

Ultralane[®] 757-55A/B



SHORE 55 ± 5D FLAME RETARDANT POLYURETHANE CASTING SYSTEM

Ultralane[®] 757-55A/B is an easy to use, low viscosity, casting system that readily picks up mold details and releases air bubbles. It contains no MOCA or TDI and is a 100% solids system that is flame retardant. It is excellent for casting tough semi-rigid parts. It is also excellent for electrical encapsulation, as a sealant for filters and other parts, and is helpful in protecting against vibration.

The Ultralane 757-55 system produces a natural translucent off-white polymer and is also available in standard Black. The natural color is easy to pigment or dye prior to curing to achieve a wide range of colors and visual effects. Custom colored versions are also available, as are versions containing UV stabilizers or anti-oxidants to give protection against extended exposure to UV light or high temperatures. Please contact us if a custom variant would be helpful for your application.

SUGGESTED APPLICATIONS:

- Prototype & Short-run parts such as impellers, rollers, gears and wheels.
- Bonding & sealing filters, electronic modulus, and other parts
- Electric Encapsulation

HANDLING PROPERTIES	VALUE	TEST METHOD
<u>Ultralane 757-55A (resin)</u>		
Visual Appearance	Clear Amber liquid	
Density, Part A	1.24 g/cm ³	ASTM E-201
Viscosity, Part A, at 25°C	600 cps	ASTM D-2393
Flash Point	>93°C	ASTM D-92
<u>Ultralane 757-55B (hardener)</u>		
Visual Appearance	Milky-white or Black Liquid	
Density,	1.06 g/cm ³	ASTM E-201
Viscosity, Part B, at 25°C	360 cps	ASTM D-2393
Flash Point	>93°C	ASTM D-92
Mixed Viscosity at 25°C	450 cps	ASTM D-2393
Mix Ratio by weight and volume:	1A: 1B by weight or volume	
Pot life, 100-gram mass	45-90 minutes*	
Demolding time:	24 hours at room temperature or allow to gel then cure for 4 hours at 150°F or 2 hours at 80°C. Allow to cool prior to demolding.	
Cure Schedules:	48 hours at 25°C (Full properties may take up to 7 days at room temperature) or gel at 25°C for 2 – 24 hours + 8 hours at 80°C.	

*The gel time can be varied from 30 seconds to greater than 3 hours by request.

CURED PROPERTIES	ROOM TEMP. CURE	TEST METHOD
Density	70 lb./ft ³ (1.1 g/cm ³)	ASTM D-792
Hardness, Shore D at 25°C (77°F)	55±5	ASTM D-2240
Ultimate Tensile Strength	>1,000 psi	ASTM D-638
Tensile Elongation	>100%	ASTM D-638
Tear Strength	>250 ppi	ASTM D-624
Linear Shrinkage during cure*	<0.001 in/in	ASTM D-624
Water Absorption by weight		ASTM D-570
24 hours at 25°C	<0.25%	
7 days at 25°C	<1%	
2 hours in boiling water	<1.5%	
Thermal conductivity	0.18 W/mK	ASTM D-2214

* Molds are half round steel, 10 inches long and 0.875-inch deep

PROCESSING AND APPLICATION INSTRUCTIONS:

To use, weigh Part A and Part B into a clean mixing container or use volumetric mixing cups. 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.

PACKAGING AVAILABLE:

This product is available in 5-gallon pails as well as gallon, and quart kits. It can also be supplied in dual syringe cartridges in 50ml, 200ml, and 400ml sizes. Dual syringe cartridges eliminate the need for hand mixing and allow for virtually air free injection into your mold.

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 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 & PERSONAL HYGENIE

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.

Ultralane 757-55A

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 757-55B

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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