



# HADALAN® VS 12E

Epoxy rolled coating, osmosis-resistant



These pictograms apply to the **basic product**.  
Deviations are possible depending on the area of application  
and processing.

## PRODUCT INFORMATION

### Description

HADALAN® VS 12E is a pigmented epoxy resin coating with good adhesion to mineral substrates and steel. The cured coating is highly resistant to many acids, alkalis, solvents, oil and grease. The good chemical resistance is confirmed by corresponding test certificates, as is the excellent abrasion resistance in accordance with DIN EN ISO 5470-1.

### Application

- for coating floor surfaces subject to high mechanical and chemical stress
- as a non-slip coating by scattering or mixing with appropriate additives
- as an anti-corrosion coating on exposed and derusted structural steel

### Operational area

- Concrete, steel
- Coatings in production halls, dairies, breweries, canneries, workshops, storage rooms, underground garages, silo facilities, sewage treatment plants

### Place of use

- for interior and exterior use
- in floor areas

### Properties

- solvent-free
- self-levelling
- shrinkage-free curing
- high abrasion resistance
- good chemical resistance
- various slip resistance classifications



## Technical Data

Available container sizes	12.5 kg/combination container
Component A	10 kg resin
Component B	2.5 kg hardener
Mixing ratio	4 : 1 parts by weight
Color tone/color tones	colorless
Density, ready to use	approx. 1.5 kg/l
Processing temperature	+5°C to +30°C
Mixing viscosity	approx. 15 dPa·s <sup>1)</sup>
Abrasion loss (according to Taber)	0.038 g (roll CS 10, 1000 U, 1000 g)
Shore hardness (Shore-A)	approx. 83
Compressive strength	approx. 69 N/mm <sup>2</sup>
Flexural strength	approx. 35 N/mm <sup>2</sup>
Tensile strength	maximum approx. 37.5 N/mm <sup>2</sup>
Adhesive strength	> 3.0 MPa
Pot life	approx. 40 minutes <sup>1)</sup>
Revisability	after approx. 24 hours <sup>1)</sup>
Resilience	Fully loadable after approx. 5 days <sup>1)</sup>
Storage	frost-free and cool, 12 months
Consumption	approx. 0.2 – 1 kg/m <sup>2</sup> depending on application
<sup>1)</sup> At +20 °C and 60 % relative humidity	

## Chemical resistance\* based on DIN EN 13529

Test medium	Resistance over a period of:						
	8 hours	24 hours	2 days	5 days	15 days	30 days	
Acetic acid 10 %	✓	✓	✓	✓	✓	✓	✓
Acetic acid 50%	✓	✓	✓	✗	✗	✗	✗
Sodium hydroxide 20 %	✓	✓	✓	✓	✓	✓	✓
Ethanol/IPA 1:1	✓	✓	✓	✓	✓	✓	✓
White spirit	✓	✓	✓	✓	✓	✓	✓
Xylene	✓	✓	✓	✓	✓	✗	✗
Hydrochloric acid 10 %	✓	✓	✓	✓	✓	✓	✓
Hydrochloric acid 30 %	✓	✓	✗	✗	✗	✗	✗
Skydrol	✓	✓	✓	✓	✓	✗	✗
Sulphuric acid 20 %	✓	✓	✓	✓	✓	✓	✓
Engine Oil	✓	✓	✓	✓	✓	✗	✗
Diesel oil	✓	✓	✓	✓	✓	✓	✓

\*The chemical resistance depends on the concentration, the temperature and the exposure time. Soiling must be removed immediately.

Even with positive chemical resistance, changes to the surface, such as loss of gloss or discolouration, may occur. However, this does not affect the functionality of the material used.

