

FAQs for Coval Concrete and Coval UTC

I. Stain Protection and Cleaning

- A. **Will Coval protect the surface from stains?** Yes. However, this is not an acid/alkali proof coating. It will protect the surface from most normal spills if they are cleaned up in a reasonable time.

Staining Agent	Resistance Time (hours)	Cleaner Required	Staining Agent	Resistance Time (hours)	Cleaner Required
10% Citric Acid	12	Dry Cloth	Ketchup	48+	Dry Cloth
Acetone	48+	Dry Cloth	Lipstick	48+	Dry Cloth
Balsamic Vinegar	12	Dry Cloth	Motor Oil	48+	Dry Cloth
Betadine	6	Wet Cloth	Permanent Marker	48+	Solvent
Black Crayon	48+	Dry Cloth	Picante Sauce	24	Dry Cloth
Brake Fluid	48+	Dry Cloth	Pickle Juice	24	Dry Cloth
Coffee/Tea	48+	Dry Cloth	Red Wine	48+	Dry Cloth
Chocolate Syrup	48+	Dry Cloth	Skydrol	48+	Dry Cloth
Gasoline	48+	Dry Cloth	Spray Paint	48+	Solvent
Grape Juice	24	Dry Cloth	Worcestershire Sauce	12	Wet Cloth

- See the YouTube video “Concrete Coat Stain Test,” <https://www.youtube.com/covaltechnologies>.
- B. **Are all Coval coatings Graffiti Proof?** All Coval solvent-based coatings are graffiti proof and spray paint and permanent marker can easily be cleaned with a mild solvent.
- C. **What detergents should I use to clean a floor coated with Coval?** A mild household detergent will clean food spills and dirt. Do not use vinegar as it is highly acidic. Always rinse with clean water to remove soap residue. Not much floor detergent is needed, if it is swept regularly and in good condition. Coval makes surfaces very easy to clean and keep clean.
- D. **How do I remove graffiti?**
Isopropyl alcohol will release Sharpie marker ink. Coval recommends acetone to remove spray paint.

II. Application – UTC does not go over Primer

- A. **What is the best way to install the coatings?** Use a pump sprayer designed for Acetone. Coval also has a sprayer design shared with customers that uses a diaphragm pneumatic pump, with an acetone-resistant hose and fittings. This allows for constant pressure and continuous spraying and is useful on large floor jobs.
To spray, acquire an assortment of spray tips such as: Red Fan tip, Grey Cone jet, Brown Cone jet, and 110-degree fan tip. Use smaller tips for smaller jobs and larger tips for bigger jobs. It is not recommended to use the brass full cone spray tip that is included with a sprayer. Read *Section V. Application Instructions* on the appropriate product data sheet for specific instructions.
- B. **How many coats of Coval should I apply?** Check the surface before applying, and if water beads on the surface (after cleaning and priming, depending on the substrate), application may begin. You only need one coat if the coating lays out and isn't absorbed by the substrate.
- C. **What should I do if I apply Coval too thick in one area by mistake?** Immediately try to remove the thick coating with an acetone-soaked cloth, then reapply the proper amount. Do not try to touch up that area while the surrounding area has cured beyond 15 minutes.
- D. **Will Coval make the surface more slippery?** Coval coatings are extremely thin and will follow the topography of the substrate where it is applied. Depending on the surface, the coating will make the surface approximately 1–4% smoother. If your floor was slippery before the coating, it will be slippery after Coval is applied. See *Section III. for slip-resistant additives*.
- E. **Do you have to sand between coats?** No, simply clean and reapply as needed. The coating covalently bonds to itself and no sanding is required between coats. If you recoat, keep the product sheen consistent. When repairing worn coating, sand lightly with 220 grit, then wipe down before reapplication.
- F. **How long does it need to dry between coats?** It depends on environmental conditions because the coating is moisture cured and temperature and humidity dependent. Wait a minimum of 24 hours but be sure to test in a small area to make sure if a second coat was applied, that the second coat bonds and lays down well.

G. How easy is clean-up after each application?

Cleanup is simple but do it quickly after finishing the installation. *Be sure to depressurize the sprayer immediately after application and empty out and discard all unused material.* It's especially important to *hold up the wand in the air and pull the trigger to let gravity flush out all the coating in the hose and spray wand.* Then dump this out and pour a few inches of acetone in the sprayer. Put the lid on the sprayer and swish acetone all over the walls of the sprayer and pressurize the tank enough to spray the acetone out into a cup, bucket, or other safe area. Repeat this twice and use a rag and acetone to clean the threads on the pump sprayer lid.

H. Will the solvent odor linger? No, if the space is ventilated during and after application the smell will go away in less than an hour. This means night applications will not leave an odor the next morning.

I. How do I repair a worn area in the coating? Clean the area thoroughly, tape off that section, re-apply the coating by spraying, and immediately remove the tape afterwards. If it is an especially worn area that has gone through the coating and damaged the substrate, you may have to sand or grind that area and repair the underlying surface, then clean, tape and spray the coating.

