



BETONAC[®]1055-SR

HIGH RANGE WATER REDUCING HYPERPLASTICIZER FOR READY MIX CONCRETE

DESCRIPTION

BETONAC[®]1055-SR 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

- LNG reservoirs, Transit railroads, Highways, Subways, Tunnels, Bridges
- In production of self-compacting and low viscosity concrete
- High-rise buildings with high durability
- Off-shore & marine structures
- Construction sites requiring high fluidity and high initial dispersion concrete
- Pre-stressed and post-tension elements

ADVANTAGES

- High water reducing effect.
- Improved concrete setting time.
- 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-SR complies with ASTM C 494, Type F & G.
(ASTM C 494 requirements, Type F: water reducing high range admixture
Type G: water reducing, high range and retarding admixture).

ADDITION

The correct quantity should be carefully measured. BETONAC[®]1055-SR can be added to the mixing water directly at the first mixing stage **OR** by adding half dosage of BETONAC[®]1055-SR 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.

**DOSAGE**

BETONAC® 1055-SR is normally added at the rate from 400 ml to 1350 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, 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-SR is generally compatible with all types of Portland cement and can be successfully used in mix designs utilizing pozzolanic materials such as silica fume, 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-SR added separately to the freshly mixed concrete, further mixing should take place for at least one minute per cubic meter.

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-SR is packed in 10 liter Jerrycans or 1000 liter IBCs

Storage & Shelf life: BETONAC® 1055-SR 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.