

# PRODUCT DATA SHEET

# SikaCor® Zinc R

## LOW-SOLVENT EPOXY ZINC-RICH PRIMER FOR STEEL

## **DESCRIPTION**

2-pack, highly pigmented zinc-rich primer of low solvent content, based on epoxy resin. Low solvent content according to Protective Coatings Directive of German Paint Industry Association (VdL-RL 04).

#### **USES**

SikaCor® Zinc R may only be used by experienced professionals.

Robust corrosion protection primer for steel offering a wide range of applications.

Mainly for bridges, pipe lines, containers, industrial and harbour installations, sewage treatment plant and large machinery; submerged or non-submerged in industrial or marine environments.

Particularly suited for workshop application as heavy duty transportable coating.

In a dry film thickness of 20  $\mu m$  SikaCor® Zinc R can also be employed as welding primer. Test report is available upon request.

## **CHARACTERISTICS / ADVANTAGES**

- Excellent corrosion protection
- Mechanically extraordinary resistant
- Extremely high water and condensation water resistance
- Fast drying and curing characteristics

## **APPROVALS / CERTIFICATES**

- Approved according to German standard 'TL/TP-KOR-Stahlbauten, Blatt 87'.
- Approved according to Austrian standard RVS 15.05.11 and RVS 08.09.02 System S1, S5, S7, S13 and S16.

## PRODUCT INFORMATION

Packaging	SikaCor® Zinc R	26 kg, 15 kg and 7 kg net. 25 l, 10 l and 3 l			
	Sika® Thinner K				
	SikaCor® Cleaner	160 l and 25 l			
Appearance / Colour	Zinc grey, matno. 687.03 Tinted red, matno. 687.04				
Shelf life	1 year				
Storage conditions	In originally sealed containers in a cool and dry environment.				
Density	~2.9 kg/l				
Solid content	~67 % by volume ~89 % by weight				

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## **TECHNICAL INFORMATION**

Chemical Resistance	The fully cured material is resistant to weathering, water and mechanical wear.
Temperature Resistance	Dry heat up to approx. + 150°C, short term up to max. + 180°C Damp heat up to approx. + 50°C

## **SYSTEM INFORMATION**

System	Steel:
	Without top coat:
	2 x SikaCor <sup>®</sup> Zinc R
	For priming under top coats:
	1 x SikaCor® Zinc R
	Weldable shop primer:
	1 x SikaCor® Zinc R, dry film thickness 20 μm.
	Suitable top coats:
	Universally recoatable with 1- and 2-pack products of Sika Deutschland GmbH.

