

## Ultralane<sup>®</sup> 758A/B

### SHORE 40A POLYURETHANE CASTING SYSTEM

Ultralane<sup>®</sup> 758A/B is an easy to use, low viscosity, flexible casting system. It contains no MOCA or TDI and cures at room temperature or can be accelerated with heat. This system generates relatively low exothermic heat during curing, allowing it to be cast in up to 2" thick sections. The Ultralane 758 system cures to a natural beige color and is easy to pigment using our Epoxicolor or Reactint colorants.

The cured polymer is tough, tear-resistant and ideal for making resilient parts, pads, or flexible molds. It reproduces fine details when used for making molds and is flexible enough to be stripped from parts with deep under cuts. Ultralane 758 is also used for foundry patterns, core boxes and metal-forming dies where it generally is used to face a cast metal, laminated epoxy, or wood back-up structure with 1/2" to 3/4" of cured Ultralane 758. Finally, the Ultralane 758A/B can be used for encapsulating flexible or stress-sensitive electronic components.

The Ultralane<sup>®</sup> 758A/B system can be ordered in custom colors and if required, can be supplied with UV stabilizers or anti-oxidants added to protect against extended exposure to UV light or high temperatures in use. Many other custom variations are available to meet your requirements. Please contact us to discuss your application if you'd like to receive samples of a custom color or to discuss a custom variant that would be suitable for your application.

#### **SUGGESTED APPLICATIONS:**

- Resilient Parts, Pads, Flexible molds.
- Encapsulating Stress Sensitive Devices
- Facing Foundry patterns

<b>HANDLING PROPERTIES</b>	<b>VALUE</b>	<b>TEST METHOD</b>
<u>Ultralane 758A (resin/pre-polymer)</u>		
Visual Appearance	Brownish Liquid	
Density, Part A	1.04 g/cm <sup>3</sup>	ASTM E-201
<u>Ultralane 758B (hardener)</u>		
Visual Appearance	Beige – Tan Liquid	
Density,	1.30 g/cm <sup>3</sup>	ASTM E-201
Mixed Viscosity @ 25°C	1,600 cps	ASTM D-2393
Mix Ratio by weight and volume:	80A:100B by weight or 1:1 by volume	
Pot life, 150 gram mass	30 minutes	
Pot life, 1 lbs. (454 g.) mass	25 minutes	
Peak Exotherm, 200g. mass @ 25 °C	27.8 °C (100°F)	
Demolding time: 16-24 hours @ room temp. or allow to gel for 2 hours at room temp. then cure for 4 hrs. at 150°F or 2 hrs at 80°C. Allow to cool prior to demolding.		
Cure Schedules: 3-7 days at room temperature or gel at 25°C for 4 – 24 hours + 16 hours @ 150°C (66°C) or 8 hours at 80°C.		

CURED PROPERTIES	VALUE	VALUE	TEST METHOD
	ROOM TEMP. CURE	HEAT CURE	
Density	1.17 g/cm <sup>3</sup>	1.17 g/cm <sup>3</sup>	ASTMD-792
Hardness, Shore D	40±5	42±5	ASTM D-2240
Ultimate Tensile Strength	550 psi	570 psi	ASTM D-638
Tensile Elongation	400%	410%	ASTM D-638
Tear Strength, Die C	62 ppi	70 ppi	ASTM D-624
Compression Set	8%	25%	ASTM D-395B
Linear Shrinkage during cure*	0.003 in/in	0.010 in/in	ASTM D-624

\* Molds are half round steel, 10 inches long, 0.875 inches deep

### **PROCESSING AND APPLICATION INSTRUCTIONS:**

Prior to use stir the container of Ultralane 758B – it may slightly settle or separate during storage or shipment and should be re-mixed prior to use. When ready to use, weigh Part A and Part B into a clean mixing container. Mixing containers should preferably be made of polypropylene, polyethylene, glass, or non-corroding metal. (Stainless steel, aluminum, etc.). Always use weighing equipment having accuracy that is ±1% or less of the smallest quantity that you will be weighing. Blend Parts A & B thoroughly using a spatula or stirring stick for at least 2 minutes using a kneading motion. Scrape the bottom and sides of the mixing container carefully and frequently to produce a uniform mixture.

