BUILDING TRUST

PRODUCT DATA SHEET

SikaTop®-599 Seal

(formerly MSeal 599)

High range elastomeric, cement-based waterproof coating for concrete and masonry

DESCRIPTION

SikaTop®-599 Seal is a high-performance, flexible, cementitious waterproofing mortar designed for concrete and masonry surfaces. SikaTop®-599 Seal is ideal for applications requiring crack-bridging capability and resistance to water pressure. When mixed with the compatible emulsion, it forms a smooth, workable slurry that can be easily applied by brush or spray equipment. Upon curing, it develops into a durable, elastomeric membrane, providing long-lasting protection against water ingress.

USES

- Ideal for waterproofing water-retaining structures subject to movement, such as water tanks, pools, and reservoirs.
- Suitable for basement waterproofing systems in areas sensitive to movement, vibrations, or minor settlement.
- Provides protection for concrete against water ingress, carbonation, and de-icing salts.
- Can be applied internally and externally, effective against both positive and negative water pressure.

FEATURES

- Flexible, even under continuous immersion
- Resistant to soft water, domestic wastewater, and mildly aggressive liquids
- Durable against freeze-thaw cycles
- Water-vapour permeable while providing CO_2 protection
- Excellent crack-bridging capability
- UV-stable for long-term exposure
- Quick and easy application by brush or spray
- Can be applied on damp substrates
- Thin-layer application for efficient coverage
- Equipment cleans easily with water
- Can be applied on damp substrates

PRODUCT INFORMATION

Packaging	Pre-batched 35.0 kg units:	
	Part A (Liquid)	10 kg
	Part B (Powder)	25 kg
Appearance and colour	Part A: White Liquid Part B: White or Grey Powder	
Shelf life	12 months from date of production date if stored properly in original unopened packaging.	
Storage conditions	Product must be stored in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5 °C and +35 °C. Protect from direct sunlight.	

Maximum grain size	Dmax: ~0,63 mm

TECHNICAL INFORMATION

Tensile strength	≥ 1.3 N/mm²	@ 28 days	(ASTM D 412)
Elongation	≥ 45%	@ 28 days	(ASTM D 412)
Tensile adhesion strength	~ 1.1 N/mm²		(BS EN 1542)
Permeability to liquid water	Nil	@ 5 bar	(BS EN 12390: Part 8)

APPLICATION INFORMATION

Consumption	0.75-1 kg/m²/coat This figure is theoretical and does not allow for any additional material due to surface porosity, surface profile, variations in level, wastage or any other variations. Apply product to a test area to calculate the exact consumption for the specific substrate conditions and proposed application equipment.
Ambient air temperature	+ 5 °C min. / + 35 °C max.
Substrate temperature	+ 5 °C min. / + 35 °C max.
Pot Life	~1 hour at +20 °C
Final set time	~2 hour at +20 °C
Fresh mortar density	~ 1.75 kg/l

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.

LIMITATIONS OF USE

- Protect freshly applied material from rain until at least 24–48 hours after application.
- Avoid direct contact with chlorinated swimming pool water.
- The product is not a vapour barrier and may transmit vapour to applied coatings and cause blistering.
- The hardening process is slower when there is a high environmental humidity level, e.g. in closed or inadequately
- ventilated rooms and basements. Controlled ventilation methods are recommended.
- Avoid application during direct sun and/or strong wind exposure.
- When over-coating with solvent paints always carry out preliminary trials to ensure the solvent does not affect the integrity of the waterproofing layer.
- Do not overpaint in basements or other structures where the membrane is subject to negative water pressure.

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 Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

The substrate must be structurally sound, clean, and free from contaminants such as dust, grease, oil, laitance, release agents, previous coatings, or any material that could affect adhesion.
Surface preparation shall be carried out using mechanical cleaning methods such as high-pressure water jetting or grit blasting to achieve an open-textured, slightly rough surface with good cohesion. Aggressive percussive methods, such as scabbling, are not recommended as they may damage the substrate.
All defective areas, cracks, and voids must be repaired with suitable products from the Sika MonoTop® range. For guidance on selecting appropriate repair materials and application techniques, please contact Sika's Technical Department.
Before application, saturate the substrate with clean water for a minimum of 2 hours, ensuring all pores and voids are adequately wetted. Remove excess surface water before applying SikaTop®-599 Seal. The substrate must be saturated surface dry (SSD), i.e. dark matt in appearance, with no standing water.

MIXING

Important: Do not add water or any other constituents.
Shake Part A (liquid polymer) thoroughly before use. Pour approximately half of Part A into a clean mixing container. Gradually add Part B (powder) while mixing with a low-speed (≈ 500 rpm) electric single-paddle mixer or other suitable equipment until a uniform consistency is achieved. Add the remaining Part A and continue mixing for at least 3 minutes until a smooth, homogeneous slurry is obtained. Mix only quantities that can be applied within the stated pot life.
Do not use concrete mixers. Mixing must be carried out in clean containers with professional equipment. Incomplete or improper mixing may impair product performance.

APPLICATION

Ensure the substrate and ambient conditions comply with the requirements stated. Do not apply under direct sunlight, strong wind, or rain, or when temperatures are below +8 °C or expected to fall below this within 24 hours.
SikaTop®-599 Seal may be applied by brush, roller, or spray equipment, depending on site conditions and desired finish.
Apply the first coat uniformly, working the material firmly into the surface to fill pores and voids.
Allow the first coat to harden before applying the second (typically after 4–6 hours, depending on temperature and humidity).
Apply the second coat in a crosswise direction to the first to ensure complete coverage and eliminate pinholes.
For critical areas such as joints, corners, or cracked substrates, embed Sika® fiber mesh into the first coat while it is still fresh and fully cover it with the second layer.
Ensure all transitions, edges, and details are fully covered to maintain a continuous waterproofing barrier.
Protect freshly applied material from rain, frost, direct sunlight, and rapid drying. Do not apply beyond the product's pot life.

CURING TREATMENT

SikaTop®-599 Seal requires moist curing to achieve full hydration and optimal performance. Protect the coated surface from rapid drying, rain, frost, and direct sunlight during the curing period. Keep the surface damp for at least 3–5 days using light misting, damp hessian, or polyethylene sheeting. This ensures proper development of mechanical strength, adhesion, and crack-bridging properties. Do not apply water pressure or additional layers until the membrane is fully cured. In hot, sunny, or windy conditions, shading or intermittent misting is recommended to prevent premature drying.

CLEANING OF EQUIPMENT

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

DISPENSING

Dispose of waste and cleaning water in accordance with local environmental regulations.

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. 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.

Sika Egypt
1st Industrial Zone (A)
Section #10, Block 13035
El Obour City, Egypt
TEL: +202 44810580
FAX: +202 44810459
egy.sika.com