

Sikaflex[®]-515

Isocyanate free, fast skinning sealant

Technical Product Data

Chemical base	Hybrid
Color	White, light grey
Cure mechanism	Humidity-curing
Density (uncured)	12.7 lbs/gal, approx.
Non-sag properties	Good
Application temperature	40 - 105°F (5 - 40°C)
Skin time ¹⁾	25 min. approx.
Open time ¹⁾	20 min. approx.
Curing speed	See diagram 1
Volume shrinkage	3% approx.
Shore A-hardness (ASTM D2240)	25 approx.
Tensile strength (ASTM D412)	160 psi, approx.
Elongation at break (ASTM D412)	300%, approx.
Tear propagation resistance (ASTM D624)	28 lbs/in, approx.
Glass transition temperature	-58°F (-50°C), approx.
Thermal resistance	Short term 4 hours 195°F (90°C) 250°F (120°C)
Shelf life (storage below 77°F (25°C))	12 months, unipac

¹⁾ 77°F (25°C) / 50% r.h.

Description

Sikaflex[®]-515 is a one-component sealant based on the Sika silane terminated polymer (STP) technology. The product cures on exposure to atmospheric humidity to form a durable elastomer.

Sikaflex[®]-515 is manufactured in accordance with ISO 9001 / 14001 quality assurance system and the responsible care program.

Product Benefits

- Fast skinning
- Good weathering and thermal stability
- Bonds well to a wide variety of substrates without the need for special pre-treatment
- Elastic
- Very good workability performances
- Can be overpainted
- Low odor
- Isocyanate Free
- Silicone- and PVC-free

Areas of Application

Sikaflex[®]-515 is a universal sealant which is suitable for most sealing applications in industrial commercial vehicle building. The product possesses excellent sealing properties for inside and outside applications. It bonds well to all the materials commonly used in the commercial vehicle industry, e.g. metals, ABS, PC, FRP and wood. This product is suitable for professional experienced users only. Test with actual substrates and conditions must be performed to ensure adhesion and material compatibility prior to use.

Industry



Cure Mechanism

Sikaflex®-515 cures by reaction with atmospheric humidity. At low temperatures the water content of the air is lower and the curing reaction proceeds a little more slowly. If Sikaflex®-515 is used in combination with a PUR adhesive, the latter must be fully cured before seam sealing with Sikaflex®-515.

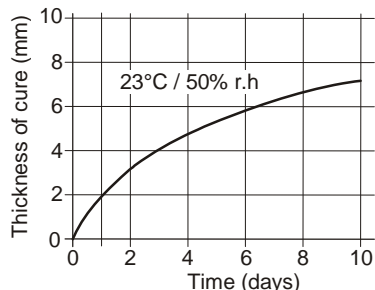


Diagram 1: Curing speed Sikaflex®-515

Chemical Resistance

Sikaflex®-515 is resistant to fresh water, seawater, and proprietary aqueous cleaning agents; temporarily resistant to fuels, mineral oils, vegetable and animal fats and oils; not resistant to organic acids, 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 Sika Corporation's Technical Services Department with your technical questions by sending an email to tsmh@sika-corp.com.

Method of Application

Surface preparation

The surfaces must be clean, dry and free from grease, oil, and dust. The adhesion of the sealant can be improved by wiping the joint faces with Sika® Cleaner-226 or possibly applying the appropriate Sika® Primer. Directions for the preparation and treatment of different substrates are offered in the "Sika Primer Chart for Flat Glass Sealing Applications" located at www.sikaindustry.com.

Application

Cut off the tip of the nozzle to suit joint width and apply the sealant into the joint with a suitable hand operated or compressed-air gun, taking care to avoid air entrapment. Once opened, packs should be used up within a relatively short time. Do not apply at temperatures below 40°F (5°C) or above 105°F (40°C). The optimum temperature for substrate and sealant is between 60°F (15°C) and 77°F (25°C).

Advice on specific applications is available from the Technical Service Department of Sika Industry.

Tooling and finishing

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

Removal

Uncured Sikaflex®-515 can be removed from tools and equipment with mineral spirits or another suitable solvent. Strictly follow solvent manufacturer's warnings and instruction for use. Once cured, the material can only be removed mechanically. Hands and exposed skin should be washed immediately using a suitable industrial hand cleaner and water. Do not use solvents on skin!"

Overpainting

Sikaflex®-515 can be overpainted before 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 with oil based paints. Actual paint and paint process compatibility should be tested and trialed 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

Avoid applications below 40°F (5°C) and above 105°F (35°C) as

improper surface properties could result. Since the material is moisture cured, provide sufficient exposure to air. Do not apply over cured silicones or in the presence of curing silicones or urethanes. Avoid contact with excessive amounts of alcohols or alcohol-containing mixtures, as some temporary initial surface tackiness may result. **Not** designed for direct glazing applications.

Handling and Storage

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 properly fitted NIOSH respirator if ventilation is poor. Wash thoroughly with soap and water after use. Remove contaminated clothing and launder before reuse.

Clean Up

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

First Aid Measures

Inhalation - Remove to fresh air.
Eyes - Rinse for 15 minutes with tepid water. Call physician. **Skin** - Wash thoroughly with soap and tepid water. Remove contaminated clothing. **Ingestion** - Do not induce vomiting. Dilute with water. Call physician. **In all cases contact a physician immediately if symptoms persist.**

HMIS

Health	*2
Flammability	0
Reactivity	1
Personal Protection	C

Further information available at:
www.sikaindustry.com

Sika Corporation
Industry Division
30800 Stephenson Highway
Madison Heights, Mi 48071
USA
Tel. 248 577 0020
Fax 248 577 0810
MADE IN SWITZERLAND



Further Information

Copies of the following publications are available on request at www.sikaindustry.com or by calling 888-832-7452:

- Material Safety Data Sheets
- Product Data Sheets

In case of emergency call:

Chemtrec: 800-424-9300
International: 703-527-3887

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

Packaging Information

Unipac	400 ml
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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.

Health and Safety Information

For information and advice regarding transportation, handling, storage and disposal of chemical products, users should refer to the Material Safety Data Sheet 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.

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 OR 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.sikacorp.com or by calling 201-933-8800.

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.sikaindustry.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.

Further information available at:
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USA
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