

SikaForce® -7718 L30

Two-component low viscosity structural polyurethane adhesive for sandwich panel bonding

Technical Product Data

Properties	Component A: SikaForce-7718 L30	Component B: SikaForce-7010 (*Refer Separate Data Sheet)
Chemical base	Polyols, filled	Isocyanate derivatives
Colour (CQP ¹ 001-1)	Beige	Brown
Colour mixed	Beige	
Curing mechanism	Poly addition	
Density (CQP 006-4)	1.6 g/cm ³ approx.	1.2 g/cm ³ approx.
Density mixed (calculated)	1.5 g/cm ³ approx.	
Mixing ratio	by volume by weight	100 25 100 19
Solids content	97%	100%
Viscosity ¹⁾ (CQP 538-2)	10,000 mPa·s approx. (Brookfield RVT 6/20)	250 mPa·s approx. (Brookfield RVT 2/50)
Viscosity mixed ¹⁾ (CQP 538-2)	3,000 mPa·s approx.	
Pot life ¹⁾ (CQP 536-3)	35 min. approx.	
Application temperature range	15-30°C	
Application time ¹⁾	18 min. approx. (see figure 1)	
Open time ¹⁾ (CQP 590-1)	70 min. approx. (see figure 1)	
Press time ¹⁾ (CQP 590-1)	200 min. approx. (see figure 1)	
Shore D hardness ²⁾ (DIN 53505, CQP 537-2)	65 D approx.	
Tensile strength ³⁾ (ISO 527, CQP 545-2)	11 N/mm ² approx.	
Elongation at break ³⁾ (ISO 527, CQP 545-2)	11% approx.	
Tensile shear strength ²⁾ (DIN EN 1465, CQP 546-2)	6 N/mm ² approx.	
Shelf life (SikaForce 7718 L30)	12 months	

¹⁾ Testing temperature: +23°C and 50% r.h.

²⁾ Curing conditions: 21 days at +23°C and 50% r.h.

³⁾ Curing conditions: 90 days at +23°C and 50% r.h.

⁴⁾ CQP: Corporate Quality Procedures

Description

SikaForce-7718 L30 is the base part of a 2-component polyurethane adhesive used with SikaForce-7010 Hardener. This product is manufactured in accordance with ISO 9001 and ISO 14001 quality assurance systems.

Product Benefits

- Room temperature curing
- Long open time
- The open time is not affected by the humidity of the air
- Low viscosity
- Good wetting properties

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.



Cure Mechanism

The curing of SikaForce-7718 L30 takes place by chemical reaction when mixed with SikaForce 7010. Higher temperatures speed up the curing process; lower temperatures slow down the curing process.

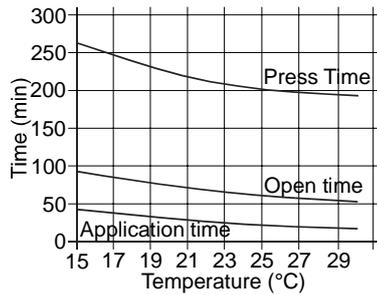


Figure 1: Press time, open time and application time for SikaForce-7718 L30

Chemical Resistance

In case of expected chemical or thermal exposure, we recommend project-related testing. Please consult Sika's Technical Service Department for advice.

Method of Application

Surface preparation

It is generally necessary to prepare the substrates for bonding to ensure optimal adhesion and strength. The preparation may consist of sanding, degreasing, corona treatment, priming or solvent wiping, etc. Metals in particular may require a primer to enhance adhesion. Type of pre-treatment must be determined by tests. Please consult Sika's Technical Service Department for advice.

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 will be determined by trials. Automated bead application is possible, and requires metering and pumping equipment. Please contact Sika's Technical Service Department for further information. For manual application, stir SikaForce 7718 L30 thoroughly before use, add SikaForce 7010 in the given ratio and stir constantly until a homogeneous mixture is

obtained. Apply with trowel before expiry of the application time and press parts together before end of the open time.

Pressing

A minimum bonding pressure of 200 g/cm² should be used. The specific pressure is dependent on the core material and should be determined by tests. The pressure must always be below the maximum compressive strength of the core. The bonded items should not be moved during the pressing stage.

Cleaning

Non-cured adhesive on tools and application equipment can be removed with SikaForce-7260 Cleaner. Cured adhesive can only be removed mechanically.

Storage Conditions

To be kept between +10°C and +30°C in a dry place. Do not expose to direct sunlight or frost. After opening of the packaging, the contents should be protected against the atmospheric humidity. The minimum temperature during transportation is 0°C.

Further Information

The following publications are available on request:

- Material safety data sheet

Packaging Information

SikaForce 7718 L30	Drum	300 kg
	Pail	22 kg
SikaForce 7010	Can	5 kg
	Pail	20 kg

Important

For information and advice on the safe handling, storage, and disposal of chemical products, users should refer to the relevant Material Safety Data Sheet(s) containing physical, ecological, toxicological and other safety related data for the appropriate type of substance.

Notice:

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