BUILDING TRUST

PRODUCT DATA SHEET

Sikaflex®-254 + SikaBooster® P-50

By Booster accelerated elastic adhesive for vehicle-assembly bonding

TYPICAL PRODUCT DATA (FURTHER VALUES SEE SAFETY DATA SHEET)

Chemical base		Polyurethane
Color (CQP001-1)		Black, white
Cure mechanism		Moisture-curing [A]
Density (uncured)	depending on color	1.3 kg/l
	SikaBooster® P-50	1.1 kg/l
Booster content	by volume	2 % (1.8 – 2.2 %)
	by weight	1.8 % (1.6 – 2.0 %)
Non-sag properties		Good
Application temperature	ambient	10 – 30 °C
Open time (CQP526-1)		20 minutes [B]
Early tensile lap-shear strength (CQP046-1 / ISO 4587)		See table 1
Shore A hardness (CQP023-1 / ISO 48-4)		45
Tensile strength (CQP036-1 / ISO 527)		3 MPa
Elongation at break (CQP036-1 / ISO 527)		400 %
Tear propagation resistance (CQP045-1 / ISO 34)		9 N/mm
Tensile lap-shear strength (CQP046-1 / ISO 4587)		2.2 MPa
Service temperature (CQP513-1)		-40 – 90 °C
	4 hours	130 °C
	1 hour	150 °C
Shelf life	Adhesive (pail / drum)	6 months [C]
	SikaBooster® P-50	9 months [C]
Mixer		Statomix MS13/18 G

CQP = Corporate Quality Procedure [A] provided by SikaBooster® P-50 [B] 23 °C / 50 % r. h. [C] storage below 25 °C

DESCRIPTION

Sikaflex®-254 + SikaBooster® P-50 is an accelerated elastic polyurethane adhesive especially designed for bonding large components. Timber, aluminum, sheet steel, primers, paints, ceramics and plastics are suitable substrates.

The use of SikaBooster® P-50 provides rapid attainment of strength and early adhesion development. Owing to the use of SikaBooster® it cures largely independently of atmospheric conditions.

PRODUCT BENEFITS

- Fast-curing by Booster Technology
- Excellent adhesion build-up on various substrates
- Ideal open-time / curing-speed ratio
- Elastic, good gap-filling capabilities
- Capable of withstanding high dynamic stresses
- Solvent-free

AREAS OF APPLICATION

Sikaflex®-254 + SikaBooster® P-50 is suitable for assemblies that are subject to dynamic stresses. Suitable substrate materials are timber, metals, particularly aluminum (including anodized components), sheet steel (including phosphated, chromated and galvanized components), metal primers and paint coatings (2-component systems), ceramic materials and plastics.

Seek manufacturer's advice and perform tests on original substrates before using Sikaflex®-254 + SikaBooster® P-50 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®-254 + SikaBooster® P-50 cures by reaction with moisture provided by SikaBooster® P-50 and largely independent from atmospheric moisture. For typical strength build up data see table below.

Time [h]	Tensile lap-shear strength at 23 °C [MPa]
2	1
3	1.5
4	2

Table 1: Strength build up of Sikaflex®-254 + SikaBooster® P-50

CHEMICAL RESISTANCE

Sikaflex®-254 + SikaBooster® P-50 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. All pretreatment steps must be confirmed by preliminary tests on original substrates considering specific conditions in the assembly process.

Application

Sikaflex®-254 + SikaBooster® P-50 need to be processed with an adequate dispensing system. The mixer type needs to be respected (see table Typical Product Data).

Sikaflex®-254 + SikaBooster® P-50 can be applied between 10 °C and 30 °C 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. 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

The open time is significantly shorter in hot and humid climate. The parts must always be joint within the open time. As a rule of thumb, a change of + 10 °C reduces the open time by half.

Sikaflex®-254 + SikaBooster® P-50 is processed with an adequate pump equipment. For advice on selecting and setting up a suitable pump system, contact the System Engineering Department of Sika Industry.

Removal

Uncured Sikaflex®-254 + SikaBooster® P-50 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 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
- Sika Pre-treatment Chart Polyurethane
- General Guidelines Bonding and Sealing with 1-component Sikaflex

PACKAGING INFORMATION

Sikaflex®-254

Pail	23 l
Drum	195 l

SikaBooster® P-50

Unipack	600 ml
Pail	23 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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