Instructions

All coatings

Protection against tarnish, rust, tea staining and corrosion for bare metals whether located indoors or outdoors for Bare Aluminium, Brass, Bronze, Copper, Chrome, Gold Plating, Pewter, Silver, Stainless Steel and hard plastics

Indoor and Outdoor Building Fixtures and Fittings, Light Fittings & Switches, Door Handles, Kick Plates, Bench and Bar Tops, Splash backs, Tapware, Window Fittings, Plaques, Ornaments, Bannisters and Railings, Kitchen Appliances, Range hoods, Copper spouting and downpipes, Signage, Checker plate flooring, Mag wheels, Boat fittings, Boat Hulls, Jewellery, Medals, Coins, Musical Instruments… and more

Are you ready?

Using the correct tools, personal protection and working in suitable environmental conditions are important factors to consider while applying the coating and are equally important throughout the curing period.

HANDY ITEMS TO HAVE ON HAND

- **Eye Protection** to protect eyes from splashes especially when decanting the coating.
- **Methylated Spirits** for wiping up wet coating and for cleaning around screw cap area of can.
- **Glass or metal containers** to hold the coating during application.
- **Tin foil** to wrap used applicator tool/s to keep them soft during the project and between coats; and to line plastic containers that will contain the coating. e.g. ice cream containers when using an Applicator Pad, plastic roller trays when using a Roller.
- **Metal Fork or Whisk or Eggbeater** to stir SATIN coating. NOTE: GLOSS does not need stirring.
- **Drop Cloth/Tarpaulin** Use a drop cloth to protect areas around where you are working.
  WARNING: Do NOT allow the coating to spill/splash onto asphalt as it will react and cannot be removed.
- **Other Application Tools** Other available options from the hardware store which are not in your kit.
  e.g. Wide Paint Pads for coating deep wide panels, Hi density Microfibre/hi density Foam Rollers.
- **Spray Application** If you are intending to spray the coating on you must use the correct equipment and methodology using a HVLP or airless spray gun with a fine finish tip. Refer to our Everbrite Website for details. Click on ADVICE from main menu.
- **Xylene Solvent** (Optional) to clean spray tips and paint brushes and for the removal of dried or cured coating.
  Refer to our Everbrite Website for details about coating removal and sourcing Xylene. Click on ADVICE from main menu.

PERSONAL PROTECTION

- Only use **nitrile powder-free** gloves or chemical resistant gloves. Do NOT use rubber or latex gloves as these will become sticky when they come into contact with the coating.
- Wear eye protection. Allow for adequate ventilation. If spraying with an HVLP or airless sprayer, a NIOSH respirator is recommended.

WEATHER CONDITIONS

- Temperature of the metal (surface) being coated, Air temperature, Humidity and Weather Forecast are all important considerations when applying a clear coat.
- **Metal (or surface) temperature** is a most important factor at the time of coating application.
  Do NOT apply the coating if the metal is too hot otherwise the coating starts to flash off too quickly and will not have enough time to self-level while it dries. The metal is too hot if you cannot place the back of your hand comfortably on it for 10 - 15 seconds.
- If the wet coating sags during application, this indicates that the metal is too cold as the coating is not flashing off fast enough. If the metal is too cold, you can warm the metal with a heat gun or hair dryer appropriately.
- Work in the sun or shade (as required depending upon the season) to find the ideal metal surface temperature.
- **Air Temperature** The coating is best applied in air temperatures ranging from 13 - 30 degrees °C and without humidity. Do NOT apply the coating if the air temperature is getting close to the dew point. The temperature must be above the dew point and not drop within a few hours after the time of application. You can access dew point information for your area on *weather.com*
- **Coatings should not be applied in freezing temperatures**, although once cured the coated surface can withstand extreme cold, including temperatures close to liquid nitrogen.
- **During the initial curing period** (first few days after coating application) the air temperature is also important.
  Do **NOT** apply the coating on outdoor surfaces if overnight temperatures are forecasted to reach freezing conditions within a few days after coating application.
- Water (rain) should not be allowed to pool on a freshly coated surface.
- **Ambient Humidity** Coating application in an environment with an ambient humidity of above 80% can also cause blushing as metals may have absorbed some of the moisture in the air. This will slow the drying and curing of the coating. If the coating is applied over dew, condensation or water, it will float on the moisture and will not adhere.

