

## Epoxy resin dispersion, bonding agent and primer

With official test certificate



### Characteristics

**HADALAN® EBG 13E** is 2-component, highly reactive epoxy resin dispersion, which can be used as a primer, or, in combination with **HADALAN® FGM003 57M**, in different layer thicknesses in many areas. Scratch putty compounds and levelling layers with **HADALAN® EBG 13E** base are permeable to water vapour and can therefore also be used for substrates that are completely wet on the rear side, without there being a danger of detaching or osmotic bubble formation.

- Open to diffusion
- VOC-free
- Fast-hardening
- Can be used on moist substrates
- Resistant to chemicals
- Variable in layer thickness

### Use

**HADALAN® EBG 13E** when diluted with water, is suitable as an open-to-diffusion primer that fills pores well, for all mineral, absorbent substrates. In combination with the filler mixture **HADALAN® FGM003 57M**, scratch putty, levelling and filling mixtures can be made for use in different layer thicknesses. Moreover, **HADALAN® EBG 13E** is suitable as a bonding agent for open-to-diffusion EP mortar in combination with the filler mixture **HADALAN® FGM012 57M**.

### Areas of application:

- Concrete and screed surfaces
- Indoors and outdoors
- On ceramic substrates

### Specifications

Packaging	Tin bucket
Combination barrels	8,5 kg / 1 kg (12x1 kg/ cart.)
Component A	6 kg / 0,705 kg
Component B	2,5 kg / 0,295 kg
Deliver form	42 cont./pallet
Mixing ratio	2,4 : 1 part by weight
Density comp. A	1.02 kg/l
Density comp. B	1.12 kg/l
Density, ready for processing	1.05 kg/l
Viscosity	5 dPa*s
Processing temperature	+8 °C to +25 °C
Processing time <sup>1)</sup>	approx. 20 minutes

### As a levelling compound in combination with **HADALAN® FGM003 57M**

Taber abrasion <sup>2)</sup>	100 - 150 mg depending on mixing ratio
Shore D Hardness <sup>3)</sup>	75
Adhesion strength	approx. 3 N/mm <sup>2</sup> on concrete
Walkable <sup>1)</sup>	after 6 hours
Capable of being fully loaded	after 5 days
Diffusion resistance coefficient $\mu$	300 - 500 depending on mixing ratio
Compression strength in conjunction with <b>-FGM012 57M</b>	
in the mixing ratio 1: 10	45 N/mm <sup>2</sup>
Storage	frost-free and cool, 12 months

<sup>1)</sup> At +20 °C and 60% relative atmospheric humidity.

<sup>2)</sup> According to Taber CS 10 / 1000 U / 1000 g

<sup>3)</sup> Shore D hardness according to DIN 53505 (after 28 days at +20 °C)

## Quantity required

Primer	approx. 0,15 kg/m <sup>2</sup>
<b>Scratch putty, levelling and filling compound in conjunction with HADALAN® FGM003 57M</b>	
<b>Consumption per m<sup>2</sup> and mm layer thickness</b>	
Scratch putty compound + levelling compound MR 8.5 kg + 20 kg	0 - 3 mm approx. 0,55 kg <b>-EBG 13E</b> + approx. 1,3 kg <b>-FGM003 57M</b>
Levelling compound MR 8.5 kg + 40 kg	3 - 8 mm approx. 0,37 kg <b>-EBG 13E</b> + approx. 1,8 kg <b>-FGM003 57M</b>
Filling compound MR 8.5 kg + 60 kg	approx. 0,28 kg <b>-EBG 13E</b> + approx. 2 kg <b>-FGM003 57M</b>
<b>Mortar in combination with -FGM012 57M</b>	
<b>Consumption per m<sup>2</sup> and mm layer thickness</b>	
Mortar MR 8.5 kg + 90 kg <b>-FGM012 57M</b>	approx. 0,2 kg <b>-EBG 13E</b> + approx. 2,1 kg <b>-FGM012 57M</b>

## Preparation of the surface

The substrate must be firm, dry, clean, free from dust, absorbent, resilient, and free from release agents, corrosive components or other layers interfering with bonding. The substrate must be generally suitable for the coating system. The adhesive tensile strength of the surfaces should not fall short of 1.5 N/mm<sup>2</sup>.

