

CROSSLINK TECHNOLOGY INC.

FORMULATED EPOXIES, URETHANES - CUSTOM CAST PARTS

9001
REGISTERED
QUALITY SYSTEM
SINCE 1981

TECHNICAL BULLETIN: CLR 1556 / CLH 6510

PRODUCT DESCRIPTION:

A LOW VISCOSITY, FLEXIBLE, ROOM TEMPERATURE CURE, POTTING COMPOUND. THE MATERIAL HAS A LONG POT LIFE AND GOOD THERMAL CYCLING ENDURANCE.

SALES SPECIFICATION	CLR 1556	CLH 6510
COLOUR	BLACK	AMBER
VISCOSITY (NOTE 1, NOTE 4)	30000 - 55000 CPS @ 22 °C	300 - 700 CPS @ 22 °C
SPECIFIC GRAVITY	1.75 ± 0.03 gm/cm ³	0.95 ± 0.02 gm/cm ³
SHELF LIFE	12 MONTHS	12 MONTHS

HANDLING:

MIX RATIO BY WEIGHT (A:B) (NOTE 2)	100:30 (by vol. 100:50.0)
MIXED VISCOSITY (NOTE 4)	3000 cps @ 22 °C
POT LIFE OF 200 gm. mass (NOTE 4)	4.00 Hrs. @ 22 °C
GEL TIME OF 200 gm. mass (NOTE 4)	8.00 Hrs. @ 22 °C

CURE SCHEDULE (NOTE 3):

RECOMMENDED CURE SCHEDULE	7 Days. @ 22 °C
ALTERNATE CURE SCHEDULE	10 Hrs. @ 60 °C

CURED PROPERTIES: (NOT INTENDED FOR PREPARATION OF SPECIFICATIONS)

DENSITY (gm/cm³) 1.47 SHORE HARDNESS 55D TENSILE STRENGTH (psi) (ASTM D 638) 1250 TENSILE ELONGATION (%) (ASTM D 638) 80.0 GUIDE TO OPERATING TEMPERATURE(°C)(NOTE 6) 110 LINEAR SHRINKAGE (in/in) (ASTM D 2566) 0.0050 MOISTURE ABSORBTION (% 24 Hours RT) 0.300 COEFFICIENT OF THERMAL EXPANSION (in/in/°C) 30X10^-6 THERMAL CONDUCTIVITY W/(m•K) 15X10^-4 THERMAL CYCLE FROM (CELSIUS) 40 THERMAL CYCLE TO (CELSIUS) 80	COLOUR	BLACK
TENSILE STRENGTH (psi) (ASTM D 638) TENSILE ELONGATION (%) (ASTM D 638) GUIDE TO OPERATING TEMPERATURE(°C)(NOTE 6) LINEAR SHRINKAGE (in/in) (ASTM D 2566) MOISTURE ABSORBTION (% 24 Hours RT) COEFFICIENT OF THERMAL EXPANSION (in/in/°C) THERMAL CONDUCTIVITY W/(m•K) THERMAL CYCLE FROM (CELSIUS) THERMAL CYCLE TO (CELSIUS)	DENSITY (gm/cm³)	1.47
TENSILE ELONGATION (%) (ASTM D 638) GUIDE TO OPERATING TEMPERATURE(°C)(NOTE 6) LINEAR SHRINKAGE (in/in) (ASTM D 2566) MOISTURE ABSORBTION (% 24 Hours RT) COEFFICIENT OF THERMAL EXPANSION (in/in/°C) THERMAL CONDUCTIVITY W/(m•K) THERMAL CYCLE FROM (CELSIUS) THERMAL CYCLE TO (CELSIUS) 80.0 80.0 110 0.300 0.300 15X10^-6 15X10^-4 15X10^-4	SHORE HARDNESS	55D
GUIDE TO OPERATING TEMPERATURE(°C)(NOTE 6) LINEAR SHRINKAGE (in/in) (ASTM D 2566) MOISTURE ABSORBTION (% 24 Hours RT) COEFFICIENT OF THERMAL EXPANSION (in/in/°C) THERMAL CONDUCTIVITY W/(m•K) THERMAL CYCLE FROM (CELSIUS) THERMAL CYCLE TO (CELSIUS) 80	TENSILE STRENGTH (psi) (ASTM D 638)	1250
LINEAR SHRINKAGE (in/in) (ASTM D 2566) MOISTURE ABSORBTION (% 24 Hours RT) COEFFICIENT OF THERMAL EXPANSION (in/in/°C) THERMAL CONDUCTIVITY W/(m•K) THERMAL CYCLE FROM (CELSIUS) THERMAL CYCLE TO (CELSIUS) 80	TENSILE ELONGATION (%) (ASTM D 638)	80.0
MOISTURE ABSORBTION (% 24 Hours RT) COEFFICIENT OF THERMAL EXPANSION (in/in/°C) THERMAL CONDUCTIVITY W/(m•K) THERMAL CYCLE FROM (CELSIUS) THERMAL CYCLE TO (CELSIUS) 80	GUIDE TO OPERATING TEMPERATURE(°C)(NOTE 6)	110
COEFFICIENT OF THERMAL EXPANSION (in/in/°C) THERMAL CONDUCTIVITY W/(m•K) THERMAL CYCLE FROM (CELSIUS) THERMAL CYCLE TO (CELSIUS) 80	LINEAR SHRINKAGE (in/in) (ASTM D 2566)	0.0050
THERMAL CONDUCTIVITY W/(m•K) THERMAL CYCLE FROM (CELSIUS) THERMAL CYCLE TO (CELSIUS) 80	MOISTURE ABSORBTION (% 24 Hours RT)	0.300
THERMAL CYCLE FROM (CELSIUS) -40 THERMAL CYCLE TO (CELSIUS) 80	COEFFICIENT OF THERMAL EXPANSION (in/in/°C)	30X10^-6
THERMAL CYCLE TO (CELSIUS) 80	THERMAL CONDUCTIVITY W/(m•K)	15X10^-4
	THERMAL CYCLE FROM (CELSIUS)	-40
THERMAL OVALED	THERMAL CYCLE TO (CELSIUS)	80
THERMAL CYCLES 5	THERMAL CYCLES	5

ELECTRICAL PROPERTIES		
DIELECTRIC CONSTANT	@1 KHz	4.20
DISSIPATION FACTOR A	@1 KHz	0.0110
DIELECTRIC STRENGTH	500 Volts/Mil	10.0 Mil/Section
ARC RESISTANCE		100 Seconds
VOLUME RESISTIVITY		30 x10^14 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

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