

PRODUCT DATA SHEET

SikaTop[®]-501 Seal

(formerly MSeal 501)

Cement Based Capillary Crystalline Waterproofing Material

DESCRIPTION

SikaTop[®]-501 Seal is a cement based capillary crystalline waterproofing material that is applied against surface waters in old and new structures from negative and positive directions.

USES

- Interior and exterior areas for vertical and horizontal applications
- Water tanks
- Tunnels
- Elevator pits
- Supporting walls, dams and harbors

CHARACTERISTICS / ADVANTAGES

- Easy to prepare and apply.
- Applied by brush.
- Long working time.
- SikaTop[®]-501 Seal fills the capillary gaps by forming permanent (insoluble) crystals and enables water impermeability.
- Protects concrete.
- Resistant to negative and positive water pressure.
- Water vapor permeable.
- Resistant to freeze-thaw cycle.

APPROVALS / STANDARDS

Complies with EN 1504-2

PRODUCT INFORMATION

Chemical Base	Mineral Fillers, Polymer Modified Additives and Special Cement
Packaging	20 kg polyethylene reinforced kraft bag
Shelf Life	6 months from date of production
Storage Conditions	The product must be stored properly in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5 °C and +30 °C.
Appearance / Colour	Grey

APPLICATION INFORMATION

Consumption	1.00 kg/m ² powder (~1.30kg/m ² mixture) for each coat. Two coats in total.	
Mixing Ratio	SikaTop[®]-501 Seal	With brush
	Mixture water	6,00 liter
	Density of mixture	2,00 kg/liter
Substrate Temperature	between +5°C and +30°C	

Pot Life

20 minutes (+23°C, 50% relative humidity)

Waiting Time / Overcoating

When the first layer sufficiently cured apply the second coat. This period may change between 3 to 5 hours depending on environmental temperature. Application period between each layer must be less than 6 hours.

BASIS OF PRODUCT DATA

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

USES

- Wait for the appropriate ambient and substrate temperature if it is less than +5°C or more than +30°C.
- Do not apply SikaTop®-501 Seal under the rain or prediction of rainy weather.
- Application must be protected from direct sun light, wind, frost or rain in 24 hours.
- SikaTop®-501 Seal applied in +23°C gains mechanical strength after 1 day, becomes impermeable to water after 7 days and gains final strength after 14 days.
- Working times of cement based systems are affected from environmental and surface temperatures and relative humidity in the air. In low temperatures the reaction slows down and this increases working period and working time. High temperatures accelerate the reaction and the periods stated above decrease depending on this. In order to complete the curing of material, environmental and surface temperatures must not decrease below the minimum allowed temperatures.
- Prepared material must be used in 20 minutes.

ECOLOGY HEALTH AND SAFETY**APPLICATION INSTRUCTIONS****SUBSTRATE QUALITY / PRE-TREATMENT**

The substrate must be structurally sound and free of all traces of contaminants, loose and friable particles, cement laitance, oil and grease etc. The substrate must be prepared by suitable mechanical preparation techniques such as high pressure water jetting, needle guns, blastcleaning, scabblers etc. Clean fine pored for adhesion. And properly pre-wetted to a saturated surface dry condition. Any water infiltration on the substrate should be plugged with Sika® Monoplug product. Tie rod holes, if any, should be filled with Sika® Monotop products. Local water concentrations on the substrates should be removed using a sponge.

MIXING

SikaTop®-501 Seal powder in a clean mixing container. Add recommended amount of water while mixing with a 400-600 RPM mixer at least for 3-5 minutes until a homogenous and uniform mixture is obtained. After waiting for 3-5 minutes, mix again for approximately 30 seconds and it becomes ready to use.

APPLICATION

Apply SikaTop®-501 Seal with brush on the dampened substrate. When the first layer sufficiently cured apply the second coat. This period may change between 3 to 5 hours depending on environmental temperature. Application period between each layer must be less than 6 hours.

CURING TREATMENT

After SikaTop®-501 Seal application, material must be protected from losing its water rapidly. Do not use curing compounds. SikaTop®-501 Seal must be kept wet for 5-7 days.

CLEANING OF TOOLS

Clean all tools and application equipment with clean water immediately after use. Hardened / cured material can only be removed mechanically.

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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Product Data Sheet

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