BUILDING TRUST

PRODUCT DATA SHEET

Sikament®-610

High Range Water Reducing Admixture

PRODUCT DESCRIPTION

Sikament®-610 is a high range water reducer and superplasticizer utilizing Sika's ViscoCrete® polycarboxylate polymer technology. Sikament®-610 meets requirements for ASTMC-494 Types A and F and AASHTO M-194 Types A and F.

USES

Sikament®-610 is designed for conventional precast/prestress applications, and may also be used for the production of Self Consolidating Concrete (SCC) if needed. In this case higher dosage may be necessary and use of viscosity modifying admixture can improve the performance, especially when lean, harsh mix designs or gap graded aggregates are used.

Sikament®-610 is a high range water reducer providing excellent plasticity, and may be effectively combined with set time accelerating or retarding admixtures to control the set time and slump life.

CHARACTERISTICS / ADVANTAGES

Water Reduction: Implication of high performance polymers allows Sikament®-610 to be used for all levels of water reduction. Sikament®-610 delivers high early strength development without causing delay of setting time, while providing a window of workability that makes it useful for most concreting applications. Sikament®-610 is designed for both the production of conventional slump concrete, as well as for SCC applications.

High Plasticity and Cohesion: The superplasticizing action of Sikament®-610 allows the production of high-slump concrete without segregation such that concrete can be placed with minimal vibrations even at low water cement ratios. Sikament®-610 is typically very cost effective when used for water reduction in the range of 20–25 %. Sikament®-610 maintains excellent cohesion within the concrete matrix eliminating excessive bleeding and/or segregation. The combined high range water reduction and efficient dispersing action of Sikament®-610 provide the following benefits in hardened concrete:

- Higher early compressive strengths for earlier removal of forms and structural use of 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 dispersion reduces surface defects in concrete elements and improves aesthetic appearance.
- In combination with set time accelerators or hardening accelerators, its fast setting characteristics and fast early strength development allows users to reduce the amount of heat necessary to achieve stripping strength.

Sikament®-610 has been formulated to provide maximum water reduction and increased early strength. In addition improved finishing characteristics may be achieved, particularly when final finish, such as broom finish, is desired. Sikament®-610 does not contain calcium chloride or any other intentionally added chlorides and will not initiate or promote the corrosion of steel present in the concrete.

PRODUCT INFORMATION

Packaging	Sikament®-610 is available in 55 gallon drums (208 liters), 275 gallon totes (1040 liters) and bulk delivery.
Appearance / Color	Dark Green Liquid
Shelf Life	Shelf life when stored in dry warehouse conditions between 40 °F and 80 °F (5–27 °C) is 1 year. Protect from direct sunlight.
Storage Conditions	Sikament®-610 should be stored at above 40 °F (5 °C). If frozen, thaw and agitate thoroughly to return to normal state.
Specific Gravity	Approx. 1.05

APPLICATION INFORMATION

Recommended Dosage	Dosage rates will vary according to materials used, ambient conditions and therequirements of a specific project. Sika recommends dosage at 5–10 fl. oz. per 100 lbs. (325-650 ml/100 kg) of cementitious materials for general concrete applications. 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 such cases please contact your local regional office or technical service department at 1-800-933-7452.
Mixing	For best superplasticizing results, add Sikament®-610 directly to freshly mixed concrete in the concrete mixer at the end of the batching cycle. Sikament®-610 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 Sikament®-610, 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:** Sikament®-610 is highly effective as a single admixture or in combination with other Sika admixtures. If used with products based on naphthalene sulfonate, plastic properties such as slump, slump retention or pumpability of concrete may be affected. **Combination with Microsilica:** Sikament®-610 is particularly well suited for use with microsilica because of its water reduction capability. Please contact your local regional office or technical service department at 1-800- 933-7452 for further information.

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.**

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