BUILDING TRUST

PRODUCT DATA SHEET

# SikaTop®-530 Seal

(formerly MSeal 530)

Surface Applied Capillary Waterproofing for Concrete and Mortar

## DESCRIPTION

SikaTop®-530 Seal consists of a blend of moisture activated chemicals, high-grade silica aggregates and selected cements. It waterproofs through the formation and development of crystals in water bearing capillaries and interstices, effectively blocks the further passage of water and ensures permanent water tightness of the structure.

## USES

SikaTop®-530 Seal is recommended for areas such as:
- static construction joints (new construction);
- water tanks and towers, reservoirs, dams, canals;
- water treatment works, harbours;
- concrete pipes, sumps, foundations;
- retaining walls, life shafts;
- sea defence walls, bridge decks, jetties, pontoons.

## CHARACTERISTICS / ADVANTAGES

- **Forms crystals in concrete pores; waterproofs by becoming an integral part of the structure** – Active ingredients will not delaminate, peel off or wear away.
- **Vapour permeable** – Allows surface to breathe, preventing build-up of vapour pressure.
- **Brushable consistency** – Easy to apply by brush or spray.
- **Unrestricted application** – Effective against both positive and negative water pressure.
- **One component** – Economical to use.
- **Non-Toxic**

## PRODUCT INFORMATION

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| **Packaging** | 25 kg bags | |
| **Appearance / Colour** | **Form** | **Colour** |
| | Powder | Grey |
| **Shelf Life** | 9 months from date of manufacture when stored in tightly sealed original packaging, if kept dry and at constant temperature. | |
| **Storage Conditions** | Store in dry, cool, and shaded place conditions at temperatures between +5 °C and +30 °C. | |
| **Density** | 2.02 kg/m³ (mxed) | |

## TECHNICAL INFORMATION

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| **Tensile Adhesion Strength** | 1 N/mm² |

## APPLICATION INFORMATION

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| **Mixing Ratio** | 7 to 8 L water per 25 kg bag | |
| **Consumption** | For brush application | 1 - 1.5 kg/m² per coat |
| | For trowel application | 2 - 2.5 kg/m² per coat |
| | Actual consumption depends on the porosity and surface profile of the substrate and wastage. | |
| **Ambient Air Temperature** | > 5° C | |
| **Initial Set Time** | 90 min (Approx.) | |
| **Final Set Time** | 110 min (Approx.) | |

## 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.

## ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet (MSDS) containing physical, ecological, toxicological and other safety-related data.

## APPLICATION INSTRUCTIONS

**New Construction**
SikaTop®-530 Seal can be applied immediately after the formwork has been removed, as the water curing process required for SikaTop®-530 Seal will also ensure full hydration of the concrete.
If treatment is to be exposed and an aesthetically pleasing finish is required, the SikaTop®-530 Seal, after curing, should receive a sand / cement render onto which the desired finish is applied.

**Existing**
Structures subject to water leakage or ingress must be carefully inspected to determine the cause. Any water present should be diverted away so that a thorough survey can be conducted. Static cracks over 1mm must be chased out, dampened down and repaired with a Sika repair mortar product range.
Dynamic cracks must be formed into watertight movement joints and sealed, using elastomeric sealant.
The rate and penetration of crystalline development will vary with the density and surface absorption of the concrete.
In powder form, the product may be used as a dry shake on horizontal construction joints.

### SURFACE PREPARATION

Surfaces to be treated must be free from dust, oil, grease, paint, residual curing compound, mould oil or any previous surface treatment that will impair adhesion of SikaTop®-530 Seal treatment or inhibit penetration of the chemicals into the surface. These include polymer-modified renders and those substrates treated with silicon or silane water repellents. Areas of weak or honeycombed concrete must be repaired. Hollow debonded renders must be removed and made good. Surfaces to be treated that are not damp must be pre-wetted and still be damp at the time of application.

### MIXING

Mechanical mixing is necessary. Mix 25kg of SikaTop®-530 Seal with 7 to 8L of water using a slow speed (60rpm), heavy duty electric drill fitted with a grout stirrer. Amount of water can be reduced depend on required consistency.
When the mixer is running, add clean mixing water to the SikaTop®-530 Seal powder to achieve the consistency required. Mix for al least 3 minutes to get a lump-free, homogeneous and creamy consistency. If applying to vertical surfaces, water may have to be reduced to achieve the desired consistency to minimise the run off on the surface. Do not add additional water after initial mixing.

## APPLICATION

### Placing
SikaTop®-530 Seal mixes are applied by brush or spray onto the dampened substrate. Apply the material in 2 coats at right angles, the second coat whilst the first is firm, but 'green' – usually 3 to 4 hours after first coat (dependant on temperature).

### Plugging leaks
Leaks and holes drilled to relieve water pressure can be sealed permanently.

**Note**: SikaTop®-530 Seal waterproofing is not suitable for subsequent decoration unless first protected by sand / cement render.

## CURING TREATMENT

Slow drying of SikaTop®-530 Seal membrane ensures ho-mogeneous curing and high waterproofing characteristics. SikaTop®-530 Seal must be protected against rapid drying due to high temperatures or wind. Cure by wet burlap, plastic sheet or mist spraying.
Curing compounds are unsuitable for use with SikaTop®-530 Seal system technology. Tanks and other water retaining structures may be filled 24 hours after final SikaTop®-530 Seal application as crystal growth is accelerated by water pressure.

## CLEANING OF TOOLS

Clean tools and equipment with water, before the waterproofing material hardens.

# 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. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.