SCHOMBURG ICS GmbH
Aquafinstrasse 2 - 8
D-32760 Detmold, Germany
phone +49-5231-953-02
fax +49-5231-953-390
www.schomburg.com

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Technical Data Sheet

BETOCRETE®-E100

Accelerating and water-reducing concrete admixture

Product Description:
BETOCRETE-E100 is a chloride-free, accelerating & water-reducing concrete admixture formulated to improve all the physical and mechanical properties during plastic and hardened concrete to produce high concrete properties with accelerated setting times as well as reducing: mixing water and permeability whilst improving surface finishes. BETOCRETE-E100 is based on high performance polymers that disperse cement particles (which tend to agglomerate) enabling the mixing water to perform more effectively. BETOCRETE-E100 contains materials that accelerate both initial and final setting times providing high early strengths.

Typical Applications:
BETOCRETE-E100 is formulated to be used as an accelerating and water-reducing concrete admixture in:
- Cold weather concreteing works.
- Plain and structural Concrete.
- Highway concreting.
- Concrete pipes, blocks..
- Pre-cast & Prestressed concrete.
- Bridges, ceilings, beams, floorings, etc.
- All similar concreteing where the removal of the formworks or the use of concrete quickly are required.

Product Features:
- Improved workability with water-reduction.
- Enables reduction of cement content.
- Accelerates both initial and final setting times.
- Accelerates early strengths.
- Eliminates the risk of segregation, bleeding and creep.
- Improved durability and reduced permeability.
- Improved surface finish.
- Water-based: non-flammable, non-toxic and does not contain any harmful ingredients.
- Chloride and nitrate free.

Standards:
BETOCRETE-E100 is formulated as an: Accelerating & water – reducing concrete admixture to comply with all the requirements of EN 934 Part 2 Tales 1, 12 as well as ASTM C-494 Type E.

Technical Properties:

Appearance:	Dark brown liquid
Specific Gravity:	1.190 ± 0.005 at 20° C
Air entrainment:	0.50 % additional air
Chloride content:	Nill
Setting times:	Both initial and final setting times will accelerated.
Permeability:	Waterproofing properties will be improved, so the resistance of water & water-borne salts will be increased
Water reduction:	15 % of mixing water can be reduced. The durability will be also increased.
Compatibility:	BETOCRETE-E100 is compatible with all types of Portland cements including Sulphate resisting Cement. It is compatible with all types of our admixtures, but each should be added separately.
Cohesion:	The cohesion of the matrix will be increased.
Mechanical Properties:	All the mechanical properties: compressive strength at early & ultimate strengths, flexural strengths, tensile strength will be improved.

Dosage range:
The dosage will be influenced by the mix design, cement content & type, quality of used materials, ambient temperatures and the specific requirements. So site trials should be carried out to determine the accurate dosage.
Typical dosage varies between 0.6% and 3 % by the weight of cement.

Dispensing:
The accurate quantity should be measured by means of a suitable dispenser.
Normally, BETOCRETE-E100 should be added to the concrete with the mixing water to achieve the best results. It should not be added directly to the dry

cement or aggregate and should always be added to the wet mix conditions.

Overdosing:
Any serious overdosing will result in more workability, more air-entrainment and acceleration of setting times.

Curing:
The concrete after placing should be cured properly by suitable means. REMICURE Range can be used for this purpose.

Cleaning:
Clean the tools & equipment or spillages with normal water.

Packaging:
BETOCRETE-E100 is supplied in 20-liters, 210 liters, and 1000-liters upon request.

Storage & Shelf-life:
BETOCRETE-E100 shall be stored in normal conditions away from extreme temperatures and away from direct sunlight. BETOCRETE-E100 is valid for use for a period 24 months from the date of production and under proper storage.

Health and Safety:
- BETOCRETE-E100 is water-based, non-flammable, non-toxic, and does not contain any harmful ingredients.
- Any contamination of skin can be removed by washing with clean water.
- For disposal follow local regulations.