BVC 510

High Range Water Reducing / Set Retarding Plasticiser Admixture

PRODUCT DESCRIPTION

İNKA-BVC 510, is a modified lignosulphonate and hydroxylated carboxylic acid based plasticizer with a retarding effect. Absorbed on the surface of the binder particles causing them to repel each other and deflocculate, it acts as a water reducing agent offering higher ultimate strengths with extra workability.

AREAS OF USE

İNKA-BVC 510 is generally used;
- To produce free flowing, easy placing concrete with extended workability,
- To produce high strength concrete by reducing the amount of mixing water,
- To produce concrete with a set retarding effect at higher dosages,
- To lower the hydration heat by cutting down from cement content in production of mass concrete. (especially in hot climates)

İNKA-BVC 510 is especially used;
- To reach desired strengths economically,
- To increase workability,
- To improve pumpability,
- To improve mixing properties in the concrete mixer,
- To reduce sticking on concrete mixer wall,
- To reduce seggregation,
- To ensure easy placing.

TECHNICAL DATA

- **Appearance:** Brown liquid
- **Density (@20°C):** 1,20 ± 0,03 kg/lt -ISO 758
- **pH:** 5,0 - 8,0
- **Total Chloride Ion Content:** max. 0,1 -EN 480-10
- **Equivalent Sodium Oxide as Na_2O%:** max. 5% -EN 480-12
- **Storage:** 12 months when kept unopened and away from freezing temperatures
- **Packaging:** 35 kg PE bins and 250 kg steel/PE barrels & in bulk
- **Standard:**

  TS EN 934-2

  Water reducing / Plasticizing admixtures
  EN 934-2: T. 2 (BVC 510)
- **Complies with**:
  ASTM C494-81 Type A
  ASTM C494-81 Type G
  EN 934-2: T. 11.1 ; 11.2

DOSAGE

İNKA-BVC 510, is used 0,2 to 1,2% by weight of binder.
This dosage can be exceeded in extreme hot climates.
Optimum dosage should be assessed after on site trials.
Using the product below +10°C and over 0,2 % will result in significant retardation. **(attention*)**

APPLICATION

İNKA-BVC 510, in general, should be added to a concrete during mixing with the last portion of the mix water in order to ensure even dispersion of the admixture throughout the concrete. This way its plasticizing effect will become better amplified.
The admixture should not be added directly to the dry cement or aggregates.

For free flowing concrete: w/b ratio should be fixed and **BVC 510** should be added according to the desired flow.

For production of high strength concrete: The water of the fresh mix is reduced by 5 to 15 % depending on the dosage of **İNKA-BVC 510**. Therefore increased final strenghts are achieved.

In order to achieve the best flowing effect and to prevent the admixture from being absorbed by dry aggregate, 70% of the mixing water should be added into the mix first.

The rest of the mixing water together with the admixture should then be added into the mix. (2- 3 minutes later)

ATTENTION

- * Workability will be substantially increased and problems may occur if overdosed. This increase will be amplified in cold weather conditions. Incase of an accidental overdose, stripping the formwork should be made under careful supervision and known procedures should be carried out (such as: protecting the area from wind, frost and direct sunlight; covering the area with damp sackcloth and/or using a curing agent) to protect the fresh concrete -its hydration process- until its setting is complete.
- Before actual field use, laboratory and field tests should be carried out. Should there be a change in cement type or composition and/or a change in aggregate type or source, additional tests must be carried out for admixture compatibility. Our Q.A has to be informed in such a case for the necessary product upgrades.

HEALTH & SAFETY

- Protective gloves, goggles and clothing should be worn.
- Wash skin and eyes with plenty of water if contact occurs and seek medical attention if necessary.
- Do not eat or drink near the product and do not use contaminated hands when drinking and eating.

TECHNICAL SERVICES

Our technical support team is ready to answer all your questions concerning our product line.
For additional information, please contact our headquarters.
Material Safety Data Sheet of this product can be obtained from **info@inka.com** or from our regional sales representatives.