



AQUAFIN

AQUAFIN[®]-IC ADMIX

Liquid Crystalline Waterproofing Additive for Concrete

- ☑ Increases concrete strength up to 25%
- ☑ Reduces water penetration
- ☑ Meets NSF/ANSI 61
- ☑ Protects reinforcement
- ☑ Liquid, not powder - NO clumping.



Product Description

AQUAFIN-IC ADMIX is a unique liquid waterproofing additive for concrete, consisting of a water based suspension of inorganic waterproofing agents. It can be added to concrete during the batching process or in a ready-mix truck with full mixing capabilities. Unlike powder additives, there is no risk of clumping.

In addition to its waterproofing characteristics AQUAFIN-IC ADMIX also significantly increases the compressive strength and freeze-thaw resistance of concrete.

Working Principle

- During concrete hardening AQUAFIN-IC ADMIX forms millions of fine crystalline fibers inside the capillary pores.
- Crystalline fibers reduce the pore diameter, thus blocking the flow of water through the capillary voids.
- Treated concrete is permanently watertight.

Typical Applications

Any concrete mix requiring waterproofing (water impermeable) capabilities. (i.e. tunnels & subway systems, foundations, precast structures, parking structures, reservoirs, sewage & water treatment plants, swimming pools, underground vaults, etc.).

Advantages

- Not a dry powder - easier and safer to mix homogenous - no fear of clumping
- Resists extreme hydrostatic pressure, positive (active) or negative (passive) water pressure side
- Can seal hairline cracks up to 1/64" (0.4 mm)
- Becomes an integral part of the concrete
- Not a vapor barrier - allows concrete to breathe
- Max. water/cement ratio of concrete: 0.55
- Negligible interference with water reducers & plasticizers
- Negligible effect on slump
- Negligible influence on air entrainment
- Non toxic ■ Permanent
- Less costly than most other methods.

Batching

- ♦ Stir AQUAFIN-IC ADMIX prior to use, to assure that the mixture is homogeneous.
- ♦ Assure that the water/cement (w/c) ratio does not exceed 0.55 before AQUAFIN-IC ADMIX is added.
- ♦ Concrete should be placed no later than 45 minutes after the addition of AQUAFIN-IC ADMIX.
- ♦ Use a retarder for mix designs containing Type II/V or Type III Portland Cement. Call our office for acceptable products.

A. BATCHING PLANT:

- ♦ Add AQUAFIN-IC ADMIX at the specified dosage rate to the batching water, or last to the finished mixture in the batch mixer.

B. ON SITE - READY-MIX TRUCK:

- ♦ Deliver specified concrete mix to site
- ♦ Add 2% - 3% AQUAFIN-IC ADMIX
- ♦ Mix for 3 - 5 minutes
- ♦ Concrete is now ready to be placed.

Storage & Shelf Life

Settlement may occur below 55°F (13°C). Store in room above 68°F (20°C) for 24 hrs and re-stir. Protect from freezing. If frozen, thaw gradually and stir to homogenous mixture. Shelf life in unopened, original containers is 12 months, when stored at 68°F (20°C).

NOTE:

Trial mixes under project conditions to determine setting time and strength of concrete are recommended. (Aggregates conforming to a well graded sieve curve are necessary to assure water tightness.)

Interference with accelerators or retarders: test before use.

Contact our technical department if alkali sensitive aggregate is used.

AQUAFIN-IC ADMIX must be placed in accordance with ACI Manual of Concrete Practice. (Latest Edition.)

CURING:

Curing procedures as per ACI Manual of Concrete Practice. (Latest Edition.)

Dosage Rates

Dosage guideline:	at w/c ratio < 0.45 = 2 %*)	at w/c ratio > 0.45 = 3 %*)
AQUAFIN-IC ADMIX	Dosage Rate	
	2 % *)	3 % *)
1 gal (3.785 liter) per:	487 lb (221 kg)	325 lb (148 kg)
	cement	
per 1 sack (94 lb) of cement:		
by weight	1.88 lb (0.85 kg)	2.82 lb (1.28 kg)
by volume	25 fl.oz (0.75 liter)	37 fl.oz (1.1 liter)
per 6 sacks (564 lb) of cement:	1.2 gal (4.50 liter)	1.75 gal (6.6 liter)
	*) % AQUAFIN-IC ADMIX by weight of cement	

Physical Data

Aggregate state:	Liquid
Color:	Transparent blue
Bulk Density:	9.74 Lb/gal (1.17 kg/L)
pH:	10 - 12
VOC:	0
Working Temperature:	> 40° F (> 5° C)
Potable water: (NSF/ANSI 61)	Certified by WQA (see www.wqa.org)
Permeability: (CRD-C 48-92)	No leakage up to 460 ft (140 m) or 200 psi (14 bar) head pressure.

Packaging

1 gal (3.8 L)	jug	9.7 lb (1.2 kg)
6 gal (22.7 L)	pail	58.5 lb (26.5 kg)
240 gal (908 L)	container	2337lb (1062kg)

NON-CHLORIDE, NON-CORROSIVE:

AQUAFIN-IC ADMIX will not initiate or promote corrosion of reinforcing steel embedded in concrete. Neither sodium chloride, calcium chloride nor any chloride-based ingredients are used in the manufacture of AQUAFIN-IC ADMIX.

Safety

Refer to MSDS. For commercial use only. Product is alkaline. Avoid contact with skin and eyes. Wear rubber gloves and safety goggles during mixing and application. After contact with skin, wash with soap and plenty of water. In case of eye contact, rinse immediately with plenty of water and seek medical advice. In case of handling large quantities, provide good ventilation if indoors.

LIMITED WARRANTY: AQUAFIN, INC. warrants its products to be manufactured free of defects and to be consistent with its standard high quality. We will replace or, at our election, refund the purchase price of, any product which is proven to be defective, provided that the product was properly applied. Our product recommendations are based on Industry Standards and testing procedures. We assume no warranties either written, expressed or implied as to any specific methods of application or use of the product. AQUAFIN, INC. MAKES NO WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES EXPRESS OR IMPLIED. AQUAFIN, INC. shall not be liable for damages of any sort including remote or consequential damages, down time, or delay.

AQUAFIN, Inc.

505 Blue Ball Rd., #160 Elkton, MD 21921
 Phone (410) 392 - 2300 Fax (410) 392 - 2324
TOLL FREE 1 - 866 - AQUAFIN (1-866-278-2346)

E-mail: info@aquafin.net
<http://www.aquafin.net>
 Check website for latest updates

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CRYSTALLINE WATERPROOFING ADMIXTURE**