



Coval Molecular Coatings

1391 Skillman Lane, Petaluma CA 94952

CONCRETE COAT

DATA SHEET

DESCRIPTION

Coval Concrete Coat is a coating for protecting concrete & masonry surfaces from the destructive forces of water, chloride ion penetration, food & beverage acids, bird and animal waste matter, salt spray, gum, and graffiti. Concrete & Masonry Coat is peel and flake resistant. Available in a gloss or satin finish. Can be applied over Coval Quick Seal & Enhance.

SURFACE

Concrete walls & structures, floors, masonry pavers, bricks, cement block.

SOLUTION

Moisture, most stains, mild acids, bird & animal waste, graffiti.

CHARACTERISTICS

Color: Clear
Finish: Gloss or Satin
Vehicle Type: Solvent Base
Flash Point: (C Penskey-Martens closed Cup)
-9C/15F
VOC: less than 100 g/L
Weight per Gallon: 7.36 lb
Non-breathable

TESTING

ASTM D-3363 Film Hardness Taper, 39.11 average
ASTM D-2047 Static Coefficient passes ADA requirements*
E96-10 Water Vapor Transmission, average WVT 0.8053 gr/ft²/hr, average perms 1.9406 gr/ft²/hr
G155 Xenon Arc, wavelength 340nm irradiance 1.0 w/m² 500 hours, slight change
*Always obtain independent retest of the static coefficient after applying any coating on walking surface to verify new application meets OSHA requirements.

SPREAD RATE

Recommended Spread Rate per coat:

Wet mils: 2.5-3.5
Dry mils: 1.5-2.1

COVERAGE

Coverage: 400-600 sq ft./gal (approximate)
Coverage will vary depending on the porosity and texture of the substrate as well as the applicator's method of application.

SURFACE PREPERATION

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, and other foreign material. Any existing floor that has retained oil must be completely free from any further wicking action as this will prevent a bond and the coating will delaminate.

IMPORTANT; REMOVE ANY SILICON

Coval Concrete Coat will not adhere to silicones or polymer-modified grouts. To determine if the surface is previously sealed or coated, sprinkle water onto the surface. If the water is absorbed and the surface becomes darker it has not been sealed. If the water beads up, there is a coating or sealer that must be removed to allow adhesion of Coval Concrete Coat to the substrate. To remove silicon sealers, use [Coval Step#1 Cleaner for unpainted surfaces](#). Rinse with fresh water and allow to dry. Moisture content not to exceed 13% before applying is required.

Pre-sealing Required on Unsealed/Porous Concrete

On unsealed or porous concrete, you need to apply a sealer first such as Coval Quick Seal & Enhance to prevent the concrete surface from absorbing too much of the Coval Coat rendering it ineffective. If enhancement is not desired, use any good water based sealer that does not contain silicone.

New Concrete or Masonry Surfaces

If in sound condition, clean the surface of all foreign material including dirt, dust, grease, oil, loose particles, laitance, coatings, and curing or release agents. Use [Coval Step#1 Cleaner for unpainted surfaces](#). Rinse with fresh water and allow to dry. Moisture content should not exceed 13%. Smooth surfaces should be abraded to 220 grit by sand or bead blasting or grinding with a floor machine. Test the surface for the proper ph balance of between 7 and 9.

Previously Painted Surfaces

If in sound condition, clean the surface of all foreign material. Use [Coval Step#1 Cleaner for painted surfaces](#). Rinse with fresh water and allow to dry. If the paint is peeling or badly weathered, re-application of the existing paint may be necessary. If re-paint is required proceed with that process outlined by the paint manufacturer, then apply Coval Concrete Coat following the paint manufacturer's re-application time table. If re-paint is not necessary the old paint will require mechanical abrading to 220 grit before applying the Coval Concrete Coat.

APPLICATION INSTRUCTION

Test Area

Due to the wide variety of texture and porosity of concrete and masonry surfaces and the various methods of application and environments, test Coval Concrete Coat in an inconspicuous location to ensure adhesion, and determine that the desired look is achieved. There will be a slight enhancement or change in appearance from the natural surface along with a shine either gloss or satin depending which finish is chosen.

Application

Coval Concrete Coat can be applied with an acetone/alcohol proof pump sprayer with a grey or red fan tip or rolled on using a high-density ultra smooth roller. With either method of application, always mask off any adjacent surfaces to keep them free of drips or accidental coating. Always provide positive fresh air and exhaust when applying indoors and make certain there is no possible ignition source such as a pilot light. When applying outdoors, make certain the ambient temperature is between 45° F and 105° F, 90% RH or less and that there is no chance of rain for a minimum of 5 hours after the estimated time of completion of the coating

process. Also make certain there will be no additional morning dew to make the surface damp again before it has dried.

