BUILDING TRUST

PRODUCT DATA SHEET

Sikaflex®-232 US

Elastic adhesive/sealant with high green strength

TYPICAL PRODUCT DATA (FURTHER VALUES SEE SAFETY DATA SHEET)

Chemical base		1-component polyurethane
Color (CQP001-1)		White
Cure mechanism		Moisture-curing
Density (uncured)		1.27 kg/l (10.6 lb/gal)
Non-sag properties		Good
Application temperature		5 – 35 °C (41 – 95 °F)
Skin time (CQP019-1)		35 minutes [A]
Curing speed (CQP049-1)		(see diagram 1)
Shore A hardness (CQP023-1 / ISO 48-4)		40
Tensile strength (ASTM D412)		1.5 MPa (220 psi)
Elongation at break (ASTM D412)		500 %
Service temperature (CQP513-1)		-40 – 90 °C (-40 – 194 °F)
Shelf life	cartridge / unipack	9 months [B]
	drum	6 months [B]

CQP = Corporate Quality Procedure

A) 23 °C (73 °F) / 50 % r. h.

B) storage below 25 °C (77 °F)

DESCRIPTION

Sikaflex®-232 US is a 1-component, thixotropic, polyurethane adhesive / sealant that exhibits a high initial green strength. It adheres well to a wide variety of substrates and cures on exposure to atmospheric moisture.

PRODUCT BENEFITS

- Very good sag resistance
- Bonds well to a wide variety of substrates
- Good gap-filling properties
- Can be painted and sanded
- Low odor

AREAS OF APPLICATION

Sikaflex®-232 US is suitable for sealing and simple bonding applications where high green strength is required to improve the assembly process such as trailers, RV's, industrial assembly and HVAC units. Sikaflex®-232 US adheres well with the most common substrates in these applications such as metals, metal primers and paint coatings (2-component systems), fiber reinforced plastic (FRP), and wood. Seek manufacturer's advice and perform tests on original substrates before using Sikaflex®-232 US 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 ensuring adhesion and material compatibility.

CURE MECHANISM

Sikaflex®-232 US 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).

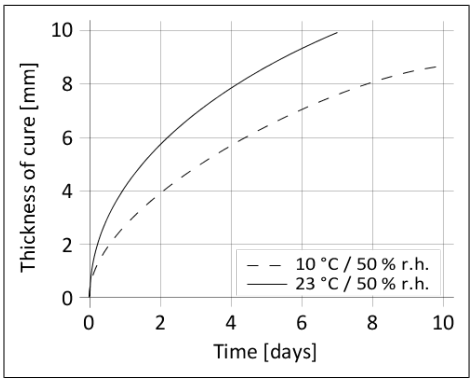

Diagram 1: curing speed for Sikaflex®-232 US

CHEMICAL RESISTANCE

Sikaflex®-232 US 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®-232 US can be processed at temperatures (climate and product) between 5 °C and 35 °C (41 °F and 95 °F) 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 (59 °F and 77 °F).

Consider that the viscosity will increase at low temperature. For easy application, condition the adhesive at ambient temperature prior to use. To ensure a uniform thickness of the bondline it is recommend to apply the adhesive in form of a triangular bead (see figure 1).

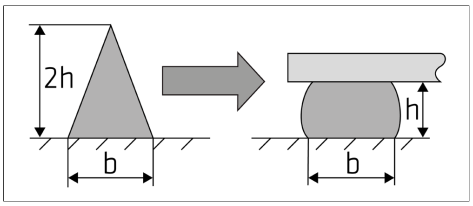

Figure 1: Recommended bead configuration

Sikaflex®-232 US can be processed with manual, pneumatic or electric driven piston guns. The open time is significantly shorter in hot and humid climate. The parts must always be installed within the open time. Never join bonding parts if the adhesive has built a skin.

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®-232 US 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®-232 US can be painted after formation of a skin. If the paint requires a baking process, best performance is achieved by allowing the sealant to fully cure first.

1C-PUR and 2C-acrylic based paints are usually suitable. 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 1-component Polyurethane
- General Guideline
  Bonding and Sealing with 1-component Sikaflex®

PACKAGING INFORMATION

Cartridge	300 ml
Unipack	600 ml
Drum	53 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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