PRODUCT DATA SHEET
Sikament® AFM

MID RANGE WATER REDUCING ADMIXTURE

PRODUCT DESCRIPTION
Sikament® AFM is a mid range water reducing admixture utilizing Sika’s ViscoCrete® Technology. Its unique formulation is based on latest polycarboxylate technology. Sikament® AFM is designed to meet the requirements for ASTM C-494 Types A and F.

USES
Sikament® AFM is recommended for use in the production of conventional ready mixed concrete, whenever high plasticity and increased early and ultimate strengths are desired. The superplasticizing action of Sikament® AFM provides excellent workability at reduced water cement ratios.

Mid Range applications:
- Concrete slabs
- Concrete footings
- Concrete paving

CHARACTERISTICS / ADVANTAGES
Mid Range Water Reducing Applications: Mid range application will be beneficial especially in ready mix applications. At a lower dosage, Sikament® AFM 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 ready mix concrete mixes or concrete containing flyash. Sikament® AFM will improve workability and finishability.

High Range Water Reducing Applications: When used as a high range water reducing admixture, water reduction up to 25 % can be obtained. The superplasticizing action allows for the production of high slump flowing concrete with excellent workability that can be placed with minimum vibration even at a low water/cement ratio. The dispersing action of Sikament® AFM maximizes cement hydration efficiency and improves concrete’s early and long term compressive strengths.

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.
- Increased slump improves workability and reduces labor costs.
- Full flow action aids in pumping and reduces need for vibration.
- Greater concrete density reduces permeability and increases durability.

Sikament® AFM does not contain calcium chloride or any
other intentionally added chlorides and will not contribute to corrosion on steel reinforcement present in the concrete.

PRODUCT INFORMATION

Packaging
Sikament® AFM is available in 55 gallon drums (208 liter), 275 gallon totes (1040 liters) and bulk delivery.

Appearance / Color
Dark Brown/Green 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
Sikament® AFM 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. 1.1

APPLICATION INFORMATION

Recommended Dosage
Dosage rates will vary depending on the material used, ambient conditions and the requirements of a specific project. For general concreting applications, Sika recommends a dosage rate between 3–12 fl. oz. / 100 lbs. (195–780 ml / 100 kg) of 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. 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 Sika representative or Sika Technical Service department at 1-800-933-7452 for further information.

Mixing
Mixing for best plasticizing results, Sikament® AFM should be added directly to freshly mixed concrete in the concrete mixer at the end of the batching cycle. Sikament® AFM 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.

Combination with Other Admixtures: Sikament® AFM is highly effective as a single admixture or in combination with other 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 Pozzolanic Materials: Sikament® AFM is particularly well suited for use with pozzolanic materials such as fly ash and GGBFS because of its water reduction capability.

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

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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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