

## PRODUCT DATA SHEET

# Sika® Unitherm® Top W

### WATER BASED TOPCOAT FOR FIRE PROTECTION COATINGS ON STRUCTURAL STEEL

#### DESCRIPTION

Sika® Unitherm® Top W is a single pack topcoat specially designed for Sika® Unitherm® and Sika® Pyroplast® intumescent fire protection systems against humidity and mechanical strain.

Sika® Unitherm® Top W has no impact on the formation of the heat insulating foam of the intumescent coatings.

#### USES

Sika® Unitherm® Top W may only be used by experienced professionals.

Sika® Unitherm® Top W is used as topcoat on fire protected structural steelwork for weathering and / or decorative reasons.

In special conditions, i.e. frequent formation of condensation and / or heating up of surfaces above + 45°C, adequate arrangements should be taken.

In dry and clean conditions, top coating with Sika® Unitherm® Top W on Sika® Unitherm® and Sika® Pyroplast® fire protection coatings may not be required.

#### CHARACTERISTICS / ADVANTAGES

- No impact on the foaming reaction of intumescent coatings
- VOC Sika® Unitherm® Top W < 48 g/l
- Free of halogens and aromatic solvents
- Applicable on all Sika® Unitherm® and Sika® Pyroplast® intumescent coating systems for steel
- Meets Type Z1 classification (i.e. internal conditions include temperatures till + 5°C and high humidity) as part of the coating system
- Complies with the highest quality requirements (level 4) of DGNB as part of the coating system
- Simple application, does not increase static load
- Individual coloration possible various colour shades in RAL, others available

#### SUSTAINABILITY

- Complies with German AgBB and French VOC (A+) when used as part of the coating system

#### PRODUCT INFORMATION

<b>Packaging</b>	Sika® Unitherm® Top W	11 kg and 3 l net.
<b>Appearance / Colour</b>	RAL colour shades DB colour shades on request	
<b>Shelf life</b>	18 months	
<b>Storage conditions</b>	In originally sealed containers in a cool and dry environment. <b>Protect against frost!</b>	
<b>Density</b>	~1,25 g/cm <sup>3</sup> at + 20°C	
<b>Flash Point</b>	Not applicable	
<b>Solid content</b>	~45 % by weight	(according ISO 3251)

## SYSTEMS

<b>Systems</b>	<u>Steel:</u>	
	Surface and / or primer	See corresponding product data sheet of the Sika® Unitherm® or Sika® Pyroplast® intumescent coating range
	Intumescent coating	Sika® Unitherm® or Sika® Pyroplast® intumescent coating for steel
	Topcoat	Sika® Unitherm® Top W
	<u>Galvanized steel:</u>	
	Interface	Sika® Permacor®-2706 EG
	Intumescent coating	Sika® Unitherm® or Sika® Pyroplast® intumescent coating for steel
	Topcoat	Sika® Unitherm® Top W

## APPLICATION INFORMATION

<b>Consumption</b>	Interior use (Type Z1/ Z2):	
	Dry film thickness	~60 µm
	Theoretical coverage	min. 150 g/m <sup>2</sup>

Due to an unleaded and unchromated pigment coating, a higher loading of 200 g/m<sup>2</sup> (160 ml/m<sup>2</sup>) is required in several work steps to reach the designated opacity.  
The quantities do not cover any material wastages. In case of diluting the loading has to be increased.

<b>Relative Air Humidity</b>	Max. 80 %, application temperature shall be at least ≥ 3 K above dew point. During application and drying of total Sika® Unitherm® or Sika® Pyroplast® coating system including Sika® Unitherm® Top W as well as transportation special protection measures must be taken against weathering. <u>Note:</u> With critical situations i.e. frequent formation of condensation and / or heating up of surfaces above + 45°C, adequate arrangements should be taken.
------------------------------	---

<b>Surface Temperature</b>	Object temperature not below + 5°C, to max. + 40°C* * If higher temperatures occur, please consult the technical department for further assistance.
----------------------------	--

<b>Waiting Time / Overcoating</b>	Sika® Unitherm® Top W requires a minimum of 6 h drying prior application with itself. A complete drying of the fire protection coating prior topcoat application is highly recommended. Through-drying of the used Sika® Unitherm® or Sika® Pyroplast® intumescent coating can be checked by 'fingernail-test'. Prior to further applications possible contaminations must be removed.
-----------------------------------	---

<b>Drying time</b>	<b>Drying/Curing</b>	
	Average drying time of Sika® Unitherm® Top W at approx. + 20°C object temperature and 60 % relative humidity:	
	Touch-dry	~0.5 h
	Overcoatable with itself	~6 h
	Through-drying	~24 h

Different temperature, different relative humidity and different coating thickness have an influence on drying time.

## APPLICATION INSTRUCTIONS

### SURFACE PREPARATION

Prior application of Sika® Unitherm® Top W, the surface to be coated must be dry, clean and free from dirt, oil, grease or any other contamination.

### MIXING

Stir thoroughly, free of lumps.

## APPLICATION

The method of application has a major effect on achieving uniform thickness and appearance. Spray application will give the best results. The indicated dry film thickness is easily achieved by airless spray. In case of application by roller or brush, additional layers may become necessary to achieve the required coating thickness, depending on type of construction, site conditions, colour shade etc. Prior to application a trial on site may be useful to ensure the selected application method will provide the requested results.

### Airless spraying:

- Material shall be applied undiluted
  - Airless spray equipment with transmission  $\geq 30 : 1$ , pressure approx. 180 bar
  - Whip line  $\frac{1}{4}$  " may be used
  - Nozzle size 0.28 - 0.38 mm (0.011 - 0.015 inch)
  - Hoses must be used for water based products only!
- Above data shall be used as a guideline with variations being made to suit local conditions.

### Brushing and rolling:

- Material shall be applied undiluted
- Load natural fine bristle brushes or short pile lambswool rollers are recommended

## CLEANING OF EQUIPMENT

Immediately after use with water.

## 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.

## DIRECTIVE 2004/42/CE LIMITATION OF EMISSIONS OF VOC

According to the EU Directive 2004/42/CE, the maximum allowed content of VOC (product category IIA / i type Wb) is 140 g/l (Limits 2010) for the ready to use product.

The maximum content of Sika® Unitherm® Top W is < 130 g/l VOC for the ready to use product.

## 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 Services AG

Tüffenwies 16

8048 Zürich

Tel: +41 58 436 4040

www.sika.com



PRODUCT DATA SHEET

Sika® Unitherm® Top W

March 2018, Version 01.0

020604000030000075

SikaUnithermTopW-en-(03-2018)-1.pdf