COVAL POLISHED CONCRETE SEALER
Technical Data Sheet

Revised 05-2023. Please reference the latest copy available at www.covaltechnologies.com

Coval Polished Concrete Sealer (PCS), clear, thin-film, protective sealer for Polished Concrete

I. PRODUCT DESCRIPTION

Coval PCS is a thin film, single component, clear sealer designed to protect highly polished concrete while preserving the natural, unfinished look and protecting it from surface wear and harsh chemicals. It creates a covalent bond with the concrete substrate and is applied with an acetone pump sprayer and microfiber applicator pad. It should be applied over a Densifier and can be used over an existing guard. Coval Coatings are UV stable and resist moisture, stains, chloride ion penetration, dirt, ice, acids, bird and animal waste, and graffiti damage to the substrate.

II. RECOMMENDED USES

A. Polished and densified concrete
B. Polished and densified/sealed concrete overlays
C. Polished and sealed/densified precast concrete products
D. Polymer modified and concrete terrazzo

III. PRODUCT CHARACTERISTICS

A. PROPERTIES

1. Color: Clear, or clear to slight amber (depending on temperature and humidity)
2. Finish: Clear-Gloss
3. Vehicle Type: Solvent Base
4. Flash Point: Penskey-Martens closed cup -9°C/15°F
5. VOC: Less than 100 g/L
6. Weight/Litre: .96 kg/L

B. DRY TIME

1. Drying Time @70°F, 50% RH: Temperature, humidity, and slab temperature dependent. (The higher the temperature and humidity, the faster the dry time).
2. Touch Dry: 2-4 hours
3. Walk on: 5-6 hours
4. Forklift Traffic: 12 hours minimum
5. Hot Tire Resistance: 72 hours
6. Dry to Recoat: Coval Coatings are designed to give excellent performance with a single coat. If recoating is necessary, wait for a minimum of 24 hours. It may take longer due to cold temperatures and low humidity, so always do a test area before recoating.
7. Full Chemical Resistance Cure: 7 days

C. SPREAD RATE PER COAT (recommended)

800-1000 square feet per gallon depending on polished concrete finish quality.

D. COVERAGE

Coverage will vary depending on the porosity and texture of the substrate, as well as the applicator's method of application. Below are typical coverage rates:

1. 400 grit polished & densified concrete: 800 sq.ft./gal
2. Terrazzo: 1000 sq.ft./gal
3. 800-3000 grit polished and densified concrete: 1000 sq.ft./gal
4. Polished and sealed concrete overlays: 1000 sq.ft./gal

E. TESTING RESULTS

ASTM D-4060 Taber Abrasion	<1 mg
ASTM D-3363 Film Hardness, Pencil	9H
ASTM D4541 Adhesion	1700 PSI
ASTM D3359-97 Adhesion	4
ASTM B117-111 Salt Spray Scribed	6

Staining Agent	Resistance Time (hours)	Cleaner Required
10% Citric Acid	12	Dry Cloth
Acetone	48+	Dry Cloth
Balsamic Vinegar	12	Dry Cloth
Betadine	6	Wet Cloth
Brake Fluid	48+	Dry Cloth
Coffee/Tea	48+	Dry Cloth
Gasoline	48+	Dry Cloth
Permanent Marker	48+	Solvent
Red Wine	48+	Dry Cloth
Spray Paint	48+	Solvent

F. INDOOR SAFETY

During application, 1) turn off all pilot lights or open flames in the building, 2) always wear safety googles and, 3) wear an OSHA approved respirator.

IV. APPLICATION INSTRUCTIONS

A. GENERAL

1. **Coval PCS** is applied with an acetone pump sprayer and a 4"X18" microfiber applicator pad and applicator.
2. Only use a ***solvent resistant spray system rated for Acetone***.
3. Watch Coval YouTube Video: https://www.youtube.com/watch?v=fJl27GJ7N8Y to see how to install.
4. Use TeeJet gray cone jet tip (TX-VK8) or (TX-VK10/12) to spray down a larger amount of product faster.
5. Start by saturating the microfiber pad with **Coval PCS** over the area where starting the installation.

