BUILDING TRUST

PRODUCT DATA SHEET

Sikaflex®-522

Weathering resistant low emission multipurpose STP sealant

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)		1.4 kg/l
Non-sag properties		Good
Application temperature		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 48-4)		40
Tensile strength (CQP036-1 / ISO 527)		1.8 MPa
Elongation at break (CQP036-1 / ISO 37)		400 %
Tear propagation resistance (CQP045-1 / ISO 34)		7.5 N/mm
Service temperature (CQP513-1)		-50 – 90 °C
	4 hours	140 °C
	1 hour	150 °C
Shelf life	Unipack / Cartridge	12 months [B]
	Drum	9 months [B]

CQP = Corporate Quality Procedure

[A] 23 °C / 50 % r.h.

[B] storage below 25 °C

DESCRIPTION

Sikaflex®-522 is a low emission 1-component Silane Terminated Polymer (STP) sealant/adhesive. It has a high weathering and mold resistance. Sikaflex®-522 meets highest EHS standards. It bonds well to a wide range of substrates with minimal pre-treatment.

PRODUCT BENEFITS

- High ageing and weathering resistant
- High fungicidal resistance
- Very low emission and odor
- Bonds well to a wide variety of substrates without the need for special pre-treatment
- High color stability under UV
- Isocyanate, solvent, phthalate and silicone-free
- Meets hygiene requirements for ventilation and air-conditioning systems and units according VDI 6022 Blatt 1:2011-07
- ISEGA certificate for foodstuff area usage
- EC1+ certificate

AREAS OF APPLICATION

Sikaflex®-522 adheres well to a wide variety of substrates and is suitable for interior and exterior elastic sealing and bonding applications. It is suitable for applications in areas of air ventilation and incidental food contact.
Suitable substrate materials include timber, glass, metals, metal primers and paint coatings (2-part systems), ceramic materials and plastics.
Seek manufacturer's advice and perform tests on original substrates before using Sikaflex®-522 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®-522 cures by reaction with atmospheric moisture. At low temperatures the water content of the air is generally lower and the curing reaction proceeds some-what slower (see diagram 1).

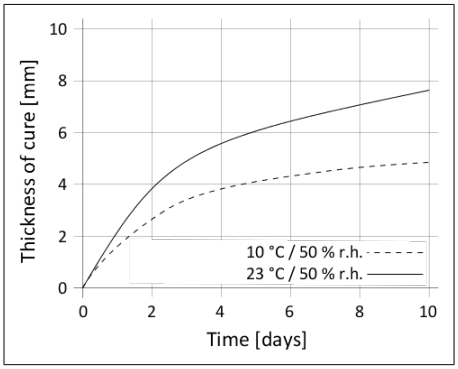

Diagram 1: Curing speed Sikaflex®-522

CHEMICAL RESISTANCE

Sikaflex®-522 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®-522 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 sealant is between 15 °C and 25 °C.

Consider that the viscosity will increase at low temperature. For easy application, condition the adhesive at ambient temperature prior to use.

Sikaflex®-522 can be processed with manual, pneumatic or electric driven piston guns as well as pump equipment. The skin time is significantly shorter in hot and humid climate.

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®-522 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 hand wipes such as Sika® Cleaner-350H cleaning towels or a suitable industrial hand cleaner and water.

Do not use solvents on skin.

Overpainting

Sikaflex®-522 can be best painted within the skin formation time. If painting process takes place after the sealant has built a skin, adhesion could be improved by treating the joint surface with Sika® Aktivator-100 or Sika® Aktivator-205 prior to paint process. If the paint requires a baking process (> 80 °C), best performance is achieved by allowing the sealant to fully cure first. All paints have to be tested by carrying preliminary trials under manufacturing conditions. The elasticity of paints is usually lower than that of sealants. This could lead to cracking of the paint in the joint area.

FURTHER INFORMATION

The information herein is offered for general guidance only. Advice on specific application 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
  For Silane Terminated Polymers (STP)
- General Guidelines
  Bonding and Sealing with Sikaflex®

PACKAGING INFORMATION

Cartridge	300 ml
Unipack	600 ml
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

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 can always refer to the most recent version of the local Product Data Sheet for the relevant product, available on our website. The information in any downloaded version is valid as of the time of download.

Sika Limited (Vietnam)
Nhon Trach 1 Industrial Zone,
Nhon Trach Dist., Dong Nai Province,
Vietnam
Tel: (84-251) 3560 700
Fax: (84-251) 3560 699
sikavietnam@vn.sika.com
vnm.sika.com