



I. AQURON CPSP

AQURON® CPSP Concrete Pool Shell Protector™

Aquron® CPSP Concrete Pool Shell Protector™ is a non-hazardous, user friendly, permanent, clear treatment/preservative sealant solution for new or old concrete installations that includes a highly reactive catalytic agent in waterborne proprietary colloidal silicate base that produces a silica-hydro gel below the surface and inside concrete's matrix that will seal the matrix and significantly preserve its embedded steel. Aquron® CPSP Concrete Pool Shell Protector™ prevents peeling, cracking and loss of bond caused by capillary moisture or internal chemical reactions that can cause saponification. Aquron® CPSP Concrete Pool Shell Protector™ will arrest or at least severely retard concrete being deteriorated by alkali-aggregate or alkali silicate reactivity, and the potential will be virtually eliminated. Aquron® CPSP is spray applied to a MOIST surface from which any oil, grease or other contaminants have been completely removed.



JUST A FEW OF THE MANY BENEFITS:

- Change densities and hardens concrete
- Stays pliable, allowing concrete to breathe
- Adds density and bonding strength
- Waterproofs
- Resists freeze-thaw spall off
- Increases thermal resistance
- Preserves embedded steel
- Retards or halts alkali-silica reactivity
- Nontoxic
- No voc/vos content
- Makes ice removal easier
- Clean equipment using only water
- Retards dusting and pitting
- Neutralizes internal corrosives
- Protects floor treatment

MANUFACTURER

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PRODUCT DESCRIPTION

AQURON® CPSP™ offers an effective solution to water migration in concrete. It is an aqueous-borne, deep penetrating, sub-surface densifying, and molecular bonding treatment/solution.

BASIC USE

AQURON® CPSP™ is a permanent, clear treatment/preservative/sealant solution for new or existing pneumatically applied or poured-in-place concrete.

AQURON® CPSP™ will significantly reduce permeability and significantly preserve its embedded steel.

AQURON® CPSP™ has a highly reactive catalytic agent that reacts with free alkali and or alkaline hydrates to internally produce a silica hydrogel that fills the pore spaces and the voids around aggregate. Furthermore, alkali is converted to a neutral compound structure, reducing the potential for chemical reactions. More density is added; additional bonding strength is provided; and the permeability and porosity are reduced.

AQURON® CPSP™ is an ideal product for concrete shells that are to be painted or plaster-coated since it enhances the bonding quality of the surface.

AQURON® CPSP™ significantly reduces peeling, cracking and loss of bond caused by capillary moisture or internal chemical reactions.

AQURON® CPSP™ will not alter the appearance of the surface or physical characteristics. The use of **AQURON® CPSP™** will significantly reduce damages (spalling, etc.) caused by freeze-thaw cycles.

AQURON® CPSP™ neutralizes existing internal corrosives such as acids and chlorides preventing internal chemical reactions. **CPSP™** severely retards the rusting or corroding of embedded steel.

Another added benefit of using **AQURON® CPSP™** is the reduction of EFFLORESCENCE staining due to the reduced ability of water to penetrate the shell and the ability of **AQURON® CPSP™** to stabilize the concrete's chemical makeup.

AQURON® CPSP™ will also reduce the chance of chemically treated pool water from passing through the pool shell and leaching into the ground water supply.

BENEFITS

- Reduces moisture penetration
- Reduces bleed through stains-EFFLORESCENCE, especially on Vanishing edge applications
- Helps protect reinforcing steel
- Helps pool water chemical balance
- Strengthens the concrete, Shotcrete, or Guniting pool shell
- Reduces the effects of freeze-thaw cycles
- Deep penetration (3-5 inches)
- Water borne = environmentally safe
- Prevents or reduces pool chemicals from leaching into ground water supply
- Environmentally friendly
- No VOC/VOS content
- Significantly enhances the cure (watering the shell surface, after the **CPSP™** is applied, is still recommended.)

APPLICABLE STANDARDS

CPSP meets or exceeds applicable standards.

