

BETOCRETE[®]-C16

CRYSTALLINE WATERPROOFING CONCRETE ADMIXTURE

Product Description:

BETOCRETE[®]-C16 is a crystalline technology concrete admixture used to produce permanently active waterproofing concrete in:

- Water retaining structures potable water tanks, sewage treatment plants, and septic tanks.
- Water excluding structures; retaining walls, tunnels, elevator pits, and dams.
- Below grade structures; piles foundations, basements.
- Mass concrete.

Advantages:

- Permanently active; will self-heal future static cracks up to 400 microns.
- Improved final strength.
- Provides additional protection to reinforcement steel by reducing chloride ion diffusions.
- Can be used in high w/c ratio (up to 0.55) concretes.
- Liquid: no lumping, easily dispersed.
- Withstands high water pressure (up to 14 bars).
- Compatible with most types of concrete admixtures.
- Eliminates the need for surface waterproofing.

Primary Properties:

Color : Clear*-colorless
Form : Liquid

Density (+20°C.) : 1.15 g/m³
pH-value : 11.5
Processing temp : +8°C to +30°C.
*Insignificant slight cloudiness does not impact the performance.

Dosage Range:

w/c ratio > 0.45 : 2% by weight of CEM.
w/c ratio < 0.45 : 1.5% by weight of CEM.
*Cement content to be a minimum of 350 kgs per CBM.

Dosage in Ready-mix Factory:

BETOCRETE[®]-C16 can be dosed together with the gauging water or to be the ready mix as the last component.

Dosage in Truck Mixer on the Job Site:

2-3 m.-% of BETOCRETE[®]-C16 is dosed into the mixer drum and then thoroughly mixed for 3-5 minutes. Pour without delay.

Instructions for Use:

When stored for extended times, stir BETOCRETE[®]-C16 well before use. Control of the concrete mix design regarding w/c ration < 0.55 prior to dosing BETOCRETE[®]-C16. Workability time is approx. 45 minutes after the addition of BETOCRETE[®]-C16. Concrete retarders are necessary when using Portland Cement Type II or III. Suitability tests have to be carried out before usage. When using BETOCRETE[®]-C16 at temperatures below +10°C, the product shall be blended with water in a ratio



of 1:1 prior to usage. If the material was stored at temperatures below +8°C crystals may form. The product is suitable for usage again after stirring or homogenizing. Suitability tests according to valid standards and norms have to be carried out prior to application.

Estimation & Supply:

IBC's	: 1.100 kg
Drums	: 200 kg
Cans	: 25 kg

Cleaning & Equipment Maintenance:

Regular water flushing of dispensing equipment will prolong service life and reduce breakdowns. Use REINIT-BM on internal metal surfaces subject to contact with concrete on concrete mixers, batch plants and truck mixers regularly to prevent concrete crust formations. Use REINIT-R to remove hardened concrete crusts.

Storage & Shelf-life:

BETOCRETE®-C16 has a shelf-life of 12 months when stored at +20°C in original, unopened containers free from frost. Always re-cap to avoid dirt contamination.

Special Advice:

- Concrete modified with BETOCRETE®-C16 may tend to efflorescence depending on the composition.
- Aggregates must have a continuous sieve line.
- It is recommended to perform compatibility tests with other admixtures as required.
- Concrete, modified with BETOCRETE®-C16 must be produced, placed and finished according to valid norms.
- BETOCRETE®-C16 is non-corrosive and has no adverse effects on the reinforcement.

- Protect surrounding areas against the influence of BETOCRETE®-C16.
- It is rarely possible that BETOCRETE®-C16 influences the setting of the concrete. Our product RUXOLITH-T5 [VZ] has proven as the most effective retarder.

Safety & Health:

Please adhere to the valid European Materials Safety Data Sheet (MSDS).