

PRODUCT DATA SHEET

Sikalastic®-8440

POLYUREA SPRAY APPLIED CHEMICAL RESISTANT MEMBRANE



DESCRIPTION

Sikalastic®-8440 is a 2-part, pure polyurea, hot spray applied, elastic, very fast curing, waterproofing membrane. Provides a seamless, abrasion and chemical resistant finish for liquid retaining structures containing high levels of acid. Suitable for use in hot and tropical climatic conditions.

USES

Sikalastic®-8440 may only be used by experienced professionals.

- Abrasion resistant protective coating in industrial and manufacturing facilities
- Tank, bund and pit lining in sewage and waste water treatment plants
- Areas where biogenic sulphuric acid is present
- Internal lining of bio-mass ponds

PRODUCT INFORMATION

| | | | |
|--------------------------------|---|-----------------------------------|-----------------|
| Composition | Pure Polyurea | | |
| Packaging | Component A (ISO) | 225 kg drum | |
| | Component B (resin) | 190 kg drum | |
| Shelf life | Component A (ISO) | 6 months from date of production | |
| | Component B (resin) | 12 months from date of production | |
| Storage conditions | Product must be stored in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5 °C and +30 °C. | | |
| Density | Component A (ISO) | ~1,15 | (EN ISO 2811-1) |
| | Component B (resin) | ~1,00 | |
| Solid content by weight | ~100 % | | |

CHARACTERISTICS / ADVANTAGES

- Seamless
- 100 % solids
- Very fast reactivity and curing time
- Almost immediate return-to-service time
- Applicable in temperatures from -20 °C to +50 °C
- Performs in constant dry temperatures from -30 °C to +100 °C
- Good crack bridging properties
- Excellent chemical and abrasion resistance
- Resistant to biogenic sulphuric acid

APPROVALS / CERTIFICATES

Sikalastic®-8440 complies with EN 1504 - 2: 2004 as coating for concrete protection, DoP no. 88577578

TECHNICAL INFORMATION

| | | |
|---------------------------|---|--------------|
| Shore D Hardness | ~60 | (EN ISO 868) |
| Tensile Strength | ~13 N/mm ² | (ISO 527-1) |
| Elongation at Break | ~130 % | (ISO 527-1) |
| Tensile Adhesion Strength | ≥ 1,5 N/mm ² to primed concrete | |
| Tear Strength | ~80 KN/m | (ISO 34-1) |
| Chemical Resistance | Resistant to many chemicals. Contact Sika Technical Service for specific information. | |

APPLICATION INFORMATION

| | | | |
|----------------------------|--|----------------|----------------|
| Mixing Ratio | Comp. A : Comp. B = 1 : 1 | | |
| Consumption | ~1 kg/m ² /mm | | |
| Layer Thickness | ≥ 2 mm | | |
| Ambient Air Temperature | +5 °C min. / +50 °C max. | | |
| Relative Air Humidity | ≤ 85 % | | |
| Dew Point | Beware of condensation! The substrate and uncured coating finish must be at least 3 °C above dew point to reduce the risk of condensation. | | |
| Substrate Temperature | +5 °C min. / +50 °C max. Surface must be free from condensation | | |
| Substrate Moisture Content | Refer to product data sheet of the used primer | | |
| Curing Time | 24 h at +23 °C | | |
| Waiting Time / Overcoating | Substrate Temperature | Minimum | Maximum |
| | 10 °C | 10–15 s | 7 h |
| | 23 °C | 10–15 s | 6 h |
| | 30 °C | 10–15 s | 5 h |

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY

Cementitious substrates (concrete) shall be sound and of sufficient compressive strength (minimum 25 N/mm²) with a minimum tensile adhesion strength of 1,5 N/mm².

Substrates shall be clean, dry and free of all contaminants such as dirt, oil, grease, coatings and surface treatments, etc.

SUBSTRATE PREPARATION

Cementitious substrates shall be prepared mechanically using suitable abrasive blast/water jetting cleaning equipment to remove cement laitance and achieve an open textured surface profile suitable for the product thickness.

Weak cementitious substrates must be removed and surface defects such as blow holes and voids must be fully exposed.

Repairs to the substrate, filling of cracks, blowholes/voids and surface levelling must be carried

out using appropriate products from the Sikafloor®, Sikadur® and Sikagard® range of materials. Products must be cured before applying Sikalastic®-8440. All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferably by vacuum cleaning equipment. For detailed information regarding substrate preparation and primer please refer to Method Statement.

Recommended Primer:

On cementitious substrates Sikafloor®-161 lightly broadcast with quartz sand, 0.3 – 0.8 mm, for example Sikadur®-507.

MIXING

Dose and mix with a suitable air driven or electrical plural component heated spray equipment. Both components must be heated up to +60 - 75 °C. The accuracy of mixing and dosage must be controlled regularly with the equipment. Thoroughly stir part B (resin) using a drum stirrer until a homogenous colour is obtained.

APPLICATION METHOD / TOOLS

Spray temperature:

| | |
|-------------|-------------|
| Component A | +60 - 75 °C |
| Component B | +60 - 75 °C |
| Hose | +60 - 75 °C |

Recommended pressure:

Component A + B 160 - 180 bar, the accuracy of pressure, mixing and dosage must be controlled regularly with the equipment.

Setup:

Do spray trials before starting the project to evaluate best setup regarding equipment, temperature (hose, comp. A, comp. B) and pressure etc..

CLEANING OF EQUIPMENT

Clean all tools with Thinner C immediately after use. Spray equipment has to be cleaned and filled with Mesamoll. Hardened and/or cured material can only be removed mechanically.

FURTHER INFORMATION

Method Statement Sikalastic®-8440

IMPORTANT CONSIDERATIONS

- For spray application the use of protective health and safety equipment is mandatory.
- Application by using a 2-component hot spray equipment.
- Under UV and weathering colour will change.
- Don't apply Sikalastic®-8440 on substrates with rising moisture.
- Freshly applied Sikalastic®-8440 must be protected from damp, condensation and liquid water for at least 30 minutes.
- The incorrect assessment of cracks may lead to reduced service life time and reflective cracking.
- If, during application, heating is required do not use gas, oil, paraffin or other fossil fuel heaters. These produce a large quantity of CO₂ and H₂O water vapour which may adversely affect the finish. For heating use only electric powered warm air blower systems.

BASIS OF PRODUCT DATA

All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for the exact product data and uses.

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 Safety Data Sheet (SDS) 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.

SIKA NORTHERN GULF

Bahrain / Qatar / Kuwait
Tel: +973 177 38188
sika.gulf@bh.sika.com
gcc.sika.com

SIKA SOUTHERN GULF

UAE / Oman / SIC
Tel: +971 4 439 8200
info@ae.sika.com
gcc.sika.com

SIKA SAUDI ARABIA

Riyadh / Jeddah / Dammam
Tel: +966 11 217 6532
info@sa.sika.com
gcc.sika.com



ISO 9001: Sika UAE LLC,
Sika Gulf B.S.C. (c),
Sika Saudi Arabia Co. Ltd,
Sika Qatar LLC
ISO 14001: Sika UAE LLC,
Sika Gulf B.S.C. (c),
Sika Saudi Arabia Co. Ltd
OHSAS: Sika UAE LLC,
Sika Gulf B.S.C. (c)

All products are supplied under a management system certified to conform to the requirements of the quality, environmental and occupational health & safety standards ISO 9001, ISO 14001 and OHSAS 18001.

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