BUILDING TRUST

PRODUCT DATA SHEET

SikaCor® EG-4 VHS

Very high solid AY-PUR Top Coat containing micaceous iron oxide

Made in Germany

DESCRIPTION

SikaCor® EG-4 VHS is a 2-pack acrylic polyurethane topcoat containing micaceous iron oxide pigments (MIO).
Low solvent content acc. to Protective Coatings Directive of German Paint Industry Association (VdL-RL 04).

USES

SikaCor® EG-4 VHS may only be used by experienced professionals.
SikaCor® EG-4 VHS is used as a mechanically resistant top coat for atmospheric exposed steel surfaces.
In combination with 2-pack primers and intermediate coats, SikaCor® EG-4 VHS offers a mechanically, water and chemically resistant coating system for long-life corrosion protection up to corrosivity category C5 very high acc. to ISO 12944-2.

CHARACTERISTICS / ADVANTAGES

- Very low solvent content
- Fast curing even at low temperatures
- Tough elastic and hard but not brittle
- Insensitive against shock and impact
- Chemical, weather and colour stable

APPROVALS / CERTIFICATES

- Approved according to Austrian standard RVS 15.05.11 and RVS 08.09.02 System S14, S15, S17, S18, S19 and S21

PRODUCT INFORMATION

Packaging	SikaCor® EG-4 VHS	30 kg net.
	Sika® Thinner EG	25 l, 10 l and 3 l
	SikaCor® Cleaner	160 l and 25 l
Appearance and colour	MIO color shades (containing micaceous iron oxide) acc. DB standard. Slight colour deviations are possible due to raw material characteristics.	
Shelf life	2 years	
Storage conditions	In originally sealed containers in a cool and dry environment.	
Density	~1.55 kg/l	
Solid content	~65 % by volume ~80 % by weight	

TECHNICAL INFORMATION

Chemical resistance

Weather, water, sewage, seawater, smoke, 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 + 180°C
Damp heat up to approx. + 50°C
An exposure to high temperatures can lead to color changes.

SYSTEM INFORMATION

System

Steel
Used as top coat on 2-pack primer and intermediate coats of the SikaCor® and Sika® Permacor® product range

e. g. System S14 acc. RVS 15.05.11
1 x SikaCor® Zinc R
1 x SikaCor® EG-1 VHS NEW
2 x SikaCor® EG-4 VHS

Hot-dip galvanized steel, stainless steel and aluminium
1 x SikaCor® EG-1 Plus
1 x SikaCor® EG-4 VHS

APPLICATION INFORMATION

Mixing ratio

	Components A : B
By weight	87 : 13

The volumetric mixing ratio may vary depending on the colour shade. Please contact us if needed.

Thinner

Consumption

Theoretical material-consumption/VOC without loss for medium dry film thickness:

Dry film thickness	80 µm
Wet film thickness	125 µm
Consumption	~0.191 kg/m²
VOC	~38 g/m²

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.
The surface must be dry and free from ice.

Surface temperature

Min. + 5°C

Pot Life

At + 10°C	~6 h
At + 20°C	~3 h
At + 30°C	~2 h

Drying stage 6

	Dry film thickness 80 µm
+ 5°C after	18 h
+ 10°C after	12 h
+ 20°C after	6 h
+ 30°C after	3 h

(ISO 9117-5)

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.:** Unlimited. **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

Steel:
Blast cleaning to Sa 2 ½ according to DIN EN ISO 12944-4.
Free from dirt, oil and grease.

Hot-dip galvanized steel, stainless steel and aluminium:
Free from dirt, oil, grease and corrosion products.
In case of permanent immersion and condensation the surfaces must be slightly sweep blasted with non-ferrous abrasives.

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 and roller:
In order to achieve an attractive appearance in case of coatings containing micaceous iron oxide it is recommended to spray apply the last top coat or to brush or roll on in one direction only to avoid streaking.

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 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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