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# PRODUCT DATA SHEET Sikasil<sup>®</sup> Pool

### Silicone sealant for swimming pools and wet areas

### DESCRIPTION

Sikasil<sup>®</sup> Pool is a one component, neutral curing silicone sealant for use in swimming pools and permanently wet areas.

### USES

Sikasil<sup>®</sup> Pool is designed for joints in and around swimming pools, areas under permanent water immersion and frequently wet areas between tiles, concrete, glass and metals.

### **PRODUCT INFORMATION**

### **CHARACTERISTICS / ADVANTAGES**

- Very good water resistance
- High chlorine resistance
- Very good resistance to fungal attack
- Non-corrosive
- High elasticity and flexibility

Chemical Base	Neutral cure silicone	Neutral cure silicone		
Packaging	300 ml cartridges, 12 cartridges per box	300 ml cartridges, 12 cartridges per box		
Colour	White, grey, transparent	White, grey, transparent		
Shelf Life	Sikasil <sup>®</sup> Pool has a shelf life of 12 months from the date of production, if it is stored properly in undamaged, original, sealed packaging, and if the storage conditions are met.			
Storage Conditions	Sikasil <sup>®</sup> Pool shall be stored in dry conditions, protected from direct sun- light and at temperatures between +5 °C and +25 °C.			
Density	~1,05 kg/l (	ISO 1183-1)		

### **TECHNICAL INFORMATION**

Shore A Hardness	~20 (after 28 days) (ISO 868)		
Tensile Strength	~1,5 N/mm²	(ISO 8339)	
Secant Tensile Modulus	~0,30 N/mm <sup>2</sup> at 100 % elongation (23 °C)	(ISO 8339)	
Elastic Recovery	> 90 %	(ISO 7389)	
Tear Propagation Resistance	~4,0 N/mm	(ISO 34)	
Movement Capability	± 25 %	(ISO 9047)	

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The joint width must be designed to suit the joint movement required and the movement capability of the sealant. The joint width shall be  $\geq$  10 mm. Sikasil<sup>®</sup> Pool shall not be used on joints with widths  $\geq$  15 mm and depths or thicknesses  $\geq$  6 mm must be applied.

For larger joints please contact Sika Technical Service.

### **APPLICATION INFORMATION**

Consumption	Joint length [m] per 300 ml cartridge 3,5 2	Joint width [mm]	Joint depth [mm]		
				10	
			Backing Material	Use closed cell, polyethylene foam backing rods.	
Sag Flow	< 2 mm (20 mm profile, 2	(ISO 7390)			
Ambient Air Temperature	+5 °C min. / +40 °C max.				
Substrate Temperature	+5 °C min. / +40 °C max.				
	min. 3 °C above dew point temperature				
Curing Rate	~2,0 mm/24 h (23 °C / 5	(CQP 049-2)			
Skin Time	~5 min (23 °C / 50 % r.h.)		(CQP 019-1)		

### **APPLICATION INSTRUCTIONS**

#### SUBSTRATE PREPARATION

The substrate must be clean, dry, sound and homogeneous, free from oils, grease, dust and loose or friable particles. Sikasil® Pool adheres without primers and/or activators.

However, for optimum adhesion and critical, high performance applications, such as on multi-story buildings, highly stressed joints, extreme weather exposure or water immersion, the following priming and/or pretreatment procedures shall be followed:

#### Non-porous substrates

Aluminium, anodised aluminium, stainless steel, glass, galvanised steel, powder coated metals or glazed tiles have to be cleaned and pre-treated using Sika<sup>®</sup> Aktivator-205, wiped on with a clean towel. Before sealing, allow a flash-off time of > 15 minutes (< 6 hours). Other metals, such as copper, brass and titanium-zinc, also have to be cleaned and pre-treated using Sika<sup>®</sup> Aktivator-205, wiped on with a clean towel. After the necessary flash-off time, use a brush to apply Sika<sup>®</sup> Primer-3 N and allow a further flash-off time of > 30 minutes (< 8 hours) before sealing the joints. PVC has to be cleaned and pre-treated using Sika<sup>®</sup> Primer-215 applied with a brush. Before sealing, allow a flash-off time of > 30 minutes (< 8 hours).

#### **Porous substrates**

Concrete, aerated concrete and cement based renders, mortars and bricks shall be primed using Sika<sup>®</sup> Primer-3 N applied with a brush. Before sealing, allow a flash-off time of > 30 minutes (< 8 hours). For more detailed advice and instructions please contact the local Sika Technical Services Department.

Note: Primers are adhesion promoters. They are neither a substitute for the correct cleaning of a surface, nor do they improve the strength of the surface significantly.

#### **APPLICATION METHOD / TOOLS**

Sikasil<sup>®</sup> Pool is supplied ready to use. After the necessary substrate preparation, insert a suitable backing rod to the required depth and apply any primer if necessary. Insert a foil pack or cartridge into the sealant gun and extrude Sikasil<sup>®</sup> Pool into the joint making sure that it comes into full contact with the sides of the joint and avoids any air entrapment. Sikasil<sup>®</sup> Pool sealant must be firmly tooled against the joint sides to ensure adequate adhesion. It is recommended to use masking tape where exact joint lines or neat lines are required. Remove the tape within the skin time. Use a compatible tooling agent (e.g. Sika<sup>\*</sup> Tooling Agent N) to smooth the joint surfaces. Do not use tooling products containing solvents.

#### **CLEANING OF TOOLS**

Clean all tools and application equipment immediately after use with Sika<sup>®</sup> Remover-208 and/or Sika<sup>®</sup> Top-Clean T. Once cured the residual material can only be removed mechanically.

### FURTHER DOCUMENTS

- Safety Data Sheet
- Pre-treatment Chart Sealing and Bonding

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### LIMITATIONS

- Sikasil<sup>®</sup> Pool cannot be overpainted.
- Colour variations may occur due to exposure to chemicals, high temperatures and/or UV-radiation (especially with the colour shade white). However, a change in colour is purely of aesthetic nature and does not adversely influence the technical performance or durability of the product.
- Do not use Sikasil<sup>®</sup> Pool on bituminous substrates, natural rubber, EPDM rubber or on any building materials which might bleed oils, plasticizers or solvents that could attack the sealant.
- Do not use Sikasil<sup>®</sup> Pool for structural glazing or insulated glazing, and food contact applications.
- Do not use Sikasil<sup>®</sup> Pool for medical or pharmaceutical uses.
- Before using Sikasil<sup>®</sup> Pool on natural stone, please contact our Technical Service Department for advice.

## Recommendations for use in swimming pools / warm water whirlpools:

- Cure Sikasil<sup>®</sup> Pool completely before the filling of the pool; minimum of 7 days (depending on the temperature, humidity and thickness of the sealant applied).
- The resistance of a sealant to chlorine is dependent on the pH value of the water and the amount of free chlorine.
- Sikasil<sup>®</sup> Pool can be used in swimming pools and warm water whirlpools in which a pH value between 6,5 and 7,6 is maintained, and the free chlorine remains less than 5 mg/l (5 ppm).
- To reduce the risk of fungal attack on Sikasil<sup>®</sup> Pool, the free available chlorine level shall not be ≤ 0,3 mg/l in swimming pools and ≤ 0,7 mg/l in warm water whirlpools. Continuous water circulation is required to avoid chlorine concentrations.
- If there is a very strong smell of chlorine, check the pH value accordingly.
- Do not use acid-based detergents as they increase the danger of fungal attack.
- When joints are reconstructed due to fungal attack, Sikasil<sup>®</sup> Pool must be removed completely.

### **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.

### 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.

### 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. 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.

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