

## PRODUCT DATA SHEET

## Sikaflex®-274

One component assembly adhesive

## TYPICAL PRODUCT DATA (FURTHER VALUES SEE SAFETY DATA SHEET)

Chemical base	1-component polyurethane	
Color (CQP001-1)	Black	
Cure mechanism	Moisture-curing	
Density (uncured)	1.25 kg/l	
Non-sag properties	Good	
Application temperature	Adhesive	15 – 45 °C
	Ambient	15 – 40 °C
Skin time (CQP019-4)	30 minutes <sup>A</sup>	
Curing speed (CQP049-1)	(see diagram 1)	
Shrinkage (CQP014-1)	1 %	
Shore A hardness (CQP023-1 / ISO 48-4)	45	
Tensile strength (CQP036-1 / ISO 527)	3 MPa	
Elongation at break (CQP036-1 / ISO 527)	400 %	
Tear propagation resistance (CQP045-1 / ISO 34)	7 N/mm	
Tensile lap-shear strength (CQP046-1 / ISO 4587)	2.5 MPa	
Service temperature (CQP509-1 / CQP513-1)	4 hours	-40 – 100 °C
		120 °C
Shelf life	Drum / Pail	9 months <sup>B</sup>
	Unipack	12 months <sup>B</sup>

CQP = Corporate Quality Procedure

A) 23 °C / 50 % r.h.

B) storage below 25 °C

## DESCRIPTION

Sikaflex®-274 is an 1-component polyurethane adhesive. It is elastic and has a pasty-like consistency as well as good non-sag properties. It is suitable for assembly bonding of big parts in the Automotive Industry. Sikaflex®-274 can be accelerated with Sika's Booster and PowerCure systems.

## PRODUCT BENEFITS

- 1-component formulation
- Elastic, can cope with thermal elongation of different substrates
- Good gap-filling capabilities
- Capable of withstanding high dynamic stresses
- Solvent free

## AREAS OF APPLICATION

Sikaflex®-274 is suitable for assembly joints which are exposed to dynamic stresses and where the attainment of high early strength is essential. It is ideal to bond large components and assemblies.

Seek manufacturer's advice and perform tests on original substrates before using this product on materials prone to stress cracking. This product is suitable for experienced professional users only. Tests with actual substrates and conditions have to be performed ensuring adhesion and material compatibility.

## CURE MECHANISM

Sikaflex®-274 cures by reaction with atmospheric moisture. At low temperatures the water content of the air is generally lower and the curing reaction proceeds somewhat slower (see diagram 1).

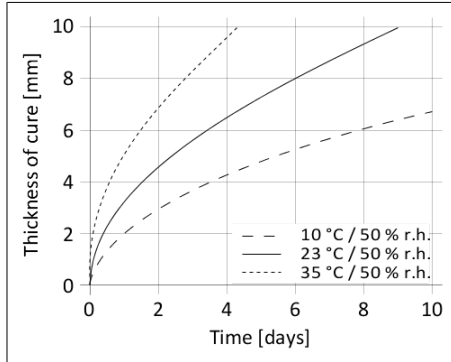


Diagram 1: Curing speed Sikaflex®-274

## CHEMICAL RESISTANCE

Sikaflex®-274 is generally resistant to fresh water, seawater, diluted acids and diluted caustic solutions; temporarily resistant to fuels, mineral oils, vegetable and animal fats and oils; not resistant to organic acids, glycolic alcohol, concentrated mineral acids and caustic solutions or solvents.

## 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 is crucial for a long lasting bond. All pre-treatment steps must be confirmed by preliminary tests on original substrates considering specific conditions in the assembly process.

### Application

Sikaflex®-274 needs to be processed with an adequate dispensing system. Sikaflex®-274 can be applied between 15 °C and 40 °C (climate) but changes in reactivity and application properties have to be considered. The temperature for substrate need to be at least 3 °C above the dew point.

To ensure a uniform thickness of the bondline it is recommend to apply the adhesive in form of a triangular bead (see figure 1).

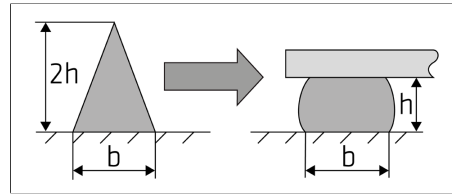


Figure 1: Recommended bead configuration

The open time is significantly shorter in hot and humid climate. The parts must always be joint within the skin formation time. Sikaflex®-274 can be processed with pump equipment. For advice on selecting and setting up a suitable pump system, contact the System Engineering Department of Sika Industry.

## Tooling and finishing

Tooling and finishing must be carried out within the skin time of the product. It is recommended using Sika® Tooling Agent N. Other finishing agents must be tested for suitability and compatibility prior the use.

## Removal

Uncured Sikaflex®-274 can 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 have to be washed immediately using hand wipes such as Sika® Cleaner-350H or a suitable industrial hand cleaner and water. Do not use solvents on skin.

## FURTHER INFORMATION

The information herein is offered for general guidance only. Advice on specific applications is available on request from the Technical Department of Sika Industry.

Copies of the following publications are available on request:

- Safety Data Sheets
- Sika Pre-treatment Chart  
For 1-component polyurethane
- General Guidelines  
Bonding and Sealing with 1-component Sikaflex®

## PACKAGING INFORMATION

Unipack	600 ml
Pail	23 l
Drum	195 l

## BASIS OF PRODUCT DATA

All technical data stated in this document 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

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