



# BETONAC<sup>®</sup>-BVT-HP

## HIGH RANGE EXCELLENT WATER REDUCING RETARDING & SUPER PLASTICISER CONCRETE ADMIXTURE

### DESCRIPTION

BETONAC<sup>®</sup>-BVT-HP is a light 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<sup>®</sup>-BVT-HP delays the initial hydration of cement.

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

### USES

BETONAC<sup>®</sup>-BVT-HP is designed to produce very high workability concrete with a minimum of 12% . It may be also used to promote high strength by facilitating reduction of water content of the concrete mix while maintaining workability. It is designed to 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

- ◆ **In-situ piling** - easy removal of formwork without causing problems of any kind.
- ◆ **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<sup>®</sup>-BVT-HP also provides protection against delays and stoppages.
- ◆ **Cement saving** - while at the same time maintaining the ultimate strength and durability of structures.

### STANDARD

BETONAC<sup>®</sup>-BVT-HP (used in hot seasons complies) with ASTM C 494, Type G  
(ASTM C 494 requirements: Type G: water-reducing, and retarding admixture)



## APPLICATION

The correct quantity should be carefully measured by a dispenser. BETONAC®-BVT-HP should be added at the final mixing sequence with 25% - 30% of the mixing water.

**Very Important Note : After adding this additives to the concrete mixture (at the final mixing sequence), NO water should be added afterwards because it will affect the compressive strength negatively .**

### Dosage

BETONAC®-BVT-HP is normally added at the rate from 0.8 % to 1.8 % of cement weight, 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 without affecting the ultimate compressive strength.

### Curing

Concrete must be prevented from drying out once additives are used. The use of LEYCO® CURASIN curing agent is strongly recommended.

### Compatibility

BETONAC®-BVT-HP is generally compatible with all other BETONAC® admixtures if added separately to the mix.

#### TECHNICAL DATA

**Density :** 1.18 gm/ml ±0.02

**Color:** Brown

**Calcium Chloride:** Nil

**Air Entrainment:** Less than 1% additional air is entrained.

**Setting time:** Initial and final setting time depend on temperature, cement type and dosage used.

**Packaging:** BETONAC®-BVT-HP is packed in 220 kg drums or 1100 kg IBC's .

**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.

OUR PRODUCTS are guaranteed against defective materials and manufacture and are sold subject to its standard terms and conditions of sale 16.08.2011