

PRODUCT DATA SHEET

Sika® ViscoCrete®-2110

HIGH RANGE WATER REDUCING ADMIXTURE

PRODUCT DESCRIPTION

Sika® ViscoCrete®-2110 is a high range water reducer and superplasticizer utilizing Sika's ViscoCrete® polycarboxylate polymer technology. Sika® Sika® ViscoCrete®-2110 meets the requirements for ASTM C-494 Types A and F and AASHTO M-194 Types A and F admixture.

USES

Sika® ViscoCrete®-2110 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®-2110 ideal for horizontal and vertical applications. Sika® ViscoCrete®-2110 is ideal for production of Self Consolidating Concrete (SCC).

CHARACTERISTICS / ADVANTAGES

Sika® ViscoCrete®-2110 can be used for all levels of water reduction in various types of concrete ranging from dry cast applications, conventional concrete to SCC (Self Consolidating Concrete). Sika® ViscoCrete®-2110 will deliver water reduction up to 45 %. The special formulation of Sika® ViscoCrete®-2110 increases compressive strength of concrete and helps maintain the plasticity of the concrete over prolonged period of time. Sika® ViscoCrete®-2110 extends concrete workability time during warmer months when slump loss and fast stiffening of the fresh concrete can be a concern. The superplasticizing action of Sika® ViscoCrete®-2110 provides high slump / flowing concrete that be placed with minimal or no vibration even at very low water cementitious ratios, as low as 0.25.

Water Reduction: Sika® ViscoCrete®-2110 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®-2110 is suitable for all levels of water reduction.

Plasticizing effect: The superplasticizing action of Sika® ViscoCrete®-2110 provides high slump, flowing concrete that maintains excellent workability and may be placed with minimal vibration even at very low water cementitious ratio's as low as 0.25. Sika® ViscoCrete®-2110 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®-2110 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®-2110 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. Sika® ViscoCrete®-2110 has been formulated to provide maximum water reduction and extended slump retention throughout entire dosage range.

- Extended slump life.
- Increased compressive strength when compared to reference concrete with same w/cm ratio.
- High early compressive strengths for earlier removal of forms and structural use of concrete.
- High ultimate strengths allow for greater engineering

- design flexibility and structural economies.
- Reduced water cementitious ratios produce more durable, dense concrete with reduced permeability.
- Highly effective plasticizer reduces surface defects in concrete elements and improves aesthetic appearance.
- Ideal for the production of Self Consolidating Concrete.

PRODUCT INFORMATION

Packaging	Sika® ViscoCrete®-2110 is available in 55 gallon drums (208 liters), 275 gallon totes (1040 liters) and bulk delivery.
Appearance / Color	Orange 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®-2110 should be stored at above 40 °F (5 °C). If frozen, thaw and agitate thoroughly to return to normal state.
Specific Gravity	Approx. 1.09

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 3–8 fl. oz. per 100 lbs. (195–520 ml/100 kg) of cementitious materials for general concrete applications. If maximum water reduction is required, dosage up to 12 fl.oz./100 lbs (780 ml/100 kg) of cementitious may be used. In this case, delayed setting times may occur. 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 office or technical service department at 1-800-933-7452 for further information.

Mixing For best superplasticizing results, add Sika® ViscoCrete®-2110 directly to freshly mixed concrete in the concrete mixer at the end of the batching cycle. Sika® ViscoCrete®-2110 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 at the job site. To optimize the superplasticizing effect after the addition of Sika® ViscoCrete®-2110, 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®-2110 is highly effective as a single admixture or in combination with other Sika admixtures. 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.

Combination with Microsilica: Sika® ViscoCrete®-2110 is particularly well suited for use with microsilica because of its water reduction capability. Do not introduce Sika® ViscoCrete®-2110 directly onto dry cementitious materials.

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.

Sika Corporation
201 Polito Avenue
Lyndhurst, NJ 07071
Phone: +1-800-933-7452
Fax: +1-201-933-6225
usa.sika.com

Sika Mexicana S.A. de C.V.
Carretera Libre Celaya Km. 8.5
Fracc. Industrial Balvanera
Corregidora, Queretaro
C.P. 76920
Phone: 52 442 2385800
Fax: 52 442 2250537



Product Data Sheet
Sika® ViscoCrete®-2110
November 2018, Version 01.03
021301011000000496

SikaViscoCrete-2110-en-US-(11-2018)-1-3.pdf

BUILDING TRUST

