Tarbender®
High Gloss Clear Coating and Encapsulant

www.smooth-on.com

PRODUCT OVERVIEW

Tarbender® is a UV resistant clear liquid epoxy that can be poured over a variety of surfaces to provide a strong, high gloss coating. Parts A and B mix together and flow easily. **Tarbender®** epoxy cures at room temperature and offers high impact resistance.

Tarbender® is an excellent wood bar top coating and can also be poured over plaster, concrete, foam, fabrics, etc. You can use Tarbender® to encapsulate 3-D objects or coat flat objects, paper and more.

Material Properties	
Mix Ratio By Volume	2A:1B
Mix Ratio By Weight	100A:44B
Mixed Viscosity - CPS. (ASTM D2393)	1100
Specific Gravity - Mixed; g./c.c. (ASTM D1475)	1.09
Spec. Volume - Mixed; cu. in./lb. (ASTM D792)	25.4
Pot Life - in a 300g mass (ASTM D2471)	45 minutes
Thin Film Working Time*	2 hours
Thin Film Tacky Recoat Time*	6 hours
Thin Film Tack Free Time*	8 hours
Cure Time - Hours*	16
Color - Mixed	Clear
Shore D Hardness (ASTM D2240)**	75

** Measured at 1/16" (1.6mm) thickness*
*** Value measured after 7 days at 73°F / 23°C*

PROCESSING RECOMMENDATIONS

Product and Work Area Preparation – Tarbender® containers should be stored and used at room temperature (73 F/23 C). Wear long sleeve garments, disposable gloves and safety glasses. Have all materials and tools on site before you begin;

- Measuring cups
- Paint Stirring Sticks
- 90% Isopropyl Alcohol
- Mixing containers
- Plastic Spreader or Wide Scraper
- Propane Torch

Mixing containers should be made of plastic, metal or wax coated paper. Due to very high temperature potential (exotherm) of Tarbender®, do not use glass or foam containers.

Ventilation - Use only in a well ventilated area and avoid breathing fumes. Wearing a NIOSH approved respirator is recommended.

Using Tarbender® to Coat Bar Tops

Usage Overview – Most bar tops require 2 – 3 layers of Tarbender® with a 4-hour cure time in between layers. You can apply as many ¼" (6.4mm) layers as needed.

Estimating Coverage – How Much Will You Need? you can correlate the square inch (cm) area of your bar top with the yield of mixed Tarbender®.

Tarbender® Coverage Rates			
Amount	**Poured at 1/16"(1.6mm)**	**Poured at 1/8" (3.2mm)**	**Poured at 1/4" (6.4mm)**
1 oz. / 28.3 grams	25.4 in^2 / 164 cm^2	12.7 in^2 / 82 cm^2	6.4 in^2 / 41 cm^2
Trial Unit (2.83 lbs. /1.28 kg)	8 ft^2 / 0.74 m^2	4 ft^2 / 0.37 m^2	2 ft^2 / 0.19 m^2
Gallon Unit (11.2 lbs. /5.08 kg)	32 ft^2 / 2.97 m^2	16 ft^2 / 1.48 m^2	8 ft^2 / 0.74 m^2
5 Gallon Unit (56.5 lbs. / 25.62 kg)	160 ft^2 / 15 m^2	80 ft^2 / 7.5 m^2	40 ft^2 / 3.75 m^2

Surface Preparation – Bar top surface to be coated with liquid epoxy should be level in all directions. Surface must be free of dust, oils or other contaminants. Tarbender® should not be used on surfaces coated with oil-based stain, as it will delaminate. Water based stains are compatible.

Sealing Porous Surfaces – unfinished wood surfaces, stone, marble, concrete, etc. should be sealed with a thin layer of Tarbender®. See "Pouring and Spreading Tarbender®" section below.

Pre-Mixing - Pre-mix Part B Before using – Shake Part B container well for 1 minute before dispensing.

Measuring – Accurately measure 2A:1B by volume into a plastic, metal or wax-free mixing container.

Safety First!

The material safety data sheet (MSDS) for this or any Smooth-On product should be read before using and is available on request. All Smooth-On products are safe to use if directions are read and followed carefully.

Tarbender® Resin PART A:

WARNING: IRRITANT TO EYES, SKIN & MUCOUS MEMBRANES.

