BUILDING TRUST

PRODUCT DATA SHEET

Sikaflex®-276 PC-2

Warm-applied direct-glazing adhesive with instant tack and acceleration option

TYPICAL PRODUCT DATA (FURTHER VALUES SEE SAFETY DATA SHEET)

Chemical base	Polyurethane
Color (CQP001-1)	Black
CURE MECHANISM	Moisture curing
Density (uncured)	1.21 kg/l
Non-sag properties (CQP061-1)	Excellent
Application temperature	60 °C
Skin time (CQP019-1)	40 minutes [A]
Open time (CQP526-1)	10 minutes [A]
Curing speed (CQP049-1)	(see diagram)
Shrinkage (CQP014-1)	1 %
Shore A hardness (CQP023-1 / ISO 48-4)	60
Tensile strength (CQP036-1 / ISO 527)	8 MPa
Elongation at break (CQP036-1 / ISO 37)	500 %
Tear propagation resistance (CQP045-1 / ISO 34)	14 N/mm
Tensile lap-shear strength (CQP046-1 / ISO 4587)	6 MPa
Service Temperature (CQP509-1 / CQP513-1)	-40 – 90 °C
Shelf life unipack	9 months [B]
drum / pail	6 months [B]

CQP = Corporate Quality Procedure

A) 23 °C / 50 % r.h.

B) Storage below 25 °C

DESCRIPTION

Sikaflex®-276 PC-2 is a warm-applied, 1-component polyurethane direct-glazing adhesive with high initial grip to prevent glass slip-down. Suited for bonding materials relevant for direct glazing such as glass, ceramic frits, painted and e-coated surfaces in commercial-vehicle production.

Sikaflex®-276 PC-2 can be accelerated with Sika's Booster system.

PRODUCT BENEFITS

- Excellent standing and slip-down behavior
- Very short cut-off string
- Good workability
- Suitable for manual and automated application
- Solvent-free

AREAS OF APPLICATION

Sikaflex®-276 PC-2 is designed for direct-glazing applications in the transportation industry, especially where a high initial grip with short fixation times is required. The product is suitable for both manual and automatic applications.

Seek manufacturer's advice and perform tests on original substrates before using Sikaflex®-276 PC-2 on materials prone to stress cracking.

Sikaflex®-276 PC-2 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®-276 PC-2 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).

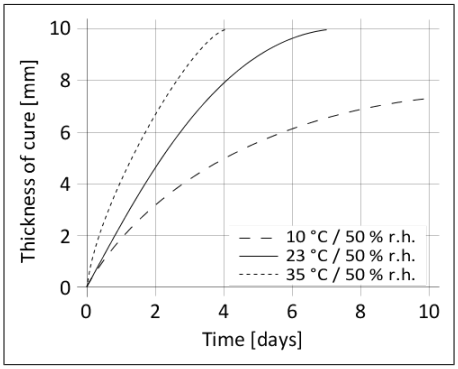

Diagram: curing speed Sikaflex®-276 PC-2

CHEMICAL RESISTANCE

Sikaflex®-276 PC-2 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®-276 PC-2 must be processed at 60 °C, at an ambient temperature between 10 °C and 35 °C (changes in reactivity and application properties have to be considered). The optimum temperature for the substrates is between 15 °C and 25 °C.
Unipacks need to be heated prior the application - this usually takes 60 minutes in a dedicated oven set at 60 °C. Unipacks can be reheated from cold several times, but must not be kept at 60 °C for more then 10 hours in total.

To ensure a uniform thickness of the bondline it is recommend to apply the adhesive in form of a triangular bead (see figure 1).

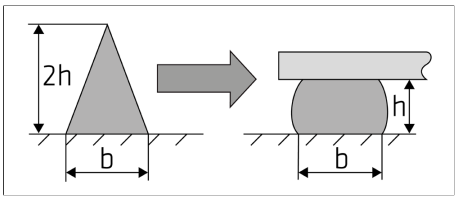

Figure 1: Recommended bead configuration

Sikaflex®-276 PC-2 can be processed a pneumatic or electric driven piston guns as well as pump equipment.
The open time is significantly shorter in hot and humid climate. The glass must always be installed within the open time. Never install a glass after the adhesive has built a skin.
For advice on selecting and setting up a suitable pump system, contact the System Engineering Department of Sika Industry.

Removal

Uncured Sikaflex®-276 PC-2 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 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 Guideline
  Bonding and Sealing with 1-component Sikaflex®

PACKAGING INFORMATION

Unipack	600 ml
Pail	23 l
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

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