

# PRODUCT DATA SHEET

# SikaSeal®-105

#### MULTI-PURPOSE WATERPROOFING SLURRY

#### **DESCRIPTION**

SikaSeal®-105 is a cement based, polymer modified, 2-component, multipurpose waterproofing slurry. SikaSeal®-105 combines a crystallization action and pore blocking effect with the excellent waterproofing ability of special polymers, fillers, and properly graded aggregates.

Suitable for use in tropical and hot climatic conditions.

#### **USES**

SikaSeal®-105 is used as an economical and easy to use waterproofing slurry both for external and internal applications. SikaSeal®-105 is suitable for the following applications:

- Water and sewage works, such as tanks and manholes
- Basements and lift pits
- Retaining walls and bridge structures
- Sea walls and irrigation channels
- Balconies, bathrooms etc.

SikaSeal®-105 can be used against positive and negative water pressure.

### **CHARACTERISTICS / ADVANTAGES**

SikaSeal®-105 is part of a complete Sika System for the economical water proofing of water containment structures. SikaSeal®-105 offers the following advantages:

- Pre-batched components (no water added).
- Impermeable
- Brush, trowel or spray applied.
- Good adhesion to sound substrates

#### PRODUCT INFORMATION

Composition	Cement, selected graded aggregates and polymer dispersion.	
Packaging	25 kg units (5 kg pails of component A and 20 kg bags of component B)	
Appearance / Colour	Component A: White liquid Component B: Grey powder	
Shelf life	12 months minimum from production date if stored properly in original unopened packaging.	
Storage conditions	Store in a dry area in original sealed packaging between 5 °C and 35 °C. Protect from direct sunlight.	
Density	~2.00 kg/l at 23 °C (fresh mortar)	
Maximum Grain Size	~0.6 mm	

Product Data Sheet SikaSeal®-105 October 2016, Version 01.01 020701010020000026

Compressive Strength	>30 N/mm² (28 days)	(EN 196)
Tensile Strength in Flexure	~9.6 N/mm² (28 days)	(EN 196)
Tensile Adhesion Strength	~1.5 N/mm²	(ASTM D 4541)

#### APPLICATION INFORMATION

Mixing Ratio	Used as slurry, A: B	1:4 by weight	
	Used as mortar, A : B	1: 4.5 by weight	
Consumption	2.0 kg/m² minimum / 4.0 kg/m² maximum.  Consumption depends on substrate roughness, surface profile, wastage etc. For water retaining structures, use total of 4.0 – 8.0 kg/m² of SikaSeal®-105 depending on water head. Apply a minimum of two coats. For damp proofing, use a minimum of 2.0 kg/m².		
Layer Thickness	1 mm min. / 2 mm max. per coat		
Ambient Air Temperature	+5 °C min. / +40 °C max.		
Substrate Temperature	+5 °C min. / +40 °C max.		
Pot Life	+25 °C	+40 °C	
	~60 min.	~30 min.	
Waiting Time / Overcoating	coats. 5 to 7 days approximately (de	Approximately 3 hours maximum at 30 °C before applying subsequent coats. 5 to 7 days approximately (depending on thickness) before painting with compatible decorative coatings.	

#### **APPLICATION INSTRUCTIONS**

#### **SUBSTRATE QUALITY / PRE-TREATMENT**

Surfaces must be clean, sound, free from grease, oil and loosely adhering particles.

The substrate must have a pull-off strength (tensile adhesive) of at least 1.0 N/mm<sup>2</sup>.

Use suitable mechanical methods such as abrasive blast cleaning, high pressure water jetting (minimum 150 bar), scabbling or needle guning. New or smooth faced concrete surfaces should be sandblasted. All surfaces must be as true and flat as possible. Blowholes and irregularities should be filled with suitable SikaTop® / Sika MonoTop® products.

Saturate absorbent concrete surfaces thoroughly with water to achieve a surface saturated dry condition.

#### MIXING

Stir component A (liquid) thoroughly before pouring into a clean mixing container.

Add component B (powder) slowly while mixing continuously. Use forced action mixers or low speed electric mixers (maximum 500 rpm) with basket type mixing blades for 3 minutes avoiding entrapment of air. By adding the powder in portions, the desired application consistency can be obtained. For a trowelable consistency use about 90 % of component A approximately 4.5 kg).

#### **APPLICATION**

While the substrate is still in a saturated surface dry condition, apply the first coat by notched trowel and leave to harden. Apply the second coat as soon as possible, after hardening of the first coat, to ensure proper adhesion between layers.

**Slurry:** Apply by spray or with a hard bristle brush or broom. Apply the second coat at right angles to the first.

Mortar: For the trowelable mortar use a notched trowel for the first coat. Apply the second coat into the notches and smoothen the surface. For floor applications, to avoid risk of damage to the first coat, it is recommended to apply the second coat after 24 hours. In such cases, the first coat should be slightly re-wetted. After application of the second coat, finish SikaSeal®-105 by rubbing down with a soft dry sponge.

**Spray:** The product can also be sprayed with a suitable mortar pump. For example Wagner PlastCoast 830 spraypack and a 4 mm nozzle. Refer to Sika's Technical Department for further advice.

In case of a third coat, scratch the surface of the second coat with the edge of the trowel to provide a mechanical key.

For further information please consult our Technical Department.



#### **CURING TREATMENT**

Protect from rapid drying by applying a Sika® Antisol® curing compound or protecting with polythene sheeting.

#### **CLEANING OF EQUIPMENT**

Clean all tools and equipment with clean water immediately after use.

Hardened / cured material can only be removed mech-

#### IMPORTANT CONSIDERATIONS

Avoid application in direct sun and/or strong wind. Protect from rain and other forms of moisture and liquids until cured as 'blooming' might result. SikaSeal®-105 is not designed as an aesthetic coating. Do not add water under any circumstances. Apply only to sound, prepared, pre-dampened substrates

#### **BASIS OF PRODUCT DATA**

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

#### **LOCAL RESTRICTIONS**

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for the exact product data and uses.

## **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.

#### **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.

SIKA NORTHERN GULF

Bahrain / Qatar / Kuwait Tel: +973 177 38188 sika.gulf@bh.sika.com gcc.sika.com



ISO 9001: Sika UAE LLC, Sika Gulf B.S.C. (c), Sika Saudi Arabia Co. Ltd, Sika Qatar LLC ISO 14001: Sika UAE LLC, Sika Gulf B.S.C. (c),

SIKA SOUTHERN GULF

Tel: +971 4 439 8200

UAE / Oman / SIC

info@ae.sika.com

gcc.sika.com

SIKA SAUDI ARABIA

Rivadh / Jeddah / Dammam Tel: +966 11 217 6532 info@sa.sika.com gcc.sika.com

SikaSeal-105-en-AE-(10-2016)-1-1.pdf

