BUILDING TRUST

PRODUCT DATA SHEET

Sikasil® Pool

Silicone sealant for swimming pools and wet areas

DESCRIPTION

Sikasil® Pool is a one-part, neutral curing silicone sealant. It is used in swimming pools and permanently wet areas.

USES

Sikasil® Pool is used for sealing:
- Areas under permanent water immersion
- Wet areas between tiles, concrete, glass and metals

Please note:
- Interior or exterior applications
- The Product is not suitable for medical or pharmaceutical uses.
- The Product cannot be overpainted.

The Product must not be used for joints with direct food contact.

CHARACTERISTICS / ADVANTAGES

- Good resistance to chlorinated water and common swimming pool cleaning chemicals
- Movement capability of ± 25 %
- Very good resistance to fungal attack
- Non-corrosive
- Neutral cure
- High elasticity
- High flexibility

PRODUCT INFORMATION

Chemical Base	Neutral curing silicone	
Packaging	300 ml cartridge	12 cartridges per box
	Refer to the current price list for available packaging variations.	
Shelf Life	15 months from date of production	
Storage Conditions	The Product must be stored in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5 °C and +25 °C. Always refer to the packaging. Refer to the current Safety Data Sheet for information on safe handling and storage.	
Colour	White, grey, other color please contact sales representative	
Density	~1.05 kg/L	(ISO 1183-1)

SYSTEM INFORMATION

Compatibility

Compatible with the following non-porous substrates:
- Aluminium
- Anodised aluminium
- Stainless steel
- Copper
- Brass
- Titanium- zinc
- PVC
- Galvanised steel
- Powder and PVDF coated metals
- Glazed tiles
- Glass

Compatible with the following porous substrates:
- Concrete
- Unglazed tiles

For other substrate types, contact Sika Technical Services.

TECHNICAL INFORMATION

Shore A Hardness	Cured 28 days at +23 °C and 50 % R.H.	~20	(EN ISO 868)
Tensile Strength	Cured 28 days at +20 °C	~1.5 N/mm²	(ISO 8339)
Secant Tensile Modulus	100 % elongation (+23 °C)	~0.30 N/mm²	(ISO 8339)
Movement Capability	± 25 %		(EN ISO 9047)
Elastic Recovery	> 90 %		(EN ISO 7389)
Tear Propagation Resistance	~4.0 N/mm		(ISO 34-2)
Service Temperature	Maximum	+80 °C	
	Minimum	-40 °C	

Chemical Resistance

- Good resistance to chlorinated water and common swimming pool cleaning chemicals

The resistance of sealant to chlorine is dependent on the water pH value and the amount of free chlorine.
Contact Sika Technical Services for additional information.

Joint Design

The joint dimensions must be designed to suit the movement capability of the sealant. The joint width must be a minimum of 10 mm and a maximum of 35 mm.
The joint depth must be a minimum of 6 mm and a maximum of 10 mm.
For larger joints, contact Sika Technical Services for additional information.

APPLICATION INFORMATION

Consumption

Joint width	Joint depth	Joint length per 300 ml cartridge
10 mm	8 mm	3.5 m
15 mm	10 mm	2 m

Sag Flow	20 mm profile tested at +23 °C	< 2 mm	(EN ISO 7390)
Ambient Air Temperature	Maximum	+40 °C	
	Minimum	+5 °C	

Dew Point	The substrate temperature must be at least +3 °C above dew point to reduce the risk of condensation decreasing adhesion.	
Substrate Temperature	Maximum	+40 °C
	Minimum	+5 °C
Backing Material	Use closed cell, polyethylene foam backing rod.	
Curing Time	~2.0 mm / 24 hours	(CQP049-2)
Skin Time	At +23 °C and 50 % r.h.	5 minutes

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.

FURTHER DOCUMENTS

Refer to the following documents:
- Pre-treatment chart for construction sealants and adhesives
- Application manual - Joint Maintenance, Cleaning and Renovation

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.

VOC DATA

49 g/L USEPA Method 24

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

Sikasil® Pool adheres without primers or activators.
Poor adhesion due to inadequate surface preparation
Note: Primers are adhesion promoters. Primers cannot replace proper surface preparation and surface cleaning.
1. Do not use primers for improving poorly prepared or poorly cleaned joint surfaces.

IMPORTANT
Degradation of sealant due to substrates leaching oil, plasticisers, or solvents
Bitumen, natural rubber or EPDM rubber can leach oils, plasticisers, or solvents that can degrade the sealant and cause the Product to become tacky.
1. Do not use the Product on building materials which leach oils, plasticisers, or solvents.

