## VERBRITE

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# Directions for Sealing Rusted Metal with Everbrite<sup>™</sup> or ProtectaClear<sup>®</sup>

Everbrite<sup>™</sup> coating is suitable for most all rusted metal projects. It is thicker and works well with porous metals like naturally rusted metal, corten or other steel. For certain rusted metal projects ProtectaClear<sup>®</sup> is needed; rusted metal countertops, sinks, or any surface that gets a lot of high use or abuse will require the hardness of ProtectaClear<sup>®</sup>. ProtectaClear<sup>®</sup> is thinner, so additional coats will likely be needed when using ProtectaClear<sup>®</sup>.

#### **5 Basic Steps**

#### 1. Neutralize Acids (if needed) 2. Smooth (if needed) 3. Dry Completely 4. Solvent Wipe 5. Apply Coating

\*\*If chemically rusting, remove any mill scale or oil prior to rusting.

#### PREPARATION

Thorough preparation is very important. If you try to take shortcuts on preparation, you will likely not achieve the intended results and may need to remove the coating and start again. Everbrite Coatings can be removed with solvents like xylene.

#### 1. NEUTRALIZE ACIDS

If the metal was artificially rusted with acids, neutralize the acid to stop the rusting process. Use EZ Prep™ Cleaner & Neutralizer in a solution of 1 part EZ Prep to 4 parts water. As an alternative, use 1 cup baking soda mixed with 1 gallon of water (or a similar ratio). Be careful to cover the entire surface at least once. Wipe, pour or spray the neutralizing solution on the surface being careful to completely neutralize. Rinse twice clean water.

#### 2. SMOOTH

Smooth, rough or rusted metal. The thicker the rust, the more coating it will take to seal it. Remove any loose, flaking or blooming rust. Prep Pads or synthetic steel wool pads work well to remove excess rust and to smooth the metal. (Do not use steel wool pads; use synthetic steel wool only.) A soft brush can be used to remove excess residue.

#### 3. DRY COMPLETELY

It is essential that the rusted metal be completely dry before coating. Rusted metal is porous and can hold moisture that can interfere with good adhesion. Even when the metal appears dry, it can still hold moisture. Moisture trapped in the metal can cause white or yellowish spots to appear under the coating. Warming the metal with heat guns, hair dryers, or extra time in the sun will help trapped moisture evaporate.

#### 4. SOLVENT WIPE

Solvent wipe or spray the metal with denatured alcohol or acetone to remove any traces of residue and to help dry the surface. The solvents dry quickly and help to remove moisture from the metal. This step needs to be done immediately before coating. Do NOT dilute or rinse the solvent. Skipping this step will result in poor adhesion of the coating. (Solvent

TIP: Denatured alcohol and acetone are preferred to xylene for rusted metal as they help remove moisture better.

not included in kits – available at hardware stores)

#### 5. APPLICATION OF COATING

#### **PREPARING THE COATING**

**SATIN finishes** – The flatting agent in the coating will settle. You MUST stir Satin well for 5 to 10 minutes each time before applying. Failure to stir well before you start and frequently throughout the application period may result in a streaky and uneven finish. (There is NO requirement to stir the clear finish.) Do NOT shake the can to avoid bubbles appearing in the coating. Do NOT thin the coatings.

#### HOW TO OPEN THE CAN

To remove the metal insert found in some cans, unscrew the cap. Hold the can to prevent the coating from spilling. Use a small screwdriver or ice-pick to pierce through the insert and pop it out. Use a small hammer to tap the screwdriver to puncture the metal. Discard this piece.



Allow for adequate ventilation. For personal protection, always wear nitrile or chemical resistant gloves when applying the coating. If spraying with an HVLP or airless sprayer, a NIOSH respirator is recommended.

Please read and follow all directions & cautions on packaging & Material Safety Data Sheet.

Our coating will melt rubber and soft plastics. Use nitrile gloves or chemical resistant gloves as rubber gloves will become sticky. Use glass or metal when pouring coating into another container. Use a natural bristled brush for a brush application (no synthetics).

