

PRODUCT DATA SHEET



Utilizing worldwide resources, Aquron Corporation has brought together a community of experts that are passionate about providing environmentally responsible solutions to challenges within all areas of concrete construction, which results in extending the life cycle of both new and existing concrete.

Concrete Preservation Treatment

CSI DIVISION

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SCAN TO SEE THE
AQURON ADVANTAGE



DESCRIPTION

AQURON® CPT-2000™ offers a proven solution to reduce water migration in concrete. It is an effective treatment that is an aqueous-borne, deep penetrating catalyzed colloidal silica liquid that turns into an amorphous hydrogel membrane inside the concrete.

BASIC USE AND APPLICATIONS

AQURON® CPT-2000™ is a permanent, clear treatment/preservative/sealant solution for new or existing pneumatically applied or cast in place concrete. **AQURON®** CPT-2000™ will reduce permeability and porosity which will significantly preserve the embedded steel. It is used on structures such as, highways, bridges, swimming pools, multi-level parking, sea ports, warehouses airport runways and salt contaminated concrete.

PRODUCT BENEFITS AND CHARACTERISTICS

- Permanently, integrally seals concrete
- Penetrates walls and floors 3"-6"
- Allows necessary vapor transmission
- Preserves matrix integrity
- Increases surface abrasion resistance
- Excellent pre-treatment for coating systems
- Adds density
- Significant resistance to salt/chloride ion intrusion
- Significantly enhances the cure
- Increases surface strength and traction
- Minimizes the effects of freeze thaw
- Improves thermal resistance
- Increases strength
- Improves post carbonation effects
- Zero VOC/VOS content
- Reduces permeability & porosity
- Makes ice removal/cleaning easier
- Improves acid/chemical resistance
- Lowers internal chemical reaction potential
- Lowers creep potential
- Lowers electrostatic discharge potential
- Non-structural repair

MEETS OR EXCEEDS THESE STANDARDS

- AASHTO T259 Ion Content
- AASHTO T260 Chloride ion penetration
- ASTM C114 Sealing from water soluble chlorides
- ASTM C156 Water retention
- DIN 1048 German and International standard for water penetration, freeze-thaw, absorption/suction, dusting resistance, efflorescence, resistance to salt attack (cross reference ASTM C672)
- ASTM CD4541 Pull up adhesion test
- ASTM C672 Resistance to scaling and salt exposure
- ASTM 666 Rapid freeze-thaw
- ASTM C192 Strengthens concrete upon curing
- ASTM C309 Type 2, Class A, curing compound
- CRD C4873 Permeability testing

PRECAUTIONS

- Cover all GLASS. **AQURON®** CPT-2000™ will etch glass. This includes eye glasses, watches, vehicle and building 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.
- Product left on the surface will become a bond breaker and need to be removed.
- Other sealers on the concrete surface must be removed before applying **AQURON®** CPT-2000.
- Polymers in the mix
- DO NOT ALLOW TO FREEZE
- If the freshly placed concrete contains IPL cement, we recommend that the **AQURON®** CPT-2000™ be applied as soon as possible, ideally 12-24 hours after placement and finish.
- Caution must be taken, as treated surfaces may be slippery until completely cured.
- Do not allow sheen from the product to remain on the surface as that can be a bond breaker. Remove with a broom or with a hose and water.

INSTALLATION

Job Conditions

1. **LOW TEMPERATURES:** Do not proceed with application of **AQURON®** CPT-2000™ 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 a temperature gun to verify.
2. **HIGH TEMPERATURES:** Should ambient or substrate temperature be 95°F/35°C or higher, cool surface with sufficient water so that the surface stays damp. Disperse puddled water. Use a temperature gun to verify.
3. **WIND:** Caution should be taken in windy conditions. Do not allow product to contact surfaces not intended for **AQURON®** CPT-2000 application.
4. **DRY:** If allowed to dry, **AQURON®** CPT-2000™ can etch glass or dull shiny aluminum. If contact is made with glass or aluminum, rinse surface immediately with water before **AQURON®** CPT-2000™ dries on surface.
5. **PENETRATION:** As a waterborne product, **AQURON®** CPT-2000™ must have access to the surface. Any paint, previous coatings or heavy buildup of oil or grease must be removed.
6. **STRENGTH:** Do not dilute. Use as supplied.
7. **APPLYING IMPERVIOUS COATINGS, COVERINGS, ETC.:** Once **AQURON®** CPT-2000™ is applied, wait 28 days on new concrete and wait 72 hours on existing concrete before applying impervious coatings, coverings, etc. Breathable coatings can be applied to cured concrete 24 hours after the application of CPT-2000.
8. **FRACTURES:** **AQURON®** CPT-2000™ only seals the concrete itself, not fractures.

