

**BUILDING TRUST** 

# PRODUCT DATA SHEET Sika<sup>®</sup> ViscoCrete<sup>®</sup>-2088

## HIGH PERFORMANCE SUPERPLASTICISER

#### DESCRIPTION

Sika<sup>®</sup> ViscoCrete<sup>®</sup>-2088 is a superplasticiser for concrete and mortar based on Polycarboxylate-Ether.

#### USES

Sika<sup>®</sup> ViscoCrete<sup>®</sup>-2088 is especially suitable for the production of ready mixed and site batched concrete with extended transportation times and workability requirements, medium water reduction and improved flow characteristics.

Sika® ViscoCrete®-2088 is recommended for the following:

- Concrete with low to high water reduction (up to 30 %)
- Concrete with reduced amount of fines or difficult aggregates
- Concrete in hot weather and with extended transportation and workability requirements etc.
- Self compacting concrete (SCC)
- High performance concrete
- Concrete with enhanced workability requirements due to a high content of blended cements

## **CHARACTERISTICS / ADVANTAGES**

Sika<sup>®</sup> ViscoCrete<sup>®</sup>-2088 is a powerful superplasticiser which acts through several different mechanisms including surface adsorption and sterical effects separating the cementitious binder particles. The following advantageous properties are achieved:

- Keeps extended workability time with many difficult cements despite high water reduction
- Superior plasticising effect, resulting in improved flow, placing and compaction characteristics
- Water reduction, resulting in improved density, higher strength and reduced permeability
- Reduced tendency to shrinkage and creep
- Reduced carbonation of the concrete
- Improved cohesion of the concrete
- Sika<sup>®</sup> ViscoCrete<sup>®</sup>-2088 does not contain chlorides or any other ingredients which promote the corrosion of steel. It is therefore suitable for use in reinforced and prestressed concrete structures.

# **APPROVALS / STANDARDS**

Conforms to the requirements of EN 934-2, Table 3.1 / 3.2  $\,$ 

#### **PRODUCT INFORMATION**

Composition	Modified polycarboxylate in water
Packaging	<ul> <li>208 L drum</li> <li>1 000 L tank</li> </ul>
Appearance / Colour	yellowish, cloudy liquid
Shelf Life	12 months from date of production if stored properly in undamaged, un- opened, original sealed packaging.
Storage Conditions	Storage at temperatures between +10 °C and +30 °C. Protect from direct sunlight, frost and contamination.
Density	~1.04 kg/l (at +20 °C)
pH-Value	~5.5

**Product Data Sheet** Sika® ViscoCrete®-2088 October 2018, Version 01.01 021301011000000128

#### **TECHNICAL INFORMATION**

Concreting Guidance

The standard rules of good concreting practice, concerning production and placing, are to be followed. Fresh concrete must be cured properly and curing applied as early as possible. Laboratory trials shall be carried out before concreting on site, especially when using a new mix design or producing with new concrete components.

#### **APPLICATION INFORMATION**

Recommended Dosage	0.2–2.0 % by weight of cement/binder
Compatibility	Sika <sup>®</sup> ViscoCrete <sup>®</sup> -2088 may be combined with many other Sika products. Important: Always conduct trials before combining products in specific mixes and contact Sika Technical Service for more information and advice.
Dispensing	Sika <sup>®</sup> ViscoCrete <sup>®</sup> -2088 is added to the gauging water or added with it into the concrete mixer. To take advantage of the workability enhancing ability, a wet mixing time, which is depending on the mixing conditions and mixer performance, of at least 60 seconds is recommended. To avoid excess water in the concrete, the final dosage must begin only after 2/3 of the wet mixing time.
Restrictions	Sika <sup>®</sup> ViscoCrete <sup>®</sup> -2088 shall not be added to dry cement. Sika <sup>®</sup> ViscoCrete <sup>®</sup> -2088 shall not be combined together with Naphthaline- or Melamin-Superplasiciser, because it might lead to fast stiffening and ex- cessive air-entrainment.

## **IMPORTANT CONSIDERATIONS**

- 1. For storage in tanks always use cleaned tanks and, clean and disinfect them minimum once a year.
- If frozen, Sika<sup>®</sup> ViscoCrete<sup>®</sup>-2088 may be used after thawing slowly at room temperature following intensive remix.
- 3. Excessive water addition or overdosing may cause bleeding or segregation.
- 4. Formwork pressure: due to strong plasticising effect and long opentime, concretes with Sika® ViscoCrete®-2088 can cause extended formwork pressure, especially for soft plastic concrete or SCC. Preliminary trials are a must.

# **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.

Product Data Sheet Sika® ViscoCrete®-2088 October 2018, Version 01.01 021301011000000128

# 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.



**BUILDING TRUST** 

Sika Kimia Sdn. Bhd. Lot 689, Nilai Industrial Estate, 71800 Nilai Negeri Sembilan D.K., Malaysia Phone: +606-7991762 Fax: +606-7991980 e-mail: info@my.sika.com Website: www.sika.com.my



 Product Data Sheet

 Sika® ViscoCrete®-2088

 October 2018, Version 01.01

 021301011000000128

SikaViscoCrete-2088-en-MY-(10-2018)-1-1.pdf



**BUILDING TRUST**