



BETONAC® BVT-HP

HIGH RANGE WATER REDUCING, RETARDING & SUPER PLASTICIZER CONCRETE ADMIXTURE

DESCRIPTION

BETONAC® BVT-HP is a brown ready to use aqueous solution based on organic compounds. It acts as a dispersing agent, breaking down the agglomerates of cement particles and enables water in the mix to perform more efficiently. BETONAC®-BVT-HP delays the initial hydration of cement.

The use of BETONAC® BVT-HP depends on the project requirements and the type of cement, sand and aggregate used for each project.

USES

BETONAC® BVT-HP is designed to:

- Produce high workability concrete with minimum vibration.
- Promote high strength by facilitating reduction of water content of the concrete mix by 12% - 20% while maintaining workability.
- Producing concrete slabs and footings.
- Delay and control the setting time of concrete. It is used wherever a delay in setting time is required to ensure sufficient delivery, easy placement and vibration or compaction time such as in hot weather concreting, where delayed and controlled setting assures sufficient placement time and improved concrete quality.

ADVANTAGES

- **Increased slump** - improves ease of placement and reduces labor costs.
- **Improved workability** - speeds placing of concrete and construction works.
- **Reduced water:cement ratio** - reduces permeability and increases durability.
- **Improved cohesion** - reduces bleeding and segregation and improves surface finish.
- **Easy pumping** – due to improved workability and cohesion and extended setting time. BETONAC® BVT-HP also provides protection against delays and stoppages.
- **Cement saving** - while at the same time maintaining the ultimate strength.

STANDARDS

BETONAC® BVT-HP complies with ASTM C 494, Type G

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

COMPATIBILITY

BETONAC® BVT-HP is generally compatible with most types of Portland and slag cement, except the rapid hardening Portland cement.

**ADDITION**

The correct quantity should be carefully measured. BETONAC® BVT-HP should be added at the final mixing step with 40% 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® BVT-HP 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

BETONAC® BVT-HP is normally added at the rate from 700 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.

TECHNICAL DATA

Appearance: Brown Liquid

Density: 1.18 ± 0.02 gm/ml

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

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

Storage & Shelf life: BETONAC® BVT-HP 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.