

# PRODUCT DATA SHEET

## Sikasil®-702

### 1-PART SILICONE BASED TRANSPARENT WEATHERSEALANT

#### DESCRIPTION

Sikasil®-702 is a one-component transparent neutral curing silicone weathersealant with good adhesion, weather-ability and elasticity for weather sealing in curtain wall and building facades.

#### USES

Sikasil®-702 is used for movement and connection joints in building envelope such as curtain wall and metal cladding weather sealing applications.

#### CHARACTERISTICS / ADVANTAGES

- Neutral cure and non-corrosive
- Very good resistance to weathering
- Good adhesion to most common building materials
- Movement capability  $\pm 35\%$  (ASTM C719)
- Very easy to apply & fast curing

#### PRODUCT INFORMATION

Composition	Neutral cure silicone
Packaging	600 ml foil pack, 20 foil packs per box
Colour	Transparent
Shelf Life	12 months from the 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 packaging.
Density	~1.01 kg/l

#### TECHNICAL INFORMATION

Shore A Hardness	> 28 days	~25	(ISO 868)
Secant Tensile Modulus	100 % elongation (+23 °C)	~0.45 N/mm <sup>2</sup>	(ISO 8339)
	100 % elongation (-20 °C)	~0.60 N/mm <sup>2</sup>	
Elastic Recovery	~90 %		(ISO 3789)
Elongation at Break	~250 %		(ISO 37)
Tear Propagation Resistance	~N.A		(ISO 34)
Movement Capability	$\pm 25\%$		(ASTM C 719)

**Service Temperature** -40 °C min. / +150 °C max.

### Joint Design

The joint width must be designed to suit the joint movement required and the movement capability of the sealant. The joint width shall be  $\geq 6$  mm and  $\leq 45$  mm. The joint depth shall be  $\geq 6$  mm and  $\leq 15$  mm. A width to depth ratio of 2:1 must be maintained (for exceptions, see table below). Typical joint dimensions.

<u>Joint width</u>	<u>Joint depth</u>	<u>Joint length / 600 ml ssg</u>
6 mm	4 mm	25 mm
9 mm	5 mm	13 mm
12 mm	6 mm	8 mm

All joints must be correctly designed and dimensioned in accordance with the relevant standards, before their construction. The basis for calculation of the necessary joint widths are the type of structure and its dimensions, the technical values of the adjacent building materials and the joint sealing material, as well as the specific exposure of the building and the joints. For larger joints please contact Sika technical service.

## APPLICATION INFORMATION

**Backing Material** Use closed cell, polyethylene foam backing rods.

**Sag Flow** Good

**Ambient Air Temperature** +5 °C min. / +40 °C max.

**Substrate Temperature** +5 °C min. / +40 °C max.  
Minimum +3 °C above dew point temperature

**Curing Rate** ~4 mm/24 hour (+23 °C / 50 % r.h.)

**Skin Time** ~5 minutes (+23 °C / 50 % r.h.)

## 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.

## IMPORTANT CONSIDERATIONS

- When applying sealant into a previously silicone sealed joint, ensure all residue is removed from joint.
- Colour variations may occur due to the exposure in service to chemicals, high temperatures and/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.
- Sikasil®-702 cannot be overpainted.
- Do not use on natural stone.
- Do not use on bituminous substrates, natural rubber or any building materials which might leach oils, plasticisers or solvents that could degrade the sealant. EPDM or other gaskets in direct contact with Sikasil®-702 have to be tested for compatibility prior to application. For specific advice contact Sika technical services.
- Do not use on pre-stressed polyacrylate and polycarbonate as it may cause environmental stress cracking (crazing).
- Do not use Sikasil®-702 in areas which are exposed to strong oxidising acids (e.g. nitric acid) and bases.
- Do not use to seal joints in or around swimming

pools.

- Do not use for joints under water pressure or permanent water immersion.
- Do not use Sikasil®-702 in totally confined spaces as it requires atmospheric moisture to cure.
- Do not use for medical or pharmaceutical applications.

## ECOLOGY, HEALTH AND SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

## APPLICATION INSTRUCTIONS

### SUBSTRATE PREPARATION

The substrate must be clean, dry, sound and free from oils, grease, dust, cement laitance and loose or friable particles. For optimum adhesion, joint durability and critical, high performance applications such as joints on multi-storey buildings, highly stressed joints, extreme weather exposure or water immersion/exposure. The following priming and/or pre-treatment procedures must be followed:

#### **Non-porous substrates**

Float glass, coated glass, anodised aluminium and

stainless steel must be pre-treated using Sika® Aktivator-205, Sika® Aktivator-100 or Sika® Cleaner P. Powder coated and PVDF coated metals must be pre-treated using Sika® Aktivator-205. For more details such as application and flash-off times, refer to the most recent Product Data Sheet of the respective pre-treatment product.

#### **Porous substrates**

Concrete, aerated concrete and cement based renders, mortars and bricks must be primed using Sika® Primer-3 N or Sika® Primer-210. For more details such as application and flash-off times, refer to the most recent Product Data Sheet of the respective pre-treatment product. Adhesion tests on project specific substrates must be performed and procedures agreed with all parties before full project application. Contact Sika Technical Services for additional information. Note: Primers and activators are adhesion promoters and not an alternative to improve poor preparation/cleaning of the joint surface. Primers also improve the long term adhesion performance of the sealed joint.

### **APPLICATION METHOD / TOOLS**

#### **Masking**

It is recommended to use masking tape where neat or exact joint lines are required. Remove the tape within the skin time after finishing.

#### **Joint Backing**

After the required substrate preparation, insert a suitable backing rod to the required depth.

#### **Priming**

If required, prime the joint surfaces as recommended in substrate preparation. Avoid excessive application of primer to avoid causing puddles at the base of the joint.

#### **Application**

Sikasil®-702 is supplied ready to use. Prepare the end of the foil pack or cartridge, insert into the sealant gun and fit the nozzle. Extrude Sikasil®-702 into the joint ensuring that it comes into full contact with the sides of the joint and avoiding any air entrapment.

#### **Finishing**

As soon as possible after application, sealant must be firmly tooled against the joint sides to ensure adequate adhesion and a smooth finish. Use a compatible tooling agent (e.g. Sika® Tooling Agent N) to smooth the joint surface. Do not use tooling products containing solvents.

### **CLEANING OF TOOLS**

Clean all tools and application equipment with Sika® Remover-208 immediately after use. Hardened material can only be removed mechanically. For cleaning

skin, use Sika® Cleaning Wipes-100.

### **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.

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#### **Product Data Sheet**

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