

## PRODUCT DATA SHEET

# Sikafloor® TC 442 W

(formerly MasterTop® TC 442W)

Waterborne two-component polyurethane topcoat

### PRODUCT DESCRIPTION

Sikafloor® TC 442 W is water borne, non-solvented, low emission, clear or pigmented 2K-PU topcoat which cures to a matt finish.

### USES

Sikafloor® TC 442 W is designed as a wear-resistant clear or pigmented topcoat on semi-rigid polyurethane systems.

### CHARACTERISTICS / ADVANTAGES

- Matt finish.
- NMP, APEO, VOC, glycol- and solvent-free.
- Very low emission (according AgBB).
- Abrasion resistant.
- Improves scratch and wear resistance.
- UV- stable.
- Good adhesion to non-porous substrates.
- Low viscosity.
- Easy to clean and maintain.

### APPROVALS / STANDARDS

- CE marking and declaration of performance based on EN 13813:2002 Screed material and floor screeds — Screed material — Properties and requirements — Synthetic resin screed material.
- Meets the requirements of GB/T 22374-2018.

### PRODUCT INFORMATION

<b>Chemical Base</b>	Polyurethane	
<b>Packaging</b>	Part A	8.0 kg/pail
	Part B	2.0kg/pail
	Part A + B	10.0kg/set
<b>Shelf Life</b>	12 months	
<b>Storage Conditions</b>	Store in original containers, under dry conditions and a temperature between 15 to 25°C. Do not expose to direct sunlight. Protect from frost. Maximum shelf life achieved under these conditions.	
<b>Appearance / Colour</b>	Part A	Liquid. Coloured or milky white.
	Part B	Liquid. Colourless or light yellow.
Sikafloor® TC 442 W is available in a range of colours, please contact your Sika Representative for more information.		

Density	Part A	~1.05 kg/L (transparent)
		~1.14 kg/L (coloured)
	Part B	~1.13 kg/L
	Mix	~1.07 kg/L (transparent)
		~1.14 kg/L (coloured)

All density values are at +23°C.

Solid content by mass	43% (clear)
	47% (coloured)

Volatile organic compound (VOC) content	< 120g/L	GB/T 22374-2018
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## TECHNICAL INFORMATION

Abrasion Resistance	<0.05g	GB/T 22374-2018
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Surface hardness	Pencil hardness: ~H (Scratches)	GB/T 22374-2018
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Resistance to Impact	Heavy load (1000g steel ball)
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Tensile adhesion strength	>2.0MPa
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Skid / Slip Resistance	>0.50
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Chemical Resistance	Resistant to many chemicals. Please ask for a detailed chemical resistance table.
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Systems	Matt, light structure system.	
	Substrates	Semi-rigid polyurethane systems and epoxy systems
	Seal Coat	1 x Sikafloor®-TC 442 W

## APPLICATION INFORMATION

Mixing Ratio	Part A : Part B = 80:20 (by weight)
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Consumption	Matt, light structure system:		
	Substrates	Product	Consumption
		Semi-rigid polyurethane systems and epoxy systems	-
	Seal Coat	1 x Sikafloor®-TC 442 W	0.12 – 0.15 kg/m <sup>2</sup> (transparent)
			0.12 – 0.15 kg/m <sup>2</sup> (coloured)

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

Ambient Air Temperature	+10 °C minimum / +30 °C maximum
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Relative Air Humidity	30% r.h. minimum / 90% r.h. maximum
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Dew Point	Beware of condensation! The substrate and uncured floor must be at least 3 °C above dew point to reduce the risk of condensation or blooming on the floor finish.
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Substrate Temperature	+10 °C min. / +30 °C max.
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Pot Life	Temperature	Time
	+20 °C	30 minutes

Curing Time	Temperature	Time
	Fully cured at +23 °C	5 days

<b>Waiting Time / Overcoating</b>	Temperature	Time
	+20 °C	12 hours minimum / 24 hours maximum
<b>Applied Product Ready for Use</b>	Light Pedestrian Traffic	Time
	12°C / 50% r.h.	24 hours
	20°C / 50% r.h.	18 hours
	30°C / 50% r.h.	12 hours

## 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.

## ECOLOGY, HEALTH AND SAFETY

This product is an article as defined in article 3 of regulation (EC) No 1907/2006 (REACH). It contains no substances which are intended to be released from the article under normal or reasonably foreseeable conditions of use. A safety data sheet following article 31 of the same regulation is not needed to bring the product to the market, to transport or to use it. For safe use follow the instructions given in the product data sheet. Based on our current knowledge, this product does not contain SVHC (substances of very high concern) as listed in Annex XIV of the REACH regulation or on the candidate list published by the European Chemicals Agency in concentrations above 0,1 % (w/w).

