



PRODUCT DATA SHEET

WCA-200

SODIUM SILICATE LIQUID SHOTCRETE ACCELERATOR

PRODUCT DESCRIPTION

WCA-200 is a non-chloride, liquid set accelerating admixture for wet-mix shotcrete applications.

USES

WCA-200 can be used to accelerate setting of wet-mix shotcrete for applications including but not limited to:

- General construction work,
- Repair and rehabilitation of concrete structures,
- Excavation stabilization of face and within tunnel and mine construction,
- Rock, slope, and trench stabilization,
- High quality lining shotcrete.

CHARACTERISTICS / ADVANTAGES

WCA-200 is suitable for use in steel reinforced shotcrete and substrates. WCA-200 provides the following benefits:

- High early strength development,
- Reliable long-term strength and durability,
- Easier overhead spraying by improved adhesion of shotcrete to substrate,
- Distinct reduction of rebound and dust,
- Improved bond of shotcrete to the substrate.

PRODUCT INFORMATION

Chemical Base	Silicate Base
Packaging	Available in 275-gallon (1040-liter) totes and bulk delivery.
Shelf Life	Shelf life when stored in original packaging in dry warehouse conditions between 41°F and 104°F (5-40°C) is one year from the date of manufacture.
Storage Conditions	WCA-200 should be stored above 41°F (5°C). If frozen, thaw and agitate thoroughly to return to a normal state. Protect from direct sunlight.
Density	Approx. 1.410

APPLICATION INFORMATION

Recommended Dosage

The typical dosage rate of WCA-200 when Ordinary Portland Cement (OPC) is greater than 65% will vary between 4-9% by weight of cementitious/binding material.

Trial mixes with the actual materials should be conducted to determine the required dosage for optimum performance. The required dosage for a mix design may change with fluctuations in the ambient temperature.

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, contact your Sika STM Technical Representative.

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.

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.

APPLICATION INSTRUCTIONS

WCA-200 is dosed and added on-site by a liquid dispensing system. Optimum dispersion in the shotcrete is governed by nozzle configuration and shotcreting techniques.

The accelerator's effect depends on the content, age and type of cement, as well as on the shotcrete temperature. Furthermore, the shotcrete quality is widely affected by the substrate, the applied layer thickness, the spraying process, the quality of equipment and the application technique. The w/c ratio of the basic concrete mix in the wet-mix shotcrete application directly influences the acceleration effect of WCA-200. Preliminary trials are required to determine correct dosage for project requirements.

Please contact your Sika STM Technical Representative for any additional technical support required.

EQUIPMENT

All equipment in contact with WCA-200 must be cleaned thoroughly before use. All preliminary trials must be conducted with the same equipment as intended for use of project.

Please contact your Sika STM Technical Representative for any additional technical support required.

OTHER RESTRICTIONS

See Legal Disclaimer.

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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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