



CROSSLINK TECHNOLOGY INC.

FORMULATED EPOXIES, URETHANES - CUSTOM CAST PARTS



TECHNICAL BULLETIN: CLR 1190 / CLH 5166

PRODUCT DESCRIPTION:

A TWO COMPONENT, HEAT CURED, LONG POT LIFE, EPOXY IMPREGNATING COMPOUND. THIS PRODUCT WAS SPECIFICALLY DEVELOPED FOR COILS AND TRANSFORMERS.

SALES SPECIFICATION	CLR 1190	CLH 5166
COLOUR	AMBER	AMBER
VISCOSITY (NOTE 1, NOTE 4)	14000 - 20000 CPS	30 - 60 CPS
SPECIFIC GRAVITY	1.14 ± 0.00 gm/cm ³	1.20 ± 0.02 gm/cm ³
SHELF LIFE	12 MONTHS	12 MONTHS

HANDLING:

MIX RATIO BY WEIGHT (A:B) (NOTE 2)	100:80
MIXED VISCOSITY (NOTE 4)	650 cps @ 22 °C
POT LIFE OF 200 gm. mass (NOTE 4)	4.00 Days. @ 22 °C
GEL TIME OF 200 gm. mass (NOTE 4)	2.00 Hrs. @ 100 °C

VISCOSITY AFTER ONE DAY~2000 cps @ 22°C

CURE SCHEDULE (NOTE 3):

RECOMMENDED CURE SCHEDULE	8 Hrs. @ 100 °C
ALTERNATE CURE SCHEDULE	4 Hrs. @ 125 °C

CURED PROPERTIES: (NOT INTENDED FOR PREPARATION OF SPECIFICATIONS)

COLOUR	AMBER
DENSITY (gm/cm ³)	1.18
SHORE HARDNESS	85D
TENSILE STRENGTH (psi) (ASTM D 638)	10500
TENSILE ELONGATION (%) (ASTM D 638)	4.0
HDT(°C) (ASTM D 648)	120
FLEXURAL STRENGTH (psi)	21500
GUIDE TO OPERATING TEMPERATURE(°C)(NOTE 6)	180
LINEAR SHRINKAGE (in/in) (ASTM D 2566)	0.0100
HDT(°C) (ASTM D 648)	120
Moisture Absorbtion (%)	0.200

ELECTRICAL PROPERTIES

DIELECTRIC CONSTANT	@100 Hz.	3.03
DIELECTRIC CONSTANT	@1 Khz.	3.01
DISSIPATION FACTOR A	@100 Hz.	0.0041
DISSIPATION FACTOR B	@1 Khz.	0.0067
DIELECTRIC STRENGTH	1000 Volts/Mil	10.0 Mil/Section
ARC RESISTANCE		120 Seconds
VOLUME RESISTIVITY		21 x10 ¹⁴

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

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.

