BUILDING TRUST

PRODUCT DATA SHEET

SikaCor® Zinc R

Low-solvent Epoxy zinc-rich primer for steel

Made in Germany

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 plants 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 µm 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.

PRODUCT INFORMATION

Packaging	SikaCor® Zinc R	26 kg, 15 kg and 7 kg net.
	Sika® Thinner K	25 l, 10 l and 3 l
	SikaCor® Cleaner	160 l and 25 l
Appearance and colour	Zinc grey, mat.-no. 687.03 Tinted red, mat.-no. 687.04	
Shelf life	1 year	
Storage conditions	In original sealed containers in a cool and dry environment.	
Density	~2.9 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.
Temperature resistance	Dry heat up to approx. + 150°C, short term up to max. + 200°C Damp heat up to approx. + 50°C

SYSTEM INFORMATION

System

Steel

Without top coat:
2 x SikaCor® Zinc R

For priming under intermediate coat:
1 x SikaCor® Zinc R

Weldable shop primer:
1 x SikaCor® Zinc R, dry film thickness 20 µm.

Suitable intermediate and top coats:
Universally recoatable with 1- and 2-pack SikaCor® or Sika® Permacor® products.

APPLICATION INFORMATION

Mixing ratio

	Components A : B
By weight	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 ~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*)
Wet film thickness	90 µm	120 µm
Consumption	~0.260 kg/m²	~0.345 kg/m²
VOC	~29 g/m²	~38 g/m²

*) for spray application
Apart from small areas the dry film thickness of SikaCor® Zinc R should not exceed 150 µm per layer.

Material 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.

Surface temperature

Min. + 5°C

Pot Life

At + 10°C	~12 h
At + 20°C	~8 h
At + 30°C	~5 h

Drying stage 6

	DFT 20 µm	DFT 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

(ISO 9117-5)

Waiting time to 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 us.

When SikaCor® Zinc R 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 Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

ECOLOGY, HEALTH AND SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

SURFACE PREPARATION

Steel:
Blast-cleaning to Sa 2 ½ 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 EQUIPMENT

SikaCor® Cleaner

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 uses.

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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