BUILDING TRUST

PRODUCT DATA SHEET

Sikafloor®-264 N

2-PART EPOXY HIGH BUILD SMOOTH COATING AND SEAL COAT

DESCRIPTION

Sikafloor®-264 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 0.6–3.0 mm. For medium - heavy wear conditions. Internal use.

USES

Sikafloor®-264 N may only be used by experienced professionals.

- High build smooth coating system for concrete and cementitious screeds with normal up to medium heavy wear e.g. clean rooms, storage and assembly halls, maintenance workshops, garages and loading ramps.
- Seal / Top coat for slip resistant broadcast systems, such as 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
- Good chemical and mechanical resistance
- Easy application
- Waterproof
- Gloss finish
- Slip resistant surface to suit clients requirements
- Can be filled with sand to produce a self-smoothing resin
- Low maintenance

APPROVALS / CERTIFICATES

- Particle emission ISO 14644-1, CSM Statement of Qualification – class 3, Fraunhofer IPA Report No. SI 1709-952.
- Outgassing behavior ISO 14644-8, CSM Statement of Qualification – class 6,5, Fraunhofer IPA Report No. SI 1709-952.
- Reaction to fire classification according to EN 13501-1, Report-No KB-Hoch-170619, Hoch Fladungen,Germany, May 2017
- Reaction to fire classification according to EN 13501-1, Report-No KB-Hoch-170625, Hoch Fladungen, Germany, May 2017.
- 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
- Certificate of conformity for indirect food contact, Institut Fresenius, Report No. 3419034-01, Germany, November 2017

PRODUCT INFORMATION

Composition	Epoxy		
Packaging	Part A	23,7 kg containers	
	Part B	6,3 kg containers	
	Part A+B	30 kg ready to mix units	
	Part A	220 kg drums	
	Part B	177 kg, 59 kg drums	
	Part A+B	1 drum part A (220 kg) + 1 drum part B (59 kg) = 279 kg 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 1001, 6021, 7030, 7032, 7035, 7037, 7038, 7040, 7042, 9002 Other colours on request. 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	~1,64 kg/l	(DIN EN ISO 2811-1)
	Part B	~1,00 kg/l	
	Mixed resin	~1,40 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	~25 mg (CS 10/1000/1000) (7 days / +23 °C)	(DIN 53109)
Compressive Strength	~53 N/mm² (Resin filled 1:0,9 with F34) (28 days / +23 °C)	(EN196-1)
Tensile Strength in Flexure	~20 N/mm² (Resin filled 1:0,9 with F34) (28 days / +23 °C)	(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.	
Temperature 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.	

SYSTEMS

Systems

Please refer to the system data sheet of :

Sikafloor® MultiDur ES-15	High build smooth coloured epoxy floor coating system
Sikafloor® MultiDur ES-21	Smooth coloured epoxy floor system
Sikafloor® MultiDur EB-12	Slip resistant broadcast coloured epoxy floor coating system
Sikafloor® MultiDur EB-12 ECC	Slip resistant broadcast coloured epoxy floor coating system for damp substrates

APPLICATION INFORMATION

Mixing Ratio

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

Consumption

~0,25–0,3 kg/m²	High build coating
~0,9–1,2 kg/m²/mm	Self-smoothing finish

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-15 and Sikafloor® MultiDur ES-21.

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

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	~ 6days	~10 days
+20 °C	~24 hours	~ 4days	~7 days
+30 °C	~18 hours	~ 2days	~5 days

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

- The 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 abrasive blast cleaning or scarifying equipment to remove cement laitance and achieve an open tex-

tured surface gripping surface profile suitable for the product thickness.
- High spots can be removed by grinding.
- 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 or vacuum extraction equipment.

MIXING

Coatings
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. 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.
Self-Smoothing Resin
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®-264 N (unfilled) must be thoroughly mixed using a low speed electric stirrer (300–400 rpm) or other suitable equipment. For the preparation of a self- smoothing resin, use a forced action mixer or rotating pan, paddle or trough type. Free fall mixers should not be used.

APPLICATION

Strictly follow installation procedures as defined in method statements, 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® EpoCem® may be applied as a temporary moisture barrier (T.M.B.) system.
Primer
Ensure a continuous, pore free coat covers the substrate. If necessary, apply two priming coats. Apply Sikafloor®-156 /-161 /-160 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. Therefore use e.g. Sikafloor®-156/-161/-160 levelling mortar (see PDS).
High Build Smooth Coating
Sikafloor®-264 N can be applied using a short-piled roller in two directions at right angles to each other.
Self-Smoothing Finish
Sikafloor®-264 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 Coating
Apply a scratch coat to substrate and immediately broadcast with quartz sand to excess to produce an even distribution surface profile. Allow scratch coat to initially cure and remove all loose sand by vacuum equipment. Apply a final seal/top coat of Sikafloor®-264 N. For application onto damp substrates, refer to Sikafloor® MultiDur EB-12 ECC system data sheet for primer and levelling product changes.
Seal coat
Apply seal/top coat of Sikafloor®-264 N by squeegee at a consumption of 0,6–0,8 kg/m² to completely encapsulate the sand. Then using a short-piled roller, back roller in two directions at right angles to each other.

CLEANING OF EQUIPMENT

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®-264 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 INFORMATION

- Sika® Method Statement: Evaluation and Preparation of Surfaces for Flooring Systems
- Sika® Method Statement: Mixing & Application of Flooring Systems
- Sika® Method Statement: Sikafloor®-Cleaning Regime

IMPORTANT CONSIDERATIONS

- Before applying Sikafloor®-304 W/-305 W/ -2540 W on Sikafloor®-264 N, the surface must be prepared by abrading with a red or black scotch brite pad.
- Do not apply Sikafloor®-264 N on substrates with rising moisture.
- Do not blind the primer.
- Freshly applied Sikafloor®-264 N must be protected from damp, condensation and water for at least 24 hours.
- For areas with limited exposure and normally absorbent concrete substrates priming with Sikafloor®-156/-161/-160 is not necessary for roller or textured coating 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®-264 N in each area is applied from the same control batch numbers.
- Under certain conditions, underfloor heating 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 CO_2 and H_2O 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.

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.

DIRECTIVE 2004/42/CE LIMITATION OF EMISSIONS OF VOC

According to the EU Directive 2004/42/CE, the maximum allowed content of VOC (product category IIA / j type sb) is 500 g/l (Limits 2010) for the ready to use product.
The maximum content of Sikafloor®-264 N is < 500 g/l VOC for the ready to use product.

LEGAL NOTES

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