

MONOCHEM

TECHNICAL BULLETIN

# AQUASEAL W20<sup>®</sup>



Cures, Hardens, Seals & Dustproofs Concrete



MADE IN U.S.A.

## PRODUCT DESCRIPTION:

ITEM NO. 7700

**MONOCHEM AQUASEAL W20** is a clear water-based, sprayable, penetrating, inorganic silicate-base solution. It is used to cure, harden, seal and dustproof interior and exterior horizontal concrete (fresh or cured) and terrazzo surfaces. **AQUASEAL W20** complies with the Federal and Army Corp Of Engineers specifications for concrete surface treatment. It also is USDA and FDA approved for use as a concrete floor sealer in food processing facilities.

### BASIC USES:

**AQUASEAL W20** is recommended for use on unpainted/unsealed new or existing concrete floors, decks, docks, ramps, pavement and parking structures. New concrete must be 7-14 days old. It is a water-based product that can be applied in areas where solvent-based sealers are hazardous. Common applications include warehouses, schools, hospitals, breweries, food processing plants and service storage areas.

### ADVANTAGES:

- Cures, seals, hardens and dustproofs.
- Environmentally Friendly.
- No solvent vapors while spraying.
- Resists the penetration of oil, chemicals and the deteriorating effects of salt and water.
- Hot Tire Resistant
- Can be tiled over.
- Produces a breathable abrasion-resistant surface.
- USDA and FDA approved as a floor sealer in food processing plants.
- Complies with Federal and Army Corp Of Engineers Specifications for concrete surface treatments.
- 5 Year Warranty for concrete hardening & dustproofing.

### PREPARATION:

All surfaces must be unpainted/unsealed, clean, dry and free from all contaminants which will inhibit the penetration of **AQUASEAL W20** into pores. Any curing, scaling or coating agents must be chemically or mechanically removed. If acid is used in the cleaning process, neutralize the surface and RINSE WELL.

### APPLICATION PRECAUTIONS:

- Protect glass and wood from contact with **AQUASEAL W20**. Clean unwanted applications with water immediately.
- Protect from freezing. In the case of freeze-thaw, stir to a uniform consistency before using. If separation occurs, do not use and discard the product properly.
- Allow 7-days of dry time before applying tiles or floor adhesive over the **AQUASEAL W20**. We require an adhesion test prior to laying down flooring.
- Monopole is not responsible for carbonation, micro cracking, crazing or porous finishes.
- For colored or pigmented concrete allow concrete to age 60+ days.
- Do not use over curing, scaling or other coating agents.
- Mop off all **AQUASEAL W20** puddles 20-30 minutes after application to avoid surface hazing.

### TECHNICAL DATA:

Contents .....Acrylic Modified Fluosilicate Silicate  
Flash Point (ASTM D3278) .....None

#### Compressive Strength Per ASTM C39 Modified After 3 day cure

Untreated Concrete .....5150 PSI  
Treated with **AQUASEAL W20** .....6030 PSI  
*\*Result: AQUASEAL W20 helped increase the Compressive Strength by 17%*

#### Moisture Loss Per ASTM C156-11

Untreated Concrete .....92.00G  
Treated with **AQUASEAL W20** .....64.00G  
*\*Result: AQUASEAL W20 helped increase Moisture Loss by 43%*

#### Abrasion Resistance Per Taber Abraser CS - 17 Wheel. 1000 gram load for 1000 revolutions

Untreated Concrete .....8.9 grams lost (100%)  
Treated with **AQUASEAL W20** .....6.5 grams lost (74.2%)  
*\*Result: AQUASEAL W20 helped increase the Abrasion Resistance by 25.8%*

#### Friction per ASTM C1028

Untreated Concrete .....Dry: 0.71; Wet: 0.47  
Treated with **AQUASEAL W20** .....Dry: 0.86; Wet: 0.69

Paraffins, oil, wax or varnish contents .....None  
Finish .....Flat / Angular Sheen  
VOC Level.....Zero

### APPLICATION:

- Conduct a small test patch of the **AQUASEAL W20** on the same substrate that will be coated. This will help to determine the ideal spread rates and application procedures.
- Apply to the concrete using a squeegee, hand or power sprayer, a soft bristle broom or a roller.
- Under normal conditions one saturation coat provides the ideal protection for light-duty. If the surface still absorbs **AQUASEAL W20** after the 1st coat, a lighter 2nd application can be conducted increasing the surfaces durability. Allow approximately 1-2 hours between coats (when the previous coat is completely dry).
- Make sure to mop off all puddles of **AQUASEAL W20** 20-30 minutes after the application. Failure to do so will result in white powdery stains. To remove the stains flush the surface with water and mop dry or use a stiff brush to remove the whitened areas. Hot water washing speeds the removal.
- Allow approximately 24 hours of dry time before exposing to normal vehicular or foot traffic.
- To help avoid surface whiteness on terrazzo floors or dense/slick concrete surfaces, rinse with hot water before **AQUASEAL W20** dried completely.

