

Sikafloor® -263 SL HC

2-Part Epoxy Self-Smoothing and Broadcast System

Construction

Product Description	Sikafloor®-263 SL HC is a two part, economic, multi purpose binder based on epoxy.	
Uses	<ul style="list-style-type: none">■ 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 wet process areas, e.g. in beverage industry, food industry, maintenance hangars etc.	
Characteristics / Advantages	<ul style="list-style-type: none">■ Highly fillable■ Good chemical and mechanical resistance■ Easy application■ Economical■ Liquid proof■ Solvent-free■ Gloss finish■ Slip resistant surface possible	
Product Data Form Appearance / Colours	Resin - part A:	See standard colour shades below. Other colour shades are on request
	Hardener - part B:	Transparent, liquid
	5 Standard colour shades RAL 6010, RAL 6029, RAL 7032, RAL 7035, RAL 7040.	
	Under direct sun light there may be some discolouration and colour variations; this has no influence on the function and performance of the coating.	
Packaging	Part A:	280 kg drums
	Part B:	200 kg drums
Storage Storage Conditions / Shelf-Life	12 months from date of production if stored properly in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5°C and +30°C.	

**Technical Data
Chemical Base**

Epoxy

Density	Part A:	~ 1.50 kg/l	(DIN EN ISO 2811-1)
	Part B:	~ 1.00 kg/l	
	Mixed resin:	~ 1.43 kg/l	
	Filled resin 1 : 1:	~ 1.84 kg/l	
	All Density values at +23°C.		

Solid Content ~ 100% (by volume) / ~ 100% (by weight)**Mechanical / Physical
Properties**

Compressive Strength	Resin: ~ 60 N/mm ² (28 days / +23°C)	(EN 196-1)
Flexural Strength	Resin: ~ 30 N/mm ² (28 days / +23°C)	(EN 196-1)
Bond Strength	> 1.5 N/mm ² (failure in concrete)	(ISO 4624)
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 (Taber Abrader Test))

**Resistance
Chemical Resistance**

Resistant to many chemicals. Please ask for a detailed chemical resistance table.

Thermal Resistance

Exposure*	Dry heat
Permanent	+50°C
Short-term max. 7 d	+80°C
Short-term max. 12 h	+100°C

Short-term moist/wet heat* up to +80°C where exposure is only occasional (steam cleaning etc.)

*No simultaneous chemical and mechanical exposure.

**System
Information
System Structure***Self-smoothing system 1.5 - 3.0 mm:*Primer: 1 x Sikafloor®-161 HC
Wearing course: 1 x 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

**Application Details
Consumption / Dosage**

Coating System	Product	Consumption
Primer	Sikafloor®-161 HC	0.35 - 0.55 kg/m ²
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 1 pbw quartz sand (0.1 - 0.3 mm)	1.9 kg/m ² mixture (0.95 kg/m ² binder + 0.95 kg/m ² quartz sand)per mm layer thickness
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	2.00 kg/m ² 2.00 kg/m ² ~ 6.0 kg/m ² ~ 0.7 kg/m ²

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

Substrate Quality

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.

If in doubt, apply a test area first.

Substrate Preparation

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 blowholes and voids must be fully exposed.

Repairs to the substrate, filling of blowholes/voids and surface levelling can 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 and/or vacuum.

**Application
Conditions /
Limitations**

Substrate Temperature +10°C min. / +30°C max.

Ambient 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).

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.

**Application
Instructions
Mixing**

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

Mixing Time

Prior to mixing, stir part A mechanically. When all of part B has been added to part A, mix continuously for 2 minutes until a uniform mix has been achieved.

When parts A and B have been mixed, add the quartz sand 0.08 - 0.25 mm and/or Sikafloor® Filler-1 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 minimize air entrainment.

Mixing Tools

Sikafloor®-263 SL HC must be thoroughly mixed using a low speed electric stirrer (300 - 400 rpm) or other suitable equipment.

**Application Method /
Tools**

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.

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 15 minutes (at +20°C) but before 30 minutes (at +20°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.

Potlife

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

Waiting Time / Overcoating

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

Substrate temperature	Minimum	Maximum
+10°C	24 hours	3 days
+20°C	12 hours	2 days
+30°C	8 hours	1 day

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

Substrate temperature	Minimum	Maximum
+10°C	30 hours	3 days
+20°C	24 hours	2 days
+30°C	16 hours	1 day

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

Notes on Application / Limitations

Do not apply Sikafloor®-263 SL HC on substrates with rising moisture.

Do not blind the primer.

Freshly applied Sikafloor®-263 SL HC must 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® -161 HC 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.

Tools

Recommended Supplier of Tools:

PPW-Polyplan-Werkzeuge GmbH, Phone: +49 40/5597260, www.polyplan.com. Serrated trowel for smooth wearing layer: e.g. Large-Surface Scrapper No. 565, Toothed blades No. 25

Serrated trowel for textured wearing layer:

e.g. Trowel No. 999 or Adhesive Spreader No.777, Toothed blades No. 23

The incorrect assessment and treatment of cracks may lead to a reduced service life and reflective cracking.

For exact colour 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 CO2 and H2O water vapour, which may adversely affect the finish. For heating use only electric powered warm air blower systems.

Curing Details
Applied Product ready
for use

Temperature	Foot traffic	Light traffic	Full cure
+10°C	~ 72 hours	~ 6 days	~ 10 days
+20°C	~ 24 hours	~ 4 days	~ 7 days
+30°C	~ 18 hours	~ 2 days	~ 5 days

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

**Cleaning /
Maintenance
Methods**

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.

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.

**Health and Safety
Information**

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

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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Sikafloor® -263 SL HC 6/6

