

## PRODUCT DATA SHEET

# Sika® ViscoCrete®-819 Extra

### High Performance Superplasticizer

#### DESCRIPTION

Sika® ViscoCrete®-819 Extra is a third generation superplasticizer for concrete and mortar. It meets the requirements for high range water reducing superplasticizer according to ASTM C494.

#### USES

Sika® ViscoCrete®-819 Extra is especially suitable for the production of concrete mixes which require high early strength development, powerful water reduction and improved flowability.

Sika® ViscoCrete®-819 Extra is mainly used for the following applications:

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

#### FEATURES

Sika® ViscoCrete®-819 Extra as a powerful superplasticizer acts through several different mechanisms including surface adsorption and sterical effects separat-

ing the binder particles. The following advantageous properties are achieved:

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

#### CERTIFICATES AND TEST REPORTS

Complies with ASTM C494 Type F

Complies with TIS 73

#### PRODUCT INFORMATION

<b>Composition</b>	Aqueous solution of modified polycarboxylates.
<b>Packaging</b>	1000L/tote, 200 L/drum
<b>Appearance and colour</b>	Light brownish liquid, clear to slightly cloudy

<b>Shelf life</b>	12 months from the date of production if stored properly in undamaged, original, sealed packaging.
<b>Storage conditions</b>	Store in dry conditions, protected from direct sunlight and frost at temperature between 5°C and 40°C
<b>Density</b>	1.070 - 1.090 kg/L (at temperature 25°C)
<b>pH-Value</b>	3.0 - 5.0

## APPLICATION INFORMATION

<b>Recommended dosage</b>	0.3 – 1.0% by weight of cement.
<b>Dispensing</b>	<ul style="list-style-type: none"> <li>▪ Sika® ViscoCrete®-819 Extra 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>

## SYSTEM INFORMATION

<b>Compatibility</b>	<p>Sika® ViscoCrete®-819 Extra is compatible with all types of Portland Cement, including S.R.C. type and Hydraulic Cement.</p> <p>Important: Always conduct trials before combining products in specific mixes and contact our Technical Service Department for information and advice about any specific combinations.</p>
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## 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.

## IMPORTANT CONSIDERATIONS

- When using Sika® ViscoCrete®-819 Extra a suitable mix design has to be taken into account and local material sources shall be trialled.
- Sika® ViscoCrete®-819 Extra shall not be added to dry cement.
- Excessive water addition or overdosing may cause bleeding or segregation.

Self Compacting Concrete:

When using Sika® ViscoCrete®-819 Extra to produce self compacting concrete, suitable mix design have to be used.

Frost:

If frozen and/or if precipitation has occurred, Sika® ViscoCrete®-819 Extra may be used after thawing slowly at room temperature and intensive mixing.

## 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.

## 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.

## 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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### Product Data Sheet

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