

**BUILDING TRUST** 

# PRODUCT DATA SHEET

# Sikaflex®-252

Elastic adhesive for vehicle assembly bonding

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

Color (CQP001-1)  Cure mechanism  Moisture-curing  Density (uncured)  Non-sag properties  Application temperature  Skin time (CQP019-1)  Open time (CQP526-1)  Curing speed (CQP049-1)  Shore A hardness (CQP023-1 / ISO 48-4)  Fensile strength (CQP036-1 / ISO 527)  Elongation at break (CQP036-1 / ISO 527)  Fear propagation resistance (CQP045-1 / ISO 34)  White  Moisture-curing  Moisture-curing  1.2 kg/l  Good  4.0 minutes A  40 minutes A  (see diagram 1)  Shore A hardness (CQP023-1 / ISO 48-4)  Fensile strength (CQP036-1 / ISO 527)  400 %  Fear propagation resistance (CQP045-1 / ISO 34)	Chemical base	1-component polyurethane
Cure mechanism  Density (uncured)  Non-sag properties  Application temperature  Skin time (CQP019-1)  Open time (CQP526-1)  Curing speed (CQP049-1)  Shore A hardness (CQP023-1 / ISO 48-4)  Tensile strength (CQP036-1 / ISO 527)  Flear propagation resistance (CQP045-1 / ISO 34)  Moisture-curing  Moisture-curing  Moisture-curing  Moisture-curing  Moisture-curing  1.2 kg/l  Adouther  400 M  Indication temperature  ambient  10 – 35 °C  400 minutes A  (see diagram 1)  50  Tensile strength (CQP036-1 / ISO 527)  3 MPa  400 %  Flear propagation resistance (CQP045-1 / ISO 34)  7 N/mm		1-component polyurethane
Density (uncured)  Non-sag properties  Good  Application temperature  Skin time (CQP019-1)  Open time (CQP526-1)  Curing speed (CQP049-1)  Shore A hardness (CQP023-1 / ISO 48-4)  Fensile strength (CQP036-1 / ISO 527)  Elongation at break (CQP036-1 / ISO 527)  Fear propagation resistance (CQP045-1 / ISO 34)  depending on color  1.2 kg/l  6ood  10 – 35 °C  40 minutes A  9 minutes A  (see diagram 1)  50  50  60  60  60  60  60  60  60  60	Color (CQP001-1)	White
Non-sag properties  Application temperature  Skin time (CQP019-1)  Open time (CQP526-1)  Curing speed (CQP049-1)  Shore A hardness (CQP023-1 / ISO 48-4)  Tensile strength (CQP036-1 / ISO 527)  Elongation at break (CQP036-1 / ISO 527)  Fear propagation resistance (CQP045-1 / ISO 34)  Good  Ambient  10 – 35 °C  40 minutes A  40 minutes A  (see diagram 1)  50  3 MPa  400 %  Fear propagation resistance (CQP045-1 / ISO 34)  7 N/mm	Cure mechanism	Moisture-curing
Application temperature ambient 10 – 35 °C  Skin time (CQP019-1) 40 minutes A  Open time (CQP526-1) 35 minutes A  Curing speed (CQP049-1) (see diagram 1)  Shore A hardness (CQP023-1 / ISO 48-4) 50  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	Density (uncured) depending on cold	or 1.2 kg/l
Skin time (CQP019-1)       40 minutes A         Open time (CQP526-1)       35 minutes A         Curing speed (CQP049-1)       (see diagram 1)         Shore A hardness (CQP023-1 / ISO 48-4)       50         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	Non-sag properties	Good
Open time (CQP526-1)       35 minutes A         Curing speed (CQP049-1)       (see diagram 1)         Shore A hardness (CQP023-1 / ISO 48-4)       50         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	Application temperature ambier	nt 10 – 35 °C
Curing speed (CQP049-1)       (see diagram 1)         Shore A hardness (CQP023-1 / ISO 48-4)       50         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	Skin time (CQP019-1)	40 minutes <sup>A</sup>
Shore A hardness (CQP023-1 / ISO 48-4)  Fensile strength (CQP036-1 / ISO 527)  Elongation at break (CQP036-1 / ISO 527)  Fear propagation resistance (CQP045-1 / ISO 34)  7 N/mm	Open time (CQP526-1)	35 minutes <sup>A</sup>
Fensile strength (CQP036-1 / ISO 527)       3 MPa         Elongation at break (CQP036-1 / ISO 527)       400 %         Fear propagation resistance (CQP045-1 / ISO 34)       7 N/mm	Curing speed (CQP049-1)	(see diagram 1)
Elongation at break (CQP036-1 / ISO 527)  Fear propagation resistance (CQP045-1 / ISO 34)  7 N/mm	Shore A hardness (CQP023-1 / ISO 48-4)	50
Tear propagation resistance (CQP045-1 / ISO 34) 7 N/mm	Tensile strength (CQP036-1 / ISO 527)	3 MPa
	Elongation at break (CQP036-1 / ISO 527)	400 %
Fancile Janushear strength (COPO46-1 / ISO 4587)	Tear propagation resistance (CQP045-1 / ISO 34)	7 N/mm
ensile lap-sited strength (CQF040-17 130 4307)	Tensile lap-shear strength (CQP046-1 / ISO 4587)	2.5 MPa
Service temperature (CQP509-1 / CQP513-1) -40 – 90 °C	Service temperature (CQP509-1 / CQP513-1)	-40 – 90 °C
4 hour   130 °C	4 hoւ	ır 130 °C
1 hour 150 °C	1 hou	ır 150 °C
Shelf life 12 months <sup>B</sup>	Shelf life	12 months <sup>B</sup>