Anhydrite screeds: < 0.5 part by weight; the substrate must be protected from increasing and penetrating moisture.

The compression strength of the substrate must be at least 25 N/mm<sup>2</sup>.

The floor surface has to be prepared by e.g. dust-free shot-blasting, diamond grinding, grinding or other suitable measures. The granular structure must be laid open and all separating substances and loose components must be removed consequently.

As a rule, substrates into whose surface agents (e.g. wax) have been incorporated for smoothing, must be removed by milling and subsequent shot-blasting. Check the compatibility with existing coatings; completely remove layers and coatings without load-bearing capacity. Screeds containing asphalt are difficult substrates due to their formability under mechanical and thermal load. Thus, they may be coated with special systems only. Please contact our technical service department.

Remove the surface of existing tiling being stuck by diamond grinding or milling. The glaze must be removed completely.

## Application

Primer:

Comp. A + B are homogeneously mixed with one another in a mechanical stirrer (300 - 400 rpm) (2 minutes stirring time). Next, the stirred material is transferred to another vessel and stirred thoroughly once again. Now, depending on the absorbency of the substrate, the mixture is diluted with 50 to 100% water and stirred thoroughly once again.

The primer that is made in this manner can be applied with a suitable tool (**Polyamidwalze Premium**). Puddle formation should be avoided.

After the primer has dried (approx. 4 hours), the surface can be reworked with an open-to-diffusion coat. Processing whilst still wet is also possible, but this does not ensure certain pore closure.

After completely drying (1 day) **HADALAN® EBG 13E** is also suitable - when the substrates are not completely moistened at the rear side - as a primer and pore closer for the following steam-hindering coats (e.g. **HADALAN® VS 12E/ -VS-E 12E**).

## Application

**Open-to-diffusion EP mortar:**

8.5 kg bonding agent + 90 - 120 kg (3 - 4 bags)

**HADALAN® FGM012 57M**. According to the mixing machine, mix parts of mixture.

The compounds are applied on the substrate on which primer has been previously applied. The finish stirred mixtures are applied with a tool that is suitable for the purpose at hand, e.g. gap blade, toothed spreader, ladle and smoother.

**When used with the HADALAN® Balcony System:**

**HADALAN® EBG 13E** is a membrane layer which can be used as a protective layer for the **HADALAN® Balcony System**. This dispersion is applied at a thickness of 2mm and can be used on damp substrates. It acts as a waterproofing by compensating for the water vapour present in the substrate. It also prevents any damp from coming through after the complete system has been applied. As required, the floor should be allowed to continue to dry out after the membrane has been applied until the amount of damp in the floor has settled.

Levelling compounds should then be evened with a spiked roller. Clean all processing equipment with water immediately after use. Next, the skimming plaster is sealed in the desired colour setting, e.g. with **HADALAN® LF51 12E/-LF41 12E**. Alternatively, **HADALAN® Topcoat M 12P** can be used as a pore closer; as a glossy protective sealant **HADALAN® Topcoat G 32P** or **HADALAN® V31 13E**.

## hahne system products

HADALAN® FGM003 57M

HADALAN® FGM012 57M

HADALAN® reaction resin systems

## Important notes

- Maintain the processing and hardening temperature (material, substrate and ambient air temperature) from + 8 °C to + 25°C.
- The rel. atmospheric humidity must not exceed 80 %. The substrate temperature must be at least 3°C above the dew point temperature.
- Increased temperatures accelerate the bonding process, low temperatures delay it.
- Unfavourable drying conditions can result in surface irritations of the levelling compound.
- Sufficient ventilation should be ensured during the hardening and drying of the material.
- Yellowing of the coat should be expected under the action of sunlight. A UV-resistant paint is recommended as a top coat in this case.

## Ingredients

EP dispersion, additives

## Safety provisions/recommendations

Information regarding the safety during transport, storage and handling are included in the updated safety data sheets.

## Disposal

The local waste removal regulations must be observed.

## Manufacturer

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