### CLEAN UP:

Wash tools and equipment immediately after use (while wet) with soap and hot water.

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CONCRETE CURING 03390  
SPECIALTY CHEMICALS

MONOPOLE INC.  
UPDATED NOVEMBER 2014



**Chemex Industries, Inc.**

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**COVERAGE RATE:** (Estimated square feet per gallon)

	Rough Finish	Fine	Troweled
Fresh Concrete (14 days old)	200	300	500
Newly Cured	200	300	500
Bare Concrete	200	300	400
Floors To Be Tiled			500
Dustproofing Concrete		300	500

**PRECAUTION:**

- Do not take internally. *Ingestion:* Do not induce vomiting, call a physician immediately.
- Avoid contact with skin or eyes. *Eye Contact:* Flush the affected eye with clean water for 15-minutes.
- Wash skin with soap and water.
- Avoid breathing vapors. Use with adequate ventilation.
- Close the container after each use.
- Observe normal safety precautions.

**MPI APPROVED PRODUCT:**

MPI # 99 Sealer, Water Based, for Concrete Floors

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

**SHELF LIFE:**

One year from manufactured date in a sealed container stored at room temperature.

**PACKAGING:**

**AQUASEAL W20** is packaged in 1-gallon cans, 5-gallon pails, and 55-gallon drums.

**CHEMICAL RESISTANT:** The American Concrete institute (ACI 515R) recommends the use of alkali silicate hardeners to increase the concrete's resistance to attack from the following chemicals:

Aluminum Sulfate	Lactic Acid ,5% & 25 %	Potassium Chloride
Ammonium Chloride	Lead Refining Solutions, 10 %	Potassium Dichromate
Barium Hydroxide	Lignite Oils	Potassium Persulfate
Beef Fat	Machine Oils	Potassium Sulfate
Calcium Hydroxide	Magnesium Chloride	Rapeseed Oil
Calcium Nitrate	Magnesium Sulfate	Sea Water
Carbon Dioxide	Magnese Sulfate	Silage
Carbonic Acid	Manure	Sodium Bromide
Castor Oil	Mash, fermenting	Sodium Carbonate
Coal Tar Oils	Mercuric Chloride	Sodium Chloride
Cottonseed Oil	Mercurous Chloride	Sodium Dichromate
Cresol	Mine Water, waste	Sodium Nitrite
Distillers Slop	Molasses	Sodium Sulfate, 10%
Ethylene Glycol	Mustard Oil	Sodium Sulfite, 10%
Ferric Chloride	Nickel Sulfate	Soybean Oil
Ferric Sulfate	Oleic Acid, 100 %	Sugar
Ferrous Chloride	Olive Oil	Sulfite Liquor
Ferrous Sulfate	Paraffin	Tallow & Tallow Oil
Fish Oil	Phenol, 5%,15%-25%	Tannic Acid
Fruit Juices	Phosphoric Acid, 85%	Tanning Liquor, 10%
Glucose	Pickling Brine, 100%	Tobacco
Glycerine	Poppy Seed Oil	Walnut Oil
Hydrogen Sulfide	Potassium Alum, Sulfate 10%	Zinc Chloride
Iodine	Potassium Carbonate	Zinc Sulfate

**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. It is your responsibility to thoroughly test the product in your specific application to determine its safety and performance capabilities. 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 specifically written statement of fitness for a particular use, MONOPOLE'S sole warranty is that the product will meet its current sales specifications. MONOPOLE disclaims any other expressed or implied warranties, including the warranty of merchantability and fitness for use. Your exclusive remedy and MONOPOLE'S sole liability for breach of warranty is limited to a refund of the purchase price or replacement of any product proven to be defective. In no event shall the seller be liable for any loss of profits or other consequential damages, including labor charges.



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