CQP = Corporate Quality Procedure

## **DESCRIPTION**

Sikaflex®-252 is an elastic 1-component polyurethane adhesive especially designed for bonding large components in vehicle assembly. It is suitable for bonding coated metal, GRP, ceramic materials and plastics.

 $^{\mbox{\scriptsize A)}}$  23 °C / 50 % r. h.

# PRODUCT BENEFITS

- Bonds well to a wide variety of substrates
- Capable of withstanding high dynamic stresses
- Good gap-filling properties
- Can be painted
- Vibration-damping
- Electrically non-conductive

B) storage below 25 °C

# AREAS OF APPLICATION

Sikaflex®-252 is suitable for assemblies that are subject to dynamic stresses. Suitable substrate materials are timber, metals, particularly aluminum (including anodized components), sheet steel (including phosphated, chromated and galvanized components), metal primers and paint coatings (2-component systems), 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. Test with actual substrates and conditions have to be performed to ensure adhesion and material compatibility.

PRODUCT DATA SHEET

**Sikaflex®-252** Version 03.01 (04 - 2023), en\_AE 012001212520001000

#### **CURE MECHANISM**

Sikaflex®-252 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).

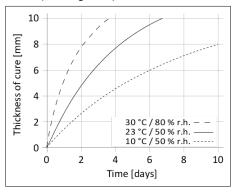


Diagram 1: curing speed Sikaflex®-252

## CHEMICAL RESISTANCE

Sikaflex®-252 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.

The 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®-252 can be processed between 10 °C and 35 °C (climate and product) 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 that the viscosity will 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 recommend to apply the adhesive in form of a triangular bead (see figure 1).

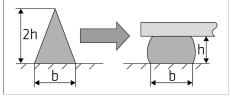


Figure 1: Recommended bead configuration

Sikaflex®-252 can be processed with manual, 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.

#### 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®-252 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 Polyurethanes
- General Guidelines
- Bonding and Sealing with 1-component Sikaflex®

#### PACKAGING INFORMATION

Unipack	600 ml
Unipack	600

#### **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

The information, and, in particular, the recommendations relating to the application and enduse 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.

**Sikaflex®-252** Version 03.01 (04 - 2023), en\_AE 012001212520001000 Sika UAE L.L.C



