CROSSLINK TECHNOLOGY INC.

FORMULATED EPOXIES, URETHANES - CUSTOM CAST PARTS

ISO 9001 REGISTERED QUALITY SYSTEM SINCE 1981

TECHNICAL BULLETIN: **CLR 1837 / CLH 5185**

PRODUCT DESCRIPTION:

A HEAT CURE, LOW STRESS, EXTREMELY TOUGH, EPOXY CASTING COMPOUND. IT WAS SPECIFICALLY DESIGNED FOR CASTING LARGE BUSHINGS, INSULATORS, INSTRUMENT AND POWER TRANSFORMERS. THE CURED MATERIAL EXHIBITS EXCELLENT THERMAL STABILITY AND THERMAL CYCLING CHARACTERISTICS. THIS PRODUCT MEETS UL94-HB FLAMMABILITY REQUIREMENTS.

SALES SPECIFICATION	CLR 1837	CLH 5185
COLOUR	RED	AMBER
VISCOSITY (NOTE 1, NOTE 4)	50000 - 100000 CPS @ 70 °C	300 - 1000 CPS @ 22 °C
SPECIFIC GRAVITY	1.90 ± 0.03 gm/cm³	1.18 ± 0.02 gm/cm³
SHELF LIFE	12 MONTHS	12 MONTHS

HANDLING:

MIX RATIO BY WEIGHT (A:B) (NOTE 2)	100:30 (by vol. 100:46.8)
MIXED VISCOSITY (NOTE 4)	6000 cps @ 60 ºC
POT LIFE OF 200 gm. mass (NOTE 4)	5.00 Hrs. @ 60 ºC
GEL TIME OF 200 gm. mass (NOTE 4)	30.00 Min. @ 125 ºC

OPTIONAL POST CURE

2 HOURS @ 150°C

CURE SCHEDULE (NOTE 3):

RECOMMENDED CURE SCHEDULE	4 Hrs. @ 125 ºC

CURED PROPERTIES: (NOT INTENDED FOR PREPARATION OF SPECIFICATIONS)

COLOUR	RED
DENSITY (gm/cm³)	1.63
SHORE HARDNESS	90D
TENSILE STRENGTH (psi) (ASTM D 638)	9500
TENSILE ELONGATION (%) (ASTM D 638)	4.0
HDT(°C) (ASTM D 648)	100
FLAMABILITY RATING	UL94-HB (130c.)
FLEXURAL STRENGTH (psi)	16000
FLEXURAL MODULUS (psi)	1200000
GUIDE TO OPERATING TEMPERATURE(°C)(NOTE 6)	155
LINEAR SHRINKAGE (in/in) (ASTM D 2566)	0.0075
MOISTURE ABSORBTION (% 24 Hours RT)	0.200
THERMAL CONDUCTIVITY	0.70 W/m•K

ELECTRICAL PROPERTIES		
DISSIPATION FACTOR A	@10	0.0120
DISSIPATION FACTOR B	@1	0.0131
DIELECTRIC STRENGTH	538 Volts/Mil	62.5 Mil/Section
ARC RESISTANCE		180 Seconds
VOLUME RESISTIVITY		12 x10^14
DISSIPATION TEMPERATURE		9.6 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 ± 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 22ºC 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

6430 Vipond Drive, Mississauga, Ontario, Canada L5T 1W8 Phone: 1-800-563-3769, (905) 673-0510, Fax: (905) 673-0519 Web site: www.crosslinktech.com , E-mail: info@crosslinktech.com