PRODUCT DATA SHEET

AQURON

300-MWC

Concrete Enhancing Admixture

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.

CSI DIVISION

ASTM C494 Type A & S mid-range water reducer with shrinkage reducing qualities.

03 05 00 03 30 00 03 40 00 07 26 00 P.R.A.H - Porosity Reducing Admixture-Hydrophilic

SCAN TO SEE THE AQURON ADVANTAGE

DESCRIPTION

Aquron® 300 Mix Water Conditioner (MWC) is a waterborne proprietary colloidal silica additive used to enhance and extend the life cycle of concrete. It does this by increasing the hydration rate of the Portland cement particle.

APPLICATIONS

Recommended for use in:

- All types of reinforced concrete, including precast/prestressed and post-tensioned applications
- Parking garages, bridge decks, marine structures, slabs, floors and other reinforced concrete applications.
- Highways
- Bridges
- Parking Garages
- Sea ports and other marine structures
- Warehouses
- Airport runways
- Swimming pools
- Salt contaminated concrete
- Slabs, floors and other reinforced concrete applications

PRODUCT BENEFITS AND CHARACTERISTICS

- Increased cement particle hydration which decreases permeability and porosity within the matrix of the concrete
- Produces early and consistent strength
- Increases flow-ability and work-ability of the concrete making it easier for awkward placements and pumping into small cavities
- Reduces concrete shrinkage, slab curl and surface cracking
- Permanent internal protection
- Significantly increases freeze thaw resistance
- Cost effective
- Environmentally responsible with no VOC or VOS

MEETS OR EXCEEDS THESE STANDARDS

ASTM C494 Low Range Water Reducer Type A&S
ASTM C779 Abrasion Resistance
ASTM D 5084-16 Permeability reduction
ASTM C1218 No added chloride
ASTM C143 Slump reducer
ASTM C1064 Reduced overall temperature
ASTM C666 Increased resistance to freeze thaw
EN-934-2 Water Proofing Properties for Admixtures
ASTM C78 Strength increase
ASTM C1567 Improves ASR resistance
ASTM C138 Increased density
ASTM C231 Reduced air voids
ASTM C42-94 Increased strengths
ASTM C3916 Compatibility with glass fibers
ASTM F1869 Moisture Vapor Emission Rate of Concrete sub-floor using Anhydrous Calcium Chloride
ASTM F710 Standard practice for preparing Concrete Floors to Receive Resilient Flooring

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PRODUCT INFORMATION

Packaging

AQURON® 300-MWC is available in 5 gal (18.9 L) and 55 gal (208.3 L) drums or 330 gal (1249.18L) Totes.

Storage

Store at ambient temperatures above 35°F(2°C) but not exceeding 125°F(52°C) Precautions should be taken to protect AQURON® 300 MWC from freezing.

Shelf Life

Contents inside of packaging has 1 year shelf life, provided AQURON® 300 MWC is kept tightly sealed in original container when not in use.

PRECAUTIONS

- Use water to remove spills in contact with glass or glazed surface immediately, as distortion of surface may occur. Shiny aluminum may be dulled if contacted, metal is otherwise unaffected. **All ACI guidelines must be strictly adhered to including curing. Failure to do so can affect warranty.**
- For best curing results, use AQURON® 2000 Cure and Seal. When adjusting slump, note that very little added water usually significantly increases slump, compared to a standard mix. Add no more than 1 gallon of water per yard of concrete to adjust the slump. Adding more than 1gal of water will void the warranty.
- AQURON® 300 mixes can appear to have a lower slump, but still have the workability of higher slump concrete.
- **DO NOT ALLOW TO FREEZE.**

HEALTH AND SAFETY

To avoid allergic reactions or skin irritation, it is recommended to wear gloves and eye protection when handling. Attention should be made to watches, eyeglasses etc., as AQURON® 300 MWC can etch glass or discolor aluminum if allowed to dry. Clean all equipment using water and mild soap. Never store dosing equipment without cleaning and maintain AQURON® 300 MWC in a sealed container between usages.

USE OF ADDITIONAL ADMIXTURE WITH AQURON® 300-MWC

If the concrete mix design requires other additives to be used, please call AQURON® Technical Support to ensure compatibility. It is ultimately the batch plants responsibility to ascertain compatibility and fitness for use.

ADDITIONAL MATERIALS FOR AQURON® 300-MWC SYSTEM

For best results and additional protection, use the AQURON® 2000 Cure & Seal after the concrete has been placed.

