BUILDING TRUST

PRODUCT DATA SHEET

# SikaCor®-2270 VHS

ACRYLIC-POLYURETHANE-TOPCOAT

Made in Germany

## DESCRIPTION

SikaCor®-2270 VHS is a very high solids and fast curing 2-pack acrylic-polyurethane-topcoat with excellent optical and mechanical properties.
Low solvent content acc. to Protective Coatings Directive of German Paint Industry Association (VdL-RL 04).

## USES

SikaCor®-2270 VHS may only be used by experienced professionals.

Used as mechanically resistant top coat for atmospheric exposed steel surfaces, e.g. steel towers (exterior and interior), industrial installations, tanks and machine parts of wind power stations.
In combination with 2-pack primers and intermediate coats it results in a mechanically resistant coating system for long life corrosion protection with extremely high weather resistance up to corrosivity category C5 high, acc. to ISO 12944-2.

## CHARACTERISTICS / ADVANTAGES

- Very fast curing, short overcoating time
- Long-lasting corrosion protection
- Very high solids
- Excellently high colour retention

## APPROVALS / CERTIFICATES

- Tested and approved according to ENERCON specification for coatings of steel towers
- Tested according to ISO 12944-6, corrosivity categories C3 high, C4 high and C5 high in combination with primer coats

## PRODUCT INFORMATION

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| **Packaging** | SikaCor®-2270 VHS (A) | 250 kg drum and 27 kg net. |
| | SikaCor®-2270 VHS (B) | 200 kg drum and 4.5 kg net. |
| | SikaCor® ECO Cleaner | 190 l and 25 l |
| | Sika® Thinner P | 190 l, 25 l and 5 l |
| **Appearance and colour** | RAL 7035 and RAL 7038. Others colour shades upon request. | |
| **Shelf life** | 2 years | |
| **Storage conditions** | In originally sealed containers in a cool and dry environment. | |
| **Density** | ~1.45 kg/l | |
| **Solid content** | ~72 % by volume<br>~84 % by weight | |

## TECHNICAL INFORMATION

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| **Chemical resistance** | Weathering, oils, grease and short term exposure to fuels and solvents. |
| **Temperature resistance** | Dry heat up to approx. + 120°C, short term up to + 150°C. |

## SYSTEM INFORMATION

**System**

Steel:
Suitable as topcoat onto the following primer and intermediate coats:
SikaCor® NCG Base Coat, SikaCor®-2420 EMK and SikaCor®-2460 VHS

Hot dip galvanized steel, stainless steel and aluminium:
1 x SikaCor® EG-1 VHS
1 x SikaCor®-2270 VHS

## APPLICATION INFORMATION

**Mixing ratio**

| | Components A : B |
|---|---|
| By weight | 100 : 16.5 |
| By volume | 4.2 : 1 |

**Thinner**

Sika® Thinner P
If necessary max. 3 % Sika® Thinner P may be added to adapt the viscosity.

**Consumption**

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

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| Dry film thickness | 80 µm |
| Wet film thickness | 111 µm |
| Consumption | ~0.161 kg/m² |
| VOC | ~25.8 g/m² |
| VOC-content (ISO 11890-1) | ~232 g/l |

**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**

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| At + 10°C | ~90 min |
| At + 20°C | ~60 min |
| At + 30°C | ~30 min |

**Drying stage 6**

| | Dry film thickness 80 µm |
|---|---|
| + 10°C after | 9 h |
| + 20°C after | 3 h |
| + 30°C after | 1 h |

(ISO 9117-5)

Higher film thicknesses will result in longer drying times.

**Waiting time to overcoating**

**Min.:** Until drying stage 6 is achieved.
In case of overcoating the topcoat the surface must be grinded resp. sweepblasted.
Before overcoating ensure that the surface is dry and free from oil, grease and dirt.
Temporary storage and the transport of coated parts shall be carried out using appropriate methods. Securing belts or chains shall not be in direct contact with the coated surface and suitable secondary packing shall be employed. Do not use shrink-wrap or any other type of packaging like plastic film.

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| **Drying time** | **Final drying time**<br>At + 20°C and good ventilation the final hardness is achieved within 5 - 7 days. |

## 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 (ISO 8501-1). Free from dirt, oil and grease.
Surface profile 'medium (G)' according to ISO 8503-2, roughness Rz ≥ 50 µm.

Hot dip galvanized steel, stainless steel, aluminium:
Free from dirt, oil, grease and corrosion products. Surfaces must be slightly sweep blasted with a ferritefree blasting abrasive.
Surface profile 'fine (G)' according to ISO 8503-2.

For contaminated surfaces e.g. galvanized or primed areas we recommend to clean with SikaCor® Wash.

### MIXING

Application with 2-component airless equipment:
Stir component A thoroughly before and during application. Fill the material into the tanks of the plural component spraying equipment or put the suction hoses into the material container. If using plural feeded airless equipment (automatic dosage) a dosage control shall be installed to monitor correct mixing ratio. 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.

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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 that the selected application method will provide the requested results.

By brush or roller
- Only suitable for small areas

Airless-Spraying:
- Pressure min. 150 bar
- Nozzle size 0.38 - 0.53 mm (0.015 - 0.021 inch)
- Spraying angle 40° - 80°
- Recommended material temperature: min. + 15°C
- Other spray parameters might be suitable depending on equipment
- Due to short potlife we recommend to use plural component airless equipment and fluid heater
- Information about spraying equipment upon request

### CLEANING OF EQUIPMENT

SikaCor® ECO Cleaner or Sika® Thinner P

## 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.