

PRODUCT DATA SHEET

SikaCor® VE MY

Vinylester Resin Based Laminate System

DESCRIPTION

SikaCor® VE MY is 2 part, vinly-ester based coating and lining system.

USES

- Especially designed for the use in a chemically stressed environment, where a high chemical resistance is mandatory.
- Internal and external lining of chemical tanks
- Secondary containment lining in bund areas
- Binder for GFR laminate systems
- Lining of gutters in process and storage areas

CHARACTERISTICS / ADVANTAGES

- High chemical resistance to acids, leaches, solvents and to oxidising agents
- Applicable on concrete
- Fast curing
- Crack bridging properties as laminate layer
- Excellent bond strength
- Easy application
- For internal and external use

PRODUCT INFORMATION

Composition	Vinyl Ester	
Packaging	Part A	<ul style="list-style-type: none"> ▪ 200 kg drum ▪ 220 kg drum
	Part B	5 kg bottle
Shelf Life	3 months from date of production	
Storage Conditions	Store properly in original, unopened and undamaged sealed packaging, in dry conditions at temperatures between +5 °C and +25 °C. Keep away from direct sunlight, rain and water.	
Appearance / Colour	Part A (Solution)	Transparent liquid
	Part B (Hardener)	Transparent liquid
Density	~1.05 kg/l	

TECHNICAL INFORMATION

Tensile Strength in Flexure	150 MPa	(ASTM D 790)
Tensile Strength	85 MPa	(ASTM D 638)
Modulus of Elasticity in Tension	3.2 GPa	(ASTM D 638)

Chemical Resistance	Chemical	Concentration	Recommended maximum continuous exposure temperature
	Hydrochloric Acid*	< 37 %	+38 °C
	Sulphuric Acid	< 70 %	+82 °C
	Nitric Acid	< 30 %	+38 °C
	Hydrogen Peroxide	< 30 %	+27 °C
	Chromic Acid	< 20 %	+49 °C

*Double C-glass veil required. Acid resistant (E-CR) glass recommended in chopped glass behind veil layers. Total thickness (veil + chopped glass + SikaCor® VE MY resin) should be ~5 mm (~0.200 inches thick)
SikaCor® VE MY is resistant to a wide range of chemicals, please provide Sika with detailed aspects of application, usage and service.

APPLICATION INFORMATION

Mixing Ratio	Laminate layer and top coat Part A : Part B = 100 : 1.0–2.0 (by weight)
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Consumption		
SikaCor® VE MY System on concrete		
Primer	SikaCor® VE MY solution : SikaCor® VE MY hardener	100 : 1–2
Scratch coat for floors	SikaCor® VE MY solution : SikaCor® VE MY hardener : Sikadur®-504	100 : 1–2 : 80–100
Scratch coat for walls	(SikaCor® VE MY solution : SikaCor® VE MY hardener) + Extender-T	(100 : 1–2) + 2–3 % Extender-T
SikaCor® VE MY resin for laminate layer, surface veil and top coat	SikaCor® VE MY solution : SikaCor® VE MY hardener	100 : 1–2

Note: All ratios are by weight

Economical System

Coating System	Product	Consumption
Primer	1 coat × SikaCor® VE MY resin	~0.20 kg/m ²
Scratch coat for floors	1–2 coats × SikaCor® VE MY resin + Sikadur®-504 (quartz sand)	0.20–0.30 kg/m ²
Scratch coat for walls	1–2 coats × SikaCor® VE MY resin + Extender-T	0.20–0.30 kg/m ²
1 st laminate layer	SikaCor® VE MY resin + Sika® Reemat ECR CSM-300	~0.90 kg/m ²
Surface veil	SikaCor® VE MY resin + Sika® Reemat SM30	~0.20 kg/m ²
Top coat	2 coats × SikaCor® VE MY resin	0.15–0.20 kg/m ² /coat

