



BETONAC[®] 1055-A

HIGH RANGE WATER REDUCING HYPERPLASTICIZER FOR READY MIX CONCRETE

DESCRIPTION

BETONAC[®]1055-A is a new generation of environment friendly concrete admixture of advanced world level. It can improve the fluidity, early and final strength and decrease the shrinkage cracks at the last stage of the mortar hardens.

USES

BETONAC[®]1055-A is designed to produce ready mix concrete with different strength grades and different levels of flowability such as:

- Producing of post tension concrete
- Precast and prestress concrete works
- Producing of high quality, flowable and dense concrete
- Reservoirs, canals and swimming pools construction
- Concrete works in airports, dams, tunnels, bridges, water treatment & waste water plants
- Skyscrapers and large size buildings
- Concrete in hot seasons that requires extended workability

ADVANTAGES

- **Improved flowability** – produces self-compacting concrete.
- **Reduced water/cement ratio** - reduces permeability and increases durability.
- **Improved Cohesion** - reduces bleeding and segregation.
- **Easy Pumping** – due to improved workability and cohesion and extended setting time. BETONAC[®]1055-A also provides protection against any delays and stoppages.
- **Cement Saving** - reduces the quantity of cement in the concrete mix by 25% while at the same time maintaining the ultimate strength and durability of structures.
- **Increase Early and Final Compressive Strength.**
- **Water reducing** — about 50% or more

STANDARDS

BETONAC[®]1055-A complies with ASTM C 494, Type F. And when it is used in hot seasons, it complies with ASTM C494, Type G

(ASTM C 494 requirements: Type F: water reducing high range admixture, Type G: high range water-reducing, and retarding admixture)

COMPATIBILITY

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



APPLICATION

The correct quantity should be carefully measured. Half dosage of BETONAC® 1055-A 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.

Important Note: If the concrete pouring process is delayed for any reason for a period longer than expected, An additional quantity of BETONAC® 1055-A should be added to the truck mixer in order to re-plasticize the mixture without effecting the compressive strength and to avoid the concrete initial setting into the mixer.

DOSAGE

our BETONAC®1055-A is normally added at the rate from 450 ml to 1200 ml for each 100kg of cement, depending on the retardation or workability required.

Longer setting times or higher temperatures may 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 specialized Lab. Engineer in this case.

TECHNICAL DATA

Appearance: Transparent or Light Brown Liquid

Density: 1.08 ± 0.02 gm/ml

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

Packaging: BETONAC® 1055-A is packed in 20 liter Jerrycans or 1000 liter IBCs

Storage & Shelf life: BETONAC® 1055-A 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.

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-A added separately to the freshly mixed concrete, further mixing should take place for at least one minute per cubic meter.
- When BETONAC® 1055-A is used to produce self-compacting concrete, special mix designs are required, please contact our technical support.

LEGAL NOTES

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.