

PRODUCT DATA SHEET

Sikalastic®-8850

POLYUREA SPRAY APPLIED CHEMICAL RESISTANT MEMBRANE

DESCRIPTION

Sikalastic®-8850 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. Thickness ≥ 2 mm.

USES

Sikalastic®-8850 may only be used by experienced professionals.

Concrete:

- Abrasion resistant protective coating in industrial and manufacturing facilities
- Waterproofing for cut and cover structures, submerged structures, walkways and balconies, 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

Steel:

- Truck bed lining
- Wear resistant coating on hydraulic steel structures

CHARACTERISTICS / ADVANTAGES

- Seamless
- Very fast reactivity and curing time
- Almost immediate return-to-service time
- Applicable in temperatures from -20°C to $+50^{\circ}\text{C}$
- Performs in constant dry temperatures from -30°C to $+100^{\circ}\text{C}$
- Good crack bridging properties
- Good chemical and abrasion resistance
- Not resistant to biogenic sulphuric acid

PRODUCT INFORMATION

Composition	Pure Polyurea		
Packaging	Component A (ISO)	200 l drum (225kg)	
	Component B (Resin)	200 l drum (205kg)	
Appearance / Colour	Grey		
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. Always refer to packaging.		
Density	Component A (ISO)	~1,00	(EN ISO 2811-1:2011)
	Component B (Resin)	~1,15	
Solid content by weight	~100 %		EN 13823:2010

TECHNICAL INFORMATION

Shore D Hardness	~48	(EN ISO 868:2005)
Mechanical Resistance	< 3000 mg	H22/1000/1000 (EN 5470-1:2001)
Tensile Strength	15–20 MPa	(ISO 527-1:2012)
Elongation at Break	340–370 %	(ISO 527-1:2012)
Tensile Adhesion Strength	≥ 1,5 MPa (to concrete)	(EN 1542:1999)
Tear Strength	90–110 kN/m	(ISO 34-1:2010)
Crack Bridging Ability	Class A 4 (static) Class B3,1 (dynamic)	(EN 1062-7:2005) (EN 1062-7:2005)
Chemical Resistance	Sikalastic®-8850 is resistant to de-icing salts, bitumen, alkalis, fresh- and ground water and various 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	~2mm	
Product Temperature	Comp. A (ISO)	+60 °C min. / +80 °C max
	Comp. B (Resin)	+60 °C min. / +80 °C max
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	
Substrate Moisture Content	Refer to primer product data sheet	
Curing Time	Fully cured after 24h / +23 °C	
Gel time	8–10 seconds	
Waiting Time / Overcoating	For overcoating with Sikalastic®-8850 or UV resistant top coats allow:	
	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) must be structurally sound and of sufficient compressive strength (minimum 25 N/mm²) with a minimum tensile strength of 1,5 N/mm².

Cementitious substrates and steel surfaces must be clean, dry and free of all contaminants such as dirt, oil, grease, existing coatings and surface treatments, etc.

SUBSTRATE PREPARATION

Cementitious substrates

Must 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.

Priming, 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®-8850.

Steel surfaces

Must be prepared mechanically using suitable abrasive blast/water jetting cleaning equipment to the requirements of the proposed manufacturer's corrosion protection system.

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

After preparation, apply a non-solvent based protective coating i.e. SikaCor® 146 DW.

MIXING

Dose and mix with a suitable air driven or electrical plural component heated spray equipment. Both components must be heated up to the temperatures: Comp. A (ISO): +60 °C, Comp. B (Resin): +80 °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 consistent colour is obtained.

APPLICATION

Sikalastic®-8850 is spray applied in a continuous application to achieve a consistent thickness and surface finish.

CLEANING OF EQUIPMENT

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

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.
- Freshly applied Sikalastic®-8850 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.
- Do not apply Sikalastic®-8850 on substrates with rising moisture.

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.

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