

PRODUCT DATA SHEET

Sikaflex®-228

SELF-LEVELING ADHESIVE FOR LARGE-AREA BONDING APPLICATIONS

TYPICAL PRODUCT DATA (FURTHER VALUES SEE SAFETY DATA SHEET)

Chemical base	1-C polyurethane
Color (CQP001-1)	Greyish white
Cure mechanism	Moisture-curing
Density (uncured)	1.5 kg/l
Application temperature ambient	5 – 35 °C
Skin time (CQP019-1)	60 minutes ^
Curing speed (CQP049-1)	(see diagram)
Shrinkage (CQP014-1)	10 %
Shore A hardness (CQP023-1 / ISO 7619-1)	35
Tensile strength (CQP036-1 / ISO 527)	1 MPa
Elongation at break (CQP036-1 / ISO 527)	400 %
Tear propagation resistance (CQP045-1 / ISO 34)	4 N/mm
Tensile lap-shear strength (CQP046-1 / ISO 4587)	1 MPa
Shelf life (CQP016-1) cartridge / unipack	12 months ⁸
drum / pail	9 months ⁸

CQP = Corporate Quality Procedure

 $^{\text{A)}}\,23$ °C / 50 % r. h.

 $^{\rm B)}$ storage below 25 °C

DESCRIPTION

Sikaflex®-228 is a 1-component self-leveling elastic-panel adhesive suitable for bonding a variety of panel materials, including solvent-resistant foams (PUR), stainless steel sheets, aluminum sheets, timber-based building boards and plasterboards.

PRODUCT BENEFITS

- Ideal for large area bonding
- Self-leveling / low viscosity
- Elastic behavior

AREAS OF APPLICATION

Sikaflex®-228 is suitable for bonding a variety of panel materials, including solvent-resistant foams (PUR), stainless steel sheets, aluminum sheets, timber-based building boards and plasterboards. It can also be used to seal seams and lap joints or to fill construction joints in floors. For exterior sealing applications, thin layers of Sikaflex®-228 must be protected from sunlight (e.g. by overpainting or covering).

Seek manufacturer's advice and perform tests on original substrates before using Sikaflex®-228 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®-228 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).

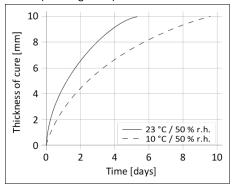


Diagram 1: Curing speed Sikaflex®-228

CHEMICAL RESISTANCE

Sikaflex®-228 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®-228 can be processed between 5 °C and 35 °C (climate and product) but changes in reactivity and application properties have to be considered. The optimum temperature for substrates and adhesive is between 15 °C and 25 °C.

If the adhesive is applied over large surface areas use a notched spreader (notch depth approx. 3 mm). The consumption is approx. 0.6 - 1.2 l per m². If the substrates to be bonded are impervious to moisture or if an accelerated rate of cure is required, the adhesive could be lightly sprayed with a water mist shortly before the substrates are joint together (use an aerosol spray or spray gun to apply approx. 10 g water per m²). Avoid air entrapment when joining the parts or filling joints. Apply firm pressure when bringing components together and keep the bond under pressure for at least 3 hours until the adhesive has set.

For advice on selecting and setting up a suitable pump system contact the System Engineering Department of Sika Industry.

Removal

Uncured Sikaflex®-228 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
 For 1-component Polyurethanes
- General Guidelines
 Bonding and Sealing with 1-component
 Sikaflex®

PACKAGING INFORMATION

Cartridge	300 ml
Unipack	600 ml
Pail	23 I
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 enduse 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.

