

MONOCHEM

# AQUASEAL STAIN<sup>®</sup>

TECHNICAL BULLETIN



MADE IN U.S.A.

SEMI-TRANSPARENT or OPAQUE • REGULAR or WATERPROOF

## PRODUCT DESCRIPTION:

ITEM NO. 7500, 7600, 8500 ,8600

**AQUASEAL STAIN** is a water based acrylic emulsion that is extremely hard and durable. It creates uniform color toning for all concrete and masonry surfaces. It also maintains the natural look, beauty, and texture of the surface without giving a heavy painted look. It is tintable to any color using universal colorants.

**BASIC USES:** For Porous Substrates Only (120-180 grit surface profile) **AQUASEAL STAIN** must fully penetrate to perform as intended. If the surface is smooth or not water absorbent, acid etching, sand blasting or shot blasting is required to meet the surface criteria. Smooth surfaces require 2-3 etchings to achieve 120-180 grit surface profile.

For etching instructions, refer to our **INSTRUCTIONS FOR APPLICATION OF MONOCHEM COATINGS**, or contact our technical service department.

**AQUASEAL STAIN** is designed for exterior or interior application over vertical or horizontal, concrete, brick, lightweight concrete, slump and regular block, precast panels, stucco, and porous tiles. For wood applications, please consult the manufacturer.

### ADVANTAGES:

- Will not peel, chip, or flake like paint.
- Maintains the natural grain and texture of the surface.
- Breathable allowing moisture to escape from the surface.
- Contains no harmful solvents, toxic fumes or ingredients.
- Easy to use.
- Does not oxidize like paint.

### PREPARATION:

- The surface must be dry (< 15% moisture), clean, and free from adhesion affecting contaminants, alkali, lime and efflorescence. All previous silicones, paints or other sealers must be removed.
- Allow the concrete and masonry to cure for 28 days prior to staining. This allows the initial moisture that is unavoidable in a newly built wall to escape. If this initial moisture causes efflorescence, the efflorescence must be removed before applying the stain. After this moisture has dissipated and the stain is applied, the stain (if it's water repellent) will shed water and help prevent further efflorescence.
- Do not apply stain in windy conditions or if rain is expected within 24 hours because water can fade the color and prevent drying.
- Do not apply stain when the surface temperature is below 45°F, or above 95°F, or in direct hot sun.
- Prior to applying stain, all mortar joints should be sound. Cracks, holes or voids larger than hairlines (1/16") should be filled with a paintable patching material and allowed to cure.
- Horizontal surfaces: Make sure the surface is water absorbent and that there is enough surface profile (at least 180 grit) to allow the **AQUASEAL STAIN** to fully penetrate.

### TECHNICAL DATA:

Composition .....	100% Acrylic Polymer
Solids by weight Semi Transparent Base.....	24% ± 2
Solids by weight Opaque Base.....	32% ± 2
Weight per gallon.....	8.5 Lbs.
VOC Level.....	< 50 g/l
Finish after application .....	Flat

#### Water Penetration Tests: Per (ASTM C 67-83)

After 1 hour .....	98.6% Repellency
After 2 hours.....	98.5% Repellency
After 5 hours.....	98.1% Repellency
After 24 hours.....	98.0% Repellency

#### Water Permeable Tests: Per (ASTM E 514-74 ) (Wind Driven Rain)

After 1 day.....	No Penetration
After 3 days.....	No Penetration

#### Moisture Vapor Transmission:

Per (ASTM E 398) .....	3.0 ± 0.5 Perms
Per (ASTM E 96) .....	5.0 ± 0.5 Perms

#### Accelerated Weathering:

##### Per (ASTM G154, ASTM D822, ASTM G23)

After 3000 hours of continuous exposure  
.....No color change, no flaking or chalking, No staining or discoloration

#### Hydrogen Sulfide Resistance:

Per (ASTM D1712).....No staining or discoloration

#### Reduction of Chloride Ion Penetration:

Per ASTM D1218.....94% Reduction@13-33mm penetration

#### UV Resistance:

Per (ASTM G90).....No change in color retention

#### Salt Spray Resistance:

##### Per (ASTM B117, 5% Sodium Chloride Fog Solution)

.....No deteriorations, no efflorescence, and  
.....No color fading after 600 hours of exposure

Efflorescence Resistance .....	Excellent
Polymerized Content .....	Excellent
Pollution Resistance .....	Excellent
Oxidation Resistance.....	Excellent

### APPLICATION:

Monopole, Inc. Requires a test patch to ensure the product meets all the established visual and performance criteria.