APPLICATION PROCEDURE FOR ESTABLISHED CURED CONCRETE:

1. **AQURON®** CPT-2000™ can be applied with a low pressure commercial pump tank up to 6 days after the concrete has been placed. After 6 days it is necessary to use a high pressure airless sprayer set at 2000 psi. There are 3 numbers on all the tips. The first number of the tip can be a 4, 5, or 6. The tip sizes are as follows:
 - 013" fan tip for steel troweled smooth concrete
 - 015", 017" fan tip for weathered concrete
 - 019" fan tip for porous concrete
2. Application of the material with the airless sprayer shall be at a 90 degree angle to the surface of the floor, wall or ceiling.
3. Pre-wet area of application 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 **AQURON®** CPT-2000™ has been applied. Temperature must be verified and recorded using a hand held temp gun.
4. Apply **AQURON®** CPT-2000™ at a rate not less than 1 liter to 5 m²/150 sq. ft. per U.S. gallon. Two applications of **AQURON®** CPT-2000™ will be required using a crosshatch pattern to achieve this rate. The first application should be sprayed in an East-West direction. Spray the second application as soon as the surface sheen from the first application has dissipated (normally 5-10 minutes. Do not allow drying). The second application should be sprayed in a North-South direction. Apply wet on wet. For best results apply to maximum tolerance. This is accomplished when the sheen takes 5-10 minutes to dissipate. Do not leave the sheen on the surface. The hotter the ambient temp, the less time you leave the sheen on the surface.
5. Start application holding spray tip approximately 8"–10"/200–300mm from concrete surface. Make application using an overlapping spray pattern with a fanning motion at the end of each pass.
6. Entire area being treated is to be saturated, but do not allow **AQURON®** CPT-2000™ to puddle. Disperse puddled areas with a broom or water hose 5-10 minutes after application is completed. Do not allow puddles of **AQURON®** CPT-2000™ to dry as it will become a bond breaker and will need to be removed.
7. Always start application at the lowest possible area and proceed to higher elevations. For vertical walls, begin at the bottom with east-west overlapping spray patterns. Work your way from the bottom to the top. Then, immediately go back over the same area just treated using a North-South overlapping spray pattern. On a vertical surface, saturation is achieved when product runs 3 inches or more below the spray.
8. Check whether **AQURON®** CPT-2000™ has purged to the surface of concrete any oil, gas, greases and salts, etc. These must be thoroughly washed or abraded away before adhesives or coatings are applied.
9. When treatment is to weeping hydrostatic concrete, repeat step number 4 until weeping stops.
10. Important caution when applying coatings: following the application of **AQURON®** CPT-2000™ we recommend that the surface be thoroughly cleaned prior to coating to remove any potentially bond-breaking contaminants that may have been purged to the surface. It will be easier to remove purged material before it dries, if possible.

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 **AQURON®** CPT-2000™ 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 manufacturer's recommendations for storage between uses.

SHELF LIFE

Contents inside of packaging has 1 year shelf shelf life, provided **AQURON**® CPT-2000™ is kept tightly sealed in original container when not in use.

PACKAGING

AQURON® CPT-2000™ is available in 5 gallon/18.9 liters and 55 gallon/208.2 liters drum size. **AQURON**® CPT-2000™ 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 AQURON HEADQUARTERS at (800) 342-4649.

Email: Info@aquoron.com

LIMITED WARRANTIES

AQURON WARRANTS THAT CPT-2000 WILL EFFECTIVELY REDUCE PERMEABILITY AND WILL CONTROL PH IN SOUND CONCRETE FOR A PERIOD OF 10 YEARS.

THE FOLLOWING LIMITATIONS APPLY TO THE AQURON PRODUCT WARRANTIES:

- ALL PRODUCTS SHALL BE APPLIED BY AQURON TRAINED KEY APPLICATORS IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS FOR THE 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 AQURON 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.
- IT IS THE RESPONSIBILITY OF THE KEY APPLICATOR TO DETERMINE FITNESS FOR USE.

CONTACT YOUR DISTRIBUTOR OR THE AQURON CORPORATION FOR SPECIFIC REQUIRMENTS FOR YOUR 10 YEAR WARRANTY

For all Limited Warranty questions or for warranty service, contact Aquoron Headquarters at (800) 342-4649.