

PRODUCT DATA SHEET

Sikafloor®-150 LV

Epoxy primer, levelling mortar and mortar screed

DESCRIPTION

Sikafloor®-150 LV is a 2-part, low odour, low viscosity, multipurpose, epoxy resin which can be used as an epoxy primer, levelling mortar and mortar screed
Total solid according to test methods DEUTSCHE BAUCHEMIE

USES

Sikafloor®-150 LV may only be used by experienced professionals.

- Priming concrete substrates, cement screeds and epoxy mortars
- For normal to strongly absorbent substrates
- Primer for all Sika Epoxy and PUR floorings
- Binder for levelling mortars and mortar screeds
- Binder for epoxy resin screeds
- For interior and exterior use

CHARACTERISTICS / ADVANTAGES

- Universally applicable
- High mechanical strength
- Low viscosity
- Low odour
- Good penetration
- Good bond strength
- Easy application
- Short waiting times
- Multi-purpose

APPROVALS / CERTIFICATES

CE Marking and Declaration of Performance to EN 13813 - Resin screed material for internal use in buildings

PRODUCT INFORMATION

Composition	Epoxy	
Packaging	Ready mix	
	A+B	10 kg / 25 kg
	Part A (Sikafloor-150 LV)	7,4 kg / 18,5 kg
	Part B (Sikafloor-150)	2,6 kg / 6,5 kg
	Drums	
	A+B	730 kg
	Part A (Sikafloor-150 LV)	180 kg (3x)
	Part B (Sikafloor-150)	190 kg (1x)
Appearance / Colour	Resin - Part A	Transparent, liquid
	Hardener - Part B	Bräunlich, liquid
Shelf life	24 months from date of production	

Storage conditions	Store in original sealed containers in a dry, cool but frost-free place.		
Density	Part A	ca. 1,12 kg/l	(DIN EN ISO 2811-1)
	Part B	ca. 0,99 kg/l	
	A+B	ca. 1,08 kg/l	
	values were determined at 23°C.		
Solid content by mass	~ 100%		
Solid content by volume	~ 100%		
Shore D Hardness	ca. 78	(7 days/23°C)	(DIN 868)
Compressive strength	ca. 80 N/mm ²	(28 days / 23°C)	(EN 196-1)
	Mortar screed: Sikafloor®-150 LV mixed 1:10 with suitable sand mixture, refer to "Systems"		
Tensile adhesion strength	> 1,5 N/mm ²	(failure in concrete)	(ISO 4624)
System	Primer		
	Low / medium porosity concrete	1 × Sikafloor®-150 LV	
	High porosity concrete	2 × Sikafloor®-150 LV	
	Levelling mortar medium (surface roughness up to 2 mm)		
	Primer	1 × Sikafloor®-150 LV	
	Levelling mortar	1 × Sikafloor®-150 LV + quartz sand (0,1–0,3 mm) + Sika® Stellmittel T	
	Epoxy screed / repair mortar (15–20 mm layer thickness)		
	Primer	1 × Sikafloor®-150 LV	
	Bonding bridge	1 × Sikafloor®-150 LV	
	Screed	1 × Sikafloor®-150 LV + suitable sand mixture	
	The following sand mixtures are indicative mix design quantities that must be confirmed by pre-trials. Grain size distribution for layer thicknesses of 15–20 mm , parts by weight (pbw): 25 pbw quartz sand 0,1–0,5 mm 25 pbw quartz sand 0,4–0,7 mm 25 pbw quartz sand 0,7–1,2 mm 25 pbw quartz sand 2–4 mm Note: The largest grain size must be a maximum 1/3 of the finished layer thickness. Dependent on the grain shape and application temperatures, the sand and the most suitable mix must be selected and confirmed by pre-trials.		

