

PRODUCT DATA SHEET

Sikaflex®-521 UV

WEATHERING-RESISTANT STP ADHESIVE SEALANT WITH A WIDE ADHESION RANGE



TYPICAL PRODUCT DATA (FURTHER VALUES SEE SAFETY DATA SHEET)

Chemical base		Silane Terminated Polymer
Color (CQP001-1)		White, grey, black
Cure mechanism		Moisture-curing
Density (uncured)	depending on color	1.4 kg/l
Non-sag properties		Good
Application temperature	ambient	5 – 40 °C
Skin time (CQP019-1)		30 minutes ^A
Curing speed (CQP049-1)		(see diagram)
Shrinkage (CQP014-1)		2 %
Shore A hardness (CQP023-1 / ISO 7619-1)		40
Tensile strength (CQP036-1 / ISO 527)		1.8 MPa
Elongation at break (CQP036-1 / ISO 527)		400 %
Tear propagation resistance (CQP045-1 / ISO 34)		5.5 N/mm
Service temperature (CQP513-1)		-50 – 90 °C
	4 hours	140 °C
	1 hour	150 °C
Shelf life (CQP016-1)	cartridge / unipack	12 months ^B
	pail / drum	9 months ^B

CQP = Corporate Quality Procedure

^{A)} 23 °C / 50 % r. h.

^{B)} storage below 25 °C

DESCRIPTION

Sikaflex®-521 UV is a weathering-resistant 1-component Silane Terminated Polymer (STP) adhesive / sealant that bonds well to a wide variety of bonding surfaces such as metals, ABS, PC, FRP and wood with usually no need for special treatment. This multipurpose product is suitable for internal and external sealing applications.

PRODUCT BENEFITS

- Ageing and weathering-resistant
- Bonds well to a wide variety of substrates without the need for special pre-treatment
- Isocyanate- and solvent-free
- Can be painted
- Can be sanded
- Low odor
- ISEGA-approved for incidental food contact

AREAS OF APPLICATION

Sikaflex®-521 UV adheres well to a wide variety of substrates and is suitable for elastic sealing and bonding. Suitable substrate materials include timber, metals, metal primers and paint coatings (2-component systems), ceramic materials and plastics.

This multipurpose product is suitable for internal and external sealing applications. Seek manufacturer's advice and perform tests on original substrates before using Sikaflex®-521 UV on materials prone to stress cracking.

This product is suitable for experienced professional users only. Test with actual substrates and conditions have to be performed to ensure adhesion and material compatibility.

CURE MECHANISM

Sikaflex®-521 UV 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 1).

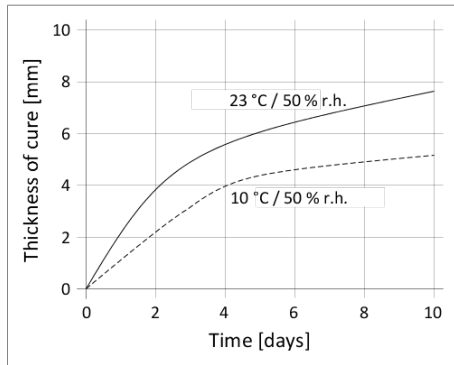


Diagram 1: Curing speed Sikaflex®-521 UV

CHEMICAL RESISTANCE

Sikaflex®-521 UV is generally resistant to fresh water, seawater, diluted acids and diluted caustic solutions; temporarily resistant to fuels, mineral oils, vegetable and animal fats and oils; not resistant to organic acids, glycolic alcohol, concentrated mineral acids and caustic solutions or solvents.

METHOD OF APPLICATION

Surface preparation

Surfaces must be clean, dry and free from grease, oil and dust. Surface treatment depends on the specific nature of the substrates and is crucial for a long lasting bond. Suggestions for surface preparation may be found on the current edition of the appropriate Sika® Pre-Treatment Chart. Consider that these suggestions are based on experience and have in any case to be verified by tests on original substrates.

Application

Sikaflex®-521 UV can be processed between 5 °C and 40 °C but changes in reactivity and application properties have to be considered. The optimum temperature for substrate and sealant is between 15 °C and 25 °C.

Sikaflex®-521 UV can be processed with hand, pneumatic or electric driven piston guns as well as pump equipment. For advice on selecting and setting up a suitable pump system, contact the System Engineering Department of Sika Industry.

Tooling and finishing

Tooling and finishing must be carried out within the skin time of the sealant. It is recommended using Sika® Tooling Agent N. Other finishing agents must be tested for suitability and compatibility prior the use.

Removal

Uncured Sikaflex®-521 UV can 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 have to be washed immediately using Sika® Cleaner-350H cleaning towels or a suitable industrial hand cleaner and water. Do not use solvents on skin.

FURTHER INFORMATION

The information herein is offered for general guidance only. Advice on specific applications is available on request from the Technical Department of Sika Industry.

Copies of the following publications are available on request:

- Safety Data Sheets
- Sika Pre-treatment Chart
Silane Terminated Polymer
- General Guidelines
Bonding and Sealing with Sikaflex® and SikaTack®

PACKAGING INFORMATION

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

BASIS OF PRODUCT DATA

All technical data stated in this document 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 Safety Data Sheets containing physical, ecological, toxicological and other safety-related data.

DISCLAIMER

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