Standard System

Coating System	Product	Consumption
Primer	1 coat × SikaCor® VE MY resin	~0.20 kg/m ²
Scratch coat for floors	1–2 coats × SikaCor® VE MY resin + Sikadur®-504 (quartz sand)	0.20–0.30 kg/m ²
Scratch coat for walls	1–2 coats × SikaCor® VE MY resin + Extender-T	0.20–0.30 kg/m ²
1 st laminate layer	SikaCor® VE MY resin + Sika® Reemat ECR CSM-300	~0.90 kg/m ²
2 nd laminate layer	SikaCor® VE MY resin + Sika® Reemat ECR CSM-300	~0.90 kg/m ²
1 st surface veil	SikaCor® VE MY resin + Sika® Reemat SM30	~0.20 kg/m ²
2 nd surface veil	SikaCor® VE MY resin + Sika® Reemat SM30	~0.20 kg/m ²
Top coat	2 coats × SikaCor® VE MY resin	0.15–0.20 kg/m ² /coat

Heavy Duty System

Coating System	Product	Consumption
Primer	1 coat × SikaCor® VE MY resin	~0.20 kg/m ²
Scratch coat for floors	1–2 coats × SikaCor® VE MY resin + Sikadur®-504 (quartz sand)	0.20–0.30 kg/m ²
Scratch coat for walls	1–2 coats × SikaCor® VE MY resin + Extender-T	0.20–0.30 kg/m ²
1 st laminate layer	SikaCor® VE MY resin + Sika® Reemat ECR CSM-450	~1.25 kg/m ²
2 nd laminate layer	SikaCor® VE MY resin + Sika® Reemat ECR CSM-450	~1.25 kg/m ²
1 st surface veil	SikaCor® VE MY resin + Sika® Reemat SM30	~0.20 kg/m ²
2 nd surface veil	SikaCor® VE MY resin + Sika® Reemat SM30	~0.20 kg/m ²
Top coat	2 coats × SikaCor® VE MY resin	0.15–0.20 kg/m ² /coat

The consumption stated above are estimates. For actual consumption, site trials are recommended. Please contact our Sika sales team for more information.

Ambient Air Temperature	+5 °C min. / +35 °C max.	
Relative Air Humidity	80 % r.h. max.	
Dew Point	Beware of condensation! The substrate and uncured floor must be at least +3 °C above the dew point to reduce the risk of condensation or blooming on the floor finish.	
Substrate Temperature	+5 °C min. / +35 °C max.	
Substrate Moisture Content	< 4 % pbw moisture content. Test method: Sika® Tramex meter, CM - measurement or Oven-dry-method. No rising moisture according to ASTM D 4263 (Polyethylene-sheet).	
Pot Life	~10 minutes (at +30 °C)	
Curing Time	Foot traffic	After 4 hours
	Fully cured	After 2 days

Note: Times are approximate and are effected by changing ambient conditions.

Waiting Time / Overcoating	Substrate Temperature	Minimum	Maximum
	+30 °C	~2 hours	~2 days

Note: Times are approximate and are affected by changing ambient conditions

BASIS OF PRODUCT DATA

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.

FURTHER INFORMATION

It is important that the user states all aspects of the application and serviceability limits. The following information shall be defined clearly and provided for selection of the appropriate resin and system:

- The chemical name. This information can be obtained from the Material Safety Data Sheet of the chemical in use.
- Concentration of each of the chemical components.
- Specific gravity of each chemical solution or mixture.
- The pH, if it is an aqueous system.
- Normal operating temperature range and temperatures in abnormal situations.
- Maximum chemical temperature when in operation.
- The usage is under pressure or vacuum conditions.
- If used in relation to food and drug industry, the application should be identified.
- Length of exposure, in cases where short or occasional splashes occurs.
- Process description, including neutralization process.

