

Sikaflex® -227

Fast Skinning, Elastic Adhesive/Sealant

Typical Product Data

Chemical base	1-C polyurethane
Color	White, Aluminum Gray
Cure mechanism	Humidity Curing
Density (uncured)	10.8 lb/gal depends on color
Non-sag properties	Good
Application temperature product	40°F - 100°F (5°C - 38°C)
Tack free time ¹ (CQP 019-1)	40 min
Curing speed	(see diagram 1)
Shore A-hardness (ASTM D 2240)	40
Tensile strength (ASTM D 412)	245 psi
Elongation at break (ASTM D 412)	600%
Tear propagation resistance (ASTM D 624)	34 pli
Tensile-shear strength (ASTM D 1002)	160 psi
Movement accommodation factor (ASTM C 719)	+/- 12.5%
Service temperature permanent	-40°F - 195°F (-40°C - 90°C)
Shelf life (storage below 80°F (25°C))	9 months

¹ 73°F (23°C) / 50% r.h.

Description

Sikaflex® -227 is a high-quality multi purpose non-sag 1-c polyurethane adhesive/sealant that cures on exposure to atmospheric humidity to form a durable elastomer. Sikaflex® -227 is manufactured in accordance with ISO 9001 / 14001 quality assurance system and the Responsible Care Program.

Product Benefits

- Adheres to a wide range of substrates, without primer in many cases
- Exhibits tenacious adhesion to aluminum, FRP, steel, wood, SMC, RIM, prepainted metals, ZINCALUME, Zincgrip, and aluminized steel, without attacking the metal coating
- Fast tack free time
- Cures rapidly to a elastic consistency with excellent cut and tear resistance
- Low odor, non-staining
- Paintable
- Weather resistant
- Resistant to road salts

Areas of Application

- Sealing exterior lap seams in many applications, including truck trailers, RV's, metal roofs, window perimeters, grain bins and HVAC units
- Sealing rivet seams
- Sealing of exposed and concealed joints of aluminum, steel, coated metals, wood, roof rails, and door hinges in transport equipment
- Sealing and caulking expansion joints
- May be suitable for use on a wide variety of substrates; including aluminum, steel, glass, wood, metal primers and paint coating (2-c systems), metals, painted plastics and many different types of plastic.

Industry



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, label and Safety Data Sheet which are available on request at tsmh@us.sika.com. Nothing contained in any Sika 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 Data Sheet, label and Safety Data Sheet prior to product use.

Cure Mechanism

Sikaflex®-227 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).

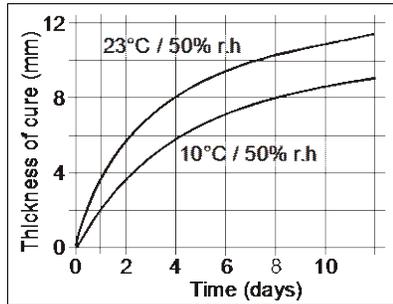


Diagram 1: Curing speed Sikaflex®-227 US

Chemical Resistance

Sikaflex®-227 is resistant to fresh water, aqueous cleaning solutions; temporarily resistant to fuels, mineral oils, vegetable and animal fats and oils; not resistant to organic and mineral acids, alcohol, 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 all traces of grease, oil and dust. As a rule, the substrates must be prepared in accordance with the instructions given in the current Sika Pre-Treatment Chart.

Application

Cartridges: Cut tip to joint size. Puncture airtight seal. Install with hand or power operated gun.

Unipacks: Place unipack in the application gun and snip off the closure clip. Cut off the tip of the nozzle to suit joint width and gun the sealant into the joint with a suitable compressed air or hand operated gun, taking care to avoid air entrapment. Once opened, packs should be used up within a relatively short space of time. Do not apply at temperatures below 40°F (5°C) or

above 100°F (38°C). The optimum temperature for substrate and sealant is between 60°F (15°C) and 77°F (25°C). For advice on selecting and setting up a suitable pump system, please contact the System Engineering Department.

Tooling and finishing

Tooling and finishing must be carried out within the tack free time of the sealant. Finishing agents or lubricants must be tested for suitability/compatibility.

Removal

Uncured Sikaflex®-227 can be removed from tools and equipment with Sika® Remover-208 or another suitable solvent. Once cured, the material can only be removed mechanically. Strictly follow solvent manufacturer's instructions for use and warnings. Hands and exposed skin should be washed immediately using a suitable industrial hand cleaner and water. **Do not use solvents on skin!**

Overpainting

Sikaflex®-227 can be overpainted when tack-free. The paint and paint process must be tested for compatibility by carrying out preliminary trials. Sikaflex®-227 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 sealant and lead to cracking of the paint film with time.

Further Information

To contact Sika Corporations' Technical Services Department please send an e-mail to tsmh@us.sika.com.

Copies of the following publications are available on request:

- Safety Data Sheets
- Pre-Treatment Chart

Packaging Information

Cartridge	300 ml
Unipack	600 ml
Pail	4.5 Gal
Drum	50 gal

Limitations

Seek manufacturer's advice before using on transparent and pigmented materials that are prone to stress cracking

Basis of Product Data

All technical data stated in this Product Data Sheet are based on laboratory tests only. 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 Safety Data Sheets containing physical, ecological, toxicological and other safety-related data.

Limited Material Warranty

Sika Corporation 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.**

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