# **PRODUCT DATA SHEET**



# 7000 System

**Concrete Soluble Chloride Reducer** 

**CSI DIVISION** 03 30 00

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.

SCAN TO SEE THE AQURON ADVANTAGE



## **DESCRIPTION**

**AQURON®** 7000 penetrating Concrete Soluble Chloride Reducing System is a proven, aqueous born, deep penetrating, catalyzed colloidal silica treatment, which extends the life of chloride contaminated concrete. The 7000 system penetrates deeply into the concrete capturing and or purging soluble chlorides from the concrete. The system consists of two saturated applications of 7000 CSCR. Concrete should be treated to refusal, wet on wet.

# **BASIC USE AND APPLICATIONS**

**AQURON**® 7000 system is used on existing concrete structures that have been exposed to salt over time. Structures including all types of reinforced concrete construction including precast, prestressed, and post -tension construction utilizing Portland cement as a binder. Structures such as, highways, bridges, swimming pools, multi-level parking, sea ports, warehouses, airport runways, and salt contaminated concrete.

# PRODUCT BENEFITS AND CHARACTERISTICS

- Environmentally responsible/ no VOC or VOS.
- · Permanent for the life of the concrete
- Reduces Soluble Chlorides within the concrete
- Significantly reduces further corrosion of the embedded steel
- Improves resistance of the concrete to continued chloride attack
- Reduces permeability and porosity thereby extending the service life of the concrete
- Penetrates deeply (depth of penetration is connected to porosity of the concrete being treated)
- Is compatible with any surface coatings
- Neutralizes most PH issues created by the Halo Effect
- Increases surface abrasion resistance
- Reduces the effects of freeze thaw
- NOT A 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
- CRD C4873 Permeability testing

### **PRECAUTIONS**

- Cover all GLASS. AOURON® 7000™ 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®** 7000™ when ambient temperature and/or substrate temperatures are less than 40°F/4.5°C or fore casted to drop below 40°F/4.5°C during the next 6 hours.
- DO NOT ALLOW TO FREEZE

### INSTALLATION

#### **JOB CONDITIONS**

- 1. Low Temperatures: Do not proceed with application of **AQURON®** 7000™ 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 prior to applying.
- 3. Wind: Caution should be taken in windy conditions. Do not allow product to contact surfaces not intended for **nouron**® 7000™ application.
- 4. Dry: If allowed to dry, **AQURON®** 7000<sup>™</sup> can etch glass or dull shiny aluminum. If contact is made with glass or aluminum, rinse surface immediately with water before **AQURON®** 7000<sup>™</sup> dries on surface.
- 5. Penetration: As a waterborne product, **AQURON®** 7000™ 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. Because it is applied to existing concrete structures, wait 24 hours before applying breathable coatings and 72 hours before applying a non-breathable coating.
- 8. It is imperative to allow the 7000 system to complete purging before applying any coatings or surface sealers. The purged material must be completely removed before applying coatings or sealers. It is not unusual for purging to occur for more than a day on heavily contaminated concrete. \*The sooner the purged material is removed, the easier the removal will be.
- 9. Fractures: **AQURON®** 7000™ only seals the concrete itself, not fractures.

# APPLICATION PROCEDURE FOR CHLORIDE CONTAMINATED CONCRETE

- 1. **AQURON**® 7000™ is applied with an airless sprayer. Tip size as follows.
- degree fan tip for steel troweled smooth concrete • 013"
- 015", 017" or 019" fan tip for porous or weathered concrete
- The 1st number on the tip can be a 4, 5, or 6.
- 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® 7000™ has been applied
- 4. The 7000 system consist of 2 applications of 7000 to refusal. Apply **AQURON®** 7000™ at a rate not less than 1 liter to 5 m2/150 sq. ft. per U.S. gallon. The first part of the application should be sprayed in an East-West direction. Spray the second part of the application as soon as the surface sheen from the first application has dissipated (normally 5-10 minutes. Repeat until sheen remains for 10 minutes. Do not allow drying). The second application should be sprayed in a North-South direction. Repeat until you achieve refusal. Refusal is when the sheen from the product remains on the surface for 10 minutes. Apply wet on wet. For best results apply to maximum tolerance. This is accomplished when the sheen takes approximately 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.
- areas with a broom 5-10 minutes after application is completed. Do not allow puddles of **AQURON®** 7000™ to dry. 6. Entire area being treated is to be saturated, but do not allow **AQURON®** 7000™ to puddle. Disperse puddled
- 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. Apply two applications of **AQURON®** 7000<sup>™</sup>. Refusal is when the run from the spray travels 3 inches or more beneath the spray. It is important to apply wet on wet. Then, immediately go back over the same area just treated using a North-South overlapping spray pattern.
- 8. Check whether **AQURON**® 7000™ 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. Important caution when applying coatings: following the application of **AQURON®** 7000™ 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.

# 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® 7000™ 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

Contents inside of packaging has a 1 year shelf life, provided **AQURON®** 7000 is kept tightly sealed in original container when not in use.

### **PACKAGING**

**AQURON**® 7000™ is available in 5 gallon/18.9 liters and 55 gallon/208.2 liters drum size.

**AQURON**® 7000™ 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 IT'S PRODUCTS, AS STATED AND PROVIDED WITH EACH AQURON PRODUCT, TO BE EFFECTIVE AGAINST MOISTURE INTRUSION THROUGH SOUND CONCRETE FOR A WARRANTY PERIOD OF ONE YEAR.

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 RESONSIBILITY OF THE KEY APPLICATOR TO DETERMINE FITNESS FOR USE.

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