

Sikaflex®-515

Isocyanate free, fast skinning sealant

Technical Product Data

Chemical base		Silane Terminated Polymer
Colour (CQP ¹ 001-1)		White, light grey, black
Cure mechanism		Moisture-curing
Density (uncured) (CQP 006-4)	depending on colour	1.52 kg/l approx.
Non-sag properties		Good
Application temperature	ambient	5 - 40°C (40 - 105°F)
Skin time ² (CQP 019-1)		25 min. approx.
Open time ² (CQP 526-1)		20 min. approx.
Curing speed (CQP 049-1)		See diagram 1
Volume shrinkage (CQP 014-1)		3% approx.
Shore A-hardness (CQP 023-1 / ISO 868)		25 approx.
Tensile strength (CQP 036-1 / ISO 37)		1.1 N/mm ² approx.
Elongation at break (CQP 036-1 / ISO 37)		300% approx.
Tear propagation resistance (CQP 045-1 / ISO 34)		5.0 N/mm approx.
Glass transition temperature (CQP 509-1 / ISO 4663)		-50°C (-60°F) approx.
Thermal resistance (CQP 513-1)		90°C (195°F)
Short term	4 hours	120°C (250°F)
Shelf life (storage below 25°C) (CQP 016-1)	cartridge / unipack pail / drum	12 months 9 months

¹⁾ CQP = Corporate Quality Procedure

²⁾ 23°C (73°F) / 50% r.h.

Description

Sikaflex®-515 is a one-component PUR-Hybrid 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
- Elastic
- Very good workability performances
- Can be overpainted
- Low odour
- VOC and solvent-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 have to be performed to ensure adhesion and material compatibility.



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 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.

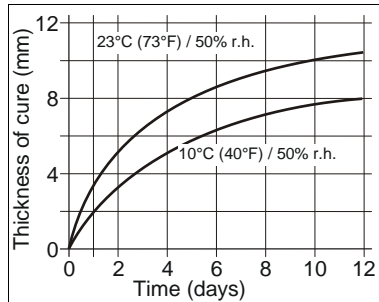


Diagram 1: Curing speed of Sikaflex®-515

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, 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

The surfaces must be clean, dry and free from grease, oil, and dust. For certain substrates the adhesion might be improved by using Sika Aktivator-205 or another appropriate pre-treatment.

General directions for the preparation and treatment of different substrates are given in the appropriate Sika Pre-treatment Chart.

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. Do not apply at temperatures below 5°C or above 40°C. The optimum temperature for substrate and sealant is between 15°C and 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® Tooling Agent N. Other finishing agents must be tested for suitability /compatibility.

Removal

Uncured Sikaflex®-515 may be removed from tools and equipment with Sika® Remover-208 or another suitable solvent. Once cured, the material can only be removed mechanically.

Hands and exposed skin should be washed immediately using Sika® Handclean towels or a suitable industrial hand cleaner and water. Do not use solvents!

Overpainting

Sikaflex®-515 can be overpainted within the skin formation time. 2 component epoxy paints are usually suitable. Other paints must be tested for compatibility by carrying out preliminary trials under manufacturing conditions. The elasticity of paints is lower than of polyurethanes. This could lead to cracking of the paint film in the joint area.

Further Information

Copies of the following publications are available on request:

- Material Safety Data Sheets
- General Guidelines - Bonding and Sealing with Sikaflex®
- Sika® Pre-Treatment Chart for Polyurethane Hybrids

Packaging Information

Cartridge	300 ml
Unipack	600 ml
Pail	23 l
Drum	195 l

Value Bases

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

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 in accordance with Sika's recommendations. 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 written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

Further information available at:

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