

## High Range Water Reducer & Superplasticizer

### PRODUCT DESCRIPTION

**INKA-BSF**, is a naphthalene formaldehyde polymer based liquid concrete admixture offering high range water reduction and superplasticizing properties while promoting high early and ultimate strengths.

### AREAS OF USE

**INKA-BSF** in general, is used;

- To produce easily placeable concrete with enhanced workability eliminating the need for surface finish,
- To acquire high strength concrete by reducing the water content.

**INKA-BSF** is especially used :

- In concrete slabs and foundations,
- To produce easily placeable concrete for areas of congested reinforcement,
- To allow easy pumping over long distances,
- In production of precast concrete elements,
- In production of prestressed concrete elements,
- In production of bridges and viaducts,
- For early stripping of moulds thanks to its water reduction properties.

### 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<sub>2</sub>O%:** 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 / 10.04.2013

High range water reducing / super plasticizer  
concrete admixture  
TS EN 934-2 T. 3.1., 3.2 (BSF)

- **Complies with:** ASTM C494-81 Type F

### DOSAGE

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

### APPLICATION

**INKA-BSF**, 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.



**For ready mix concrete:** w/b ratio should be fixed and **BSF** 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-BSF**. 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](mailto:info@inka.com) or from our regional sales representatives.

