BUILDING TRUST

PRODUCT DATA SHEET

Sikafloor®-263 SL HC

2- PART EPOXY COVERING FOR SMOOTH AND BROADCASTED FLOORING SURFACES

DESCRIPTION

Sikafloor®-263 SL HC is a two part, multipurpose binder based on epoxy resin.

USES

Sikafloor®-263 SL HC may only be used by experienced professionals.
Sikafloor®-263 SL HC is used as:

- Self-smoothing and broadcast systems for concrete and cement screeds with normal up to medium heavy wear e.g. storage and assembly halls, maintenance workshops, garages, loading ramps etc.
- The broadcast system is recommended for multi-storey and underground car parks, maintenance hangars and for wet process areas, e.g. beverage and food industry.

CHARACTERISTICS / ADVANTAGES

- Highly fillable
- Good chemical and mechanical resistance
- Easy application
- Liquid proof
- Gloss finish
- Slip resistant surface possible

APPROVALS / STANDARDS

- Particle emission certificate Sikafloor®-263 SL HC CSM Statement of Qualification – ISO 14644-1, class 5– Report No. SI 0904-480 and GMP class A, Report No. SI 1008-533.
- Outgassing emission certificate Sikafloor®-263 SL HC CSM Statement of Qualification – ISO 14644-8, class 6,5 - Report No. SI 0904-480.
- Good biological Resistance in accordance with ISO 846, CSM Report No. 1008-533
- Fire classification in accordance with EN 13501-1, Report-No. 2007-B-0181/14, MPA Dresden, Germany, February 2007.

PRODUCT INFORMATION

Chemical Base	Epoxy	
Packaging	Part A : 15.8 kg can Part B : 4.2 kg can Part A+B : 20 kg set	
Appearance / Colour	Resin - part A: Hardener - part B:	Liquid / Coloured Liquid / Transparent
	Available in a number of colour shades. Please consult our Technical Sales Engineer for further details. Under direct UV exposure (sun, lamp, skylight, etc.) there may be some discolouration and colour deviation, this has no influence on the function and performance of the coating.	
Shelf Life	24 months from date of production	

Storage Conditions	The product must be stored in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +18 °C and +30 °C.		
Density	Part A Part B Mixed resin Filled resin (1:0.8) All Density values at +23 °C.	~1.50 kg/L ~1.00 kg/L ~1.43 kg/L ~1.84 kg/L	(DIN EN ISO 2811-1)
Solid content by weight	~100 %		
Solid content by volume	~100 %		

TECHNICAL INFORMATION

Shore D Hardness	~76 (7 days/+23 °C)	(DIN 53 505)
Abrasion Resistance	~70 mg (CS 10/1000/1000) (8 days / +23°C)	(DIN 53 109)
Compressive Strength	Resin: ~60.0 N/mm² , Resin (filled 1:0.9 with F36 (28 days))	(EN196-1)
Tensile Strength in Flexure	Resin: ~30.0 N/mm² , Resin (filled 1:0.9 with F36 (28 days))	(EN 196-1)
Tensile Adhesion Strength	>1.5 N/mm² (failure in concrete)	(ISO 4624)
Chemical Resistance	Resistant to many chemicals. Contact Sika technical service for specific Information.	
Thermal Resistance	**Exposure*** / **Dry heat** Permanent / +50 °C Short-term max. 7 days / +80 °C Short-term max. 12 hours / +100 °C Short-term moist/wet heat* up to +80 °C where exposure is only occasional (steam cleaning etc.).	

SYSTEM INFORMATION

Systems	Self-smoothing system 1.5 - 3.0 mm: Primer: 1 x Sikafloor®-161 HC Wearing course: Sikafloor®-263 SL HC+ quartz sand (0.1 - 0.3 mm) Broadcast system approx. 4 mm: Primer*: 1 x Sikafloor®-161 HC Base coat: 1 x Sikafloor®-263 SL HC+ quartz sand (0.1 - 0.3 mm) Broadcasting: quartz sand (0.4 - 0.7 mm) broadcast to excess Seal coat: 1 x Sikafloor®-264 HC

APPLICATION INFORMATION

Mixing Ratio

Part A : part B = 79 : 21 (by weight)

