

Sikaflex® -268 PowerCure

Accelerated adhesive/sealant with excellent weathering and cleaning agent resistance

Typical Product Data

Chemical base	Polyurethane
Color (CQP ¹ 001-1)	Black
Cure mechanism	Moisture-curing
Density (uncured) (CQP 006-4)	1.3 kg/l (10.8 lb/gal)
Non-sag properties (CQP-061-1)	Very good
Application temperature	ambient
Open time ² (CQP 526-1)	10° – 35°C (50° – 95°F)
Early tensile lap-shear strength ³ (CQP 046-1)	30 minutes
Shore A hardness (CQP 023-1 / ISO 868)	See table 1
Tensile strength (CQP 036-1 / ISO 37)	55
Elongation at break (CQP 036-1 / ISO 37)	6 MPa (870 psi)
Tear propagation resistance (CQP 045-1 / ISO 34)	500%
Tensile lap-shear strength (CQP 509-1 / ISO 4587)	13 N/mm (74 pli)
G-Modulus (CQP 081-1)	4.5 MPa (650 pis)
Service temperature (CQP 513-1)	at 0.1 – 10% shear strain
Shelf life (CQP 016-1) (storage below 25°C)	1.3 MPa (190 psi)
	-50° - 90°C (-58° – 194°F)
	9 months

1) CQP = Corporate Quality Procedure 2) Provided by PowerCure 3)23°C (73°F) / 50% r.h.

Description

Sikaflex®-268 PowerCure is an accelerated 1-component polyurethane adhesive and sealant especially designed for the rail vehicle market. The product is applied using the PowerCure Dispenser and cures largely independent from atmospheric conditions to form a durable elastomer. Sikaflex®-268 PowerCure has an outstanding weathering resistance and unique resistivity against a wide variety of cleaning agents used in the rail industry.

Product Benefits

- Accelerated curing speed
- Resistant against a wide variety of rail cleaning agents
- Suitable for bonding and sealing
- Excellent weathering stability
- Very good processing and tooling characteristics
- Solvent and PVC free

Areas of Application

Sikaflex®-268 PowerCure is designed for assembly and direct glazing applications in the rail industry as well as for other transportation vehicles. It exhibits good tooling and excellent application properties. With its superior resistance against cleaning agents commonly used in rail, combined with its outstanding weathering resistance, it can be used for exterior joints. It has to be considered that the tooling time is limited to 15 – 20 minutes (23 °C / 50 % r.h.). This product is suitable for professional experienced users only. Test with actual substrates and conditions have to be performed to ensure adhesion and material compatibility.

Industry



Prior to each use of any Sika product, the user must always read and follow the warnings and instructions on the product's most current Product Data Sheet, label and Safety Data Sheet which are available on request at tsmh@us.sika.com. Nothing contained in any Sika materials relieves the user of the obligation to read and follow the warnings and instructions for each Sika product as set forth in the current Product Data Sheet, label and Safety Data Sheet prior to product use.

Cure Mechanism

Sikaflex®-268 PowerCure cures by reaction with the accelerator paste. For approx. strength build up values see table below.

Time [min]	Lap shear strength [MPa]
2	0.2 (130 psi)
3	1 (150 psi)
4	2 (300 psi)
6	3.5 (500 psi)

Table 1: Tensile lap shear strength at 23°C (73°F)/ 50 % r.h.

Chemical Resistance

Sikaflex®-268 PowerCure is resistant to fresh water, aqueous cleaning agents (neutral, acid or alkaline types, chlorine free in normal concentrations); temporarily resistant to fuels, mineral oils, vegetable and animal fats and oils; not resistant to organic acids, concentrated mineral acids and caustic solutions and solvents. It is resistant to a wide variety of rail cleaning agents if used according to the guidelines of the manufacturer. Specifically dilution, exposure time and temperatures need to be respected in any case. 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 and dust. Additional surface treatment depends on the specific nature of the substrates and manufacturing process. Therefore all recommendations must be determined by preliminary tests. Advice on specific applications is available from the Technical Department of Sika Industry.

Application

Setup the PowerCure Dispenser according to the PowerCure User Manual. If the application is discontinued for more than 15 minutes, the mixer needs to be replaced.

Sikaflex®-268 PowerCure can be processed between 10°C and 35°C (50°F and 95°F) but changes in reactivity as well as application properties need to be considered. The optimum process temperature (substrates, climate and product) is between 15 °C and 25 °C (59°F and 77°F).

To ensure uniform thickness of adhesive bead, we recommend that the adhesive is applied in the form of a triangular bead (see illustration below).

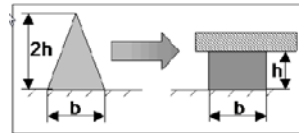


Figure 1: Recommended bead configuration

Tooling and finishing

Fill exposed joints completely without voids until slightly overfilled, then remove excess product. Respect the tooling time! For smooth joint finishes use Sika® Tooling Agent N.

Removal

Uncured Sikaflex®-268 PowerCure may be removed from tools and equipment with Sika® Remover-208. Once cured, the material can only be removed mechanically. Hands and exposed skin should be washed immediately using a suitable industrial hand cleanser and water. Do not use solvents on skin!

Further Information

Copies of the following publications are available on request:

- Safety Data Sheets

Packaging Information

PowerCure Pack	600 ml
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All technical data stated in this Product Data Sheet are based on laboratory tests only. 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.

Limited Material Warranty

Sika Corporation warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within shelf life. User determines suitability of product for intended use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product exclusive of labor or cost of labor. NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.

Basis of Product Data

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