

## STARSEAL® COLOR SEAL

### SOLID COLOR STAIN • TINTABLE • BREATHABLE

#### DESCRIPTION

**STARSEAL COLOR SEAL**, part of Vexcon's concrete coloring system is a tintable solid color, permanent, penetrating water based curing and sealing compound material that provides a color stained appearance on gray and colored concrete surfaces.

This tintable material is designed to be used with Vexcon StarSeal Color Tints which when combined provides for coloring and sealing in one easy, flexible and cost effective solution to color and match concrete surfaces.

It produces a low maintenance, easy to clean, attractive protective coating that improves resistance to staining, oils, water and salts. Apply to new or to rejuvenate existing colored and gray concrete

#### BENEFITS

- Available in 20 of the most popular colors
- Apply to new or existing colored and gray concrete surfaces
- Provides for complete development of concrete's wear resistance and strength properties
- Interior/exterior applications
- Prevents efflorescence, dusting and spalling
- Flexible and cost effective
- Low odor
- Seals and hardens surface, reducing clean-up and maintenance
- Excellent protection against staining, oil, cleaners and common industrial chemicals
- Corrects variations in colored concrete
- Custom colors and color matching available
- Revitalizes old, stained or uncolored concrete
- Apply to damp or moist surfaces without whitening or loss of adhesion
- Vexcon breathable technology

#### RECOMMENDED FOR

Precast, decorative, and architectural colored and gray interior and exterior concrete where a solid opaque look is desired.

#### SHORT SPECIFICATION

[03 39 00] [09 97 23] [09 93 00]: Low VOC acrylic colored curing and sealing compound. VOC content less than 250 grams/liter shall conform to ASTM C309 Type II and ASTM C1315 Type II Class A in the color \_\_\_\_\_ as manufactured by Vexcon Chemicals.

#### SPECIFICATIONS/COMPLIANCE

Tested according to the most current test procedures in the industry. Testing includes water absorption/repellency ratings, penetration and salt spray resistance.

- VOC – 250 grams/liter or 2.09 #/gallon
- Meets:
  - USEPA AIM-Concrete Curing and Sealing Compounds
  - OTC-Concrete Curing Compounds
  - CARB-Concrete Curing Compounds
- LEED NC category/points: For detailed information visit [vexcon.com/green](http://vexcon.com/green).
  - EQ 4.2 – 1 point
  - MR 2.1/2.2 – 1 point
  - MR 5.1/5.2 – 1 point
- ASTM C1315 Type II Class A
- ASTM 309 Type II, Class A&B
- USDA approved
- Meets ADA and ASTM D 2047 non-slip
- ASTM G154 – passes Class A 300 hour UV resistance
- CSI reference: 03 39 00, 09 97 23, 09 93 00

#### APPLICATION

- Product is supplied at the proper consistency for application and dilution will reduce efficiency and gloss.
- Thoroughly mix with a drill equipped with a jiffy mixer at slow speed. Do not hand mix material or shake can.
- Use **Certi-Vex® Grip** to improve non-slip profile especially in areas where water may remain on the surface.
- After combining materials per instructions, if different containers are used these should be boxed mixed to minimize the possibility of color variation.
- Material should not be allowed to puddle or collect in joints. Apply as thinly and uniformly as possible.
- The area should be protected from additional construction work or staining once application is complete.
- Do not apply on windy, hot days or in direct sun light.
- **If applying by sprayer:**
  - Apply by low-pressure high solids commercial airless sprayer. (Do not use garden or form oil sprayers).
  - The sprayer must be clean and dry. If cleaning with solvents is required, use **Certi-Vex Equipment Cleaner** then flush with water. Clean sprayer as directed between applications to ensure best results.
  - If spraying and back rolling, best application is to spray enough material that a second person can immediately back roll following the spray applicator. Follow roller instructions below. Caution; do not delay the back roll as the area will dry quickly.
- **If applying by roller:**
  - Use ¼" nap mohair roller on stamped textured surfaces. On flat smooth surfaces use Vexcon's Even Flow applicator.
  - Use a roller pan to take off excess product. Do not dip and roll or pour and spread
  - Do not over-work material, apply in a single lapping motion. Do not roll area back and forth, this can cause the film to break and product to become stringy.
  - Do not run roller dry, keep a wet edge and do sections small enough to roll only once over wet material.
  - Do not roll over dry material this can cause the product to become stringy.
  - Over rolling or using incorrect rollers will cause bubbles to form in the coating. If this occurs on final coat corrective procedure is to apply a light coat of **Certi-Vex Coating Repair** over the area. This will recast (heal) the coating and eliminate the bubbles. If this occurs on first coat, follow corrective procedure above then apply final coat.
  - Do not allow sealed area to become wet with water until dry. See dry times.
  - Protect all surrounding areas from over spray. The work area should be closed to foot and vehicle traffic.
  - The sealer can be applied to damp surfaces, however, do not apply over puddled water.

