BUILDING TRUST

PRODUCT DATA SHEET

Sikaflex®-668

High-performance assembly, glazing adhesive and sealant with acceleration option

TYPICAL PRODUCT DATA (FURTHER VALUES SEE SAFETY DATA SHEET)

Chemical base	1-component polyurethane (Purform®)
Color (CQP001-1)	Black
Cure mechanism	Moisture-curing
Density (uncured)	1.3 kg/l
Non-sag properties (CQP061-1)	Very good
Application temperature	10 – 35 °C
Skin time (CQP019-1)	60 minutes [A]
Open time (CQP526-1)	50 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 527)	500 %
Tear propagation resistance (CQP045-1 / ISO 34)	12 N/mm
Tensile lap-shear strength (CQP046-1 / ISO 4587)	5 MPa
Service temperature (CQP509-1 / CQP513-1)	-50 – 90 °C
Shelf life (CQP016-1) unipack pail / drum	12 months [B] 6 months [B]

CQP = Corporate Quality Procedure

[A] 23 °C / 50 % r. h.

[B] stored below 25 °C

DESCRIPTION

Sikaflex®-668 is based on Purform®, a polyurethane with less than 0.1% monomeric diisocyanate for better health protection and occupational safety. The Sikaflex®-668 adhesive system is specifically designed for the rail industry. It is suitable for assembly bonding and glazing applications. Its weathering and unique resistance to a wide variety of cleaning agents makes it a very good solution for use in exterior joints.

Sikaflex®-668 can be accelerated with Sika's Booster and PowerCure system.

PRODUCT BENEFITS

- Less than 0.1 % monomeric diisocyanate for better health protection and occupational safety
- Very good weathering stability
- Resistant to a wide variety of cleaning agents
- Passes EN45545 R1/R7 HL3, NFPA 130, BSS 7239
- Curing can be accelerated with Sika Booster and Sika PowerCure
- Phthalate-free

AREAS OF APPLICATION

Sikaflex®-668 is designed for assembly and direct-glazing applications in rail, the commercial vehicle industry and for the repair market.

It exhibits very good tooling and application properties. With its superior resistance to a wide range of cleaning agents combined with outstanding weathering resistance, it can be used for exterior joints.

Seek manufacturer's advice and perform tests on original substrates before using Sikaflex®-668 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®-668 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).

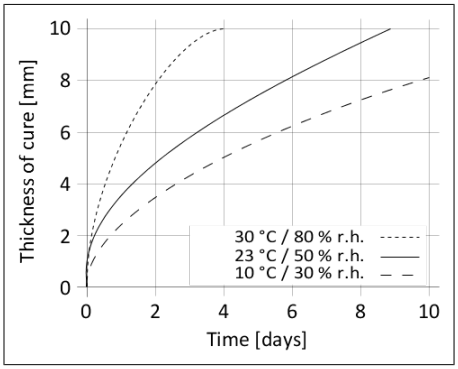

Diagram 1: Curing speed Sikaflex®-668

CHEMICAL RESISTANCE

Sikaflex®-668 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.

It is resistant to a wide range of rail cleaning agents if used according to the guidelines of the manufacturer. Some rail cleaning agents contain aggressive chemicals such as phosphoric acids which may influence the durability of Sikaflex®-668 significantly. Therefore it is of highest importance to limit the exposure time to a minimum, observe correct dilution of cleaning agent and to perform a thorough rinsing after the cleaning process. Test newly introduced cleaning agents.

The above information is offered for general guidance only. Advice on specific applications will be given on request.

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. All pretreatment steps must be confirmed by preliminary tests on original substrates considering specific conditions in the assembly process.

Note: The maximum primer flash-off time is limited to 8 hours for Sikaflex®-668 at temperatures above 30 °C. The primer must then be reactivated with Sika® Aktivator-100 prior the bonding process.

Application

Sikaflex®-668 can be processed with manual, pneumatic or electric driven piston guns as well as pump equipment.

Sikaflex®-668 can be processed between 10 °C and 35 °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.

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

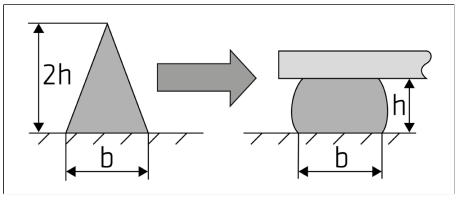

Figure 1: Recommended bead configuration

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.

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® Tooling Agent N. Other finishing agents must be tested for suitability and compatibility.

Removal

Uncured Sikaflex®-668 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 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
- General Guideline
  Bonding and Sealing with 1-component Sikaflex®

PACKAGING INFORMATION

Unipack	600 ml
Pail	23 l
Drum	195 l

Please contact our customer service, for information of what packaging sizes are sold in Denmark.

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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