

PRODUCT DATA SHEET

Sikament[®]-686

HIGH RANGE WATER REDUCING ADMIXTURE

PRODUCT DESCRIPTION

Sikament[®]-686 is a high range water reducing admixture utilizing Sika's ViscoCrete[®] polycarboxylate technology. Sikament[®]-686 meets the requirements of ASTM C494/AASHTO M 194, Type A & F.

USES

Sikament[®]-686 is designed for use in ready mix applications whenever high plasticity and increased strengths are required and is effective in concrete containing Portland Limestone Cement (PLC/Type IL) and supplementary cementitious materials. Sikament[®]-686 can be used for production of high slump/flow concrete as well as for production of conventional slump concrete.

CHARACTERISTICS / ADVANTAGES

Various levels of water reduction can be achieved by adjusting the dosage rate of Sikament[®]-686.

When used as a high range water reducing admixture, water reduction up to 30% can be obtained. The superplasticizing action of Sikament[®]-686 allows for the production of high slump/flow concrete with excellent workability that can typically be placed with minimal vibration even at a low water/cementitious ratio.

At lower dosage rates Sikament[®]-686 is an effective normal water reducing or mid-range water reducing admixture. This application is ideal for use with lean, harsh concrete mixes or concrete containing supplementary cementitious materials.

The combined water reducing and superplasticizing action of Sikament[®]-686 provides the following benefits:

- Reduced water cement ratios produce more durable, dense concrete,
- Increased slump and workability improves efficiency of labor and reduces labor costs,
- Improved finishing characteristics,
- Increased strengths allow faster structural use of concrete.

Sikament[®]-686 does not contain intentionally added chlorides.

ENVIRONMENTAL INFORMATION

Enables a substantially lower carbon footprint through reduction in cementitious materials. Reduces the amount of water required to produce concrete.

A Manufacturer Inventory is available for Sikament[®]-686.

For further information, please visit:
<https://usa.sika.com/en/sustainability.html>

PRODUCT INFORMATION

Packaging	Available in 55-gallon (208-liter) drums, 275-gallon (1040-liter) totes and bulk delivery.
Shelf Life	Shelf life when stored in original packaging in dry warehouse conditions

between 40°F and 80°F (5-27°C) is one year from the date of manufacture.

Storage Conditions	Sikament®-686 should be stored above 40°F (5°C). If frozen, thaw and agitate thoroughly to return to a normal state. Protect from direct sunlight.
Appearance / Color	Brown Liquid
Specific gravity	Approx. 1.051

APPLICATION INFORMATION

Recommended Dosage The typical dosage rate of Sikament®-686 will vary between 3-12 fl oz / 100 lb. (195-780 mL / 100 kg) of cement or cementitious materials. If maximum water reduction is required, dosage rates up to 18 fl oz / 100 lb. (1170 ml / 100 kg) or above of cement or cementitious materials may be used. Various factors will affect the dosage rates.

Trial mixes with the actual materials should be conducted to determine the required dosage for optimum performance.

To the extent specialized materials are used, extreme ambient temperatures are encountered, or for other unusual project conditions, dosage rates outside the typical range may be required. For dosage rates outside the typical range, please contact your local Sika representative or the Sika Technical Services Department at 1-800-933-7452.

Mixing Measure the required quantity manually or by automated dispenser. Add Sikament®-686 directly into the freshly mixed concrete, or as an integral material in the batching cycle. Do NOT mix with dry cement. Sikament®-686 may be dispensed on-site directly prior to placement. Care must be taken to mix thoroughly. When used in combination with other admixtures dispense each admixture separately into the mix.

Compatibility: Sikament®-686 can be used in combination with other Sika admixtures and can be successfully used in mix designs utilizing supplementary cementitious materials. If used in combination with certain Sikament® high range water reducers, it may affect the plastic properties of fresh concrete.

BASIS OF PRODUCT DATA

See Legal Disclaimer.

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

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.

OTHER RESTRICTIONS

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BUILDING TRUST



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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