III. Application Specifications - Coval Concrete

A. How long should the concrete cure before application?

Coval follows industry standards and states 28 days. Countertop concrete blends with polymer additives have been successfully coated sooner, however, always test first.

B. Can I apply Coval over damp concrete?

Never, the surface must be completely dry. Follow standard concrete cure time of 28 days and have a moisture meter limit of 15%.

C. How many coats of Coval should I apply? Check the surface before applying, and if water beads on the surface (after cleaning and priming), application may begin. You only need one coat if the coating lays out and isn't absorbed by the substrate. An unsealed concrete substrate is too porous, so Coval Primer is needed, and you may need more than one coat of Primer if water does not bead after first application.

D. What about broom finish driveways, patios, and sidewalks?

The surface must be sanded first to knock off any weak concrete caused by the broom finish. Using a 32-grit sanding disc is the easiest way to do this, or a coarse Nylo Grit brush. Coval Primer or a high-solids acrylic is recommended because it will be a very porous surface, and the Primer provides a base to seal the pores. If using Coval Primer, use Coval Concrete, not Coval UTC, for the top coat.

E. Can I apply the coating in cold weather on cold concrete slabs?

Not recommended. If so, use space heaters in the cold winter months to warm the concrete for several hours. With a small foam brush apply a test area to be sure the coating will level out and cure properly. Bring the concrete to a minimum of 45°F/7°C before spraying.

IV. Application Specifications - Coval Ultimate Top Coat (UTC)

A. Which product should I use over Epoxy, Acrylic or Urethane?

Ultimate Top Coat. **Prepare a small test area first** to be sure that the coating will cure and level out properly. Apply at 4-5 wet mils/100-125 microns thickness. Some epoxies cure and create microscopic dilutants or plasticizers that will repel the coating. If this happens, a light sand with a 220 grit screen will remove them. Be sure to remove any scratch marks before applying either product. Wipe down epoxy with acetone before applying Coval UTC.

B. For polished concrete, what if a guard is already installed?

Do a test area, but lithium silicate and most silicate/siloxane guards and penetrating sealers should be compatible with Coval coatings. Acrylic sealers are compatible as well.

C. Will Coval stop epoxy from yellowing? No. Coval UTC will not stop UV light from passing through it. So, if the epoxy was going to yellow due to UV light, then it will still turn yellow with Coval over the top, but the Coval coating will not yellow.

D. Will my epoxy last longer if it is coated with Coval UTC? Yes, the UTC coating on epoxy will stop it from oxidizing and chalking. On floating storage tank roofs in Texas, the epoxy typically needs to be stripped and replaced every two years. With Coval over the epoxy, it will last 5 – 7 years.

E. Will a Coval coating over paint prevent the paint from fading? Yes and no, depending on the chemical backbone of the paint in question. Here is why: When a Coval coating is applied over a painted surface, it will create a barrier between the paint and the outside world. The reason paints fade is because UV light will attack the pigment in the paint, break down that molecule, and then that molecule oxidizes, and this oxidation makes the pigment lose its color. If there is some component in

E. Continued ...

the paint that will turn yellow by UV light, Coval will not prevent that from occurring. Coval will not stop the UV light, but it will stop the oxidation of the paint.

- F. **Does an applied Coval coating yellow over time?** No, there is nothing in Coval coatings that will turn yellow.
- G. **Will Coval revitalize faded paint?** Yes. There are two mechanisms that make paint fade. One is that UV light is destroying the pigment and the actual pigment is fading. The second is that this oxidation on the surface is changing the topography of the surface (making the surface rougher) and light is scattering. This also makes the painted surface more faded. Applying Coval will fill in that rough surface and leave a glass-like finish. The coating will appear to have brought the old paint color back to life.
- H. **Will Coval hide scratches in epoxy or urethanes?** It will depend on the severity of the scratches. If epoxy is properly sanded to 220 grit with no deep scratches then yes, it will cover these, after cleaning. Coval is extremely thin and clear, so you will see deeper scratches. The Matte and Satin finishes will do a much better job at hiding scratches. Test a small area first to confirm.

V. Dye and Slip-resistant Additives to Coval Coatings

A. How can I make the surface less slippery?

Coval is perfect for use in industrial kitchens, bottling, and processing plants where the floors are often wet or other areas where slip-resistance is important.

Non-Slip or grip additives can be added to the Coval Primer and Coval Concrete. Coval is compatible with 100 grit (heavy) to 200 grit (mild) additives at a rate of 2-4 ounces/gallon or 60-118 ml/litre.

Polypropylene or Aluminum Oxide powders are compatible.

To verify the DCOF (Dynamic Coefficient of Friction), Installers should always do a mock-up and test it with an approved slip-resistant test meter or submit a coated sample to a third-party laboratory. Slip resistant coatings are not guaranteed in wet locations unless they are verified, and Coval accepts no liability for the performance of the slip-resistant coating performance. Coval coatings average .5mils/13 microns DFT and will not sustain an additive unless a two-coat system is installed. The grip additive is installed in the first coat. The second coat, without the additive, is applied after the appropriate wait dry time, and encapsulates it to resist chipping. The additive must be stirred well before spraying and continuously shaken or stirred during the spray application to keep it suspended.

