



“Our strength is in our formulations”

TECHNICAL BULLETIN:

CLI 4175 / CLH 6104

DESCRIPTION: A ROOM TEMPERATURE CURE, TWO COMPONENT POLYURETHANE GEL COAT SYSTEM. THIS HIGH PERFORMANCE MATERIAL HAS OUTSTANDING TEAR STRENGTH AND ABRASION RESISTANCE. THE PRODUCT IS RECOMMENDED FOR TOOLS, FOUNDRY PATTERNS AND CORE BOXES. THE FORMULATION DOES NOT CONTAIN MOCA OR MDA.

HANDLING: (NOTES 1,2 & 5)

<u>RESIN (Part A)</u>	<u>HARDENER (Part B)</u>	<u>MIX RATIO (By weight)</u>	<u>VISCOSITY (cps) (Mixed)</u>	<u>POT LIFE (200 gms)</u>	<u>DEMOULD</u>
CLI 4175	CLH 6104	100:100	10,000 – 25,000	20 Minutes	24 Hours

CURE SCHEDULE:(NOTE 3)

OPERATING TEMPERATURE:

5 – 7 DAYS @ R.T. OR 16 HOURS @ 80°C

105°C

CURED PROPERTIES: (NOT INTENDED FOR PREPARATION OF SPECIFICATIONS)

<u>SHRINKAGE (in/in)</u>	<u>HARDNESS (Shore)</u>	<u>TENSILE (psi)</u>	<u>FLEXURAL (psi)</u>	<u>MODULUS (psi)</u>	<u>ELONGATION (%)</u>	<u>HDT (°C)</u>
0.002	65/60D	2,600	17,500	2,000	125	N/A

**PACKAGING
Pre-weighed Units**

SPECIFIC GRAVITY

	<u>gm/cm³</u>	<u>lb/in³</u>
25 Kg Total	1.3	0.047
5 Kg Total	19,230 cm ³	1,170 in ³
	3,850 cm ³	243in ³

TIPS ON MIXING:

- Stir each component individually prior to mixing together.
- Mix together in the recommended ratio and stir for 4 – 5 minutes frequently scraping the sides of the container. Do not use wood stir sticks as the wood may contain moisture.

TIPS ON CURING:

- If the tool is to be removed from the model, depending on the design, supports may be required during post cure.
- Use step cure for optimum dimensional reproduction.

****Typical properties shown are in Laminate Form**

NOTES:

- 1) If a filled resin, settling may occur during transportation or storage. Fillers must be remixed before use.
- 2) The mix ratio must be within $\pm 2\%$ of the stated value and thorough mixing is required to avoid degraded properties.
- 3) Other cure schedules may yield satisfactory results however; these should be determined by the customer for his given application.
- 4) Unless otherwise specified, all measurements are taken at 22⁰C.
- 5) These products may trigger allergic reactions in some individuals. Prevent contact with skin; wash with plenty of soap and water if contact occurs and **Read the Material Safety Data Sheet** before using the materials. **Do Not Breathe Vapours** provide good ventilation and exercise good housekeeping at the work area.
- 6) 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.
- 7) If stated, the “**Guide to Operating Temperature**” is based on our experience with materials of similar chemistry and/or thermal index. The ultimate suitability of a product for a particular operating temperature is application dependent and **may change according to the demands placed upon it in service.**

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 ASSESSMENT 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 MERCANTABLE OR FIT FOR ANY PARTICULAR PURPOSE; OR THAT THE USE OF SUCH OTHER INFORMATION OR PRODUCT WILL NOT INFRINGE ANY PATENT.

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