Consumption

Coating System	Product	Consumption
Priming	Sikafloor®-161 HC	0.35-0.55 kg/m²
Levelling (optional)	Sikafloor®-161 HC levelling mortar	Refer to PDS of Sikafloor®-161 HC
Self-smoothing wearing course (Film thickness ~1. 5 - 3.0 mm)	1 pbw Sikafloor®-263 SL HC 0.8 pbw quartz sand (0.1 - 0.3 mm)	Approx. 1.9 kg/m² per mm layer
Broadcast system (Film thickness ~4.0 mm)	1 pbw Sikafloor®-263 SL HC 1 pbw quartz sand (0.1 - 0.3 mm) + broadcasting quartz sand 0.4 -0.7 mm + Seal coat Sikafloor®-264 HC	2.00 kg/m² 2.00 kg/m² ~6.0 kg/m² ~0.7 kg/m²

These figures are theoretical and do not allow for any additional material due to surface porosity, surface profile, variations in level and 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 min
+20 °C	~25 min
+30 °C	~15 min

Curing Time

Before applying Sikafloor®-263 SL HC on Sikafloor®-161 HC allow:

Substrate temperature	Minimum	Maximum
+10 °C	24 h	3 d
+20 °C	12 h	2 d
+30 °C	8 h	1 d

Before applying Sikafloor®-263 SL HC on Sikafloor®-263 SL HC allow:

Substrate temperature	Minimum	Maximum
+10 °C	30 h	3 d
+20 °C	24 h	2 d
+30 °C	16 h	1 d

Note : 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	~72 h	~6 d	~10 d
+20 °C	~24 h	~4 d	~7 d
+30 °C	~18 h	~2 d	~5 d

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

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

- Concrete substrate must be sound and 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.
- Weak concrete must be removed and surface defects such as blow holes 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.
- The concrete or screed substrate has to be primed or levelled in order to achieve an even surface.
- High spots must be removed by e.g. grinding.
- All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferably by brush 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, add the quartz sand and if required the Extender T and mix 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®-263 SL HC must be thoroughly mixed using a low speed stirrer (300 – 400 rpm) or other suitable equipment.

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®-161/160 HC by brush, roller or squeegee. Preferred application is by using a squeegee and then backrolling crosswise.

Levelling:
Rough surfaces need to be levelled first. Therefore use e.g. Sikafloor®-161 HC levelling mortar (see PDS).

Wearing course smooth:
Sikafloor®-263 SL HC is poured, spread evenly by means of a serrated trowel.
After spreading the material evenly, turn the serrated trowel and smooth the surface in order to achieve an aesthetically higher grade of finish.
Roll immediately in two directions with a spiked roller to ensure even thickness.

Broadcast system:
Sikafloor®-263 SL HC is poured, spread evenly by means of a serrated trowel.
Then, level and remove any entrapped air with a spiked roller and after about 5 minutes (at +30 °C) but before 10 minutes (at +30 °C), broadcast with quartz sand, at first lightly and then to excess.

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.

MAINTENANCE

CLEANING

To maintain the appearance of the floor after application, Sikafloor®-263 SL HC must have all spillages removed immediately and must be regularly cleaned using rotary brush, mechanical scrubbers, scrubber dryer, high pressure washer, wash and vacuum techniques etc using suitable detergents and waxes.

LIMITATIONS

- Application of Sikafloor®-263 SL HC should be applied at evening until midnight to minimize discolouring.
- Do not apply Sikafloor®-263 SL HC on substrates with rising moisture.
- Do not blind the primer
- Freshly applied Sikafloor®-263 SL HC should be protected from damp, condensation and water for at least 24 hours.
- Avoid puddles on the surface with the primer.
- For areas with limited exposure and normally absorbent concrete substrates priming with Sikafloor®-161HC is not necessary for broadcast systems.
- For roller / textured coatings: Uneven substrates as well as inclusions of dirt cannot and should not be covered by thin sealer coats. Therefore both substrate and adjacent areas must always be prepared and cleaned thoroughly prior to application.
- The incorrect assessment and treatment of cracks may lead to a reduced service life and reflective cracking.
- For exact color matching, ensure the Sikafloor®-263 SL HC in each area is applied from the same control batch numbers.
- Under certain conditions, underfloor heating 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 CO_2 and H_2O water vapour, which may adversely affect the finish. For heating use only electric powered warm air blower systems.

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.

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.

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.

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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