

PRODUCT DATA SHEET

Sikaflex®-521 FC

Transparent sealant

TYPICAL PRODUCT DATA (FURTHER VALUES SEE SAFETY DATA SHEET)

Chemical base	Silane Terminated Polymer
Colour (CQP001-1)	Transparent
Cure mechanism	Moisture-curing
Density (uncured)	1.06 kg/l
Non-sag properties	Good
Application temperature	5 – 40 °C
Skin time (CQP019-1)	30 minutes ^A
Curing speed (CQP049-1)	see diagram
Shore A hardness (CQP023-1 / ISO 48-4)	35
Tensile strength (CQP036-1 / ISO 527)	1.5 MPa
Elongation at break (CQP036-1 / ISO 527)	200 %
Tear propagation resistance (CQP045-1 / ISO 34)	1.5 N/mm
Service temperature (CQP513-1)	-40 – 90 °C
Shelf life (CQP016-1)	18 months ^B

CQP = Corporate Quality Procedure

^A) 23 °C / 50 % r. h.^B) stored (unopened) in a dry place at ≤ 25 °C

DESCRIPTION

Sikaflex®-521 FC is a transparent, weathering-resistant 1-component sealant, which cures by reaction with atmospheric moisture. It bonds well to a wide variety of substrates such as metals, plastics, and wood. Usually no or only limited surface preparation required. After curing, the sealant forms a permanent elastic joint.

PRODUCT BENEFITS

- Transparent
- Good weathering resistance
- No or only limited pre-treatment required
- None corrosive
- Low odor
- Isocyanate free

AREAS OF APPLICATION

Sikaflex®-521 FC is a transparent, weathering-resistant 1-component sealant, which cures by reaction with atmospheric moisture. It bonds well to a wide variety of substrates such as metals, plastics, and wood. Usually no or only limited surface preparation required. Sikaflex®-521 FC is used for permanent elastic seals.

Seek manufacturer's advice and perform tests on original substrates before using Sikaflex®-521 FC on materials prone to stress cracking. This product is suitable for experienced professional users only. Tests with actual substrates and conditions have to be performed ensuring adhesion and material compatibility.

CURE MECHANISM

Sikaflex®-521 FC 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).

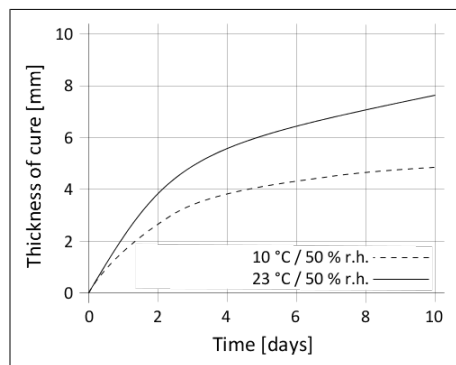


Diagram 1: Curing speed Sikaflex®-521 FC

CHEMICAL RESISTANCE

Sikaflex®-521 FC 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, dust and contaminants. 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 FC can be processed between 5 °C and 40 °C (climate and product) but changes in reactivity and application properties have to be considered. The optimum temperature for substrate and process material is between 15 °C and 25 °C.

Sikaflex®-521 FC can be processed with manual, pneumatic or electric driven piston guns.

Tooling and finishing

Tooling and finishing must be carried out within the skin time of the product. 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 FC 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 have to be washed immediately using hand wipes such as Sika® Cleaner-350H 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 Sheet
- Sika Pre-treatment Chart
For Silane Terminated Polymers
- General Guideline
Bonding and Sealing with 1-component Sikaflex®

PACKAGING INFORMATION

Cartridge	290 ml
Unipack	600 ml
Pail	20 l
Drum	205 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

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

DISCLAIMER

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.

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