



AQURON® 300-MWC™

Proven Since 1985

Concrete Mix Water Conditioner CONCRETE PROTECTION AND WATERPROOFING

MANUFACTURER

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PRODUCT DESCRIPTION

AQURON® 300-MWC™ Concrete Mix Water Conditioner is a clear, environmentally neutral, non-toxic, odorless colloidal liquid.

BASIC USE

AQURON® 300-MWC™ Concrete Mix Water Conditioner added to cement concrete mix water produces extraordinarily strong, hard, and impermeable concrete. **AQURON® 300-MWC™ Concrete Mix Water Conditioner** achieves this accomplishment in several ways beginning with improvement in the quality of hydrolysis-hydration by-products followed by promoting significant increase in mix water performance and already included cement utilization, providing additional cement paste volume, per cement particle, without including additional cement in the mix. Through an increase in utilization of the already included cement and mix water, concrete's performance values are significantly improved through enhancing the plastic concrete mix such as production of fine-textured very homogeneous cement paste with smaller more uniform-pore sizes, lower void space percentages, improved workability/increased lubricity, less bleed water volume at surface, and a much improved permeability factor, improvements which translate to greatly improved durability. **AQURON® 300-MWC™ Concrete Mix Water Conditioner** provides mix water the ability to initiate hydration without the normal cement potency loss, usually ascribable to mix water dilution/hydrolysis. **AQURON® 300-MWC™ Concrete Mix Water Conditioner** ensures that freshly produced cement paste contacting/coating mix's aggregate is of the highest possible quality, a factor which significantly improves cement paste-to-aggregate bond quality, further increasing flexure strength. **AQURON® 300-MWC™ Concrete Mix Water Conditioner** greatly improves calcium hydroxide quality, providing for a greater more efficient lamination of the silicate polymer particles, strands or chains, an action that also reduces the volume of unused calcium hydroxide in the set concrete. **AQURON® 300-MWC™ Concrete Mix Water Conditioner** provides or branching of

silicate polymer particles, strands or chains, the main constituents of tobermorite gel, which is the main strength component of concrete.

AQURON® 300-MWC™ Concrete Mix Water Conditioner utilization produces concrete with greater durability and freeze damage resistance, factors of major consequence, since these factors are normally associated with extending concrete's useful life span. Very importantly, **AQURON® 300-MWC™ Concrete Mix Water Conditioner**, added to mix water, causes significant reduction in the ultimate size of unused cement particle cores, left in concrete to act as aggregates. Various, smaller than usual, sizes causes the particle cores to subsequently become excellent unreachable filler aggregate, sized somewhere between sand and cement grain sizes, providing fantastic filler benefits, similar to silica fume, resulting in denser, stronger, more impermeable concrete with higher integrity, less susceptibility to contaminate pollution, freeze damage, imbedded steel corrosion, and etc.. **AQURON® 300-MWC™ Concrete Mix Water Conditioner** utilization provides Portland Cement concrete many unique benefits, and requires no special handling, storage, mixing, finishing, or curing techniques. Also importantly, **AQURON® 300-MWC™ Concrete Mix Water Conditioner** increases cementitious material (cm) content of concrete by utilizing greater volumes of the already included cement, therefore allowing a mix water volume increase while still producing concrete with low water-cement (w-c) ratio quality, or better, because of higher cementitious material water ratios.

PRECAUTIONS

AQURON® 300-MWC™ Concrete Mix Water Conditioner must be thoroughly mixed with the mix water before the introduction of Portland cement, aggregates and fines.

SOME ATTRIBUTES

- Adds workability by increased lubricity
- Alleviates/eliminates plastic cracking
- Reduces bleed water volume
- Improves strengths
- Increases density
- Increases impermeability and durability
- Improves surface abrasion resistance
- Lowers internal chemical reaction potential
- Eliminates capillary action potential
- Reduces absorption rate
- Lowers/eliminates potential for dusting
- Lowers chloride induced corrosion potential

- Lowers/eliminates slab curl potential
- Increases acid/chemical resistance
- Decreases cementitious material waste
- Works to greatly reduce shrinkage cracking

PHYSICAL PROPERTIES

Physical	liquid
Color	water-clear
Odor	none
pH	12±
Flash point	none
Flammability	none
Toxicity	none
Pollutant	none
Hazardous vapors	none
Spill clean-up	dilute/flush using water
Environmental impact	none/neutral
User status	friendly
Abrasion resistance	excellent
VOC/VOS compliant	yes

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 eg. cement, aggregate, fines etc.. When batching in a transit mixer, **AQURON® 300-MWC™ Concrete Mix Water Conditioner** must be utilized as follows:

- Place 90% of concrete's mix water in transit mixer.
- Place the designed amount of **AQURON® 300-MWC™ Concrete Mix Water Conditioner** in transit mixer.
- Rotate mixer drum 8-10 revolutions.
- Add cement sand and aggregate.
- Add remaining mix water.
- 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. With **AQURON® 300-MWC™ Concrete Mix Water Conditioner** Cement ratio is normally between .49 and .54. With slump being adjusted with just potable water. Note: very little added water usually dramatically increases slump.

Warranties and Limitations of Liability

Aquron Corporation ("Seller") warrants that if any goods supplied prove defective in workmanship or materials, that Seller shall replace them or refund their purchase price. Aquron Corporation offers a performance warranty for this **Aquron®** product. The warranty for the performance of this **Aquron®** product must be requested from the Aquron Corporation and initiated prior to applying this **Aquron®** product. Failure to initiate warranty of performance prior to application, holds harmless 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.

CONTINUOUS MIXING

AQURON® 300-MWC™ Concrete Mix Water Conditioner is added or injected into, mix water at the rate of 10 fluid ounces to 3.5 US gallons/22ml per L, prior to combining the mix water with Cement, for operations such as Flowcrete, Shotcrete, Gunite etc.

OTHER ADDITIVES

If mix design requires other additives call your **AQURON®** Representative to ensure and verify product compatibility.

TEST CYLINDERS

AQURON® 300-MWC™ Concrete Mix Water Conditioner Test Cylinders must be taken after full mixing period only. Note **AQURON® 300-MWC™ Concrete Mix Water Conditioner** is one part of a two part system which includes cure and sealing with **AQURON® CPT-2000™**.

SHELF LIFE

Shelf life is indefinite provided containers are kept tightly sealed when not in use.

PACKAGING

AQURON® 300-MWC™ Concrete Mix Water Conditioner is available in 5 gal-Ion/18.9 liters and 55 gallon/208.2 liters drum size. **AQURON® 300-MWC™ Concrete Mix Water Conditioner** is also available in bulk containers.

MAINTENANCE

No special maintenance or finishing of concrete is required.

TECHNICAL SERVICES

Technical information and assistance may be obtained from your local dealer, or by calling the technical department of the AQURON Corporation at (972) 722-5444, (800) 342-4649 Office, or (972) 722-6412 FAX or toll free FAX (888) 412-1543. E-mail welcome – info@aquron.com

Local Area Representative