

# **CROSSLINK TECHNOLOGY INC.**

9001 REGISTERED QUALITY SYSTEM

FORMULATED EPOXIES, URETHANES - CUSTOM CAST PARTS

SINCE 1981

## TECHNICAL BULLETIN: CLR 1331 / CLH 6010

### **PRODUCT DESCRIPTION:**

A LOW STRESS, EXTREMELY TOUGH CASTING COMPOUND WHICH WAS DEVELOPED FOR CASTING LOW VOLTAGE BUSHINGS AND INSULATORS.

SALES SPECIFICATION	CLR 1331	CLH 6010
COLOUR	GREY	AMBER
VISCOSITY (NOTE 1, NOTE 4)	20000 - 35000 CPS @ 70 °C	200 - 400 CPS @ 22 °C
SPECIFIC GRAVITY	1.85 ± 0.03 gm/cm <sup>3</sup>	1.01 ± 0.02 gm/cm <sup>3</sup>
SHELF LIFE	12 MONTHS	12 MONTHS

#### HANDLING:

MIX RATIO BY WEIGHT (A:B) (NOTE 2)	100:7.5
MIXED VISCOSITY (NOTE 4)	4500 cps @ 70 °C
POT LIFE OF 200 gm. mass (NOTE 4)	4.00 Min. @ 70 °C
GEL TIME OF 200 gm. mass (NOTE 4)	6.00 Min. @ 70 °C

#### CURE SCHEDULE (NOTE 3):

RECOMMENDED CURE SCHEDULE	24 Hrs. @ 22 °C
ALTERNATE CURE SCHEDULE	4 Hrs. @ 60 °C

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

COLOUR	GREY
DENSITY (gm/cm <sup>3</sup> )	1.75
SHORE HARDNESS	91D
TENSILE STRENGTH (psi) (ASTM D 638)	10500
TENSILE ELONGATION (%) (ASTM D 638)	4.5
HDT(°C) (ASTM D 648)	117
COMPRESSIVE STRENGTH (psi)	28800
FLEXURAL STRENGTH (psi)	16000
FLEXURAL MODULUS (psi)	1100000
GUIDE TO OPERATING TEMPERATURE(°C)(NOTE 6)	130
LINEAR SHRINKAGE (in/in) (ASTM D 2566)	0.0065
MOISTURE ABSORBTION (% 24 Hours RT)	0.040
COEFFICIENT OF THERMAL EXPANSION (in/in/°C)	43 x10^-6
THERMAL CONDUCTIVITY W/(m•K)	37X10^-4
THERMAL CYCLE FROM (CELSIUS)	-40
THERMAL CYCLE TO (CELSIUS)	125
THERMAL CYCLES	10

ELECTRICAL PROPERTIES				
DIELECTRIC CONSTANT	@10 KHz	4.06		
DIELECTRIC CONSTANT	@1 MHz	3.86		
DISSIPATION FACTOR A	@10 KHz	0.0197		
DISSIPATION FACTOR B	@1 MHz	0.0178		
DIELECTRIC STRENGTH	594 Volts/Mil	62.5 Mil/Section		
VOLUME RESISTIVITY		4.3 x10^14 Ω•cm		
DISSIPATION TEMPERATURE		5.6 x10^13		

#### **NOTES**

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

Note2 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**

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