

STARSEAL[®] 309

ECONOMICAL • EASY TO USE • LOW ODOR

DESCRIPTION

StarSeal 309 is a water based 100% acrylate curing, sealing, hardening dust proofing, and water repellent compound. Easily applied, StarSeal 309 quickly forms a hard, crystal clear film that is permanent, tough, water repellent, resistant to yellowing and many chemicals. StarSeal 309 features Vexcon's breathable technology which allows moisture vapor to pass through rather than becoming trapped, preventing whitening, peeling and flaking. The product is ideal for both interior and exterior applications on new and existing concrete floors, stucco or brick walls, architectural sections, retarded concrete and vertical poured walls. It is also an ideal base coat for paints, tiles, adhesives and carpet, meeting the requirements of the Resilient Tile Institute. StarSeal 309 will quickly dry to a clear layer of protection at an affordable price.

BENEFITS

- Provides for complete development of concrete's wear resistance and strength properties
- Surface remains clear
- Apply to damp surfaces without whitening or loss of adhesion
- Seals and hardens surface, reducing clean-up and maintenance
- Excellent protection against staining, attack by alkali, oil, cleaners and common industrial chemicals
- Prevents efflorescence, dusting and spalling
- Vexcon breathable technology
- Economical
- Excellent base for adhesives
- Re-coatable
- Low odor

APPLICATION

- Product is supplied at the proper consistency for application and dilution will reduce efficiency and gloss.
- Thoroughly mix before applying.
- To improve non-slip profile use **Certi-Vex[®] Grip**.
- Note; product forms a surface film quickly depending on temperature, humidity and wind conditions therefore, for best results follow all equipment and application instructions carefully.

If applying by sprayer:

- Apply by low-pressure commercial grade solvent resistant sprayer with neoprene fittings. (Do not use garden or farm 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:

- For best results use Vexcon's **EvenFlow Applicator** or ¼" nap mohair roller (non-shedding, solvent resistant).
- 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. To aid in keeping roller wet and fluid, keep a roller pan filled with **Certi-Vex Equipment Cleaner**.
- 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.
- Material should not be allowed to puddle.
- Do not allow sealed area to become wet with water until Dry. See dry times.
- Protect all surrounding areas from over spray.
- The sealer can be applied to damp surfaces, however, do not apply over puddled water.
- A uniform appearance requires even coats leaving no gaps. Some areas may be more porous than others; these areas may Require additional coats to even out the appearance. Caution: Do not over apply material. See Special Notes section.

CURING AND SEALING NEW CONCRETE

- Apply StarSeal 309 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 200 sq.ft/gal (5.0 m²/L). A second coat is recommended for long term durability. See Second Coat section.

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.

- To remove coatings such as epoxies, sealers and curing Compounds, use **StarSeal EF Concrete Stripper**.
- The concrete should be cleaned with **StarSeal EF 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 Flexible 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.
- 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 309 at 400-500 sq.ft./gal (10-12.5 m²/L) on hard non-porous floors and 250-300 sq.ft./gal (6.2-7.5 m²/L) on porous floors.

SECOND COAT

Apply after 1st coat has dried at 400-500 sq.ft./gal (10-12.5 m²/L).

SPECIFICATIONS/COMPLIANCE

- VOC <300 grams/liter or <2.50 3/gal

Meets:

- USEPA AIM-Concrete Curing & Sealing Compounds
- OTC- Concrete Curing Compound
- LADCO/MRPO- Concrete Curing Compounds
- Canada- Concrete Curing Compound
- CARB- Concrete Curing Compound
- SCAQMD- Rule 1113- Concrete Curing Compound for roads & bridges
- LEED NC category/points: For detailed information visit vexcon.com/green.
 - EQ 4.2 – 1 point
 - MR 2.1/2.2 – 1 point
 - MR 5.1/5.2 – 1 point
- ASTM C 309 Type 1 Class A&B
- USDA approved
- Meets ADA and ASTM 2047 non-slip
- CSI reference: 03 39 00

Test reports are available upon request.

MAINTENANCE

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

TOPCOATS AND ADHESIVES

StarSeal 309 cured concrete can be topcoated with a variety of paint, adhesives and mastics, a minimum of 14 days after application. It is strongly suggested that a test area be applied prior to coating the entire surface, since products can adhere to concrete in varying degrees. Check with manufacturer of the topcoat for any precautionary and compatibility information.

SPECIAL NOTES

- To assist in application note, 200 sq.ft./gal wet film is approximately equal to the thickness of a sheet of paper.
- Will tend to show rubber burns or tire marks
- Plasticizer migration from soft plastic mats, pads, etc. can cause sticking. Remove these items from direct contact with sealer.
- Will cause bleeding of bituminous surfaces
- May enhance mottling of colored surfaces
- Not gasoline resistant use **Vexcon High Performance Coating** products
- Application of more than two coats is not recommended
- Over application may lead to surface discoloration and improper sealer performance
- Mix well before each use, 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
- Proper application of Vexcon material is the responsibility of the installer or user. Telephone consultation and/or field visits by Vexcon personnel are for the sole purpose of making technical recommendations only, and not for providing quality control or supervision on location.

PACKAGING

StarSeal 309 is available in 55-gallon drums, 5-gallon pails and 1 gallon containers. Contact Vexcon directly to discuss your customized packaging requirements.

VITAL STATISTICS

- Flash Point (TCC) >212°F (>100°C)
- Boiling Point 212°F (100°C)
- Autoignition Temp 450°F (232°C)
- Extinguishing Media Foams, Dry Chemical, CO₂, Water Fog

PHYSICAL PROPERTIES

- Wet appearance Milky White
- Dry appearance Clear
- Dry - tack free 25 minutes
- Foot traffic 24 hours
- Vehicle traffic 72 hours
- Solids 15% minimum

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

Lower temperatures and relative humidity will extend dry times.

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 CS100 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.

CONTACT US @

Additional product information, technical assistance and customer service is available by contacting Vexcon Chemicals directly, or our distributors.

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- sales@vexcon.com
- techservice@vexcon.com
- Voice: 888.839.2661
- customerservice@vexcon.com
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WARRANTY

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