

PRODUCT DATA SHEET

SikaPlast[®]-500

MID RANGE WATER REDUCING ADMIXTURE

PRODUCT DESCRIPTION

SikaPlast[®]-500 is a mid range water reducing admixture utilizing Sika's ViscoCrete[®] Technology. It's unique formulation is based on latest polycarboxylate technology. SikaPlast[®]-500 is designed to meet the requirements for ASTM C-494 Types A and F.

USES

SikaPlast[®]-500 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 SikaPlast[®]-500 provides excellent workability at reduced water cement ratios. SikaPlast[®]-500 is specifically suitable in following applications:

- Concrete slabs
- Concrete footings
- Concrete paving
- Harsh mix designs with low cement content

CHARACTERISTICS / ADVANTAGES

Low Range Water Reducing Applications: SikaPlast[®]-500 can be used as an economical low dosage admixture for conventional slump concrete, where water reduction up to 5% is required. SikaPlast[®]-500 shows similar setting properties as a reference concrete. By reducing water SikaPlast[®]-500 improves durability and increases compressive strength.

Mid Range Water Reducing Applications: Mid range application will be beneficial especially in ready mix applications. At a medium dosage, SikaPlast[®]-500 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 12 % can be obtained. This application is ideal for use with lean, harsh ready mix concrete mixes or concrete containing fly ash. SikaPlast[®]-500 will improve workability and finishability.

High Range Water Reducing Applications: When used as a high range water reducing admixture, water reduction up to 20 % 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 SikaPlast[®]-500 maximizes cement hydration efficiency and improves concrete's early and long term compressive strengths. The combined water reducing and superplasticizing action in all three cases provide the following benefits:

- Higher early and ultimate strengths.
- Increased slump improves ease of placement and reduces labor costs.
- Reduced water/cementitious ratio reduces permeability and increases durability.

SikaPlast[®]-500 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	SikaPlast®-500 is available in 55 gallon drums (208 liters), 275 gallon totes (1040 liters) and bulk delivery.
Appearance / Color	Dark Brown 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	SikaPlast®-500 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. 1.15

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 of between 3–12 fl.oz. /100 lbs. (195–780 ml/100 kg) 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 will likely 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	<p>For best plasticizing results, SikaPlast®-500 should be added directly to freshly mixed concrete in the concrete mixer at the end of the batching cycle. SikaPlast®-500 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.</p> <p>Combination with Other Admixtures: SikaPlast®-500 is highly effective as a single admixture or in combination with other admixtures. Please contact your local regional office or Technical Service Department at 1-800-933-7452 for further information.</p> <p>Combination with Pozzolanic Materials: SikaPlast®-500 can be successfully used in mix designs utilizing pozzolanic materials such as fly ash and GGBFS</p>

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.

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

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

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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