Industry

Sikaflex®-252

Assembly adhesive

Technical Product Data

Chemical base		1-C polyurethane
Colour (CQP[1] 001-1)		Black, white
Cure mechanism		Moisture-curing
Density (uncured) (CQP 006-4)	depending on colour	1.2 kg/l approx.
Non-sag properties		Good
Application temperature	ambient	10 - 35°C
Tack-free time[2] (CQP 019-1)		40 min. approx.
Open time[2] (CQP 526-1)		35 min. approx.
Curing speed (CQP 049-1)		see diagram 1
Shrinkage (CQP 014-1)		6 % approx.
Shore A hardness (CQP 023-1 / ISO 868)		50 approx.
Tensile strength (CQP 036-1 / ISO 37)		3 MPa approx.
Elongation at break (CQP 036-1 / ISO 37)		400 % approx.
Tear propagation resistance (CQP 045-1 / ISO 34)		7 N/mm approx.
Tensile lap-shear strength (CQP 046-1 / ISO 4587)		2.5 MPa approx.
Glass transition temperature (CQP 509-1 / ISO 4663)		-40°C approx.
Volume resistivity (CQP 079-2 / ASTM D 257-99)		5 x 10^9 Ωcm approx.
Service temperature (CQP 513-1)	 4 hours 1 hour	-40 - 90°C 130°C 150°C
Shelf life (storage below 25°C) (CQP 016-1)		12 months

[1] CQP = Corporate Quality Procedure [2] 23°C (73°F) / 50% r.h.

Description

Sikaflex®-252 is a non-sag 1-c polyurethane adhesive of stiff, paste-like consistency that cures on exposure to atmospheric humidity to form a durable elastomer.
Sikaflex®-252 is manufactured in accordance with ISO 9001 / 14001 quality assurance system and the responsible care program.

Product Benefits

- 1-C formulation
- Elastic
- Can be overpainted
- Good gap-filling properties
- Capable of withstanding high dynamic stresses
- Vibration-damping
- Non-corrosive
- Electrically non-conductive
- Bonds well to a wide variety of substrates

Areas of Application

Sikaflex®-252 is suitable for structural joints that will be subjected to dynamic stresses. Suitable substrate materials are timber, metals, particularly aluminium (incl. anodized components), sheet steel (incl. phosphated, chromated and zinc-plated components), metal primers and paint coatings (2-c 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.

Cure Mechanism

Sikaflex®-252 cures by reaction with atmospheric moisture. At low temperature the water content of the air is generally lower and the curing reaction proceeds slower (see diagram).

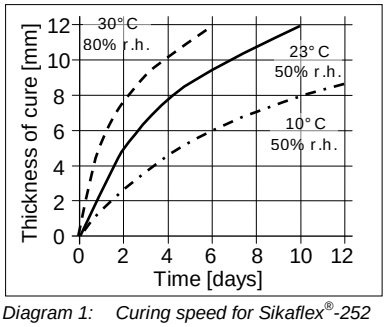


Diagram 1: Curing speed for Sikaflex®-252

Chemical Resistance

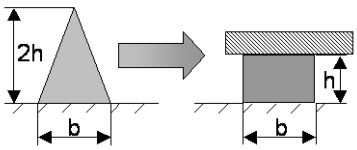
Sikaflex®-252 is resistant to fresh water, seawater, limewater, sewage effluent, dilute acids and caustic solutions; temporarily resistant to fuels, mineral oils, vegetable and animal fats and oils; not resistant to organic acids, alcohol, concentrated mineral acids and caustic solutions or solvents.
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. The substrates must be prepared in accordance with the instructions given in the actual corresponding Sika Pre-treatment Chart.
Advice on specific applications is available from the Technical Service Department of Sika Industry.

Application
Do not apply at temperatures below 10°C or above 35°C. The optimum temperature for substrate and adhesive is between 15°C and 25°C. For cartridge application we recommend the use of a compressed air piston type cartridge gun.
To ensure uniform thickness of adhesive when compressed, we recommend to apply the adhesive in the form of a triangular bead (see illustration).

Recommended bead configuration



For advice on selecting and setting up a suitable pump system please contact the System Engineering Department of Sika Industry.

Tooling and finishing
Tooling and finishing must be carried out within the tack-free time of the adhesive. We recommend the use of Sika® Tooling Agent N. Other finishing agents or lubricants must be tested for suitability / compatibility.

Removal
Uncured Sikaflex®-252 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!

Overpainting
Sikaflex®-252 can be overpainted after formation of a skin. In case the paint requires a bake process it may be necessary to wait for a full cure. 1C-PUR and 2C-acrylic based paints are usually suitable. Not suitable are oil based paints. All paints have to be tested by carrying preliminary trials under manufacturing conditions. The elasticity of paints is lower than of polyurethanes. This could lead to cracking of the paint film in the joint area.

Further Information

Working instructions issued for a defined application may further specify technical data contained in this Product Data Sheet. Copies of the following publications are available on request:

- Material Safety Data Sheets
- Sika Pre-treatment Chart for 1C Polyurethanes
- General Guidelines - Bonding and Sealing with Sikaflex®

Packaging Information

Cartridge	300 ml
Unipack	600 ml

Value Bases

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 Material Safety Data Sheets containing physical, ecological, toxicological and other safety-related data.

Note

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 accordanc 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 Australian version of the Product Data Sheet for the product concerned, copies of which will be supplied on request.

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