PROTECT ASPHALT, CONCRETE OR OTHER SURFACES

- Asphalt needs to be protected; as the solvent in the coating will harm the asphalt if spilled. Put a tarp down for protection.
- The coating will not harm concrete but it will darken the concrete and may cause it to look shiny.

PREPARING THE COATING

- **Satin must be stirred well.** Turn the can over a few times before decanting into a metal or glass container and stir the coating well for a few minutes with a metal fork, whisk or eggbeater. Clean the wet coating off the fork, whisk or eggbeater with methylated spirits, acetone or xylene. Failure to stir satin coating may result in an uneven streaky finish due to the flatteners not being evenly distributed. Stir well before and frequently during application.
- **Natural Gloss** There is NO requirement to stir clear natural gloss coating
- **Avoid shaking the can just before coating application.** If the can has been shaken let the bubbles settle to avoid bubbles appearing on the coated surface.
- **Do NOT thin the coating** with any type of solvent or thinners as the coating will fail.
- **Containers.** Pour enough coating into a clean, dry, metal or glass container.
- **Plastic Containers.** If using a plastic container (e.g. 2 litre ice cream tub which is ideal when using our clear coat applicator pads) or a plastic roller tray, **line the plastic container with two layers of aluminium foil** as wet coating will soon melt a plastic container if wet coating has been left to dwell in it.
- Use a clean glass jar with a metal lid to store left over coating once decanted and used. We discourage pouring left over coating back into the original can to prevent possible cross contamination.
- **Clean the thread areas** of the can and screw cap with methylated spirits, acetone or xylene before reattaching the cap to prevent sticking.

Surface Preparation

Thorough and correct preparation of the surface means the difference between the intended result, or needing to remove the coating and start again. The surface must be scrupulously clean with no traces of oily or polish residues, and must also be free of any acid traces and be completely dry before coating.

STEP 1. BUFF, POLISH, CLEAN

- Polish and buff the surface to the luster desired with any metal polish.
- The metal can also be sanded or simply cleaned to the desired appearance.
- If you are having difficulty polishing/cleaning the metal there is likely to be an old coating on the metal. You will need to remove an old coating with a varnish/lacquer stripper (available from Hardware Store) before you can polish the metal to the desired finish.
- Remove films, oils, waxes and silicone completely as these will interfere with coating adhesion or cause separation.
- Most waxes can be removed with ammonia.
- Silicone is a common coating agent which can be removed with mineral spirits (mineral turpentine) available at hardware stores. Once removed, you must still solvent wipe – See Step 4.
- **If mould is present** before any cleaning, wet the surface with water; then apply a bleach solution of 1 part bleach to 4 parts water and rinse off well with clean water.

STEP 2. ACID NEUTRALIZE THE SURFACE

This is a critical step. Treat with EZ Prep™ Solution mixed up as a Neutraliser.

- **Acid must be removed from the surface otherwise black marks/dark cloudiness will appear under the coating.**
- **Wear nitrile powder-free gloves when handling the items to be coated as finger/handprints contain acid.**
- The EZ Prep™ solution is not corrosive - it will not damage other surfaces or hurt your plants; but we do recommend wetting the surrounding areas with plain water first to prevent possible 'water staining' if you are treating large areas.
- Use EZ Prep™ in a solution of 1 part EZ Prep™ to 4 parts water. As an alternative, use 1 cup baking soda mixed with 4 litres of water.
- **Wash the metal with a cloth saturated with the EZ Prep™ neutralizing solution being careful to cover the entire surface at least once. Do NOT let the EZ Prep™ solution dry on the surface.**
- MIDAS TOUCH Polish does not contain acid, however many polishes do. Check the ingredient list of your polish. If unsure, complete this neutralizing step.
- If you do not need to acid neutralize the surface clean off polish/oily residues using EZPrep™ as a cleaner mix 1:100 with clean water.
- Do NOT waste your EZ Prep™ solution. You can store made-up solution in a plastic container like a clean milk bottle.

STEP 3. RINSE AND DRY

- Rinse the EZ Prep™ solution off **twice** with clean water to ensure all traces of EZ Prep™ has been removed.
- Dry with a clean cloth to prevent spotting. It is essential that the metal be completely dry before coating. 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 warm sunny breezy weather will help moisture evaporate.
- **The cleaned and acid neutralized surface must be completely dry before Step 4 Solvent wiping.**

STEP 4. SOLVENT WIPE

This is another critical step.

