

# BETOCRETE<sup>®</sup>-C16

## CRYSTALLINE WATERPROOFING CONCRETE ADMIXTURE

### Product Description:

BETOCRETE<sup>®</sup>-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 ± 0.02 g/m<sup>3</sup>

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<sup>®</sup>-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<sup>®</sup>-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<sup>®</sup>-C16 well before use. Control of the concrete mix design regarding w/c ration < 0.55 prior to dosing BETOCRETE<sup>®</sup>-C16. Workability time is approx. 45 minutes after the addition of BETOCRETE<sup>®</sup>-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<sup>®</sup>-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).