Construction

Sikalastic®-8800

Spray applied waterproofing membrane

Product Description

Sikalastic®-8800 is a two part, elastic, 100% solids, very fast curing and coloured pure polyurea liquid applied membrane with good chemical resistance.

Uses

On concrete

- Abrasion resistant protective coating in industrial and manufacturing facilities
- Bund lining
- Roof Waterproofing
- Waterproofing on walkways and balconies
- Waterproofing on floors and car park decks
- Water retaining structures in power plants
- Secondary containment structures
- Tank, bund and pit lining in sewage and waste water treatment plants

On steel

- truck bed lining
- waterproofing and wearing layer on steel ridges

Characteristics / Advantages

- Very fast reactivity and curing time
- Almost immediate return-to-service time
- Applicable in temperatures from +1°C to +50°C
- Performs in constant dry temperatures from-30°C to +100°C
- Excellent crack bridging properties
- Good chemical resistance
- Excellent abrasion resistance
- UV light exposure may lead to yellowing and chalking
- Not resistant to biogenic sulphuric acid

Tests

- Coating for concrete protection according the requirements of EN 1504-2/2004,
- DoP 02 06 07 01 001 0 00017 1008, certified by FPC Notified Body and provided with CE-MArking
- Geoscope GmbH, project No. 131303A, 2013, Determination of the durability of the synthetic membrane Sikalastic-8800 in an autoclave, based on DIN EN ISO 13438
- Test report according ZTV-ING, part 4, section 3, corrosion protection of gravel troughs, issued by KIWA, report No.: 8769
- Eurofins Product Testing A/S, report No. G23435_Ver2/BJ1, 2013, Determination

	of the overall migration and migration of isocyanates acc. EN 1186 and EN 14338 ■ Kiwa Polymer Institut GmbH, report No. P8331-E, 2013, Testing of static and dynamic crack bridging ability in accordance with DIN EN 1062-7, as well as bond strength after freeze-thaw-cycling with de-icing salt immersion and after thundershower cycling acc. DIN EN 13687-1 and -2, in combination with Sikafloor®-156 ■ Kiwa Polymer Institute GmbH, report No. P8395, 2013,Testing of the root resistance according DIN 4062
Approval / Standards	

Product Data

Form

Appearance / Colours	ISO - Part A: Resin - Part B: Grey ~ca. RAL 7004	clear / brownish grey or yellowish	
Packaging	Part A: Part B:	212 kg drum, 191 kg drum,	

Storage

Storage Conditions / Shelf Life	Part A: 12 months Part B: 12 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.	

Technical Data

Chemical Base	Polyurea	
Density	Part A: ~ 1.08 kg/litre Part B: ~ 1.04 kg/litre Mixed resin: ~ 1.00 kg/litre (cured film) All Density values at +23°C	(DIN EN ISO 2811-1)
Curing Speed /Rate	From +8°C to +45°C substrate temperature: Start of setting phase after 5 - 10 seconds.	
Solid Content	> 99%	
Viscosity	Part A: ~ 900 - 1300 mPas at +20°C Part B: ~ 600 – 850 mPas at +20°C	
Layer Thickness	Minimum 2 mm	

Mechanical / Physical Properties

Tensile Strength	~ 18.0 N/mm^2	(28 days / +23°C)	(DIN 53504)
Shore A Hardness	> 50		
Elongation at Break	~ 350%	(28 days / +23°C)	(DIN 53504)

Resistance

Chemical Resistance	Sikalastic®-8800 is generally resistant to: - De-icing salts - Bitumen - Alkalis
Thermal Resistance	Sikalastic®-8800 is short-term resistant to hot poured asphalt applied at up to max. +240°C. The elastic properties are maintained at temperatures as low as -30°C.

Application Details

Consumption / Dosage	~ 1kg/mm/m²
Substrate Quality	The concrete substrate must be sound and of sufficient compressive strength (minimum 25 N/mm^2) with a minimum pull off strength of 1.5 N/mm^2. The substrate must be clean, dry and free of all contaminants such as dirt, oil, grease, coatings and surface treatments, etc. If in doubt, apply a test area first.
Substrate Preparation	All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferably by brush and/or vacuum.

