# CROSSLINK TECHNOLOGY INC.

FORMULATED EPOXIES, URETHANES - CUSTOM CAST PARTS

ISO 9001 REGISTERED QUALITY SYSTEM SINCE 1981

**TECHNICAL BULLETIN:** **CLR 1336 / CLH 5515**

**PRODUCT DESCRIPTION:**

A TWO COMPONENT, HEAT CURED EPOXY SYSTEM, DEVELOPED SPECIFICALLY FOR USE ON INSTRUMENT AND POWER TRANSFORMERS. THE CURED MATERIAL EXHIBITS EXCELLENT THERMAL STABILTY AND THERMAL CYCLING PERFORMANCE. PRODUCT MEETS UL94-HB FLAMABILITY REQUIREMENTS.

| SALES SPECIFICATION | CLR 1336 | CLH 5515 |
|---|---|---|
| COLOUR | BLACK | AMBER |
| VISCOSITY (NOTE 1, NOTE 4) | 15000 - 30000 CPS @ 70 °C | 5000 - 15000 CPS @ 45 °C |
| SPECIFIC GRAVITY | 1.85 ± 0.03 gm/cm³ | 1.16 ± 0.02 gm/cm³ |
| SHELF LIFE | 12 MONTHS | 12 MONTHS |

**HANDLING:**

| | |
|---|---|
| MIX RATIO BY WEIGHT (A:B) (NOTE 2) | 100:50 (by vol. 100:80.0) |
| MIXED VISCOSITY (NOTE 4) | 4000 cps @ 65 ºC |
| POT LIFE OF 200 gm. mass (NOTE 4) | 25.00 Min. @ 125 ºC |
| GEL TIME OF 200 gm. mass (NOTE 4) | 40.00 Min. @ 125 ºC |

**CURE SCHEDULE (NOTE 3):**

| | |
|---|---|
| RECOMMENDED CURE SCHEDULE | 4 Hrs. @ 125 ºC |
| OPIONAL POST CURE | 150 @ 150 ºC |

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

| | |
|---|---|
| COLOUR | BLACK |
| DENSITY (gm/cm³) | 1.54 |
| SHORE HARDNESS | 82D |
| TENSILE STRENGTH (psi) (ASTM D 638) | 3850 |
| TENSILE ELONGATION (%) (ASTM D 638) | 37.5 |
| FLAMABILITY RATING | UL94-HB (130c.) |
| GUIDE TO OPERATING TEMPERATURE(°C)(NOTE 6) | 180 |
| LINEAR SHRINKAGE (in/in) (ASTM D 2566) | 0.0080 |
| COEFFICIENT OF THERMAL EXPANSION (in/in/°C) | 40X10^-6 |
| THERMAL CONDUCTIVITY W/(m•K) | 0.6 |

| ELECTRICAL PROPERTIES | | |
|---|---|---|
| **DISSIPATION FACTOR A** | @1 | 0.0200 |
| **DIELECTRIC STRENGTH** | 425 Volts/Mil | 62.5 Mil/Section |
| **ARC RESISTANCE** | | 180 Seconds |
| **VOLUME RESISTIVITY** | | 300 x10^14 Ω•cm |

## 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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