

# AQUASEAL<sup>®</sup> SS



Silane / Siloxane Concentrate Water Repellent



MADE IN U.S.A.



7 THERMAL AND MOISTURE PROTECTION

WATER REPELLENTS 07190

MONOPOLE INC.  
UPDATED AUGUST 2015

**PRODUCT DESCRIPTION:**

ITEM NO. 4990

**AQUASEAL SS** is a Micro Emulsion Silane Oligomeric Alkyl Alkoxysiloxane. With the addition of water and simple agitation, it forms a colorless, non-staining, non-yellowing, breathable, deep penetrating water repellent for concrete and masonry. **AQUASEAL SS** is designed for exterior use on above grade vertical or horizontal concrete, masonry, and stucco.

**BASIC USES:**

**AQUASEAL SS** can be used on either dense or porous unsealed substrates to protect against the damaging effects of water, chemicals, freeze-thaws, acid rain exposure, de-icing and other atmospheric chemicals. It does this without altering or changing the texture or the surface appearance.

**ADVANTAGES:**

- Complies with all VOC requirements for all 50 states and cities within.
- Excellent water repellency for up to ten years.
- Suitable for both dry and damp surfaces (<15% moisture).
- Breathable and permeable to water vapor.
- Paintable with latex or oil based paints.

Product Qualifications	
Cal Green	Yes
SCAQMD	Yes
CARB	Yes
LEED (New Construction)	Yes
LEED (New Schools / CHPS)	Yes

**PREPARATION:**

1. The cause of water infiltration must be determined. The substrate must also be inspected to identify repairs or improvements, which may be necessary prior to the application.
2. All cracks, holes, voids, etc. larger than hairline (1/16") should be filled or caulked.
3. Alkali, lime or efflorescence on the surface needs to be treated and removed with the proper solution and neutralized. RINSE WELL after neutralizing. Allow 24 to 48 hours of surface dry time before the application.
4. All preparation, painting and caulking of joints or cracks should be allowed to cure prior to the application.
5. Allow new concrete and stucco to cure for 28 days before application.
6. Do not apply **AQUASEAL SS** to a wet surface. All surfaces must be dry for a minimum of 24 hours following rain. The moisture level should not exceed 15% during application.
7. In hot, dry weather it is recommended that the surface to be treated, be slightly damp (not wet) before application to improve material penetration.

**TECHNICAL DATA:**

Composition: .....*Silane / Siloxane*  
 1:12 Dilution Solids Contents (ASTM D2369) .....8% ±2  
 1:8 Dilution Solids Contents .....12% ±2  
 VOC Level (after dilution) .....10 g/L  
 Drying Time for recoat (wet-on-wet) .....15 Minutes  
 Penetration ..... 3/8 inch Minimum

**TEST RESULTS**

Reduction in Water Leakage (ASTM E514) [Wind Driven Rain]  
 Brick: .....100%  
 Split Face Block: .....> 93%  
 Moisture Vapor Transmission  
 Breathability (ASTM D1653): .....100%  
 Accelerated Weathering 2500 Hrs (ASTM G154): ...No loss of water repellency  
 Scaling Resistance (ASTM C672) 100 cycles .....No Scaling  
 Water Absorption  
 ASTM C140 (Max. 24 Hrs): .....< 0.72%  
 ASTM C642 (Max. 48 Hrs): .....1%  
 Reduction in Water Permeance (ASTM C67): .....97%  
 Reduction in Water Permeance (SS-W-110-C): .....97%  
 NCHRP 244 Series II (AASHTO T259 & AASHTO T260)  
 Reduction in Water Absorption (Minimum Required 75%): ..Obtained > 86%  
 Reduction in Chloride Ion (Minimum Required 75%): .....Obtained > 86%  
 Efflorescence Resistance (NBS 883) .....Rated Highest  
 Surface Appearance .....No Change  
 Warranty .....Ten Years

**DILUTION RATIOS:**

Vertical Dense Surfaces: 1:12  
 (1 part **AQUASEAL SS** to 12 parts water)

Vertical Porous Surfaces: 1:8  
 (1 part **AQUASEAL SS** to 8 parts water)

Horizontal Surfaces: 1:5  
 (1 part **AQUASEAL SS** to 5 parts water)

**APPLICATION:**

**AQUASEAL SS** (after dilution with water) must be applied in a small area prior to doing the complete job. This will ensure proper results and aid in determining the proper coverage and application procedures. Apply with a low-pressure airless sprayer not to exceed 20 psi.

**TIP SIZE:**

Porous substrates ..... 0.035 or larger  
 Dense substrates ..... 0.035 or smaller

**AQUASEAL SS** should be applied in a uniform manner. Each application coat consists of a light fog that wets the entire surface and breaks the surface tension. The fog coat must be followed immediately with a flood coat (with an 8" run down which can be back rolled into the surface if desired to maximize performance) to achieve the maximum penetration.



