

PRODUCT DATA SHEET

Sikaflex®-252

Elastic adhesive for vehicle assembly bonding

TYPICAL PRODUCT DATA (FURTHER VALUES SEE SAFETY DATA SHEET)

Chemical base		1-component polyurethane
Color (CQP001-1)		Black, white
Cure mechanism		Moisture-curing
Density (uncured)	depending on color	1.20 kg/l (10.0 lb/gal)
Non-sag properties		Good
Application temperature	ambient	10 – 35 °C (50 – 95 °F)
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 (430 psi)
Elongation at break (CQP036-1 / ISO 527)		400 %
Tear propagation resistance (CQP045-1 / ISO 34)		7 N/mm (40 pli)
Tensile lap-shear strength (CQP046-1 / ISO 4587)		2.5 MPa (360 psi)
Service temperature (CQP509-1 / CQP513-1)		-40 – 90 °C (-40 – 194 °F)
	4 hour	130 °C (266 °F)
	1 hour	150 °C (302 °F)
Shelf life	cartridge, unipack	9 months ^B
	drum	6 months ^B

CQP = Corporate Quality Procedure

^{A)} 23 °C (73 °F) / 50 % r. h.^{B)} storage below 25 °C (77 °F)

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.

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
- Listed under NSF – Proprietary Substances and Nonfood Compounds (black and white)

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 (12 - 2023), en_US
012001212520001000

Nonfood Compounds
Program Listed (FCI) Registration
#122821 & 123379

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).

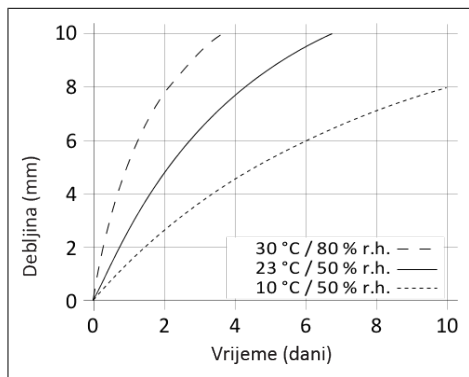


Diagram 1: curing speed Sikaflex®-252

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 at temperatures (climate and product) between 10 °C and 35 °C (50 °F and 95 °F) 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 (59 °F and 77 °F).

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 bond-line it is recommended to apply the adhesive in form of a triangular bead (see figure 1).

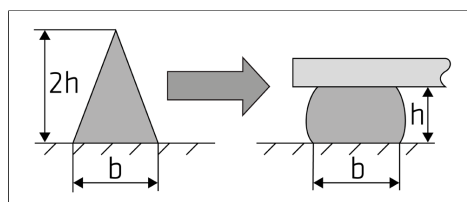


Figure 1: Recommended bead configuration

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® Slick. 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 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

Cartridge	300 ml
Unipack	600 ml
Drum	53 gal (US)

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.

ENVIRONMENTAL, HEALTH AND SAFETY

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

LEGAL DISCLAIMER

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates ("SIKA"), the user must always read and follow the warnings and instructions on the product's most current product label, Product Data Sheet and Safety Data Sheet which are available at usa.sika.com or by contacting SIKA's Technical Service Department via email at tsmh@us.sika.com. Nothing contained in any SIKA literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each SIKA product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

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