BETONAC® 136

HIGH RANGE WATER REDUCING & RETARDING SUPERPLASTICIZER FOR READY MIX CONCRETE

DESCRIPTION

BETONAC® 136 is a high range (Polycarboxylate Ether) based superplasticizer used for producing ready mix concrete to reduce water while maintaining workability and average slump retention.

USES

- Ready-mix concrete, on-site concrete of industrial or civil buildings such as: Bridges, highways, subways, multi-story buildings…etc.
- Concrete paving.
- Concrete works that require very good workability and high strength.
- In producing of different concrete elements such as: (Slabs, piles, girders, columns, footings, shear walls).
- Concrete in hot climates.

ADVANTAGES

- **Improved Workability** - speeds placing of concrete and construction works.
- **Improved Cohesion** - reduces bleeding and segregation where poor sand grading is unavoidable.
- **Easy Pumping** – due to improved workability and cohesion and extended setting time. BETONAC®136 also provides protection against any delays and stoppages.
- **Cement Saving -** reduces the quantity of cement in the concrete mix while at the same time maintaining the ultimate strength and durability of structures.
- **Increase Compressive Strength** with high workability.
- **Water reducing** — about 35% or more.

STANDARDS

BETONAC® 136 complies with ASTM C 494, Type F. And when it is used in hot seasons, it complies with ASTM C 494, Type G.
(ASTM C 494 requirements: Type F: high range water reducing,
Type G: high range water reducing and retarding admixture).

ADDITION

The correct quantity should be carefully measured. It can be added at the first sequence with the mixing water, or Half dosage of BETONAC® 136 can 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® 136 is normally added at the rate from 750 ml to 1500 ml 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® 136 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® 136 can be used with all types of Portland cement, and it successfully used in mix designs utilizing silica fume, fly ash and GGBFS.

LIMITATIONS

- BETONAC® 136 does not contain chloride or other steel corrosion promoting ingredients, it may therefore be used without any restrictions for reinforced and prestressed concrete construction.
- When BETONAC® 136 added separately to the freshly mixed concrete, further mixing should take place for at least one minute per cubic meter.
- BETONAC® 136 is highly effective as a single admixture or in combination with other admixtures except with the naphthalene-based water reducers, please contact our technical sales representative for further information.

TECHNICAL DATA

Appearance: Light Brown Liquid

Density: 1.07 ± 0.02 gm/ml

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

Packaging: BETONAC® 136 is packed in 20-liter Jerrycans or 1000-liter IBCs

Storage & Shelf life: BETONAC® 136 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