BUILDING TRUST

PRODUCT DATA SHEET

Sikadur®-120 LM

2-part epoxy coating for ground gas protection and damp proofing

PRODUCT DESCRIPTION

Sikadur®-120 LM is a two-part, epoxy based, moisture tolerant coating for use in sub-structure waterproofing and gas protection. It will also act as a liquid-applied Damp-Proof Membrane (DPM).

USES

Sikadur®-120 LM is used as a:
- Liquid applied membrane for ground gas continuity
- Liquid applied termination and detailing product alongside our Sika waterproofing membrane systems
- Liquid applied DPM for concrete surfaces

Please note, it should only be used by experienced professionals

CHARACTERISTICS / ADVANTAGES

- Easy to mix and apply
- Suitable for dry and matt damp concrete substrates
- High adhesion to substrate
- Impermeable to liquids and water vapour
- Resists carbon dioxide and methane

APPROVALS / STANDARDS

Conforms to the requirements of BS EN 1504-4
DoP 58052556, certified by Factory Production Control Body 1139 and provided with the CE mark
Methane Permeability Testing to ISO 15105-1, Report No. LR2531, issued by Versaperm

PRODUCT INFORMATION

Chemical Base	Epoxy resin with specialist fillers		
Packaging	Container: Part A + Part B	5 kg Containers	
Appearance / Colour	Part A	White	
	Part B	Dark Grey	
	Cured Colour	Concrete Grey	
Shelf Life	24 months from date of production		
Storage Conditions	Sikadur®-120 LM must be stored in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5 °C and +30 °C. Always refer to the packaging and current Safety Data Sheet for information on safe handling and storage.		
Density	Mixed Product	~1.4 kg/L	(EN ISO 2811-1)

TECHNICAL INFORMATION

Tensile adhesion strength	≥1.5 N/mm²	(EN 1542)
Permeability to methane	7.43 ml.mm/m².day	(ISO 15105-1)

NOTE: Gas Transmission Rate (GTR) of 7.43 ml.mm/m2.day is an average of three readings.

APPLICATION INFORMATION

Mixing Ratio

Part A : Part B (by weight)	2 : 1

Consumption

~1.2 - 1.4 kg/m² per mm of thickness.
NOTE: Consumption data is theoretical and does not allow for any additional material due to surface porosity, surface profile, variations in level, wastage or any other variations. Apply the Product to a test area to calculate the exact consumption for the specific substrate conditions and proposed application equipment.

Layer Thickness

Maximum	~1.0 mm

Product Temperature

Maximum	+25°C
Minimum	+10°C

Ambient Air Temperature

Maximum	+30°C
Minimum	+10°C

Relative Air Humidity

Maximum	80 % r.h.

Dew Point

Beware of condensation. The substrate and uncured applied Product must be at least +3 °C above the dew point to reduce the risk of condensation or blooming on the surface of the applied product. Low temperatures and high humidity conditions increase the probability of blooming.

Substrate Temperature

Maximum	+25°C
Minimum	+10°C

Substrate Moisture Content

The substrate must be dry or matt damp, with no standing water.

Pot Life

Temperature	Pot Life (200 g)
+10°C	145 minutes
+20°C	55 minutes
+30°C	35 minutes

(ISO 9514)

Please note
- Pot life begins when the resin and hardener are mixed.
- Pot life is shorter at high temperatures and longer at low temperatures.
- The greater the quantity of product mixed, the shorter the pot life.
- Apply the following methods for obtaining a longer pot life at high temperatures: 1. Divide the mixed product into smaller quantities. 2. Cool down parts A and B before mixing. Do not cool below +5 °C

Waiting Time / Overcoating

Maximum waiting time for 'wet-on-wet' application:

Temperature	Waiting Time
+10°C	5 hours
+20°C	2 hours
+30°C	1 hour

If the maximum waiting time is exceeded, remove the product before applying any further material and prepare the substrate appropriately. NOTE: Times are approximate and will be affected by changing ambient and substrate conditions.

VALUE BASE

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.

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 QUALITY

Concrete and cementitious substrates must be older than 28 days, depending on any minimum strength requirements. Cementitious substrates must be structurally sound and of sufficient compressive strength (minimum 25 N/mm2) with a minimum tensile strength of 1.5 N/mm2. The substrate must be sound, clean, free from all contaminants such as dirt, oil, grease, loose friable material, cement laitance, coatings and other surface treatments.

SUBSTRATE PREPARATION

For the application of Sikadur-120 LM, prepare concrete and cementitious substrates to a minimum substrate roughness of 0.5 mm according to EN 1766 or ≥CSP 3 (International Concrete Repair Institute) or equivalent.
1. Remove weak cementitious substrates and contaminants such as dirt, grease and oil.
2. IMPORTANT: The final texture of the substrate must be open-textured and gripping. Prepare cementitious substrates mechanically using abrasive blast cleaning, planing or scarifying equipment to remove cement laitance.
3. Pre-fill any surface voids with the SikaTop-586 Seal in order to avoid excess thicknesses of the coating in local areas.
4. Before applying the Product, remove all dust, loose and friable material from the application surface with an industrial vacuuming equipment.
5. For critical adhesion applications, perform preliminary site trials incorporating adhesion pull-off tests to confirm that substrate and Product tensile adhesion strengths are acceptable for the application.

MIXING

1. IMPORTANT: Mix full units only. Mix part A (resin) separately using a low-speed single-paddle electric stirrer (300–400 rpm) to mix liquid and all coloured pigment until the mixture achieves a uniform colour.
2. Add part B (hardener) to part A and mix both parts continuously for 3 minutes until the mixture achieves a uniform colour.
3. IMPORTANT: Avoid over-mixing to minimise air entrainment. Pour the materials into a clean container and mix again for at least 1 minute to achieve a consistent mix and to ensure thorough mixing. NOTE: Total mixing time is 4 minutes.
4. Scrape down the sides and bottom of the mixing container with a flat or straight edge trowel at least once to ensure complete mixing.

APPLICATION

Apply the mixed Sikadur®-120 LM to the prepared surface by brush, roller or with a trowel. Ensure uniform and complete coverage. On hardened concrete substrates mechanically prepared to receive fresh concrete, always apply by brush and work the material well into the substrate. For applications where ground gasses are present, 2 x 1 mm coatings should be installed.

CLEANING OF TOOLS

Clean all tools and application equipment with Sika® Thinner C immediately after use. Hardened / cured material can only be mechanically removed.

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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