



BETONAC[®]1055

HIGH RANGE WATER REDUCING HYPERPLASTICIZER FOR READY MIX CONCRETE

DESCRIPTION

BETONAC[®]1055 is a new generation admixture (Polycarboxylate Ether based) hyper plasticizer used for producing ready mix concrete to reduce water while maintaining workability and average slump retention, it also helps to achieve early compressive strength and hence increasing the life of concrete flowability.

USES

- Ultra-high-performance concrete production
- Off-shore & marine structures
- Dams, tunnels, bridges, water treatment plants
- Pilling applications
- Precast, prestressed and post tension elements
- It is also used in production of facades stones and different concrete tiles.

ADVANTAGES

- Provides excellent water reducing in concrete.
- Enables to produce flowable concrete mixtures with low water to binder ratios.
- Cement saving in the concrete mixture by 30% while at the same time maintaining the ultimate strength and the high durability of structures.
- Improves the early and ultimate strength of concrete.
- Increases the flexural strength.
- Reduces shrinkage and creep.
- Increases the impermeability of concrete and reduces the concrete cracks.

STANDARDS

BETONAC[®]1055 complies with ASTM C 494, Type F.
(ASTM C 494 requirements, Type F: water reducing high range admixture).

APPLICATION

The correct quantity should be carefully measured. Half dosage of BETONAC[®]1055 should be added at the first mixing sequence with 75% of the mixing water then the second half of the dosage should be added at the final sequence with 25% of the mixing water.

Also, it can be added to the mixing water directly at the first mixing stage.

**DOSAGE**

BETONAC® 1055 is normally added at the rate from 150 ml to 1250 ml for each 100kg of cement, depending on the concrete type, water reduction and the workability required.

Longer setting times or higher temperatures require higher addition rates. Conversely, the addition rate will be lower for shorter retardation. Trial mixes are recommended.

Overdosing results in more retardation and higher workability. Segregation might occur in some cases, please consult our specialized Lab. Engineer in this case.

COMPATIBILITY

BETONAC® 1055 is generally compatible with all types of Portland cement and can be successfully used in mix designs utilizing pozzolanic materials such as fly ash and GGBFS.

LIMITATIONS

- The standard rules of good concreting practice, concerning production as well as placing, are to be followed. Refer to relevant standards. Fresh concrete must be cured properly.
- When BETONAC® 1055 added separately to the freshly mixed concrete, further mixing should take place for at least one minute per cubic meter.
- When BETONAC® 1055 is used to produce self-compacting concrete, special mix designs are required, please contact our technical support.

TECHNICAL DATA

Appearance: Transparent or Light Brown Liquid

Calcium Chloride: <0.15%

Density: 1.12 ± 0.02 gm/ml

Setting time: Initial and final setting time depends on temperature, cement quantity and dosage used.

Packaging: BETONAC® 1055 is packed in 10 liter Jerrycans or 1000 liter IBCs

Storage & Shelf life: BETONAC® 1055 has a minimum shelf life of 1 year if stored in originally sealed packaging. It should not be exposed to direct sunbeam and protected against frost.

LEGAL NOTE

Whilst information and/or specification contained herein is to the best of our knowledge true and accurate, and is based on many years of experience, we cannot accept any liability either directly or indirectly arising from the use of our products, whether or not in accordance with any advice, specification or recommendation given by us, as we have no direct or continuous control over how or where our products are applied.