

PRODUCT DATA SHEET

Sika® Permacor®-3326 EG H

Very high solid epoxy coating for steel and concrete

PRODUCT DESCRIPTION

Sika Permacor-3326 EG H is a low solvent containing 2-pack epoxy coating for steel and concrete. The coating has high physical strength, with good abrasion and impact resistance.

Crack bridging capability up to 3 mm (laminated system).

USES

Sika Permacor-3326 EG H is ideally suited for the corrosion protection of steel and concrete surfaces exposed to various media.

The principal use of Sika Permacor-3326 EG H is the internal lining of sludge digesters, composting vessels, and process water-, waste water-, and chemical storage tanks, as well as cooling water pipelines and biogas plants.

Sika Permacor-3326 EG H is also suitable as a robust anti-corrosive coating for use in industrial environments, e.g. for pipe bridges, bottling plants, and as an external coating for tanks and pipes, machinery and other pieces of apparatus.

PROPERTIES

- High chemical resistance to water, aggressive effluents and waste water and a wide range of chemicals, particularly salt solutions and to acids occurring in biological processes
- High diffusion resistance
- Very good adhesion to steel and mineral surfaces
- Crack bridging capability up to 3 mm (laminated system)
- Reliable application due to the ability to check for pores in the coating

PRODUCT DATA

COLOUR SHADES

Pebble grey approx. RAL 7032 and green approx. DB 601

FINISH

Mat

PACKAGING

Sika Permacor-3326 EG H:	16 kg net.
Sika Thinner E + B:	5 and 25 litres
SikaCor Cleaner:	25 and 160 litres

SHELF LIFE

In originally sealed containers in a cool and dry environment 2 years.

SYSTEMS

COATING SYSTEMS

Steel:

2 - 3 x Sika Permacor-3326 EG H

Concrete:

1. Rigid coating structure:

- Surface preparation by blast cleaning etc.
- Surface filler Icoment-520 mortar approx. 1200 g/m²
- Fine surface filler Icoment-520 mortar approx. 1800 g/m²
- Primer and base coat Sikagard-177 approx. 400 - 600 g/m²
- Broadcast quartz sand (0.1 – 0.3 mm) approx. 800 - 1000 g/m²
- Top coats 3 x Sika Permacor-3326 EG H approx. 420 g/m² per coat

2. Crack-bridging coating structure:

- Surface preparation by blast cleaning etc.
- Surface filler Icoment-520 mortar approx. 1200 g/m²
- Fine surface filler Icoment-520 mortar approx. 1800 g/m²
- Primer and base coat Sikagard-177 approx. 600 - 800 g/m²
- Sika Betonol special fabric (300 g/m², not including laps)
- Embedding layer Sikagard-177 approx. 800 - 1000 g/m²
- Top coats 3 x Sika Permacor-3326 EG H approx. 420 g/m² per coat

Note:

If there is a possibility of moisture penetration behind the system, the Icoment-520 fine surface filler must be replaced by the Epoxy Cement Combination (ECC) based Sikagard-720 EpoCem mortar. The actual consumption of all materials is dependent on the surface profile, characteristics and application method. The average dry film thickness must be min. 500 µm for the Sika Permacor-3326 EG H top coat, in accordance with the 'tank resistance list'.

SURFACE PREPARATION

Steel:

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

Free from dirt, oil and grease. Average roughness depth R_z ≥ 50 microns

Concrete:

Surfaces to be coated must meet recognised building standards, i.e. be solid, load-bearing and free from contaminants detrimental to adhesion. Pull-off adhesion strength in accordance with DIN 1048 should be > 1.5 N/mm² on average with the lowest reading no less than 1.0 N/mm². For areas subject to heavy mechanical loading, the average value should be > 2.0 N/mm² and the lowest reading no less than 1.5 N/mm². Apply suitable compatible undercoats and observe recommended overcoating intervals.

TECHNICAL DATA

MATERIAL CONSUMPTION

Product	Specific gravity liquid approx. kg/L	Solids content approx. %		Theoretical material-consumption/ coverage without loss for medium dry film thickness of			
		by vol.	by weight	dry microns	wet microns	approx. kg/m ²	approx. m ² /kg
Sika Permacor-3326 EG H	1.90	75	88	250	330	0.633	1.58

MIXING RATIO

(COMPONENTS A : B)

By weight 100 : 23**By volume** 100 : 26

RESISTANCECHEMICAL RESISTANCE

Upon request

TEMPERATURE RESISTANCEDry heat up to approx. + 100°C

POROSITY TEST

With a suitable high-voltage tester, e.g. Fischer-POROSCOPE® H2D, H8D or HV20D with flat electrode (rubber tongue). Test voltage 5 Volt per micron coating thickness.

HINTS OF APPLICATION**MIXING INSTRUCTIONS/
MIXING TIME**

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 METHOD

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 and by brush. 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 or roller:

Dry film thickness of approx. 150 microns per layer is achievable.

Possibly an additional layer may become necessary to achieve the total dry film thickness.

Airless-spraying:

Efficient airless equipment.

Spray pressure in gun of min. 180 bar

Remove sieves

Nozzle size ≥ 0.38 mm (≥ 0.015 inch); spraying angle approx. 50°;Diameter of hoses min. 8 mm ($\frac{3}{8}$ inch)Temperature of material min. + 15°C

APPLICATION CONDITIONS

Min. + 10 °C (material and surface)

Relative humidity: Max. 85 %, max 80% in containers, except the surface temperature is significantly higher than the dew point temperature, it shall be at least 3 K above dew point.

If necessary max. 5% Sika Thinner E+B may be added to adapt the viscosity.

SUBSTRATE HUMIDITYMax. 4% (CM-measuring)

POTLIFE

At + 20°C: Approx. 90 minutes

At + 30°C: Approx. 45 minutes

WAITING TIME BETWEEN COATS	Min.: 12 hours (+ 20°C) <u>Coating used as lining:</u> Max. 48 hours (+ 20°C) In case of longer waiting times the surface must be activated by sweep blasting.
OVERCOATING	With itself. <u>For exposure to corrosive atmospheric conditions, also:</u> With Sika Permacor-2230 VHS or Sika Permacor-2330. Other products - refer to Sika.
FINAL DRYING TIME	Full mechanical and chemical resistance after 7 days at + 20°C.
THINNER	Sika Thinner E + B
CLEANING OF EQUIPMENT	SikaCor Cleaner

IMPORTANT NOTICE

CE-MARKING DIN EN 1504-2

The harmonized European Standard EN 1504-2 "Products and systems for the protection and repair of concrete structures – Definitions, requirements, quality, control and evaluation of conformity – Part 2: Surface protection systems for concrete gives specifications for products and systems based on methods "hydrophobic impregnation", "impregnation" and "coating".

Products acc. EN 1504-2 used as flooring systems with mechanical loads also must fulfil EN 13813.

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.

HEALTH AND SAFETY INFORMATION

GISCODE: RE 5

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.gisbau.de/service/epoxi/epoxi.htm).

Information on the safe handling of chemical products, as well as the essential physical, safety-related, toxicological and ecological data can be found in the current safety data sheets. Observe all relevant regulations, e.g. the hazardous substances act. Further notes and information data sheets on product safety and disposal can be found on the Internet at www.sika.de.

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. The most recent product data sheet applies. This can be requested from us or is available to download at www.sika.de. Please check availability of local product data sheet at your local website. In cases of doubt the German text is valid.

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English
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