

Quickstart Directions for CrobialCoat®

Suggested Project Use: High use or high touch areas where antimicrobial protection is desired. Excellent for railings, kitchens, bathrooms, door hardware, light switches, panel buttons, handicap push buttons. For use on stainless steel, aluminum, anodized aluminum, copper, brass, bronze, chrome, and any non-painted metals. Other suitable surfaces would be ceramics, tile/grout, hard woods, and most hard plastics.

Read entire directions thoroughly before beginning.

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. The article to be coated must be scrupulously clean and completely dry before applying the coating.

FOR SURFACES THAT LOOK HOW YOU WANT THEM:

1. **Ensure the surface is completely clean and dry.** Proper cleaning is surface dependent. For bare metals, wipe with a recommended solvent. Hard plastics, use 90%+ Isopropyl Alcohol. Other surfaces can be washed with a mild soap and water or our EZ Prep Cleaner, rinsed and dried completely.
2. **Skip to “4. Application of Coating”.**

FOR ANODIZED ALUMINUM THAT IS CHALKY OR OXIDIZED:

1. **Remove Chalk/Oxidation.** Wet the surface with water. Use a Prep Pad or equivalent and water to work off any chalk and oxidation. Clean evenly.
2. **Wash, Rinse & Dry.** Wet surface. Use EZ Prep as a Cleaner or an equivalent. Do not allow cleaner to dry on the surface. Rinse with water until water sheets off (no beading or separation). Dry completely.
3. **See Step “3. Solvent Wipe”.**
4. **See Step - “4. Application of Coating”.**

FOR TARNISHED METAL SURFACES:

1. **Clean or Polish.** Clean, polish or buff the surface to the luster desired with any metal polish you prefer. (We recommend MAAS Polish that is non-acidic, found on our website). The metal can also be sanded or simply cleaned to desired appearance.
2. **Neutralize!!! **Very important** (This Step can be skipped if acidic cleaners and polishes are not used.)** MAAS does not contain acid, however many polishes do, check ingredient list for any type of acid. If you are unsure, complete this step. 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). Wash the metal with a cloth saturated with the neutralizing solution being careful to cover the entire surface at least once. Rinse with clean water. Dry with a clean cloth to prevent spotting. See preparation tips for additional information.
3. **See Step “3. Solvent Wipe”.**
4. **See Step - “4. Application of Coating”.**

PREPARATION TIPS FOR ALL SURFACES:

USE GLOVES TO AVOID FINGERPRINTS

After cleaning, use gloves during handling to protect from fingerprints and avoid problems later.

REMOVE FILMS, OILS, WAXES & SILICONE

These can interfere with adhesion or cause separation. They need to be removed completely. Most waxes can be removed with ammonia. Silicone is a common coating agent which can be removed with mineral spirits (*available at hardware stores*). Once removed, complete Step 3 (Solvent Wipe) again.

REMOVE ALL MOISTURE

Porous metals like steel will need to be bone dry before coating. Heat guns, hair dryers, or extra time in the sun will help trapped moisture evaporate.

FOR TARNISHED & OXIDIZED SURFACES:

ALTERNATIVES TO PREP PADS

In place of our gray synthetic steel wool Prep Pads, any fine, 000 or 0000, synthetic steel wool pad or Teflon® safe kitchen sponge can be used. Do not use regular steel wool as it can leave particles that will rust.

IF MOLD IS PRESENT

Before any cleaning, wet the surface with water. Apply a bleach solution of 1 part bleach to 4 parts water.

NEUTRALIZING ACIDS IS CRITICAL

It is very important to neutralize any acid from polishes, cleaners, or chemical methods very well before coating. Acids remaining can discolor the metal under the coating or interact with the coating leaving streaks of discoloration. For example, blackening or black streaks on copper are common when not well neutralized. **For strong acids**, you may need to strengthen the solution. To strengthen the neutralizing solution, use 1 part EZ Prep to 3 Parts water. Or 2 cups of baking soda to a gallon of water.

3. SOLVENT WIPE

Solvent wipe the metal with xylene, a xylene substitute, denatured alcohol, or acetone to remove any traces of residue. If using acetone, be careful. Acetone is a strong solvent, take caution near any painted surfaces. This step needs to be done immediately before coating. Do NOT dilute or rinse the solvent. This step will ensure a completely clean and dry surface. **Skipping this step will result in poor adhesion of the coating.** (Solvent not included; available at hardware stores)

4. APPLICATION OF COATING

Do NOT thin the coating. Shake coating before each use to ensure antimicrobial properties are distributed throughout coating.

1. Pour the coating into clean, dry, metal or glass pan.
2. 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.
3. Apply the coating to the surface letting the applicator **glide** across the surface. **Do not press hard.** Applicator should glide 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.

Let the coating dry completely. It will self-level as it dries. If you see an area you missed, let it dry and then coat over the missed area. CrobrialCoat is self-annealing; 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.

Apply one coat for antimicrobial protection only. Two or more coats are recommended for antimicrobial protection plus protection from tarnish, oxidation, and elements. (See Project Specific Tips.)

DRY & CURE TIME: The coating will be dry in an hour (several coats may take longer). Dry coating is still delicate until cured. Heat and air circulation help speed curing. Under normal circumstances & with good ventilation, coating is generally cured after 4-5 days. Wait until cured before prolonged contact with other surfaces or packaging. Allow a minimum of two weeks cure time before letting water sit/pool on the coated surface, immersing in water or filling sinks/fountains, etc. In most cases, dew or rain does not hurt the coating once it is dry for 3-4 hours.

