# Sikalastic®-842 BG

Liquid applied polyurea hybrid membrane

## Product Description
Sikalastic®-842 BG is a two part, highly elastic, crack-bridging, polyurea hybrid membrane. Sikalastic®-842 BG is for manual application only.

## Uses
- High performance liquid applied waterproofing membrane for interior and exterior applications:
  - Typical uses:
    - Protective coatings
    - Expansion joints
    - Interior surfaces such as floors
    - Bridge coatings
    - Roof coatings

## Characteristics / Advantages
- Seamless
- Suitable for applications in temperatures as low as -5°C
- Applicable in single or multiple applications
- Performs in constant temperatures from -30°C to 120°C
- Excellent low temperature flexibility
- Good thermal and chemical resistance

## Product Data

### Form

<table>
<thead>
<tr>
<th>Appearance / Colours</th>
<th>ISO - Part A:</th>
<th>Resin - Part B:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>white liquid</td>
<td>black liquid</td>
</tr>
<tr>
<td>Grey</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Packaging
- Part A (net): 16 kg pail
- Part B (net): 5 kg pail

### Storage
- Part A: 18 months
- Part B: 18 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 Hybrid

Density
Part A: ~ 1.05 kg/litre
Part B: ~ 1.32 kg/litre
All Density values at +23°C

Pot life
12 to 18 minutes

Tack Free Time
4 to 6 hours

Post Cure Time
24 hours

Solid Content
> 95%

Viscosity
Part A: ~ 300 to 400 mPas
Part B: ~ 350 to 400 mPas

Mechanical / Physical Properties

Tensile Strength
> 10 N/mm²

Shore A Hardness
~ 60 to 70

Elongation at Break
1100 to 1300%

Resistance

Chemical Resistance
Sikalastic®-842 BG is resistant to many chemicals. Please ask for a detailed chemical resistance table.

Thermal Resistance
Sikalastic®-842 BG performs in constant temperatures from -30°C to 120°C.

Application Details

Consumption / Dosage

<table>
<thead>
<tr>
<th>Coating System</th>
<th>Product</th>
<th>Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>System for concrete structures</td>
<td>1 x Sikafloor®-156, Lightly broadcast with quartz sand, 0.3 - 0.8 mm</td>
<td>0.3 - 0.5 kg/m²</td>
</tr>
<tr>
<td></td>
<td>1 x Sikalastic®-842 BG</td>
<td>1.0 - 1.5 kg/m²</td>
</tr>
<tr>
<td></td>
<td>~ 1.11 kg/m²/mm</td>
<td></td>
</tr>
</tbody>
</table>

The performance and technical properties are not affected by UV exposure. Sikalastic®-842 BG is UV light resistant, but not colour stable under UV exposure.

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

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.

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.

### Application Conditions / Limitations

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substrate Temperature</td>
<td>-5°C min. / +60°C max.</td>
</tr>
<tr>
<td>Ambient Temperature</td>
<td>-5°C min. / +60°C max.</td>
</tr>
<tr>
<td>Substrate Moisture Content</td>
<td>≤ 4% 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>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 = 80 : 20 (by volume)

**Mixing Time**

Using a mechanical mixer, first pre-mix separately part-A and part-B base material thoroughly to obtain an uniform colour, making sure to scrape the solids from the bottom and sides of the pail.

Pour part-B into part-A slowly and while mixing, scrape the sides of the container. Mix for 1-2 minutes until uniform colour is obtained.

Sikalastic®-842 BG might not be diluted under any circumstances.

#### Application Method / Tools

Prior to application, confirm substrate moisture content, r.h and dew point.

**Primer:**

Prime prepared concrete with Sikafloor®-156. Sikafloor®-156 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.

**Waterproofing:**

Sikalastic®-842 BG is poured and then spread evenly with a squeegee or notched trowel.

#### 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®-842 BG on Sikafloor®-156 allow:

<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></td>
</tr>
<tr>
<td>+20°C</td>
<td>20 hours</td>
<td></td>
</tr>
<tr>
<td>+30°C</td>
<td>16 hours</td>
<td></td>
</tr>
<tr>
<td>+45°C</td>
<td>14 hours</td>
<td></td>
</tr>
</tbody>
</table>

Before applying Sikalastic®-842 BG on Sikalastic®-842 BG allow:

<table>
<thead>
<tr>
<th>Substrate temperature</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>+10°C</td>
<td>8 hours</td>
<td>16 hours</td>
</tr>
<tr>
<td>+20°C</td>
<td>6 hours</td>
<td>14 hours</td>
</tr>
<tr>
<td>+30°C</td>
<td>4 hours</td>
<td>12 hours</td>
</tr>
<tr>
<td>+45°C</td>
<td>3 hours</td>
<td>10 hours</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 hand abrade the entire surface using a moderate 200 to 300 grit sandpaper. Clean the grinded surface using Sika Colma® Reiniger. For larger areas Sikalastic®-Primer 2 must be applied as a bonding bridge.

Notes on Application / Limitations

In order to avoid blistering it is recommended to apply during falling temperatures. Control film thicknesses during application by using thickness gauge.

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

For applications on vertical or inclined surfaces, up to 2 wt.-% Extender T must be added to increase sag resistance.

The performance and technical properties of Sikalastic®-842 BG are not affected by UV exposure. Sikalastic®-842 BG is UV light resistant, but not colour stable under UV exposure.

Tools:

Recommended supplier of tools:

PPW-Polyplan-Werkzeuge GmbH, Phone: +49 40/5597260, www.polyplan.com

Curing Details

Applied Product ready for use

<table>
<thead>
<tr>
<th>Temperature</th>
<th>Rain resistant after</th>
<th>Ready for foot1) traffic (carefully)</th>
<th>Ready for traffic2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>+10°C</td>
<td>~ 8 hours</td>
<td>~ 12 hours</td>
<td>~ 24 hours</td>
</tr>
<tr>
<td>+20°C</td>
<td>~ 6 hours</td>
<td>~ 10 hours</td>
<td>~ 18 hours</td>
</tr>
<tr>
<td>+30°C</td>
<td>~ 4 hours</td>
<td>~ 8 hours</td>
<td>~ 14 hours</td>
</tr>
<tr>
<td>+45°C</td>
<td>~ 3 hours</td>
<td>~ 6 hours</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 not for permanent traffic.

Note:

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.