

# AQUAMAT ADMIX

## Crystalline waterproofing admixture for concrete

### Description

AQUAMAT ADMIX is an admixture in powder form consisting of cement and special active chemicals, which react with moisture and free lime in fresh concrete creating insoluble crystalline compounds. These crystals seal capillary shrinkage cracks inside concrete, thus protecting against penetration of water under strong hydrostatic pressure.

Offers the following advantages:

- Water impermeability against water pressure from both positive and negative side.
- Significant reduction of the capillary absorption of water.
- Permanently active for the life of the structure – therefore, it continuously protects the construction from any water penetration.
- Ability to seal hairline cracks up to 0.4 mm wide, even if they appear after the setting of concrete.
- Not affecting vapor permeability of the concrete element.
- Protection of the steel of reinforced concrete from corrosion.
- No air-entraining action.
- Free of chlorides and other corrosive ingredients.
- Compatibility with all kinds of Portland cement.

Certified according to EN 934-2: T9 and classified as a water-resisting concrete admixture. CE marked. Certificate number: 0906-CPR-02412007/01.

AQUAMAT ADMIX has also been tested and approved by the National University of Water Management and Natural Resources (Rivne Ukraine) – Laboratory of Testing Building Materials, for the following properties:

- Increase of water tightness of concrete.
- Increase of frost resistance.
- Not affecting the final strength of concrete.

### Fields of application

AQUAMAT ADMIX is suitable for any type of concrete element that is constantly or temporarily in contact with water, such as foundations, basements, water tanks, tunnels, canals, sewage and wastewater treatment tanks, swimming pools, etc.

### Technical data

Form:	powder
Color:	grey
Density of dry mortar:	0.97 ± 0.1 kg/l
Maximum chloride content:	chloride-free

### Directions for use

As AQUAMAT ADMIX is in powder form, it should never be added directly to wet concrete. This could cause clumping and the admixture will not be dispersed properly.

#### 1<sup>st</sup> way: Addition to the aggregates:

AQUAMAT ADMIX is added first to the aggregates and then is thoroughly mixed for 2-3 minutes with about 50% of the required mixing water, before cement and the residual water are added. The concrete should be mixed for at least 2-3 minutes to ensure good distribution of AQUAMAT ADMIX in the concrete mass.

#### 2<sup>nd</sup> way: Addition to the concrete mixer truck:

First, AQUAMAT ADMIX is mixed separately with water in the following ratio: 20 kg of AQUAMAT ADMIX with 25.5 l of water, in order to form a slurry. Then this slurry is added to the wet concrete at a ratio of 1.80 - 2.20 kg of slurry per 100 kg of cement. Further mixing must take place for at least 5 minutes, in order to achieve a homogeneous mixture.

# AQUAMAT ADMIX

## Consumption

0.8-1.0 kg per 100 kg of cement.

## Packaging

20 kg paper bags.

## Shelf life – Storage

12 months from production date if stored in original, unopened packaging in a frost-free and dry place.

## Remarks

- AQUAMAT ADMIX might affect concrete's setting time and final strength. They both depend on the concrete mix design. Trial mixes should be carried out, in order to determine the actual effect of the product on concrete.
- Due to cement content, the product reacts with water forming alkaline solutions, thus is classified as irritant.
- In case AQUAMAT ADMIX is added to the wet concrete in the form of slurry, the water/cement ratio is not significantly altered given that apart from adding the water contained in the slurry, cement is added as well that is contained in AQUAMAT ADMIX.
- Please consult the safety instructions written on the packaging before use.



0906

ISOMAT S.A.  
17<sup>th</sup> km Thessaloniki – Ag. Athanasios  
P.O. BOX 1043, 570 03 Ag Athanasios, Greece

13

0906-CPR-02412007/01

EN 934-2:2009+A1:2012

DoP No.: AQUAMAT ADMIX/1631-03

### AQUAMAT ADMIX

Water Resisting admixture for concrete  
EN 934-2: T.9

Max chloride content: chloride free

Corrosive behaviour: contains components only  
from EN 934-1:2008, Annex A.1

Dangerous substances: none

**ISOMAT S.A.**  
BUILDING CHEMICALS AND MORTARS  
**MAIN OFFICES - FACTORY:**  
17th km Thessaloniki - Ag. Athanasios Road,  
P.O. BOX 1043, 570 03 Ag. Athanasios, Greece  
Tel.: +30 2310 576 000, Fax: +30 2310 722 475  
**www.isomat.eu e-mail: info@isomat.eu**