

Sikaflex®-252

Elastic Adhesive

Technical Product Data

Chemical base	1-C polyurethane	
Colour	White, Black	
Cure mechanism	Moisture Curing	
Density (uncured)	1.19 kg/L (depends on colour)	
VOC (EPA method 24)	61.1 g/L	
Non-sag properties	Very Good	
Application temperature product	10°C to 35°C	
Tack free time ¹⁾	40 min	
Curing speed	(see diagram 1)	
Shrinkage	6%	
Shore A-hardness (ASTM D 2240)	55	
Tensile strength (ASTM D 412)	4.14 N/mm ²	
Elongation at break (ASTM D 412)	>300%	
Tear propagation resistance (ASTM D 624)	8.93 N/mm	
Tensile lap-shear strength (ASTM D 1002)	2.62 N/mm ²	
Temperature Service	permanent	-40°C to 90°C
Short term	4hours	130°C
	1hour	150°C
Shelf life (storage below 25°C)	Cartridges & Sausage	9 months
	Drum & Pails	6 months

¹⁾ 23°C / 50% r.h.

Description

Sikaflex®-252 is a 1-component, moisture cured, polyurethane adhesive with extremely high thixotropy and high strength. Sikaflex®-252 is particularly suited to bonding applications in the manufacture of trucks, trailers and equipment. Sikaflex®-252 is manufactured under strict quality control to the highest Sika standards. Sikaflex®-252 is manufactured in accordance with ISO 9001/14001 quality assurance system.

Product Benefits

- Bonds and seals at the same time.
- One part formulation.
- Replaces rivets and mechanical fasteners.
- Very high thixotropy for good gap filling properties.
- Adhesion to a wide range of substrates.
- Short tack-free and curing time.
- Non-staining curing process.
- Initial load bearing capacity.
- Sandable and paintable.
- Increases torsional stiffness of final assembly.
- Shock/ impact resistant.
- Vibration and sound damping.
- Excellent weather and water resistance.
- USDA approved for incidental food contact.

Areas of Application

- Seek manufacturer's advice before using on plastics that are prone to stress cracking.
- Bonding of floors (plywood, blandex, wood, metal) to subfloor or metallic frame.
- Bonding of all exterior or interior panels, walls, sheets to corners or tubular frames.
- Bonding of FRP roofs (vans, cabins).
- Bonding of trim, molding and all kinds of styling elements.
- Sealing, especially for large dimension joints.

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.

Industry



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).

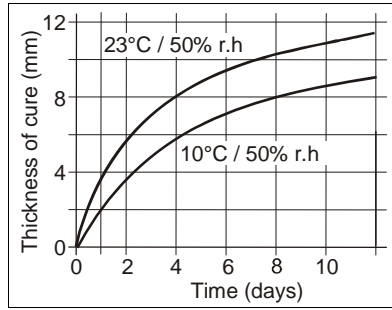


Diagram 1: Curing speed Sikaflex®-252

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 is available from the technical service department of Sika Canada.

Method of Application

Surface preparation

Surfaces must be clean, dry, free of water, oil, grease or rust and of sound quality. Remove all loose particles or residues with a jet of compressed air, sandpaper, or hard brush. Clean surface with a solvent, like acetone, if the substrate can stand it. Pretest substrates for adhesion. Cleaners and/or primers may be required to achieve optimal adhesion. Please refer to the Sika Primer Chart for specific application information. Advice on specific applications and primer chart is available from the Technical Service Department of Sika Canada.

Application

Cartridges: Pierce cartridge membrane. Affix nozzle.

Sausages: Place sausage in the application gun and snip off the closure clip. Cut off the tip of the nozzle to joint size. To ensure uniform thickness of adhesive when compressed, we recommend applying the adhesive in the form of a triangular bead (see illustration). Use a hand or powered caulking gun. If Sikaflex®-252 is used as an adhesive, assemble within 15 minutes. Make sure surfaces are frost free. Do not apply at temperatures below 10°C or above 35°. The optimum temperature for substrate and adhesive is between 15°C and 25°C. For advice on selecting and setting up a suitable pump system, as well as on the techniques of pump operated application, please contact the System Engineering department of Sika Canada. Advice on specific applications is available from the technical service department of Sika Canada.

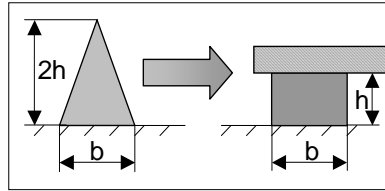


Figure 1: Recommended bead configuration

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.

Clean up

Uncured Sikaflex®-252 may be removed from tools and equipment with Sika® Remover-208 or another suitable solvent. Strictly follow solvent manufacturer's warnings and instructions for use. Once cured, the material can only be removed mechanically. Hands and exposed skin should be washed immediately using a suitable industrial hand cleanser and water. Do not use solvents!

Overpainting

Sikaflex®-252 can be overpainted when tack free. The paint and paint process compatibility must be tested before use. Sikaflex®-252 should not be exposed to baking temperatures until it has attained full cure. It should be understood that the hardness and film thickness of the paint may impair the elasticity of the adhesive and lead to cracking of the paint film with time.

Limitations

Since system is moisture-cured, permit sufficient exposure to air.

Do not apply over silicones or in the presence of curing silicones.

Avoid contact with alcohol, and alcohol containing solvents, during cure.

For best results, use opened cartridges the same day.

Further Information

Copies of the following publications are available on request:

- Material Safety Data Sheets
- Product Data Sheet
- Sika Primer Chart
- General guidelines for bonding and sealing with Sika products

Packaging Information

Cartridge	300 mL
Sausage	600 mL
Pail	17 L
Drum	195 L

Value Basis

All technical data stated in this Product Data Sheet and laboratory test based. Current measured values may vary due to factors beyond our control.

Health and Safety Information

For information and advice on the safe handling, storage and disposal of chemical products, users should refer to the current Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data for the appropriate type of substance.

All Product Data Sheets and Material Safety Data Sheets are also available on our web site.

Legal Notes

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, within their shelf life. 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 recommendations, or from any other advice offered. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users should always refer to the most recent issue of the Product Data Sheet for the product concerned, copies of which will be supplied on request or can be accessed in the Internet.

Further information available at:
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