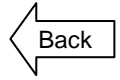


# Sikament® NN

## High Range Water Reducing

<b>Description</b>	A highly effective dual action liquid superplasticizer for the production of free flowing concrete or as a substantial water-reducing agent for promoting high early and ultimate strengths. Chloride free. Complies with A.S.T.M. C 494-92 Type F
<b>Use</b>	<p>Sikament® NN is used as a super plasticizer in the production of free flowing concrete for use in :</p> <ul style="list-style-type: none"> <li>■ Slabs and foundations</li> <li>■ Walls, columns and piers.</li> <li>■ Slender components with densely packed reinforcement.</li> <li>■ Textured surface finishes.</li> </ul> <p>It is also used as a water-reducing agent leading to high early strength concrete for use in :</p> <ul style="list-style-type: none"> <li>■ Pre-cast concrete elements</li> <li>■ Pre-stressed concrete</li> <li>■ Bridges and cantilever structures</li> <li>■ Areas of concrete where formwork must be removed quickly or early load will be applied.</li> </ul>
<b>Advantages</b>	<p>Sikament® NN provides the following properties :</p> <p>As a Superplasticizer :</p> <ul style="list-style-type: none"> <li>■ Workability is greatly improved. Increased placeability in slender components with packed reinforcement.</li> <li>■ Decreases the amount of vibration required. Normal set without retardation.</li> <li>■ Significantly reduces risk of segregation.</li> </ul> <p>As a Water reducer :</p> <ul style="list-style-type: none"> <li>■ Up to 20% reduction of water will produce 40% increase in 28 days compressive strength.</li> <li>■ High strength after 12 hours.</li> </ul>
<b>Dosage</b>	<p>Sikament® NN can be used at the dose rate 0.30% - 2.30% by total weight of cementitious material depending on requirements concerning workability and strength.</p> <p>It is recommended that trial mixes be conducted to determine the exact dosage rate required.</p> <p><b>Note :</b></p> <ul style="list-style-type: none"> <li>■ Typical dosage rate for use with silica sand is 0.60 % - 1.8% by weight of cementitious material for normal precast concrete application.</li> <li>■ Typical dosage rate for use with combination of manufactured sand / volcanic sand is 0.8 % - 2.3% by weight of cementitious material for normal precast concrete application.</li> </ul> <p>For more specific requirements, advice is available from our Technical Service Department to determine the usage rate for optimum results.</p>



**Dispensing** Sikament<sup>®</sup> NN can be added to the mixing water prior to its addition to the aggregates or as in most cases, it can be added directly to the freshly mixed concrete.  
When added directly to the freshly mixed concrete, the plasticizing effect is more pronounced.  
For ready-mix concrete, Sikament<sup>®</sup> NN is added to the concrete immediately prior to discharge and after further mixing has taken place for about three to five minutes.

**Combinations** Sikament<sup>®</sup> NN may be combined with the following products:

- Plastocrete series
- Plastiment series
- Sika Pump
- SikaFume
- Sika AER

Pre-trials are recommended if combinations with the above products are required. Please consult our Technical Service Department.

<b>Technical Data</b>	Naphthalene Formaldehyde Sulfonate
<b>Type</b>	
<b>Colour</b>	Dark brown
<b>Specific Gravity</b>	1.17 – 1.19 kg/ ltr
<b>Shelf Life</b>	Minimum 1 year if stored in original unopened container
<b>Storage</b>	Dry, cool, shaded place
<b>Packaging</b>	240 kg drum

**Handling Precautions:**

- Avoid contact with skin and eyes
- Wear protective gloves and eye protection during work
- If skin contact occurs, wash skin thoroughly.
- If in eyes, hold eyes open, flood with warm water and seek medical attention without delay.

**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 product 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.



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