

# **BUILDING TRUST**

# PRODUCT DATA SHEET

# Sika® Pyroplast® Wood T with Topcoat Sika® Pyroplast® Wood Top T

Water based fire protective coating for wood, interior use

PRODUCT DESCRIPTION	Sika Pyroplast Wood T is a water borne, transparent fire protection coating which forms a carbon char under the effect of heat.	
	Sika Pyroplast Wood T provides spread-of-flame protection and delays the inflammation of internal natural wood derivates.	
	Sika Pyroplast Wood T emphasizes the interior design of timber structures in keeping an attractive option to architects, builders and end-users.	
USES	Reduction of ignitability of soft- and hardwood ≥ 10 mm thickness and other timber derivatives, i. e. plywood, chipboard, fibre insulation board, hardboard and also on veneers ≥ 12 mm thickness. Insulates against heat, checks fire, prevents propagation of fire and spread of flame and diminishes flue-gas temperatures.	
	Sika Pyroplast Wood T should not be used in areas of high humidity, heat sources or on surfaces where significant physical impact is likely such as floors, stairs etc.	
PROPERTIES	- Water based coating system	
	- VOC: approx. 40 g/l	
	- Free of aromatic solvents	
	- Low material consumption	
	- Simple application	
	- No additional statical load of coating	
TESTS	APPROVAL / STANDARDS	
	Sika Pyroplast Wood T is thoroughly tested to ensure that the coating	

Sika Pyroplast Wood T is thoroughly tested to ensure that the coating performs in all conditions and has been successfully tested and classified to many standards worldwide including EN 13501-1 and BS 476 part 6/7.

Sika® Pyroplast® Wood T with Topcoat Sika® Pyroplast® Wood Top T 06.07.2015, Revision\_04 DS-Code: 9142 English Fire Protection

**Product Data Sheet** 

PRODUCT DATA				
COLOUR SHADES	Sika Pyroplast Wood T Primer: Sika Pyroplast Wood T: Sika Pyroplast Wood Top T:	transparent transparent matt		
PACKAGING	Sika Pyroplast Wood T Primer: Sika Pyroplast Wood T: Sika Pyroplast Wood Top T:	5 kg, net weight 5 kg and 25 kg, net weight 2.5 kg and 10 kg, net weight		
IMDG-CODE-NO	Not applicable			
SHELF LIFE	18 months, in cool and dry storage conditions and original unopened containers.  Protect against frost!			
SYSTEMS				
COATING SYSTEMS	<u>Tie coat (if necessary):</u> Sika Pyroplast Wood T Primer			
	Intumescent coating: Sika Pyroplast Wood T	=		
	Finishing Sealer: Sika Pyroplast Wood Top T			
SURFACE PREPARATION	Substrate must be dry, free from dust, oil, wax, grease, dirt, resin, etc.; Existing coatings with poor adhesion have to be completely removed, e. g. with solvent-based paint stripper or to be rubbed down. Surfaces that have been treated with non-acid resistant coatings or release agents such as emulsion paints containing lime, chalk or lithopone should be rubbed down completely. Timber substrates with wetting difficulties should be roughened thoroughly with abrasive paper. The moisture content of the timber should be below 15 %.			
PRE-TREATMENT WITH WOOD PRESERVATIVES	If resistance to wet rot, fungi or insect attack is requested, we recommend using commercial preservative agents based on oil-alkyd resins provided they are compatible with the Sika Pyroplast fire protection system.  Apply Sika Pyroplast fire protection coating system only after the preservative treatment is completely dry.			
TECHNICAL DATA				
MASS DENSITY	Sika Pyroplast Wood T Primer: Sika Pyroplast Wood T transpare Sika Pyroplast Wood Top T:	approx. 1.00 g/cm³ at +20° C ent: approx. 1.33 g/cm³ at +20° C approx. 0.98 g/cm³ at +20° C		
SOLIDS BY WEIGHT	Sika Pyroplast Wood T Primer: Sika Pyroplast Wood T: Sika Pyroplast Wood Top T:	approx. 65% (according to EN ISO 3251) approx. 63% (according to EN ISO 3251) approx. 50% (according to EN ISO 3251)		
FLASH POINT	Sika Pyroplast Wood T Primer: Sika Pyroplast Wood T: Sika Pyroplast Wood Top T:	not applicable not applicable approx. + 61°C		

Product Data Sheet
Sika® Pyroplast® Wood T
with Topcoat Sika® Pyroplast® Wood Top T
06.07.2015, Revision\_04

DS-Code: 9142





#### **MATERIAL CONSUMPTION**

1 x 60 g/m<sup>2</sup> Sika Pyroplast Wood T Primer (if necessary)

1 x 300 g/m<sup>2</sup> Sika Pyroplast Wood T (Woodclass D > 12 mm)

or

 $1 \times 350 \text{ g/m}^2 \text{ Sika Pyroplast Wood T (Woodclass D > 10 - 12 mm)}$  plus

1 x 50 g/m<sup>2</sup> Sika Pyroplast Wood Top T

Consumption rates are based on fire performance according EN 13501-1

B EN 13823 FIGRA  $\leq$  120 W/s and LFS < edge of specimen and THR<sub>600s</sub>  $\leq$  7,5 MJ

and

EN ISO 11925-2 Exposure = 30 s Fs < 150 mm within 60 s

s1 SMOGRA  $\leq$  30 m<sup>2</sup> / s2 und TSP<sub>600s</sub>  $\leq$  50 m<sup>2</sup>

d0 No flaming doplets/particles in EN 13823 within 600 s;

If consumption rates for alternative standards are requested, please consult the Technical Department of Sika Deutschland GmbH.

