

## PRODUCT DATA SHEET

# SikaCor® EG-1 VHS

Very High Solid EP micaceous iron oxide primer and intermediate coat

### DESCRIPTION

SikaCor® EG-1 VHS is a 2-pack primer and intermediate coat based on epoxy resin containing micaceous iron oxide.  
Low solvent content acc. to Protective Coatings Directive of German Paint Industry Association (VdL-RL 04).

### USES

SikaCor® EG-1 VHS may only be used by experienced professionals.

Designed as a mechanically resistant primer and intermediate coat on steel surfaces, hot-dip galvanized steel, stainless steel and aluminium exposed to atmospheric conditions.

In combination with 2-pack top coats, SikaCor® EG-1 VHS offers a mechanically water and chemically resistant coating system for long-life corrosion protection up to corrosivity category C5 high acc. to ISO 12944-2.

### PRODUCT INFORMATION

<b>Packaging</b>	SikaCor® EG-1 VHS	30 kg and 15 kg net.
	Sika® Thinner EG	25 l, 10 l and 3 l
<b>Appearance and colour</b>	Grey metallic approx. DB 702, approx. DB 703 Green metallic approx. DB 601 Other colours upon request Slight colour deviations are possible due to raw material characteristics.	
<b>Shelf life</b>	2 years	
<b>Storage conditions</b>	In originally sealed containers in a cool and dry environment.	
<b>Density</b>	~1.8 kg/l	
<b>Solid content</b>	~78 % by volume	
	~90 % by weight	

### CHARACTERISTICS / ADVANTAGES

- Excellent adhesion to galvanizing, stainless steel and aluminium
- Broad range of dry film thicknesses per coat from 80 - 200 µm
- VOC content less than 250 g/l
- Fast curing at low temperatures
- Very short overcoating intervals

### APPROVALS / CERTIFICATES

- Approved according to German standard 'TL/TP-KOR-Stahlbauten, Blatt 94'.

## TECHNICAL INFORMATION

<b>Mechanical resistance</b>	Highly resistant to transport and assembly stresses.
<b>Chemical resistance</b>	Water, seawater, sewage, diluted inorganic acid and alkalis, salts, detergents, greases, oils and short-term exposure to fuels and solvents.
<b>Temperature resistance</b>	Dry heat up to approx. + 150°C, short-term up to + 200°C Damp heat up to approx. + 50°C

## SYSTEM INFORMATION

<b>Systems</b>	<p><u>Steel:</u> 1 x Sika Poxicolor® Primer HE NEW or SikaCor® Zinc R 1 x SikaCor® EG-1 VHS 1 x SikaCor® or Sika® Permacor® top coats In case of exposure to permanent condensation use SikaCor® Zinc R as primer.</p> <p><u>Hot dip galvanised steel, stainless steel and aluminium:</u> 1 x SikaCor® EG-1 VHS 1 x SikaCor® EG-4 or SikaCor® EG-5</p> <p>In case of light 2-pack PUR topcoat colours a 2<sup>nd</sup> coat may become necessary for perfect opacity.</p>
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## APPLICATION INFORMATION

<b>Mixing ratio</b>		<b>Components A : B</b>	
	<u>By weight</u>	<u>87 : 13</u>	
	<u>By volume</u>	<u>3.2 : 1</u>	
<b>Thinner</b>	Sika® Thinner EG If necessary max. 5% Sika® Thinner EG may be added to adapt the viscosity.		
<b>Consumption</b>	Theoretical material-consumption/VOC without loss for medium dry film thickness:		
	<u>Dry film thickness</u>	<u>80 µm</u>	<u>160 µm</u>
	<u>Wet film thickness</u>	<u>100 µm</u>	<u>200 µm</u>
	<u>Consumption</u>	<u>~0.185 kg/m<sup>2</sup></u>	<u>~0.370 kg/m<sup>2</sup></u>
	<u>VOC</u>	<u>~18.5 g/m<sup>2</sup></u>	<u>~36.9 g/m<sup>2</sup></u>
<b>Material temperature</b>	Min. + 5°C		
<b>Relative air humidity</b>	Max. 85 %, except the surface temperature is significantly higher than the dew point temperature, it shall be at least 3 K above dew point.		
<b>Surface temperature</b>	Min. + 5°C		
<b>Pot Life</b>	<u>At + 20°C</u>	<u>~2 h</u>	
<b>Drying stage 6</b>		<b>Dry film thickness</b>	<b>Dry film thickness</b> (ISO 9117-5)
		<b>80 µm</b>	<b>160 µm</b>
	<u>+ 5°C after</u>	<u>10 h</u>	<u>16 h</u>
	<u>+ 15°C after</u>	<u>7 h</u>	<u>9 h</u>
	<u>+ 20°C after</u>	<u>4 h</u>	<u>5 h</u>
<u>+ 30°C after</u>	<u>2 h</u>	<u>3 h</u>	
<b>Waiting time to overcoating</b>	Min.: until drying stage 6 is achieved Max.: unlimited Prior to further applications possible contamination must be removed (see page 3 'surface preparation').		

## 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, grease and oil.

#### Hot dip galvanized steel, stainless steel, aluminium:

Free from dirt, oil, grease and corrosion products. In case of permanent condensation the surfaces must be slightly sweep blasted with a ferrite-free blasting abrasive.

For contaminated surfaces e.g. galvanized or primed areas 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 or roller

#### Airless spraying:

- High performance airless equipment
- Pressure min. 180 bar
- Nozzle size 0.38 - 0.53 mm (0.15 - 0.21 inch)
- Spraying angle 40° - 80°

### CLEANING OF EQUIPMENT

Sika® Thinner EG

## 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 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.



#### PRODUCT DATA SHEET

SikaCor® EG-1 VHS

March 2022, Version 04.01

020602000040000035

SikaCorEG-1VHS-en-MN-(03-2022)-4-1.pdf