

BUILDING TRUST

PRODUCT DATA SHFFT

SikaTack® Plus + SikaBooster® P-50

Accelerated high-strength adhesive system

TYPICAL PRODUCT DATA (FURTHER VALUES SEE SAFETY DATA SHEET)

Chemical base		Polyurethane	
Color (CQP001-1)		Black	
Cure mechanism		Moisture-curing ^A	
Density (uncured)	Adhesive	1.2 kg/l (10.0 lb/gal)	
	SikaBooster® P-50	1.1 kg/l (9.2 lb/gal)	
Booster content	by volume	2.0 %	
	by weight	1.9 %	
Non-sag properties		Good	
Application temperature		15 – 40 °C (59 – 104 °F)	
Open time (CQP526-1)		5 minutes ^B	
Early tensile lap-shear strength (CQP046-1 / ISO 4587)		See table 1	
Shrinkage (CQP014-1)		1 %	
Shore A hardness (CQP023-1 / ISO 48-4)		50	
Tensile strength (CQP036-1 / ISO 527)		7 MPa (1000 psi)	
Elongation at break (CQP036-1 / ISO 527)		400 %	
Tear propagation resistance (CQP045-1 / ISO 34)		12 N/mm (70 pli)	
Tensile lap-shear strength (CQP046-1 / ISO 4587)		4.5 MPa (650 psi)	
Service temperature (CQP513-1)		-40 – 90 °C (-40 – 194 °F)	
Shelf life	Adhesive	6 months ^c	
	SikaBooster® P-50	9 months ^C	
Mixer		Statomix MS 13/18 G	
COD = Corporate Quality Procedure A) provided by CikaPoecter® D. EO	B) 22 °C (72 °E) / EO %	C) storage below 25 °C (77 °E)	

CQP = Corporate Quality Procedure

A) provided by SikaBooster® P-50

^{B)} 23 °C (73 °F) / 50 % r.h.

C) storage below 25 °C (77 °F)

DESCRIPTION

SikaTack® Plus + SikaBooster® P-50 is an accelerated elastic polyurethane adhesive for a variety of industrial bonding applications. Suited for bonding materials relevant for direct glazing such as paints, glass, ceramic frits, painted and e-coated surfaces as well as for assembly bonding of common materials used in commercial-vehicle production.

SikaTack® Plus + SikaBooster® P-50 is compatible with Sika's black-primerless bonding process.

Owing to the use of SikaBooster® it cures largely independently of atmospheric conditions.

PRODUCT BENEFITS

- Accelerated curing and adhesion build-up
- Excellent application properties
- Suitable for automated application
- Low climate dependency of the curing speed with Sika® Booster Technology
- High mechanical strength

AREAS OF APPLICATION

SikaTack® Plus + SikaBooster® P-50 is designed especially for manual and automated direct-glazing and assembly applications out of bulk packaging where a fast build-up of adhesion and strength is required.

The use of SikaBooster® P-50 provides rapid attainment of strength and early adhesion development.

Seek manufacturer's advice and perform tests on original substrates before using SikaTack® Plus + SikaBooster® P-50 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.

PRODUCT DATA SHEET

SikaTack® Plus + SikaBooster® P-50 Version 04.01 (04 - 2023), en_US 012002230010901050

CURE MECHANISM

SikaTack® Plus + 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 (73 °F) [MPa]
1	0.3 (45 psi)
2	1.8 (260 psi)
4	4 (580 psi)

Table 1: Strength build-up of SikaTack® Plus + SikaBooster® P-50

CHEMICAL RESISTANCE

SikaTack® Plus + 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

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

SikaTack® Plus + SikaBooster® P-50 can be applied between 15 °C and 40 °C (59 °F and 104 °F) 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 (59 °F and 77 °F).

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

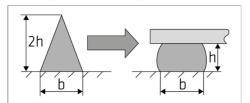


Figure 1: Recommended bead configuration

The open time is significantly shorter in hot and humid climate. The parts must always be joined within the open time. As a rule of thumb, a change of + 10 °C (+ 18 °F) reduces the open time by half.

SikaTack® Plus + 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 SikaTack® Plus + 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 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

SikaTack® Plus

Drum	195 I			
SikaBooster® P-50				
Pail	23 I			

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.

ENVIRONMENTAL, HEALTH AND SAFETY

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

LEGAL DISCLAIMER

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates ("SIKA"), the user must always read and follow the warnings and instructions on the product's most current product label, Product Data Sheet and Safety Data Sheet which are available at usa.sika.com or by contacting SIKA's Technical Service Department via email at tsmh@us.sika.com. Nothing contained in any SIKA literature or 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 label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

SIKA 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 the product's shelf life. User determines suitability of product for intended use and assumes all risks. User's and/or buyer's sole remedy shall be limited to the purchase price or replacement of this product exclusive of any labor costs. NO OTHER WARRANTIES EX-PRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FIT-**NESS 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. Sale of SIKA products are subject to the Terms and Conditions of Sale which are available at https://usa.sika.com/en/group/SikaCorp/termsandconditions.html or by calling +1 800-933-

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Sika Corporation

30800 Stephenson Highway Madison Heights, MI 48071 U.S.A.

Telephone: +1 248-577-0020 Email: tsmh@us.sika.com www.sikausa.com