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6. Spray an even amount of material across the floor and begin mopping it in a circular motion in 3'-4' rows, left to right across the floor.
7. Use control joints or defined breaks in the floor to maintain a manageable wet-edge (25-30 feet) distance. Long wet edge applications require multiple applicators to install the coating fast enough before it starts to tack up. Always return to the starting position of each row to begin a new row so that it starts at the oldest point. The coating will begin to tack on average in 3 minutes, which is plenty of time to work at a relaxed pace over a 25-30 foot wet edge.
8. TIP: If a small spot is accidentally missed, use the sprayer to mist **Coval PCS** on the missed spot and do not touch it. The sealer will flow over the missed area and level out.
9. If applying outdoors, make certain the ambient temperature is between 40°F and 90°F, and Relative Humidity (RH) is 90% or lower. Check the forecast for low wind and no chance of rain for a minimum of 5 hours after the estimated time of completion of the coating process. Pick the coolest time of day to minimize the concrete surface temperature.
10. Confirm and schedule so that no morning dew, or sprinkler watering occurs 5 hours minimum after application.
11. BURNISHING: **Coval PCS** can be burnished if dry to the touch and as needed to enhance the appearance and smooth the surface. Use a standard natural hair heat generating pad or diamond impregnated pad designed for polishing.
12. Two coats will enhance the wear and stain resistance of the sealer.

B. SURFACE PREPARATION

1. Sweep, Dust and Decontaminate

IMPORTANT: REMOVE ANY SILICONE
Decontaminate any surface to be coated, removing oils, grease, wax, fatty acids, and other contaminants by using detergents, etching solutions, heavy duty cleaner/degreaser, steam cleaning, or chemical cleaning. Ensure the polished surface is beading water and has the final permanent look desired.

2. Previously Polished Concrete

a. **Coval PCS** is compatible with densifiers and hardeners used after the concrete is placed or polished or during the curing process. Lithium silicate, colloidal silica, sodium silicate, and acrylic emulsions or guards are generally compatible with **Coval PCS**. Clean the surface before application. DO A TEST AREA in an inconspicuous spot to ensure there is not any issue with the adhesion or curing process.
b. **Coval PCS** is not formulated for application over painted surfaces or epoxy.

3. Test Area

a. When using **Coval PCS** on a new substrate for the first time, clean the area, then test it on a small, inconspicuous area to ensure adhesion and determine that the desired look is achieved. Due to the wide variety of texture and porosity of concrete and masonry surfaces and the various methods of application and environments, different reactions may occur. Once satisfied, work can begin.
b. There will be a slight enhancement or change in appearance from the natural surface when using **Coval PCS**. It will depend on the color of the concrete.
c. If ever in doubt about a coating, TEST it first.

C. MOVE

Do not exceed 3 minutes of wet-edge exposure. When replenishing the coating, quickly refill the sprayer and return to coating on the wet edge within 15 minutes and avoid touching the previously coated areas. Be prepared with coating ready to refill a sprayer. For larger jobs use multiple applicators to maintain the wet edge and assist with refills.

D. INTERRUPTION OF WORK

1. If a stop is needed, use a control or expansion on the floor or clean tape line.
2. Clean the sprayer with acetone and resume work when ready.
3. After 15 minutes, the coating will not re-emulsify or melt into itself if stopped and restarted on the wet edge.

E. CLEAN UP

1. Clean tools and flush equipment with acetone twice (minimum) immediately after application.
2. Remove spray tips and soak in acetone.
3. **IMPORTANT**: Once the coating is dry, the tools will not clean up with any solvent.

V. STORAGE

If excess coating remains in a container, Coval recommends the following:

A. Put a nitrogen or argon blanket on the top of the remaining liquid in the container, **OR**
B. Move the remaining coating to a smaller container with as little air/oxygen in the container as possible. Use only HDPE containers.
C. Store in a cool, dry location. Do not store solvent-based products in the sun, warm

storage area, or in a sun-heated vehicle as overly heated products can turn dark in color and remain tinted when applied.

D. Shelf life: 12 months
E. Store in temperature-controlled environment not to exceed 80°F.

VI. CARE AND MAINTENANCE

A. Wipe up spills as soon as possible.
B. Do not use heavy abrasive pads on auto-scrubbers.
C. A soft brush or white buffing pad is sufficient to remove stains from the surface once cured.
D. Neutral pH cleaners, disinfecting cleaners, and de-greasers will not damage the finish and can be used regularly.
E. Remove paint spills or graffiti with rubbing alcohol and rinse with water.
F. If high traffic areas show wear, lightly sand and spray a fresh coat in the worn area.

VII. SAFETY AND ENVIRONMENTAL

A. Always wear OSHA approved 1910.134 and ANSI Z88 2 respiratory protection.
B. 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.
C. 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.
D. 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.
E. If accidentally swallowed, rinse mouth thoroughly and obtain immediate medical attention.
F. In enclosed areas, make sure to have an observer watching the applicator for any signs of physical distress.

Please see Coval FAQs for the specific product online at www.covaltechnologies.com.