The substrate must be sound, clean, dry and free of contaminants such as dirt, oil, grease, cement laitance, sealant residues and poorly bonded coatings which could affect adhesion of the primer and sealant.
The substrate must be of sufficient strength to handle the stress induced by the sealant during movement.
1. Use techniques such as wire brushing, grinding, grit blasting or other suitable mechanical methods to remove all weak substrate material.
2. Repair all damaged joint edges with suitable Sika repair products.
3. Remove dust, loose and friable material from all surfaces before applying the sealant.

Use the following priming or pre-treatment procedures to ensure optimum adhesion and joint durability:
NON-POROUS SUBSTRATES
Aluminium, anodised aluminium, stainless steel, galvanised steel or glazed tiles
1. Lightly roughen the surface with a fine abrasive pad.
2. Clean the surface.
3. Pretreat the surface with Sika® Aktivator-100 applied with a clean cloth.

Other metals, such as copper, brass and titanium-zinc
1. Lightly roughen the surface with a fine abrasive pad.
2. Clean the surface.
3. Pretreat the surface with Sika® Aktivator-100 applied with a clean cloth.
4. Wait until the flash-off time is over.
5. Prime the surface with Sika® Primer-3 N applied with a brush.

PVC substrates
1. Prime the surface with Sika® Primer-215 applied with a brush.

Glass substrates
1. Clean the glass with Isopropanol before application.

POROUS SUBSTRATES
Concrete and unglazed tiles
1. Prime the surface with Sika® Primer-3 N applied with a brush.
2. Wait until the flash-off time is over.

Before applying onto natural stone, contact Sika Technical Services.
IMPORTANT
Poor adhesion due to incorrect priming procedure
Incorrectly defined or uncontrolled priming procedures may lead to a variation in Product performance.
1. Test adhesion on project-specific substrates and agree on procedures with all parties before full project application. For more information contact Sika Technical Services.

MIXING

One-part ready to use

APPLICATION

IMPORTANT
Strictly follow installation procedures
Strictly follow installation procedures as defined in Method Statements, application manuals and working instructions which must always be adjusted to the actual site conditions.
IMPORTANT
Incorrect acid and base dosage
An incorrect acid or base dosage increases the risk of fungal growth.

1. Use the Product in swimming pools and warm water whirlpools with a pH value between 6.5 and 7.6, and free chlorine < 5 mg/L (5 ppm).
2. Free available chlorine level must not be ≤ 0.3 mg/L in swimming pools and ≤ 0.7 mg/L in warm water whirlpools.
3. Maintain continuous water circulation to avoid chlorine concentrations.
4. Do not use acid-based detergents.
5. When joints must be reconstructed due to fungal growth, remove Sikasil® Pool completely beforehand.

1. Apply masking tape where neat or exact joint lines are required.
2. After the required substrate preparation, insert a backing rod to the required depth.
3. Prime the joint surfaces as recommended in substrate preparation. Note Avoid excessive application of the primer.
4. Set up the PowerCure Dispenser according to the PowerCure User Manual.
5. Fit the nozzle and cut it to the desired bead size.
6. Apply the Product into the joint. Note Avoid air entrapment. Make sure that the Product comes into full contact with the adhesion area of the joint.
7. Replace the mixer if the application is discontinued. For example, at +23 °C the maximum stand time is 10 minutes. Note Temperature will affect Product reactivity and application properties.
8. IMPORTANT Do not use tooling products containing solvents. As soon as possible after application, tool the Product firmly against the joint sides to ensure adequate adhesion and a smooth finish. Use a compatible tooling agent such as Sika® Tooling Agent N to smooth the joint surface.
9. Remove the masking tape within the skin formation time of the Product.

Sikasil® Pool must be cured completely before filling the pool: minimum 7 days (depending on the temperature, humidity and thickness of sealant).

Colour variations
Note: Colour variations may occur due to the exposure in service to chemicals, high temperatures or UV-radiation (especially with white colour shade). This effect is aesthetic and does not adversely influence the technical performance or durability of the product.

CLEANING OF TOOLS

Clean all tools and application equipment immediately after use with Sika® Remover-208 or Sika® Cleaning Wipes-100. Once cured, hardened 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. 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 HONGKONG LTD.
Rm.1507-12, Blk A, New Trade Plaza,
6 On Ping Street, Shatin, N.T., H.K.
Phone: +852 26868108
Fax: +852 26453671
Mail: marketing@hk.sika.com
Website: www.sika.com.hk