



STARSEAL® EF WEATHER AND STAIN GUARD

ADVANCED WEATHER & STAIN PROTECTION • LONG TERM PROTECTION
SUPERIOR REPELLENCY

DESCRIPTION

STARSEAL EF WEATHER AND STAIN GUARD is an advanced water based emulsion horizontal and vertical weather, stain and discoloration protective treatment for hard, porous, decorative and functional surfaces.

StarSeal EF Weather and Stain Guard's deep penetrating and pore clogging formula creates a molecular bond within the surfaces pores yielding unequalled stain protection from food, salts, water, oil, dirt, acids and other common stains.

StarSeal EF Weather and Stain Guard also protects against the damaging effects of weather-related conditions such as wind-driven rain, freeze thaw cycles, moisture and chloride ion intrusion from deicing salts.

Surfaces properly treated with StarSeal EF Weather and Stain Guard according to manufacturers instructions, have a totally natural appearance and will renew the color of some faded materials yielding a more vibrant surface without film build up or surface film gloss.

BENEFITS

- Advanced protective treatment prevents staining and discoloration.
- Protects natural and colored surfaces
- Prevents the formation of mold and mildew
- Vertical and horizontal surfaces
- Interior and exterior surfaces
- Breathable-Does not trap moisture
- An effective chloride screen reducing surface erosion and corrosion
- Retains natural color and texture of treated surface
- Use on smooth, porous, and ground surfaces
- Long lasting protection
- Can be applied to surfaces, which are slightly damp
- Low odor
- Simplifies cleanup

STARSEAL EF

StarSeal EF products are high performance building materials that are dedicated to reducing their environmental foot print by improving the environmental performance of buildings, the air quality of its inhabitants and reducing the effects of volatile organic compounds (VOC's) on the environment.

ECO-FRIENDLY ATTRIBUTES

- Low odor
- Low VOC content
- LEED points
- Safe to use
- Safe to store
- Packaged in recyclable containers

SPECIAL NOTES

- **Important** – Read and follow all instructions. Any questions, contact Vexcon.
- The product should be stored in sealed containers and kept away from extreme heat
- Can apply when surface temperatures are 40⁰F-85°F When below or above these ranges review Vexcon cold or hot weather application guide.
- Protect glass from over spray
- Always test each type of surface and each type of stain for suitability, coverage rates and desired results before application.
- Shelf Life: If properly stored in its original sealed container, two (2) years. Rotate your stock.
- New concrete should be thoroughly cured, 14 days, before application.
- For use by experienced applicators

SURFACE PREPARATION

- All patching and joint sealants, and grout should be installed prior to application of StarSeal EF Weather and Stain Guard.
- Surface should be cleaned free of dust, surface dirt and contaminants. Use one of **Vexcon's cleaners and stain removal products** to properly clean the surface prior to application.
- Prior to application a test area must be performed to determine proper application rate and required surface preparation. To determine that the surface is penetrable perform a water absorbency test by applying water to a representative portion of the prepared surface. A properly prepared surface when dry will immediately absorb clean water without any surface beading effects.
- Protect wall cavities during construction to prevent rain water saturation and related staining.
- Let newly constructed surfaces dry and cure for 14 days before cleaning. Excessive moisture may mobilize staining and cause unsatisfactory cleaning results.
- Cleaning high-strength mortar/grout within seven days improves results.
- Application to still damp surfaces is acceptable however free standing water must be removed.

APPLICATION

- StarSeal EF Weather and Stain Guard should not be diluted or altered.
- See Coverage/Estimating section below for suggested application rates.
- Treated surfaces should be protected from rain and foot traffic for 4-6 hours following application.
- Protect from vehicular traffic for 24 hours.
- Apply with low-pressure (20-PSI) airless commercial grade spray equipment. Sprayer should be clean and fitted with solvent resistant hoses and gaskets. Use **Certi-Vex Equipment Cleaner** then flush with water to properly clean spray equipment.
- If using brushes or rollers care should be taken to ensure that enough solution is applied.
- Use a roller pan to take off excess product. Do not dip and roll or pour and spread.
- Porous substrates may require additional light applications until surface rejection to totally seal the pores.

