

## PRODUCT DATA SHEET

# Sikament® NNG

Superplasticizer / High range water-reducer and Retarding admixture

### DESCRIPTION

Sikament® NNG is a highly effective admixture for concrete especially suitable for the production of free flowing concrete and for the production of high strengths concrete, especially in hot climatic conditions.

### USES

Sikament® NNG acting as superplasticizer or as high range water-reducer and retarder, promotes a very high plasticity and good slump keeping properties to concrete.

Sikament® NNG is mainly used for the following applications:

- Concrete with strong fluidity.
- High quality concrete.
- Concrete applied in precast.
- Concrete submitted to long transportation, delayed placing and high temperatures.

- Concrete with high water reduction while maintaining favourable consistency enabling good early strength development.

### CHARACTERISTICS / ADVANTAGES

Sikament® NNG provides the following properties:

#### As superplasticizer

- Workability is greatly improved.
- Increase place ability in slender components with densely packed reinforcement.
- Enables easy placing, less vibration needed.
- Good slump keeping effect.

#### As high range water-reducer

- Up to 25% of water reduction.
- Pronounced increase of final strengths.
- Reduced permeability for water.

### APPROVALS / CERTIFICATES

Complies with EN 934-2 / ASTM C494: Type G.

### PRODUCT INFORMATION

<b>Composition</b>	Based on naphthalene formaldehyde sulphonate
<b>Packaging</b>	<ul style="list-style-type: none"> <li>▪ 1,000 litres IBC</li> <li>▪ 200 litres Drum</li> <li>▪ 20 litres Jerrycan</li> </ul>
<b>Shelf life</b>	12 months minimum from production date if stored in undamaged and unopened, original sealed packaging, in dry conditions at temperatures between +5 and +35 °C. Protect from direct sunlight.
<b>Storage conditions</b>	Store in a dry area between 5°C and 35°C. Protect from direct sunlight
<b>Appearance and colour</b>	Dark Brown Liquid
<b>Density</b>	1.23 ± 0.03
<b>pH-Value</b>	8.5 ± 1
<b>Total chloride ion content</b>	< 0.1%.

## APPLICATION INFORMATION

<b>Recommended dosage</b>	0.5 – 3.0 % by weight of cement, depending on the requested performance of the concrete. It is advisable to carry out trial mixes to establish the exact dosage rate required
<b>Dispensing</b>	Sikament® NNG is added to the gauging water or can be added separately to the freshly mixed concrete (the plasticizing effect is more pronounced). Never add Sikament® NNG directly to dry cement or aggregates (will cause efficiency reduction)  Sikament® NNG can also be added to the concrete immediately prior to discharge and after further mixing has taken place for at least three more minutes.

## BASIS OF PRODUCT DATA

All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

## LIMITATIONS OF USE

- We recommend previous tests to determine the correct dosage of the admixture and whenever concrete composition is changed.
- When accidental overdosing occurs, the set retarding effect increases. During this period the concrete must be kept moist in order to prevent premature drying out.

## ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

## APPLICATION INSTRUCTIONS

### APPLICATION METHOD / TOOLS

Sikament® NNG allows the production of high performance concrete, as long as the composition is well design and standard rules of good concreting practice are followed (production as well as placing). Fresh concrete must be cured properly and as early as possible especially in hot climatic conditions in order to prevent plastic and drying shrinkage.

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## CLEANING OF EQUIPMENT

Clean all tools and application equipments with water immediately after use.

## LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for exact product data and uses.

## LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.