



PRODUCT DATA SHEET SikaCor[®] EG Phosphat Plus

Future name: Macropoxy[®] EG Phosphat N

HIGH-SOLID EPOXY ZINC PHOSPHATE PRIMER

DESCRIPTION

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

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

USES

SikaCor[®] EG Phosphat Plus 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 Plus is a mechanical resistant coating system for durable corrosion protection in rural, urban, industry and sea atmosphere, up to corrosivity category C5 high acc. to ISO 12944-2. In a dry film thickness of 20 μ m SikaCor[®] EG Phosphat Plus can also be used as weldable shop primer.

PRODUCT INFORMATION

CHARACTERISTICS / ADVANTAGES

- Very good corrosion protection
- Chemical and mechanical resistant
- Suitable for application in shop or on site
- High film thickness per coat (up to 120 μm)

APPROVALS / CERTIFICATES

- Approved according to German standard 'TL-KOR-Stahlbauten, Blatt 87'
- Approved according DIN EN ISO 17652-2 as weldable shop primer

| Packaging | SikaCor [®] EG Phosphat Plus | 30 kg, 15 kg and 3 kg net. | | | |
|-----------------------|---|--|--|--|--|
| | Sika [®] Thinner EG | 25 l, 10 l and 3 l | | | |
| | SikaCor [®] Cleaner | 160 l and 25 l | | | |
| Appearance and colour | Sand yellow approx. RAL 1002, matno. 687.02 | | | | |
| | Redbrown approx. RAL 8012, m | Redbrown approx. RAL 8012, matno. 687.06 | | | |
| | Zinc grey approx. RAL 7005 | Zinc grey approx. RAL 7005 | | | |
| Shelf life | 3 years | 3 years | | | |
| Storage conditions | In originally sealed containers ir | In originally sealed containers in a cool and dry environment. | | | |
| Density | ~1.6 kg/l | ~1.6 kg/l | | | |
| Solid content | ~62 % by volume | | | | |
| | ~80 % by weight | | | | |

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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. | | |
|------------------------|--|--|--|
| Temperature resistance | Dry heat up to + 150°C, short term up to + 200°C In case of higher temperatures please contact us. | | |

SYSTEM INFORMATION

System

Steel 1 - 2 x SikaCor[®] EG Phosphat Plus

Suitable as primer under intermediate and top coats of the SikaCor[®] and Sika[®] Permacor[®] product range.

APPLICATION INFORMATION

| Mixing ratio | | Components A : B | | | | |
|-----------------------------|---|------------------|-------------|--|--|--|
| | By weight | 90:1 | 0 | | | |
| | By volume | 4.6 : 1 | | | | |
| Thinner | Sika® Thinner EG If necessary max. 5 % Sika® Thinner EG may be added to adapt the viscosity In case of use as weldable shop primer add approx. 18 % b.w. Sika® Thin- ner EG. | | | | | |
| Consumption | Theoretical material-consumption/VOC without loss for medium dry film thickness: | | | | | |
| | Dry film thickness | 20 µm | 80 µm | | | |
| | Wet film thickness | 44 µm | 129 µm | | | |
| | Consumption | 0.067 kg/m² | 0.206 kg/m² | | | |
| | VOC | ~21 g/m² | ~41 g/m² | | | |
| | With SikaCor® EG Phosphat Plus up to 120 μm dry film thickness per application can be achieved by airless spraying. | | | | | |
| 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 | <u>At + 10°C</u> | ~12 h | | | | |
| | <u>At + 20°C</u> | ~8 h | | | | |
| | <u>At + 30°C</u> | ~5 h | | | | |
| Drying stage 6 | Dry film thickness 80 μm (ISO 9117-5 | | | | | |
| | <u>+ 5°C after</u> | 10 h | | | | |
| | + 10°C after | 7 h | | | | |
| | + 20°C after | <u>3.5 h</u> | | | | |
| | + 40°C after | <u>25 min</u> | | | | |
| | + 80°C after | 15 min | | | | |
| 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 Sherwin-Williams. | | | | | |
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| Prior to further applications: After a waiting period or after exposure to |
|--|
| weathering, all possible contamination must be removed from the surface |
| before the subsequent coating is applied. |

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.

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

<u>Steel:</u> 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 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 recommenddations relating to the application and end-use of Sherwin-Williams` products, are given in good faith based on Sherwin-Williams' current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sherwin-Williams` 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. Sherwin-Williams 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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