

## PRODUCT DATA SHEET

# Sikaflex®-552 AT

## STP ASSEMBLY ADHESIVE WITH REDUCED SUBSTRATE PREPARATION

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

Chemical base		Silane Terminated Polymer
Color (CQP001-1)		White, black
Cure mechanism		Moisture-curing
Density (uncured)		1.5 kg/l
Non-sag properties (CQP061-1)		Very good
Application temperature	ambient	5 – 40 °C
Skin time (CQP019-1)		30 minutes <sup>A</sup>
Open time (CQP526-1)		20 minutes <sup>A</sup>
Curing speed (CQP049-1)		see diagram 1
Shore A hardness (CQP023-1 / ISO 868)		50
Tensile strength (CQP036-1 / ISO 37)		3 MPa
Elongation at break (CQP036-1 / ISO 37)		600 %
Tear propagation resistance (CQP045-1 / ISO 34)		15 N/mm
Tensile lap-shear strength (CQP046-1 / ISO 4587)		2 MPa
Service Temperature (CQP509-1 / CQP513-1)		-50°C – 90 °C
Shelf life (CQP016-1)	cartridge	15 months <sup>B</sup>
	unipack	12 months <sup>B</sup>
	drum / pail	9 months <sup>B</sup>

CQP = Corporate Quality Procedure

A) 23 °C / 50 % r.h.

B) storage below 25 °C

**DESCRIPTION**

Sikaflex®-552 AT is a high-performance elastic assembly adhesive based on the Sika Silane Terminated Polymer (STP) technology that cures on exposure to atmospheric moisture. This multipurpose adhesive is suitable for internal and external industrial bonding applications.

**PRODUCT BENEFITS**

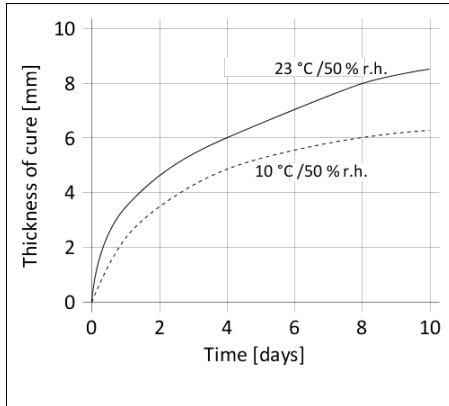
Aging and weathering resistant  
 Good adhesion to a wide variety of substrates without primer  
 Capable of withstanding high dynamic stresses  
 High elasticity  
 Can be painted  
 Low odor  
 Very low VOC  
 Isocyanate- and solvent-free  
 Silicone- and PVC-free

**AREAS OF APPLICATION**

Sikaflex®-552 AT is suitable for joints that will be subjected to dynamic stresses. Suitable sub-strate materials are metals, particularly aluminum, metal primers, paint coatings, sheet steel, ceramic materials and plastics. Seek manufacturer's advice before using on plastics that are prone to stress cracking. 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®-552 AT 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).



## CHEMICAL RESISTANCE

Sikaflex®-552 AT 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

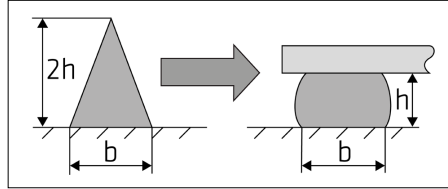
Surfaces must be clean, dry and free from grease, oil, dust and contaminants. Surface treatment depends on the specific nature of the substrates and is crucial for a long lasting bond. Suggestions for surface preparation may be found on the current edition of the appropriate Sika® Pre-treatment Chart. Consider that these suggestions are based on experience and have in any case to be verified by tests on original substrates.

## Application

Sikaflex®-552 AT can be processed between 5 °C and 40 °C but changes in reactivity and application properties have to be considered. The optimum temperature for substrate and sealant is between 15 °C and 25 °C.

Consider the viscosity increase at low temperature. For easy application, condition the adhesive at ambient temperature prior to use.

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



Sikaflex®-552 AT can be processed with hand, pneumatic or electric driven piston guns as well as pump equipment.

The open time is significantly shorter in hot and humid climate. The parts must always be installed within the open time.

Never join bonding parts if the adhesive has built a skin.

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 adhesive. It is recommended using Sika® Tooling Agent N. Other finishing agents must be tested for suitability and compatibility prior the use.

## Removal

Uncured Sikaflex®-552 AT 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 Sheet
- General Guidelines - Bonding and Sealing with Sikaflex® and Sikatack®
- Sika® Pre-Treatment Chart
- Silane Terminated Polymer

## PACKAGING INFORMATION

Cartridge	300 ml
Unipack	600 ml

## 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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