

PRODUCT DATA SHEET

SikaPower®-1511 LV

FAST CURING AND LOW-VISCOUS MULTIPURPOSE 2-COMPONENT EPOXY ADHESIVE

TYPICAL PRODUCT DATA (FURTHER VALUES SEE SAFETY DATA SHEET)

Properties	SikaPower®-1511 LV A	SikaPower®-1511 LV B
Chemical base	Epoxy	Mercaptan
Color (CQP001-1)	Transparent	Transparent
	mixed	Transparent/translucent amber
Density	1.2 g/cm ³	1.2 g/cm ³
	mixed, calculated	1.2 g/cm ³
Mixing ratio	A:B by volume	1:1
	A:B by weight	1:1
Viscosity (by Brookfield)	LVT	15 Pa·s ^A
Consistency		15 Pa·s ^A
Application temperature		Liquid
Pot-life (CQP021-1)		15 – 30 °C
Handling time (CQP580-1, -6 / ISO 4587)	time to reach 1 MPa	6 minutes ^A
Shore D hardness (CQP023-1 / ISO 7619-1)		15 minutes ^{A,B}
Tensile strength (CQP543-1 / ISO 527)		80
E-Modulus (CQP543-1 / ISO 527)		50 MPa ^{A,C}
Elongation at break (CQP543-1 / ISO 527)		3 000 MPa ^{A,C}
Tensile lap-shear strength (CQP046-9 / ISO 4587)		2.4 % ^{A,C}
Glass transition temperature (CQP509-1 / ISO 6721)		20 MPa ^{A,B,C}
Shelf life		55 °C ^C
		12 months ^D

CQP = Corporate Quality Procedure

^{A)} 23 °C / 50 % r. h.^{B)} adhesive thickness: 1 mm / substrate: GFR-epoxy^{C)} tested after 2 weeks curing at 23 °C^{D)} storage between 15 and 25 °C**DESCRIPTION**

SikaPower®-1511 LV is a multipurpose two-component epoxy adhesive, which cures at room temperature in a short time. The product rapidly reaches elevated mechanical properties and is suitable for bonding a large number of substrates, when a very fast and rigid assembly is needed. Its low viscosity makes it suitable for injection applications and filling joints with small gaps. It is crystal clear and hardly visible if applied in thin layers.

PRODUCT BENEFITS

- Fast setting product designed to reduce assembly time
- Good mechanical performance
- Multipurpose solution for various materials
- Low viscosity, suitable for injection applications and filling small gaps
- Transparent if applied in thin layer

AREAS OF APPLICATION

SikaPower®-1511 LV can be used for multiple bonding applications, including maintenance or repair of various materials (e.g., metals, glass, wood, composites and plastics, except polyolefin and non-polar plastics) as well as assembly of decontamination filters. 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

SikaPower®-1511 LV cures by fast chemical reaction of the two components at room temperature. Higher temperatures increase the cure rate. The final glass transition temperature, as well as the tensile and shear strengths, may also be increased with higher curing temperature.

METHOD OF APPLICATION

Surface preparation

Surfaces must be clean, dry and free from grease, oil and dust. Surface treatment depends on the specific nature of the substrates and is crucial for a long lasting bond. All pre-treatment steps must be confirmed by preliminary tests on original substrates considering specific conditions in the assembly process.

Application

SikaPower®-1511 LV is dispensed from 1:1 dual cartridges with adequate manual or pneumatic guns. In order to achieve a proper mixing a Nordson Square Turbo Mixer 180A-824 (for 200 ml cartridges) or a 295-620 (for 50 ml cartridges) is required.

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

Removal

Uncured SikaPower®-1511 LV can be removed from tools and equipment with Sika® Remover-208 or another suitable solvent. Once cured, the material can only be removed mechanically. 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!

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

Dual cartridge	50 ml 200 ml
----------------	-----------------

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

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.