



Technical Data Sheet

BETOCRETE®-A100

Water-reducing & waterproofing, high performance concrete admixture

Art.-No. 4 06654

Product Description:

BETOCRETE-A100 is a high performance, liquid, water-reducing "plasticizer" & waterproofing concrete admixture formulated to improve workability, reduce permeability and improve durability. Once incorporated in the mix, BETOCRETE-A100 is adsorbed on the cement particles' surface inducing a powerful deflocculating property, effectively reducing the concrete mixing water demand and improving physical and mechanical properties of the resultant concrete. BETOCRETE-A100 is based on a blend of modified Lignosulphonates and organic modifiers designed with the main purpose of reducing workability loss.

Primary Uses:

BETOCRETE-A100 is typically used to produce:

- Ready mix concrete
- Precast concrete
- All concrete works where good workability and increased waterproofing properties are required. Such as: swimming pools, sea walls, tunnels, bridges, basement, etc.

Advantages:

- Reduced mixing water while maintaining same workability.
- Improved workability & pumping properties.
- Improved physical & mechanical properties.
- Improved surface finish.
- Improved cohesion minimizes risks of segregation, bleeding and creep.
- Denser concrete improves waterproofing properties and protection of reinforcement steel against detrimental water-borne ion attack.
- Water-based, non-flammable, non-toxic.
- Chloride-free; suitable for pre-stressing.
- Specially formulated for hot weather concreting.

Standards:

BETOCRETE-A100 is formulated to comply with all the requirements of:

- ASTM C- 494, Type A
- EN 943, Part 2, Tables 1 and 2

Technical Properties:

Appearance:	Dark brown liquid
Specific Gravity:	1.175 ± 0.005 at 20° C
Chloride content:	Nil
Additional air-entrainment:	Less than 1 %
Water-reduction:	10-20 % of mixing water
Setting Times:	No effect at the recommended dosages.
Permeability:	Reduces concrete porosity, improves waterproofing and durability.
Compressive strength:	Increased early and ultimate compressive strengths
Cohesion:	Improved cohesion reduces risk of segregation
Compatibility:	Compatible with all types of Portland cement including Sulfate Resisting Cement (SRC). Compatible with other SCHOMBURG admixtures when dispensed separately

Dosage range

Dosage is influenced by cement type, mix design, quality of used materials, ambient temperatures and other specific requirements, so site trials should be carried to determine the optimum dosage. Dosage: typically 0.40% to 0.90% by the weight of total cementitious content (cement + replacers if used)

Dispensing:

BETOCRETE-A100 should be added with the last third of mixing water or immediately after complete mixing water addition. Do not add directly to the dry mix or cement. For proper administration an automatic dispenser shall be used.

Overdosing:

An overdose of BETOCRETE-A100 may result - depending on dosage - in an increase of workability and extension of setting time. Overdosed concrete must be protected against direct sun light and water evaporation.

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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. Spills must be contained and removed to industrial waste in accordance with local environmental laws. Please always consult local legislative authorities.

Estimating & supply

Packaging:

BETOCRETE-A100 is supplied in 20 kg pails, 200 kg drums or 1070 kg IBCs.

Consumption:

0.4% to 0.9% by weight of cement depending on requirements. Site trials are always necessary to determine the optimum dosage.

The use of dispensing equipment is important to reduce errors and wastage, typically associated with manual dispensing.

Storage & Shelf-life:

BETOCRETE-A100 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-A100 is non-flammable, non-toxic and non-corrosive.
- Spills should be washed with plenty of water.
- Local environmental regulations are to be considered.
- BETOCRETE-A100 is not dangerous during handling and transportation.