For best results, vacuum de-gas the mixed material under vacuum prior to casting or use in encapsulation. Due to the low viscosity of the mixture, air release is generally good, even without vacuum de-airing, but for release of all air bubbles, vacuum or a vibrating table will be quite helpful. The addition of a few drops of one of the products from our Airout line of air release agents may also be helpful in applications where vacuum de-gassing equipment is not available.

### **PACKAGING AVAILABLE:**

This product is available in quarts, gallons, 5-gallon pails and other package sizes by request.

Please call use with any special packaging requests or for information on custom kitting.

### **STORAGE GUIDELINES:**

Store these materials in a clean, cool and dry environment in their tightly closed original containers. Protect from extended exposure to temperatures below 15°C (59°F). Crystallization may occur if the material is exposed to cold for extend periods. If this occurs, heat the entire container for 4 hours at 70°C to re-liquefy the material. Allow to cool to ambient temperature prior to using. Also protect the EpoPro 104A&B from exposure to moisture or high humidity. Tightly re-seal containers after use. If the recommended storage conditions are observed the products will have a minimum shelf-life of 12 months from the date of shipment.

### **HANDLING PRECAUTIONS:**

Mandatory and recommended industrial hygiene procedures should be followed whenever these products are being handled and processed. For additional information please consult the corresponding material safety data sheets.

## PERSONAL HYGIENE:

### **Ultralane 758A**

**WARNING!** Can cause skin irritation, eye irritation, allergic respiratory reaction, and allergic skin reaction. Can be Harmful if inhaled. May cause eye & skin irritation. Avoid contact with eyes, skin, or clothing. Wear eye protection and impervious gloves when handling. Wash thoroughly after handling. Avoid breathing vapor or mist. Keep containers closed when not in use. Use only with adequate ventilation. Do not take internally.

### **Ultralane 758B**

**CAUTION!** In accord with good industrial practice, handle with due care. Could cause eye, skin, and respiratory irritation. Prolonged or repeated skin contact or inhalation of vapors may cause allergic skin or respiratory reactions. Harmful if inhaled or swallowed. Avoid contact with eyes, skin, or clothing. Wear eye protection and impervious gloves when handling. Wash thoroughly after handling. Avoid breathing vapor or mist. Keep containers closed when not in use. Use only with adequate ventilation.

## FIRST AID

In case of contact:

**Skin** – Immediately wash skin thoroughly with mild soap and water. Remove contaminated clothing and wash before reuse. Destroy contaminated shoes and other articles made of leather.

**Eyes** – Immediately flush eyes with plenty of water for 15 minutes and get prompt medical attention.

**Inhalation** - Remove person to fresh air. Administer oxygen or artificial respiration if necessary. Call a physician.

**Ingestion** - Do not induce vomiting. Dilute with plenty of water and contact physician immediately. Never give anything by mouth to an unconscious person.

## DISCLAIMER:

**IMPORTANT:** The following supercedes Buyer's documents. **SELLER / MANUFACTURER MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, INCLUDING OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** No statements herein are to be construed as inducements to infringe any relevant patent. Under no circumstances shall Seller / Manufacturer be liable for incidental, consequential or indirect damages for alleged negligence, breach of warranty, strict liability, tort or contract arising in connection with the product(s). Buyer's sole remedy and Seller's sole liability for any claims shall be Buyer's purchase price. Data and results presented are based on controlled or laboratory work and must be confirmed by Buyer by testing for its intended conditions of use. The product(s) has not been tested for, and is therefore not recommended for, uses for which prolonged contact with mucous membranes, abraded skin, or blood is intended; or for uses for which implantation within the human body is intended

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