

**BUILDING TRUST** 

## PRODUCT DATA SHEET

# Sika® ViscoCrete®-3614 SKY

(formerly MasterGlenium® Sky 3614)

High Range Workability - Retaining Admixture

### **DESCRIPTION**

**Sika® ViscoCrete®-3614 SKY** admixture is a revolutionary new technology superplasticiser, based on significant advances in admixture chemistry.

**Sika® ViscoCrete®-3614 SKY** admixture is used as part of an admixture system to provide customized admixture solutions for a wide range of concrete applications.

**Sika® ViscoCrete®-3614 SKY** admixture is a workabilityretaining admixture that provides extended, flexible degrees of slump retention without retardation.

**Sika® ViscoCrete®-3614 SKY** admixture provides the concrete producer with the ability to immediately create the optimal admixture system for changing and fluctuating regional raw materials, environmental conditions, and project requirements.

**Sika® ViscoCrete®-3614 SKY** admixture gives the concrete producer the ability to consistently produce and deliver quality concrete mixtures.

**Sika® ViscoCrete®-3614 SKY** admixture offers extended workability retention for high range concrete mix designs for long distance travel or extended workability requirement applications.

## **USES**

- Concrete with varying slump requirements.
- Concrete mixtures utilizing supplementary cementitious materials.
- Concrete where high flowability, increased stability and durability are needed.

- Ready-mixed and precast concrete.
- Production of self-consolidating concrete in (SCC) mixtures.
- Improved water reduction for materials with high water demand characteristics.
- Sprayed Concrete applications.

## **CHARACTERISTICS / ADVANTAGES**

- Workability retention without retardation.
- Flexible levels of workability retention by adjusting the dosage.
- Improved early and late-age compressive strengths.

Sika® ViscoCrete®-3614 SKY offers the following benefits:

- Promotes greater consistency of concrete workability at the job site.
- Promotes consistency in compressive strengths via minimized job site addition of water.
- Minimizes re-dosing of high-range water-reducing ad-mixture at the job site.
- Fewer rejected loads and better customer satisfaction due to consistent quality of concrete.
- Faster truck turn-around time.
- Expanded concrete delivery range.

## **APPROVALS / STANDARDS**

ASTM C 494/C 494M Type S, Specific Performance admixtures.

## PRODUCT INFORMATION

Packaging	Sika® ViscoCrete®-3614 SKY is available in 1000 litre IBC's.
Shelf Life	Sika® ViscoCrete®-3614 SKY admixture has a minimum shelf life of 12 months from date of manufacture.  Depending on storage conditions, the shelf life may be greater than stated.
Storage Conditions	Sika® ViscoCrete®-3614 SKY admixture must be stored at temperatures above 5°C. If Sika® ViscoCrete®-3614 SKY admixture freezes, thaw and reconstitute by mechanical agitation. Do not use pressurized air for agitation.  Sika® ViscoCrete®-3614 SKY admixture is not UV stable and may experience different colour shades between different batches and/or may darken over time. This does not affect product performance in any way.
Appearance / Colour	Yellowish liquid
Density	1.040 -1.080
pH-Value	5.0 – 7.0

## **APPLICATION INFORMATION**

Recommended Dosage	Sika® ViscoCrete®-3614 SKY admixture has a recommended dosage range of 600 - 1800 mL/100 kg of cementitious materials.
	Sika® ViscoCrete®-3614 SKY admixture offers extended workability concrete. Targeted workability retention needs to be measured through preliminary testing and final site evaluation with relevant concrete materials and site conditions to established fixed retention periods in relation to dosage.
Dispensing	Sika® ViscoCrete®-3614 SKY admixture can be added with the initial batch water or as a delayed addition.  Other dosages may be recommended in special cases or applications according to the specific site conditions or material requirements. In this case, please consult our Technical Services Department for advice.

## SYSTEM INFORMATION

Compatibility
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Sika® ViscoCrete®-3614 SKY admixture is compatible with most admixtures used in the production of quality concrete, including normal, mid-range and high-range water reducing admixtures, air-entrainers, accelerators, retarders, extended set control admixtures, corrosion inhibitors, and shrinkage reducers.

Sika® ViscoCrete®-3614 SKY admixture has only been tested with admixtures manufactured by Sika South Africa (Pty) Ltd. As a result, use of Sika® ViscoCrete®-3614 SKY admixture with non-Sika South Africa (Pty) Ltd admixtures may produce unpredictable results.

Non-Chloride, Non-Corrosive: Sika® ViscoCrete®-3614 SKY admixture will neither initiate nor promote corrosion of reinforcing steel embedded in concrete, prestressing steel or of galvanized steel floor and roof systems. Neither calcium chloride nor other chloride-based ingredients are used in the manufacture of Sika® ViscoCrete®-3614 SKY.

Do not use Sika® ViscoCrete®-3614 SKY admixture with admixtures containing beta-naphthalene sulfonate. Erratic behaviours in slump, workability retention and pumpability may be experienced.





## **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.

#### **LIMITATIONS**

Use of Sika® ViscoCrete®-3614 SKY admixture is reasonably flexible, but for best results, ensure accuracy in moisture control, batch proportions and consistent mixing procedures, and limit excessive fluctuation in material characteristics as part of effective quality control measures. In addition, measure not only initial mix design characteristics, but also characteristics at point of discharge and effort to maintain time to discharge as consistent as possible.

#### **ECOLOGY HEALTH AND SAFETY**

Please refer to the product Saftey Data Sheet (SDS) for specific information.

### 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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