

# PRODUCT DATA SHEET

## Sika® Unitherm® Repair S

Solvent based repair filler for solvent borne Sika Unitherm fire protection systems

### PRODUCT DESCRIPTION

Sika Unitherm Repair S is a solvent based repair filler for solvent borne Sika fire protection systems, interior and exterior use.

Sika Unitherm Repair S and solvent borne Sika fire protection systems are forming a heat insulating layer under the influence of fire and improve the fire resistance of steel parts.

### USES

Damaged areas of solvent borne Sika fire protection systems may be repaired with Sika Unitherm Repair S. Smoothing of uneven areas on steel surfaces, levelling of structured fire protection coating surfaces to achieve smooth finish.

Please consider all instructions of the product data sheet of the applied Sika Unitherm fire protection system.

### PROPERTIES

- Repair of damaged areas of all solvent borne Sika Unitherm fire protection systems
- Smoothing coating finish
- Compatible with Sika Unitherm Top S topcoat and Sika Unitherm Top S EG \*

\* Below Sika Unitherm Top S and Sika Unitherm Top S EG are called Sika Unitherm Top S

### PRODUCT DATA

#### COLOUR SHADES

White

#### PACKAGING

13 kg, net weight

#### IMDG-CODE NO.

Class 3.3, UN-No.: 1263

#### SHELF LIFE

18 months from delivery in cool and dry storage conditions, original unopened containers.

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## SYSTEMS

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### COATING SYSTEMS

#### Steel:

Primer e.g.: Sika Permacor-1705  
Intumescent coating: Solvent borne Sika fire protection systems  
Repair filler: Sika Unitherm Repair S  
Topcoat: Sika Unitherm Top S

#### Galvanised steel:

Interface: Sika Permacor-2706 EG  
Intumescent coating: Solvent borne Sika fire protection systems  
Repair filler: Sika Unitherm Repair S  
Topcoat: Sika Unitherm Top S

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### SURFACE PREPARATION

Damages of the primer coat like scratches or corrosion must be eliminated before repairing the fire protection system. At affected fire protection coating areas, all loose and damaged particles have to be removed. For further information about repair work of steel fire protection systems please see special technical data sheet 'Maintenance of Sika fire protection coatings for steel'.

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## TECHNICAL DATA

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### MASS DENSITY

Approx. 1.38 g/cm<sup>3</sup>

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### SOLIDS BY WEIGHT

Approx. 85% (according to BCF Guidance Method)

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### FLASH POINT

+ 35 °C

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### MATERIAL CONSUMPTION

Application rate of Sika Unitherm Repair S depends on the required dry film thickness of the applied fire protection coating system. The specified dry film thicknesses for the different section factors and the coating system structure have to be maintained. Please see the corresponding product data sheet of solvent borne Sika fire protection coatings. After keeping to the specified drying times, 1 x 160 g/m<sup>2</sup> Sika Unitherm Top S topcoat can be applied for interior use, 2 x 140 g/m<sup>2</sup> Sika Unitherm Top S topcoat must be applied for exterior use.

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## HINTS OF APPLICATION

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### PREPARATION OF MATERIAL

Not necessary.  
Do not thin.

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### APPLICATION METHOD

By trowel or putty knife.

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### APPLICATION CONDITIONS

Object temperature not below + 5°C, to max. + 40°C  
Relative humidity max. 80%  
Application temperature shall be at least ≥ 3 K above dew point.  
In case relative humidity exceeds 80% special measures must be taken to prevent the condensation forming while application.  
During application and drying of the repaired Sika fire protection system including Sika Unitherm Top S topcoat as well as transportation special protection measures must be taken against weathering.

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**DRYING / CURING**

At + 20°C object temperature and 65% relative humidity:

Interior use:

Overcoating of Sika Unitherm Repair S

- DFT up to 1 mm after 24 h drying

- DFT up to 2 mm after 48 h drying

with 1 x 160 g/m<sup>2</sup> Sika Unitherm Top S topcoat (approx. 1 x 140 ml/m<sup>2</sup>).

Exterior use:

Overcoating of Sika Unitherm Repair S

- DFT up to 1 mm after 48 h drying

- DFT up to 2 mm after 72 h drying

with 1 x 160 g/m<sup>2</sup> Sika Unitherm Top S topcoat (approx. 2 x 120 ml/m<sup>2</sup>).

A complete drying of the fire protection coating prior topcoat application is highly recommended.

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**TOPCOAT**

Sika Unitherm Top S produced in RAL colour shades or on request for other colour shades.

For exterior use: 2 x 140 g/m<sup>2</sup> is necessary for structural steelwork exposed to weathering (see separate product data sheet for topcoat).

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**CLEANING OF EQUIPMENT**

Immediately after use with Sika Unitherm Thinner.

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**IMPORTANT NOTICE****EU-DIRECTIVE 2004/42/EC  
(DECOPAINT-DIRECTIVE)**

For the product category IIA / i, Type Sb, the maximum permissible content of VOC according to the EU-Directive 2004/42/EC is 500 g / litre (limit 2010).

The maximum VOC-value of Sika Unitherm Repair S is below 500 g / l.

**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.

**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.

**HEALTH AND SAFETY  
INFORMATION**

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](http://www.sika.de).

**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. The most recent product data sheet applies. This can be requested from us or is available to download at [www.sika.de](http://www.sika.de). Please check availability of local product data sheet at your local website. In cases of doubt the German text is valid.

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**Product Data Sheet**  
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