

PRODUCT DATA SHEET

SikaFast®-555 L05

Fast curing, 2-component structural adhesive

TYPICAL PRODUCT DATA (FURTHER VALUES SEE SAFETY DATA SHEET)

Properties	SikaFast®-555 L05 (A)	SikaFast®-555 (B)
Chemical base	Acrylate	
Colour (CQP001-1)	White	Grey
	mixed Grey	
Cure mechanism	Radical polymerization	
Density	1.13 kg/l	1.50 kg/l
	mixed (calculated) 1.16 kg/l	
Mixing ratio	by volume	10 : 1
	by weight	10 : 1.3
Consistency	Thixotropic paste	
Application temperature	5 – 40 °C	
Open time (CQP526-2)	5 minutes ^A	
Fixing time	time to reach 80 % of torsional strength 15 minutes ^A	
Shore D hardness (CQP023-1 / ISO 48-4)	50 ^{A, B}	
Tensile strength (CQP036-1 / ISO 527)	11 MPa ^{A, B}	
Elongation at break (CQP036-1 / ISO 527)	200 % ^{A, B}	
Tensile lap-shear strength (CQP046-6 / ISO 4587)	12 MPa ^{A, B, C}	
Service temperature (CQP513-1)	-40 – 80 °C	
Shelf life (CQP016-1)	12 months ^D	

CQP = Corporate Quality Procedure

C) Adhesive layer: 25 x 12.5 x 1.5 mm / on aluminum

A) 23 °C / 50 % r. h.

D) Stored below 25 °C and protected from direct sun light

B) Cured for 1 week at 23 °C

DESCRIPTION

SikaFast®-555 L05 is an acrylic based, fast curing, flexibilized structural, 2-component adhesive. It has a pasty-like consistency allowing for vertical and horizontal, easy and precise application. It is suitable to replace mechanical fixation and provides very good adhesion on various substrates such as metals, plastics, glass and wood.

This product is available with different pot life versions to adapt to specific application requirements.

PRODUCT BENEFITS

- Strength development within minutes after application
- Adhesion to a wide range of substrates without or with limited surface preparation
- High strength and impact resistance
- Solvent and acid free
- Lower odor than products containing MMA

AREAS OF APPLICATION

SikaFast®-555 L05 is designed for fast bonding and can replace mechanical fixations such as rivets, screws or welding. It is suitable for high strength fastening of concealed joints and exhibits excellent adhesion on different types of substrates including metals, plastics, glass, wood, etc.

This product is suitable for experienced professional users only. Tests with actual substrates and conditions have to be performed to ensure adhesion and material compatibility.

CURE MECHANISM

SikaFast®-555 L05 cures according to radical chain polymerization. Open and fixture time are influenced by mixing ratio deviations as well as temperature. The higher the temperatures, the shorter the open and fixture times are and vice versa.

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. Remove all loose particles or residues by cleaning it thoroughly. For best adhesion performance on non-porous substrates pre-treat the bonding area with Sika® ADPrep prior to the bonding process. Due to the diversity of materials, preliminary tests with original substrates are necessary.

Application

SikaFast®-555 L05 is applied with a mixing ratio of 10:1 by volume from cartridges or bulk packaging.

Consider that if applied in large masses, heat is generated by the exothermic reaction. To avoid excessive temperature increase, bond line thickness is limited to 3 mm, but must measure at least 0.5 mm.

Optimum temperature for the bonding process is between 15 °C and 25 °C. The approved temperature range for substrates and adhesive is between 5 °C and 40 °C. The influence of the reactivity by temperature changes has to be respected.

After the open time has elapsed the bonded parts must not be moved against each other anymore. When the fixture time is reached the parts can be moved provided that no additional stress is distributed to the bond line.

SikaFast®-555 L05 can be processed with pneumatic driven piston guns as well as pump equipment. For advice on selecting and setting up a suitable pump system, contact the System Engineering Department of Sika Industry.

Removal

Uncured excess of SikaFast®-555 L05 can be removed easily before curing with a dry wipe, with Sika® Remover-208 or another suitable solvent. Once the adhesive is cured it can only be removed mechanically.

Hands and exposed skin shall be washed immediately using Sika® Cleaner-350H towels 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

PACKAGING INFORMATION

SikaFast®-555 L05 (A+B)

Dual cartridge	50 ml
Mixer: Sulzer MixPac™ MBHX 05-16T	

Dual cartridge	250 ml
Mixer: Sulzer MixPac™ MFQX 07-24T	

SikaFast®-555 L05 (A)

Pail	20 l
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SikaFast®-555 (B)

Pail	18 l
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BASIS OF PRODUCT DATA

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.

DISCLAIMER

The information, and, in particular, the recommendations relating to the application and enduse of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

PRODUCT DATA SHEET

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