- This step is undertaken immediately prior to applying the first coat and will ensure a completely clean and dry surface.
- Let the surface cool before solvent wiping. The surface can be warm but not hot.
- Use a clean dry lint free cloth for the solvent wipe. Solvent wipe the metal thoroughly with **methylated spirits, xylene or acetone to remove any traces of residue** and to help dry the surface further. This step needs to be done immediately before applying the first coat. Do **NOT** use turpentine as the solvent wipe as this contains oil and will affect the adherence of the coating.
- **Skipping this step will result in poor adhesion of the coating.** *Solvent is not included in kits.*
- Do **NOT** dilute or rinse the solvent. *Solvent is not included in kits – available at hardware stores and supermarkets.*

Coating Application

APPLICATION METHODS

The coating application method is project dependent and a matter of personal preference.

Spraying **When spraying use an HVLP or Airless paint sprayer with a fine-finish tip.**

- When spraying larger areas a 50/50 overlap is recommended. Details are on our website about the Spray Application of an Everbrite Coating. Refer to our Everbrite Website for details about spraying on the coating. Click on ADVICE from main menu.

Paint Brushes **Use a paint brush to coat narrow profiles and for cutting in.**

- Use a good quality natural bristle brush, or a compatible synthetic blended bristle paint brush as supplied in the Everbrite kits.
- Dip paint brush completely in the coating and then lightly tap the side of the paint brush on the side of the container. The paint brush should be full of coating but not dripping. Ensure paint brushes are dried well if being cleaned with Xylene solvent. Do NOT allow any solvent into the coating. Used bristle paint brushes can be kept wrapped in aluminium tin foil for some weeks to keep soft if not cleaned up with Xylene solvent.
- **Never use pre-used old paint brushes as streaking will always appear due to the smallest traces of paint residue**.

Sponge Brushes

- Do NOT fully immerse a sponge brush into the coating as the adhesive used to keep the sponge on the handle will melt.

Applicator Pads

- Wear a nitrile glove and submerge the applicator pad (as supplied in our larger kits) completely into the coating.
- Gently squeeze the excess from the pad so that it stops dripping but still remains completely saturated. It is important to be saturated as dry areas in the applicator pad will cause streaks.
- **Allow the applicator pad to glide smoothly across the surface.** Do NOT press hard. When the pad starts to show resistance, re-dip the pad into the coating again and continue**.**
  - **Round Pad with hand gusset** Use to coat around banisters, railings and smaller items.
  - **Large brick shape Pad** Use to coat larger and wider panels.

Dipping

- Small items can also be dipped into the coating and hung up to dry.

Other Applicator Tools For wider panels available from the hardware store – must be compatible with solvent based coating.

- Hi Density microfibre rollers - Hi Density foam rollers - Paint pads

GENERAL COATING APPLICATION TIPS

- The surface to be coated must be scrupulously clean, sterile and bone dry.
- Do NOT use circular or rubbing motions to apply the coating.
- Use a smooth motion and finish one section/panel at a time.
- Do NOT overwork the coating once applied.
- Quickly observe for runs, drips or sagging and quickly wipe them out before the coating starts to dry within a couple of minutes. Let the coating dry completely before overlapping with more coating. It will self-level as it dries.
- If after a few minutes an area you missed, **let it dry completely first** and then coat over the missed area.
- Wait at least one to two hours between coats or until the previous coat is completely dry or fully cured.
- Observe the coating while applying: if the coating separates or does not look completely smooth, then **STOP;** and remove the wet coating immediately with methylated spirits and re-clean the surface properly.
- **Ensure that you do NOT press hard with the applicator tool when applying second and subsequent coats. Move the applicator tool in one direction only.** Everbrite coatings are self-annealing; meaning recoats will become part of the previous coat. Applying in one direction will prevent pulling the previous coat off to give a smooth finish.
- **Watch Application Demonstration Videos on our Website.**
  Refer to our Everbrite Website. Click on ADVICE from main menu.

RECOMMENDED NUMBER OF COATS

- **Everbrite**, **ProtectaClear** and **CrobialCoat** coatings are self-annealing; meaning the second and subsequent coats will become part of the previous coat.
- Wait at least 90 minutes between coats or until the previous coat is completely dry or cured.
- There is no preparation needed between coats.
- **When applying a second or subsequent coat it is important to move the applicator tool in ONE DIRECTION ONLY and leave it alone to dry**. Do NOT move your paint brush, applicator pad, or roller backwards and forwards as this will drag on the previous coat and damage the finish as it quickly melts into the previously applied coating whether it is just dried or fully cured.
- Most projects require two (2) coats, some need more.
- Refer to the separate sheet with **Project Specific Tips** and **Table with recommended number of coats.**

