

PRODUCT DATA SHEET

SikaCor® Zinc R

LOW-SOLVENT EPOXY ZINC-RICH PRIMER FOR STEEL

PRODUCT 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 for steel surface providing a durable and decorative effect.

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 travel coat system.

With up to 20 microns film thickness SikaCor® Zinc R may also be employed as weldable shop coating. An approval 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 / STANDARDS

Approved to German standard 'TL/TP-KOR-Stahlbauten', page 87.

PRODUCT INFORMATION

Packaging	SikaCor® Zinc R	15 kg
	Sika® Thinner K	10 l and 3 l
	SikaCor® Cleaner	25 l
Appearance / Colour	Zinc grey, tinted red, mat.-no.: 687.03/04	
Shelf Life	Min. 1 year	
Storage Conditions	In original sealed containers in a cool and dry environment.	
Density	~2.8 kg/l	
Solid Content	~67% by volume ~89% by weight	

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	Coating Systems <u>Steel:</u> <u>Without top coat:</u> 2 x SikaCor® Zinc R <u>For priming under top coat:</u> 1 x SikaCor® Zinc R <u>Weldable shop coating:</u> 1 x SikaCor® Zinc R, dry film thickness 20 microns. <u>Suitable top coatings:</u> Universally recoatable with 1- and 2-pack products of Sika Deutschland GmbH
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APPLICATION INFORMATION

Mixing Ratio	Components A : B By weight 94 : 6																												
Thinner	Sika® Thinner K For thickened material meet 3% b.w. If necessary max. 3% Sika® Thinner K may be added to adapt the viscosity. In case of weldable shop coating add ~12% b.w. Sika® Thinner K.																												
Consumption	Theoretical material-consumption/VOC without loss for medium dry film thickness: <table><tr><td>Dry film thickness</td><td>60 µm</td><td>80 µm*)</td></tr><tr><td>Wet film thickness</td><td>90 µm</td><td>120 µm</td></tr><tr><td>Consumption</td><td>~0.250 kg/m²</td><td>~0.335 kg/m²</td></tr><tr><td>VOC</td><td>~27.6 g/m²</td><td>~36.8 g/m²</td></tr></table> *) for spray application Apart from small areas the dry film thickness of SikaCor® Zinc R should not exceed 150 µm per layer.	Dry film thickness	60 µm	80 µm*)	Wet film thickness	90 µm	120 µm	Consumption	~0.250 kg/m ²	~0.335 kg/m ²	VOC	~27.6 g/m ²	~36.8 g/m ²																
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Product Temperature	Min. + 5 °C																												
Relative Air Humidity	Max. 85 %, except the surface temperature is significantly higher than the dew point temperature, it shall be at least 3 K above dew point.																												
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Pot Life	At + 20 °C approx. 8 h																												
Drying Stage 6	<table><thead><tr><th>Product</th><th>Dry film thick-ness</th><th>Dry film thick-ness</th><th>ISO 9117-5</th></tr><tr><th>SikaCor® Zinc R</th><th>20 µm</th><th>80 µm</th><td></td></tr></thead><tbody><tr><td>+ 5 °C after</td><td>1 h</td><td>3 h</td><td></td></tr><tr><td>+ 10 °C after</td><td>1 h</td><td>2.5 h</td><td></td></tr><tr><td>+ 20 °C after</td><td>45 min</td><td>2 h</td><td></td></tr><tr><td>+ 40 °C after</td><td>30 min</td><td>1.5 h</td><td></td></tr><tr><td>+ 80 °C after</td><td>20 min</td><td>45 min</td><td></td></tr></tbody></table>	Product	Dry film thick-ness	Dry film thick-ness	ISO 9117-5	SikaCor® Zinc R	20 µm	80 µm		+ 5 °C after	1 h	3 h		+ 10 °C after	1 h	2.5 h		+ 20 °C after	45 min	2 h		+ 40 °C after	30 min	1.5 h		+ 80 °C after	20 min	45 min	
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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.

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

Drying time

Final drying time

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

APPLICATION INSTRUCTIONS

SURFACE PREPARATION

Steel:

Blast-cleaning to Sa 2 ½ according to DIN EN ISO 12944, part 4.

Free from dirt, oil and grease.

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

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.

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.

GISCODE: RE 3

This coding enables additional information and help with the creation of operating instructions (WINGIS online) to be obtained on the BG Bau service pages (www.gisbau.de).

Skin contact with epoxy resins can lead to allergies!

Avoid direct skin contact at all costs when handling epoxy resins!

For the selection of suitable protective equipment, we have made our information data sheets 7510 'General notes on occupational safety' and 7511 'General notes for wearing protective gloves' available at www.sika.de. In conjunction with this we also recommend the BG Bau service pages for information regarding the handling of epoxy resins (www.bgbau.de/gisbau/fachthemen/epoxi).

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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