

PRODUCT DATA SHEET

Sikafloor®-263 SL N

2-PART EPOXY SELF-SMOOTHING RESIN FLOOR FINISH

PRODUCT DESCRIPTION

Sikafloor®-263 SL N is a 2-part epoxy coloured resin that can provide a hard wearing, seamless, low maintenance, smooth gloss finish or slip resistant finish when broadcast with different aggregate grades. Varying thickness's can be achieved from 1.5–4.0 mm. For medium - heavy wear conditions. Internal use.

USES

Sikafloor®-263 SL N may only be used by experienced professionals.

- Self-smoothing system on concrete and cementitious screeds with normal up to medium heavy wear e.g. clean rooms, storage and assembly halls, maintenance workshops, garages, loading ramps etc.
- Slip resistant broadcast system for multi-storey and underground car park decks, maintenance hangars and for wet process areas, e.g. beverage and food industry

CHARACTERISTICS / ADVANTAGES

- Seamless and hygienic
- Filled with aggregate for economical and heavy duty resin screeds
- Good chemical and mechanical resistance
- Easy application
- Waterproof
- Gloss finish
- Slip resistant surface to suit clients requirements
- Low maintenance

ENVIRONMENTAL INFORMATION

Conformity with LEED v2009 IEQc 4.2: Low-Emitting Materials - Paints and Coatings

APPROVALS / STANDARDS

- Particle emission ISO 14644-1, CSM Statement of Qualification – class 2, Fraunhofer IPA Report No. SI 1709-952
- Outgassing behavior ISO 14644-8, CSM Statement of Qualification – class 6,6, Fraunhofer IPA Report No. SI 1709-952
- Reaction to fire classification according to EN 13501-1, Report-No KB-Hoch-171321-2, class Bfl-s1, Hoch Fladungen, Germany, January 2018
- CE-marking and Declaration of Performance as Coating for surface protection of concrete according to EN 1504-2:2004, based on certificate of factory production control issued by notified factory production control certification body and type testing.
- CE-marking and Declaration of Performance as Synthetic resin screed material according to EN 13813:2002, based on type testing and factory production control



**Cleanroom[®]
Suitable
Materials**

Sikafloor-263 SL N
Outgassing VOC / SVOC
ISO-ACC_m Class -6.6 / < -9.6

Sika Deutschland GmbH
Report No. SI 1709-952



**Cleanroom[®]
Suitable
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Sikafloor-263 SL N
Particle (vs. PA6): ISO 2

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PRODUCT INFORMATION

Chemical Base	Epoxy	
Packaging	Part A	15.8 kg containers
	Part B	4.2 kg containers
	Part A+B	20 kg ready to mix units
	Part A	220 kg drums
	Part B	177 kg
	Part A+B	3 drums part A (220 kg) + 1 drum part B (177 kg) =837 kg
Appearance / Colour	Resin - part A	coloured, liquid
	Hardener - part B	transparent, liquid
	RAL 3003, 5010, 6010, 7011, 7032, 7035, 7038, 9005, 9010 Under direct sun light there may be some discolouration and colour variation; 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 +5 °C and +30 °C. Always refer to packaging.	
Density	Part A	~ 1.50 kg/l (DIN EN ISO 2811-1)
	Part B	~ 1.00 kg/l
	Mixed resin	~ 1.44 kg/l
	Filled resin (1:1)	~ 1.84 kg/l
	All Density values at +23 °C.	
Solid content by weight	~100 % Total solid epoxy composition acc. to the test method Deutsche Bauchemie e.V. (German Association for construction chemicals)	
Solid content by volume	~100 %	

TECHNICAL INFORMATION

Shore D Hardness	~76 (7 days / +23 °C)	(DIN 53 505)
Abrasion Resistance	~35 mg (CS 10/1000/1000) (7 days / +23 °C)	(DIN 53 109)
Compressive Strength	~50 N/mm ² (Resin filled 1:0.9 with F34 / 28 days / +23 °C)	(EN196-1)
Flexural Strength	~20 N/mm ² (Resin filled 1:0.9 with F34 / 28 days / +23 °C)	(EN 196-1)
Tensile adhesion strength	> 1.5 N/mm ² (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 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 and only in combination with Sikafloor® systems as a broadcast system with approx. 3 - 4 mm thickness.	

