

# Sikament®-NN

## High Range Water-Reducing Concrete Admixture

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| <b>Product Description</b> | <b>Sikament®-NN</b> is a highly effective dual action liquid superplasticizer for production of free flowing concrete or as a substantial water-reducing agent for promoting high early and ultimate strengths.<br>Suitable for use in tropical and hot climatic conditions.                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Uses</b>                | <b>Sikament®-NN is used as a superplasticizer in the production of free flowing concrete, such as</b> <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> <b>Sikament®-NN is also used as a water-reducing agent for producing high early strength concrete, such as</b> <ul style="list-style-type: none"><li>■ Pre-cast concrete elements</li><li>■ Pre-stressed concrete</li><li>■ Bridges and cantilever structures</li><li>■ Concrete where formwork must be removed quickly or early loading can be applied</li></ul> |
| <b>Advantages</b>          | <b>Sikament®-NN</b> provides the following properties:<br><b>As a Superplasticizer</b> <ul style="list-style-type: none"><li>■ Workability is greatly improved</li><li>■ Increased placeability in slender components with densely packed reinforcement.</li><li>■ Easy placing, less vibrating</li><li>■ Normal set without retardation</li><li>■ Significantly reduces the risk of segregation.</li></ul> <b>As a Water Reducer</b> <ul style="list-style-type: none"><li>■ Up to 25% water reduction</li><li>■ 16 hours compressive strengths increased by up to 100%</li><li>■ Final strengths are improved by up to 40%.</li></ul>                                               |
| <b>Test Standards</b>      | <b>Sikament®-NN</b> complies with ASTM C-494 Type A & F and EN 934-2 :2001                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Product Data</b>        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Type</b>                | Poly-naphthalene condensate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Form</b>                | Brown Liquid                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Packaging</b>           | 200 lt. drums and 1000 lt. flow bins<br>Bulk supply in tanker trucks is possible on demand                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Storage Condition</b>   | Store in a dry area between 5°C and 35°C. Protect from direct sunlight                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |



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| <b>Shelf life</b>          | 12 months minimum from production date if stored properly in original unopened packaging                                                                                                                                                                                                                                                                                  |
| <b>Technical Data</b>      |                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Density</b>             | Approximately 1.20 kg/lt                                                                                                                                                                                                                                                                                                                                                  |
| <b>pH value</b>            | Approximately 8                                                                                                                                                                                                                                                                                                                                                           |
| <b>Chloride content</b>    | Nil (EN 934-2)                                                                                                                                                                                                                                                                                                                                                            |
| <b>Application Details</b> |                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Dosage</b>              | 0.6 – 3.0% by weight of cement. It is advisable to carry out trial mixes to establish the exact dosage rate required.                                                                                                                                                                                                                                                     |
| <b>Dispensing</b>          | <b>Sikament®-NN</b> can be added to the mixing water prior to its addition to the aggregates or directly to the freshly mixed concrete (the plasticizing effect is more pronounced). <b>Sikament®-NN</b> can also be added to the concrete immediately prior to discharge and after further mixing has taken place for at least three more minutes.                       |
| <b>Concrete Placing</b>    | The standard rules of good concreting practice (production as well as placing) must also be observed when using <b>Sikament®-NN</b> concrete.                                                                                                                                                                                                                             |
| <b>Curing</b>              | Fresh concrete must be cured properly, especially at high temperatures in order to prevent plastic and drying shrinkage. Use Sika Antisol products as a curing agent or apply wet hessians.                                                                                                                                                                               |
| <b>Compatibility</b>       | <p><b>Sikament®-NN</b> may be combined with the following Sika products:</p> <ul style="list-style-type: none"> <li>■ Sika FerroGard-901</li> <li>■ SikaFume</li> </ul> <p>It is also compatible with sulphate resistant cement. Pre-trials are recommended if combinations with the above products are being made. Please consult our Technical Services Department.</p> |
| <b>Cleaning</b>            | Clean all equipment and tools with water immediately after use.                                                                                                                                                                                                                                                                                                           |
| <b>Remarks</b>             | When accidental overdosing occurs, the set retarding effect increases, however, no excessive amount of additional air will be entrained. During this period the concrete must be kept moist in order to prevent premature drying out.                                                                                                                                     |
| <b>Notes</b>               | All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.                                                                                                                                                                                                                |
| <b>Safety</b>              | For information and advice on the safe handling, storage and disposal of chemical products, users should refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.                                                                                                                                |

## 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 should 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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