

Ultralane[®] 792-4A/B

2 COMPONENT, SELF-FOAMING URETHANE SYSTEM (4 LB/FT³ DENSITY)

Ultralane[®] 792-4A/B is 2-part urethane system that reacts to produce a self-rising urethane foam with many applications. When fully cured it has excellent mechanical and electrical properties and resists water and chemicals. This system can be used for making low density models, for marine flotation, or for aerospace or electrical potting.

The Ultralane 792 series of products are available in several different densities and in custom colors upon request. Please contact us to discuss your application if you'd like to receive samples of a custom variant that might be suitable for your application.

SUGGESTED APPLICATIONS:

- Marine flotation / buoyancy applications
- Low density tooling/model making
- Aerospace or electrical potting.

| HANDLING PROPERTIES | VALUE | TEST METHOD |
|---|---|--------------------|
| <u>Ultralane 792-4A</u> | | |
| Visual Appearance | Brown liquid | |
| Density | 1.20 g/cm ³ | ASTM E-201 |
| Viscosity, Part A, @ 25°C | 100 | ASTM D-2393 |
| Flash Point | >100°C | ASTM D-92 |
| <u>Ultralane 792-4B</u> | | |
| Visual Appearance | Light yellow to amber liquid | |
| Density | 1.1 g/cm ³ | ASTM E-201 |
| Viscosity, Part B, @ 25°C | 1500 cP | ASTM D-2393 |
| Flash Point | >100°C | ASTM D-92 |
| <u>Mixed Properties</u> | | |
| Mixed Viscosity | 1,000 cP | |
| Mix Ratio (part by weight) | 1:1A/B | |
| Expansion rate | approximately 15 times liquid volume | |
| Shelf-life | at least 12 months @ room temperature (~ 25°C) | |
| Pot life (100 grams) @ 25°C | 1-3 minutes | |
| Cure Schedules: | 24 hours @ 25°C or 8 hours at 40°C or 2 hours @ 65°C* | |
| *Note: allow to set first at room temperature (~ 15 – 30 minutes prior to any heat cure). | | |

| PHYSICAL PROPERTIES (Tested at 25C unless otherwise noted – cured 2 hours @ 65C) | | |
|---|-----------------------|--------------------|
| | | <u>TEST METHOD</u> |
| Appearance | Cream to light yellow | Visual |
| Density (Free rise at 77F)* | 4.0 lbs / cubic foot | |
| Buoyancy (flotation) | 54 lbs / cubic foot | |
| Tensile Strength, parallel to foam rise | 110 psi | ASTM D-695 |
| Compressive Strength, parallel to foam rise | 90 psi | ASTM D-695 |
| Shear strength, parallel to foam rise | 70 psi | |
| Moisture absorption (24 hour in boiling water - % weight gain) | 0.1% | ASTM D-570 |
| Thermal Rating | -55°C to 105°C | EIC 216 |

NOTE : Values are based on laboratory or average production results – not for specification purposes. * also density will vary with ambient temperature and based on any factors that restrict expansion.

PROCESSING AND APPLICATION INSTRUCTIONS :

Ultralane 792-4A/B should be mixed vigorously for 25 – 30 seconds then poured into the prepared mold or cavity. For large quantities, mix with a drill mixer or other mechanical means to ensure complete mixing. For large castings, you can mix and pour in layers and the layers will bond to each other. For best results, allow 15 – 30 minutes between layers. This allows the first layers to set somewhat prior to the following layers being applied.

For best adhesion to other materials, sand-blast, abrade, or otherwise prepare the surface for bonding by roughening it. After roughening, clean the surface thoroughly of any loose material, dust and debris.

PACKAGING AVIALABLE:

This product is available in a wide range of package sizes including quart kits, gallon kits, and 5-gallons kits.

STORAGE GUIDELINES:

Store the Ultralane 792-4A&B, in a clean, cool and dry environment in its tightly closed original containers. Protect from extended exposure to temperatures below 15°C (59°F) to prevent crystallization. If crystallization occurs, heat the entire container 4 hours at 60°C to re-liquefy the material. Also protect from exposure to extended 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.

Product Datasheet



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 792-4A

CAUTION! May cause eye & skin 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. Do not take internally.

Ultralane 792-4B

CAUTION! May cause eye & skin 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. Do not take internally.

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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