

# TECHNICAL DATA SHEET

Product: SharkThane Hard Pro 70-3

Product No: 300403700308 – 2 Quart kit (2#A / 2#B)

300403700310 – 2 Gallon kit (8#A / 8#B) 300403700313 - 10 Gallon kit (40#A / 40#B)

Trade Name: SharkThane Hard Pro 70-3

Supplier: Fiberlay Inc.

24 S. Idaho St Seattle, Wa 98134 (206) 782-0660

#### **DESCRIPTION:**

The SharkThane Hard Pro70-3 Liquid Plastic is an ultra-low viscosity casting resin that yields castings that are bright white and virtually bubble free.. It offers the convenience of a 1A:1B by volume or 100A:90B by weight mix ratio, cures at room temperature and begins to gel in 3 minutes. This resin readily accepts fillers and can be colored with SharkThane® Pigment. Fully cured castings are tough, durable, machinable and paintable.

#### **APPLICATION**

SharkThane Hard Pro70-3 Liquid Plastic is good for reproducing small to medium size sculptures, making prototype models, special effect props, decorative jewelry and many more uses.

# PROPERTIES AND CHARACTERISTICS:

Pot Shore life	<u>Cure</u> Time	Mixed Visc	Mix Ratio	Color	Specific Gravity	Heat Deflectn	<u>Shrink</u>	Elong- ation	<u>Tensile</u> Strength	<u>Compr</u> Strength
3 70 D min	30 min	80	1A:1B	White	1.05	120°F	0.01	5%	3,000	4,000

## PREPARATION:

Materials should be stored and used in a warm environment (73 $^{\circ}$  F / 23 $^{\circ}$  C). These products have a limited shelf life and should be used as soon as possible. Wear safety glasses, long sleeves and rubber gloves to minimize contamination risk. Because no two applications are quite the same, a small test application to determine suitability for your project is recommended.

A release agent is necessary to facilitate demolding when casting into or over most surfaces. Use a paste, spray or brush on release agent made specifically for mold making. A liberal coat of release agent should be applied onto all surfaces that will contact the plastic. After 30 minutes apply a second layer of and allow it to dry for 30 minutes also. Silicone rubber molds usually do not require a release agent when casting polyurethanes, however, applying a release agent will prolong the life of the mold.

IMPORTANT: Shelf life of product is reduced after opening. Remaining product should be used as soon as possible. Immediately replacing the lids on both containers after dispensing product will help prolong the shelf life of the unused product. XTEND-IT® or PolyPurge® Dry Gas Blanket will significantly prolong the shelf life of unused liquid urethane products.

#### **MEASURING AND MIXING:**

Liquid urethanes are moisture sensitive and will absorb atmospheric moisture. Mixing tools and containers should be dry, clean and made of metal, glass or plastic.

Stir or shake both Part A & Part B thoroughly before dispensing. Carefully weigh Parts A and B as specified, pour into mixing container and mix thoroughly scraping sides and bottom of mixing container often. Pour this mix into a second mixing container and stir. Take caution to avoid introducing air into the mix. If using a drill mixer, submerge the mixer before turning it on. If using a spatula, stir deliberately without whipping in air. If adding a filler, pigment or tint, do so after mixing parts A and B.

Do not measure more SharkThane than you can pour within its pot life. If you have a large mold, you may pour SharkThane in more than one batch.

Partial containers that have been worked out of should be blanketed with dry nitrogen or the equivalent and sealed tightly.

## **POURING:**

Pour your mixture in a single spot at the lowest point of the containment field and let the mixture seek its level. This will help minimize air entrapment. Pour slowly so that any air bubbles that may have formed during mixing can break over the lip of the container as it pours out SharkThane does not require pressure casting or vacuum degassing.

### **CURING:**

Leave SharkThane in the mold for the full cure time. Exotherm created during cure will leave castings hot. Let cool to room temperature before handling. Fumes, which may be visible as this product starts to "gel" and cure, will dissipate with adequate ventilation. Do not inhale/breathe fumes. Castings will reach "full cure" faster and achieve maximum physical properties if post cured. Allow material to cure for recommended cure time at room temperature followed by 4 - 6 hours at 150°F/65°C. Allow casting to come to room temperature before handling.

Cured castings are durable, resist moisture, moderate heat, solvents and dilute acids. Rigid SharkThanes can be machined, primed/ painted or bonded to other surfaces (any release agent must be removed). If machining cured material, wear dust mask or other apparatus to prevent inhalation of residual particles. Castings can be displayed outdoors after priming and painting. Unpainted castings may yellow over time - more quickly when exposed to ultra-violet light.

# **SAFETY INFORMATION:**

The material safety data sheet (MSDS) for this or any SharkThane product should be read before using and is available upon request. All SharkThane products are safe to use if directions are read and followed carefully. WARNING: IRRITANT TO EYES, SKIN & MUCOUS MEMBRANES. May contain Methylene Diphenyl Isocyanate. Do not get in eyes, mucous membranes or on skin. Do not take internally. Do not breathe fumes. Use only with adequate ventilation. Wear chemical-resistant gloves and eye protection when using these products.

FIRST AID: In case of eye contact, flush thoroughly with water for 15 minutes and get immediate medical attention. In case of skin contact, wash thoroughly with soap and water. If irritation persists, get medical attention. If swallowed, do not induce vomiting. Drink 1-2 glasses of water and get immediate medical attention. If vapors are inhaled or if breathing becomes difficult, remove person to fresh air. If symptoms persist, get medical attention. CAUTION: HOT! When combined, parts A & B may generate heat in excess of 212°F (100°C) which could cause burns to the skin. Let cured plastic cool before handling.

#### KEEP OUT OF REACH OF CHILDREN

All data, statement, and recommendations made herein are based upon information we to be believe to be reliable, but are made without any representation or guaranty or warranty of accuracy and are made with reservation of all patent right. Also statement regarding the use of our products or processes are not to be construed as recommendations for their use in violation of any patents rights or in violation of any application laws or regulations.