- 1. Pour the coating into clean, dry, metal or glass pan.
- 2. First coat must be rolled on: Use a small diameter high density foam roller or smooth microfiber roller. Rusted metal is very porous, it is important to get a good first coat on the metal using the roller with moderate pressure to ensure full penetration of the coating into the porous surface.
- **3.** Submerge applicator completely into the coating. Gently squeeze out just the excess. Applicator should be saturated but not dripping. This is important as dry areas in the applicator can cause streaks.
- **4.** Applicator should roll smoothly. When it starts showing resistance, dip the applicator again. If you get drips, simply smooth them out before the coating starts to dry.

Observe the coating while applying: if the coating separates or does not look completely smooth, **STOP** and re-clean the surface. Other chemicals present on the surface can cause separation and need to be removed completely. Once removed, complete Steps 2 (Solvent Wipe) and 3 (Completely Dry) again. Repeat "Application" steps.

Let dry one hour or until it is completely dry before applying the second coat.

- 5. Second and Subsequent Coats: Use a recommended roller, natural-bristled paintbrush or paint sprayer with a fine-finish tip. Apply subsequent coats to the surface using light pressure, letting the applicator "glide" across the surface. Applicator should glide smoothly.
- 6. Let the coating dry completely. It will self-level as it dries. Everbrite coatings are selfannealing; meaning the second coat will become part of the first coat. Wait at least one hour between coats or until the previous coat is completely dry.

### SETTING A SPECIFIC PATINA DESIGN:

If a specific patina design is not to be disturbed, dab the coating on the surface first with an applicator cloth. Let the dabbed coating dry completely. Then apply the rolled coat. (Step 2)

## TEMPERATURE & HUMIDITY MATTER:

Coating is best applied in temperatures from 55-85 and without degrees humidity. (40-100 degrees outside temperature is a workable range.) The temperature of the metal is more important than the air temperature. The metal is too hot if you cannot place the back of your hand on it for 10-15 seconds. If it is too cold, warm the metal with a heat gun, hair dryer, or work in the sun or shade appropriately. Do not apply if the temperature is within 10 degrees of the dew point. You can access dew point information for your area on weather.com.

7. Due to the porous nature of rusted metal and the varying degree of rust, three (3) or

more coats will be required. After the third coat is completely dry, run a clean dry white cloth over the coated surface, if any rust transfer is present on the cloth, additional coating is needed. Apply additional coats, testing with a clean dry white cloth after each coat, until there is no transference of rust onto the cloth.

<u>CURE TIME:</u> The coating is an air dry solvent, so heat and air circulation help speed curing. Under normal circumstances & with good ventilation, the coating will be cured after 4-5 days. The coating will be delicate until it is fully cured, which can take up to two weeks. You can shorten cure time by gently heating the coating <u>AFTER</u> it is dry to the touch. Dry, coated items placed in a low temperature oven (140°F -180°F) for 1 hour will be cured when cooled.

Coating **MUST** be fully cured before prolonged contact with other surfaces, for example, packaging, allowing water to sit on the coated surface, immersing in water or filling fountains, etc. In most cases, dew or rain does not hurt the coating once it is dry for 3-4 hours. Do not allow pooling water to remain on the surface of the coating for a minimum of two weeks after coating.

**AFTER CARE**: Do NOT use solvent or citrus based cleaners or abrasives to clean coated metal. Do not use cleaners with "petroleum distillates". Suggested cleaners: Windex, mild dish soap and water or similar mild cleaners.

**MAINTENANCE & LONGEVITY:** Once coated, the coating is easy to maintain. Perform a rust transference test periodically to check if recoating is needed. Wipe with a damp cloth to remove dirt and residue, dry well, and recoat. The coating longevity is dependent on proper application of the coating, it's environment, and general use and abuse.

**SHELF LIFE OF COATING:** Our *Clear* coating has an indefinite shelf life if stored in an air tight metal or glass container. Keep any extra coating for touch ups. We recommend cleaning the threads of the container before reattaching the lid. The *Satin* finish coating will settle, eventually becoming difficult to mix well due to the flatting agent.

**COATING REMOVAL:** The coatings can be removed from rusted metals with solvents like Xylene or a Xylene substitute or they can be removed mechanically by sanding for larger areas. Small items can be soaked in solvent. Wear personal protection. Wet a cloth or paper towels with the solvent completely. Move the wet cloth over the coated metal with light pressure. Rubbing hard is not advised. When the coating begins to "melt", wipe it up and off of the surface. Repeat until the coating is gone.

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