each material to determine its suitability for the intended application.

#### **IMPORTANT**

THE INFORMATION IN THIS BULLETIN IS BASED ON DATA OBTAINED BY OUR OWN RESEARCH AND IS CONSIDERED ACCURATE. ALL INFORMATION SUPPLIED BY CROSSLINK TECHNOLOGY INC.,IS FURNISHED UPON THE EXPRESS CONDITION THAT THE PERSON RECEIVING THE PRODUCT SHALL MAKE THEIR OWN ASSESMENTS TO DETERMINE ITS SUITABILITY FOR THEIR PARTICULAR PURPOSE. NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING SUCH INFORMATION, OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF; THAT ANY PRODUCT SHALL BE MERCHANTABLE OR FIT FOR ANY PARTICULAR PURPOSE; OR THAT THE USE OF SUCH OTHER INFORMATION OR PRODUCT WILL NOT INFRINGE ANY PATENT.