You can shorten cure time by gently heating the coating **AFTER** 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. Larger items can be placed direct sunlight to speed curing.

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. As long as the original coating is still intact, wash the surface with a mild dish soap and water, dry well, and recoat. It is best to recoat before any tarnish or oxidation is seen or at the first sight of slight color change. The longevity of the coating is dependent on proper application of the coating, its environment, and general use and abuse.

SHELF LIFE OF COATING: Coating has an indefinite shelf life when stored in the closed, original container. Keep any extra coating for touch ups. We recommend cleaning the threads of the container before reattaching the lid to avoid sticking.

COATING REMOVAL: The coatings can be removed from **unpainted** metals with solvents like Xylene or a Xylene substitute or they can be removed mechanically by sanding for larger areas like copper roofs. 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 coating begins to “melt”, wipe it up & off of the surface. Repeat until the coating is gone.

APPLICATION TIPS:

PERSONAL PROTECTION:

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

CAUTION - RUBBER & SOFT PLASTICS:

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).

TEMPERATURE & HUMIDITY MATTER:

Coating is best applied in temperatures from 55-85 degrees and without 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.

APPLICATION METHODS:

Application method is a matter of personal preference and somewhat project dependent. For application, use a clear-coat applicator: applicator pad, sponge brush, natural-bristled paintbrush, dense microfiber roller, clean dry lint-free white cloth, aerosol can, HVLP or Airbrush paint sprayer with a fine-finish tip. If using a cloth, fold it into a pad. Aerosols are not recommended for large, flat surfaces. For intricate items or jewelry chains spraying is the best application. Items can also be dipped into the coating and hung to dry.

APPLICATOR CARE & CLEANING:

Rollers, sponge brushes, and applicator pads are discarded after use, but they will last for a short while if wrapped well in aluminum foil to stop brushes/tools from becoming hard between coats or during breaks. Brushes and spray tips can be cleaned with Xylene or a Xylene substitute.

TEST FIRST: For larger projects, it is recommended to test application of the coating in a small inconspicuous area before coating your entire project.

PROJECT SPECIFIC TIPS BEFORE YOU START:

Copper: If high mineral content in water, use distilled water to avoid discoloration from water mineral components. Copper Cleaning Gel is available for heavily tarnished copper. If using this the gel, see the Copper Cleaning Gel directions.

Sinks and water features: Avoid pooling water, filling with water, or pouring boiling water in the sink for a minimum of two weeks after coating. Sinks may take longer to cure. A deep sink does not get much air circulation. A hairdryer or heated fan can be used every so often to introduce heat and circulation to the area after it is coated to speed curing.

Stainless Steel : Many stainless steel cleaners contain silicone. Silicone residue must be removed before applying the coating. Silicone is a common coating agent which can be removed with mineral spirits (*available at hardware stores*). A solvent wipe is still needed. **Appliances:** Faux stainless steel appliances are not suitable for our coating due to the plastic nature of the material. **Stainless Steel (where rust needs to be removed):** Stainless Steel Rust Remover and our synthetic steel wool Prep Pads are excellent for removing rust. (Do not use regular steel wool.) See the specific Rust Remover directions first. Rusty stainless steel can also be wet sanded with very fine 600-2000 grit automotive sand paper. Always clean and sand with the grain.

Jewelry: Due to their size, jewelry items can be brushed, dipped or sprayed and it is best to bake cure them. See Cure Time instructions. (Note: Only one coat is needed if using for anti-microbial protection only.)

- **Brushing:** Lay your items on foil and brush coating on with a natural-bristle brush or a sponge-brush. Gently glide the brush over the surface without getting too much excess on the foil below. Wait one hour and until the item is dry to the touch before applying additional coats. If you want to coat the other side of the piece, wait at least 2 hours before turning it over to coat the other side (use a new piece of foil to coat the other side on to avoid any wet coating sticking to the dry side) We recommend coating the "back side" of the piece first.
- **Dipping:** Place a piece of foil under the items in case of drips. You can insert an unbent uncoated paper clip through the eye of your jewelry piece to dip it. Dip the piece in the coating, and then pull it up. Let the coating drip for a few seconds. It is helpful to have a small "artist's paintbrush" to brush off the excess coating that may gather at the bottom and around the hanger. Hang the item to dry where it isn't touching anything else. Make sure to check the item after a couple of minutes to see if any excess coating has gathered at the bottom. Wait one hour until the item is dry to the touch before applying additional coats. Dip the item again, smooth out the excess, and let it dry.
- **Spraying:** Hang the item and spray. You should be 5-6 inches away when spraying. Do not over spray; a quick pass is sufficient for each coat. Wait one hour and until the item is dry to the touch before applying additional coats.

Questions: Call Everbrite, Inc. (916) 852-0200 or visit RenewMetal.com

Number of coats needed:

For antimicrobial protection only, apply one coat.

For antimicrobial protection plus protection from tarnish, oxidation, and elements, two or more coats as recommended below:

- 2 coats are standard for most projects.
- Kitchen Sinks: 4 coats (bathroom sinks: 2 coats)
- Countertops/Bar/Tabletops: 3-4 coats
- Rings (jewelry): 3-4 coats
- Steel & Rusted Metal (raw, cold rolled, corten other): 3-4 coats
- Walkable surfaces: 3 coats (coating not suitable for all walkable surfaces)
- Highly polished: 1-2 coats (two if high handling or high use/abuse)
- Kitchen Appliances/Hoods: 1 good coat (on vertical surfaces)