

**BUILDING TRUST** 

# PRODUCT DATA SHEET Sika® ViscoCrete®-2044

# HIGH PERFORMANCE SUPERPLASTICISER

## DESCRIPTION

Sika® ViscoCrete®-2044 is a third generation superplasticiser for concrete and mortar.

## USES

Sika® ViscoCrete®-2044 is especially suitable for the production of concrete mixes which require high early strength development, powerful water reduction and excellent flowability.

Sika<sup>®</sup> ViscoCrete<sup>®</sup>-2044 is mainly used for the following applications:

- Precast concrete
- Fast track concrete
- In situ concrete requiring fast stripping time
- Self Compacting Concrete (SCC)

# **CHARACTERISTICS / ADVANTAGES**

Sika<sup>®</sup> ViscoCrete<sup>®</sup>-2044 as a powerful superplasticiser acts by different mechanisms. Through surface adsorption and sterical effects separating the binder particles the following properties are achieved:

- Pronounced increase in the early strength development, resulting in very economical stripping times for precast and in situ concrete
- Extremely powerful water reduction, resulting in high density, high strength and reduced permeability for water, etc.
- Excellent plasticising effect, resulting in improved flowability, placing and compacting behaviour
- Reduced energy cost for steam cured precast elements
- Especially suitable for the production of SCC
- Improved shrinkage and creep behaviour
- Reduced closure times for repairs of roads and runways

Sika® ViscoCrete®-2044 does not contain chlorides or other ingredients promoting corrosion of steel reinforcement. It is therefore suitable for reinforced and prestressed steel.

### **PRODUCT INFORMATION**

Composition	Aqueous solution of modified polycarboxylates	
Packaging	• 200 L drum • 1 000 L tank	
Appearance / Colour	Brownish liquid, clear to slightly cloudy	
Shelf Life	12 months from the date of production	
Storage Conditions	Stored properly in original, unopened and undamaged packaging in dry conditions and protected from direct sunlight at temperatures between +5 °C and +35 °C.	
pH-Value	3–5	
Total Chloride Ion Content	< 0.1 % (total chloride ion content % w/w)	(EN 934-2)

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## APPLICATION INFORMATION

Recommended Dosage	<ul> <li>For medium workability: 0.2–0.8% by weight of cement.</li> <li>For concrete of high workability, very low water/cement ratio and for SCC: 1.0–2.0% by weight of cement.</li> <li>It is recommended to carry out trial mixes to establish the required dosage.</li> </ul>	
Compatibility	Sika <sup>®</sup> ViscoCrete <sup>®</sup> -2044 may be combined with SikaPump <sup>®</sup> , SikaRapid <sup>®</sup> , Sika <sup>®</sup> FerroGard <sup>®</sup> -901 MY, SikaFume <sup>®</sup> , Sika <sup>®</sup> Stabiliser <sup>®</sup> -229 MY. Please conduct trials before combining products.	

## APPLICATION INSTRUCTIONS

#### DISPENSING

Sika® ViscoCrete®-2044 is added to the gauging water or added with it into the concrete mixer.

#### **CLEANING OF TOOLS**

Clean all tools and application equipment with water immediately after use. Hardened or cured material can only be mechanically removed.

## **IMPORTANT CONSIDERATIONS**

The standard rules of good concreting practice concerning production as well as placing are to be followed. Fresh concrete must be cured properly.

## **BASIS OF PRODUCT DATA**

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.

## LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

# 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.

## 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.

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