SYSTEM INFORMATION

Systems	Refer to the following system data sheets :	
	Sikafloor® MultiDur ES-20	Smooth coloured epoxy floor system
	Sikafloor® MultiDur EB-27	Slip resistant broadcast coloured epoxy floor system
	Sikafloor® MultiDur EB-27 ECC	Slip resistant broadcast coloured epoxy floor system for damp substrates

APPLICATION INFORMATION

Mixing Ratio	Part A : part B = 79 : 21 (by weight)			
Consumption	~0.9–1.2 kg/m ² /mm These figures are theoretical and do not allow for any additional material due to surface porosity, surface profile, variations in level or wastage etc. For detailed information, refer to the system data sheets Sikafloor® Multidur ES-20 and Sikafloor® Multidur EB-27			
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 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	~60 minutes		
	+20 °C	~30 minutes		
	+30 °C	~15 minutes		
Curing Time	Before overcoating Sikafloor®-263 SL N 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.				
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

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

- Concrete substrate must be sound and of sufficient compressive strength (minimum 25 N/mm²) with a minimum tensile strength of 1.5 N/mm².
- Substrates must be clean, dry and free of all contaminants

such as dirt, oil, grease, coatings, laitance, surface treatments and loose friable material.

- Concrete substrates must be prepared mechanically using suitable abrasive blast cleaning or scarifying equipment to remove cement laitance and achieve an open textured gripping surface profile suitable for the product thickness.
- 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.
- All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferably by brush and /or vacuum extraction equipment.

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 Extender T. 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 smooth consistent mix. Over mixing must be avoided to minimise air entrainment.

Mixing Tools

Sikafloor®-263 SL N must be thoroughly mixed using low speed equipment (300 - 400 rpm). Use a forced action mixer of rotating pan, paddle or trough type. Free fall mixers should not be used.

APPLICATION

Strictly follow installation procedures as defined in information manuals, application manuals and working instructions which must always be adjusted to the actual site conditions. Prior to application, confirm substrate moisture content, relative air humidity and dew point. If > 4% pbw moisture content, Sikafloor® Epo-Cem® may be applied as a T.M.B. (temporary moisture barrier) system.

Primer:

Ensure a continuous, pore free coat covers the substrate. If necessary, apply two priming coats. Apply Sikafloor®-156 / 161 by brush, roller or squeegee. Preferred application is by using a squeegee and then back rolling in two directions at right angles to each other.

Levelling:

Rough surfaces need to be levelled first using Sikafloor®-150/-151 levelling mortar (see PDS).

Self -Smoothing Finish:

Sikafloor®-263 SL N is poured and spread evenly using a suitable trowel/pin rake to the required thickness. Spike roller immediately in two directions at right angles to each other to remove trowel marks, aid air release, ensure an even thickness and obtain required surface finish.

Slip Resistant Broadcast Finish:

Sikafloor®-263 SL N is poured and spread evenly using a suitable trowel/pin rake to the required thickness. Spike roller immediately in two directions at right angles to each other to aid air release and ensure an even thickness. 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 to produce an even distribution surface profile. Allow Sikafloor®-263 SL N to initially cure and remove all loose sand by va-

cuum equipment. Apply a final seal/top coat of Sikafloor®-264N by roller or squeegee at a consumption of 0.6 - 0.8 kg/m² to completely encapsulate the sand. Then back roller in two directions at right angles to each other.

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

To maintain the appearance of the floor after application, Sikafloor®-263 SL N 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

FURTHER DOCUMENTS

Sika® Information Manual: Evaluation and Preparation of Surfaces for Flooring Systems

Sika® Information Manual: Mixing & Application of Flooring Systems

Sika® Information Manual: Sikafloor®-Cleaning Regime

LIMITATIONS

- Before applying Sikafloor®-304 W/-305W/-2540 W on Sikafloor®-263 SL N the surface must be prepared by abrading with a red or black scotch brite pad.
- Do not apply on substrates with rising moisture.
- Do not blind the primer
- Freshly applied product should be protected from damp, condensation and water for at least 24 hours.
- For areas with limited exposure and normal absorbent concrete substrates. Priming with Sikafloor®-150/-151 is not necessary for roller or textured coating systems.
- If product is used for roller / textured sealer coats.
- Uneven and / or dirty substrates should not be considered for thin coating application. All 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 N in each area is applied from the same control batch numbers.
- Under certain conditions, underfloor heating or high ambient temperatures combined with high point loading, may lead to indentations 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.
- Seal / Top coat consumption will vary depending on sand granulometry

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.

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.

DIRECTIVE 2004/42/CE - LIMITATION OF EMISSIONS OF VOC

According to the EU-Directive 2004/42, the maximum allowed content of VOC (Product category IIA / j type sb) 500 g/l (Limit 2010) for the ready to use product. The maximum content of Sikafloor®-263 SL N 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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