## CURING AND SEALING NEW CONCRETE

- Apply StarSeal Color Seal to still damp freshly finished concrete as soon as the surface cannot be marred, and water sheen disappears. Do not apply over freestanding water.
- If application is delayed, concrete must be kept wet (preferably by water spray mist) until product can be applied.
- If concrete is allowed to dry use **Certi-Vex® Concrete Etch & Efflorescence Remover** to clean and prepare the surface.
- Apply first coat at 300 sq.ft./gal (7.5m<sup>2</sup>/L). A second coat is recommended for long term durability. See Second Coat section.
- Do not cover sealed area with any type of supplemental curing material such as plastic sheeting.

## SURFACE PREPARATION EXISTING CONCRETE

The concrete surface must be properly repaired, structurally sound and cleaned. Use Vexcon's surface prep and cleaning products to properly clean the surface prior to application. Testing should be performed to verify that any cleaning or stripping methods or materials will not damage the concrete.

- To remove coatings such as epoxies, sealers and curing compounds use **Certi-Vex Stripper**.
- The concrete should be cleaned with **Certi-Vex Super Degreaser & Cleaner** to remove any dust, dirt or debris and allowed to dry for a minimum of 24 hours after cleaning.
- To remove efflorescence or to etch the surface for improved material penetration use **Certi-Vex Etch & Efflorescence Remover**.
- There should be no freestanding water.
- Large cracks should be repaired using **Powercoat Epoxy Joint Sealant**.

## SEALING EXISTING CONCRETE

- Prior to application a test area must be performed to determine proper application rate and required surface preparation.
- To determine that the concrete is penetrable perform a water absorbency test by applying water to a representative portion of the prepared concrete floor. A properly prepared surface when dry will immediately absorb clean water without any surface beading effects. Do not continue application if any tested area does not readily absorb water. Additional surface preparation and testing must be done until desired result is achieved.
- If required use **Certi-Vex Etch & Efflorescence Remover** to improve sealer penetration. Application to still damp surfaces is acceptable however free standing water must be removed.
- Apply StarSeal Concrete Stain at 400-500 sq.ft./gal (10-12.5 m<sup>2</sup>/L) on hard non-porous floors and 250-300 sq.ft./gal (6.2-7.5 m<sup>2</sup>/L) on porous floors.

## SECOND COAT

Apply after 1<sup>st</sup> coat has dried at 400-500 sq.ft./gal (10-12.5 m<sup>2</sup>/L).

## MAINTANCE

Spills should be removed promptly and cleaned. Sealed areas should be cleaned regularly, use **Certi-Vex Degreaser & Cleaner** for all cleaning requirements. Periodic reapplication may be required as the sealer wears off.

## HEALTH AND SAFETY

- Use only with adequate ventilation.
  - Use of gloves, goggles and other protective clothing is advised when using this product.
  - If swallowed, do not induce vomiting.
  - Use of respirators is advised when using in confined areas.
- MSDS #CS300 is an integral part of the safety and application of our product. A short synopsis is provided in this product data sheet. Before using this Vexcon product obtain a copy of the MSDS from your distributor or by contacting Vexcon Chemicals.