- ASTM C672 Section 7 Water absorption
- ASTM C672 Section 9 Suction
- ASTM C672 Section 10 Efflorescence
- ASTM C666 Freeze-thaw resistance
- ASTM C666 Salt attack resistance
- DIN 1048
- ASTM C192 Strengthens concrete
- AASHTO T260 Chloride ion content
- AASHTO T259-78 Chloride ion penetration
- VOC/VOS Compliant

COMPOSITION

AQURON® CPSP™ has a highly reactive catalytic agent in a waterborne proprietary colloidal silicate base that produces a silica hydrogel below the surface and inside the matrix of the concrete, Shotcrete or Guniting.

PRECAUTIONS

AQURON® CPSP™ cannot function if there are:

- (1) Other sealers on the concrete surface
 - (2) Polymers in the mix
 - (3) Rebound in pneumatically applied concrete
- Cover all GLASS. **CPSP™** will etch glass.
 - Cover everything not intended for product. Incidental damage may occur on unintended surfaces.
 - Spills or spray droplets in contact with glass should be removed immediately by flushing with water.
 - Some discoloration of aluminum can occur.
 - Do not apply **AQURON® CPSP™** when air and/or substrate temperatures are less than 40°F/4.5°C and will not decrease to less than 40°F/4.5°C for 6 hours.

PHYSICAL PROPERTIES

Physical	Liquid
Color	Clear
Odor	None
Specific gravity	1.11±
Flash point	None
pH	12±
Toxicity	None
Boiling point	212°F/100°C
Freeze temperature	32°F/0°C
Hazardous vapors	None
Weight per gallon.	9.18lbs/4.16kg
Environmental impact	Neutral
User-friendly	Yes
Shelf life	Indefinite if cover is on tightly
Freeze harm	None (allow to thaw completely at room temperature)
Surface bond quality	Excellent
Flammability	None
VOC/VOS content	None
Resistance to UV	Excellent
Paintable	Yes
Pollutants	None
Waste disposal methods	Non-hazardous
Resistance to abrasion	Excellent
Polymerization	nil
Solids before applied	nil
Solids after applied	100%
Recommended coverage	150 sq. feet per US gallon/ 3.5 sq. meters per liter

INSTALLATION

Job Conditions

- Penetration:** It is essential that **AQUORON® CPSP™** have access to the substrate. Any previous coatings must be removed. Abrasion of the surface may be required to allow penetration. To determine if **AQUORON® CPSP™** can penetrate, spritz the surface with water. If the water sits on top of the surface or beads up, abrading is required.
 - Low Temperatures:** Do not proceed with application of **AQUORON® CPSP™** when ambient temperature and/or substrate temperatures are less than 40°F/4.5°C or forecasted to drop below 40°F/4.5°C during the next 6 hours. Use temperature gun to determine.
 - High Temperatures:** Should ambient or substrate temperature be 95°F or higher, cool surface with sufficient water so that the surface stays damp. Disperse puddled water. Use temperature gun to determine.
 - Wind:** Caution should be taken in windy conditions. Do not allow product to contact surfaces not intended for CPSP application.
 - Dry:** If allowed to dry, **AQUORON® CPSP™** can etch glass or dull shiny aluminum. If contact is made with glass or aluminum, rinse surface immediately with water before **AQUORON®** dries on surface.
 - Strength:** Do not dilute. Use as supplied.
 - Plaster Coat:** Once **AQUORON® CPSP™** is applied to an existing (not a new shell), wait 24 hours or until surface is dry before applying a breathable plaster coat.
For new concrete, it is recommended to wet cure in accordance with ACI 506.2-95 section 3.8.
 - Fractures:** **AQUORON® CPSP™** only seals the concrete itself, not fractures.
- Start application holding spray tip approximately 8"–10"/200–254mm from concrete surface, make application using overlapping spray pattern with a fanning motion at the end of each pass.
 - Entire area being treated is to be saturated, but do not allow **AQUORON® CPSP™** to puddle. Depending on temperature, disperse puddled areas with a broom 5-15 minutes after application is completed. The higher the temperature, the shorter the time that the sheen is allowed to stay. Do not allow puddles of **AQUORON® CPSP™** to dry.
 - For vertical walls, begin at the bottom using an East-West overlapping spray pattern. Work your way from the bottom to the top. As soon as the sheen from the first application has disappeared, go back over the same area just treated using a North-South overlapping spray pattern. When the product runs 3-4 inches below the spray, you have reached tolerance.
 - When treating weeping hydrostatic concrete, Shotcrete or Gunitite, four applications will be required as follows:
 - (1) Spray East-West as in step 3 of the Application Procedures
 - (2) Then spray North-South
 - (3) Immediately spray East-West again
 - (4) Then spray North-South
 - Important caution when applying coatings: following the application of **AQUORON® CPSP™**: we recommend that the surface be thoroughly cleaned prior to coating to remove any potentially bond-breaking containments that may have been purged to the surface

