

Sikafloor®-263 SL HC

2-part epoxy self-smoothing and broadcast system

Product Description Sikafloor®-263 SL HC is a two part, economic, multi purpose binder based on epoxy resin.

Uses

- 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

- 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: coloured, liquid
- Hardener - part B: transparent, liquid

5 standard colour shades RAL 7030, RAL 7032, RAL 7035, RAL 7037, RAL 7040
For all other colours please refer to Sikafloor®-261.

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 +18°C and +30°C. Keep away from direct sunlight.

Technical Data

Chemical Base Epoxy



Density	<ul style="list-style-type: none"> ■ Mixed resin: ~ 1.43 kg/ltr ■ Filled resin 1 : 1: ~ 1.84 kg/ltr All density values at +23°C	(DIN EN ISO 2811-1)
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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 53505)
Abrasion Resistance	70 mg (CS 10/1000/1000) (8 days / +23°C)	(DIN 53109 (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 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.)

*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 HC

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 HC	2.0 kg/m ² 2.0 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	<p>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.</p> <p>The substrate must be clean, dry and free of all contaminants such as dirt, oil, grease, coatings, surface treatments, etc.</p> <p>If in doubt, apply a test area first.</p>
Substrate Preparation	<p>Concrete substrates must be prepared mechanically using abrasive blast cleaning or scarifying equipment to remove cement laitance and achieve an open textured surface.</p> <p>Weak concrete must be removed and surface defects such as blowholes and voids must be fully exposed.</p> <p>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.</p> <p>The concrete or screed substrate has to be primed or levelled in order to achieve an even surface.</p> <p>High spots must be removed by e.g. grinding.</p> <p>All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferably by brush and/or vacuum.</p>
Application Conditions / Limitations	
Substrate Temperature	+10°C min. / +30°C max.
Ambient Temperature	+10°C min. / +30°C max.
Substrate Moisture Content	<p>≤ 4% pbw moisture content.</p> <p>Test method: Sika[®]-Tramex meter, CM - measurement or Oven-dry-method.</p> <p>No rising moisture according to ASTM (Polyethylene-sheet).</p>
Relative Air Humidity	80% r.h. max.
Dew Point	<p>Beware of condensation!</p> <p>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.</p>
Application Instructions	
Mixing	Part A : part B = 79 : 21 (by weight)
Mixing Time	<p>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.</p> <p>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.</p> <p>To ensure thorough mixing pour materials into another container and mix again to achieve a consistent mix.</p> <p>Over mixing must be avoided to minimize air entrainment.</p>
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.

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.

EU Regulation 2004/42 VOC - Decopaint Directive

According to the EU-Directive 2004/42, the maximum allowed content of VOC (Product category IIA / j type **sb**) is 550 / 500 g/l (Limits 2007 / 2010) for the ready to use product.

The maximum content of **Sikafloor®-263 SL HC** is < 500 g/l VOC for the ready to use product.

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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