Application Conditions / Limitations

Substrate Temperature	+5°C min. / +45°C max.
Ambient Temperature	+5°C min. / +45°C max.
Substrate Moisture Content	≤ 4% pbw moisture content. Test method: Sika®-Tramex meter, CM - measurement or Oven-dry-method. No rising moisture according to ASTM (Polyethylene-sheet)
Relative Air Humidity	80% r.h. max.
Dew Point	Beware of condensation! 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.

Application Instructions

Mixing	Part A : Part B = 1 : 1 (by volume) Dose and mix with suitable two-part spray equipment. Both components shall be heated up to +70C. The accuracy of mixing and dosage must be controlled regularly with the equipment.
Application Method / Tools	Prior to application, confirm substrate moisture content, r.h and dew point. *Primer:* Prime prepared concrete with Sikagard®-161. Sikagard®-161 should not just be rolled or poured. In order to avoid the formation of pinholes, the primer must be brushed into the concrete surface, if necessary in two applications. After each application lightly broadcast with quartz sand 0.3 - 0.8 mm. In order to avoid the formation of blisters do not broadcast to excess. *Levelling up:* Rough surfaces need to be leveled first. Use Sikagard®-161 leveling mortar (see the relevant PDS). *Waterproofing:* Spray apply with suitable two-part hot spray equipment. Possible suppliers of spray equipment are Gama, Graco, Isotherm, WiWa, Reaku, Magma,… Material temperature: +70°C For more detailed application engineering information pls. refer to the appropriate method statement. *Bonding bridge (intermediate):* Uniformly spread 1 x Sikalastic®-810 using a short pile (12 mm) nylon roller or by spray.
Cleaning of Tools	Clean all tools and application equipment with Thinner C immediately after use. Hardened and/or cured material can only be removed mechanically

Waiting Time / Overcoating

Before applying Sikalastic®-8800 on Sikafloor®-161 allow:

Substrate temperature	Minimum	Maximum
+10°C	24 hours	1 month [1])
+20°C	12 hours	
+30°C	8 hours	
+45°C	6 hours	

Before applying Sika® Concrete Primer on Sikalastic®-8800 allow:

Substrate temperature	Minimum	Maximum
+10°C	10 Min	3 hours [2])
+20°C		2 hours [2])
+30°C		2 hours [2])
+45°C		1 hour [2])

Before applying Sikalastic®-8800 on Sikalastic®-8800 allow:

Substrate temperature	Minimum	Maximum
+10°C	4 Min	3 hours [3])
+20°C		
+30°C		1 hour [3])
+45°C		

[1]) Assuming that any dirt has been carefully removed and contamination is avoided.

[2]) If the max. waiting time is exceeded then Sikalastic®-810 + 15 wt.-% Thinner C must be applied as a bonding bridge.

[3]) If the max. waiting time is exceeded then Sikalastic®-810 must be applied diluted with max. 20% Thinner C.

Times are approximate and will be affected by changing ambient conditions particularly temperature and relative humidity.

Notes on Application / Limitations

This product may only be used by experienced professionals.

Application is by 2-part hot spray equipment only.

Temperature of the substrate during application and curing: min. +5°C.

Sikalastic®-8800 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.
Please note: Always apply a test area first.

Curing Details

Applied Product ready for use

Temperature	Rain resistant after	Ready for foot[1)] traffic (carefully)	Ready for traffic[2)]
+10°C	~ 1 minutes	~ 8 minutes	~ 24 hours
+20°C		~ 5 minutes	~ 18 hours
+30°C		~ 4 minutes	~ 14 hours
+45°C		~ 4 minutes	~ 12 hours

Note:
[1)] Only for inspection or for application of the next layer.
[2)] Only for inspection, application of the next layer or placing of the asphalt overlay by trucks. Not for permanent traffic.

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

Value Base

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.

Construction

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.

Health and Safety Information

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 containing physical, ecological, toxicological and other safety-related data.

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.

EU Regulation 2004/42

VOC - Decopaint Directive

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

The maximum content of **Sikalastic®-8800** is < 500 g/l VOC for the ready to use product.

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