

# Sikaflex®-252

## Elastic Adhesive

Technical Product Data (Typical Values) \*Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

|  |   |
|--|---|
| Chemical base                            | 1-C polyurethane                                  |
| Color                                    | White, Black                                      |
| Cure mechanism                           | Moisture Curing                                   |
| Density (uncured)                        | 9.7-10.2 lb/gal (depends on color)                |
| VOC (EPA method 24)                      | 0.51 lb/gal (61 g/l)                              |
| Non-sag properties                       | Very Good   |
| Application temperature                  | product 50 to 95°F (10 to 35°C)                   |
| Tack free time <sup>1</sup>              | 40 min  |
| Curing speed                             | (see diagram 1)                                   |
| Shrinkage                                | 6%  |
| Shore A-hardness (ASTM D 2240)           | 50  |
| Tensile strength (ASTM D 412)            | 435 psi   |
| Elongation at break (ASTM D 412)         | 400%  |
| Tear propagation resistance (ASTM D 624) | 40 pli  |
| Tensile lap-shear strength (ASTM D 1002) | 360 psi   |
| Volume resistivity (ASTM D 257-99)       | 5 x 10 <sup>9</sup> Ωcm                           |
| Service temperature                      | permanent -40 to 194°F (-40 to 90°C)              |
| Short term                               | 4hours 266°F (130°C)<br>1hour 302°F (150°C)       |
| Shelf life (storage below 77°F (25°C))   | Cartridge/Unipack 9 months<br>Pail/Drums 6 months |

<sup>1)</sup> 73°F (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 for 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 and the Responsible Care Program.

### 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.
- NSF registered for use in applications with the possibility of 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.

Industry



- 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 experienced professional users only.
- Tests 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 1).

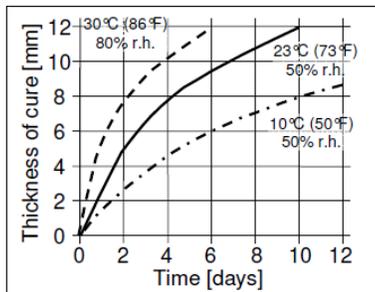


Diagram 1: Curing speed Sikaflex®-252

### 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 will be given on request. Contact Technical Service at [tsmh@us.sika.com](mailto:tsmh@us.sika.com). The above information is offered for general guidance only.

### 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, such as acetone, which can be tolerated by the substrate. 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 Industry at [tsmh@us.sika.com](mailto:tsmh@us.sika.com).

#### Application

**Cartridges:** Pierce cartridge membrane. Affix nozzle.

**Unipacks:** Place unipac 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 Figure 1). 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 50°F (10°C) or above 95°F (35°C). The optimum temperature for substrate and adhesive is between 60°F (15°C) and 77°F (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 Sika Industry at [tsmh@us.sika.com](mailto:tsmh@us.sika.com).

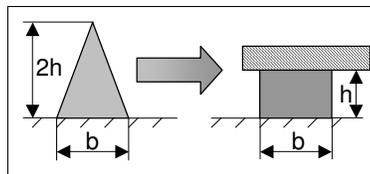


Figure 1: Recommended bead configuration

#### Tooling and finishing

Tooling and finishing must be carried out within the tack free time of the adhesive. We recommend the use of Sika®-Slick Cutout Lubricant and Tooling Agent. Other finishing agents or lubricants must be tested for suitability / compatibility. Advice on specific applications is available

from the Technical Service Department of Sika Industry at [tsmh@us.sika.com](mailto:tsmh@us.sika.com).

#### Removal

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 on skin!

#### 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.

#### WARNING:

**IRRITANT, SENSITIZER.** Contains Polyisocyanate Prepolymer (Mixture), Xylene (CAS 1330-20-7). Causes eye irritation. May cause skin/respiratory irritation. May cause skin and/or respiratory sensitization after prolonged contact. May be harmful if swallowed. Reports have associated repeated and prolonged exposure to some of the chemicals in this product with permanent brain, liver, kidney and nervous system damage. Headaches and dizziness may result. **Deliberate misuse by inhalation of vapors may be**

Further information available at:  
[www.sikausa.com](http://www.sikausa.com)

Sika Corporation  
Industry Division  
30800 Stephenson Highway  
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Fax 248 577 0810



**harmful or fatal. Strictly follow all usage, handling and storage instructions.**

#### HMS

|                     |    |
|---------------------|----|
| Health              | *2 |
| Flammability        | 1  |
| Reactivity          | 0  |
| Personal Protection | C  |

#### First Aid Measures

**Eyes** – Hold eyelids apart and flush thoroughly with water for 15 minutes. **Skin** – Remove contaminated clothing. Wash skin thoroughly for 15 minutes with soap and water. **Inhalation** – Remove to fresh air. **Ingestion** – Do not induce vomiting. Dilute with water. Contact physician. **In all cases contact a physician immediately if symptoms persist.**

#### Further Information

Copies of the following publications are available on our website [www.sikausa.com](http://www.sikausa.com):  
- Material Safety Data Sheets  
- Product Data Sheet

**In case of emergency call:**  
**Chemtrec: 800-424-9300**  
**International: 703-527-3887**

#### Health and Safety Information

For further information and advice regarding transportation, handling, storage and disposal of chemical products, users should refer to the actual Material Safety Data Sheets containing physical, ecological, toxicological and other safety related data. It is highly recommended to read the actual Material Safety Data Sheet before using the product.

- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- KEEP CONTAINER TIGHTLY CLOSED
- FOR PROFESSIONAL USE ONLY

#### Packaging Information

|           |                  |
|-----------|------------------|
| Cartridge | 300 ml           |
| Unipack   | 600 ml           |
| Pail      | 4.5 gal          |
| Drum      | 200 L / 52.8 gal |

#### Value Basis

All technical data stated on this Product Data Sheet are based on the results of laboratory tests only. Actual measured data in the field may vary due to site specific conditions which are not known to Sika and beyond our control.

#### Handling and Storage

Do not store near excessive heat. Store in tightly closed containers. Ideal storage temperature is less than 77°F, exposure to temperatures in excess of 80°F can cause premature polymerization without hazard. Avoid direct contact. Wear personal protective equipment (chemical resistant goggles / gloves / clothing) to prevent direct contact with skin and eyes. Use only in well ventilated areas. Open doors and windows during use. Use a properly fitted NIOSH respirator if ventilation is poor. Wash thoroughly with soap and water after use. Remove contaminated clothing and laundry before reuse.

#### Clean Up

Use personal protective equipment (chemical resistant gloves/goggles/clothing). Without direct contact, remove spilled or excess product and place in suitable sealed container. Dispose of excess product and container in accordance with applicable environmental regulations.

#### Limited Material Warranty

SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within shelf life. User determines suitability of product for intended use and assumes all risks. Buyer's sole remedy shall be limited to the

purchase price or replacement of product exclusive of labor or cost of labor. **NO OTHER WARRANTIES IMPLIED OR EXPRESS SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.**

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Sika reserves the right to change the properties of its products without notice. All sales of Sika product(s) are subject to its current terms and conditions of sale which are available at [www.sikausa.com](http://www.sikausa.com) or by calling 201-933-8800.

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Prior to each use of any Sika product, the user must always read and follow the warnings and instructions on the product's most current Product Data Sheet, product label and Material Safety Data Sheet which are available at [www.sikausa.com](http://www.sikausa.com). Nothing contained in any Sika materials relieves the user of the obligation to read and follow the warnings and instruction for each Sika product as set forth in the current Product Data Sheet, product label and Material Safety Data Sheet prior to product use.

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