

**Sikament® 163**

## High Range Water-Reducing

## Construction

**Product Description** **Sikament®163** is used as a highly effective water-reducing agent and superplasticizer for the production of high quality concrete in hot climates. the dual action **Sikament®163** promotes accelerated hardening with high early and ultimate strengths.

**Uses** **Sikament®163** is used as a superplasticizer in the production of free flowing concrete such as

- Slabs and foundations
- Walls, columns and piers
- Slender components with densely packed reinforcement
- Piles

**Advantages** **Sikament® 163** provides the following properties:

**As a Superplasticizer**  
Substantial improvement in workability without increased water or the risk of segregation. Long lasting control of slump loss. No adverse effect on ultimate strengths.

**As a Water Reducer**  
Early and ultimate strengths significantly increased. Up to 20% water reduction. Especially suitable for hot climates. No adverse shrinkage effect,also used in the precaste factories. Chloride free (according to British Standards)

**Test Standards** **Sikament®163** complies with ASTM C494 Type F and B.S.5075 Part 3 1983 for super plasticiser.

**Product Data**

**Type** Modified Polymers Dispersion.

**Form** Brown liquid

**Packaging** 250 Kg drums and 1100 Kg flow bins  
Bulk supply in tanker trucks possible on demand

**Storage condition** Store in a dry minimum area between 5°C and 35°C. Protect from direct sunlight

**Shelf life** 15 months minimum from date of production if stored properly in original unopened packaging

**Technical Data**

**Density at 25°C** Approximately 1.17 kg/it

**Chloride content** Nil (EN 934-2)



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## Application Details

**Dosage** 0.6 - 2.5% by weight of cement. Exact dosage rates are dependent on the type of effect required, quality of cement, aggregates, water cement ratio and ambient temperature. Therefore, in many cases it is advisable to carry out trial mixes. **Sikament®163** is compatible with all types of Portland cements including S.R.C..

**Dispensing** **Sikament®163** 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). The correct quantity of Sikament®163 should be measured by means of a recommended dispenser.

**Curing** 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 hessian.

**Cleaning** Clean all equipment and tools with water immediately after use.

**Remarks** When accidental overdosing occurs, the set retarding effect increases and additional air entrapped. During this period the concrete must be kept moist in order to prevent premature drying out.

## Safety

**Precautions** soap.  
Accidental splashes to the eyes or mucous membrane must be rinsed with clean warm water. Seek medical attention without delay.

Skin barrier cream, safety goggles and rubber gloves are recommended.

**Ecology** Do not dispose of into water or soil but according to local regulations.

**Toxicity** Non-toxic under the relevant Swiss health and safety codes.

**Transportation** Non-hazardous.

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 practice, the differences in materials, substratum 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 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 Technical Data Sheet for the product concerned, copies of which will be supplied on request