COATINGS DRY TIME & CURE TIMES

- Everbrite coating is **touch dry** within 30 to 45 minutes after application.
- ProtectaClear and CrobialCoat coatings take a little longer to be touch dry - 45 to 90 minutes.
- Once touch dry it can be coated over.
- Temperature and humidity affect the cure time. Hot, dry climates will allow the coating to cure faster than cold or wet climates.
- **The coating will be delicate until fully cured,** so care should be taken during this period considering the weather conditions.
- The coating is an air dry solvent, so warmth and air circulation hastens curing. Under normal circumstances and with good ventilation, the coating is fully cured after 5 days.
- Cure time is shortened with heat from the sun.
- Smaller items can be placed in a low temperature oven (80°C) for 1 hour and be cured when cooled.
- The coating MUST be fully cured before prolonged contact with other surfaces; e.g. packaging, allowing water to sit on the coated surface, immersing in water or filling fountains, etc. Recommend 10 days for extra curing before long term water immersion.
- In most cases, dew or rain does not hurt the coating once it is has dried for 4 hours. But do not allow pooling water to remain on the surface of the coating for a minimum of 7 days after coating.
- For garage doors, building cladding and the vertical frames of aluminium windows it is not as critical because these are vertical surfaces where water sheets off and does not dwell on the surface. Where water pools dry off until the coating has fully cured.

COVERAGE

- 250mL of coating provides a one (1) coat coverage to five (5) square metres.
- **Ensure that there is complete coverage, with the correct number of coats being applied**; Refer table below
- Good coverage will lengthen the time before a maintenance coat is required.

HEAT RESISTANCE Once cured the coatings are heat resistant up to 260 - 285 degrees centigrade. The coatings will gas off at about 350 degrees centigrade.

FOODSAFE Once cured items coated with **ProtectaClear®** and **CrobialCoat®** are food safe.

COATING REMOVAL & CLEAN UP

- Wet coating can be cleaned up with methylated spirits.
- You cannot remove the coating with methylated spirits once it has dried. Only Xylene Solvent will remove a dried or cured coating. For more details about Coating Removal refer to our Everbrite Website. Click on ADVICE from main menu.
- Clean up paint brushes and spray tips with Xylene Solvent.
- Clean the thread of the coating can and screw cap using methylated spirits, acetone or Xylene before reattaching the cap to prevent sticking.
- Wrap used coating applicator tools with aluminium tin foil to keep soft during the project.
- Discard well used sponge brushes, pads and rollers after a project is completed as these cannot be cleaned with Xylene.

COATING SHELF LIFE

- **Natural Gloss** coating has an indefinite shelf life when stored in its air tight metal container.
- **Satin** coating also has a long shelf life when the can is turned over periodically and gently shaken or stirred to keep the flattening agent from settling on the bottom of the can.
- Keep left over coating for touch ups and re treatments when maintenance coats are required.

AFTER CARE

- Do NOT use cleaners containing solvents or, petroleum distillates.
- Avoid citrus based cleaners or abrasives to clean coated metal.
- Suggested Cleaner: Use mild dish wash soap and water and rinse well with clean water.

ONGOING MAINTENANCE

- Once coated the coated surface is easy to maintain.
- **It is best to recoat before any tarnish or oxidation is seen or at the first sight of discolouration.**
- The longevity of the coating (and time between subsequent maintenance recoats) is dependent on metal quality, proper surface preparation, coating application, number and thickness of initial coats, the environment and general use and abuse.
- As long as the original coating is still intact, wash the surface with a mild soap and water, dry well, and recoat.
- Maintenance for Stainless Steel: Refer **Project Specific Tips**
- For more details about ongoing maintenance refer to our Everbrite Website. Click on ADVICE from main menu.

DANGER: COATING IS HARMFUL OR FATAL IF SWALLOWED.

FIRST AID In case of eye contact, flush thoroughly with plenty of water for 15 minutes and get medical attention. Reports have associated repeated and prolonged over-exposure to solvents with damage to health. Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal.

CAUTION Combustible liquid. Material does not sustain combustion. Do not smoke or use near flame. Use with adequate ventilation & avoid continuous breathing of vapour/spray & avoid prolonged contact with skin. Wear nitrile gloves & eye protection.

KEEP OUT OF REACH OF CHILDREN

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

New Zealand EPA Group Standard Approval: Polymers Combustible Group 2020 HSR 002640