

Sikaflex®-252

Assembly 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 (CQP1 001-1)	Black, white
Cure mechanism	Moisture-curing
VOC (EPA Method 24)	61 g/l
Density (uncured)	10 lbs. /gallon, approx. Depends on Color.
Non-sag properties	Good
Application temperature ambient	50 - 95°F (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)	435 psi approx.
Elongation at break (CQP 036-1 / ISO 37)	400 % approx.
Tear propagation resistance (CQP 045-1 / ISO 34)	40 pli approx.
Tensile lap-shear strength (CQP 046-1 / ISO 4587)	360 psi approx.
Glass transition temperature (CQP 509-1 / ISO 4663)	-40°F (-40°C) approx.
Volume resistivity (ASTM D 257-99)	5 x 10 ⁹ Ωcm approx.
Service temperature (CQP 513-1)	-40 - 195°F (-40 - 90°C)
	4 hours 265°F (130°C)
	1 hour 300°F (150°F)
Shelf life (storage below 25°C) (CQP 016-1)	Cartridge/Unipac 9 months
	Pail/Drum 6 months

1) CQP = Corporate Quality Procedures 2) 23°C (73°F) / 50% RH.

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
- NSF registered, Proprietary Substances and Nonfood Compounds.

Areas of Application

Sikaflex®-252 is suitable for structural joints that will be subjected to dynamic stresses. Suitable substrates include wood, metals, particularly aluminum, sheet

Industry



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 1).

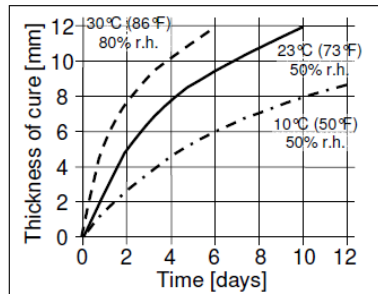


Diagram 1: Curing speed Sikaflex®-252

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. 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.

Application

Cartridges: Pierce cartridge membrane. Affix nozzle.

Unipacs: 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.

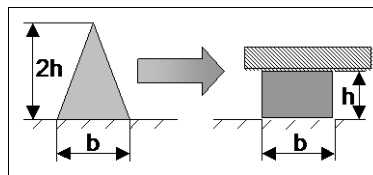


Figure 1: Recommended bead configuration

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.

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 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. The paint and paint process compatibility must be tested under manufacturing conditions before use. The elasticity of paints is lower than of polyurethanes. This could lead to cracking of the paint film in the joint area.

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.

Danger

Contains: xylene (CAS: 1330-20-7), titanium dioxide (CAS: 13463-67-7), ethylbenzene (CAS: 100-41-4), 4, 4'-methylenediphenyl diisocyanate (CAS: 101-68-8), 3-isocyanatomethyl-3, 5, 5 trimethylcyclohexyl isocyanate (CAS: 4098-71-9), Aliphatic polyisocyanate (CAS: 28182-81-2), Carbon black (CAS: 1333-86-4). May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Suspected of causing cancer. Reports have associated repeated and prolonged exposure to

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some of the chemicals in this product with permanent brain, liver, kidney and nervous system damage. Intentional misuse by deliberate concentration and inhalation of vapors may be harmful or fatal. **WARNING!** This product contains a chemical known in the State of California to cause cancer. **WARNING:** This product contains a chemical known in the State of California to cause birth defects or other reproductive harm.

HMIS

Health	*3
Flammability	0
Reactivity	0
Personal Protection	X

First Aid Measures

IF ON SKIN: Wash with plenty of soap and water. IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. IF exposed or concerned: Get medical advice/ attention. If skin irritation or rash occurs: Get medical advice/ attention.

Further Information

For further information and advice regarding transportation, handling, storage and disposal of chemical products, users should refer to the actual Safety Data Sheets containing physical, ecological, toxicological and other safety related data. Read the current actual Safety Data Sheet before using the product. In case of emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887. Health and Safety Information

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

Packaging Information

Cartridge	300 ml
Unipac	600 ml
Hobbock	23 L
Drum	195 L

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

Handling:

- Do not breathe vapors or spray mist.
- Avoid exceeding the given occupational exposure limits
- Do not get in eyes, on skin, or on clothing.
- For personal protection review product SDS
- Persons with a history of skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.
- Smoking, eating and drinking should be prohibited in the application area.
- Follow standard hygiene measures when handling chemical products.

Conditions for safe storage:

- Prevent unauthorized access.
- Store in original container.
- Keep container tightly closed in a dry and well-ventilated place.
- Observe label precautions.
- Store in accordance with local regulations.

Store product in tightly sealed containers in a cool, dry well-ventilated area at temperatures between 40°F and 95°F is acceptable away from ignition sources. Storage temperature of <

77°F is most highly recommended to ensure maximum shelf life.

Clean Up

- Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
- Keep in suitable, closed containers for disposal.

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 EXPRESS OR IMPLIED 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.**

Sale of Sika products are subject Sika's Terms and Conditions of Sale available at <http://usa.sika.com/> or by calling 201-933-8800.

Legal Notes/Disclaimer

All information provided by Sika Corporation ("Sika") concerning Sika products, including but not limited to, any recommendations and advice relating to the application and use of Sika products, is given in good faith based on Sika's current experience and knowledge of its products when properly stored, handled and applied under normal conditions in accordance with Sika's instructions. In practice, the differences in

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