APPLICATION INFORMATION

Mixing ratio	Part A : Part B = 74 : 26 (by weight)
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Consumption

Coating System	Product	Consumption
Priming	1–2 × Sikafloor®-150 LV	1–2 × 0,30–0,50 kg/m ²
Levelling mortar fine (surface roughness < 1 mm)	1 pbw Sikafloor®-150 LV + 0,5 pbw quartz sand (0,1–0,3 mm) + 0,015 pbw Extender T	1,4 kg/m ² /mm
Levelling mortar medium (surface roughness up to 2 mm)	1 pbw Sikafloor®-150 LV + 1 pbw quartz sand (0,1–0,3 mm) + 0,015 pbw Sika® Stellmittel T	1,6 kg/m ² /mm
Bonding bridge	1–2 × Sikafloor®-150 LV	1–2 × 0,3–0,5 kg/m ²
Epoxy screed (15–20 mm layer thickness) / Repair Mortar	1 pbw Sikafloor®-150 LV + 10 pbw quartz sand	2,2 kg/m ² /mm

These figures are theoretical and do not allow for any additional material required due to surface porosity, surface profile, variations in level or wastage etc.

Relative air humidity	Max. 80 %								
Dew point	Beware of condensation. The substrate and uncured floor must be at least +3 °C above dew point to reduce the risk of condensation or blooming on the floor finish.								
Substrate temperature	+ 10°C min. / + 30°C max. The minimum temperature must not be lower than this, even during curing.								
Substrate moisture content	≤ 0,3 CM% for anhydrite screeds ≤ 4 CM% for cementitious substrates								
Pot Life	<table border="1"> <thead> <tr> <th>Temperature</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>+ 10 °C</td> <td>~ 60 minutes</td> </tr> <tr> <td>+ 20 °C</td> <td>~ 30 minutes</td> </tr> <tr> <td>+ 30 °C</td> <td>~ 15 minutes</td> </tr> </tbody> </table>	Temperature	Time	+ 10 °C	~ 60 minutes	+ 20 °C	~ 30 minutes	+ 30 °C	~ 15 minutes
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Curing time	Before applying non-solvented products on Sikafloor®-150 LV allow:		
	Substrate temperature	Minimum	Maximum
	+10 °C	24 hours	4 days
	+20 °C	12 hours	2 days
	+30 °C	8 hours	24 hours
	Before applying solvented products on Sikafloor®-150 LV allow:		
	Substrate temperature	Minimum	Maximum
	+10 °C	36 hours	6 days
	+20 °C	24 hours	4 days
	+30 °C	12 hours	2 days
	Times are approximate and will be affected by changing ambient conditions particularly temperature and relative humidity.		

BASIS OF PRODUCT DATA

All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

FURTHER INFORMATION

Substrate quality / preparation:

For further information, please refer to the system data sheet

"Sikafloor Floors: Assessing, Preparing and Priming Surfaces".

Maintenance:

For further information, please refer to the "Cleaning and maintenance instructions".

IMPORTANT CONSIDERATIONS

- After application, Sikafloor®-150 LV must be protected from damp, condensation and direct water contact (rain) for 24 hours.
- If temporary heating is required, do not use gas, oil, paraffin or other fossil fuel heaters, these produce large quantities of both CO₂ and H₂O water vapour, which may adversely affect the finish. For heating use only electric powered warm air blower systems.
- Discard any material over the pot life recommendations.
- Do not apply on substrates with rising moisture.
- Sikafloor®-150 LV mortar screed is not suitable for frequent or permanent contact with water unless sealed.
- Pre-trials must be carried out for mortar mixes to assess suitable aggregate grain size distribution.
- For external applications, apply on a falling temperature. If applied during rising temperatures "pin holing" may occur from rising air. These pinholes can be closed after light grinding by applying a scratch coat of Sikafloor®-150 LV mixed with ~3 % of Sika® Stelmittel T.

Construction joints require pre-treatment. Treat as follows:

- Static Cracks: prefill and level with Sikadur® or Sikafloor® epoxy resin.
- Dynamic cracks: to be assessed and if necessary apply a stripe coat of elastomeric material or design as a movement joint.
- The incorrect assessment and treatment of cracks may lead to a reduced service life and reflective cracking on the surface.

ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data. Further notes and information data sheets on product safety and disposal can be found on the Internet at www.sika.de.

