SikaTack® Plus Booster

Fast-curing high-strength adhesive system

Industry

Technical Product Data

Properties	With Sika® Booster	Without Sika® Booster
Chemical base	Accelerated PUR	1-C polyurethane
Colour (CQP[1] 001-1)	Black	
Cure mechanism	Moisture-curing[2]	Moisture-curing
Density (uncured) (CQP 006-4) (depending on colour)	1.2 kg/l approx.	
Booster content by weight	2% (1.8 - 2.2%)	
Non-sag properties	Good	
Application temperature (product) cartridge / unipack drum / pail	80°C (175°F) 15 - 40°C[5] (60 - 105°F)	15 - 60°C (60 - 140°F) 15 - 60°C (60 - 140°F)
Skin time[3] (CQP 019-1)		30 min approx.
Open time[3, 4] (CQP 526-1)	8 min approx.	
Green strength (CQP 063-2)	see table 1	
Curing speed (CQP 049-1)		3.5 mm / 24 h approx.
Volume shrinkage (CQP 014-1)	2% approx.	
Shore A hardness (CQP 023-1 / ISO 868)	50 approx.	
Tensile strength (CQP 036-1 / ISO 37)	7 N/mm^2 approx.	
Elongation at break (CQP 036-1 / ISO 37)	400% approx.	
Tear propagation resistance (CQP 045-1 / ISO 34)	12 N/mm approx.	
Tensile lap-shear strength (CQP 046-1 / ISO 4587)	4.5 N/mm^2 approx.	
Shear modulus at 10% (CQP 081-1)	0.7 N/mm^2 approx.	
Glass transition temperature (CQP 509-1 / ISO 4663)	-50°C (-60°F) approx.	
Electrical resistivity (CQP 079-2 / ASTM D 257-99)	10^8 Ωcm approx.	
Service temperature (CQP 513-1)	-40 - 90°C (-40 - 195°F)	
Shelf life (CQP 016-1) cartridge / unipack (storage below 25°C) drum / pail	9 months 6 months	

[1] CQP = Corporate Quality Procedure
[2] Moisture provided by Sika® Booster Paste
[3] 23°C (73°F) / 50% r.h.
[4] Depending on application temperature and mixer
[5] Higher temperatures to be approved by Sika

Description

SikaTack®-Plus Booster is an accelerated 1-component polyurethane adhesive suitable for a variety of industrial bonding applications.
SikaTack®-Plus Booster is manufactured in accordance with ISO 9001 / 14001 quality assurance system and the responsible care program.

Product Benefits

- Accelerated adhesive system for fast curing and strength build-up
- Curing speed almost independent of climatic conditions if used with Sika® Booster Paste
- Good gap-filling capabilities
- Elastic
- Black-primerless adhesion to a wide range of ceramic frits

Areas of Application

SikaTack®-Plus Booster is an elastic adhesive designed for applications where significant strength build-up within a short period of time is required. It is well suited for direct glazing and bonding of other vehicle parts.
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.

Cure Mechanism

SikaTack®-Plus cures by reaction with atmospheric moisture. When used in conjunction with Sika® Booster, curing proceeds more rapidly and largely independent of atmospheric moisture.

Time [h]	Strength [MPa]
1	0.7 approx.
2	1.0 approx.
4	1.6 approx.

Table 1: Green strength (CQP 063-2) of SikaTack®-Plus Booster at 23°C by pump application

Chemical Resistance

SikaTack®-Plus is resistant to fresh water, seawater, and proprietary aqueous cleaning agents; temporary resistant to fuels, mineral oils, vegetable and animal fats; not resistant to organic acids, concentrated mineral acids and caustic solutions or solvents.

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. As a rule the bond faces must be prepared in accordance with the instructions given in the current Sika Primer Chart for 1 component Polyurethanes. Due to the wide variety of substrate compositions preliminary tests are recommended.

Advice on specific applications is available from the Technical Service Department of Sika Industry.

Application

For use with Sika® Booster Adapter the adhesive must be heated up to 80°C.

Note: The adhesive can be reheated several times, but the total heating time must not exceed 10 hours.

Do not apply the product at ambient temperatures below 10°C or above 35°C. The optimum substrate temperature is between 15°C and 25°C.

To ensure a uniform thickness of adhesive when compressed, we recommend applying the adhesive in the form of a triangular bead (see figure 1).

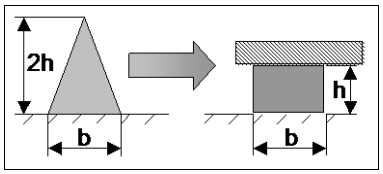

Figure 1: Recommended bead configuration

For advice on selecting and setting up a suitable pump system please contact the System Engineering Department of Sika Industry.

Tooling and finishing

Excellent tooling results are limited to SikaTack®-Plus without Booster.

Removal

Uncured SikaTack®-Plus 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 should be washed immediately using Sika® Handclean towels or a suitable industrial hand cleaner and water. Do not use solvents!

Overpainting

SikaTack®-Plus Booster can be overpainted after formation of a skin. In case the paint requires a bake process it may be necessary to wait for a full cure. 1C-PUR and 2C-acrylic based paints are usually suitable. Not suitable are oil based paints. All paints have to be tested by carrying preliminary trials under manufacturing conditions. The elasticity of paints is lower than of polyurethanes. This could lead to cracking of the paint film in the joint area.

Further Information

Copies of the following publications are available on request:

- Material Safety Data Sheets
- Sika Pre-treatment Chart for 1 component Polyurethanes
- General Guidelines - Bonding and Sealing with Sikaflex®

Packaging Information

SikaTack®-Plus

Cartridge	300 ml
Unipack	600 ml
Pail	23 l
Drum	195 l

Sika® Booster Paste

Booster Adapter	1 unit (up to 600 ml)
Unipack	600 ml
Pail	23 l

Value Bases

All technical data stated in this Product Data Sheet 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 Material Safety Data Sheets containing physical, ecological, toxicological and other safety-related data.

Legal Notes

Further information available at:
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www.sika.com

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