# **HINTS OF APPLICATION**

#### PREPARATION OF MATERIAL

Stir thoroughly, free of lumps.

#### **APPLICATION METHOD**

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 that the selected application method will provide the requested results.

### Airless spraying:

- Material shall be applied undiluted
- Airless spray equipment with pressure ratio ≥ 30 : 1
- Filters should be removed
- Hose diameter not below % "
- Whipline ¼ " may be used
- Recommended nozzle size for Sika Pyroplast Wood T:
   0.028 0.38 mm or 0.011 0.015 inch
- Recommended nozzle size for Sika Pyroplast Wood Top T: 0.028 0.38 mm or 0.011 0.015 inch
- Solvent resistant hoses must be used!

Apply two coats of Sika Pyroplast Wood T to a load of 175 g/m<sup>2</sup> each coat, in order to obtain a very smooth finish by cutting down wooden fibres, light sanding after the first coat may be recommend (i. e. with 150 grade paper).

Above data shall be used as a guideline with variations being made to suit local conditions.

# Brushing and rolling:

- Material shall be applied in supply viscosity
- Load natural fine bristle brushes or short pile lambswool rollers are recommended
- Application of two coats of Sika Pyroplast Wood T to a load of 175 g/m<sup>2</sup> each coat is recommended.

**Product Data Sheet** 

Sika® Pyroplast® Wood T with Topcoat Sika® Pyroplast® Wood Top T 06.07.2015, Revision\_04 DS-Code: 9142 English Fire Protection



#### **APPLICATION CONDITIONS**

Sika Pyroplast Wood T Primer, Sika Pyroplast Wood T and

Sika Pyroplast Wood Top T:

Object temperature not below + 10°C, to max. + 40°C\*

Relative humidity max.80%

Application temperature shall be at least  $\geq$  3 K above dew point.

In case relative humidity exceeds 80% special measures must be taken to prevent the condensation forming while application.

At high moisture content of the timber (> 15%), the coating is unlikely to dry satisfactorily and blooming may result. Therefore the moisture content of the timber should be, as near as possible to the level it will stabilize at in use.

\* If higher temperatures occur, please consult the Technical department for further assistance.

#### **DRYING / CURING**

#### Sika Pyroplast Wood T Primer:

At approx. + 20°C temperature and 60% relative humidity:

- Touch dry: after approx. 0.5 hour- Through dry: after approx. 2 hours

## Sika Pyroplast Wood T and Sika Pyroplast Wood Top T:

At approx. + 20°C temperature and 60% relative humidity:

- Touch dry: after approx. 2 hour- Through dry: after approx. 24 hours

Overcoatable with topcoat Sika Pyroplast Wood Top T after approx. 48 hours.

Different temperature and relative humidity's have an influence on drying

Do not stack timber components treated with Sika Pyroplast fire protection coatings.

## **CLEANING OF EQUIPMENT**

Sika Pyroplast Wood T Primer and Sika Pyroplast Wood T:

Immediately after use with warm water.

Sika Pyroplast Wood Top T:

Immediately after use with Sika Unitherm Thinner.



Sika® Pyroplast® Wood T with Topcoat Sika® Pyroplast® Wood Top T 06.07.2015, Revision\_04 DS-Code: 9142 English Fire Protection



# **IMPORTANT NOTICE**

# EU-DIRECTIVE 2004/42/EC (DECOPAINT-DIRECTIVE)

The maximum allowed VOC content acc. To EU Regulation 2004/42 (product class IIA / i, type Wb) in the ready for use material is 140 g/l (limit 2010).

The maximum VOC content of Sika Pyroplast Wood T Primer and Sika Pyroplast Wood T is < 40 g/l VOC.

The maximum allowed VOC content acc. to EU Regulation 2004/42 (product class IIA / i, type Sb) in the ready for use material is 500 g/l (limit 2010).

The maximum VOC content of Sika Pyroplast Wood Top T is < 500 g/I VOC.

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.

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.

Information on the safe handling of chemical products, as well as the essential physical, safety-related, toxicological and ecological data can be found in the current safety data sheets. Observe all relevant regulations, e.g. the hazardous substances act. Further notes and information data sheets on product safety and disposal can be found on the Internet at www.sika.de.

The information, and, in particular, the recommendations relating to the application and enduse 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. The most recent product data sheet applies. This can be requested from us or is available to download at www.sika.de. Please check availability of local product data sheet at your local website. In cases of doubt the German text is valid.

# VALUE BASE

**LOCAL RESTRICTIONS** 

HEALTH AND SAFETY INFORMATION

**LEGAL NOTES** 

Sika Deutschland GmbH

Industrial Coatings Rieter Tal 71665 Vaihingen / Enz Germany www.sika.de

**Product Data Sheet** 

Sika® Pyroplast® Wood T with Topcoat Sika® Pyroplast® Wood Top T 06.07.2015, Revision\_04 DS-Code: 9142 Version given by

Industrial Coatings Phone: (07042) 109-0 Fax: (07042) 109-180

Mail: industrial-coatings@de.sika.com

English Fire Protection

