



STARSEAL® EF RELEASE

ECONOMICAL FORM TREATMENT • CHEMICALLY ACTIVE • ECO-FRIENDLY

DESCRIPTION

STARSEAL EF RELEASE is an economical, non-staining, crystal clear water based form release agent which provides exceptional release properties while protecting environmentally sensitive areas and. Recommended for all types of aluminum, steel, and wood forms.

Since the product does not contain any oils or waxes, Starseal EF Release is non-staining to the concrete and can be top-coated without concern for compatibility. When properly applied the product forms a film on the surface that covers 100% of the exposed form area. 100% coverage is the Vexcon Forming Advantage by providing uniform release that avoids heavy build up and uncovered areas.

Starseal EF Release will not crater, bead, run or sag on vertical application. This reduction in heavy build up reduces form preparation between uses increasing the forms useful life and decreases labor and maintenance costs. The product also includes a special rust inhibitor to minimize rust formations on steel forms. No surface preparation is required for subsequent coatings or treatments of concrete formed with Starseal EF Release.

BENEFITS

- Excellent release performance
- Economical
- Environmentally friendly
- Will not stain or discolor concrete
- Quick drying
- Reduces surface air voids (bug holes)
- Will not deteriorate or damage surface
- Increases form useful life
- Decrease labor and maintenance costs
- Reduces concrete build up
- Ensures easy stripping of forms
- Reduces surface preparation and painting costs
- Effective for up to three weeks before concrete is poured
- Rain will not wash off dried product
- Minimizes rust formation

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
- Safe to use
- Safe to store
- Packaged in recyclable containers

RECOMMENDED FOR

- Architectural concrete
- Foundations
- Environmentally sensitive areas
- Tunnel, bridges and waste water treatment facilities
- Pre-cast, pre-stressed concrete
- Maritime construction
- Tidal zones
- General forming application

SPECIFICATIONS/COMPLIANCE

- VOC: 0 grams/liter
Meets all clean air standards throughout the US & Canada:
 - US EPA AIM - Form Release Compound
 - OTC - Form Release Compound
 - LADCO/MRPO - Form Release Compound
 - Canada - Form Release Compound
 - CARB - Form Release Compound
 - SCAQMD – Rule 1113- Form Release Compound
- 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
- Federal Unified Facilities Guide Specification (UFGS) for Structural, Precast and Architectural Concrete Forming and Biodegradable Form Release Agent for Cast in Place Concrete
- Ohio EPA contact with potable water
- Contact Vexcon for current state D.O.T. approvals
- CSI reference: 03 11 00 – Concrete Forming

APPLICATION

- Forms and other surfaces that are to be made bond free should be cleaned before applying StarSeal EF Release.
- Remove buildup of concrete, rust, scale and dirt with **Certi-Vex® Concrete Remover** and repair any holes or fractures from previous uses before applying.
- StarSeal EF Release is ready to use direct from its container, do not dilute.
- Apply by brush, roller, spray or dipping on forms immediately before pouring concrete.
- Keep off reinforcing steel and any other embedment's when forms and steel are already in place. An alternative is to apply StarSeal EF Release to forms just prior to erection of rebar steel.
- Coat Uniformly - Leave no gaps.
- Avoid over application and remove excess material.
- Allow to dry.

SPECIAL NOTES

- Residual concrete dust can be wiped off with a rag or water washed to a clean surface.
- Do not use as a bond breaker for concrete on concrete.
- Water base release agents are not visible on applied surfaces once dry. This is normal and does not affect release agent performance. Upon request, product is available with a dissipating dye to aid in application.
- Manufacturers of coatings or treatments should be consulted for special application requirements of their product.
- StarSeal EF Release can be effective for up to three weeks before concrete is poured.
- It is also recommended that forms be treated with StarSeal EF Release between each pour and before long periods of idleness or storage.
- Do not apply form release treatment when surface temperatures are below 40°F.
- Do not apply when rain is predicted 24 hours or less then 1 day after surface has been wet.
- StarSeal EF Release must be allowed to dry on the forms prior to pouring concrete.
- Mix well before each use.
- Keep from freezing.
- Do not apply on windy days.
- For use by experienced contractors.
- Shelf Life: If properly stored in its original sealed container, one year from date of manufacture. Rotate your stock.
- Storage/ Handling: Store in tightly sealed original factory container. Keep from freezing and exposure to moisture. Store at room temperature prior to use. Care should be taken to keep dirt, water and contaminants away from the opening of containers.
- Delivery: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.
- 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.

SHORT SPECIFICATION

03 11 16: Low VOC Concrete Forming and Accessories. Form release agent with rust inhibitor that will not bond with, stain, and rust or adversely affect concrete surfaces and will not impair subsequent concrete treatments. Environmentally safe, meeting local, state and federal regulations. Approved for use in portable water, federal and military facilities. Manufactured by Vexcon.

CLEANING OF USED FORMS.

Instructions for transitioning form oil treated forms to StarSeal EF Release.

- All forms types, metal and wood, should be power washed.
- Used plywood form faces should be power washed and cleaned with **Certi-Vex Super Degrease & Cleaner**.
- Power wash off cleaner and allow to dry.
- Apply release as instructed.
- Notes: To aid in performance on used plywood forms after proper cleaning in is recommended that an application of StarSeal EF Release be applied and allowed to dry.

PACKAGING

StarSeal EF Release is available in 55-gallon drums, 5-gallon pails and 275-gallon totes. Our packaging is recyclable type 2 high density polyethylenes' (HDPE).

COVERAGE

Typical application rate is 500-1000 sq.ft./gal (12.5-25 m²/L) depending on porosity, texture and form material. Conduct a test application to verify the proper application rate for your use.

PHYSICAL PROPERTIES

- | | |
|---------------|----------------------------|
| • Color | Water white clear solution |
| • Wt/gal | 8.3 |
| • Acid number | None |
| • Carrier | Water |

VITAL STATISTICS

- | | |
|---------------------|---------------|
| • Flash Point | None |
| • Boiling Point | 212°F (100°C) |
| • Autoignition Temp | None |

HEALTH AND SAFETY

- Use only with adequate ventilation.
- If swallowed, do not induce vomiting.
- Use of gloves, goggles and other protective clothing is advised when using this product.

Vexcon MSDS FR111 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 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 or our distributors.

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WARRANTY

LIMITED WARRANTY: Vexcon warrants for a period of one (1) year from the date of manufacture that the goods supplied hereunder shall be of its standard quality and free of defects, and conforms to (a) Vexcon's published specifications in force on the date of acceptance by Vexcon of the order and (b) the sample which has been made available for testing by buyer prior to sale. Any claim under this warranty must be made in writing to Vexcon Chemicals within sixty (60) days after such non-conformity is first discovered. As the EXCLUSIVE REMEDY for any breach of this Limited Warranty, Vexcon at its option 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 EXPRESSED 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 OF NEGLIGENCE, GROSS NEGLIGENCE, MISUSE, STORAGE DAMAGE, MISAPPLICATION, ACCIDENT, STRICT LIABILITY OR ANY OTHER TORT. 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.

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