

Proven since 1985

# **AQURON®** CPT-2000™

## **C**oncrete **P**reservation **T**reatment

**AQURON®** Corporation International Post Office Box 758

**MANUFACTURER** 

Rockwall, Texas 75087 U.S.A.

Corp. HQ (972) 722-5444 Fax (972) 722-6412 Toll free tel. (800) 342-4649 Toll free fax (888) 412-1543

Email: info@aquron.com Website: www.AQURON.com

#### PRODUCT DESCRIPTION

**AQURON°** CPT-2000™ offers a proven solution to water migration in concrete. It is an effective treatment that is aqueous-borne, deep penetrating, sub-surface densifying, and molecular bonding.

**AQURON** CPT-2000™ is a permanent, clear treatment/preservative/sealant solution for new or existing pneumatically applied or cast in place concrete. **AQUROA**° CPT-2000™ will seal the matrix and significantly preserve its embedded steel.

**AQURON°** CPT-2000™ 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 internal chemical reactions. More density is added; additional bonding strength is provided; and the concrete is permanently, hydrostatically sealed from within.

**AQURON\*** CPT-2000™ is an ideal product for concrete or other masonry surfaces that are to be painted or coated since it enhances the bonding quality of the surface. AQURON CPT-2000™ prevents peeling, cracking and loss of bond caused by capillary moisture or internal chemical

**AQURON°** CPT-2000™ will not alter the appearance of the surface or physical characteristics and will enhance surface traction quality, making it ideal for use on all new or existing concrete installations including bridges, decks, streets, airport runways, basements, parking garage decks, sidewalks, driveways, slabs, etc.

The use of  $\textbf{AQURON}^{\bullet}$  CPT-2000  $^{\text{\tiny{TM}}}$  will diminish the effects of freeze-thaw CPT-2000™ AQURON' neutralizes existing corrosives such as acids and chlorides preventing internal chemical reactions. Also, AQURON° CPT-2000™ severely retards the rusting or corroding of embedded steel. In projects where there are higher levels of chlorides as determined by appropriate testing, use

the AQURON® 7000™ System. AQURON CPT-2000™ will arrest or at least severely retard concrete being deteriorated by alkali silicate reactivity. In addition, by treating addredate or concrete not yet affected, the potential will be significantly reduced.

#### **BENEFITS**

- · 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

- Improves thermal resistance
- Increases strength
- Improves post carbonation effects
- Zero VOC/VOS content
- Prevents internal water migration
- · Makes ice removal/cleaning easier
- Improves acid/chemical resistance
- Lowers internal chemical reaction potential
- Lowers creep potential
- Lowers electrostatic discharge potential
- · Significantly enhances the cure

#### APPLICABLE STANDARDS

**AQURO**n

• CPT-2000™ meets or exceeds applicable 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, freezethaw, absorption/suction, dusting resistance, efflorescence, resistance to salt attack (cross reference ASTM 672)
- 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 C30991 Type 2, Class A, curing compound

#### • CRD C4873 Permeability testing **COMPOSITION**

**AQURON°** CPT-2000™ has a highly reactive catalytic agent in a waterborne proprietary colloidal silica base that produces a silica hydrogel below the surface and inside the concrete matrix.

## **AQURON°** CPT-2000™ cannot function if there are:

- (1) Other sealers on the concrete surface
- (2) Polymers in the mix

## **PRECAUTIONS**

- Cover all GLASS. AQURON® CPT-2000™ 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 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

#### **PHYSICAL PROPERTIES**

Physical Liquid Color Clear None Odor Specific gravity 1.11± Flash point None рΗ 10± Toxicity None 212°F/100°C Boiling point Freeze temperature 32°F/0°C Hazardous vapors None Weight per gallon. 9.18lbs/4.16kg Environmental impact Neutral

#### PHYSICAL PROPERTIES CONTINUED

Yes User-friendly Indefinite

Shelf life None (allow to thaw completely)

Freeze harm Excellent Surface bond quality None Flammability None VOC/VOS content Excellent Resistance to UV Paintable Yes **Pollutants** None Waste disposal methods

Non-hazardous Resistance to abrasion **Excellent** Polymerization nil Solids before applied nil Solids after applied 100%

Recommnded coverage 150-200 sq. ft. per US gallon/3.5

m2 - 4.9 m2 per

#### **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.
- 2. 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.
- 3. Wind: Caution should be taken in windy conditions. Do not allow product to contact surfaces not intended for 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
- 5. Penetration: As a waterborne product, AQURON° CPT-2000™ must have access to the surface. Any 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.
- 8. Fractures: AQURON° CPT-2000™ only seals the concrete itself, not

#### **APPLICATION PROCEDURE**

## FOR ESTABLISHED CURED CONCRETE:

- 1. AQURON° CPT-2000™ can be applied wih 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 spraver.
  - 013" 25 degree fan tip for steel troweled smooth concrete • 015" - 019
- 25 fan tip for porous or weathered concrete 2. Application of the material with the airless sprayer shall be at a 90 degree angle to the surface of the wall or floor.
- 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.
- 4. Apply **nouron** CPT-2000™ at a rate not less than 1 liter to 5 m<sup>2</sup>/150 sq. ft. per U.S. gallon. Two applications of **ACURON** 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.
- 5. Start application holding spray tip approximately 8"-10"/200-300mm from concrete surface, make application using 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 broom 5-10 minutes after application is completed. Do not allow puddles of **AQURON®** CPT-2000™ to dry.
- 7. Always start application at 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.
- 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.
- Important caution when applying coatings: following the application of **AOURON®** 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

#### **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 manufacture's recommendations for storage between uses.

#### SHELF LIFE

Shelf life is indefinite provided AQUROA® CPT-2000™ is kept tightly sealed in original containers when not in use.

**AQUROA** 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@aquron.com

#### LIMITED WARRANTIES

AQURON products effectively address problems caused by moisture intrusion when properly applied by Aquron Trained Key Applicators. Aquron will warrant the Aquron CPT 2000 against water migration through sound concrete for a warranty period of one-year. Extended warranties are available and an application must be filled out prior to applying the product. 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.

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

AQURON CORPORATION P.O. BOX 758 ROCKWALL, TEXAS 75087 972.722-5444 OR 800.342.4649 (TOLL FREE USA) www.aquron.com