

PRODUCT DATA SHEET

Sika® ViscoCrete®-3355

Concrete Admixture For High Flow / Self-Compacting Concrete

DESCRIPTION

Sika® ViscoCrete®-3355 is a third-generation super-plasticizer for concrete and mortar. It is particularly developed to produce high flow concrete with exceptional flow retention properties. This product is suitable for use in hot climatic conditions.

USES

Sika® ViscoCrete®-3355 facilitates extreme water reduction, excellent flowability with optimal cohesion and strong self-compacting behavior. ® 3355 is used for the following types of concrete:

- High flow concrete
- Self-compacting, concrete (S.C.C.)
- Concrete with high water reduction (upto 30%)
- High strength concrete

The combination of high-water reduction, excellent flowability and high early strength provides clear benefits in the above-mentioned applications.

CHARACTERISTICS / ADVANTAGES

Sika® ViscoCrete®-3355 acts by surface absorption on the cement particles producing a sterical separation effect on the cement particles. Concrete produced with Sika® ViscoCrete®-3355 exhibits the following properties:

- Excellent flowability (resulting in highly reduced placing and compacting efforts)
- Strong self-compacting behaviour
- Extremely high water reduction; $\geq 25\%$ (resulting in high density and strengths)
- Increased high early strength development
- Improved shrinkage and creep behaviour
- Reduced rate of carbonation of the concrete

Sika® ViscoCrete®-3355 does not contain chlorides or other steel corrosion promoting ingredients. Therefore, it maybe used without restriction for reinforced and pre-stressed concrete construction. Sika® ViscoCrete®-3355 gives the concrete extended workability and depending on the mix design and the quality of material used, self-compacting properties can be maintained for more than 1 hour at 30°C.

APPROVALS / STANDARDS

Sika® ViscoCrete®-3355 follows the requirements of ASTM C494; Type G.

PRODUCT INFORMATION

Chemical Base	Aqueous solution of modified Polycarboxylate co-polymers
Packaging	05 ltr jerry can 20 ltr plastic can 200 ltr drum 1000 ltr IBC Bulk supply in tanker is possible on demand

Shelf Life	12 months minimum from production date if stored properly in original unopened packaging.
Storage Conditions	Store in a dry area between 5°C and 35°C. Protect from direct sunlight.
Appearance / Colour	Clear, Colorless to Yellowish Liquid
Specific gravity	1.02 - 1.1 at 25°C
pH-Value	3 - 7 at 25°C
Total Chloride Ion Content	Nil

APPLICATION INFORMATION

Recommended Dosage	<ul style="list-style-type: none"> ▪ For soft plastic concrete 0.3 - 1% by weight of binder ▪ For flowing and self-compacting concrete 0.6 - 1.5% by weight of binder. ▪ Higher dosage upto 2% by weight of binder can be used depending in the mix design & concrete requirement. <p>A pre-trial using local material sources to confirm the dosage must be done by the user. *Note: Set retardation may occur at dosage greater than 1.0% with some binders.</p>
Dispensing	Sika® ViscoCrete®-3355 is added to the gauging water or simultaneously poured with it into the concrete mixer. For optimum utilization of its high-water reduction property, we recommend thorough mixing at a minimal wet mixing time of 60 seconds. The addition of the remaining gauging water (to fine tune concrete consistency) may only be started after two-thirds of the wet mixing time, to avoid surplus water in the concrete.
Compatibility	<p>Sika® ViscoCrete®-3355 may be combined with many other Sika products particularly:</p> <ul style="list-style-type: none"> ▪ Sika pump ▪ Sika Fume ▪ Sika Retarder and Sika Retardol-25 <p>Pre-trials must be performed before combining products in a concrete mix. Please consult our technical services department for further advice and information.</p>

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

When using Sika® ViscoCrete®-3355 suitable mix design must be selected, and local material sources should be trailed. If frozen and/or if precipitation has occurred, Sika® ViscoCrete®-3355 may only be used after thawing slowly at room temperature and intensive mixing. Sika® ViscoCrete®-3355 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.

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.

CLEANING OF TOOLS

Clean all tools & application equipment with water immediately after use.

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. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

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