

PRODUCT DATA SHEET

Sika® ViscoCrete®-2100

High Range Water Reducing Admixture

PRODUCT DESCRIPTION

Sika® ViscoCrete®-2100 is a high range water reducing and superplasticizing admixture utilizing Sika's 'ViscoCrete®' polycarboxylate polymer technology. Sika® ViscoCrete®-2100 meets the requirements for ASTM C-494 Types A and F.

USES

Sika® ViscoCrete®-2100 may be used in both ready mix and precast applications, as a plant added high range water reducer to provide excellent plasticity while maintaining slump for up to 90 minutes. Controlled set times make Sika® ViscoCrete®-2100 ideal for horizontal and vertical applications, Sika® ViscoCrete®-2100 is ideal for production of Self Consolidating Concrete (SCC).

CHARACTERISTICS / ADVANTAGES

Water Reduction: Sika® ViscoCrete®-2100 can be dosed in small amounts to obtain water reduction from 10-15%, and will achieve water reduction up to 45% at high dosage rates. Sika® ViscoCrete®-2100 is suitable for all levels of water reduction.

High Plasticity: The superplasticizing action of Sika® ViscoCrete®-2100 provides high slump, flowing concrete that maintains excellent workability and may be placed with minimal vibration even at very low water cement ratio's as low as 0.25. Sika® ViscoCrete®-2100 plasticized concrete is highly fluid while maintaining complete cohesion within the concrete matrix to eliminate excessive bleeding or segregation.

Extended Slump Life and Set Control: Sika® ViscoCrete®-2100 has been formulated to provide controlled and predictable extended slump life for periods of 60 to 90 minutes with normal set times, The combined high range water reduction and superplasticizing action of Sika® ViscoCrete®-2100 provide the following benefits in hardened concrete:

- Higher ultimate strengths allow for greater engineering design flexibility and structural economies.
- Reduced water cement ratios produce more durable, dense concrete with reduced permeability.
- Highly effective plasticizer reduces surface defects in concrete elements and improves aesthetic appearance.
- It has been formulated to provide maximum water reduction and extended slump retention at low dosages. Sika® ViscoCrete®-2100 is a non-chloride based admixture, it does not contain any intentionally added chlorides.

PRODUCT INFORMATION

Packaging	Sika® ViscoCrete®-2100 is available in 55 gallon drums (208 liters), 275 gallon totes (1040 liters) and bulk delivery.
Appearance / Color	Blue Liquid
Shelf Life	Shelf life when stored in dry warehouse conditions between 50 °F and 80 °F (10–27 °C) is one year minimum.

Storage Conditions

Sika® ViscoCrete®-2100 should be stored at above 40 °F (5 °C). If frozen, thaw and agitate thoroughly to return to normal state.

Specific Gravity

Approx. 1.08

APPLICATION INFORMATION

Recommended Dosage

Dosage rates will vary according to materials used, ambient conditions and the requirements of a specific project. Sika recommends dosage at 1-6 fl.oz. per 100 lbs. (65–390 ml/100 kg) of cementitious materials for conventional concrete applications. If high slump or Self Consolidating Concrete (SCC) is required, typically dosage from 5–12 fl.oz./100 lbs. (325–780 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 1-800-933-7452 for more information and assistance.

Mixing

For best superplasticizing results, add Sika® ViscoCrete®-2100 directly to freshly mixed concrete in the concrete mixer at the end of the batching cycle. Sika® ViscoCrete®-2100 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. To optimize the superplasticizing effect, after the addition Sika® ViscoCrete®-2100, Sika recommends that the combined materials be mixed for 80-100 revolutions, either in the concrete mixer or in the Ready-Mix truck.

Combination with Other Admixtures: Sika® ViscoCrete®-2100 is highly effective as 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 a Sika representative for further information.

Combination with Microsilica: Sika® ViscoCrete®-2100 is particularly well suited for use with microsilica because of its water reduction capability and superior slump control.

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.

OTHER RESTRICTIONS

See Legal Disclaimer.

ENVIRONMENTAL, HEALTH AND SAFETY

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

LEGAL DISCLAIMER

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

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. **NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.**

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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