



Technical Data Sheet

BETOCRETE®-C35

Crystalline waterproofing concrete admixture

Art.-No. 4 06705

Primary Uses:

BETOCRETE-C35 is a crystalline technology concrete admixture used to produce permanently active waterproof concrete in:

- Water retaining structures; potable water tanks, sewage treatment plants, septic tanks.
- Water excluding structures; retaining walls, tunnels, elevator pits, 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 diffusion.
- Can be used in high w/c ratio (up to 0.55) concretes.
- Withstands high water pressures (up to 14 bars).
- Compatible with most types of concrete admixtures.
- Eliminates need for surface waterproofing.

Primary Properties:

Colour:	grey
Form:	powder
Bulk density:	1.04 g/cm ³
Processing temp.:	+8° C to +30° C
Application temp.:	from +5° C

Dosage Range:

The dosage amount depends on the concrete/mortar mix design and the reactivity of the cement. Trial applications must be conducted to find the suitable amount. The recommended dosage rate is 0.8 – 1.5% by weight of CEM.

Instructions for Use:

Dosage in mortars:

Add BETOCRETE-C35 to the aggregate and approx. 40% of the mix water. Mix at least 2 minutes before adding the remaining water and cement.

Dosage in ready-mix factory:

Add BETOCRETE-C35 to the aggregate and mix at least

30 s before adding water and cement. Continue mixing for at least 45 s until the concrete mix has reached its working properties.

Dosage in batch truck:

The addition of BETOCRETE-C35 on the job site (batch truck) does not happen in powder form but as a suspension in water. Mix the required amount of BETOCRETE-C35 with water in a suitable vessel and add this slurry completely into the mix drum. The mixing ration is approx. 1:1, add approx. 5 l water to a 5 kg bag BETOCRETE-C35.

The required mixing time can be estimated as 1 minutes per m³ drum contents, but min. 5 minutes. Make sure that the additional slurry water does not increase the water/cement ratio above the projected value. Otherwise the water amount must be reduced from the mixing water dosage at the batch plant.

The working time after addition of BETOCRETE-C35 depends on the reactivity of the used cement and can either be prolonged or shortened.

The addition of a concrete retarder like RUXLITH-T5 (VZ) or REMITARD-20 (BV) may be required when using Portland Cement Type I, II or III. Suitability tests accord. to valid standards and norms have to be carried out prior to application.

Estimating & Supply:

5 kg plastic bags, 25 kg bags

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 in 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-C35 has a shelf-life of 12 months when stored dry at +20° C in original, unopened bags.

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Special Advice:

- Concrete modified with BETOCRETE-C35 may tend to effloresce 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-C35 must be produced, placed and finished according to valid norms.
- BETOCRETE-C35 is non corrosive and has no adverse effects on the re-inforcement.
- Protect surrounding areas against the influence of BETOCRETE-C35.
- It is rarely possible that BETOCRETE-C35 influences the setting of the concrete. Our product RUXOLITH-T5 (VZ) and REMITARD-20 (BV) have proven as effective retarders.
- Never apply BETOCRETE-C35 powder into mixed (wet) concrete or mortar mixes as this will increase the risk of lump formation. A homogeneous dispersion of BETOCRETE-C35 can not be expected under these conditions.

Health & Safety:

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