

Sikalastic®-827 LT

Modified hotmelt adhesive with defined volume increase and chemical bond activated by the hot asphalt

Product Description	Sikalastic®-827 LT is a modified hot-melt adhesive used as part of the bridge deck waterproofing system underneath mastic asphalt and asphalt concrete.
Uses	<ul style="list-style-type: none">■ As pellets broadcast into wet Sikafloor®-161 or Sika® Concrete Primer to allow a bond between the spray applied liquid membrane and asphalt overlay on concrete bridge decks.■ As pellets broadcast into wet SikaCor® HM Mastic or SikaCor® Elastomastic Airless to allow a bond to the asphalt overlay on steel bridges.
Characteristics / Advantages	<ul style="list-style-type: none">■ Allows bonding between waterproofing membrane Sikalastic®-821 LV, Sikalastic®-841 ST, Sikalastic®-851 and Sikalastic®-8800 to asphalt overlay■ Thermal reaction triggered at > 65°C■ Provides mechanical bond due to 50%-100% expansion when in contact with heated asphalt■ Easy application■ Applied as pellets by hand or machine■ Excellent bond and shear strength■ Provides excellent adhesion to mastic asphalt or asphalt concreted due to hot-melt properties
Tests	<ul style="list-style-type: none">■ Certificate 13/H204 of BBA/ HAPAS as a part of the Sikalastic®-841 ST Bridge Deck Water Proofing System for the use on concrete decks■ European Technical Approval, ETA 13/ 0653, according ETAG 033, as a liquid applied bridge deck waterproofing kit on concrete decks■ Part of the BAST listed system according ZTV-ING, part 7, section 4, as a liquid applied bridge deck water proofing kit on steel bridge.
Product Data	
Form	
Appearance / Colours	White/yellowish pellets, particle size approximately 2 mm
Packaging	25 kg bags or 750 kg boxes
Storage	
Storage Conditions / Shelf Life	36 months 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.



Construction

Technical Data		
Chemical Base	Modified ethy-vinyl-acetate copolymer	
Density	~ 1.2 kg/litre Bulk Density value at + 23°C	(DIN EN ISO 2811-1)
Solid Content	> 99%	
Chemical Resistance	Sikalastic-827 LT is resistant to water, bitumen an de-icing salts	
Thermal Resistance	Short-term exposure to asphalt concrete and mastic asphalt approx. ~ +250°C.	

System Information

System Structure

System for concrete bridge decks with hot rolled asphalt

Primer: 1-2 x Sikafloor®-161

Waterproofing: 1 x Sikalastic®-821LV/ / Sikalastic®-841 ST/ Sikalastic®-851, Sikalastic®-8800

Tack-coat: 1 x Sikafloor®-161or Sika® Concrete Primer + Sikalastic®-827 LT

Asphalt: Mastic asphalt or asphalt concrete temperature min. 140°C (substrate temperature min. 20°C)

System for steel bridge decks with hot rolled asphalt

Primer: 1x SikaCor® HM Primer

Waterproofing: 1 x SikaCor® HM Mastic

Tack-coat: Sikalastic®-827 LT (broadcast into wet SikaCor® HM Mastic)

Asphalt: Mastic asphalt or asphalt concrete temperature min. 140°C (substrate temperature min. 20°C)

The system specification as described above must not be changed.

Application Details

Consumption / Dosage	Coating System for concrete bridges	Product	Consumption
	Priming	1-2 x Sikafloor®-161, Lightly broadcast with quartz sand, 0.3 - 0.8 mm	0.3 - 0.5 kg/m ² /layer 1.0 - 1.5 kg/m ²
	Waterproofing	1x Sikalastic®-821 LV or 1x Sikalastic®-841 ST or 1 x Sikalastic®-851 or 1 x Sikalastic®-8800	~ 1.00 kg/m ² /mm ~ 1.08 kg/m ² /mm ~ 1.08 kg/m ² /mm ~ 1.08 kg/m ² /mm
	Tack-coat (in case of asphalt overlay)	1x Sikafloor®-161 or 1x Sika Concrete Primer broadcast with 1x Sikalastic®-827 LT	0.50 - 0.60 kg/m ² 0.50 - 0.60 kg/m ² 0.60-0.80 kg/m ²
	Coating System for steel bridges	Product	Consumption
Priming	1x SikaCor® HM Primer	~ 0.22 kg/m ²	
Waterproofing	1x SikaCor® HM Mastic	~ 1.70 kg/m ² /mm	
Tack-coat (in case of asphalt overlay)	Broadcast still wet with 1x Sikalastic®-827 LT	0.60-0.80 kg/m ²	

