CROSSLINK TECHNOLOGY INC.

FORMULATED EPOXIES, URETHANES - CUSTOM CAST PARTS

ISO 9001 REGISTERED QUALITY SYSTEM SINCE 1981

TECHNICAL BULLETIN: **CLR 3507 / CLH 6230**

PRODUCT DESCRIPTION:

A SEMI-FLEXIBLE, 100% SOLID, EPOXY SYSTEM. THIS PRODUCT WAS SPECIFICALLY DEVELOPED FOR POTTING/CASTING OF ELECTRICAL AND ELECTRONIC COMPONENTS. THE LONG POT LIFE OF THE MATERIAL MAKES IT SUITABLE FOR LARGE MASS CASTINGS OR HEAT INDUCED CURING WITH MINIMAL STRESS. PRODUCT PASSES UL 94-HB IN-HOUSE FLAMMABILITY TESTING. FOR A MORE RIGID SYSTEM, CLR 3517/CLH 6230 IS RECOMMENDED.

SALES SPECIFICATION	CLR 3507	CLH 6230
COLOUR	RED	AMBER
VISCOSITY (NOTE 1, NOTE 4)	15000 - 25000 CPS @ 22 °C	10 - 30 CPS @ 22 °C
SPECIFIC GRAVITY	1.65 ± 0.03 gm/cm³	0.95 ± 0.02 gm/cm³
SHELF LIFE	12 MONTHS	12 MONTHS

HANDLING:

MIX RATIO BY WEIGHT (A:B) (NOTE 2)	100:10
MIXED VISCOSITY (NOTE 4)	3500 cps @ 22 ºC
POT LIFE OF 200 gm. mass (NOTE 4)	30.00 Min. @ 60 ºC
GEL TIME OF 200 gm. mass (NOTE 4)	90.00 Min. @ 60 ºC

POT LIFE (200gms)~8.0 Hrs @ 22ºC

CURE SCHEDULE (NOTE 3):

RECOMMENDED CURE SCHEDULE	6 Hrs. @ 60 ºC
ALTERNATE CURE SCHEDULE	4 Hrs. @ 80 ºC

CURED PROPERTIES: (NOT INTENDED FOR PREPARATION OF SPECIFICATIONS)

COLOUR	RED
DENSITY (gm/cm³)	1.55
SHORE HARDNESS	63D
TENSILE STRENGTH (psi) (ASTM D 638)	1500
TENSILE ELONGATION (%) (ASTM D 638)	30.0
COMPRESSIVE STRENGTH (psi)	9000
LINEAR SHRINKAGE (in/in) (ASTM D 2566)	0.0030
MOISTURE ABSORBTION (% 24 Hours RT)	0.200
COEFFICIENT OF THERMAL EXPANSION (in/in/°C)	120X10^-6
THERMAL CONDUCTIVITY W/(m•K)	14X10^-4

ELECTRICAL PROPERTIES		
DIELECTRIC CONSTANT	@10 KHz	4.41
DIELECTRIC CONSTANT	@1 MHz	3.87
DISSIPATION FACTOR A	@10 KHz	0.0516
DISSIPATION FACTOR B	@1 MHz	0.0419
DIELECTRIC STRENGTH	600 Volts/Mil	62.5 Mil/Section
VOLUME RESISTIVITY		0.043 x10^14 Ω•cm
DISSIPATION TEMPERATURE		0.13 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

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