Before applying stain, thoroughly mix it for at least 5 minutes by hand or 3 minutes if power stirring. Continue to mix the stain during application.

**AQUASEAL STAIN** is best applied by using an airless gun with a 0.015 - 0.019 spray tip. Hold the spray gun at least 12 inches from the surface, avoid overlapping, and use crisscrossing techniques. When fully dry, apply a second coat for the desired appearance and even tone.

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TRANSPARENT FINISHES 09930  
PROTECTIVE COATINGS

MONOPOLE INC.  
UPDATED MARCH 2011



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**APPLICATION HINTS:**

1. Do not allow the stain to run and backroll stained areas to avoid pooling or puddling. Also, ensure the stain has penetrated. Remove or wipe away excess material which may cause the stain to become glossy or tacky.
2. Feather edge the stain at the end of each pass.
3. Do not let the edge of one pass dry before making the next pass.
4. Don't stop applying the stain in random spots. Stop the application only at the inside or outside of corners.

**RECOMMENDATIONS:**

**AQUASEAL STAIN** is available in Semi-Transparent or Opaque, regular or waterproof. When applied over highly porous surfaces or when water repellency is required, use the following options:

**For Semi-Transparent Stain Application:**

**Option #1:**

Apply **AQUASEAL STAIN** Semi-Transparent Regular Formula (7500). Allow to dry for 24 hours, followed by one coat of **AQUASEAL ME12 (5200)**.

**Option #2:**

Apply **AQUASEAL STAIN** Semi-Transparent, Water Repellent Formula (7600).

**For Opaque Stain Application:**

**Option #1:**

Apply **AQUASEAL ME12 (5200)** first. Allow it to dry for 24 hours, followed by **AQUASEAL STAIN** Opaque Regular Formula (8600).

**Option #2:**

Apply **AQUASEAL STAIN** Opaque, Water Repellent Formula (8500).

**COVERAGE:** Always test a small area first prior to proceeding with entire application.

Surface Type	Approximate Coverage	
	1st Coat	2nd Coat
Split face, concrete blocks, stucco, Mexican tiles.....	120 - 160	160 - 200
Precast concrete, poured concrete, brick, adobe blocks.....	230 - 260	300 - 350

The coverage rates are approximations. Absorption rates will depend upon the texture and porosity of the substrate. Allow for extra surface area when estimating the coverage for raked joints and fluted or split-face blocks.

**TINTING:**

**AQUASEAL STAIN** Semi-Transparent (7500, 7600) is short-filled 4 ounces per gallon and 3-4 ounces of color tint can be added. Do not exceed 4 ounces of colorant.

**AQUASEAL STAIN** Opaque (8500, 8600) is short-filled 6 ounces per gallon and 4-5 ounces of color tint can be added (do not exceed 6 ounces).

Depending on the intended use of **AQUASEAL STAIN**, the following Monochem clear top coats may be used for added protection. Always allow **AQUASEAL STAIN** to dry for a minimum of 24 hours before applying any of the following:

**VERTICAL SURFACES**

- AQUASEAL ME12** - Flat Finish
- AQUASEAL 20** - Flat Finish
- AQUASEAL 40** - Flat Finish
- AQUAPELL** - Flat Finish
- AQUASEAL HEAVY DUTY** - Flat Finish
- AQUASEAL SILANE 20** - Flat Finish
- AQUASEAL SILANE 40** - Flat Finish

**HORIZONTAL SURFACES**

- PERMASEAL** - Semi-Gloss Finish
- PERMASHIELD 100** - Semi-Gloss Finish
- PERMASHIELD 200** - Matte Finish or High Gloss
- MONOCHEM 200** - Gloss (Interior Only)
- PERMASHIELD PREMIUM** - Matte Finish or High Gloss
- AQUASEAL SILANE 20** - Flat Finish
- AQUASEAL SILANE 40** - Flat Finish

**TECHNICAL SERVICES:**

Contact Monopole, Inc. Monday through Friday at (800) 491-9977 for technical assistance on any Monochem coating or system. Monopole, Inc. has field representatives that can aid you in application, specifications, and field assistance.

**LEED CREDITS:**

**AQUASEAL STAIN** qualifies for earning LEED® credits for Indoor Environmental Quality, EQ 4.2 Low-Emitting Materials, based on low contribution of VOC.

**SHELF LIFE:**

**AQUASEAL STAIN** will remain useable in well protected storage for 12 months.

**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.



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