Manufacturer of  
U.S. SPECIALTY COATINGS

4661 Alger Street • Los Angeles, CA 90039

Tel: 818-500-8585 • Fax: 818-502-0818

www.monopoleinc.com • Email: info@monopoleinc.com

**AQUASEAL SS** is to be used in a one coat application. If the surface is very porous an additional treatment may be needed. In this scenario, apply a second coat wet-on-wet (within 15 minutes when the previous coats has cleared).

**CAUTIONS:**

- Do not apply **AQUASEAL SS** to sealed or non-porous substrates such as glazed tile, glazed brick, glass, shrubs, plants, automobiles, and asphalt. Mask off and protect all such substrates during the application.
- **AQUASEAL SS** must be diluted with water.
- **AQUASEAL SS** will not prevent water penetration or help control alkali efflorescence through unsound or cracked substrates.
- Do not apply when surface temperatures are above 90°F or below 40°F.
- Do not apply in windy conditions or if rain is expected within 12 hours.
- Clean drips, runs, and overspray residue while still wet, using detergent and water. Dried material may require a legally compliant solvent for removal.

**STORAGE:**

**AQUASEAL SS** should be stored in temperatures between 40°F and 85°F. Protect it from freezing, moisture and direct sunlight.

**SHELF LIFE & PACKAGING:**

**AQUASEAL SS** will remain usable for one year in original unopened container stored at room temperature. It is packaged in one-gallon cans a five-gallon pails:  
ITEM NO. 4991-01: One-Gallon Cans  
ITEM NO. 4990-05: Five-Gallon Pails

**SAFETY & FIRST AID:**

- Use in a well-ventilated area or wear an air-supplied respirator. If inhaled, move immediately to fresh air.
- Always wear protective goggles and gloves.
- In the case of skin or eye contact, flush immediately with water for 15 minutes. Also, remove contaminated clothing and shoes, then call a physician.
- Local, state and federal regulations should be consulted for proper disposal procedures.

**WARRANTY:**

**AQUASEAL SS** is backed by a five and ten year warranty. They are available on an individual job basis and must be approved before application. Contact Monopole's service centers for further information.

**COVERAGE RATES:**

Coverage rate may vary considerably due to the porosity of the surface. Always test and approve with the project architect and/or building owner prior to doing the complete job.

**Vertical surfaces (Dense Substrates)  
One Coat Application**

*Dilution Ratio: 1:12 (Mix 12 gallons of water to one gallon of AQUASEAL SS)*

<u>Substrate</u>	<u>Application</u>	<u>Coverage</u>
Precast Concrete	10" Run Down	120-200
Poured Concrete	10" Run Down	120-200
Tilt-ups, Concrete	10" Run Down	120-170
Dense Brick	10" Run Down	80-125
Stucco	10" Run Down	80-125
Plaster/Stone	10" Run Down	200-300

**Vertical surfaces (Porous Substrates)  
One Coat Application**

*Dilution Ratio: 1:8 (Mix 8 gallons of water to one gallon of AQUASEAL SS)*

<u>Substrate</u>	<u>Application</u>	<u>Coverage</u>
Split Face Blocks	10" Run Down	50-70
Standard Blocks (ASTM C90-75 Grade N)	10" Run Down	60-80

**Horizontal surfaces**

*Dilution Ratio: 1:5 (Mix 5 gallons of water to one gallon of AQUASEAL SS)*

<u>Substrate</u>	<u>Application</u>	<u>Coverage</u>
Porous Concrete	Saturate, no puddles	60-80
Smooth Concrete	Saturate, no puddles	120-200

*\*Concrete blocks and other porous substrates (vertical and horizontal) will require two coats of AQUASEAL SS. Apply a second coat at the coverage rate of 100-140 sq/ft per gallon.*

**WARRANTY INFORMATION:** MONOPOLE believes that the information in this publication is an accurate description of the typical characteristics and/or uses of the product or products. But it is the end users responsibility to thoroughly test the product in the specific application to determine its performance efficacy and safety. Since use of this product is beyond our control, Monopole, Inc. cannot assume any risk or liability for results obtained when not used according to our specifications and directions. Unless MONOPOLE provides a specific written statement of fitness for a particular use, MONOPOLE'S sole warranty is that the product will meet its current sales specifications. MONOPOLE specifically disclaims any other expressed or implied warranty, including the warranty of merchantability and fitness for use. The exclusive remedy and MONOPOLE's sole liability for breach of warranty is limited to a refund of the purchase price or replacement of product proven to be defective. In no event shall the seller be liable for any loss of profits or other consequential damages. Under no circumstance will MONOPOLE pay labor charges.