Sikalastic®-8800
Spray applied waterproofing membrane

Product Description
Sikalastic®-8800 is a two part, elastic, 100% solids, very fast curing pure polyurea liquid applied membrane with good chemical resistance. Sikalastic®-8800 shall not be used in closed structures containing biogenic sulphuric acid. Sikalastic®-8800 can only be spray applied with special two part hot spray equipment.

Uses
- Abrasion resistant protective coating in industrial, mining and manufacturing facilities
- Bund lining
- Roof Waterproofing
- Waterproofing on walkways and balconies
- Waterproofing on floors and car park decks
- Water retaining structures
- Primary and secondary containment structures
- Tank, bund and pit lining in sewage and waste water treatment plants
- Truck bed lining
- Waterproofing and wearing layer on bridges

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
- Kiwa Polymer Institut GmbH, report No. P8331-E, 2013, Testing od 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
AS 4020:2005 pending
### Product Data

#### Appearance / Colours
ISO - Part A: clear / brownish  
Resin - Part B: grey or yellowish  
Grey ~ca. RAL 7004

#### Packaging
Part A: 212 kg drum,  
Part B: 191 kg drum,

#### Storage

<table>
<thead>
<tr>
<th>Storage Conditions / Shelf Life</th>
<th>Part A</th>
<th>Part B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shelf Life</td>
<td>12 months</td>
<td>12 months</td>
</tr>
<tr>
<td>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.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Technical Data

<table>
<thead>
<tr>
<th>Chemical Base</th>
<th>Polyurethane</th>
</tr>
</thead>
</table>

| 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 |
|----------|----------------|----------------------|-----------------------------|
| 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

<table>
<thead>
<tr>
<th>Tensile Strength</th>
<th>~ 18.0 N/mm² (28 days / +23°C) (DIN 53504)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shore A Hardness</td>
<td>&gt; 50</td>
</tr>
<tr>
<td>Elongation at Break</td>
<td>~ 350% (28 days / +23°C) (DIN 53504)</td>
</tr>
</tbody>
</table>

#### Resistance

| Abrasion Resistance | < 15 mg (CS 17/1000/1000)  
~ 100 mg (H22/1000/1000) | EN ISO 5470-1 |
| Crack bridging properties | Static: > 2500µm at +23°C, class A5  
Dynamic: class B4.2 at -20°C | DIN EN 1062-7 |
| 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

<table>
<thead>
<tr>
<th>Consumption / Dosage</th>
<th>~ 1kg/mm²/m²</th>
</tr>
</thead>
</table>
| Substrate Quality | The concrete substrate must be sound and of sufficient compressive strength (minimum 25 N/mm²) with a minimum pull off strength of 1.5 N/mm².  
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

Concrete substrates must be prepared mechanically using abrasive blast cleaning or scarifying equipment to remove cement laitance and achieve an open textured surface to CSP3, or average surface profile > 80 microns.

Weak concrete must be removed and surface defects such as blowholes and voids must be fully exposed.

Repairs to the substrate, filling of blowholes/voids and surface levelling must be carried out using appropriate products from the Sikafloor®, SikaDur® and SikaGard® range of materials.

The concrete or screed substrate has to be primed or levelled in order to achieve an even surface.

High spots must be removed by e.g. grinding.

All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferably by brush and/or vacuum.

Steel surfaces must be prepared by blast cleaning to Sa 2 ½ (ISO 8501-1) or SSPC-SP 10. All weld splatter has to be removed and welds must be grind in accordance with EN 14879-1. An average surface profile Rₜ > 50µm must be achieved, the substrate has to be free from contaminants detrimental to adhesion, preferably by high pressure water jetting prior of blast cleaning.

Application Conditions / Limitations

<table>
<thead>
<tr>
<th>Substrate Temperature</th>
<th>+5°C min. / +45°C max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambient Temperature</td>
<td>+5°C min. / +45°C max.</td>
</tr>
<tr>
<td>Substrate Moisture Content</td>
<td>≤ 6% pbw moisture content.</td>
</tr>
<tr>
<td></td>
<td>Test method: Sika®-Tramex meter, CM - measurement or Oven-dry-method.</td>
</tr>
<tr>
<td></td>
<td>No rising moisture according to ASTM (Polyethylene-sheet)</td>
</tr>
<tr>
<td>Relative Air Humidity</td>
<td>80% r.h. max.</td>
</tr>
<tr>
<td>Dew Point</td>
<td>Beware of condensation!</td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
</tbody>
</table>

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 +70°C.
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.

**Leveling 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,…
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.
Sika Quick Cure [concrete primer] may also be used as intercoat primer

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

<table>
<thead>
<tr>
<th>Substrate temperature</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>+10°C</td>
<td>24 hours</td>
<td>1 month ¹)</td>
</tr>
<tr>
<td>+20°C</td>
<td>12 hours</td>
<td></td>
</tr>
<tr>
<td>+30°C</td>
<td>8 hours</td>
<td></td>
</tr>
<tr>
<td>+45°C</td>
<td>6 hours</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Substrate temperature</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>+20°C</td>
<td>2 hours ²)</td>
<td></td>
</tr>
<tr>
<td>+30°C</td>
<td>2 hours ²)</td>
<td></td>
</tr>
<tr>
<td>+45°C</td>
<td>1 hour ³)</td>
<td></td>
</tr>
</tbody>
</table>

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.

Sika Quick Cure [concrete primer] may also be used as intercoat primer

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

<table>
<thead>
<tr>
<th>Temperature</th>
<th>Rain resistant after</th>
<th>Ready for foot ¹) traffic (carefully)</th>
<th>Ready for traffic ²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>+10°C</td>
<td>~ 1 minutes</td>
<td>~ 8 minutes</td>
<td>~ 24 hours</td>
</tr>
<tr>
<td>+20°C</td>
<td>~ 1 minutes</td>
<td>~ 5 minutes</td>
<td>~ 18 hours</td>
</tr>
<tr>
<td>+30°C</td>
<td>~ 1 minutes</td>
<td>~ 4 minutes</td>
<td>~ 14 hours</td>
</tr>
<tr>
<td>+45°C</td>
<td>~ 1 minutes</td>
<td>~ 4 minutes</td>
<td>~ 12 hours</td>
</tr>
</tbody>
</table>

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.
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 Siklastic®-8800 is < 500 g/l VOC for the ready to use product.