

TOP SECRET COATINGS

YOU MAY NEVER PAINT AGAIN!

REFINISHING COUNTERTOPS (Hard-Shell Urethane) (2/15/07)

This information has been prepared for reference when resurfacing countertops and similar surfaces with the Hard-Shell Urethane (TS-2) refinishing system. These products are easy to use, highly durable and economical producing a beautiful finish that really lasts. It provides excellent coverage and self levels without leaving brush or roller marks when properly applied however, best results are typically achieved in spray applications. It may be applied to virtually any surface including Metal, Fiberglass, Wood, Vinyl, Concrete, Masonry, Tile, Porcelain, Formica, Plastic, Composites and Glass. It has been designed to go on thin and out perform high build coatings. A supplied air respirator is required whenever spraying TS-2 Urethane.

NOTE: Please read the following information carefully before moving forward with your project. All products are best when used at room temperatures above 60 F. Dry and cure times will be extended without proper ventilation! These products can be dangerous when misused. The customer or end user(s) assume full responsibility for its proper use and application, as outlined in these installation instructions. Material Safety Data Sheets (MSDS) are available upon request.

What to watch out for: Incompatibly issues: Use TS-2 only with recommended thinners and primers. If you are painting over preexisting paint be sure it has cured before proceeding. **Mixing instructions:** Pour the contents of component B container into Component A container in its entirety. Stir thoroughly with a lifting motion for 3-5 minutes. There is no induction time. The mixing ratio is 7:1 (by volume). Pot life is 4 hours. **Watch your thickness:** This product must be applied at the proper thickness. The maximum wet film thickness is only 3 mils which is less than the thickness of a sheet of paper. If it is applied too thickly the coating may not dry or cure properly which may lead to extended dry and cure time or a failed application. TS-2 has been specifically formulated to go on thin and self level allowing it to spread further and cover better. **Runs and sags:** If you get any runs or sagging, usually, it has been applied too thick. TS-2 may be different than what you may have used previously so you may want to do a small test before committing to the entire project. **Cure times:** Hard-Shell Urethane is a two component catalyst cured aliphatic urethane coating system that is typically dry to the touch in 30 minutes and is dry enough for careful light foot traffic in 6-8 hours. Allow 5-7 days for it to achieve its full performance capabilities or film failure may occur. If the film remains soft after 24 hours it has likely been applied too heavily. Increasing air movement across the curing film is the best way to speed dry and cure times. For faster dry, use TS-6075 Accelerator. **Drying Problems:** After applying the topcoat or clear coat, you notice that the painted area is soft and can be easily indented with your fingernail you probably didn't let the basecoat dry long enough before applying the next coat. Solution - Just wait and let the paint dry. Allow more time until cured hard. **Thinning:** Hard-Shell Urethane may require thinning in spray applications. Recommended reduction is 5-10% depending on variations in temperature, humidity, equipment, spray tip size, desired control and application requirements. Proper thinning is required to achieve a leveled finish. Use only TS-620 Thinner. To prevent incompatibility issues and achieve the best results DO NOT substitute any other reducer or thinner.

1. Preparation: Completely remove all silicone or caulking from fixtures with a razor blade then sand off any remaining film on the fixture. Repair all damage, deep scratches, voids and cracks with a paintable repair material. All surfaces to be refinished must be sanded with 80-100 grit sandpaper to remove paint droppings, excess caulking or other unwanted imperfections prior to application. Fiberglass and like surfaces must be thoroughly sanded to roughen the surface prior to applying the primer. (Exceptions are Formica countertops, cultured marble and plastics. These surfaces require a light sanding with 300-400 grit sandpaper. Rust may be removed with a wire brush.

2. Clean: Recommend using TS-695 Etching Cleaner. Apply masking tape to trim prior to applying Etching Cleaner. Recommend wearing safety goggles, latex gloves and a solvent rated dust mask or respirator. Avoid splashing etching solution on bare skin. Apply Etching Cleaner 100% strength using a disposable paint brush. Do not allow solution to run onto any unmasked surfaces because it will deglaze them. Work the etching solution into the surface with a scrub brush or pad for 10 minutes. It is acceptable to do the work in sections. Rinse surface thoroughly after 10 minutes with clean water. An old towel or paper towels may be used to remove moisture from the fixture. **WARNING:** Even the smallest amount of moisture may ruin your job. All surfaces must be allowed to dry thoroughly and completely before proceeding with your project.

3. Apply Primer: Etching Primer (TS-664) is always required. This is an excellent high-build sandable “etching” primer available in White for light colors and Red Oxide for dark colors. Stir primer thoroughly with a lifting motion to suspend heavy solids from bottom of container. Apply Etching Primer evenly with a soft natural bristle brush or ¼” -3/8” wool or mohair roller cover. Recommended dry thickness is 4 mils. Once the primer has been allowed to dry and cure 2+ hours it can be sanded lightly with 200 grit sandpaper to remove imperfections in preparation for the top coat. It is OK to proceed without sanding. Primer must be thoroughly dry before topcoating.

4. Mix and thin epoxy: Stir Hard-Shell Urethane thoroughly with a lifting motion to suspend heavy solids and colorants from bottom of container. Thin only as needed. Spray applications typically require 5-10% dilution, brush and roll 0-5% dilution depending weather, humidity and type of equipment. Stir in TS-620 Thinner with a lifting motion. For spray applications we recommend straining the paint and stirring one more time. **NOTE:** The use of TS-6075 Accelerator is strictly optional. It is a highly effective additive that increases hardness, speeds the dry and cure time as well as increasing resistance to abrasions and impacts. After mixing paint and thinner, add TS-6075 Accelerator at a rate of 2 ounces per quart of paint or 8 ounces (one-half pint) per gallon. Mix thoroughly. Pot life with additives is approximately 1 hour.

5. Apply urethane color: Spray: Recommended tip for airless Sprayers: .015 to .021 tip. Begin by spraying 1 light coat and finish with a second good, wet, shiny coat waiting 10-15 minutes for the coating to flash prior to applying each coat. Normally 2 coats is all that is required. Avoid runs; if you do get any runs, wipe the run off with a paper towel lightly saturated with acetone. Brush & Roll: Begin by brushing edges with a brush then roll the rest maintaining a wet edge. Avoid overlaps and heavy application. Areas with too heavy build up may take days to dry and cure so avoid heavy build up. When Super-Fleck Chips, sparkles, flakes and other decorative elements are desired to enhance the texture or appearance they are evenly sprinkled onto the still wet surface of the color coat in brush and roll applications. In spray applications they are sprinkled onto the still wet surface of the second color coat creating the desired appearance.

6. Apply urethane clear: The clear coat application is required to seal in Super-Fleck Chips and like decorative elements, protects the color coat and acts as the wear layer. Brush, roll or spray according to guidelines as seen in steps 4 and 5. When finished, remove masking tape and paper. Do not allow fixture to dry with masking tape or paper left on it. Allow to Dry 24 hours depending on temperature, humidity and ventilation – **DO NOT USE SURFACE OR ALLOW PAINTED AREA TO GET WET FOR 36-48 HOURS.** Color, low temperature, high humidity and poor ventilation adversely affect drying times. **CLEAN UP:** Use TS-620 Thinner or Acetone. **CARE & CLEANING:** Do not use abrasive cleanser, scrub pads or bleach which will damage the finish.

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