



Technical Data Sheet

BETOCRETE®-CP-350-CI

Art.-No. 2 06445

Crystalline concrete additive with corrosion inhibitors

Only for sale outside the EU due to no CE-Mark.

BETOCRETE-CP-350-CI is powder-based admixture for designing a water tight concrete with innovative 2 in 1 technology. Nano-crystals are formed in the capillaries by special catalysts, which become active on contact with water forming a sustainable and permanently water impermeable concrete. In addition, reinforcing steel is protected against corrosion.

- Powder based.
- Innovative 2 in 1 technology.
- Crystallization of the capillaries.
- Crack healing possible for penetrating cracks up to 0.4 mm and for map/pattern cracks up to 0.5 mm.
- Corrosion inhibitor.
- Improvement of the resistance to freeze/thaw.
- Reduction in Chloride migration.
- Protects reinforcement from corrosion.
- Minimization of maintenance and repair costs.
- Time saving.

Areas of application:

BETOCRETE-CP-350-CI can be applied to all concrete where water penetration should be permanently prevented.

These are for example: Cooling towers at power stations, tanks and containers, retaining basins, swimming pools, parking garages, parking lot levels, foundations, sandwich units, waterproof concrete, sewer channels/manhole access points, tunnels, concrete pipes and everywhere, where watertightness is needed.

Technical data:

Colour:	grey
Consistency:	Powder
Bulk density:	1.12 g/cm ³
Application temp.:	≥ +5 °C
Storage:	dry, 12 months in the original unopened container. Use opened containers promptly.
Packaging:	20 kg foil bag

Concrete requirements:

Minimum cement content:	CEM I	270 kg/m ³
	CEM II	290 kg/m ³
	CEM III /A	380 kg/m ³
Pozzolanic cement with pozzolan content >20%:		300 kg/m ³
Granulated slag:		max. 100 kg/m ³
Fly ash:		max. 80 kg/m ³

Product preparation:

Dosage:

The required dosage rate is 0.75 - 1.25% based on CEM weight and is dependent, amongst other criteria, on the concrete formula and the reactivity of the cement. The dosage is to identify with a suitability trial. The following dosage levels have stood the test of time:

w/c value	< 0.4	0.75% based on CEM
	> 0.4-0.5	0.80% based on CEM
	> 0.5-0.55	0.95% based on CEM

Do not exceed the maximum dosage level of 1.25% based on CEM weight.

Dosage at concrete plants:

BETOCRETE-CP-350-CI is to be dosed into the aggregate and mixed for a minimum of 30 seconds before adding the water and cement. Subsequently mix for a minimum of 45 seconds until ready for use.

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Dosage in concrete trucks:

The addition of BETOCRETE-CP-350-CI on site (concrete truck) is not carried out as a powder but as a very aqueous suspension. The required amount of BETOCRETE-CP-350-CI is premixed with water at a ratio of 1:1 (5 kg BETOCRETE-CP-350-CI and 5 kg water) using a suitable vessel and stirrer and then completely emptied into the mixing drum of the truck. The secondary mix time should be 1 min/m³ of drum contents but at least 5 minutes. Ensure that additional water from the prepared suspension does not increase the required w/c value specified. Otherwise the water in the concrete recipe must be considered during production and prior to the addition of the suspension.

Advice:

- Dependent on composition, concrete modified with BETOCRETE-CP-350-CI can feature crystals on the surface of the concrete.
- Carry out preliminary trials in accordance with current standards before using BETOCRETE-CP-350-CI or other types of additives.
- Lignite fly ash is only suitable with restrictions.
- The use of CEM III/B&C cements is excluded.
- The prescribed crack width restrictions given by the Planner/Engineer/Structural Engineer must be respected in all circumstances. Differing interpretations are to be proven with relevant design verification and design suitability.
- Concrete with BETOCRETE-CP-350-CI must be produced, installed and cured following current valid standards.
- In rare circumstances BETOCRETE-CP-350-CI may influence the initial set of the concrete. As a system compatible product, RUXOLITH-T5 (VZ) is available to control the concrete.

Please observe a current valid EU safety data sheet!