Continuously shake the pump sprayer during application to keep the particles suspended and remove all in-line filters in the sprayer to avoid clogging. A gray or brown cone tip in a circular motion will work best. For tile or polished concrete, Coval recommends putting the non-slip additive into the first coat of UTC. When the first coat is thoroughly dry, apply a second coat of UTC without non-slip additive to encapsulate and protect the texture.

B. Can I add a dye or pigment to Coval?

1. Only acetone dyes can be used with Coval, NOT pigments.

2. *For Decorative Concrete Applications:*

- Coval Concrete Primer, sprayed before Coval Concrete, blends with acetone dyes. Coval recommends acetone dyes that are UV stable and can be used on exterior concrete. Installers typically combine smaller ratios than the normal 1:1 gallon/litre ratios used with straight acetone dyes. For example, you should use a ratio of 2-2.5 gallons/litres of Primer per one pint/half litre container of dye.
- Make a small batch to be sure the dye matches the color you wish to achieve.
- Use enough primer to seal the surface and achieve the desired look, but do not overapply the dye colors to prevent full absorption into the pores of the concrete.
- The advantage of this system is the primer dries quickly and colors can be mottled and blended rapidly. Once the desired color is achieved in the liquid, install the Concrete Primer mixed with the dyes to the concrete surface with the acetone sprayer. Then, use Coval Concrete as a sealer for decorative applications. Don't overapply the primer, use just enough to achieve an even finish that has penetrated the pores of the concrete.
- *Use Coval Concrete as a sealer for decorative concrete applications, do not use Coval UTC.*

3. *For Solid Color Applications:*

There are several different dye systems to use:

Option 1) Add dye to Coval Primer, add dye to Coval Concrete, or add to both, OR,

Option 2) Add dye to the first coat of Coval UTC, add dye to a second coat of UTC, or add to both.

For a light commercial or residential application, use Option 1 with Coval Primer and Concrete:

- Mechanical bond with Primer needed on first coat. Concrete needs to be porous so the Primer can soak into the pores.
- Requires etching or grinding prior to Primer application for it to soak into the pores.
- Primer dries in minutes and allows the installer to evenly blend the color into more porous areas that require a second coat.
- Apply Coval Concrete with color for the final coat to achieve a solid color finish.
- Easy to maintain, only recoat heavy traffic areas as needed.

For a very heavy industrial application, use Option 2 with Coval UTC. Advantages:

- Covalent/molecular bond directly to the concrete.
- For use on polished or hard troweled concrete and concrete with a “cure and seal” hardener already installed.
- Works in environments where grinding or acid etching is not possible.
- Placement on floors that will have heavy truck and forklift traffic.
- Easy to maintain, only recoat heavy traffic areas as needed.

Ratios for Solid Colors: Coval Color Packs will be available after 3Q2023. Recommended third-party dyes including:

- Ameripolish: 3-pint/.5L jugs of Surelock Dyes per 5-gal./20L of Coval Primer, Concrete or UTC
- SurfKoat Exterior Kolour Dyes: 3-pint/.5L cans per 5-gal./20L of Coval Primer, Concrete, or UTC
- SurfKoat Acrylipak Dyes: 1 quart/1 litre bottle per 5-gal./20L of Coval Primer, Concrete, or UTC

Recommendation: Use the SurfKoat Acrylipak dyes when you have industrial colors that do not require UV stability. Use the Ameripolish SureLock or SurfKoat Kolour Dyes when decorative colors are needed. The only dyes that claim to be UV stable are the SurfKoat Exterior Kolour Dyes.

VI. Coval Performance

- How quickly can I drive over a Coval coated floor?** Depending on the temperature and humidity of the application location, an auto can typically drive over the coating between 24 – 48 hours. Wait the full curing time for heavy duty trucks. The coating will not reach its full hardness for 5–7 days, but rubber tires will be fine.
- How do I repair a scratch in the coating?** This will depend on the nature and depth of the scratch. If it is a small scratch, it's possible to clean the area, use a microfiber cloth and wipe a Coval coating over the scratch. The new coating will fill in the scratch and should be almost invisible. See the YouTube video of repairing a light scratch on a car: <https://www.youtube.com/watch?v=K048c6j0BKU>
- How do I remove the coating?** On a floor, Coval will need to be ground or sanded off with a 60-grit grinder/sandpaper or diamond impregnated polishing pads. If you are trying to remove the coating from a metal, use abrasion blasting.
- What is the shelf life?** Coval lasts 12 months unopened in a temperature-controlled environment.
- How long do the applied coatings last?** It all depends on the environment. Many floors that have Coval coatings applied have withstood heavy industrial wear for 10 years or more. But like any product, eventually they will start to show wear. With Coval Concrete and Coval UTC, simply clean and re-coat areas that need repairs.
- Are the coatings breathable?** Yes, the coatings will allow moisture to evaporate underneath the coating and allow pressurized air to pass through the surface.