

## PRODUCT DATA SHEET

# SikaCor® Zinc R Plus

High solid 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 Plus may only be used by experienced professionals.

Designed as a mechanically resistant zinc-rich coating for steel surfaces exposed to atmospheric conditions. Mainly for bridges, pipe lines, containers, industrial and harbour installations or large machinery in industrial or marine environments.

Particularly suited for workshop application as heavy duty transportable coating.

In combination with 2-pack intermediate and top coats, SikaCor® Zinc R Plus is a mechanically, water and chemically resistant coating system for durable corrosion protection up to corrosivity category C5 very high according to ISO 12944-2.

## **CHARACTERISTICS / ADVANTAGES**

- Low consumption per square meter
- Excellent corrosion protection
- Mechanically extraordinary resistant
- Fast drying and curing characteristics

## **APPROVALS / STANDARDS**

- Approved according to German standard 'TL/TP-KOR-Stahlbauten, Blatt 87'.
- Certificates for C5 high and very high acc. ISO 12944 are available

## PRODUCT INFORMATION

Packaging	SikaCor® Zinc R Plus	30 kg, 15 kg und 6 kg net.			
	Sika® Thinner K	25 l, 10 l and 3 l			
	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 original sealed containers in a cool and dry environment.				
Density	~2.3 kg/l				
Solid Content	~71 % by volume				

## **Product Data Sheet**

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## **TECHNICAL INFORMATION**

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

## **SYSTEM INFORMATION**

Systems	Steel
	Without top coat:
	2 x SikaCor® Zinc R Plus
	For priming under intermediate coat / top coat:
	1 x SikaCor® Zinc R Plus
	Versatile recoatable with 1- and 2-pack products of Sika Deutschland
	GmbH
	e. g. "Blatt 87" acc. TL-KOR-Stahlbauten
	1 x SikaCor® Zinc R Plus
	1-2 x SikaCor® EG-1 Plus
	1 x SikaCor® EG-4 / SikaCor® EG-5

## **APPLICATION INFORMATION**

Mixing Ratio	Components A : B					
	By weight	94 : 6				
	By volume	6.1:1				
Thinner	Sika® Thinner K					
	If necessary max. 3 % Sika® Thinner K may be added to adapt the viscosity					
Consumption		Theoretical material-consumption/VOC without loss for medium dry film				
	thickness:					
	Dry film thickness	<u>60 μm</u>	<u>80 μm*)</u>			
	Wet film thickness			.3 μm		
	Consumption	~0.194 kg/m <sup>2</sup>		~0.259 kg/m <sup>2</sup>		
	VOC	~21 g/m²	~29 g/m	12		
	*) for spray application Apart from small area not exceed 150 µm po	s the dry film thickness or er layer.	of SikaCor® Zi	inc R Plus should		
	Apart from small area	•	of SikaCor® Zi	inc R Plus should		
Product Temperature	Apart from small area not exceed 150 μm po Min. + 5°C	er layer.				
Product Temperature Relative Air Humidity	Apart from small area not exceed 150 μm po Min. + 5°C Max. 85 %, except the	•	significantly l	higher than the		
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	Apart from small area not exceed 150 µm po Min. + 5°C Max. 85 %, except the dew point temperatu	er layer.  e surface temperature is	significantly I	higher than the		
Relative Air Humidity Surface temperature	Apart from small area not exceed 150 µm po Min. + 5°C  Max. 85 %, except the dew point temperatu  Min. + 5°C	er layer. e surface temperature is re, it shall be at least 3 K	significantly I	higher than the		
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Relative Air Humidity  Surface temperature  Pot Life	Apart from small area not exceed 150 µm po Min. + 5°C  Max. 85 %, except the dew point temperatu  Min. + 5°C  At + 10°C  At + 20°C	e surface temperature is re, it shall be at least 3 K	significantly I above dew p	higher than the point.		
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#### Waiting Time / Overcoating

Min.: Until drying stage 6 is achieved.

Higher layer thicknesses, but also lower temperatures than specified, lead to longer drying times. The overcoating intervals can be delayed and may need to be determined on site.

Max.: 1 year

In case of longer waiting times please contact Sika.

When SikaCor® Zinc R Plus is to be overcoated after a waiting period or after exposure to weathering, all zinc corrosion products or other contaminations must be removed from the surface before the subsequent coating material is 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.

## **BASIS OF PRODUCT DATA**

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**

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet (MSDS) containing physical, ecological, toxicological and other safety-related data.

#### APPLICATION INSTRUCTIONS

#### **SURFACE PREPARATION**

#### Steel:

Blast-cleaning to Sa 2 % according to 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 TOOLS**

SikaCor® Cleaner

## 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





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