Pump Sprayer

Shake the contents thoroughly in the container to re-suspend the nano particles that have settled to the bottom before pouring into sprayer. Typically about 1/4" of buildup will be present in the bottom of the can. All of this needs to be re-suspended for the coating to perform. Make certain to re-shake every 15-20 minutes to re-suspend the settling nano particles to ensure proper performance. Using an SP brand acetone/alcohol proof pump sprayer or equivalent, install a grey or red fan tip on the wand as this provides the most even application. The SP sprayer is equipped with a valve stem like on a car tire. It is recommended to keep an even amount of pressure while spraying in order to keep a consistent look. We recommend hooking up a compressor and air hose with a quick release to the valve stem on the SP sprayer and then supply the SP sprayer with a constant 35 PSI. This will provide an even flow and finish. To start spraying hold the tip square to the surface being coated at a distance of 8" to 10" off the floor. In a separate container begin spraying into the container to avoid initial spitting of product on the floor caused from air trapped in the spray wand. When you stop spraying also stop the flow in the separate container as spray wands often drip a few drops after handle is released. You want to provide even distribution of the coating so a smooth right to left then up and down pattern at a fairly fast rate should provide good coverage. This product should go on thin and never allow puddling. It is always best to spray on a few mock ups to get the feel of putting down this product before attempting an actual project. Be careful not to apply too thick (THIN TO WIN) or allow the product to puddle as this will cause too much surface tension and possible bubbles or delimitation. Do not apply a second coat unless there is a flaw in your application of the first coat. If a second coat is necessary, wait 24 hours for the surface to dry. Then abrade the surface with 220 grit sandpaper on a buffing floor machine to allow the second coat to bond. Clean floor of dust and reapply.

Roller

Shake contents thoroughly in the container to re-suspend the nano particles that have settled to the bottom. Typically there will be approximately 1/4" of build up in the bottom of the can that you need to re-suspend for the coating to perform. Make certain to re-shake every 15-20 minutes to re-suspend the nano particles, this will ensure proper performance. Using a high-density ultra smooth roller, roll onto surface in a cross-pattern; left to right, then up and down, always keeping a wet edge. Make certain the roller is completely saturated at all times. Do not apply a second coat unless there is a flaw in your application of the first coat. If a second coat is necessary wait 24 hours for the surface to dry. Then abrade the surface with 220 grit sandpaper on a buffing floor machine to allow the second coat to bond. (Second coat will not adhere to first coat unless the surface is abraded by sanding) Clean floor of dust and reapply.

DRY TIME

Drying Time (@ 77 F, 50% RH):

Drying time is Temperature, humidity and film thickness dependent. (The higher the humidity the faster the dry time)

Touch: 2-3 hours

Through: 3-5 hours

Walk on: 8 to 12 hours

Full Cure: 7 Days

INTERRUPTION OF WORK

It is advisable to stop application on a expansion joint or any other obvious marker so the applicator can begin where the application had previously ceased.

If an area becomes damaged, re-abrade the area using 220 grit sandpaper on a floor machine and re-apply over the area. Prevent any traffic on the area for a minimum of 8 hours. Keep moisture off of repaired area and allow curing for 7 full days.

CLEAN UP

Clean tools and flush equipment with acetone thoroughly before product dries. Once product is dry solvents will not clean the product off.

CAUTION

Always wear OSHA approved 1910.134 and ANSI Z88 2 respiratory protection. Fresh air and exhaust should be provided in enclosed work areas. If inhaled, remove affected person to fresh air and call physician immediately if physical difficulties occur. Wear butyl-rubber gloves and other skin protection to avoid contact. In the event of contact with skin, wash skin thoroughly with soap and water. Chemical safety goggles or splash shields are required. Do not wear contacts without eye protection. Immediately flush eyes with water for 15 minutes after contact and get medical attention. If accidentally swallowed, rinse mouth thoroughly and obtain immediate medical attention. (In enclosed areas make sure to have an observer watching the applicator for any signs of physical distress.)

CARE & MAINTENANCE

Clean with a mop using **Coval Safe Clean** then rinse with water. On large commercial type floors, a floor machine can be driven over the surface in wash mode only with the **Coval Safe Clean** as the cleaning agent. A soft, non-abrasive pad may be used to buff the floor for a shiny finish. Wax coating is no longer necessary.

If an area becomes damaged, re-abrade the area using 220 grit sandpaper on a floor machine and re-apply over the area. Prevent any traffic on the area for a minimum of 8 hours. Keep moisture off of repaired area and allow curing for 7 full days.