

HADALAN® EBG 13E

Epoxy resin dispersion, binder and primer



























These pictograms apply to the **basic product**.

Deviations are possible depending on the area of application and processing.

PRODUCT INFORMATION

Description

HADALAN® EBG 13E is a 2-component, highly reactive epoxy resin dispersion that can be used as a primer or in combination with **HADALAN®** filler mixtures in various layer thicknesses in many areas.

Scratch levelling compounds and levelling coatings based on **HADALAN® EBG** 13E are water vapour permeable and can therefore also be used on substrates that are soaked on the reverse side without the risk of detachment or osmotic blistering. In **HADALAN®** Balcony Protection, it serves as a levelling compound in 2 mm layer thickness as a membrane layer and ensures vapour pressure equalisation on damp substrates. For subsequent system build-ups, press-on moisture must be excluded and, if necessary, the component must be allowed to dry down to the equilibrium moisture content.

Operational area

- Binder for synthetic resin mortar made of **HADALAN® FGM012** 57M
- Primer for mineral substrates
- Binder for scratch filler, levelling and filling compounds made of HADALAN® FGM003 57M

Place of use

indoors and outdoors

Properties

- VOC-free
- solvent-free
- 2-component
- vapour-permeable
- osmosis-resistant
- can be used on damp substrates

Tests / Approvals

- Emission test French VOC regulation A+
- Testing as surface protection system OS8 (rigid coating for surfaces subject to heavy mechanical loads)
- Fire behaviour classification according to DIN EN 13501-1
- Complies with DIN EN 13813:2002
- Emission testing GEV-EMICODE EC1PLUS





Technical Data

Mixing ratio	2.4 (comp. A): 1 (comp. B)		
Density comp. A	1.02 kg/l		
Density comp. B	1.12 kg/l		
Density ready for use	approx. 1.05 kg/l		
Viscosity ready for use	approx. 5.0 dPa-s		
Processing temperature	min. +8 °C to max. +25 °C (air, substrate, material)		
Processing time	approx. 30 minutes at +8 °C approx. 20 minutes at +20 °C approx. 15 minutes at +25 °C		
Pot life	1 l/20°C ca. 20 Minuten		
Diffusion equivalent air layer thickness (\mathbf{s}_{d} -value)	0.6 to 1 m		
Revisability	after approx. 24 hours		
Can be walked on after	after approx. 6 hours		
Full loading capacity	after approx. 5 days		
Water vapour diffusion resistance $\boldsymbol{\mu}$	300 – 500 depending on MV		
Adhesive tensile strength	approx. 2,5 N/mm 2 on concrete with HADALAN $^{\otimes}$ FGM003 57M (MV 1 : 2,3) approx. 3 N/mm 2 on concrete with HADALAN $^{\otimes}$ FGM012 57M (MV 1 : 10)		
Compressive strength	30 N/mm² with HADALAN® FGM003 57M (MV 1 : 2,3) 45 N/mm² with HADALAN® FGM012 57M (MV 1 : 10)		
Storage	12 months, frost-free and originally sealed		
Consumption	approx. 0.15 kg/m² as primer. Other applications: see section "Areas of application and processing".		

■ Chemical resistance* based on DIN EN 13529

Resistance over a period of:

Test medium	24 hours	3 days	7 days	28 days
Acetic acid 10 %				
Sodium hydroxide 5 %				
Ethanol				
Xylene				
Hydrochloric acid 5 %				
Sulphuric acid 5				
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

Suitable substrates

- Mineral substrates
- Ceramic substrates

Properties/tests

- The compressive strength of the substrate should be at least 25 N/mm².
- In principle, the substrate must be suitable for the coating system.
- The surface adhesive tensile strength must not fall below 1.5 N/mm².
- On anhydrite screed, its moisture content must < be 0.5 CM-%.
- Compatibility with existing coatings must be checked.
- The substrate must be solid, clean, dust-free, absorbent, load-bearing and free from separating agents, corrosion-promoting components or other layers interfering with adhesion.
- The moisture content of the substrate must be ≤ 6.0 CM-%.

Substrate preparation

- The floor surface must be prepared by suitable measures, e.g. diamond grinding, milling or blasting.
- Separating substances and loose components must be consistently removed.
- Layers containing surface aids (e.g. waxes) must be removed.

AREAS OF APPLICATION AND PROCESSING

The product can be used in the following areas:

- Primer
- Scraper with HADALAN® FGM003 57M
- **Levelling compound** with **HADALAN® FGM003** 57M (≤ 3 mm Layer thickness)
- Levelling compound with HADALAN® FGM003 57M (> 3 mm to 8 mm layer thickness)
- Filler with HADALAN® FGM003 57M
- Synthetic resin mortar with HADALAN® FGM012 57M

ATTENTION! Observe the respective processing instructions for each area of application!