## SPECIAL NOTES

- Concrete color can be affected by many conditions therefore, before full application test product in a inconspicuous area on the actual substrate to be treated for desired results and application techniques to be used.
- May enhance mottling of colored surfaces.
- Keep product agitated and mixed thoroughly throughout application.
- Actual color will vary depending upon concrete surface, porosity and application method.
- Vexcon color tints are intended to be used with Vexcon StarSeal Color Seal, Color Stain and Color Cure products only.
- Will tend to show rubber burns or tire marks.
- Not gasoline resistant, use **Powercoat® Epoxy** products
- Application of more than two coats is not recommended
- Over application may lead to surface discoloration and improper performance.
- Keep from freezing.
- Do not apply more material per square foot than specified.
- Can apply when surface temperatures are 40°F - 85°F, when below or above these ranges review Vexcon's Cold and Hot Weather Application Guides.
- Shelf Life: If properly stored in its original sealed container, two years from date of manufacture. Rotate your stock.
- For use by experienced applicators

## PACKAGING

Tint base material is available in 5-gallon pails. Color tint packs are available in 24 ounce containers packed 6 per case. Contact Vexcon directly to discuss your customized packaging requirements.

## MIXING INSTRUCTIONS

- Mix selected color tint pack well before adding to tint base
- Mix tint base well before adding tint.
- Add tint color to base according to color loading instructions.
- Mix combined material thoroughly with a drill equipped with a jiffy mixer at slow speed. Do not hand mix material. Mix until a uniform consistency and streak free color is reached. Care should be taken to not over mix the material as this may trap air into the material.
- After combining materials if different containers are used these should be boxed mixed to minimize the possibility of color variation.

## COLOR LOADING INSTRUCTIONS

Note: See StarSeal Color Tint Data Sheet # OP108 for loading, tint base and color pack selection instructions.

Three easy steps:

1. Choose color. (See our Concrete Coloring System brochure)
2. Choose correct tint base according to color selected
3. Add correct load amount of color tint A or tint B to the correct tint base material.

Important Note: Loading amounts are based on five gallons of finished tint base material. Mixing of smaller amounts is not recommended.

Important Note: Color packs can be reused but must be tightly sealed and stored in climate controlled area.

## PHYSICAL PROPERTIES

- |                   |             |
|-------------------|-------------|
| • Wet appearance  | Milky White |
| • Dry appearance  | Solid Color |
| • Dry - tack free | 25 minutes  |
| • Foot traffic    | 24 hours    |
| • Vehicle traffic | 72 hours    |
| • Solids          | 25% minimum |

Note: All calculations based upon 68-77°F (20-25°C).

Lower temperatures and relative humidity will extend dry times.

## WARRANTY

Vexcon warrants that the goods supplied hereunder shall be of its standard quality and shall conform in all material respects to the sample which has been made available for testing by buyer prior to sale. As the EXCLUSIVE REMEDY for any breach of this Limited Warranty, Vexcon shall replace nonconforming goods or refund the purchase price. Since methods of use and application are beyond Vexcon's control, this Limited Warranty IS IN LIEU OF ALL OTHER WARRANTIES EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THOSE CONCERNING MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THIS LIMITED WARRANTY IS ALSO IN LIEU OF ANY OTHER POSSIBLE LIABILITIES OF VEXCON, WHETHER ALLEGED TO ARISE BY AGREEMENT OR BY OPERATION OF LAW, RESPECTING THE SALE, APPLICATION, USE OR FUNCTION OF VEXCON'S PRODUCTS, INCLUDING BUT NOT LIMITED TO CLAIMS OR NEGLIGENCE, GROSS NEGLIGENCE, STRICT LIABILITY OR ANY OTHER TORT. IN NO EVENT SHALL VEXCON BE LIABLE FOR PERSONAL INJURY OR PROPERTY DAMAGE, REAL OR PERSONAL, ATTRIBUTED TO ITS PRODUCTS, NOR FOR ANY EXCAVATION, REMOVAL, REAPPLICATION, DOWNTIME, CLEANUP, LOSS OF USE, LOSS OF OPPORTUNITY, LOSS OF MARKET VALUE, LOSS OF RENTAL VALUE OR FOR ANY LOSS OF PROFITS OR OTHER SPECIAL, INCIDENTAL, RESULTING, CONSEQUENTIAL OR EXEMPLARY DAMAGES. No person is authorized by Vexcon to assume for it any other liability of any kind in connection with the sale or use of products manufactured and sold by it, and there are no oral agreements or warranties collateral to or affecting any sale or use. All of the foregoing arises under the substantive law of Pennsylvania without regard to principles of conflicts of laws.