



## STARSEAL® EF BIO-RELEASE

ZERO VOC • NO ODOR • BIO DEGRADABLE • ECO-FRIENDLY

### DESCRIPTION

**STARSEAL EF BIO-RELEASE** is a water based form release made from bio-degradable, rapidly renewable oils. The product does not contain petroleum oils, is odor and VOC free, making it the product of choice for environmentally sensitive areas and protecting the workers who apply the product.

This product is non-staining and provides exceptional release properties yielding a smooth, uniform and dust free surface every time.

Recommended for architectural, pre-cast and general forming. Designed for use on aluminum, metal, wood forms and is ideal product for plastic form liners.

Since the product does not contain any petroleum oils or waxes, StarSeal EF Bio-Release will not stain the concrete surface and because no surface preparation is required subsequent applications of coatings or other treatments applied to the formed surface are completely compatible

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 Bio-Release will not crater, bead, run or sag on vertical application. Residual concrete dust can be wiped off with a rag or water washed to a clean surface. This reduction in heavy build up reduces form preparation between uses increasing the forms useful life and decreases labor and maintenance costs.

### BENEFITS

- Environmentally friendly
- Made from bio-degradable, rapidly renewable materials
- Odorless
- Meets all clean air VOC standards throughout the US
- Yields a smooth and uniform surface
- Will not stain or discolor concrete
- Reduces surface air voids (bug holes)
- Quick drying
- Excellent release performance for aluminum, metal and plywood forms
- Will not deteriorate or damage surface
- Increases form useful life
- Decrease labor and maintenance costs
- Reduces surface preparation
- Reduces concrete build up

### 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 (VOCs) on the environment.

### ECO-FRIENDLY ATTRIBUTES

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

### SPECIFICATIONS/COMPLIANCE

- VOC: 0 grams/liter  
Meets all clean air standards throughout the US:
  - USEPA AIM –Form Release Compound
  - OTC –Form Release Compound
  - LADCO –Form Release Compound
  - Canada – Form Release Compound
  - CARB – Form Release Compound
  - SCAQMD - Bond Breaker
- Meets or exceeds the requirements of the Corp of Engineers, Civil Works Construction Guide, CW-0301, section 2.1.2. and 3.1.3.
- Bureau of Reclamation Standards
- State Specifications for non-staining form release
- Ohio EPA contact with potable water
- CSI reference: 03 11 00 – Concrete Forming

### SHORT SPECIFICATION

03 11 16: Zero VOC Concrete Forming and Accessories. Form release agent made from bio-degradable materials that will not bond with, stain, or adversely affect concrete surfaces, will not impair subsequent treatments of concrete surfaces. Environmentally safe, meeting local, state and federal regulations. Manufactured by Vexcon Chemicals.

### 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 Bio-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. However, because StarSeal EF Bio-Release or any other form release agent must be kept off reinforcing steel and any other embedments, spray application must be done with care when forms and steel are already in place. An alternative is to coat forms with StarSeal EF Bio-Release just prior to erection of rebar steel.
- Coat Uniformly - Leave no gaps.
- Allow to dry

## **SPECIAL NOTES**

- Do not use as a bond breaker for concrete on concrete.
- Manufacturers of coatings or treatments should be consulted for special application requirements of their product.
- 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 Bio- Release can be effective for up to three weeks before concrete is poured.
- It is also recommended that forms be treated with Starseal EF Bio-Release between each pour and before long periods of idleness or storage.
- Starseal EF Bio-Release must be allowed to dry on the forms prior to curing concrete.
- Keep from freezing.
- Do not apply on windy days.
- Mix well before each use.
- For use by experienced contractors.
- Shelf Life: If properly stored in its original sealed container, one year from date of manufacture. Rotate your stock.
- 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.

## **COVERAGE**

500-1000 sq.ft./gal (12.5-25 m<sup>2</sup>/L) depending on porosity, texture and form material.

## **PACKAGING**

StarSeal EF Bio-Release is available in 55-gallon drums, 5-gallon pails and 275-gallon totes. Contact Vexcon directly to discuss your customized packaging requirements.

## **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 FR112 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.

## **PHYSICAL PROPERTIES**

• Color	Water white emulsion
• Wt/gal	8.3
• Acid number	6
• Carrier	Water

## **VITAL STATISTICS**

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

## **CONTACT US @**

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

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• techservice@vexcon.com	• Voice: 888.839.2661
• customerservice@vexcon.com	• Fax: 215.332.9997

## **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 EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THOSE CONCERNING MERCHANT ABILITY 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.

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