PROCESSING // Primer









These pictograms apply to the basic product.

Deviations are possible depending on the area of application and processing.

Mixing ratio

■ 2.4 : 1 (Comp. A : Comp. B)



1 Container (8,5 kg) **HADALAN® EBG** 13E

Consumption (per mm layer thickness)

approx. 0,15 kg/m2 HADALAN® EBG 13E

Mixing

- 1. Combine comp. A and comp. B in a mixing ratio of 2.4:1.
- 2. Mix slowly (400 rpm) with a suitable stirrer (e.g. Collomix LX or DLX stirrer) for at least 2 minutes until homogeneous. Make sure not to stir in any air.
- 3. Repot the material and stir again.
- 4. Depending on the absorbency of the substrate, dilute with 50 to 100 % water and stir again.

Applying

- 1. Apply with suitable tools (rubber slider, roller).
- 2. Avoid the formation of puddles.
- 3. To produce a pore-shot surface, apply a second, undiluted coat.

Drying / Follow-up work

- 1. Recoating can be carried out after approx. 4 hours with vapour permeable coatings, but after a maximum of 24 hours without additional preparation of the surface.
- 2. Fresh-on-fresh application is possible, but this does not guarantee reliable pore closure. After complete drying (1 day), the following is suitable HADALAN® EBG 13E, for substrates that are not soaked on the reverse side, also as primer and pore sealant for subsequent water vapour retardant coatings (e.g. HADALAN® VS 12E / HADALAN® VS-E 12E).



PROCESSING // Scraper with HADALAN® FGM003 57M







These pictograms apply to the processing as **Scraper** with **HADALAN® FGM003** 57M. Deviations are possible depending on the area of application and processing.

Mixing ratio

1: 2,3 (ready-mixed HADALAN® EBG 13E: HADALAN® FGM003 57M)







1 Container (20 kg) **HADALAN® FGM003** 57M

Consumption (per mm layer thickness)

approx. 0,55 kg/m² HADALAN® EBG 13E + approx. 1,3 kg/m² HADALAN® FGM003 57M

Mixing

- 1. Combine comp. A and comp. B in a mixing ratio of 2.4:1.
- 2. Mix slowly (400 rpm) with a suitable stirrer (e.g. Collomix LX or DLX stirrer) for at least 2 minutes until homogeneous. Make sure not to stir in any air.
- **3.** Repot material and **HADALAN® FGM003** 57M in a mixing ratio of 1 : 2,3 (ready-mixed **HADALAN® EBG** 13E : **HADALAN® FGM003** 57M) add and stir again (for easier processing, per 8.5 kg **HADALAN® EBG** 13E add 0.5 l of water).

Applying

1. Apply the compound to the previously primed substrate and remove with a suitable tool (trowel).

Drying / Follow-up work





PROCESSING // Levelling compound with HADALAN® FGM003 57M

≤ 3 mm layer thickness







These pictograms apply to the processing as **Levelling compound** with **HADALAN® FGM003** 57M (≤ 3mm layer thickness). Deviations are possible depending on the area of application and processing.

Mixing ratio

1: 2,3 (ready-mixed HADALAN® EBG 13E: HADALAN® FGM003 57M)







1 Container (20 kg)
HADALAN® FGM003 57M

Consumption (per mm layer thickness)

approx. 0,55 kg/m² HADALAN® EBG 13E + approx. 1,3 kg/m² HADALAN® FGM003 57M

Mixing

- 1. Combine comp. A and comp. B in a mixing ratio of 2.4:1.
- 2. Mix slowly (400 rpm) with a suitable stirrer (e.g. Collomix LX or DLX stirrer) for at least 2 minutes until homogeneous. Make sure not to stir in any air.
- **3.** Repot material and **HADALAN® FGM003** 57M in a mixing ratio of 1 : 2,3 (ready-mixed **HADALAN® EBG** 13E : **HADALAN® FGM003** 57M) add and stir again (for easier processing, per 8.5 kg **HADALAN® EBG** 13E add 0.5 l of water).

Applying

- **1.** Apply the compound to the previously primed substrate and, depending on the application (toothed squeegee), remove or spread with a suitable tool.
- **2.** After spreading the levelling compound evenly on the substrate, apply it crosswise with a deaeration roller vent to eliminate air pockets.

Drying / Follow-up work





PROCESSING // Levelling compound with HADALAN® FGM003 57M

> 3 mm up to 8 mm layer thickness







These pictograms apply to the processing as **Levelling compound** with **HADALAN® FGM003** 57M (> 3 mm up to 8 mm layer thickness). Deviations are possible depending on the area of application and processing.

