



TECHNICAL DATA SHEET

SILOXA-TEK® 8500

An industrial-grade, water-based, silane/siloxane engineered to reduce water and moisture intrusion, while protecting concrete or masonry substrates from chlorides and deicing salts. Siloxa-Tek 8500 is our favorite product to treat nearly any application. A proprietary blend of silane/siloxanes, this clear penetrating sealer not only prevents deicing salt and freeze-thaw damage, but its hydrophobic nature resists moisture intrusion and vapor transmission. This is the go to choice to seal any concrete, brick, or masonry based substrate especially driveways, basements, patios and garages.

APPLICATIONS

Exceptional when used for:

- Applications: Driveways/sidewalks, patios, pool decks, garages, chimneys, roof tiles
- Substrates: Concrete, concrete blocks/cinderblocks, brick, pavers, exposed aggregate, stucco, stone, slate, sandstone

BENEFITS

- Water beading effect
- Excellent penetration
- Breathable substrate
- Easy application
- Tack free finish
- No appearance change
- Low VOCs
- DOT approved
- Prevents deicing salt/chloride damage
- Prevents Freeze-thaw damage
- Protects from spalling/pitting/cracking
- Resists mold/mildew growth
- Prevents efflorescence
- Reduces dirt pick up
- Resists water vapor transmission
- Resists ASR/Alkali attacks
- Reduces Water ingress
- Reduces Moisture intrusion
- Resists UV radiation

DESCRIPTION

Siloxa-Tek® 8500 is an advanced, high performance, industrial strength water based concrete/masonry water repellent solution designed to reduce water and moisture intrusion. Approved by the Department of Transportation to protect a wide variety of mineral substrates including architectural concrete, concrete block, split face block, pavers, stucco, porous and dense brick, clay tile, exposed aggregate concrete, sandstone, and slate this unique formula incorporates leading molecular nanotechnology; putting an end to



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water and moisture migration through any porous cementitious substrate. Siloxa-Tek® 8500 is a uniquely transparent, blended formula with added enzymes and surfactants that aide in accelerating a penetrating disbursement. Thus eliciting a more effective, uniformed reaction between the formula and the concrete / masonry substrate it's being applied to. Siloxa-Tek® 8500 provides a hydrophobic barrier beneath the surface and seals out moisture while remaining highly vapor permeable and chemically bonding with the substrate. The treated surfaces will show no change in visual appearance from application and the surface that will not chip, flake, delaminate or breakdown with UV light exposure.

- Available in a ready to use gallon or an industry first ultra-concentrated gallon where 1 gallon of Siloxa-Tek 8500 mixes with 4 gallons of water to make 5 gallons of sealer that will treat up to 1250 sq. ft. of concrete per coat.

HOW IT WORKS

A water repellent impregnating sealer is a surface applied, invisible, non-film forming protection system, that can very effectively increase the durability of concrete. Due to the small size of the mono-molecular layer, there is little or no change in its aesthetic appearance. Compared to film forming coating systems, the surface applied water repellent impregnating sealer penetrates the surface pores and capillaries, so they are internally lined but not filled. Water repellent impregnating sealers change the surface tension of mineral substrates that produce a water repellent surface to keep water and aggressive water-soluble salts, such as chlorides and sulfates, out.

In structures on and below grade water should generally be kept out and away to prevent damage. The most pervasive form of concrete damage is surface scaling from freeze-thaw. Other forms of damage include alkali-silica reaction (ASR), chemical intrusion and corrosion of steel reinforcements. Siloxa-Tek® 8500 can block up to 99% of surface moisture. The active ingredients seal the pores within the substrate adequately blocking surface moisture while still maintaining the concretes ability to breathe. It will not significantly modify substrate appearance or traction and will only wear away if the concrete surface itself wears away.

New or existing concrete can be treated and performance can be improved in as little as two applications. Siloxa-Tek® 8500 is a small investment that leads to long-term savings and improved performance.

PREPARATION

Avoid contact with skin, eyes and clothing. Wash hands after use and do not take internally. Please refer to the product Safety Data Sheet (SDS) before using. The preparation process should be followed to ensure adequate penetration and optimum performance:

Step 1: The concrete substrate must be structurally sound, thoroughly dry and clean. Wait at least 24-48 hours after rain and/or pressure washing before sealing; concrete should be visibly dry.

Step 2: Remove all paints, previous sealers and/or adhesives before application.

Step 3: The substrate must be clean of oil, grease, dirt, wax, curing compounds, efflorescence and other contaminants that might interfere with the penetration of the sealer.

Step 4: If acid is used to clean the concrete, neutralize the surface completely and rinse it with water prior to application. Then wait for the concrete to dry out for at least 24-48 hours.



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Step 5: The surface-zone moisture content of the concrete should not exceed 4%wt.

Step 6: Cover all surrounding areas not intended to be coated.

Step 7: New concrete must be cured for at least 28 days before sealing.

APPLICATION – READY TO USE

Step 1: Siloxa-Tek® 8500 Ready to Use is ready to use right out of the container. Stir extremely well before use.

Step 2: If spray applying, pour the Siloxa-Tek® 8500 Ready to Use into a sprayer. If roll applying, pour the Siloxa-Tek® 8500 Ready to Use into a paint tray or bucket and dip a 3/8" nap roller into the tray or bucket.

Step 3: Spray or roll one coat onto an area of approximately 100 square feet.

Step 4: Immediately apply a second coat to the same 100 square foot area, while the first coat is still wet. You may walk on the first coat to apply the second coat. Apply until the surface is saturated but not to the point of puddling. (Since the Siloxa-Tek® 8500 Ready to Use is a hydrophobic product if you try to apply a second coat after the first coat has dried, the first coat may try to repel the second coat).

