

# Sikaflex®-527 AT

High-performance sealant for multi-purpose elastic joints

## Technical Product Data

Chemical base		Silane Terminated Polymer
Color (CQP <sup>1</sup> 001-1)		White, black, light grey
Cure mechanism		Moisture curing
Density (uncured) (CQP 006-4)	(depending on color)	1.35 kg/l approx.
Non-sag properties		Good
Application temperature	ambient	5 - 40 °C (40 - 105 °F)
Skin time <sup>2</sup> (CQP 019-1)		40 min. approx.
Open time <sup>2</sup> (CQP 526-1)		30 min. approx.
Curing speed (CQP 049-1)		see diagram 1
Volume shrinkage (CQP 014-1)		3 % approx.
Shore A-hardness (CQP 023-1 / ISO 868)		40 approx.
Tensile strength (CQP 036-1 / ISO 37)		1.5 N/mm <sup>2</sup> approx.
Elongation at break (CQP 036-1 / ISO 37)		400% approx.
Tear propagation resistance (CQP 045-1 / ISO 34)		6 N/mm approx.
Glass transition temperature (CQP 509-1 / ISO 4663)		-50 °C (-60 °F) approx.
Thermal resistance (CQP 513-1)	4 hours 1 hour	120 °C (250 °F) 160 °C (320 °F)
Service temperature		-40 - 80 °C (-40 - 175 °F)
Shelf life (CQP 016-1) (storage below 25°C)	cartridge unipack	15 months 12 months

<sup>1)</sup> CQP = Corporate Quality Procedure

<sup>2)</sup> 23°C (73 °F) / 50 % r.h.

### Description

Sikaflex®-527 AT is a 1-component PUR-Hybrid sealant based on the Sika Silane Terminated Polymer (STP) technology. It is made for multi-purpose elastic joints for both the interior and exterior of the vehicle body and cures on exposure to atmospheric humidity to form a durable elastomer.

Sikaflex®-527 AT is manufactured in accordance with ISO 9001 / 14001 quality assurance system and the responsible care program.

### Product Benefits

- Advanced hybrid technology
- Good adhesion to a wide variety of substrates without primer
- Fast curing
- Excellent working properties
- Can be reworked with a paint brush
- Over paintable with water-based paint systems wet-on-wet and after skin formation
- Ageing and weathering resistant
- Low odor
- Non-corrosive
- Solvent- and isocyanate-free
- Silicone- and PVC-free

### Areas of Application

Sikaflex®-527 AT is suitable for sealing, seam sealing, simple bonding as well as for vibration reduction and sound dampening measures in collision repair and vehicle body construction.

Sikaflex®-527 AT adheres well to all the materials commonly used in body shops, e.g. metal primers and paint coatings, metals, painted plastics and plastics.

This product is suitable for professional experienced users only. Tests with actual substrates and conditions have to be performed to ensure adhesion and material compatibility.



### Cure Mechanism

Sikaflex®-527 AT cures by reaction with atmospheric humidity. At low temperatures the water content of the air is generally lower and the curing reaction proceeds more slowly.

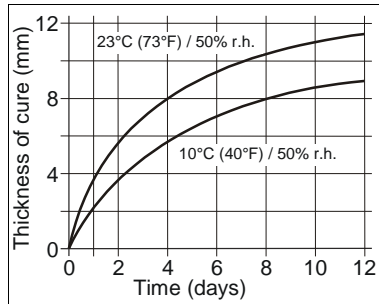


Diagram 1: Curing speed Sikaflex®-527 AT

### Chemical Resistance

Sikaflex®-527 AT is resistant to fresh water, seawater, and aqueous cleaning solutions; temporarily resistant to fuels, mineral oils, vegetable and animal fats and oils; not resistant to organic acids, alcohol, concentrated mineral acids and caustic solutions or solvents.

The above information is offered for general guidance only. Advice on specific applications will be given on request.

### Method of Application

#### Surface preparation

Surfaces must be clean, dry and free from grease, oil and dust. Where appropriate, the adhesion of the adhesive can be improved by treating the substrate with Sika® Aktivator-205. Further suggestions for surface preparation can be found on the current edition of the Sika® Pre-Treatment Chart – For Polyurethane Hybrids. Consider that these suggestions are based on experience and have to be verified by tests on original substrates.

Advice on specific applications is available from the Technical Department of Sika Industry.

### Application

Cut off the tip of the nozzle to suit joint width and apply the sealant into the joint with a suitable hand gun, taking care to avoid air entrapment.

Do not apply at temperatures below 5 °C or above 40 °C. The optimum temperature for substrate and sealant is between 15 °C and 25 °C.

### Tooling and finishing

Sikaflex®-527 can be tooled and finished, for example, with a paint brush or spatula. Tooling and finishing must be carried out within the open time of the sealant. For a smooth finish it is recommended using Sika® Tooling Agent N. Other finishing agents of lubricants must be tested for suitability and compatibility.

### Removal

Uncured Sikaflex®-527 AT may be removed from tools and equipment with Sika® Remover-208 or another suitable solvent. Once cured, the material can only be removed mechanically.

Hands and exposed skin should be washed immediately using Sika® Handclean towels or a suitable industrial hand cleaner and water. Do not use solvents!

### Over painting

Sikaflex®-527 AT can be over painted with most common car paint systems (including water based). Alkyd-based and acid-curing paints are unsuitable.

Over painting can be done wet-on-wet and up to 72 hours after application of Sikaflex®-527 AT. To achieve best material performance, allow sealant to cure prior to paint application and subsequent baking process. Adhesion on fully cured Sikaflex®-527 AT can be improved by treating the sealant with Sika® Aktivator-205 prior the paint process.

Consider that the hardness and film thickness of the paint may impair the elasticity of the sealant and lead to cracking of the paint film.

### Further Information

Copies of the following publications are available on request:

- Safety Data Sheets
- General Guidelines - Bonding and Sealing with Sikaflex®
- Sika® Pre-Treatment Chart for Polyurethane Hybrids

### Packaging Information

Cartridge	300 ml
Unipack	400 ml

### Value Bases

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.

### Health and Safety Information

For information and advice regarding transportation, handling, storage and disposal of chemical products, users shall refer to the actual Safety Data Sheets 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.

Further information available at:

[www.sika.ch](http://www.sika.ch)  
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