



# BETONAC<sup>®</sup> 300

## HIGH RANGE WATER REDUCING & RETARDING SUPERPLASTICIZER FOR READY MIX CONCRETE

### DESCRIPTION

BETONAC<sup>®</sup> 300 is a new generation superplasticizer used for producing ready mix concrete with high strength, its unique formulation is based upon the latest polycarboxylate chemistry.

### USES

- Conventional ready-mix concrete.
- Different concrete elements such as: (Slabs, beams, columns, footings ...etc.).
- Concrete paving.
- Power stations, commercial buildings, residential complexes and various projects.
- Concrete in hot climates.

### ADVANTAGES

- Increase compressive strength with high workability.
- Water reducing and enhancing the early compressive strength for the first 72 hours.
- Cement saving by reducing the quantity of cement in the concrete mixture while at the same time maintaining the ultimate strength and durability of structures.
- Dispersing action maximizes cement hydration.
- Speeds placing of concrete and construction works.
- BETONAC<sup>®</sup> 300 provides protection against any delays and stoppages.

### STANDARDS

BETONAC<sup>®</sup> 300 complies with ASTM C 494, Type G  
(ASTM C 494 requirements: Type G: water-reducing, high range and retarding admixture).

### ADDITION

The correct quantity should be carefully measured. Half dosage of BETONAC<sup>®</sup> 300 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.

### DOSAGE

BETONAC<sup>®</sup> 300 is normally added at the rate from 850 ml to 1500 ml (we recommend 1000ml) for each 100kg of cement, depending on the retardation or 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.



**Important Note: If the concrete pouring process is delayed for any reason for a period longer than expected, An additional quantity of BETONAC® 300 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.**

#### COMPATIBILITY

BETONAC® 300 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.

#### 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.
- BETONAC® 300 is highly effective as a single admixture or in combination with other admixtures except with the naphthalene water reducers. Please contact our technical sales representative for further information.
- When BETONAC® 300 added separately to the freshly mixed concrete, further mixing should take place for at least one minute per cubic meter.

#### TECHNICAL DATA

**Appearance:** Light Brown Liquid

**Density:** 1.06 ± 0.02 gm/ml

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

**Packaging:** BETONAC® 300 is packed in 20-liter Jerrycans or 1000-liter IBCs

**Storage & Shelf life:** BETONAC® 300 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 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.