

# PRODUCT DATA SHEET

# Sika® ViscoCrete®-3618 Ease

# SUPERPLATICIZER FOR THE PRODCUTION OF HIGH QUALITY READY-MIX CONCRETE CONTAINING NATURAL POZZOLANIC MATERIALS

#### **DESCRIPTION**

Sika® ViscoCrete®-3618 Ease is an innovative superplasticizer designed to give class-leading strength,rheology and workability; especially in concrete containing natural pozzolanic materials. Sika® ViscoCrete®-3618 Ease is formulated from unique polymers produced in-house by Sika. The objective of the development of this new generation polymer was to take the characteristics of traditional polycarboxylic ether(PCE) admixtures but to modify them to give enhanced rheology and robustness to the concrete. The polymers contained in the formulation of Sika® ViscoCrete®-3618 Ease ensures that enhanced rheology is maintained from time of mixing to time of placing and finishing.

#### **USES**

Sika® ViscoCrete®-3618 Ease is used for the production of high quality ready-mix concrete, such as:

- High flow concrete
- Concrete with high water reduction
- Slabs
- Foundations
- Walls
- Columns and piers
- Piles
- Bridges and cantilever structures

### **FEATURES**

#### For the Ready-mix Producer:

- Capability of delivering high performance concrete with enhanced rheology, strength and workability.
- Concrete is easier to pump reducing pumping time and pumping pressure of equipment thus to reduce the wear-and-tear.
- Concrete is easier to place and finish
- Enhanced rheology is maintained from time of mixing to time of placement

#### For the Contractor/Applicator:

- Easier placing and improved strength development
- Improved concrete surfaces
- Cost-effective self-compacting concrete can be obtained by using Sika® ViscoCrete®-3618 Ease alongwith Sika® Stabilizer in the concrete mix. The resultant Smart Dynamic Concrete also has a lower carbon foot print, reduced shrinkage and lower heat of hydration than traditional SCC

#### For the Engineer:

- Assurance that concrete meets original specification
- High quality durable concrete

#### **CERTIFICATES AND TEST REPORTS**

Sika® ViscoCrete®-3618 Ease follows the requirements of ASTM C494; Type G and BS EN 934-2

#### PRODUCT INFORMATION

Composition	Aqueous solution of modified polycarboxylates, co-polymers
Packaging	210 L drum, 1000 L flowbin or bulk supply in tanker
Appearance and colour	Colorless to pale yellow liquid
Shelf life	12 months from date of production if stored properly

#### Product Data Sheet

Sika® ViscoCrete®-3618 Ease December 2024, Version 01.01 021301011000005826

Storage conditions		amaged, unopened, original sealed packaging in dry condi- peratures between +5°C and +45°C. Protect from direct sun- ell before using.	
Density	~1.10 kg/l (+25°C)		
pH-Value	9.0–11.5		
Total chloride ion content	Nil	(BS EN 934-2)	

#### TECHNICAL INFORMATION

Concreting guidance	The standard rules of good concreting practice for production and placing must be observed when using Sika® ViscoCrete®-3618 Ease in concrete. Refer to relevant standards. Fresh concrete must be cured properly especially at high temperatures in order to prevent plastic and
	drying shrinkage. Use Sika® Antisol® products as a curing agent or apply wet hessian.

#### APPLICATION INFORMATION

Recommended dosage	0.5 to 2.0 L per 100 kgs of total cementitious material. Trial mixes must be performed to establish the exact dosage rate required
Compatibility	Sika® ViscoCrete®-3618 Ease is suitable for mixes containing all types of cement and supplementary cementitious materials such as: Microsilica (Silica Fume), Fly Ash (PFA), GGBS (Ground Granulated Blast Furnace Slag) and the following Sika products:  • SikaPump®  • Sika® FerroGard®  • SikaFume®  • SikaFiber®  • SikaFiber®  • Sika® Aer  • Sika® Stabilizer  • Sika® Stabilizer  • SikaControl®  We recommend to perform trial mixes to establish the required performance when combining Sika® ViscoCrete®-3618 Ease with the above products or other admixtures. Please consult our Sika Technical Department for further assistance.
Dispensing	Sika® ViscoCrete®-3618 Ease is a ready-to-use admixture to be added to the concrete as a separate component. Optimal result is obtained if Sika® ViscoCrete®-3618 Ease is poured into the concrete mix right after the addition of the first 80% of the mixing water, i.e. when all solids are wetted. Avoid adding the admixture to the dry aggregates.

## **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.
- Internal Reference Version: MBS\_CCKSA/ MGL\_3618\_03-23/07-24/08-24

#### **IMPORTANT CONSIDERATIONS**

When using Sika® ViscoCrete®-3618 Ease a mix design must be selected for the local material sources used and trial mixes performed to verify suitability. If frozen and/or if precipitation has occurred, it may only be used after thawing slowly at room temperature and intensive mixing. Sika® ViscoCrete®-3618 Ease should not be added to

dry cement. Before pouring, suitability tests on the fresh concrete must be carried out. Due to the extended workability take special care that formwork is properly installed and secured. In case the setting time of concrete is extended, if cured properly, other properties may not be affected and higher ultimate strength may be achieved. Sika® ViscoCrete ® products are not compatible with admixtures based on sulfonated napthalene or melamine. When accidental overdosage occurs, bleeding and segregation of the concrete and retardation of intial set may be obseved.

Product Data Sheet
Sika® ViscoCrete®-3618 Ease
December 2024, Version 01.01
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## **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.

#### 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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ISO 9001, 14093, 45991 – 965:

- Siks LUE LUE
- Siks LOF LUE
- Siks LOF LUE
- Siks Carl ESC. 150:

ISO 9001, 14091 – 968:

- Siks Soulf Instals United
ISO 9001, 14091 – 100:

- Siks Deaf Instals United
ISO 9001, 14091 – 170:

- Siks ME Construction Chemicals
for Manufacturing LUC
- Manufer Builders Solutions LUC
- Manufer Builders Solutions LUC

All products are supplied under a management system certified to conform to the requirements of the quality, environmental and occupational health & safety standards SO 9001, ISO 14001 and ISO 45001.



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