CE-KENNZEICHNUNG

See declaration of performance

HAZARD INFORMATION

GISCODE: RE 30 (previously RE 1)

This coding makes it possible to obtain further information on the service pages of the BG Bau (www.bgbau.de/gisbau), as well as assistance in drawing up operating instructions (www.wingis-online.de/wingisonline/).

Skin contact with epoxy resins can lead to allergies!

When handling epoxy resins, direct skin contact must be avoided at all costs! For the selection of suitable protective equipment, our information data sheets "General notes on occupational health and safety" (reference number 7510) and "General notes on the wearing of protective gloves" (reference number 7511) are available at www.sika.de. In this context, we also recommend the service pages of the BG Bau for handling epoxy resins (www.bgbau.de/gisbau/fach-themen/epoxi).

REGULATION (EC) NO 1907/2006 - REACH

The maximum content of VOCs (product category IIA/j type sb) allowed in EU Directive 2004/42 is 500 g/l in the ready-to-use state (Limit 2010). The maximum content of Sikafloor®-150 LV in the ready-to-use state is < 500 g/l VOC

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

Substrate quality

- Cementitious substrates (concrete / screed) must be structurally sound and of sufficient compressive strength (minimum 25 N/mm²) with a minimum tensile strength of 1,5 N/mm².
- Substrates must be clean, dry and free of all contaminants such as dirt, oil, grease, coatings, laitance, surface treatments and loose friable material.
- Cementitious substrates must be prepared mechanically using suitable abrasive blast cleaning or planing / scarifying equipment to remove cement laitance and achieve an open textured gripping surface profile suitable for the product thickness.
- High spots can be removed by grinding.
- Weak cementitious substrates must be removed and surface defects such as blow holes and voids must be fully exposed.

Pre-treatment

- Repairs to the substrate, filling of cracks, blowholes/voids and surface levelling must be carried out using appropriate products from the Sikafloor®, Sikadur® and Sikagard® range of materials. Products must be cured before applying Sikafloor®-150 LV.
- All dust, loose and friable material must be completely removed from all surfaces before application of the product and associated system products, preferably by industrial vacuuming equipment.

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MIXING

Stir component A mechanically before mixing. Carefully mix the components with A + B in the prescribed mixing ratio before application. To prevent splashing or even spilling of the liquid, mix the components with an infinitely variable electric stirrer for a short time at low speed.

Then increase the stirring speed to a maximum of 300 rpm for intensive mixing. After approx. 3 minutes, add the specified proportions of quartz sand or Sikafloor®-Filler 1. The mixing time is at least 2 minutes and is only finished when a homogeneous mixture is obtained. Transfer (repot) the mixed material into a clean container and mix again briefly as described above.

APPLICATION

Strictly follow installation procedures as defined in method statements, application manuals and working instructions which must always be adjusted to the actual site conditions.

Before application, confirm substrate moisture content, relative air humidity, dew point, substrate, air and product temperatures. If moisture content > 4 % (parts by weight), Sikafloor® EpoCem® may be applied as a Temporary Moisture Barrier (T.M.B.) system.

Primer

Pour mixed Sikafloor®-150 LV onto the prepared substrate and apply by brush, roller or squeegee then back roller in two directions at right angles to each other. Ensure a continuous, pore free coat covers the substrate. If necessary, apply two priming coats. Confirm primer waiting /overcoating time has been achieved before applying subsequent products. Refer to individual primer Product Data Sheet.

Levelling mortar

Apply the levelling mortar by squeegee/trowel to the required thickness.

Bonding bridge

Pour mixed Sikafloor®-150 LV onto the prepared substrate and apply by brush, roller or squeegee. For epoxy screed, back roller in two directions at right angles to each other. Ensure a continuous, pore free coat covers the substrate. If necessary, apply two priming coats.

Epoxy screed / repair mortar

Apply the repair or screed mortar onto the "tacky" bonding bridge. For the screed, use levelling battens and screed rails as necessary. After a short waiting time, compact and smoothen the mortar with a trowel. For the screed, a teflon coated power float (~20–90 rpm) is recommended

CLEANING OF EQUIPMENT

Clean tools with Sika Verdünnung® C immediately after use. Cured material can only be removed mechanically.

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for the exact product data and uses.

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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