

# **CROSSLINK TECHNOLOGY INC.**

FORMULATED EPOXIES, URETHANES - CUSTOM CAST PARTS

9001
REGISTERED
QUALITY SYSTEM
SINCE 1981

TECHNICAL BULLETIN: CLR 1796 / CLH 6580

## **PRODUCT DESCRIPTION:**

A TWO COMPONENT, LOW VISCOSITY, ROOM TEMPERATURE CURE EPOXY SYSTEM. MATERIAL HAS YELLOW CARD UL94-V0 RATING, AND CONTAINS NON ABRASIVE FILLERS SUITABLE FOR METER MIX DISPENSE.

| SALES SPECIFICATION        | CLR 1796                       | CLH 6580                       |
|----------------------------|--------------------------------|--------------------------------|
| COLOUR                     | BLACK                          | AMBER                          |
| VISCOSITY (NOTE 1, NOTE 4) | 30000 - 50000 CPS @ 22 °C      | 20 - 50 CPS @ 22 °C            |
| SPECIFIC GRAVITY           | 1.55 ± 0.03 gm/cm <sup>3</sup> | 0.95 ± 0.02 gm/cm <sup>3</sup> |
| SHELF LIFE                 | 12 MONTHS                      | 12 MONTHS                      |

#### **HANDLING:**

| MIX RATIO BY WEIGHT (A:B) (NOTE 2) | 100:9 (by vol. 100:14.0) |
|------------------------------------|--------------------------|
| MIXED VISCOSITY (NOTE 4)           | 5000 cps @ 22 °C         |
| POT LIFE OF 200 gm. mass (NOTE 4)  | 30.00 Min. @ 22 °C       |
| GEL TIME OF 200 gm. mass (NOTE 4)  | 60.00 Min. @ 22 °C       |

### GEL TIME~12 Min @ 60°C

## **CURE SCHEDULE (NOTE 3):**

| RECOMMENDED CURE SCHEDULE | 24 Hrs. @ 22 °C |
|---------------------------|-----------------|
| ALTERNATE CURE SCHEDULE   | 4 Hrs. @ 60 °C  |

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

| COLOUR                                      | BLACK          |
|---|----------------|
| DENSITY (gm/cm³)                            | 1.48           |
| SHORE HARDNESS                              | 87D            |
| TENSILE STRENGTH (psi) (ASTM D 638)         | 6500           |
| TENSILE ELONGATION (%) (ASTM D 638)         | 4.0            |
| HDT(°C) (ASTM D 648)                        | 97             |
| FLAMABILITY RATING                          | UL94-V0 (90c.) |
| COMPRESSIVE STRENGTH (psi)                  | 13500          |
| GUIDE TO OPERATING TEMPERATURE(°C)(NOTE 6)  | 130            |
| LINEAR SHRINKAGE (in/in) (ASTM D 2566)      | 0.0040         |
| COEFFICIENT OF THERMAL EXPANSION (in/in/°C) | 45x10^-6       |
| THERMAL CONDUCTIVITY W/(m•K)                | 0.80           |

| ELECTRICAL PROPERTIES |               |                       |  |  |
|-----------------------|---------------|-----------------------|--|--|
| DISSIPATION FACTOR A  | @1            | 0.0200                |  |  |
| DIELECTRIC STRENGTH   | 450 Volts/Mil | 62.5 Mil/Section      |  |  |
| ARC RESISTANCE        |               | 150 Seconds           |  |  |
| VOLUME RESISTIVITY    |               | 40 x10^14 ohm•cm 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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