

# PRODUCT DATA SHEET

# Sika® ViscoCrete®-182 TH

#### HIGH PERFORMANCE SUPERPLASTICISER

#### **DESCRIPTION**

Sika® ViscoCrete®-182 TH is a third generation superplasticizer for concrete and mortar. It meets the requirements for set retarding / high range water reducing superplasticizers.

#### **USES**

Sika® ViscoCrete®-182 TH is especially suitable for concrete mixes with extended transportation times and extended workability requirements, high water reduction and improved flow characteristics.

Sika® ViscoCrete®-182 TH is mainly used for:

- Concrete with ultra high water reduction (up to 30%)
- High performance concrete
- Concrete in hot weather and with extended transportation and workability requirements
- Long slump keeping

## **CHARACTERISTICS / ADVANTAGES**

Sika® ViscoCrete®-182 TH is a powerful superplasticizer which acts through several different mechanisms including surface adsorption and sterical effects separating the cementitious binder particles. The following advantageous properties are achieved:

- High water reduction, resulting in high density, high strength and reduced permeability
- Superior plasticising effect, resulting in improved flow, placing and compaction characteristics
- Reduced shrinkage during curing and reduced creep when hardened
- Long slump keeping which workability can be maintained up to 4 hours (still depends on admixture dosage, cement type, temperature, W/C)

Sika® ViscoCrete®-182 TH 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 / CERTIFICATES**

Complies with ASTM C-494 Type F&G

#### PRODUCT INFORMATION

Packaging	25 l, 200 l / drum 1,000 l/ tote or bulk
Appearance / Colour	Light brownish liquid
Shelf life	12 months from the date of production If stored properly in undamaged, original, sealed packaging.
Storage conditions	Store in dry conditions, protected from direct sunlight at temperature between+ 5°C and +30°C.
Density	1.060 - 1.080 kg/l (at temperature +25°C)
pH-Value	3.0 - 4.5 Approx.

Product Data Sheet Sika® ViscoCrete®-182 TH January 2020, Version 01.02 021301011000003332

#### APPLICATION INFORMATION

Recommended Dosage	0.6 - 3.0% by weight of cement. Sika® ViscoCrete®-182 TH is compatible with all types of Portland Cement, including S.R.C type and Hydraulic Cement.
Compatibility	Sika® ViscoCrete®-182 TH may be combined with many other Sika products. Always conduct trials before combining products in specific mixes and contact our Technical Service Department for information and advice about any specific combinations.
Dispensing	<ul> <li>Sika® ViscoCrete®-182 TH is added to the gauging water or added with it into the concrete mixer.</li> <li>To take advantage of the high water reduction, a wet mixing time, which is depending on the mixing conditions and mixer performance, of at least 60 seconds is recommended.</li> <li>To avoid excess water in the concrete, the final dosage must begin only after 2/3 of the wet mixing time.</li> </ul>
Restrictions	The standard rules of good concreting practice, concerning production and placing, are to be followed. Laboratory trials shall be carried out before concreting on site, especially when using a new mix design or producing new concrete components. Fresh concrete must be cured properly and curing applied as early as possible.

#### IMPORTANT CONSIDERATIONS

When using Sika® ViscoCrete®-182 TH a suitable mix design has to be taken into account and local material sources shall be trialled. Sika® ViscoCrete®-182 TH shall not be added to dry cement. Excessive water addition or overdosing may cause bleeding or segregation. Self Compacting Concrete, when using Sika® ViscoCrete®-182 TH to produce self compacting concrete, suitable mix designs have to be used.

#### **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 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 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.

#### Sika (Thailand) Limited

700/37 Moo 5 Amata City Chonburi Industrial Estate, T. Klong Tamhru A. Muang, Chonburi 20000, Thailand Tel: +66 3810 9500

E-mail: sikathai@th.sika.com Website: tha.sika.com









Product Data Sheet Sika® ViscoCrete®-182 TH January 2020, Version 01.02 021301011000003332 SikaViscoCrete-182TH-en-TH-(01-2020)-1-2.pdf

