

PRODUCT DATA SHEET

Sika® ViscoCrete®-1000

HIGH RANGE WATER REDUCING ADMIXTURE

PRODUCT DESCRIPTION

Sika® ViscoCrete®-1000 is a high range water reducer utilizing the combination of Sika® ViscoCrete® and Sika® ViscoFlow® Technology. It's unique formulation is based on polycarboxylate technology. Sika® ViscoCrete®-1000 meets the requirements of ASTM C 494 Type A and F admixture.

USES

Sika® ViscoCrete®-1000 is recommended for production of all high strength, concrete products, whenever high plasticity, prolonged slump retention and increased early/ ultimate strengths are required. Sika® ViscoCrete®-1000 can be used for production of SCC (Self Consolidating Concrete) as well as for production of conventional slump concrete.

CHARACTERISTICS / ADVANTAGES

Sika® ViscoCrete®-1000 can be used for the production of SCC (Self Consolidating Concrete) as well as for the production of conventional slump concrete. The implementation of the latest Sika® ViscoFlow® Technology allows Sika® ViscoCrete®-1000 to extend the slump retention without a negative impact on set time. This is beneficial especially in a hot climate environment when the slump loss of a concrete mixture is more likely to occur.

High Range Water Reducing Applications: When used as a high range water reducing admixture, water reduction up to 35 % can be obtained. The superplasticizing action allows for the production of high slump flowing concrete with excellent workability and extended slump retention that can be placed with minimum vibration even at a low

water/cementitious ratio. The dispersing action of Sika® ViscoCrete®-1000 maximizes cement hydration efficiency and improves concrete's early and long term compressive strengths. Extended slump retention does not have negative effect on setting times.

Mid Range Water Reducing Applications: At a lower dosage, Sika® ViscoCrete®-1000 can be used as a cost effective mid range water reducing admixture or simply as a water reducing admixture for production of conventional slump concrete. When used as a mid range water reducing admixture, water reduction up to 15 % can be obtained. This application is ideal for use with lean, harsh concrete mixes or concrete containing fly ash. Sika® ViscoCrete®-1000 will improve workability and finishability.

The combined water reducing and superplasticizing action provide the following benefits:

- Higher early and ultimate strengths for cost effective high strength concrete and earlier structural use of concrete.
- Higher early strengths allow faster demolding and more efficient use of forms to precast producers.
- Improved slump retention will extend workability without negative effect on setting time characteristics of the concrete mixture.
- Increased slump improves workability and reduces labor costs.
- Greater concrete density reduces permeability and increases durability.

Sika® ViscoCrete®-1000 does not contain calcium chloride or any other intentionally added chlorides and will not initiate or contribute to corrosion on steel reinforcement present in the concrete.

PRODUCT INFORMATION

Packaging	Sika® ViscoCrete®-1000 is available in 55 gallon drums (208 liters), 275 gallon totes (1040 liters) and bulk delivery.
Appearance / Color	Brown Liquid
Shelf Life	Shelf life when stored in dry warehouse conditions between 40 °F and 80 °F (5–27 °C) is 1 year.
Storage Conditions	Sika® ViscoCrete®-1000 should be stored at above 40 °F (5 °C). If frozen, thaw and agitate thoroughly to return to normal state. Protect from direct sunlight.
Specific Gravity	Approx. 1.06

APPLICATION INFORMATION

Recommended Dosage	Dosage rates of Sika® ViscoCrete®-1000 will vary depending on the materials used, ambient conditions and the requirements of a specific project. For general concreting applications, Sika recommends a dosage rate between 2–12 fl.oz./100 lbs. (130–780 ml/100 kg) cementitious materials. If maximum water reduction is required, dosage up to 18 fl.oz./100 lbs. (1170 ml/100 kg) of cementitious materials may be used. Dosage rates outside the recommended range may be used where specialized materials such as microsilica are specified, extreme ambient conditions are encountered or unusual project conditions require special consideration. In this case please contact your local regional Sika representative or Sika technical service department at 1-800-933-7452 for further information.
Mixing	<p>For best plasticizing results, Sika® ViscoCrete®-1000 should be added directly to freshly mixed concrete in the concrete mixer at the end of the batching cycle. Sika® ViscoCrete®-1000 may also be dispensed as an integral material during the regular admixture batching cycle, or into freshly mixed concrete in a Ready-Mix truck at the concrete plant or job site. To optimize the superplasticizing effect, Sika recommends that the combined materials be mixed for 80–100 revolutions, either in the concrete mixer or in the Ready-Mix truck.</p> <p>Combination with Other Admixtures: Sika® ViscoCrete®-1000 is highly effective as a single admixture or in combination with other admixtures in the Sika System. If used in combination with certain Sikament® high range water reducers, it may affect the plastic properties of fresh concrete. Please contact your local regional office or technical service department at 1-800-933-7452 for further information.</p>

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

OTHER RESTRICTIONS

See Legal Disclaimer.

LEGAL DISCLAIMER

- KEEP CONTAINER TIGHTLY CLOSED
- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- FOR PROFESSIONAL USE ONLY

ENVIRONMENTAL, HEALTH AND SAFETY

For further information and advice regarding transportation, handling, storage and disposal of

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates ("SIKA"), the user must always read and follow the warnings and instructions on the product's most current product label, Product Data Sheet and Safety Data Sheet which are available at usa.sika.com or by calling SIKA's Technical Service Department at 1-800-933-7452. Nothing contained in any SIKA literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each SIKA product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within the product's shelf life. User determines suitability of product for intended use and assumes all risks. User's and/or buyer's sole remedy shall be limited to the purchase price or replacement of this product exclusive of any labor costs.

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Sale of SIKA products are subject to the Terms and Conditions of Sale which are available at <https://usa.sika.com/en/group/SikaCorp/termsandconditions.html> or by calling 1-800-933-7452.

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