Tarbender® Resin is irritating to the eyes and skin. Avoid prolonged or repeated skin contact to prevent possible sensitization. Avoid breathing vapors and use only with adequate ventilation. Wear personal protective equipment.

First Aid: In case of eye contact, flush thoroughly with water for 15 minutes and get immediate medical attention. In case of skin contact, wipe clean with white vinegar and 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.

Keep Out Of Reach Of Children.

Tarbender® PART B Hardener:

WARNING: IRRITANT TO EYES, SKIN & MUCOUS MEMBRANES.

EpoxAmite® Hardeners are corrosive materials and can cause severe eye and skin burns. They are sensitizers that may cause dermatitis from skin contact or vapor inhalation. Use these products only with adequate ventilation. Remove contaminated clothing and wash from skin with soap and water.

First Aid: In case of eye contact, flush thoroughly with water for 15 minutes and get immediate medical attention.

Keep Out Of Reach Of Children.

IMPORTANT: The information contained in this bulletin is considered accurate. However, no warranty is expressed or implied regarding the accuracy of the data, the results to be obtained from the use thereof, or that any such use will not infringe upon a patent. User shall determine the suitability of the product for the intended application and assume all risk and liability whatsoever in connection therewith.

Mixing – Mix using a flat edge wooden paint stick for 2 minutes. Scrape the sides and bottom of the mixing container with the edge several times. Pour contents into a new, clean mixing container and mix again for 2 minutes. If using a drill mixer, mix for 2 minutes and hand mix for 2 minutes. A large mass concentration of epoxy will reduce pot life and may become too hot to handle. If concentrated mass of epoxy begins to get very hot, move outside to open air. To extend working time, reduce mass by pouring mixture into a flat baking pan and pour onto bar top from there.

Do Not Vacuum – Subjecting mixture to vacuum will introduce air.

Pouring and Spreading Tarbender® - After mixing, pour a thin coat along the entire length of the bar top. Use a plastic scraper to spread Tarbender® uniformly over entire surface.

Do not exceed 1/16" (1.6 mm) for this layer. Look for bubbles and lightly pass propane torch over surface to dissipate. Let cure for 4 hours before applying another layer.

Note; do not exceed ¼" (6.4 mm) thickness per pour. If greater thicknesses are desired, pour in layers of ¼" (6.4 mm) with 4 hours minimum between layers.

For coating bar tops, a minimum thickness of 1/8" (3.2 mm) or two layers is recommended.

Non-Porous Surfaces do not require a sealing coat. Mix and pour Tarbender® as directed to ¼" (6.4 mm) thickness. Look for bubbles and lightly pass propane torch over surface to dissipate. Let cure for 6 hours.

If Encapsulating 3-D Objects – Apply a 1/16" (1.6 mm) coating to bar top as directed above. Dissipate bubbles with torch. Let cure for 4 hours. Place objects on top of cured layer. Mix a small amount of Tarbender® and pour directly over and around objects to break surface tension.

If Encapsulating Paper, Cardboard, etc. – Laminate paper before encapsulating. You can also seal surface with white glue (such as Elmer's Glue) mixed 4 parts glue to 1 part water). Allow to dry for 16 hours before encapsulating in Tarbender®.

Adding Color – You can add SO-Strong or IGNITE color tints. Pre-mix color tint into Tarbender® Part A thoroughly and then add Part B.

Adding New to Old - If too much time passes (72 hours or more) between applying layers of Tarbender®, delaminating may occur if you try to add more. For Best Results; lightly sand cured epoxy surface with 220 grit sand paper and wipe clean with denatured alcohol before mixing and applying new Tarbender®.

Releasing Tarbender® From Surfaces – if you do not want Tarbender® to adhere to a surface, apply two coats of Sonite Wax. Allow wax to dry 1 hour and buff before pouring epoxy.

Clean Up – 90% Isopropyl Alcohol will remove uncured Tarbender® from most surfaces. It can also be used to clean the surface of cured Tarbender® epoxy. Alcohol is flammable. Follow all safety precautions for handling flammable liquids and provide adequate ventilation.

Call Us Anytime With Questions About Your Application

Toll-free: **(800) 381-1733** Fax: **(610) 252-6200**

The new **www.smooth-on.com** is loaded with information about mold making, casting and more.