

BS1000/R

Set Retarding High Range Water Reducer & Superplasticizer



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PRODUCT DESCRIPTION

INKA-BS 1000/R, is a naphthalene formaldehyde polymer modified liquid concrete admixture offering high range water reduction and superplasticizing properties with a retarding effect. Minimizing or even eliminating the need to use vibrators in large volume and problematic concrete pours, **BS 1000/R** promotes high ultimate strengths at hot climates.

AREAS OF USE

INKA-BS 1000/R is generally used in hot climates where high performance concrete with good workability and high strength properties are needed together with a retarding effect. Some areas of use;

- free flowing, easy placing concrete,
- high strength concrete by reducing substantial amount of mixing water,
- allows concrete pours at hot climates thanks to its set retarding feature,
- production of engineering structures, bridges and viaducts,
- reduction of cement amount to lower hydration heat in production of mass concrete in hot climates.

INKA-BS 1000/R is especially used;

- to reach desired strengths economically,
- to increase workability,
- in production of prestressed concrete elements,
- to allow easy pumping over long distances,
- to reduce sticking on concrete mixer wall,
- to ensure easy placing.

TECHNICAL DATA

- **Appearance:** Translucent 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 Na₂O%:** 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
- **Complies with:**

TS EN 934-2 T. 11.1 - 11.2 (BS-1000/R)
High range water reducing and set retarding / super plasticizer concrete admixture
ASTM C494-81 Type G

DOSAGE

INKA-BS 1000/R, is used 0,8 to 2% by weight of binder. Optimum dosage should be assessed after on site trials.

APPLICATION

INKA-BS 1000/R, in general, should be added to 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.

In ready mix concrete plants, it's best to add **BS 1000/R** right before the pouring process followed by a 2 to 3 minute mix.

For ready mix concrete: w/b ratio should be fixed and **BS 1000/R** should be added according to the desired flow.

For production of high strength concrete: The water of the fresh mix is reduced by 10 to 30% depending on the dosage of **INKA-BS 1000/R**. Therefore increased initial and final strengths 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. In case 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.