Micro-Seal® Densifer LS

Water Repellent and Concrete Densifier TECHNICAL DATA SHEET



100% Lithium Silicate Densifier that provides long-lasting protection from moisture penetration and densifies concrete. Clear formula designed to seal surfaces.

Micro-Seal® CSI Reference

03 35 43 Concrete Finishing
04 40 00 Unit Masonry
09 61/96 Finishes
09 24/25 Finishes

^{*}standard warranty period is 5 years

Description

Rainguard's Micro-Seal® Densifier LS is a high-quality densifier, hardener, and sealer for concrete surfaces. It is made of 100% Lithium Silicate. The lithium silicate penetrates deeper than potassium and sodium silicates. It is also less likely to blush. The harder surface makes cleaning easier and provides a dustproof finish for easy surface maintenance. Micro-Seal® Densifier LS does not contribute to surface Alkali Silicate Reaction (ASR).

Features & Benefits

- Deep penetration creates a harder surface and long lasting performance
- Better abrasion resistance than other sealers
- · Quick cure time, approx. 1 hour
- Easy application only requires one coat
- Provides a durable glossy finish
- · Non-flammable and non-toxic formula with low odor
- Does not crack, peel, or turn yellow

Coverage Rate by Substrate (theoretical)

The coverage depends on the surface. Test the product on a small area to estimate penetration rates. Project conditions can vary. Quantities may range depending on project conditions.

Substrate	Sq Ft/ Gallon
Freshly Placed, Steel Troweled, Uncured Concrete	700 - 900
Ground / Honed and Polished Concrete	500 - 800
Green Concrete	300 - 600

Surface Preparation

Prepare all surfaces prior to application and consider variables that may affect the end result. Remove coatings on existing concrete. Grinding may be necessary depending on the existing coating.

Clean and remove any debris from the surface. Foreign materials such as bond breakers, form release agents, curing agents, surface grease or oils, and construction debris should be removed. Any Acid-Stained surface must be thoroughly neutralized and rinsed.

Dry the surface completely. The proper surface and air temperatures for application ranges between 40 - 100°F (4 - 38°C). Do not apply onto surfaces that are frozen or approaching freezing temperatures soon.

Store Micro-Seal® Densifier LS in a climate-controlled area, and tightly seal the containers. Do not add other chemicals or additives into the material at any time. Maintain a storage temperature of 40 - 100°F (4 - 38°C).

Protect all surfaces, objects, people, pets, and plants from the product. Prevent overspray and splashing on anything not designed to receive the product. Use protective materials such as polyethylene-based protective equipment or similar.

For guidance pertaining to your project, please Contact Us at 888-765-7070.

Application Instructions

ONLY APPLY TO SURFACES THAT HAVE BEEN PROPERLY PREPARED. Refer to the "Surface Preparation" Section for more details. Test each surface to confirm compatibility, coverage rates, and overall suitability for the project.

Do not dilute Micro-Seal® Densifier LS.

- 1. Remove existing coatings.
- 2. Seal existing cracks with a semi-rigid filler.
- 3. Use a 30 or 40 grit metal-bonded diamond to grind the surface.
- 4. Repeat grinding with a 80 grit metal-bonded diamond.
- Grind the surface again with a 150 grit metal-bonded diamond.



Application Instructions (cont.)

- 6. Apply Micro-Seal® Densifier LS with a micro-fiber pad or an airless sprayer.
- 7. If pooling occurs, spread the product evenly to disperse, do not let it dry.

Uncured Steel-Troweled Green Concrete

Apply Micro-Seal® Densifier LS approximately 2 to 6 hours after concrete is poured depending. Apply in a cross hatch wet-on-wet pattern. The time of application depends on the outdoor humidity.

- 1. Soft cut control joints.
- 2. Clean and remove all surface pollutants (dirt, dust, grime, etc).
- 3. Apply a coat of Micro-Seal® Densifier LS using a low pressure pump and spread it evenly with a clean micro-fiber brush. Wet the surface with enough product, and without creating puddles.
- 4. Once the surface begins to dry avoid spreading or scrubbing the surface. Keep surface wet for 5 to 10 minutes. Do not create puddles.
- 5. Allow the surface to dry.
- 6. Apply the curing agent immediately.
- 7. Once cured, use an automatic floor scrubber with a cleaning pads or brushes to remove surface pollutants and other residues.
- 8. Polish the floor after curing is complete. See polishing instructions (optional).

Staining or Dyes

Stains and Dyes can be added onto the conrete after the grinding process, and before the application of Micro-Seal® Densifier LS. Allow the stain or dye to dry sufficiently before applying Densifier LS.