Step 5: Roll or broom out any puddles until the sealer penetrates the substrate.

Step 6: After the first area has been treated move on to the next 100 square foot section and apply two (2) coats following the wet-on-wet application method.

Step 7: When the entire application has been treated with two (2) coats, let the concrete dry for at least six (6) hours before walking, 24 hours before driving, and protect the concrete from rain for at least 24-48 hours after sealing.

Step 8: Clean up: Application tools can be cleaned using soap and water.

Step 9: If over-spray occurs it should be cleaned and removed immediately after sealing.

Step 10: Unused or old material may be disposed of in a waste disposal site in accordance with local, state and federal laws.

APPLICATION – ULTRA CONCENTRATE

Step 1: Siloxa-Tek® 8500 Ultra Concentrate is a concentrated product that needs to be mixed with water prior to application. We recommend using a five (5) gallon bucket to mix the sealer. Pour the one (1) gallon container of Siloxa-Tek 8500 Ultra Concentrate into a five (5) gallon bucket.

Step 2: Next fill up the bucket with four (4) gallons of water (distilled water is preferred). (Siloxa-Tek® 8500 Ultra Concentrate can be mixed in smaller quantities as long as the one (1) part Siloxa-Tek® 8500 Ultra Concentrate to four (4) parts water ratio is followed. For example, one (1) cup Siloxa-Tek® 8500 Ultra Concentrate can be mixed with four (4) cups of water, or a half (1/2) gallon of Siloxa-Tek® 8500 Ultra Concentrate can be mixed with two (2) gallons of water).



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Step 3: Stir the Siloxa-Tek® 8500 Ultra Concentrate and water mixture well before using.

Step 4: If spray applying, pour the mixed material into a sprayer. If roll applying, dip a 3/8" nap roller into the bucket of mixed material.

Step 5: Spray or roll one coat onto an area of approximately 100 square feet.

Step 6: Immediately apply a second coat to the same 100 square foot area, while the first coat is still wet. You may walk on the first coat to apply the second coat. Apply until the surface is saturated but not to the point of puddling. (Since the Siloxa-Tek® 8500 Ultra Concentrate is a hydrophobic product if you try to apply a second coat after the first coat has dried, the first coat may try to repel the second coat).

Step 7: Roll or broom out any puddles until the sealer penetrates the substrate.

Step 8: After the first area has been treated move on to the next 100 square foot section and apply two (2) coats following the wet-on-wet application method.

Step 9: When the entire application has been treated with two (2) coats, let the concrete dry for at least six (6) hours before walking, 24 hours before driving, and protect the concrete from rain for at least 24-48 hours after sealing.

Step 10: Clean up: Application tools can be cleaned using soap and water.

Step 11: If over-spray occurs it should be cleaned and removed immediately after sealing.

Step 12: Unused or old material may be disposed of in a waste disposal site in accordance with local, state and federal laws.

APPLICATION NOTES:

- Before application test the sealer by applying in an inconspicuous area to ensure the desired coverage and appearance is achieved.
- Do not over apply.
- Prevent from getting on glazed and finished surfaces such as glass, aluminum etc. In case of contact flush immediately with water.
- Does not prevent equipment leaks or other leaks such as oil, hydraulic fluid etc. Use the Siloxa-Tek® 8505 or Siloxa-Tek® 8510 for oil repellency and staining resistance.
- Do not use on concrete that has been previously sealed without chemically etching or mechanically scarifying.
- Water repellency may take up to seven (7) days to develop.

TECHNICAL SPECS

- Feature: Water & salt repellent
- Chemistry: Silane/Siloxane
- Color: Clear
- Finish: Invisible



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- Category: Penetrating
- Carrier: Water
- Availability: Ready to Use or Ultra Concentrate: Makes 5 Gallons
- Packaging: 1 Gallon
- Coverage: Ready to Use: 250 sq. ft. per coat., Ultra Concentrate: 1250 sq. ft. per coat
- Reconstitution Ratio: Ultra Concentrate: 1 part sealer : 4 parts water
- Interior/Exterior: Interior/Exterior
- Application Method: Sprayer, Roller
- Application Temperature: 45 F - 90 F
- Number of Coats: 2
- Time Between Coats: 5 Minutes
- Drying Time (dry to touch): 6 Hours
- Drying time (full cure): 24 Hours
- Time before/after rain: 48 Hours
- New Concrete: Yes, at least 28 days after being poured
- Storage/Shelf Life: 1 Year
- Clean up: Soap/water
- Paintable: Yes, oil or enamel based paint; first test for compatibility
- VOC Content: 90 g/L

WARRANTY/LIMITATIONS OF LIABILITY

We warrant that our products are manufactured to strict quality assurance specifications and that the information supplied by us is accurate to the best of our knowledge. Such information supplied about our products is not a representation or a warranty. It is supplied on the condition that you shall make your own tests to determine the suitability of our product for your particular purpose. Any use or application other than recommended herein is the sole responsibility of the user. Listed physical properties are typical and should not be construed as specifications. No warranty is made, expressed or implied, regarding such other information, the data on which it is based, or the results you will obtain from its use. No warranty is made, expressed or implied, that our product shall be merchantable or that our product shall be fit for any particular purpose. No warranty is made that the use of such information or our product will not infringe upon any patent. We shall have no liability for incidental or consequential damages, direct or indirect. Our liability is limited to the net selling price of our product or the replacement of our product, at our option. Acceptance of delivery of our product means that you have accepted the terms of this warranty whether or not purchase orders or other documents state terms that vary from this warranty. No representative is authorized to make any representation or warranty or assume any other liability on our behalf with any sale of our products. Our products contain chemicals that may cause serious physical injury. Before using, read the Safety Data Sheet and follow all precautions to prevent bodily harm.