IMPORTANT CONSIDERATIONS

- Do not apply SikaCor® VE MY on substrates with rising moisture.
- Do not apply SikaCor® VE MY on polymer modified cementitious mortars, or epoxy based repair materials.
- Freshly applied SikaCor® VE MY should be protected from damp, condensation and water for at least 24 hours.
- Do not allow the imbedding resin to puddle on the surface.
- Ensure a min. 5 cm overlapping of the glass fabric.
- Construction joints require pre-treatment. Treat at follows:
 - Static cracks: Fill and level with SikaCor® VE MY screed or paste
 - Dynamic cracks: Cracks up to 0.2 mm wide can be covered with the laminate system. For cracks wider than 0.2 mm design as movement joint.
- The incorrect assessment and treatment of cracks may lead to a reduced service life and reflective cracking
- During application of SikaCor® VE MY in closed rooms, pits and shafts etc., sufficient ventilation must be provided. Keep away naked flames, including sparks from welding equipment.
- In poorly lit rooms only electricity powered safety

lamps are permitted. The installed ventilation and lighting equipment must be spark-proof.

- During application of SikaCor® VE MY the use of Personal Protective Equipment (PPE) is mandatory. Please refer to the latest Material Safety Data Sheet (MSDS).
- Under certain conditions, floor heating or high ambient temperatures combined with high loading, may lead to imprints in the resin.
- If heating is required, do not use naked flame during the application of SikaCor® VE MY. Gas, oil, paraffin or other fossil fuel heaters produce large quantities of both CO₂ and H₂O water vapour, which may adversely affect the finish. For heating, use only flash protected warm air blower or heat pump.

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

SUBSTRATE PREPARATION

Concrete substrates must be sound and of sufficient compressive strength (minimum 25 N/mm²) with a minimum pull-off strength of 1.5 N/mm².

The substrate must be clean, dry and free of all contaminants such as dirt, oil, grease, coatings, surface treatments, etc. If in doubt, apply a test area first.

Concrete substrates must be prepared mechanically using abrasive blast cleaning or grinding equipment to remove cement laitance and achieve an open textured surface.

Weak concrete must be removed and surface defects such as blowholes and voids must be fully exposed.

Repairs to the substrate, filling of blowholes/voids and surface levelling must be carried out using appropriate products from Sika® MonoTop® or SikaCor® VE MY screed.

The concrete or screed substrate has to be primed or levelled in order to achieve an even surface.

High spots must be removed by grinding.

All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferably by brush and/or vacuum.

For more information, please refer to "Method Statement-Evaluation and Preparation of Concrete Surfaces for Sika's Flooring System (Doc. No.

CA/006/21082018)

MIXING

Prior to mixing, stir part A mechanically. When all of part B has been added to part A, mix continuously for 1–2 minutes until a uniform mix has been achieved. To ensure thorough mixing pour materials into another container and mix again to achieve a consistent mix. Over mixing must be avoided to minimise air entrainment.

When adding Extender-T or Quartz Sand, mix these components with part A for ~1 minute before adding part B.

APPLICATION

Prior to application, confirm substrate moisture content, r.h. and dew point.

Primer

Apply 1 primer coat of SikaCor® VE MY using a roller and let it cure.

Scratch Coat

Rough surface need to be levelled first. Apply 1–2 layers of scratch coat by trowel to the required thickness and let it cure.

Laminate Layer

Apply the first layer of SikaCor® VE MY by roller, imbed the glass fabric. Apply the second and third layer in the same way, wet on wet. After application of the final glass fabric, de-aerate and wet out the glass fabric using a laminating or disk roller

Important Note: Ensure a min. 5 cm overlapping of the glass fabric.

Top Coat

Apply 2 coats of SikaCor® VE MY by roller.

Important Notes:

- During application a high air change rate has to be provided.
- Water, even in the smallest amount, could affect the hardening and block the curing process. Tools and equipment have to be totally dry.
- Appropriate eye protection shall be worn at all times while handling and mixing products.
- Approved **respiratory protection** masks (eg. Half face-piece reusable respirator 6200, respiratory protection with replaceable cartridges/filters from 3M) shall be worn at all times to protect the nose and mouth from inhaling fumes from the material.
- Safety shoes, rubber gloves and other appropriate skin protection shall be worn at all times.

CLEANING OF TOOLS

Clean all tools and application equipment with **acetone** immediately after use. Hardened and/or cured material can only be removed mechanically.

Attention: **Acetone** is a flammable liquid, please

handle with care. The use of Personal Protection Equipment (PPE) is mandatory.

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.

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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Product Data Sheet

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