

## PRODUCT DATA SHEET

# Sika® ViscoCrete® SKY 8614

(formerly MasterGlenium® SKY 8614)

### SUPERPLASTICIZING AND VISCOSITY MODIFYING ADMIXTURE FOR HIGH FLOWABLE CONCRETE

#### DESCRIPTION

Sika® ViscoCrete® SKY 8614 is a polycarboxylate ether (PCE) based superplasticizers to provide high flowable concrete for everyday use. The superplasticizer contains an essential component which is a break-through and revolutionary viscosity modifying admixture (VMA). Sika® ViscoCrete® SKY 8614 offers a quantum leap in concrete robustness allowing for flowability and stability of concrete at the same time. The self consolidating nature of high flowable concrete reduces significantly vibration making the process of concrete placement fast and effective. Sika® ViscoCrete® SKY 8614 is free of added chloride and is compatible with all cements meeting ASTM standards. Sika® ViscoCrete® SKY 8614 is proprietary, intelligent (smart) polymers which interact among themselves and with water molecules to generate a water envelope that produces a highly established cement paste. It is a unique 2-in-1 admixture with VMA inside based on the principle of intelligent, self organizing molecules.

A combination of viscosity modify agent with a tailor-made polycarboxylate ether, it improves cement dispersion to give a matrix-like structure which distributes the liquid cement evenly and enhances segregation resistance. Sika® ViscoCrete® SKY 8614 is able to substantially increase the plastic viscosity of concrete, while maintaining a limited increase in the yield value thereby reducing its sensitivity to water variations.

#### USES

- Ready-mix concrete and site mixing concrete
- Reinforced concrete and plain concrete
- Self consolidating concrete
- Impermeable concrete
- Mass concrete
- Pumped concrete

#### FEATURES

- High workability – ease of placing and compaction. No segregation.
- Superior slump retention – no re-tempering.
- Low shrinkage and creep – improve dimensional stability. Reduced risk of cracks.
- Good cohesion – ease of pumping. No bleeding.
- Good workability – excellent surface appearance. Self-compacting concrete.
- Superior slump retention, including mid-range slumps.
- Minimal bleed water – excellent concrete quality.
- High elastic modulus – superior load bearing capacity.

#### PRODUCT INFORMATION

<b>Composition</b>	Aqueous solution of modified polycarboxylate copolymers
<b>Packaging</b>	205 L drums (non-returnable) 1 000 L bulk delivery
<b>Shelf life</b>	12 months from date of production if stored properly in undamaged, unopened, original sealed packaging.

**Storage conditions** Store in dry conditions at temperatures between +5 °C and +35 °C. Protect from direct sunlight and frost.

**Appearance** Liquid

## TECHNICAL INFORMATION

**Concreting guidance** The standard rules of good concreting practice, concerning production and placing, are to be followed.  
Laboratory trials before concreting on site are strongly recommended when using a new mix design or producing new concrete components.  
Fresh concrete must be cured properly and as early as possible.

## APPLICATION INFORMATION

**Recommended dosage** 0.8 - 1.5 L per 100 Kg of cementitious.  
Other dosages may also be used depending on the specific working conditions. Trial mixes should be made with job materials to determine the optimum dosage required for a specified job requirement.

**Compatibility** Sika® ViscoCrete® SKY 8614 may be combined with the following products:

- Sika® Plastiment Series
- Sika Viscoflow® Series
- Sika® Fume
- SikaFibre®

Do not use viscocrete / viscoflow series combined with sikament series.  
To produce flowing and / or self-compacting concrete, special concrete mix design is required.  
Pre-trials are recommended and mandatory if combinations with the above products are required.  
Please consult to our Technical Service Department.

## BASIS OF PRODUCT DATA

All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

## ECOLOGY, HEALTH AND SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

## APPLICATION INSTRUCTIONS

### APPLICATION

Sika® ViscoCrete® SKY 8614 is a ready-to-use admixture to be added to the concrete mix as a separate component along with a polycarboxylate ether or modified lignosulphonate based admixture. Optimal mixing is obtained if Sika® ViscoCrete® SKY 8614 is poured into the concrete mix right after the addition of the first 50 -70% of the mixing water. Avoid adding the admixture to the dry aggregates. A separate dispenser and feed line must be used.

## LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for exact product data and uses.

## 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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