SikaForce[®]-7718 L30

Low viscous structural adhesive suitable for GRP sandwich panel bonding

Technical Product Data			
Properties		Component A SikaForce [®] -7718 L30	Component B SikaForce [®] -7020
Chemical base		Polyols, filled	Isocyanate derivatives
Color (CQP ¹ 001-1)		Beige	Brown
Color 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		97%	100%
Mixing ratio	by volume	100 : 25	
	by weight	100 : 19	
Viscosity ² (CQP 538-2)	Brookfield – RVT 6/20	10,000 mPa⋅s approx.	
	Brookfield – RVT 2/20		90 mPa⋅s approx.
Viscosity (mixed) Brookfield – RVT 6/20		3,000 mPa⋅s approx.	
Application temperature		15-30°C	
Pot-life ² (CQP 536-3)		35 min. approx.	
Open time ² (CQP 590-1)		70 min. approx. (see diagram 1)	
Press time ² (CQP 590-1)		200 min. approx. (see diagram 1)	
Shore D hardness ² (CQP 537-2)		65 D approx.	
Tensile strength ³ (CQP 545-2 / ISO 527)		11 N/mm ² approx.	
Elongation at break ³ (CQP 545-2 / ISO 527)		11% approx.	
Tensile lap-shear strength ³ (CQP 546-2 / ISO 4587)		6 N/mm ² approx.	
Shelf life	1000 I container	6 months	9 months
(storage between 10 and 30°C)	smaller packaging	12 months	9 months
CQP = Corporate Quality Procedure $^{2)}$ 23°C / 50% r.h.		³⁾ Curing according to CQP 542-2	

Description

SikaForce[®]-7718 L30 is the base part of a two component polyurethane adhesive used with Sika-Force[®]-7020 Hardener. This product is manufactured in accordance with ISO 9001 / 14001 quality assurance systems.

Product Benefits

- Room temperature curing
- Long open time
- Low viscosity
- Good wetting properties
- Can also be used with Sika
 - Force[®]-7010 Hardener

Areas of Application

Bonding of metal, fibre cement, wood, rigid PVC and glass fibre reinforced polyester to polystyrene, polyurethane foams and mineral wool in 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[®]-7718 L30 takes place by a chemical reaction of the two components. Higher temperatures speed up and lower temperatures slow down the curing process.

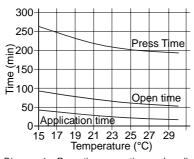


Diagram 1: Press time, open time and application time for SikaForce[®]-7718 L30

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 pretreatment may 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/m^2 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 good contact between the substrates 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. The bonded parts should not be moved during the pressing stage.

Removal

Uncured SikaForce[®]-7718 L30 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[®] Handclean Towel or a suitable industrial hand cleaner and water. Do not use solvents!

Storage Conditions

SikaForce[®]-7718 L30 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 contents should be protected against humidity.

Minimum temperature during transportation is 0°C for maximum 6 hours.

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	22 kg
	Drum	300 kg
	Fluid bag	1450 kg
	Can	0.5 kg
Component	Can	5 kg
B Hardener	Pail	20 kg
	Drum	250 kg

Jika®

Further information available at: www.sika.dk www.sika.com

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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 should refer to the actual Material Safety Data Sheets containing physical, ecological, toxicological and other safetyrelated data.

Legal Notes

"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 of 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 correctly 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 effected 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."