## SUBSTRATE



### ■ Properties/tests

- The substrate must be dry, solid, clean, dust-free, absorbent, load-bearing and free of separating agents, corrosive components or other layers that could interfere with the bond.
- In principle, the substrate must be suitable for the coating system.
- The adhesive tensile strength of the substrate must be at least 1.5 N/mm<sup>2</sup>.
- The substrate moisture content for cementitious substrates must be < 4.0 CM%, anhydrite screeds: < 0.5 CM%.
- The residual moisture of mineral substrates must be ≤ 4.0 CM-% at the time of installation.
- The compressive strength of the substrate should be at least 25 N/mm<sup>2</sup>.
- The substrate must be protected against rising and penetrating moisture.

### ■ Preparation

- The floor surface must be prepared by e.g. dust-free shot blasting, diamond grinding, milling or other suitable measures. The grain structure must be exposed and all separating substances and loose components must be removed thoroughly. Substrates whose surfaces have been treated with smoothing agents (waxes) must always be removed by milling and subsequent shot blasting.
- Compatibility with old coatings must be checked, non-load-bearing layers and coatings must be completely removed.
- Asphalt-containing screeds are difficult substrates due to their deformability under mechanical and thermal stress. They can therefore only be coated with special systems. Please contact our technical service for more information.
- In the case of existing fixed tile coverings, the surface must be removed by diamond grinding or milling. The glaze must be completely removed.
- All substrate preparations must be carried out by suitable specialist companies.

## AREAS OF APPLICATION AND PROCESSING

### ■ Applying

- Mix the resin and hardener intensively in a suitable container using a slow-running drill with stirring basket.
- Mixing ratio: 4 GT resin : 1 GT hardener
- The mixture must be decanted into a suitable, clean container and stirred again briefly before use.
- For sealing coats, apply with a suitable short pile roller for epoxy resins. The application is carried out crosswise without waiting times to avoid build-up.
- For thick layers, e. g. leveling compounds, apply with a trowel or squeegee. The material must be applied evenly and deaerated with a spiked roller.

## NOTES

### ■ Cleaning

- Clean tools immediately after use with HADALAN EPV 38L.

### ■ System products

- HADALAN® EPV 38L
- HADALAN® EPU<sub>ni</sub> 12E
- HADALAN® FGM003 57M
- HADALAN® EBG 12E
- Quartz051 57M

### ■ To be observed

- Maintain a processing temperature of +5 °C to +30 °C.
- Heavily oily surfaces and substrates where rising and laterally penetrating moisture is to be expected are unsuitable for coating.
- Complies with the provisions of the BIA.
- The substrate temperature must be at least 3 °C above the dew point temperature during application and curing.
- The application distances for multi-layer coatings must be observed.
- To maintain the surface quality of the coating, the use of care products and regular cleaning of the floors is recommended (see HADALAN epoxy resin flooring care instructions).
- Grinding stresses can lead to scratching of the surface.



### ■ **Ingredients**

- Epoxy resin, Epoxy hardener
- functional fillers
- Pigments

### ■ **Occupational safety / Recommendation**

- Further information on safety during transportation, storage and handling can be found in the current safety data sheets. Detailed information can be found in the leaflet "Epoxy resins in the construction industry", published by the Arbeitsgemeinschaft der Bau-Berufsgenossenschaften, Tiefbau-Berufsgenossenschaft, Industrieverband Klebstoffe e.V., Bauchemie und Holzschutz e.V. in Frankfurt.

### ■ **Disposal**

- The following applies to all systems: Only return empty containers to recycling partner Interseroh. Cured material residues can be disposed of in accordance with EWC code no. 08 01 11 (paint and varnish waste containing organic solvents or other hazardous substances).

### ■ **Producer**

#### **Sievert Baustoffe SE & Co. KG**

Mühlenschweg 6, 49090 Osnabrück

Tel. +49 2363 5663-0, Fax +49 2363 5663-90

[hahne-bautenschutz.de](mailto:hahne-bautenschutz.de), [info-hahne@sievert.de](mailto:info-hahne@sievert.de)

The statements are made based on extensive tests and practical experiences. They cannot be applied to every application case. Therefore, we recommend carrying out application trials if necessary. Subject to technical changes in the course of further development. Furthermore, our General Terms and Conditions of Business apply.