



# TECHNICAL DATA SHEET

**Product:** Sharkthane Hard Flex Pro 60-25 Black |  
**Product No:** 3004026025133 – 10 Gallon Kit (40#A/24#B) |  
**Trade Name:** Sharkthane Hard Flex Pro 60-25 Black |  
**Supplier:** Fiberlay Inc.  
1468 Northgate Blvd  
Sarasota, FL 34234  
(206) 782-0660

## DESCRIPTION:

Sharkthane Hard Flex Pro 60-25 Black is specifically formulated for high abrasion and impact resistance. This product is a safe, easy-to-handle, room temperature mixing and curing system that does not contain TDI, MDI, MDA or MOCA.

## APPLICATION:

Sharkthane Hard Flex Pro 60-25 Black is relatively insensitive to typical environmental moisture and will make good void-free parts. Castings are particularly suitable for foundry patterns, mining and mineral process industries.

## PROPERTIES:

Shore	Pot life	Cure Time	Mixed Viscosity	Mix Ratio	Color	Specific Gravity	Heat Deflectn	Shrink	Elong- ation	Tensile Strength	Compr Strength
60 D	25 min	4-5 hours	2,200	By wt. 100:60	Black	1.06	150°F	<0,002	325	3,400	3,600

## PREPARATION:

Materials should be stored and used in a warm environment (73° F / 23° 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 de-molding 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.

## MIXING & MEASURING:

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. To use a vacuum degassing technique: after mixing parts A and B, and before pouring into the mold, subject mixture to 29 h.i.g. mercury. Make sure your missing container has 3-4 times the capacity of the mixed material to allow for volume expansion. Be aware of pot life so that material does not set up in the container. To use a pressure casting technique: after pouring the mixed compound, the entire casting assembly (mold, dam structure, etc.) is placed in a pressure chamber and subjected to 60 PSI (4.2 kg/cm<sup>2</sup>) air pressure for the full cure time of the material.

**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. Post Cure - 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.

**PERFORMANCE:**

Cured castings are durable, resist moisture, moderate heat, solvents and dilute acids. Rigid Sharkthane 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.

---