

PRODUCT DATA SHEET

SikaCor® EG Phosphat

HIGH-SOLID EPOXY ZINC PHOSPHATE PRIMER

DESCRIPTION

SikaCor® EG Phosphat is a 2-pack primer based on epoxy resin containing zinc phosphate.

Low solvent content according to Protective Coatings Directive of German Paint Industry Association (VdL-RL 04).

USES

SikaCor® EG Phosphat may only be used by experienced professionals. Designed as primer for steel surfaces exposed to atmospheric conditions. In combination with 2-pack intermediate and top coats SikaCor® EG Phosphat is a mechanical resistant coating system for rural, urban, industry and sea atmosphere according to ISO 12944-2. Suitable as welding primer in 20 µm thickness. Test report on request.

CHARACTERISTICS / ADVANTAGES

Combined with 2-pack epoxy intermediate coats and 2-pack PUR top coats:

- Very good corrosion protection
- Excellent chemical, weather and colour stability
- Tough elastic and hard but not brittle
- Insensitive against shock and impact

APPROVALS / CERTIFICATES

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

PRODUCT INFORMATION

Packaging	SikaCor® EG Phosphat	30 kg, 15 kg and 3kg net.
	Sika® Thinner EG	25 l, 10 l and 3 l
	SikaCor® Cleaner	160 l and 25 l
Appearance / Colour	Sand yellow approx. RAL 1002, mat.-no. 687.02 Redbrown approx. RAL 8012, mat.-no. 687.06 Zinc grey approx. RAL 7005	
Shelf life	3 years	
Storage conditions	In originally sealed containers in a cool and dry environment.	
Density	~1.6 kg/l	
Solid content	~62 % by volume ~80 % by weight	

TECHNICAL INFORMATION

Chemical Resistance	Combined with 2-pack epoxy intermediate coats and 2-pack PUR top coats: Weathering, water, sewage, seawater, smoke gas, de-icing salts, acid and lye vapours, oils, grease and short term exposure to fuels and solvents.
Thermal Resistance	Dry heat up to + 100°C, short term up to + 150°C In case of higher temperatures please consult Sika.

SYSTEMS

Systems	<u>Steel:</u> 1 - 2 x SikaCor® EG Phosphat Suitable intermediate and top coats: 2-pack top coats of our SikaCor® and Sika® Permacor® range.
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APPLICATION INFORMATION

Mixing Ratio	Components A : B													
	By weight	90 : 10												
	By volume	4.9 : 1												
Thinner	Sika® Thinner EG If necessary max. 5% Sika® Thinner EG may be added to adapt the viscosity. In case of using SikaCor® EG Phosphat as weldable shop coating add approx. 20% b.w. Sika® Thinner EG.													
Consumption	Theoretical material-consumption/VOC without loss for medium dry film thickness: <table><tr><td>Dry film thickness</td><td>20 µm</td><td>80 µm</td></tr><tr><td>Wet film thickness</td><td>30 µm</td><td>130 µm</td></tr><tr><td>Consumption</td><td>~0.050 kg/m²</td><td>~0.205 kg/m²</td></tr><tr><td>VOC</td><td>~10.3 g/m²</td><td>~41.3 g/m²</td></tr></table> The dry film thickness of the primer coat does not respect the correction factors on rough surfaces according to ISO 19840. With SikaCor® EG Phosphat up to 120 µm dry film thickness can be achieved by airless spraying.		Dry film thickness	20 µm	80 µm	Wet film thickness	30 µm	130 µm	Consumption	~0.050 kg/m ²	~0.205 kg/m ²	VOC	~10.3 g/m ²	~41.3 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.													
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	Dry film thickness 80 µm	(ISO 9117-5)												
	+ 5°C after	10 h												
	+ 10°C after	7 h												
	+ 20°C after	3.5 h												
	+ 40°C after	25 min												
	+ 80°C after	15 min												
Waiting Time / Overcoating	Min. until drying stage 6 is achieved Max. 1 year In case of longer waiting times please contact Sika. Make sure that all contamination is removed before overcoating with top-coats (see below: surface preparation).													

Drying time

Final drying time

Depending on film thickness and temperature full hardness is achieved after 1 - 2 weeks. Tests of the completed coating system should only be carried out after final curing.

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 and roller

Conventional high pressure spraying:

- Nozzle size 1.5 - 2.5 mm
- Pressure 3 - 5 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

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.

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.

DIRECTIVE 2004/42/CE - LIMITATION OF EMISSIONS OF VOC

For product category IIA / j, Type SB, the maximum permissible content of VOC as per directive 2004/42/CE is 500 g/l (limit 2010).

The maximum content of SikaCor® EG Phosphat remains below 500 g/l VOC.

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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