## **APPLICATION INFORMATION**

Mixing Ratio			Components A : B			
	By weight		94:6	94:6		
	By volume		4.4:1			
Thinner	Sika® Thinner K If necessary max. 3 % Sika® Thinner K may be added to adapt the viscosity. In case of using as weldable shop primer add approx. 12 % b.w. Sika® Thinner K.					
Consumption	Theoretical material-consumption/VOC without loss for medium dry film thickness:					
	Dry film thickness	60 μm		80 μm <sup>*)</sup>		
	Wet film thickness	90 μm		120 μm		
	Consumption	~0.260 kg	g/m²	~0.345 kg/m <sup>2</sup>		
	VOC	~29 g/m <sup>2</sup>	2	~38 g/m <sup>2</sup>		
	*) for spray application Apart from small areas the dry film thickness of SikaCor® Zinc R should not exceed 150 µm per layer.  Min + 5°C					
Product Temperature	Apart from small area		n thickness of	SikaCor® Zinc R should not		
Product Temperature Relative Air Humidity	Apart from small area exceed 150 μm per la Min. + 5°C	ayer. e surface tem	nperature is si	ignificantly higher than the		
	Apart from small area exceed 150 μm per la Min. + 5°C Max. 85 %, except th	ayer. e surface tem	nperature is si	ignificantly higher than the		
Relative Air Humidity	Apart from small area exceed 150 μm per la Min. + 5°C  Max. 85 %, except the dew point temperature.	ayer. e surface tem	nperature is si	ignificantly higher than the		
Relative Air Humidity Surface Temperature	Apart from small area exceed 150 µm per la Min. + 5°C  Max. 85 %, except the dew point temperature.  Min. + 5°C	ayer. e surface tem	nperature is si at least 3 K a ———————————————————————————————————	ignificantly higher than the		
Relative Air Humidity Surface Temperature	Apart from small area exceed 150 µm per la Min. + 5°C  Max. 85 %, except the dew point temperature Min. + 5°C  At + 10°C	ayer. e surface tem	nperature is si at least 3 K a ~12 h	ignificantly higher than the		
Relative Air Humidity Surface Temperature	Apart from small area exceed 150 µm per la Min. + 5°C  Max. 85 %, except the dew point temperature of the Min. + 5°C  At + 10°C  At + 20°C  At + 30°C	ayer. e surface tem	nperature is si at least 3 K a ———————————————————————————————————	ignificantly higher than the bove dew point.		
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Relative Air Humidity Surface Temperature Pot Life	Apart from small area exceed 150 µm per la Min. + 5°C  Max. 85 %, except the dew point temperature of the Min. + 5°C  At + 10°C  At + 20°C  At + 30°C  The matter of the Min. + 5°C after area	e surface tem ire, it shall be FT 20 μm h	2.5 h	ignificantly higher than the bove dew point.		
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Relative Air Humidity Surface Temperature Pot Life	Apart from small area exceed 150 µm per la Min. + 5°C  Max. 85 %, except the dew point temperature.  Min. + 5°C  At + 10°C  At + 20°C  At + 30°C	e surface tem ire, it shall be FT 20 μm h	2.5 h	ignificantly higher than the bove dew point.		





#### Waiting Time / Overcoating

Between SikaCor® Zinc R, SikaCor® EG-1 and SikaCor® EG-1 VHS:

Min. until drying stage 6 is achieved

Max. 4 years

In case of longer waiting time please contact Sika.

Between SikaCor® Zinc R and other top coats:

Min. until drying stage 6 is achieved

Max. depending on top coat

In case of intermediate storage possible contamination must be removed before further coats may be applied.

#### **Drying time**

#### Final drying time

Depending on film thickness and temperature full hardness is achieved after 1-2 days.

If used as primer for a coating system with top coats the final drying time depend on them and the full hardness is usually achieved after 1 - 2 weeks, depending on film thickness and ambient temperature. Tests of the completed system should only be carried out after final drying.

#### APPLICATION INSTRUCTIONS

#### **SURFACE PREPARATION**

#### Steel:

Blast-cleaning to Sa 2  $\frac{1}{2}$  according to DIN EN ISO 12944-4.

Free from dirt, oil and grease.

For contaminated and weathered surfaces we recommend to clean with SikaCor® Wash.

#### **MIXING**

Stir component A very thoroughly using an electric mixer (start slowly, then increase up to approx. 300 rpm). Add component B carefully and mix both components very thoroughly (including sides and bottom of the container). Mix for at least 3 minutes until a homogeneous mixture is achieved. Fill mixed material into clean container and mix again shortly as described above. During mixing and handling of the materials always wear protective goggles, suitable gloves and other protective clothings.

#### 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. Adding solvents reduces the sag resistance and the dry film thickness. In case of application by roller or brush, additional applications may become necessary to achieve the required coating thickness, depending on type of construction, site conditions, colour shade etc. Prior to major coating operations a test application on site may be useful to ensure the selected application method will provide the requested results.

#### By brush

#### Conventional high pressure spraying:

- Nozzle size 1.7 2.5 mm
- Pressure 3 4 bar
- Oil and water trap is compulsory

#### Airless-spraying:

- Pressure min. 180 bar
- Nozzle size 0.38 0.53 mm (0.015 0.021 inch)
- Spraying angle 40° 80°

#### **CLEANING OF EQUIPMENT**

SikaCor® Cleaner

### **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

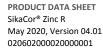
## **ECOLOGY, HEALTH AND SAFETY**

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. Further notes and information data sheets on product safety and disposal can be found on the Internet at www.sika.de.

## 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 / j type Sb) is 500 g/l (Limits 2010) for the ready to use product.

The maximum content of SikaCor® Zinc R is < 500 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.

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