

PRODUCT DATA SHEET

Sika® Permacor®-2230 VHS

Very High Solid 2-pack-Acrylic-Polyurethane-topcoat

PRODUCT DESCRIPTION

Sika Permacor-2230 VHS is a 2-pack Acrylic-Polyurethane-topcoat, with extremely low solvent content and with very good aesthetics and mechanical properties.

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

USES

Sika Permacor-2230 VHS is used as mechanically resistant finishing coat for atmospheric exposed steel surfaces, e.g. tanks, wind power stations and sewages.

Sika Permacor-2230 VHS in combination with 2-pack primers and intermediate coats of SikaCor and Sika Permacor achieve to mechanical resistant coating systems for long life corrosion protection with extremely high weather resistance up to corrosivity category C5-I resp. C5-M, 'high', acc. to DIN EN ISO 12944.

PROPERTIES

- Extremely high gloss and colour retention
- Fast curing characteristics, short recoating time
- Economical due to high volume solids
- VOC-value of approximately 250g/L

TESTS

APPROVAL / STANDARDS

Tested according to NORSOK Standard M-501, Rev. 6, system no. 1.

PRODUCT DATA

COLOUR SHADES

RAL, NCS, others on request

PACKAGING

Sika Permacor-2230 VHS: 25 kg and 10 kg net.
Sika Thinner P: 5; 25 litres

SHELF LIFE

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

SYSTEMS

COATING SYSTEMS

Steel:

As a topcoat on the following primers and intermediate coats
Sika Permacor-2204 VHS
Sika Permacor-2215 EG VHS
SikaCor-6205 VHS, SikaCor-6205 VHS Turbo and
SikaCor EG-1 VHS.

1 x Sika Poxicolor Primer HE NEU or SikaCor Zinc R
1 x SikaCor EG-1 VHS
1 x Sika Permacor-2230 VHS or Sika Permacor-2230 VHS EG

Galvanized steel, stainless steel and aluminium:

1 x SikaCor EG-1 or SikaCor EG-1 VHS
1 x Sika Permacor-2230 VHS EG or Sika Permacor-2230 VHS

In case of exposure to permanent condensation use SikaCor Zinc R or
Sika Permacor-2311 Rapid as primer.

SURFACE PREPARATION

Steel:

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

Galvanized steel, stainless steel and aluminium:

Free from dirt, oil, grease and corrosion products.

In case of 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.

TECHNICAL DATA

MATERIAL CONSUMPTION

Product	Specific gravity liquid approx. kg/L	Solids content approx. %		Theoretical material-consumption/VOC without loss for medium dry film thickness			
		by vol.	by weight	dry microns	wet microns	approx. kg/m ²	VOC approx. g/m ²
Sika Permacor-2230 VHS	1.4	70	82	80	115	0.157	28.8

MIXING RATIO

(COMPONENTS A : B)

By weight 100 : 18

By volume 3.8 : 1

RESISTANCE

CHEMICAL RESISTANCE

Water, see water, sewage, thinned inorganic acids and bases, salt, detergents, grease, oil and for short term contact solvents and gasoline.

TEMPERATURE RESISTANCE

Dry heat up to: Approx. + 120°C, short term up to + 150°C.

Wet heat till: Approx. + 50°C

MECHANICAL RESISTANCE

High resistant against shipment and construction.

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

Airless-spraying:

Pressure of minimum 150 bar;
nozzle size 0.38 - 0.53 mm (0.015 - 0.021 inch); spraying angle 40° - 80°.

Airmix-Spraying:

APPLICATION CONDITIONS

Min. + 5 °C (material and surface)
Surface: 0 °C when accelerated with SikaCor PUR Accelerator
Relative 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.
If necessary max. 5% Sika Thinner P may be added to adapt the viscosity.

POTLIFE

At + 10°C: approx. 4 hours
At + 20°C: approx. 2 hours
At + 30°C: approx. 1 hour

DRYING STAGE 6 (EN ISO 9117-5)

Product	Dry film thickness	+ 5°C after	+ 15°C after	+ 20°C after	+ 30°C after
Sika Permacor-2230 VHS	80 microns	20 h	10 h	6 h	3 h

WAITING TIME BETWEEN COATS

Product	Dry film thickness	+ 5°C after	+ 15°C after	+ 20°C after	+ 30°C after
Sika Permacor-2230 VHS	80 microns min.	approx. 18 h	approx. 9 h	approx. 5 h	approx. 2 h

Max.: Unlimited.

Prior to further applications contamination must be removed (see page 2 'surface preparation').

THINNER AND CLEANING OF EQUIPMENT

Sika Thinner P

IMPORTANT NOTICE

DIRECTIVE 2004/42/EC (DECOPAINT)

For the product category IIA / j, Type Sb, the maximum permissible content of VOC according to the EU-Directive 2004/42/EC is 500 g/litre (limit 2010). The maximum VOC-value of Sika Permacor-2230 VHS is below 500 g/litre.

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: PU 50

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).

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
Corrosion Protection