

SikaForce®-7710 L100

General purpose sandwich panel adhesive

Technical Product Data

Properties	Component A SikaForce®-7710 L100	Component B SikaForce®-7010
Chemical base	Polyols, filled	Isocyanate derivates
Colour (CQP ¹ 001-1)	Beige	Brown
Colour mixed	Beige	
Cure mechanism	Poly addition	
Density (CQP 006-5)	1.6 g/cm ³ approx.	1.2 g/cm ³ approx.
Density mixed (calculated)	1.5 g/cm ³ approx.	
Solids content	100%	100%
Mixing ratio	by volume by weight	100 : 25 100 : 19
Viscosity ² (CQP 538-2)	Brookfield - RVT 6/20 Brookfield - RVT 2/50	30'000 mPa·s approx. 250 mPa·s approx.
Viscosity (mixed)	Brookfield - RVT 6/20	10'000 mPa·s approx.
Application temperature	15 - 30°C (60 - 85°F)	
Pot-life ² (CQP 536-3)	100 min. approx.	
Open time ² (CQP 590-1)	100 min. approx. (see diagram 1)	
Press time ² (CQP 590-1)	230 min. approx. (see diagram 1)	
Shore D hardness ² (CQP 537-2)	80 D approx.	
Tensile strength ³ (CQP 545-2 / ISO 527)	13 N/mm ² approx.	
Elongation at break ³ (CQP 545-2 / ISO 527)	8% approx.	
Tensile lap-shear strength ³ (CQP 546-2 / ISO 4587)	9 N/mm ² approx.	
Shelf life (storage between 10 and 30°C)	IBC smaller packaging	6 months 12 months 9 months

¹⁾ CQP = Corporate Quality Procedure

²⁾ 23°C (73°F) / 50% r.h.

³⁾ Curing according to CQP 542-2

Description

SikaForce®-7710 L100 is the base part of a two component polyurethane adhesive used with Sika-Force®-7010 Hardener. SikaForce®-7710 L100 is manufactured in accordance with ISO 9001 / 14001 quality assurance system and the responsible care program.

Product Benefits

- Room temperature curing
- Solvent-free
- Long open time / short press time
- Approved for bulkheads according to IMO Res. A.653(16)

Areas of Application

Bonding of metal, fibre cement, wood and glass fibre reinforced polyester to expanded and extruded polystyrene foam, polyurethane foam and mineral wool in the manufacturing of sandwich elements and other constructions.

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



Cure Mechanism

The curing of SikaForce®-7710 L100 takes place by a chemical reaction of the two components. Higher temperatures speed up and lower temperatures slow down the curing process.

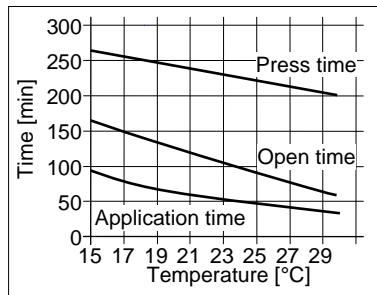


Diagram 1: Press time, open time and application time for SikaForce®-7710 L100

Chemical Resistance

In case of chemical or thermal exposure, we recommend a project related testing. Please consult the Technical Service Department of Sika Industry for advice.

Method of Application

Surface preparation

Usually it is necessary to prepare the substrates for bonding to ensure optimal adhesion and strength. After the cleaning process, a physical or chemical pre-treatment might be required, based on the surface and type of material. Type of pre-treatment must be determined by tests.

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

Application

Coat weights between 150 and 350 g/m² are recommended depending on the substrates to be bonded. The specific coat weight for a given substrate combination is to be determined by tests.

The procedure for manual application is as follows: Stir the base part thoroughly before use, add the hardener in the given ratio and stir constantly until a homogeneous mixture is obtained. Apply with trowel before reaching half of the pot-life and join parts together within the open time. Further details can be obtained

from the Technical Service Department of Sika Industry. For automated applications, please contact the System Engineering Department of Sika Industry.

Pressing

An adequate bonding pressure to obtain a void-less contact between the substrates and adhesives is necessary. The specific pressure is, however, dependent on the core material and must be determined by tests. The pressure must always be below the maximum compressive strength of the core. After starting the press process do not release the pressure until the press time has elapsed.

Removal

Uncured SikaForce®-7710 L100 may be removed from tools and equipment with SikaForce®-7260 Cleaner. Once cured, the material can only be removed mechanically. Hands and exposed skin should be washed immediately using Sika® Hand clean Towel or a suitable industrial hand cleaner and water. Do not use solvents!

Storage Conditions

SikaForce®-7710 L100 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 must be protected against humidity. Minimum temperature during transportation is 0°C for max. 6 hours. For B component refer to the actual Product Data Sheet.

Further Information

Copies of the following publications are available on request:

- Material Safety Data Sheets
- Reactivity curves in large format

Packaging Information

Component A Resin	Pail	25 kg
	Drum	300 kg
	IBC	1500 kg
Component B Hardener	Can	1 kg
	Can	5 kg
	Pail	20 kg
	Drum	250 kg
	IBC ¹	1000 kg

¹ Intermediate bulk container

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

The information, and, in particular, the recommendations relating to the application and end-use 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.

Further information available at:
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