Mixing ratio

1: 4,7 (ready-mixed HADALAN® EBG 13E: HADALAN® FGM003 57M)







2 Container (2 × 20 kg) **HADALAN® FGM003** 57M



Consumption (per mm layer thickness)

approx. 0,55 kg/m² **HADALAN® EBG** 13E + approx. 1,3 kg/m² **HADALAN® FGM003** 57M

Mixing

- 1. Combine comp. A and comp. B in a mixing ratio of 2.4:1.
- 2. Mix slowly (400 rpm) with a suitable stirrer (e.g. Collomix LX or DLX stirrer) for at least 2 minutes until homogeneous. Make sure not to stir in any air.
- 3. Repot material and HADALAN® FGM003 57M in the ratio 1:4,7 (ready-mixed HADALAN® EBG 13E: HADALAN® FGM003 57M) Add and stir again (for easier processing, per 8.5 kg HADALAN® EBG 13E, add 0.5 l of water).

Applying

- 1. Apply the compound to the previously primed substrate and, using suitable tools, depending on the application (tooth or pencil squeegee).
- **2.** After spreading the levelling compound evenly on the substrate, apply it crosswise with a deaeration roller vent to eliminate air pockets.

Drying / Follow-up work



PROCESSING // Filler with HADALAN® FGM003 57M







These pictograms apply to the processing as **Filler** with **HADALAN® FGM003** 57M. Deviations are possible depending on the area of application and processing.

Mixing ratio

1:7,1 (ready-mixed HADALAN® EBG 13E: HADALAN® FGM003 57M)







3 Container (3 × 20 kg) **HADALAN® FGM003** 57M





Consumption (per mm layer thickness)

approx. 0,28 kg/m² HADALAN® EBG 13E + approx. 2,0 kg/m² HADALAN® FGM003 57M

Mixing

- 1. Combine comp. A and comp. B in a mixing ratio of 2.4:1.
- 2. Mix slowly (400 rpm) with a suitable stirrer (e.g. Collomix LX or DLX stirrer) for at least 2 minutes until homogeneous. Make sure not to stir in any air.
- 3. Repot material and HADALAN® FGM003 57M in a mixing ratio of 1 : 7.1 (ready-mixed HADALAN® EBG 13E : HADALAN® FGM003 57M) add and stir again (for easier processing, per 8.5 kg HADALAN® EBG13E, add 0.5 l of water).

Applying

1. Apply the compound to the area to be filled and previously primed.

Drying / Follow-up work



PROCESSING // Synthetic resin mortar mit HADALAN® FGM012 57M







These pictograms apply to the processing as **Synthetic resin mortar** mit **HADALAN® FGM012** 57M. Deviations are possible depending on the area of application and processing.

Mixing ratio

1: 10,6 (ready-mixed HADALAN® EBG 13E: HADALAN® FGM012 57M)







3 Container (3 × 30 kg) **HADALAN® FGM012** 57M





Consumption (per mm layer thickness)

approx. 0,2 kg/m² HADALAN® EBG 13E + approx. 2,1 kg/m² HADALAN® FGM012 57M

Mixing

- 1. Combine comp. A and comp. B in a mixing ratio of 2.4:1.
- 2. Mix slowly (400 rpm) with a suitable stirrer (e.g. Collomix LX or DLX stirrer) for at least 2 minutes until homogeneous. Make sure not to stir in any air.
- **3.** Repot material and **HADALAN® FGM012** 57M in a mixing ratio of 1 : 7.1 (ready-mixed **HADALAN® EBG** 13E : **HADALAN® FGM012** 57M) add and stir through again.

Applying

1. Apply and spread the synthetic resin mortar with suitable tools (trowel, smoother) fresh in fresh on the previously primed substrate, depending on the application.

Drying / Follow-up work





NOTES

Cleaning

Tools can be cleaned with water immediately after use.

System products

- HADALAN® Reactive resin and waterproofing systems
- HADALAN® FGM012 57M
- HADALAN® FGM003 57M

To be observed

- Maintain a working and curing temperature (material, substrate and ambient air temperature) of +8 °C to +25 °C.
- Relative humidity must not exceed 80 %. The substrate temperature must be at least 3 °C above the dew point temperature.
- High temperatures accelerate, low temperatures delay the solidification and curing process.
- Unfavourable drying conditions can lead to surface irritation of the levelling compound.
- Ensure sufficient ventilation during curing and drying of the material.
- Exposure to sunlight must be expected to cause yellowing of the coating. In this case, a UV-resistant paint coat is recommended as a topcoat.

Ingredients

EP dispersion, additives

Occupational safety / Recommendation

For further information on safety during transport, storage and handling, please refer to the current Safety Data Sheets.

Disposal

The following applies to all systems: Only return empty containers to the recycling partner Interseroh. Material residues can be disposed of according to EWC key no. 08 01 11 (paint and varnish waste containing organic solvents or other hazardous substances).

Producer

Sievert Baustoffe SE & Co. KG

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