### Regulation (EC) No 1907/2006 (REACH) - Mandatory training

As from 24 August 2023 adequate training is required before industrial or professional use of this product. For more information and a link to the training visit [www.sika.com/pu-training](http://www.sika.com/pu-training).



## APPLICATION INSTRUCTIONS

### EQUIPMENT

Sikafloor® TC 442 W must be thoroughly mixed using a low speed electric stirrer (~300 rpm) or other suitable equipment.

### SUBSTRATE QUALITY

The coating to which Sikafloor® TC 442 W is applied should be clean and dry. Application should take place within the recoating intervals of the coating on which it will be applied.

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### MIXING

Sikafloor® TC 442 W is supplied in working packs which are pre-packaged in the exact ratio. Before mixing, pre-condition both A and B components to a temperature of approximately 15 to 25°C. Pour the entire contents of Parts A and B into a clean pail.

**DO NOT MIX BY HAND.**

Mix with a mechanical drill and paddle at a low speed (~300 rpm) for at least 3 minutes. Scrape the sides and the bottom of the container several times to ensure complete mixing. Keep the mixer blades submerged in the coating to avoid introducing air bubbles.

**DO NOT WORK OUT OF THE CONTAINER USED FOR MIXING.**

After proper mixing to a homogeneous consistency pour the mixed Parts A and B into a fresh container and mix for another minute.

### APPLICATION

As with all waterborne sealers, it is important to avoid dry edges by always working 'wet-on-wet' when overlapping, otherwise roller marks will be visible in the final finish. Use a maximum 40 cm, medium nap roller, start in the middle of one of the short sides of the floor. Dip the roller into the mixed material and roll out a strip of Sikafloor® TC 442 W, parallel to the wall out to one of the corners. Dip the roller into the material once again and roll out a second strip from the starting point out to the other corner. Move backward and repeat these steps, overlapping the first strip by a few cm.

Use a second roller, starting in one corner; back roll the Sikafloor® TC 442 W, without stopping, to the other corner. Offset the roller by 10 – 20 cm and roll over, again without stopping, to the opposite wall. Always roll in the same direction, do not back roll in a criss-cross pattern. When almost all the laid material has been back rolled, lay two more strips and back roll as described above. Using this method, the period between the overlapping should not exceed 1 to 4 minutes and visible roller marks will be minimised. Depending of the application method and quantity, Sikafloor® TC 442 W can have a light structure, without influencing the final properties.

Sikafloor® TC 442 W dries primarily by evaporation of

water followed by a chemical cross-linking reaction. Therefore, when applying Sikafloor® TC 442 W, the ambient temperature and humidity is of importance. High humidity (especially in combination with low temperatures) slows down the drying process. After application, the surface should be protected from direct contact with water for at least 24h (+23°C / 50% r.h.).

NOTE: To ensure a uniform color, use only the same batch number of product for the same area.

### CLEANING OF TOOLS

Re-usable tools should be carefully cleaned immediately after use with water. Once the material has cured, mechanical cleaning is required.

### CLEANING

Due to the good cleaning ability of Sikafloor® TC 442 W, initial care is not necessarily required. The slight surface structure can be seen by a glossy cleaning maintenance. In order to preserve the aesthetic properties, satin matt to matt cleaning maintenance is suitable.

## 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 LIMITED

Watchmead  
Welwyn Garden City  
Hertfordshire, AL7 1BQ  
Tel: 01707 394444  
Web: [www.sika.co.uk](http://www.sika.co.uk)  
Twitter: @SikaLimited



Product Data Sheet  
Sikafloor® TC 442 W  
August 2024, Version 01.01  
020812000000002040

SikafloorTC442W-en-GB-(08-2024)-1-1.pdf