

# PRODUCT DATA SHEET

## Sikalastic®-821 LV

### SPRAY APPLIED WATERPROOFING MEMBRANE

#### DESCRIPTION

Sikalastic®-821 LV is a two part, elastic, crack bridging, rapid curing polyurethane membrane. Sikalastic®-821 LV is for machine application only.

#### USES

Sikalastic®-821 LV may only be used by experienced professionals.

- As a waterproofing membrane underneath asphalt on concrete bridge decks
- As a waterproofing membrane for concrete structures and non-trafficked concrete areas with an additional top coat for UV protection
- As a waterproofing layer for car parks

#### CHARACTERISTICS / ADVANTAGES

- Excellent crack bridging properties
- Highly elastic waterproofing membrane
- Contains no fillers
- Fast curing (application with plural spray equipment only)

#### APPROVALS / STANDARDS

- Coating for surface protection of concrete according to EN 1504-2:2004, Declaration of Performance 02 07 02 03 001 0 000020 1008, certified by notified factory production control certification body 0921, certificate of conformity of the factory production control 0921-CPR-2017, and provided with the CE marking.
- Kiwa Polymer Institute, test report P 2366, conformity with the requirements of ZTV-I\_NG, part 7, section 3, 2010, incl. bond/ shear strength test
- Polymer Institute Dr. Stenner GmbH, test report P 1700-1, basic test on bridge deck waterproofing in accordance with TL/TB-BEL-B of ZTV-BE-B, part 3, 1995
- Polymer Institute Dr. Stenner GmbH, test report P 2298-2, basic test according DAFStb Guideline, 2001, class OS 11 (OS F)
- Kiwa Polymer Institute GmbH, test report P 5971-E, root resistance in accordance with DIN 4062, chapter 5.7

#### PRODUCT INFORMATION

<b>Chemical Base</b>	2-part polyurethane
<b>Packaging</b>	Part A: 209 kg drum Part B: 211 kg drum
<b>Appearance / Colour</b>	Grey, approx. RAL 7005
<b>Shelf Life</b>	Part A: 12 month Part B: 9 month
<b>Storage Conditions</b>	From date of production if stored properly in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5 °C and +30 °C. Protect from direct sun light and frost.

Density	Part A: ~ 1.04 kg/litre Part B: ~ 1.04 kg/litre Mixed resin: ~ 1.04 kg/litre	(DIN EN ISO 2811-1)
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Solid Content	≥ 99 %
Viscosity	Part A: 3900 mPa·s Part B: 5900 mPa·s

## TECHNICAL INFORMATION

Shore A Hardness	~ 72
Tensile Strength	~ 8 N/mm <sup>2</sup> (DIN 53504)
Elongation at Break	~ 380 % (DIN 53504)
Tensile Adhesion Strength	≥ 1.5 N/mm <sup>2</sup>
Crack Bridging Ability	Dynamic crack-bridging properties ≤ 0.3 mm at -20 °C static crack-bridging properties ≤ 1.0 mm
Chemical Resistance	Resistant to de-icing salts, bitumen and alkalis
Thermal Resistance	Short term resistant to mastic asphalt up to +240 °C

## APPLICATION INFORMATION

Mixing Ratio	Part A : Part B = 1 : 1 by volume															
Consumption	~ 1 kg/m <sup>2</sup> /mm															
Layer Thickness	Min. 2mm															
Ambient Air Temperature	+8 °C min. / +45 °C max.															
Relative Air Humidity	≤ 85 %															
Dew Point	The substrate and uncured membrane must be at least 3 °C above dew point to reduce the risk of condensation or blooming of the membrane finish. Protect from direct sun light and frost. Beware of condensation															
Substrate Temperature	+8 °C min. / +45 °C max.															
Substrate Moisture Content	≤ 4 % according CM method															
Gel time	20 to 25 seconds															
Waiting Time / Overcoating	Before applying Sikalastic®-823/-825 on Sikalastic®-821 LV allow: <table border="1"> <thead> <tr> <th>Temperature</th> <th>Minimum</th> <th>Maximum</th> </tr> </thead> <tbody> <tr> <td>+10 °C</td> <td>60 minutes</td> <td>2 months<sup>1)</sup></td> </tr> <tr> <td>+20 °C</td> <td>30 minutes</td> <td>2 months<sup>1)</sup></td> </tr> <tr> <td>+30 °C</td> <td>20 minutes</td> <td>2 months<sup>1)</sup></td> </tr> <tr> <td>+40 °C</td> <td>20 minutes</td> <td>2 months<sup>1)</sup></td> </tr> </tbody> </table>	Temperature	Minimum	Maximum	+10 °C	60 minutes	2 months <sup>1)</sup>	+20 °C	30 minutes	2 months <sup>1)</sup>	+30 °C	20 minutes	2 months <sup>1)</sup>	+40 °C	20 minutes	2 months <sup>1)</sup>
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<sup>1)</sup> Assuming that any dirt has been carefully removed and contamination is avoided.

## APPLICATION INSTRUCTIONS

### APPLICATION

Spray with a suitable plural component, heated spray equipment; material temperature approx. +70 °C

### CLEANING OF TOOLS

Clean all tools and application equipment with Thinner C immediately after use. Hardened and / cured material can only be removed mechanically.

## LIMITATIONS

- Application is by 2-part hot spray equipment only.
- Sikalastic®-821 LV is not UV light resistant and changes colour under UV exposure. However, the performance and technical properties are not affected providing the exposure is max. 4 weeks. It is therefore advisable to overcoat Sikalastic®-821 LV with hot poured asphalt as early as possible. Areas not to be overlaid with asphalt and which are permanently exposed to UV light radiation must be overcoated with a suitable protective coating.

- In wet areas or climatic zones with a permanent air humidity of > 80 %, in combination with a permanent air temperature of > +30 °C, the adhesion promoter Sikalastic®-810 must be used.
- Please note that Sikalastic®-821 LV is not suitable for applications with permanent water load.
- Prior to placing the hot poured asphalt (mastic asphalt), a tack-coat Sikalastic®-823 has to be applied by brush, roller or spray.
- Prior to placing the hot rolled asphalt (asphalt concrete), a tack-coat, comprising primer Sikafloor®-161 and Sikalastic®-827 pellets, has to be applied.
- Always apply a test area first.

## 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.

## LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

## ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet (MSDS) containing physical, ecological, toxicological and other safety-related data.

## VOC DATA

According to the EU-Directive 2004/42, the maximum allowed content of VOC (Product category IIA / j type **sb**) is 550 / 500 g/litre (Limits 2007 / 2010) for the ready to use product.

The content of Sikalastic®-821 LV is ≤ 250 g/litre VOC for the ready to use product.

## 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. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

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