

PRODUCT DATA SHEET

Sikafloor[®]-160 HC

2-PART SOLVENT FREE EPOXY PRIMER AND BINDER

DESCRIPTION

Sikafloor[®]-160 HC is two part, low viscosity epoxy resin.

USES

Sikafloor[®]-160 HC may only be used by experienced professionals.

- For priming concrete substrates, cement screeds and epoxy mortars
- For normal to strongly absorbent substrates
- Primer for the Sikafloor[®]-263 SL HC and Sikafloor[®]-264 HC economic flooring systems
- Binder for levelling mortars and mortar screeds

CHARACTERISTICS / ADVANTAGES

- Solvent free
- Low viscosity
- Good penetration
- Excellent bond strength
- Easy application
- Short waiting times
- Multi-purpose

PRODUCT INFORMATION

Chemical Base	Epoxy		
Packaging	Part A : 200 kg drums, 12.8 kg can Part B : 200 kg drums, 7.2 kg can Part A+B : 20 kg set (A+B)		
Shelf Life	24 months from date of production if stored properly in original, unopened and undamaged sealed packaging		
Storage Conditions	Store in dry conditions at temperatures between +18 °C and +30 °C.		
Appearance / Colour	Part A – Resin :	Liquid, brownish-transparent	
	Part B – Hardener :	Liquid, transparent	
Density	Part A :	~1.10 kg/L	(DIN EN ISO 2811-1)
	Part B :	~1.02 kg/L	(at +23 °C)
	Mixed Resin :	~1.10 kg/L	

TECHNICAL INFORMATION

Shore D Hardness	83 (7days / +23°C / 50% r.h.)	(DIN 53505)
Compressive Strength	Mortar: ~ 95 N/mm ² (7 days / +23°C / 50% r.h.)	(EN 196-1)

SYSTEM INFORMATION

Systems

Primer:

Low/medium porosity concrete: 1 - 2 x Sikafloor®-160 HC

High porosity concrete: 2 x Sikafloor®-160 HC

Levelling mortar fine (surface roughness < 1 mm):

Primer: 1 - 2 x Sikafloor®-160 HC

Levelling mortar: 1 x Sikafloor®-160 HC + quartz sand (0.1 - 0.3 mm) + Extender T

Levelling mortar medium (surface roughness up to 2 mm):

Primer: 1 - 2 x Sikafloor®-160 HC

Levelling mortar: 1 x Sikafloor®-160 HC + quartz sand (0.1 - 0.3 mm) + Extender T

APPLICATION INFORMATION

Mixing Ratio

Part A : part B = 64 : 36 (by weight)

Consumption

Coating System	Product	Consumption
Priming	Sikafloor®-160 HC	0.35 - 0.55 kg/m ²
Levelling mortar fine (surface roughness < 1 mm)	1 pbw Sikafloor®-160 HC + 0.5 pbw quartz sand (0.1 - 0.3 mm) + 0.015 pbw Extender T	1.7 kg/m ² /mm
Levelling mortar medium (surface roughness up to 2 mm)	1 pbw Sikafloor®-160 HC + 1 pbw quartz sand (0.1 - 0.3 mm) + 0.015 pbw Extender T	1.9 kg/m ² /mm

Note: 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.

Ambient Air Temperature

+10 °C min. / +30 °C max

Relative Air Humidity

80% r.h. max.

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.

Note: Low temperatures and high humidity conditions increase the probability of blooming.

Substrate Temperature

+10 °C min. / +30 °C max

Substrate Moisture Content

≤ 4% pbw moisture content.

Test method: Sika-Tramex meter, CM - measurement or Oven-dry-method. No rising moisture according to ASTM (Polyethylene-sheet).

Pot Life

Temperature	Time
+ 10 °C	~50 minutes
+ 20 °C	~25 minutes
+ 30 °C	~15 minutes

Curing Time

Waiting Time / Overcoating

Before applying Sikafloor®-160 HC on Sikafloor®-160 HC allow:

Substrate temperature	Minimum	Maximum
+10 °C	24 hours	4 days
+20 °C	12 hours	2 days
+30 °C	6 hours	1 day

Before applying solvent containing products on Sikafloor®-160 HC allow:

Substrate temperature	Minimum	Maximum
+10 °C	30 hours	3 days
+20 °C	20 hours	2 days
+30 °C	10 hours	1 day

Notes : Times are approximate and will be affected by changing ambient conditions particularly temperature and relative humidity.

Applied Product Ready for Use	Temperature	Foot traffic	Light traffic	Full cure
	+10°C	~24 hours	~4 days	~10 days
	+20°C	~12 hours	~2 days	~7 days
	+30°C	~6 hours	~1 days	~5 days

Note: Times are approximate and will be affected by changing ambient conditions.

BASIS OF PRODUCT DATA

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.

LIMITATIONS

- Do not apply Sikafloor®-160 HC on substrates with rising moisture.
- Freshly applied Sikafloor®-160 HC should be protected from damp, condensation and water for at least 24 hours.
- Avoid puddles on the surface with the primer.
- Sikafloor®-160 HC mortar screed is not suitable for frequent or permanent contact with water unless sealed.
- Practical trials should 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 a soft grinding by applying a scratch coat of Sikafloor®-160 HC mixed with approx. 3 % of Extender 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. Under certain conditions, underfloor heating or high ambient temperatures combined with high point loading, may lead to imprints in the resin. If 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.

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.

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

- The concrete substrate must be sound and of sufficient compressive strength (minimum 25 N/mm²) with a minimum pull off strength of 1.5 N/mm².
- The substrate must be clean, dry and free of all contaminants such as dirt, oil, grease, coatings and surface treatments, etc.
- Concrete substrates must be prepared mechanically using abrasive blast cleaning or scarifying equipment to remove cement laitance and achieve an open textured surface.
- High spots must be removed by e.g. grinding.
- Weak concrete must be removed and surface defects such as blowholes and voids must be fully exposed.
- Repairs to the substrate, filling of blowholes/voids and surface levelling must be carried out using appropriate products from the Sikafloor®, SikaDur® and SikaGard® range of materials.
- All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferably by brush and/or vacuum.

MIXING

Prior to mixing, stir part A mechanically. When all of part B has been added to part A, mix continuously for 3 minutes until a uniform mix has been achieved. When parts A and B have been mixed, if required add the quartz sand and or the Extender T for a further 2 minutes until a uniform mix has been achieved. To ensure thorough mixing pour materials into another container and mix again to achieve a consistent mix. Over mixing must be avoided to minimise air entrainment.

MIXING TOOLS

Sikafloor®-160 HC must be thoroughly mixed using a low speed electric stirrer (300 - 400 rpm) or other suitable equipment. For the preparation of mortars use a forced action mixer of rotating pan, paddle or trough type. Free fall mixers should not be used.

APPLICATION

Prior to application, confirm substrate moisture content, r.h. and dew point.

If > 4% pbw moisture content, Sikafloor® EpoCem® may be applied as a T.M.B. (temporary moisture barrier) system.

Primer:

Make sure that a continuous, pore free coat covers the substrate. If necessary, apply two priming coats. Apply Sikafloor®-160 HC by brush, roller or squeegee.

Levelling mortar

Rough surfaces need to be levelled first. Apply the levelling mortar by squeegee/trowel to the required thickness.

CLEANING OF TOOLS

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

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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