HORIZONTAL SURFACES

Apply in a single saturating application with sufficient material applied so the surface remains wet for a few minutes before penetration into the surface. Surface residues, pools and puddles should be broomed or brushed out until they completely penetrate into the surface.

VERTICAL SURFACES

Apply in a flooding application, from the bottom up with sufficient material applied to provide a 6" to 8" run down below the contact point of the new spray pattern with the surface. Thoroughly brush heavy runs and drips into the surface.

MAINTENANCE

- Do not allow spills to sit for extended periods of time. Clean spills immediately with Vexcon's **Starseal EF Degreaser & Cleaner**. When using other general cleaners test a small area for cleaner compatibility prior to full every day use.
- Periodic reapplication may be required as the treatment ages or after cleaning heavy dirt build up.

SUBSTRATE LIST

StarSeal EF Weather and Stain Guard is safe to use on the following surfaces:

- Concrete (Architectural, Pavers, Block)
- Marble tile
- Granite (Lightly Polished and Unpolished)
- Slate
- Natural Stone
- Manufactured Stone
- Clay Brick
- Masonry

PERFORMANCE TEST DATA

StarSeal EF Weather and Stain Guard has been tested according to the most current test procedures in the industry. Testing includes water absorption/repellency ratings, penetration and salt spray resistance. Results are listed below and independent test reports are available on request.

1. Chloride screen test using NCHRP 244 series IV (1 application at 125 sq.ft. /gal.) min 90%.
2. Reduces water absorption (ASTM C-67 and ASTM C-140) by greater than 84%.
3. Scale rating-ASTM C-672-84 100 freeze thaw cycles-0 (no scaling).
4. Penetration (1 application) 7mm-13mm.
5. Water Transmission 110%
6. Stain Resistance: See stain resistance chart. # TN 230

VITAL STATISTICS

- Flash Point: >212⁰F Tag closed cup
- Boiling Point: 210⁰F, 760 mm Hg
- Autoignition Temp: ND
- Extinguishing Media: Foams, Dry Chemical, CO₂, Water Fog, spray

SPECIFICATIONS/COMPLIANCE

- VOC 248gr/liter or 2.07#/gallon
- Meets:
 - USEPA AIM-Waterproofing Sealers and Treatments
 - OTC-Waterproofing Sealers
 - CARB-Waterproofing Sealers, Concrete/Masonry
- LEED NC category/points: For detailed information visit vexcon.com/green
 - EQ 4.1 – 1 point
 - MR 2.1/2.2 – 1 point
 - MR 5.1/5.2 – 1 point
- Meets NCHRP 244
- Meets SSW 110C (water repellency)
- Meets ASTM 16536 (breathability)
- CSI Reference: 07 19 16

COVERAGE RATES/ESTIMATING

Porosity and texture of the surface will affect the amount of material necessary for effective treatment. The following is a guide for estimating material requirements. Always test on the actual surface to get precise consumption rates.

Concrete:

Pavers	200-300 sq.ft/gal.
Fine broom finish	300-400 sq.ft/gal.
Hard trowel finish	400-600 sq.ft/gal.
Clay Brick	300-400 sq.ft/gal.
Marble tile unpolished	600-800 sq.ft/gal.

Granite:

Lightly Polished	800-1000 sq.ft/gal
Unpolished	600-800 sq.ft/gal
Slate	600-800 sq.ft/gal.
Sand and Lime Stone	400-500 sq.ft/gal.
Manufactured Stone	200-400 sq.ft/gal.
Tile Grout	300-400 sq.ft/gal.
CMU Block	50 - 100 sq.ft/gal.

PACKAGING

StarSeal EF Weather and Stain Guard is available in 55-gallon drums, 5-gallon pails and 1-gallon containers. Contact Vexcon to discuss your customized packaging requirements

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.
- Vexcon MSDS # PS113 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 it is advisable to 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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