Polishing

Densifier LS can be polished to achieve different levels of glossiness. The higher the grit, the higher the gloss. Do not exceed 3,000 grit polish. Increase the grit levels depending on the desired gloss in increments. Most applications are polished 3 to 4 times with different grits, starting with a 200-grit, then 400-grit, 800-grit, and finishing with a 1,500 or 3,000 grit. We recommend the use of resin-bond diamond pads.

Best Practices

We recommend a top coat application for application of the final product. This helps maintain the final finish, and simplies the maintenance process.

Precautions

All surfaces to be coated should be clean of any dirt, grime, efflorescence, lime run, form oils and release agents, grease, mud, excess mortar, mold and mildew, etc. All cracks should be pointed or caulked. All voids, bee holes, masonry surface defects, and openings such as conduits, pipes, drains, door frames, vents, air conditioner openings, electrical openings, control joints, or any dissimilar materials should be repaired using urethane or other approved patching.

Use the product in a well ventilated area. Protect the work of other trades. Protect shrubbery and other plants with drop cloths. Protect automobiles and all other areas not to be coated from overspray. Remove overspray from any windows, automobiles, metal as soon as possible should it occur. To prevent permanent staining, clean spills or leaks in a timely manner.

Test Panel

Always apply Micro-Seal® Densifier LS onto a mock wall or test panel. Test the wall or an actual surface area to determine acceptable color, surface porosity, application rates and methods before starting general application.

Safe Handling

Use product only with adequate ventilation and/or an appropriate cartridge type respirator. Avoid contact with skin and wear protective gloves. Read the Safety Data Sheet before using.



Technical Data

Material Type	Lithium Silicate
Active Content	15%
Volume Solids	8%
Color of Material	Colorless
Odor	Slight Odor
V.O.C.	0 g/L V.O.C. Compliant
Flash Point	Non-Flammable
pH Value	11
Weight	Approximately 9.2 lbs./gal.
Surface Dry/Recoat	Approx 1 Hour

Test Data

ASTM F 1869 Water Vapor Transmission Rate	10.00 lbs/ 2,000 sqft/ 24 hours, 35.4% Improvement over untreated control specimens
ASTM C-642 Water Absorption	After 48 hour immersion, 20.9% improvement over untreated control specimens

Warranties

Rainguard Brands, LLC guarantees that this product is free from manufacturing defects and complies with our published specifications. In the event that the buyer proves that the goods received do not conform to these specifications or were defectively manufactured, the buyer's remedies shall be limited to either the return of the goods and repayment of the purchase price or replacement of the defective material at the option of the seller. Rainguard Brands, LLC makes no other warranty, expressed or implied, and all warranties of merchantability and fitness for a particular purpose are hereby disclaimed. Manufacturer or seller shall not be liable for prospective profits or consequential damages resulting from the use of this product. Manufacturer shall not be liable for material used outside of its shelf life. For product dating, please refer to the batch number on the product or contact Rainguard Brands, LLC.

Surface conditions and application variables are out of the control of Rainguard Brands, LLC. As such, the applicator agrees to: Follow recommended application instructions, acknowledge limitations outlined in this technical data sheet, contact the manufacturer in the event there any uncertainties, perform a test panel to confirm fit and finish before any general application. The data on this sheet represent typical values. Since application variables are a major factor in product performance, this information should serve only as a general guide. Rainguard Brands assumes no obligation or liability for use of this information. Contact manufacturer at 888-765-7070 before bidding to confirm warranty provisions and procedures.

SELLER'S LIABILITY UNDER THE SALE OF THIS PRODUCT IS LIMITED TO REPLACING DEFECTIVE PRODUCT. HOWEVER, IF SELLERS FAILS IN ITS ATTEMPT TO REPLACE THE DEFECTIVE PRODUCT, BUYER WILL BE ENTITLED TO A REFUND OF MONIES PAID TO SELLER UNDER THIS PRODUCT WARRANTY. SELLER IS NOT LIABLE FOR BUYER'S LOSS OF PROFITS, BUSINESS GOODWILL, OR OTHER CONSEQUENTIAL DAMAGES, DESPITE ANY FAILURE TO REPLACE THE PRODUCT. BUYER HAS ACCEPTED THIS RESTRICTION ON ITS RIGHT TO RECOVER CONSEQUENTIAL DAMAGES AS PART OF ITS BARGAIN WITH SELLER. BUYER REALIZES AND ACKNOWLEDGES THAT THE PRICE OF THE PRODUCT WOULD BE HIGHER IF SELLER WERE REQUIRED TO BE RESPONSIBLE FOR BUYER'S CONSEQUENTIAL DAMAGES."

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