

PRODUCT DATA SHEET

SikaForce®-840 L07

Structural elastic 2-component polyurethane adhesive

TYPICAL PRODUCT DATA (FURTHER VALUES SEE SAFETY DATA SHEET)

Properties	SikaForce®-840 L07 (A)	SikaForce®-840 (B)
Chemical base	Polyol	Isocyanate
Color (CQP001-1)	Black	Black
Density (uncured)	1.16 g/cm ³	1.27 g/cm ³
	mixed (calculated)	1.21 g/cm ³
Mixing ratio	by volume by weight	100 : 100 100 : 109.5
Viscosity (CQP029-4)	at 10 s ⁻¹	22 Pa·s ^A 60 Pa·s ^A
Application temperature	15 – 30 °C	
Open time (CQP046-11 / ISO 4587)	7 minutes ^{B, C}	
Handling time (CQP046-11 / ISO 4587)	20 minutes ^{B, C}	
Shore A hardness (CQP023-1 / ISO 48-4)	95 ^B	
Tensile strength (CQP036-2 / ISO 527)	15 MPa ^{B, D}	
Elongation at break (CQP543-1 / ISO 527)	100 % ^{B, D}	
E-Modulus (CQP036-2 / ISO 527)	elongation 0.05 – 0.25 %	350 MPa ^{B, D}
Tensile lap-shear strength (CQP046-9 / ISO 4587)	15 MPa ^{B, C, D}	
Glass transition temperature (CQP509-1 / ISO 6721)	-45 °C ^D	
Shelf life	cartridge	6 months ^E
	pail	12 months ^E

CQP = Corporate Quality Procedure
 D) cured for 1 week at 23 °C

A) tested at 20 °C
 E) storage between 10 and 30 °C

B) 23 °C / 50 % r. h.

C) adhesive layer: 25 x 12.5 x 1.5 mm

DESCRIPTION

SikaForce®-840 L07 is a flexible, structural 2-component polyurethane adhesive, which cures at room temperature. It is designed for bonding composite or coated metal components with stable properties over large temperature span. The adhesive is characterized by fast curing and strength build-up. While uncured, it has very good non-sag and compressibility behavior.

PRODUCT BENEFITS

- Combination of structural properties and flexibility
- Stable mechanical properties over wide temperature range
- Fast curing at room temperature and suitable for quick assembly
- Good non-sag behavior
- Excellent compressibility
- Low smell
- Does not contain solvents or PVC

AREAS OF APPLICATION

SikaForce®-840 L07 is suitable for structural elastic bonding of composites (e.g., CFRP, GFRP) or coated metals in transportation and general industry. This product is suitable for experienced professional users only. Tests with actual substrates and conditions have to be performed ensuring adhesion and material compatibility.

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CURE MECHANISM

SikaForce®-840 L07 cures by chemical reaction of the two components at room temperature. Higher temperatures accelerate the cure rate and decrease the open time. High humidity reduces the open time as well. In big bead applications, the generated exothermic heat of reaction can speed up the cure, reducing working and handling times.

After the open time is reached, the cure reaction proceeds very fast and the viscosity will increase significantly within minutes.

CHEMICAL RESISTANCE

In the view of potential chemical or thermal exposure, it is required to conduct a project related testing.

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 is crucial for long lasting bond. All pre-treatment steps must be confirmed by preliminary tests on original substrates considering specific conditions in the assembly process.

Application

Cartridge: Extrude adhesive without mixer to equalize the filling levels. Attach the mixer and dispose the first few cm of the bead prior to the application.

If SikaForce®-840 L07 is dispensed from dual cartridges, it is recommended to use a pneumatic or electric piston gun. SikaForce®-840 L07 can also be processed from pails with adequate 2-component equipment.

If dispensed with 2-component equipment, the mixer needs to be tailored for the specific application.

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

Removal

Uncured SikaForce®-840 L07 may be removed from tools and equipment with Sika® Remover-208 or another suitable solvent.

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.

STORAGE CONDITIONS

SikaForce®-840 L07 has to be kept between 10 °C and 30 °C in a dry place. Do not expose it to direct sunlight or frost. After opening of the packaging, the content has to be protected against humidity.

The lowest allowed temperature during transport is -20 °C for max. 7 days.

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
- ATI: Mixer alternatives for cartridges

PACKAGING INFORMATION

SikaForce®-840 L07 (A+B)

Dual cartridge	400 ml
Mixer: Sulzer MixPac™ MFQ 08-24T	

SikaForce®-840 L07 (A)

Pail	23 l
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SikaForce®-840 (B)

Pail	23 l
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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

Any information or suggestions for use concerning Sika's products, which we either in writing or orally have given buyers or end-users of the product, have been given in good faith based on our own experiences and based on approved praxis and the technological and scientific knowledge on the time of giving such suggestions and information, which are given without any type of guarantees, and which do not lead to any further responsibility from Sika Danmark A/S, besides what is stated in the sales agreement in question. The buyer or end-user should themselves investigate or otherwise make sure, that our products are suitable for the use in question and further make sure that the products are kept and used correct and in agreement with the published rules and considering the actual conditions in order to avoid damages or less satisfactory results. Any order is accepted and any deliverance is affected according to the general terms of sales and delivery from Sika Danmark A/S, which are considered known and accepted, and which could be handed out when asked for. Our catalogues are not up-dated automatically. The present product data sheet is only for use in Denmark. Values stated in the present product data sheet should be seen as recommended, unless stated otherwise.

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