APPLICATION PROCEDURES

For new or established pool or spa shells:

- AQUORON® CPSP™** must be applied at 2000 psi with a high pressure airless sprayer with spray tip size as follows:
 - Steel troweled pool decking and smooth plaster .013
 - Shotcrete .015– .019
 - Gunitite .019
 - Spray tip fan width should be 8"–12" wide.
- Application of the material with the airless sprayer shall be at a 90 degree angle to the surface of the wall or floor.
- Prior to applying **AQUORON® CPSP™**, pre-wet area with water to cool concrete that is extremely hot (95°F/35°C or higher). Pooled and puddle areas must be dispersed. Continue to keep damp until **AQUORON® CPSP™** has been applied. For maximum penetration of **AQUORON® CPSP™** keep the pool shell moist while applying product. If necessary, continue to mist the surface during the application of product to keep moist.
- AQUORON® CPSP™** must be sprayed twice over the same area. The first application should be sprayed in an East-West direction. Spray the second application in a North-South direction, over the area just treated, as soon as at least 60% of the surface sheen from the first application has disappeared. Apply wet on wet. One gallon of **AQUORON® CPSP™** will cover two applications of 150 sq. ft. To calculate the number of gallons required, divide the number of square feet in the project by 150.

CLEAN UP AND SAFETY

- Caution must be taken, as treated surfaces may be slippery until completely cured.
- No special clothing, breathing apparatus, goggles or gloves are necessary, but in enclosed areas it is advisable to wear an appropriate respirator to avoid possible irritation to breathing.
- Attention should be made to watches, eyeglasses, etc., as **AQUORON® CPSP™** can etch glass or discolor aluminum if allowed to dry.
- Clean equipment using water and mild soap. Never store spray equipment without cleaning and following manufacture's recommendations for storage between usages.

SHELF LIFE

Shelf life is indefinite provided **CPSP™** is kept tightly sealed in original containers when not in use.

PACKAGING

AQUORON® CPSP™ is available in 5 gallon/18.9 liters and 55 gallon/208.2 liters drum size. **AQUORON® CPSP™** is also available in bulk containers.

MAINTENANCE

Special maintenance of treated area is not required.

TECHNICAL SERVICES

Technical information and assistance may be obtained from your local dealer, or by calling the technical department of the **AQUORON** Aquatics Division at 1-800-342-4649. E-mail: info@aquoron.com

AQUORON Corp. Headquarters (972) 722-5444
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LIMITED WARRANTIES

AQUORON products effectively address problems caused by moisture intrusion when properly applied by Aquoron Trained Key Applicators. Aquoron will warrant its products, as stated and provided with each Aquoron product, to be effective against water intrusion through sound concrete for a warranty period of one-year. Two-year warranties are available if a warranty application is completed and approved before product application and the product is applied by an **AQUORON** trained key applicator.

THE FOLLOWING LIMITATIONS APPLY TO THE **AQUORON** PRODUCT WARRANTIES:

- ALL PRODUCTS SHALL BE APPLIED BY **AQUORON** TRAINED KEY APPLICATORS IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS FOR EITHER WARRANTY TO BE EFFECTIVE.
- ALL WARRANTY REMEDIES ARE LIMITED TO REFUND OF THE PURCHASE PRICE FOR THE AMOUNT OF PRODUCT COVERING THE AFFECTED AREA
- MECHANICALLY RELATED MOISTURE MIGRATION IS SPECIFICALLY EXCLUDED FROM ANY **AQUORON** WARRANTY
- ALL OTHER WARRANTIES, INCLUDING BUT NOT LIMITED TO WARRANTIES FOR FITNESS FOR USE OR FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY DISCLAIMED, EXCLUDED AND WAIVED TO THE FULLEST EXTENT ALLOWED BY LAW.

For all Limited Warranty questions or for warranty service, contact Aquoron Headquarters at the numbers below.

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