

## PRODUCT DATA SHEET

# Sikalastic®-870 BT

FAST-CURING, LIQUID APPLIED, PURE POLYUREA MEMBRANE WITH HIGH ACIDIC AND ALKALINE CHEMICAL RESISTANCE

### DESCRIPTION

Sikalastic®-870 BT is a two part, hot-sprayed, elastic, polyurea liquid applied membrane. It features a high acidic and alkaline chemical resistance and a very fast curing time.

### USES

The Product is used as a:

- Waterproof coating on concrete and cementitious screeds substrates

Please note:

- The Product may only be used by experienced professionals.
- For applications other than in sewage systems contact Sika Technical Service.

### CHARACTERISTICS / ADVANTAGES

- Good resistance to abrasion
- Good resistance to specific chemicals
- Very fast reactivity and curing time
- Impermeable to liquids

### PRODUCT INFORMATION

<b>Chemical Base</b>	Pure Polyurea	
<b>Packaging</b>	Part A (Isocyanate)	200 kg drum (net)
	Part B (Polyamine)	175 kg drum (net)
	Part C (Colour)	15 kg container (net)
	Refer to the current price list for available packaging variations.	
<b>Shelf Life</b>	Part A	12 months from date of production
	Part B	12 months from date of production
	Part C	12 months from date of production
<b>Storage Conditions</b>	The Product must be stored in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5 °C and +30 °C. Protect from direct sunlight and frost. Always refer to packaging. Refer to the current Safety Data Sheet for information on safe handling and storage.	

Appearance / Colour	Part A	Clear–light yellowish liquid
	Part B	Medium brown liquid
	Part C	Toner grey liquid

**IMPORTANT**

**Discolouration and deterioration due to exposure to sunlight**

When the product is exposed to direct sunlight there may be some discolouration and colour variation. Prolonged exposure to direct sunlight will cause deterioration.

1. Always apply a UV resistant top coat if the Product will be left exposed to direct sunlight.
2. Contact your Sika technical services for advice on selecting a UV resistant product.

Density	Part A	1.05 kg/L	(EN ISO 2811-1)
	Part B	1.00 kg/L	
	Part C	1.05 kg/L	

Density values determined at +23 °C

Solid content by weight	100 %
-------------------------	-------

## TECHNICAL INFORMATION

Shore D Hardness	> 42	(JIS K 6253-1)
Resistance to Impact	No cracks or peels	(JIS A 6916)
Tensile Strength	> 18 N/mm <sup>2</sup>	(JIS K 6251)
Elongation at Break	> 200 %	(JIS K 6251)
Tear Strength	> 75 N/mm <sup>2</sup>	(JIS K 6252-1)
Service Temperature	Performs in constant dry temperatures from -30 °C to +60 °C	
Permeability to Water Vapour	0 g	(JIS A 1404)
Chloride Ion Diffusion Resistance	< 3.4 × 10 <sup>-4</sup> mg·cm <sup>-2</sup> ·d <sup>-1</sup>	(JIS K 5400)

## APPLICATION INFORMATION

Mixing Ratio	Part A : Part B + Part C = 1 : 1	
Consumption	1.10 kg/m <sup>2</sup> per mm thickness	
Layer Thickness	> 2 mm	
Product Temperature	Part A	+67 °C
	Part B + Part C	+53 °C
Ambient Air Temperature	Maximum	+40 °C
	Minimum	- 5 °C
Relative Air Humidity	< 85 %	
Dew Point	Beware of condensation. The substrate and uncured applied product must be at least +3 °C above dew point to reduce the risk of condensation or blooming on the surface of the applied product. Low temperatures and high humidity conditions increase the probability of blooming.	
Substrate Temperature	Maximum	+50 °C
	Minimum	0 °C

<b>Curing Time</b>	24 hours at +20 °C
<b>Gel time</b>	15 s at + 23 °C
<b>Waiting Time / Overcoating</b>	1–2 min at +23 °C

## BASIS OF PRODUCT DATA

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.

## 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.

## APPLICATION INSTRUCTIONS

### EQUIPMENT

#### MIXING EQUIPMENT

- Drum stirrer

#### APPLICATION EQUIPMENT

- Air driven or electrical 2-component hot spray-equipment

### SUBSTRATE QUALITY

Cementitious substrates must be structurally sound and of sufficient compressive strength (minimum 25 N/mm<sup>2</sup>) with a minimum tensile strength of 1.5 N/mm<sup>2</sup>.

Substrates must be clean, dry and free of contaminants such as dirt, oil, grease, coatings, laitance, surface treatments and loose friable material.

### MIXING

#### IMPORTANT

Do not dilute with solvent or water.

1. Pour all the container of Part C into the drum of Part B
2. Thoroughly stir the single drum of coloured resin using a drum stirrer to obtain a uniform colour.
3. Heat all three parts: **Part A** +67 °C : **Part B + Part C** +53°C.
4. Dose and mix with the spray equipment making sure constant air pressure is maintained.
5. Regularly check and control the accuracy of the mixing and dosage. The proportioning equipment must be capable of consistently supplying the correct pressure and heat.

## APPLICATION

### IMPORTANT

#### **Ventilation in confined spaces**

Always ensure good ventilation when applying the Product in a confined space.

### IMPORTANT

#### **No application on unprimed or unlevelled substrates**

Only apply the Product on primed or levelled concrete and screed surfaces.

### IMPORTANT

#### **No application on rising moisture**

Do not apply on substrates with rising moisture.

### IMPORTANT

#### **No application on out-gassing substrates**

Important: Do not apply on porous surfaces where significant moisture vapour transmission (out-gassing) will occur during application.

The Product is applied with specific temperatures for each component. If the application equipment only has a single fixed temperature setting use +70 °C and conduct application trials before undertaking the full application.

1. Apply the Product using air driven or electrical 2-component hot spray equipment.

## CLEANING OF TOOLS

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

## 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.

## 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 (Singapore) Pte Ltd.

28 Tuas South Ave 8

Singapore 637648

Phone: +65 6861 0632

Fax: +65 6862 3915

Email: [sales@sg.sika.com](mailto:sales@sg.sika.com)

[www.sika.com.sg](http://www.sika.com.sg)



### Product Data Sheet

Sikalastic®-870 BT

October 2023, Version 05.01

020706201000000035