



TBP Converting, Inc.  
Sika 953 L15/ L30

# Sikaflex®-953 L15 / L30

## Two component assembly adhesive / sealant

### Typical Product Data

Properties	Sikaflex®-953 A L15 / L30	Sikaflex®-905 B
Chemical base	2-component silane terminated polymer (STP)	
Color (CQP <sup>1</sup> 001-1)	white	white
Density (CQP 006-4)	1.4 kg/l	1.2 kg/l
Density mixed	1.4 kg/l	
Mixing ratio	A:B by volume A:B by weight	10 : 1 11.7 : 1
Non-sag properties (CQP061-1)	fair	
Application temperature	5 - 40 °C	
Skin time <sup>2</sup> (CQP 019-1)	L15 / L30	20 / 40 minutes
Open time <sup>2</sup> (CQP 526-1)	L15 / L30	15 / 30 minutes
Curing speed <sup>2</sup> (CQP 046-1)	see table 1	
Shrinkage (CQP 014-1)	2 %	
Shore A hardness (CQP 023-1 / ISO 868)	50	
Tensile strength (CQP 036-1 / ISO 37)	2.5 MPa	
Elongation at break (CQP 036-1 / ISO 37)	450 %	
Tear propagation resistance (CQP 045-1 / ISO 34)	10 N/mm	
Tensile lap-shear strength (CQP 046-1 / ISO 4587)	1.5 MPa	
Glass transition temperature (CQP 509-1 / ISO 4663)	-50 °C	
Thermal resistance (CQP 513-1)	1 hour	160 °C
Service temperature (CQP 525-1)	-45 - 90 °C	
Shelf life (CQP 016-1) (storage 5 - 25 °C) <sup>3</sup>	9 months	

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

<sup>2)</sup> 23 °C / 50 % r.h.

<sup>3)</sup> B-Component is frost sensitive

### Description

Sikaflex®-953 is a two component silane terminated polymer assembly adhesive which cures by chemical reaction of both components. Due to its good weathering resistance and gap filling performance it can also be used for exposed sealing joints. The adhesive is available in 2 versions with different open time: L15 and L30. It is as well suited where pumping over a long distance is required.

### Product Benefits

- Pumpable over long distances
- Minimal pre-treatment required for most common substrates
- Good gap filling capabilities
- Great weathering and ageing resistance
- Solvent and isocyanate free

### Areas of Application

Sikaflex®-953 is suitable for bonding of large component exposed to dynamic stress and where the attainment of early strength is required. Common substrates are metals, particularly aluminum (incl. anodized), steel (incl. phosphated, chromated, zinc plated), metal primers and paint coatings (2-part systems), ceramic materials and plastics.

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

Industry



## Cure Mechanism

The curing of Sikaflex®-953 takes place by chemical reaction of the two components.

Time [h]	Strength [MPa] L15 / L30
2	0.4 / 0.2
4	0.9 / 0.6
6	1.1 / 0.8

Table 1: Lap shear strength (CQP 046-1) at 23 °C / 50 % r.h.

## Chemical Resistance

Sikaflex®-953 is resistant to fresh water, seawater, 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. Surface treatment depends on the specific nature of the substrates and need to be verified in any case by tests on original substrates. Often the adhesion can be improved by wiping the joint surfaces with Sika® Aktivator-205.

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

### Application

Sikaflex®-953 is dispensed from pails and drums by means of a pneumatic or hydraulic metering system or out of cartridges with an adequate hand gun. In order to achieve a proper mixing an 18 element mixer is required. For a regular output we recommend the Statomix® MS 13-18-G mixer.

For advice on suitable pump systems contact the System Engineering Department of Sika Industry.

Do not apply at temperatures below 5 °C or above 40 °C. The optimum temperature for substrate and Sikaflex®-953 is between 15 °C and 25 °C.

## Tooling and finishing

Tooling and finishing must be carried out within the open time of the adhesive / sealant. We recommend the use of Sika® Tooling Agent N. Other finishing agents must be tested for suitability and compatibility.

## Removal

Uncured Sikaflex®-953 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 Towel or a suitable industrial hand cleaner and water. Do not use solvents on skin!

## Overpainting

Sikaflex®-953 might be over painted. All paints must be tested by carrying out preliminary trials under manufacturing conditions. The elasticity of paints is lower than the elasticity of Sikaflex®-953. This may lead to cracking of the paint film in the joint area.

## Further Information

Always consider the following publications that are available on request:

- Safety Data Sheets
- General Guidelines Bonding and Sealing with Sikaflex® products

## Packaging Information

### Sikaflex®-953 A L15 / L30

Pail	23 l
Drum	195 l

### Sikaflex®-905 B

Pail	23 l
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### Sikaflex®-953 L30

Dual cartridge	490 ml
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## 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.

## 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.

## Disclaimer

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.