



Technical Data Sheet

BETOCRETE®-FN

Art.-No. 4 06658

High-range water-reducing (superplasticizer) concrete admixture for rheoplastic concrete

Product Description:

BETOCRETE-FN is high-range water-reducing „superplasticizer“ formulated to produce rheoplastic concrete in hot climates.

BETOCRETE-FN is based upon a blend of synthetic polymer and organic substances and other additive to improve its performance.

BETOCRETE-FN is suitable to be in the case of mineral admixtures for concrete, e.g. silica fume.

Primary Uses:

BETOCRETE-FN is formulated as superplasticizer to reduce the mixing water and to improve the workability & pumpability of concrete in:

- Pre-cast concrete.
- Ready mixed concrete.
- All concrete works such as: parking decks, garages, bridge decks, exposed balconies, structural and plain concrete.
- All types of steel reinforcement including pre-cast & pre-stressed and post-tension concrete.
- Tropical climate concreting.

Advantages:

- Improve workability without increasing amount of mixing water.
- Improves all the physical & mechanical properties of concrete.
- Improves early strengths as well as the ultimate strengths.
- Extended slump retention.
- Increases mix cohesion.
- Improves durability and reduces permeability.
- Improves surface finishes.
- Concrete superplasticizer, i.e. reduces the mixing water up to 20%.
- Eliminates the risk of segregation, bleed and creep.
- Normal setting at the recommended dosage.
- Water-based, Chloride-free, non-flammable, non-toxic and does not contain harmful ingredients.
- Formulated to be suitable with the Middle East conditions.

Standards:

BETOCRETE-FN is formulated to comply with all requirements of ASTM C-494 Type F, ASTM C – 1017, EN 934 Part 2 Tables: 1, 3.1 and 3.2 as well as all ACI recommendations

Technical Properties:

Appearance:	Brown liquid
Specific Gravity:	1.18 at 23°C
Air entrainment:	1% additional air (maximum)
Chloride Content:	Nil
Setting Times:	Setting times will not be affected at the recommended dosages.
Permeability:	Waterproofing properties will be improved. Resistance to water & water-borne salts will be improved.
Water-reduction:	Up to 20 of mixing water can be reduced. The durability will be also increased.
Compatibility:	Compatible with all types of Portland cements including SRC. It is compatible also with all types of SCHOMBRUG admixtures. Each should be added separately.
Cohesion:	The cohesion of the matrix will be increased.
Mechanical Properties:	All the mechanical properties (such as compressive, flexural and tensile strengths) will be improved.

Dosage range

The dosage will be influenced with the mix design (including pozzolanic materials or not, W/ C Ratio), cement content & type, quality of used materials, ambient temperatures and the specific requirements, so site trials must be carried out to determine the proper dosage.

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Dosage: typically 0.50 – 3.00 % by weight of cement (total Cementitious content).
(0.42 - 2.55 Litre for each 100 kg of cement)

Dispensing:

The accurate quantity should be measured by means of a suitable dispenser.

Normally, BETOCRETE-FN should be added with the last third of mixing water or immediately after complete mixing water addition.

Curing:

Concrete should be cured in accordance to applicable European Norms or ACI recommendations. Alternatively use any of the SCHOMBURG curing agents range; REMICURE.

Cleaning:

Dispensers, hoses, equipment and tools can be easily cleaned with water.

Packaging:

BETOCRETE-FN is supplied in 20 liters, 210 liters and 1000 liters upon request.

Storage & Shelf-life:

BETOCRETE-FN has a shelf-life of 12 months when original, unopened containers are stored in a dry and frost-free environment above 5° C.

Health and Safety:

- BETOCRETE-FN is water-based, non-flammable, and non-toxic.
- Any contamination of skin shall be removed and then washed with normal water and soap.
- For disposal follow the local regulations.