BUILDING TRUST

PRODUCT DATA SHEET

Sikaflex®-505 UV

Multi purpose silane terminated polymer adhesive sealant

TYPICAL PRODUCT DATA (FURTHER VALUES SEE SAFETY DATA SHEET)

Chemical base		Silane Terminated Polymer
Color (CQP001-1)		White, gray
Cure mechanism		Moisture-curing
Density (uncured)		1.50 kg/l (12.5 lb/gal)
Non-sag properties		Good
Application temperature	ambient, product	5 – 40 °C (41 – 104 °F)
Skin time (CQP019-1)		30 minutes [A]
Curing speed (CQP049-1)		(see diagram 1)
Shore A hardness (CQP023-1 / ISO 48-4)		45
Tensile strength (ASTM D412)		1.5 MPa (220 psi)
Elongation at break (ASTM D412)		200 %
Service temperature (CQP513-1)		-40 – 90 °C (-40 – 194 °F)
Shelf life		12 months [B]

CQP = Corporate Quality Procedure

[A] 23 °C (73 °F) / 50 % r.h.

[B] storage below 25 °C (77 °F)

DESCRIPTION

Sikaflex®-505 UV is a 1-component silane terminated polymer (STP) adhesive sealant that cures on exposure to atmospheric moisture. It exhibits very good adhesion to a wide range of substrates and is weather resistant making it suitable for open joints.

PRODUCT BENEFITS

- Contains no solvents or isocyanates
- Low VOC content
- Very good adhesion to a wide variety of substrates
- Very good weathering resistance
- Meets the requirements of AAMA 802.3 Type I and II
- Conforms to ASTM C920, Type S, Grade NS, Class 50, Use T, NT, G and A

AREAS OF APPLICATION

Sikaflex®-505 UV is suitable for interior and exterior sealing as well as simple bonding for a variety of markets including transportation (trailers, recreational vehicles), Industry (metal buildings, HVAC units), and fenestration (window and door manufacturing, window backbedding). It exhibits very good adhesion to many substrates including aluminum, steel, glass, marble, wood and many different types of plastic.

Seek manufacturer's advice and perform tests on original substrates before using Sikaflex®-505 UV 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®-505 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).

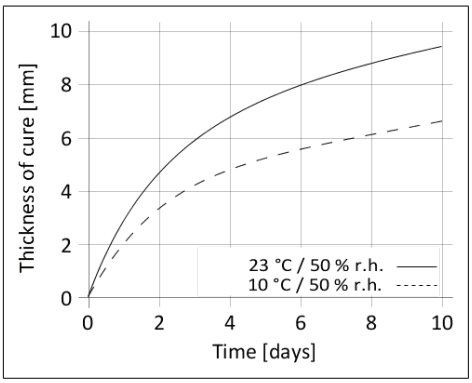

Diagram 1: Curing speed Sikaflex®-505 UV

CHEMICAL RESISTANCE

Sikaflex®-505 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. Adhesion and compatibility have to be verified by tests on original substrates.

Application

Sikaflex®-505 UV can be processed at temperatures (climate and product) between 5 °C and 40 °C (41 °F and 104 °F) 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 (59 °F and 77 °F). Sikaflex®-505 UV can be processed with manual, 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 product. It is recommended using Sika® Slick. Other finishing agents must be tested for suitability and compatibility prior the use.

Removal

Uncured Sikaflex®-505 UV 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 a suitable industrial hand cleaner and water.

Do not use solvents on skin.

Overpainting

Sikaflex®-505 UV 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 / 176 °F), 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 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
  For Silane Terminated Polymers
- General Guideline
  Bonding and Sealing with 1-component Sikaflex®

PACKAGING INFORMATION

Cartridge	300 ml
Unipack	600 ml
Drum	50 gal (US)

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.

ENVIRONMENTAL, HEALTH AND SAFETY

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

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