

Waterproofing Systems / Capillary Water Proofing Systems

AQUAFIX LIQUID C

Concentrated Crystallized Capillary Waterproofing Additive for Concrete

DESCRIPTION

Concentrated **crystallized** waterproofing **liquid** additive with reactive properties which forms needle like crystals in the pores and capillary voids in reaction with water, moisture and free lime after it is mixed into the concrete.

APPLICATION AREAS

- All reinforced concrete structures exposed to water, moisture, sulfate and chemicals such as chloride ions that may damage the concrete,
- Bored pile foundation,
- Wells, foundations and shear walls,
- Watertanks and treatment plants,
- Potable and waste water tanks,
- Elevator pits,
- Swimming pools,
- Dams and irrigation channels,
- Concrete pipes,
- Tunnels, subways and culverts,
- Cisterns,
- Retaining walls,
- Underground car parks,
- Precast concrete elements.

TECHNICAL PROPERTIES

Appearance	Light brown colored liquid
Liquid Density	~1.15 kg/L (20°C)
Corrosive Behavior	Not Corrosive
Chlorine Ion Content	< 0.1%
Application Temperature	All weather conditions suitable for pouring concrete
Working Time Inside the Mixture	50 minutes

ADVANTAGES

- Homogeneously distributed in the concrete in the transmixer at the construction site as it is in liquid form. There is no risk of lumping.
- Does not affect the slump value and workability of the concrete.
- Prevents the penetration of water, moisture and sulfate into the concrete as it fills the capillary voids and the cracks up to 0.5 mm. Protects the concrete from chemical and physical damages caused by sulfate attacks and prevents reinforcement corrosion.
- Since it insulates the concrete volumetrically, there is no need for a protection layer.
- Increases the compressive strength of the concrete as it fills the capillary voids of the concrete.
- Continues to operate under hydrostatic pressure.
- Since it is reactive, it continues to react with water molecules throughout the life of the concrete and protects the concrete and the steel reinforcement from corrosion for a lifetime.
- Easy to apply, accelerates the work schedule.
- Can be used in all weather conditions suitable for pouring concrete.
- Ideal for single-sided mold-cast shear wall insulation.
- Can be used with all cement types produced in accordance with ASTM and EN standards. It is also compatible with slag and pozzolanas such as fly ash, GGBS and silica fume.
- Air and water vapor permeable, allows the concrete to breathe. Prevents damp odor in the basement floors.
- Resistant to freeze – thaw cycle.
- Non-toxic, can be used in potable water tanks.

CONSUMPTION

Up to 1% of the cement weight in the concrete and the maximum consumption in each concrete class should not exceed 7 kg per 1 m³ of concrete.

PACKAGING

30 kg plastic jerrycans and 200 kg barrels

APPLICATION**APPLICATION**

Add AQUAFIX LIQUID C to the transmixer at a ratio of 1% of the cement in the concrete just before the concrete casting. Mix immediately with the transmixer at fast speed for about 5 minutes. Pour the concrete that has gained waterproofing properties with AQUAFIX LIQUID C. The working time of the material is approximately 50 minutes after it is added to the mixture.

CAUTION

- Shake the can well before application.
- The amount of cement mixing water must be reduced by the same amount as the AQUAFIX LIQUID C used (When 7 kg/m³ AQUAFIX LIQUID C is used, reduce the concrete mixture water by 7 kg/m³).
- Request the concrete recipe from the concrete pouring company. AQUAFIX LIQUID C consumption may vary according to the cement dosage and admixtures in the concrete design.
- In order for AQUAFIX LIQUID C to mix homogeneously in concrete, mix it mechanically by adding it into the transmixer.
- If CEM II or III Portland cement is used in the concrete, it may be appropriate to use a setting retarder. AQUAFIX LIQUID C is compatible with other concrete admixtures (naphthalene sulfonate, polycarboxylate etc.)
- The aggregates to be used in the concrete must be clean and in the correct sieve ranges.

SHELF LIFE

Expires in 12 months. Store unopened packages in a dry environment above 10°C. Shake well before use and protect against frost.

HEALTH AND SAFETY

As with all chemical products, avoid contact with food products, skin, eyes and mouth during use and storage. During the application, use work clothes, protective gloves and glasses in accordance with the occupational and worker health rules. Consult a doctor if accidentally swallowed. In case of contact with skin, rinse with water. Do not leave the cover open. Store out of the reach of children.

The application instructions and technical values given for the products have been obtained in accordance with our tests and experiences in accordance with international standards at 23±2°C temperature and 50±5% relative humidity conditions. These values may vary depending on ambient conditions. High temperatures shorten the times, low temperatures lengthen them. Before starting the application, the user should test whether the product is suitable for the application and purpose. FIXA Construction Chemicals Ltd. is not responsible. This Technical Data Sheet remains valid until the next revision is published. FIXA reserves the right to change the values specified in this Technical Data Sheet, provided that the new version is published. It is the user's responsibility to check that the document is up-to-date. Please contact our sales department for more information.