

BETONAC[®]-BVM

SUPER PLASTICISER AND FLOWING CONCRETE ADMIXTURE LIQUID

Product Description

BETONAC[®]-BVM is a synthetic polymer derived from melamine for use as a concrete admixture in all types of construction work.

Uses

BETONAC[®]-BVM is a water soluble admixture to produce high workability concrete which is virtually self levelling, self-compacting and required little or no vibration during handling and placing.

BETONAC[®]-BVM is also to be used to promote high early and ultimate strength by facilitation large reductions in water content, whilst maintaining workability.

Advantages

- **Speeds construction - increased workability speed handling, filling of formwork and placing around congested reinforcement labour times reduced to minimum.**
- **Self compacting - Requires little or no vibration to achieve optimum compaction.**
- **Increased strength - Higher strength without increase in cement content or reduction in workability.**
- **Improved quality - Reduced shrinkage cracking by lower W/C ratio. Denser, closer textured concrete for improved durability and surface finish. Bleeding and segregation minimized.**
- **Non retarding - Concrete setting and formwork stripping unaffected.**
- **High-early strength - Using the minimum water W/C ratio, fast development of strength.**
- **Chloride free - Safe in prestressed concrete and with sulphate resisting cements and marine aggregates.**

Technical Data

General Information

BETONAC[®]-BVM does not entrain air

Physical Performance

Workability: The addition of BETONAC[®]-BVM without the reduction of water content produces „collapsed slump concrete“ which will flow to fill formwork completely, and produce denser hardened concrete, without decrease in compressive strength.

The flowing concrete properties last for 45 - 60 min (at 20 °C) after which time the concrete reacts as it would without addition.

Compressive Strength: Substantial reduction in the water/cement ratio results in early/high increase by as much as 100 %, whilst maintaining original workability. An obvious advantage for precast/prestressed concrete.

Bleeding/Segregation: Despite the high liquid consistency of collapsed slump concrete, little bleeding takes place and the likelihood of aggregate segregation is reduced. It should be noted, however, that the pressure developed by the flowing concrete is slightly increased.

LEYCOCHEM-IRAQ Baghdad

Tel.: 0750-4344200, Tel.:0770-8748222, Tel.:0781-3802151

Email: sales.leycochem.iraq@leyde.com

Email: admin.leycochem.iraq@leyde.com

www.leyde.com

LeycoChem LEYDE GmbH Germany

Industriestrasse 155

P.O. Box 501627

D-50999 Köln/Cologne

Tel.:+49(0)2236-96600-0

Fax:+49(0)2236-96600-10

Email: leycochem@leyde.com

Product Data Sheet

Product No: 01.019

Reduced Shrinkage Cracking: „Flowing concrete“ does not have the same disadvantages of a concrete which has been plasticized by increasing the amount of water or cement paste and the incidence of shrinkage cracking is therefore reduced. Where the water or cement reducing properties of BETONAC®-BVM are used, shrinkage cracking is also greatly reduced.

Durability: Increased density and uniformity produced by the workability of the plasticized concrete increase durability and resistance to aggressive agents. Research indicates that the long-term effects of creep are unaffected and, where water reducing properties are used, creep is reduced. Long-lasting tests of more than 8 years have shown, that not reduction in strength occurs.

Concrete mix design for flowing concrete: A well designed pump mix is all that is generally required to produce „flowing concrete“ with BETONAC®-BVM. The workability of concrete before adding BETONAC®-BVM should give a slump of at least 75 mm. Concrete mixes with a lower cement content range will require an increase in the sand content.

Characteristics

No chloride Content

Compatibility

May be used with all types of Portland Cement

Consumption

As a guide, consumption can be measured as follows:

1. Flowing concrete (without water reduction): 1 - 1.5 % of cement weight.
2. High strength concrete (without water reduction): 1 to 2 % of cement weight.

Storage / Shelf life

At least 1 year if stored in originally sealed container.

Application

General information

1. The correct quantity of BETONAC®-BVM must be carefully measured.
2. Add BETONAC®-BVM, mix thoroughly and discharge immediately. Avoid delays during placing, so that full benefits are obtained.
3. For ready mixed concrete, BETONAC®-BVM should be added to the mixing drum on site, and the concrete mixed for 2 min. at maximum revolution before packing

Dosage

The optimum dosage should be determined by on-site or laboratory trails with the particular concrete mix, so that the effect of workability, strength gain and/or cement reduction can be measured accurately.

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 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.

LEYDE-PRODUCTS are guaranteed against defective materials and manufacture and are sold subject to its standard terms and conditions of sale. 01.09.2009