BUILDING TRUST

PRODUCT DATA SHEET

SikaCor® EG Phosphat

HIGH-SOLID EPOXY ZINC PHOSPHATE PRIMER

PRODUCT 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 installation works to be carried out only by Sika Approved Contractors. Please observe information given by Product Data Sheets.
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 brittling
- Insensitive against shock and impact

APPROVALS / STANDARDS

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

SYSTEM INFORMATION

Systems

Steel:
1 - 2 x SikaCor® EG Phosphat

Suitable intermediate and top coats:
2-pack top coats of our SikaCor® and Sika® Permacor® range.

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:

Dry film thickness	20 µm	80 µm
Wet film thickness	30 µm	130 µm
Consumption	~0.050 kg/m²	~0.205 kg/m²
VOC	~10.3 g/m²	~41.3 g/m²

With SikaCor® EG Phosphat up to 120 µm dry film thickness per application can be achieved by airless spraying.

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
+ 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

(ISO 9117-5)

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 topcoats (see page 3 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.
Colour Stability: It is the natural tendency of epoxy products to discolorate (yellowing) whether used on internal or external areas. Therefore, any areas touched-up and repaired with the same colour at a later date may be obvious due to this colour change. 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

VALUE BASE

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 uses.

ECOLOGY, HEALTH AND SAFETY

Local safety regulations must be observed and it advisable to wear PPI when working with this product with particular attention paid to cutting and handling. Transportation Class: The product is not classified as hazardous good for transport. Disposal: The material is recyclable. Disposal must be according to local regulations. Please contact your local Sika sales organisation for more information.

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® EG Phosphat 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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