These figures are theoretical and do not allow any additional material required due to surface porosity, surface profile, variations in level and wastage etc.

Application Conditions / Limits

Substrate Temperature +5°C min. +45°C max.

Air Temperature +5°C min. / +45°C max.

Relative Air Humidity 85% RH max.

Application Instructions

Application Method / Tools

Tack coat:

Uniformly broadcast 1x Sikalastic®-827 LT by hand, low pressure blast equipment or mechanical means into the still wet suitable tack coat

**Waiting Time /
Overcoatability**

Before applying asphalt overlay on Sikafloor®-161+ Sikalastic®-827 LT allow:

Substrate Temperature	minimum	maximum
+ 10°C	~ 24 hours	1 month ¹⁾
+ 20°C	~ 12 hours	
+ 30°C	~ 8 hours	

Before applying asphalt overlay on Sika® Concrete Primer+ Sikalastic®-827 LT allow:

Substrate Temperature	minimum	maximum
+ 10°C	~ 6 hours	1 month ¹⁾
+ 20°C	~ 3 hours	
+ 30°C	~ 3 hours	

Before applying asphalt overlay on SikaCor® HM Mastic + Sikalastic®-827 LT allow:

Substrate Temperature	minimum	maximum
+ 10°C	~ 36 hours	1 month ¹⁾
+ 20°C	~ 24 hours	
+ 30°C	~ 16 hours	

¹⁾ Assuming that the surface has been protected by a covering and that only very limited light traffic takes place.

Times are approximate and will be affected by changing ambient conditions.

**Notes on Application /
Limits**

Application temperatures of substrate and during curing: at least +5°C.

Prior to placing the asphalt overlay, the Sikalastic®-827 LT pellets have to be broadcast uniformly into the wet suitable tack coat.

Minimum temperature during broadcasting +5°C.

Maximum temperature during broadcasting +40°C.

Always consider the pot life of Sikafloor®-161, especially at temperatures $\geq 30^{\circ}\text{C}$. (for more detailed information consult the product datasheet)

Please note:

In order to guarantee an optimal bonding between waterproofing membrane and asphalt concrete, the temperature of the asphalt during rolling should be $\geq 130^{\circ}\text{C}$. Substrate temperature shall not exceed 50°C during placement of first layer of asphalt.

All systems with an additional asphalt layer (= local specification of asphalt) has to be approved, regarding the properties of adhesion and shear-strength in accordance with local specifications.

For this purpose strictly a reference area has to be carried out, which has to be approved by the awarding authority. Sika excludes any responsibility for all following asphalt layers.

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 product uses.

Health and Safety Information

Please insert additional Standard Health and Safety Information in accordance with local laws, which are not already stated in the safety data sheet. For questions contact your Ecology and Safety-Manager.

Important Notes

Residues of material must be removed according to local regulations. Fully cured material can be disposed of as household waste under agreement with the responsible local authorities.

Detailed health and safety information as well as detailed precautionary measures e.g. physical, toxicological and ecological data can be obtained from the safety data sheet.

All technical data stated in this Product Data Sheet are based on laboratory-tests. Actual data may vary due to changing conditions beyond our control.

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 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 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 Product Data Sheet for the product concerned, copies of which will be supplied on request.



SIKA LIMITED

Head Office · Watchmead · Welwyn Garden City · Hertfordshire · AL7 1BQ · United Kingdom
Phone: +44 1 707 394444 · Fax: +44 1 707 329129 · www.sika.co.uk

