

Renaissance Concrete Chemical Stain Technical Data Sheet

1. Description and Uses

Renaissance Concrete Chemical Stain™ is a permanent concrete stain that transforms concrete into beautiful, natural earth tones that add the finishing touches to any residential or commercial property.

Renaissance Concrete Chemical Stain™ creates an affluent mottling and shading of colors on a concrete surface by penetrating the concrete in varying degrees of intensity depending on the composition of the concrete. The stain consists of mild acid that is mixed with water and metal oxide additives that penetrate the surface to create a chemical reaction with the free lime in the concrete.

Renaissance Concrete Chemical Stain™ doesn't just cover up the concrete like dyes or pigments. It absorbs into it by working in harmony with the finish character of the substrate, creating an everlasting finished glow of color.

Renaissance Concrete Chemical Stain™ is available in an assortment of eleven colors which include: Weathered Bronze, Antique Gold, Chestnut, Rustic Fieldstone, Walnut Brown, Smokey Granite, Ebony Stone, Vermont Slate, Turquoise Blue, Emerald Green, and Spanish moss.

Colors are meant to be used as designed, but artists can create their own shades by mixing colors together.

2. Coverage

One full gallon of *Renaissance™ Concrete Chemical Stain* will cover approximately 200 to 250 square feet. The recommended dilution is 1:1 with water, therefore if you purchase one gallon, after the dilution you will have two gallons. Two applications are recommended for most jobs.

SelectGuard™ Sealers have coverage rates of approximately 250 square feet per gallon. Two applications of sealer are needed to finish a job. SelectGuard™ Sealer is available in five gallon containers.

3. Preparation

New concrete should be given of a minimum of

fourteen to twenty one days to cure. The results of the stain will be unpredictable if applied to concrete that has not been fully cured. Liquid curing agents should not be used.

The concrete must be thoroughly cleaned and rinsed before chemical staining can begin. Pressure washing with a fan tip, scrubbing with a rotary machine or hand scrubbing with a stiff bristled brush is recommended. The surface must be free of any material that would inhibit the stain from contacting the concrete. Water must also easily penetrate the surface; this can be checked by spotting the surface with water. The water should darken the surface and be readily absorbed into the concrete. If the water "beads" and does not penetrate, additional curing and/or surface preparation must be done.

4. Protection

Surrounding areas, plant foliage and walls should be protected prior to staining. The work area should be roped off. All adjacent vehicles should be removed and the roped areas closed to foot or vehicular traffic. Applicators should wear an approved acid vapor respirator. Provide adequate ventilation and sufficient local exhaust as needed to maintain exposure below TWA and TLV limits. Wear chemical-resistant gloves, chemical splash goggles and suitable protective clothing to avoid contact with the skin.

5. Application

Each concrete slab will accept the stain in varying degrees of intensity due to factors such as temperature, amount of stain used, makeup of the concrete and finishing techniques used. The benefit of these variations is that it creates a natural color variation that brings a certain distinction to each project.

To ensure satisfaction with the stain being used, it is best to test the stain in an inconspicuous area. An adequate size sample should be used so a good judgment of the final appearance can be made. Make sure to use the same worker, equipment, and techniques that produced the sample to be used on the finished product.

Renaissance Concrete Chemical Stain™ should be applied by using a pump-up sprayer with all plastic

components. Apply one coat of the chemical stain while agitating the surface with a brush. Brushes should be uncolored, acid-resistant nylon bristled with a medium stiffness and able to hold liquids. Use the brush in a circular motion to ensure maximum coverage. For best results, maintain a wet edge. Make sure to avoid leaving brush marks or puddles because they will become permanent when the stain dries.

As the stain is applied, various degrees of acidic reactions, such as foaming and fizzing, could occur. These reactions imply that the chemical stain is positively reacting with the concrete. Just remember that the liquid chemical stain color will not resemble the final color produced on the concrete surface. Sometimes there will be no immediate visible reaction with the concrete and stain, this is why it is important to allow at least five hours for the stain to dry until rinsing or cleaning unless a lighter color is desired.

When applying chemical stain to vertical surfaces, application should start at the bottom and work upward. Excessive run down should be avoided.

Two applications of the stain are normally required on the concrete. Once the stain has properly dried it should be cleaned off the concrete before applying the final coat of stain. This is necessary because there will most likely be some build up of residue that will negatively affect your final appearance of the concrete. Make sure adequate time has been given for the stain to react with concrete. Premature rinsing will generally lighten the color and may cause undesired, dramatic shading. The final coat of chemical stain should be allowed to dry before rinsing unless different effects are desired.

Only one coat is needed to produce the desired results when staining polymer cement. Polymer cement accepts chemical stain more readily than concrete. Renaissance Concrete Chemical Stain™ may completely change the color of the polymer cement.

6. Clean-Up and Neutralizing

After the final staining process allow adequate time for the concrete to dry again. Apply a final rinse cycle to the now dry concrete surface. Rinse the surface until the rinse water is completely clean. A solution of five percent to ten percent sodium bicarbonate (baking soda) or ammonia and water should be applied to the surface to neutralize it. Use an acid resistant nylon brush to scrub the surface to

remove all residues. Use a rotary floor scrubber or buffer should be used to clean the surface if available. An all plastic, acid resistant shop-vac can be used to collect all wash water. All residues, run off, cleaning water, and absorbent materials must be discarded and disposed of in accordance with all local, state, and federal regulations.

7. Sealing

Allow 24 hours for the concrete surface to dry from final rinse cycle before applying the sealer. Two coats of *SRI Solvent Based Clear Sealer* (or an equivalent) are suggested to complete the project. Do not apply below 45°F. Open the pail of sealer and mix thoroughly with a drill. To apply with a roller, use a solvent resistant, 1/4" nap. Apply one thin coat forcing the sealer into the low areas of the surface. Allow the sealer approximately 12 hours to dry then repeat the process (for second coat use non-skid modified sealer if desired). To apply with an airless sprayer, use a size 8/13 reversible tip and spray evenly onto the concrete surface.

Allow 24 hours before allowing foot traffic on the sealed area and allow at least 72 hours before allowing vehicle traffic on the area.

CAUTION: SRI Solvent Based Sealers are flammable.

8. Package Sizes

Renaissance Concrete Chemical Stain™ is offered in one gallon containers. For large projects, please contact SRI Concrete Products for alternate packaging. Sample kits (eleven 8 oz bottles of each stain) are also available for a minimal fee.

9. Warranty

Renaissance Concrete Chemical Stain™ is warranted for uniform chemical quality across all products distributed or used. Due to the fact that all concrete receives stain in varying intensity, there is no warranty, expressed or implied, as to the final appearance of a concrete surface. If *Renaissance Concrete Chemical Stain™* is found to be inconsistent chemically, the full purchase price for the non-uniform material will be refunded. The user assumes all other risk and liabilities that result from the use of this product. If you have any further questions, please contact SRI Concrete Products.