

## PRODUCT DATA SHEET

# Sika® ViscoCrete® SKY 3102

(formerly MasterGlenium® SKY 3102)

A latest generation high-performance polycarboxylate ether (PCE) superplasticizer for the Ready-mix industry when extended workability retention is required

### DESCRIPTION

Sika® ViscoCrete® SKY 3102 consists of a blend of innovative patented latest generation modified polycarboxylate ether polymers. The particular molecular configuration allows Sika® ViscoCrete® SKY 3102 to firstly give a high level of water reduction and secondly extended workability retention up to several hours. The polymer structure of Sika® ViscoCrete® SKY 3102 is also specially designed to improve rheology of concrete, making it flowable and less viscous even at very low water/cement ratios. Robustness is a distinctive feature of concrete produced with

### USES

Sika® ViscoCrete® SKY 3102 is suitable for producing highly-fluid concrete for piling and diaphragm wall construction. Concrete remains stable without segregation or bleed at low water cement ratios with high ultimate strength. Sika® ViscoCrete® SKY 3102 may be used in combination with Sika® Stabilizer-110 MM to improve mix stability such as when producing Self Compacting Concrete (SCC) or Smart Dynamic Concrete (SDC) that is placed without the use of vibration giving economic, ecological and ergonomic concrete production.

### PRODUCT INFORMATION

<b>Packaging</b>	Sika® ViscoCrete® SKY 3102 is available in 210 liters drums or in bulk.
<b>Shelf life</b>	Up to 12 months if stored according to manufacturer's instructions in unopened containers
<b>Storage conditions</b>	Sika® ViscoCrete® SKY 3102 should be stored above 0°C In closed containers or storage tanks to protect from evaporation and extreme temperatures.
<b>Appearance and colour</b>	Brown liquid

### FEATURES

#### The ready-mix producer:

- Capability of delivering high performance concrete to the job site.
- Production of concrete with low water cement ratios with excellent workability retention properties.
- Single product for many application needs.

#### The contractor / applicator:

- Easier placing and faster strength development.
- Extended working live for mass concrete of where placing is slow or delayed.
- Improved concrete surfaces finish.

#### The engineer:

- Insurance that concrete meets original specification.
- High quality durable concrete.

### CERTIFICATES AND TEST REPORTS

Sika® ViscoCrete® SKY 3102 meets the requirements of EN 934-2 and ASTM C494 Type G.

Density	@ 25°C = 1.085 – 1.105 g/cm <sup>3</sup>
pH-Value	5-7
Total chloride ion content	“Chloride Free” to EN 934

## APPLICATION INFORMATION

<b>Recommended dosage</b>	The recommended dosage rate is 0.5 to 3.0 liters per 100kg of cementitious material. Other dosages may be used in special cases according to specific production conditions. In this case please consult our Technical Services Department.
<b>Compatibility</b>	<p>Sika® ViscoCrete® SKY 3102 is compatible and recommended for use with:</p> <ul style="list-style-type: none"> <li>• MasterMatrix 110 to modify the viscosity of SCC.</li> <li>• MasterAir, air entraining admixture to improve freeze-thaw resistance.</li> <li>• MasterFinish, demoulding agent for easy formwork removal and improved finish.</li> <li>• MasterKure, user friendly curing compound for highly efficient water retention.</li> <li>• MasterLife range provides resistance to deterioration caused by abrasion, corrosion of steel, alkali silica reaction, sulfate attack, and drying shrinkage cracking.</li> </ul> <p>Sika® ViscoCrete® SKY 3102 is not compatible with MasterRheobuild superplasticizers.</p> <p>Sika® ViscoCrete® SKY 3102 is suitable for mixes containing all types of Portland cement and cementitious materials as follows:</p> <ul style="list-style-type: none"> <li>• Microsilica (silica fume)</li> <li>• fly ash (PFA)</li> <li>• ground granulated blastfurnace slag GGBS</li> </ul>

## 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.

## 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.

## APPLICATION INSTRUCTIONS

Sika® ViscoCrete® SKY 3102 is a ready to use liquid admixture that is added to the concrete at the time of batching.

The maximum effect is achieved when the MasterGlenium SKY 3102 is added after the addition of 70% of the water.

Sika® ViscoCrete® SKY 3102 must not be added to the dry materials. Thorough mixing is essential and a minimum mixing cycle, after the addition of the Sika® ViscoCrete® SKY 3102 of 60 seconds at least for forced action mixers is recommended.

## 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. It may be necessary to adapt the above disclaimer to specific local laws and reg-

ulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

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