AQURON 300-MWC

Concrete Enhancing Admixture

DIRECTIONS FOR USE

DOSAGE

AQURON® 300-MWC Concrete Mix Water Conditioner is added to concrete's mix water at the rate of 10 fluid ounces per 100lb/6.5ml per Kg of cement, or if using a mix water tank for variable cement content batching, please contact your area distributor or the AQURON Corporation International for technical assistance.

NORMAL BATCHING

AQURON® 300-MWC Concrete Mix Water Conditioner must be mixed into 90% of the batching mix-water before introduction of any other mix materials e.g. cement, aggregate, fines etc...

When batching in a transit mixer, **AQURON®** 300-MWC Concrete Mix Water Conditioner must be utilized as follows:

A. Place 90% of concrete's mix water in transit mixer.
B. Place the designed amount of **AQURON®** 300-MWC Concrete Mix Water Conditioner in transit mixer.
C. Rotate mixer drum 8-10 revolutions.
D. Add cement sand and aggregate.
E. Add remaining mix water.
F. Mix batch for at least 15 minutes at no more than 10-15 rpm.

The total mix must be kept mixing for a minimum of 180 revolutions.

Using **AQURON®** 300-MWC Concrete Mix Water Conditioner allows for a water to cement ratio between .48 and .54. Slump is easily adjusted with very little additional potable water. We recommend adding no more than 1 gallon of water per yard of concrete to adjust the slump

Note: Very little added water dramatically increases slump.

CONTINUOUS MIXING

AQURON® 300-MWC Concrete Mix Water Conditioner is added or injected into, mix water at the rate of 10 fluid ounces per 100 lbs. of cement, prior to combining the mix-water with cement. The same is for operations such as, Flow Crete, Shot Crete, Lightweight, and/or Gunite etc.

TEST CYLINDERS

AQURON® 300-MWC Concrete Mix Water Conditioner Test must be taken after full mixing period only. Note **AQURON®** 300-MWC Concrete Mix Water Conditioner is one part of a potential two-part system which includes cure and sealing with **AQURON®** Cure and Seal™. Contact your representative for more information on the Aquron Complete System.

MAINTENANCE

No special maintenance of concrete is required when using the **AQURON®** 300-MWC.

TECHNICAL SERVICES

Technical information and assistance may be obtained from your local dealer, or by calling the technical department of the AQURON Corporation at Office (972)722-5444, Toll Free (800) 342-4649, Fax (972) 722-6412 or Email aquron@aquron.com

WARRANTIES AND LIMITATIONS OF LIABILITY

ALL WARRANTY REMEDIES ARE LIMITED TO REFUND OF THE PURCHASE PRICE FOR THE AMOUNT OF PRODUCT COVERING THE AFFECTED AREA.
It the responsibility of the batch plant owner and/or operator and the AQURON trained KEY APPLICATOR to determine the merchantability and fitness for a particular purpose or use of the AQURON® 300-MWC™ and/or the AQURON® 2000 Cure and Seal™. AQURON offers a product performance warranty for this AQURON mitigation system of AQURON® 300-MWC™ concrete admixture and AQURON® 2000 Cure & Seal™.
The Aquron 300/2000 comes with a limited warranty against moisture migration through sound concrete, control of concrete pH, and anti-dusting performance. All eligibility requirements on the warranty must be met to receive the warranty.

ELIGIBILTY REQUIREMENTS

1. **The applicant must fill out a warranty of performance request form from the Aquron corporation for the specific job it will be used on.**
2. **The batch plant operator must be an Aquron trained KEY APPLICATOR, or an Aquron representative must be present during batching.**
3. **The contractor that places and finishes the concrete must be an Aquron trained KEY APPLICATOR as well as be ACI certified in placement and finishing concrete. Failure to comply with these requirements holds harmless the Aquron Corporation of any liability arising from its use, and user assumes all risk and liabilities whatsoever in connection therewith. The terms of this paragraph may not be orally modified. There are no warranties express or implied which extend beyond the face herewith. 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.**

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. EXTENDED WARRANTIES ARE AVAILABLE (IF A WARRANTY APPLICATION IS COMPLETED AND APPROVED BEFORE PRODUCT APPLICATION AND WHEN THE 300 MWC HAS BEEN USED IN THE BATCH.

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 (800) 342-4649.