

PRODUCT DATA SHEET

Sikafloor®-264 HC N

2- PART EPOXY ROLLER COAT AND SELF-SMOOTHENING TOPPING

DESCRIPTION

Sikafloor®-264 HC N is a two part, epoxy resin based topping

USES

Sikafloor®-264 HC N is a construction products which only should be applied by trained applicators.

Sikafloor®-264 HC N is used as:

- Self-smoothing topping & Roller coat for concrete and cement screeds with normal up to medium heavy wear e.g. Production area, storage and assembly halls, maintenance workshops, garages and loading ramps.
- Seal coat for broadcast systems, such as multi-storey and underground car parks, maintenance hangars and for wet process areas, e.g. beverage and food industry.

CHARACTERISTICS / ADVANTAGES

- Good chemical and mechanical resistance
- Easy application
- Liquid proof
- Gloss finish
- Slip resistant surface possible
- Seamless / Joint free application possible
- Easily cleaned and maintained
- Does not support growth of bacteria and fungus
- Wide range of ~RAL colours (consult Sika® representative)

APPROVALS / CERTIFICATES

- Particle emission certificate Sikafloor-264 HC CSM Statement of Qualification – ISO 14644-1, class 4–Report No. SI 0904-480 and GMP class A, Report No.SI 1008- 533.
- Outgassing emission certificate Sikafloor-264 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. 2013-B-2119/01, MPA Dresden, Germany, June 2013.
- 2-part epoxy roller and seal coat according to EN 1504-2: 2004 and EN 13813:2002.
- Di-electrical Breakdown voltage test) certification from ERDA, Vadodara.
- Food grade (USFDA 175.300 1st April 2017) from CFTRI, Mysore.

PRODUCT INFORMATION

Composition	Epoxy	
Packaging	Part A (Neutral base)	13.43 kg containers
	Part B (Hardener)	4.2 kg containers
	Colour pack (RAL)	2.37 kg x 2nos
	Part A+B (Pigmented resin)	20 kg ready to mix units
Appearance / Colour	Part A (Neutral base)	light brownish liquid
	Part B (Hardener)	transparent, liquid
<p>*Colour component: Sika colour components available separately (Please consult with Sika representative for more details) Extended colour range: RAL 5012, 6017,6019,6029,7001,7032, 7035, 7037, 7038, 7040, 7042, 7047 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.</p>		
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 +10 °C and +30 °C.	
Density	Part A	~ 1.64 kg/l (DIN EN ISO 2811-1)
	Part B	~ 1.00 kg/l
	Mixed	~ 1.40 kg/l
All Density values at +23°C.		
Solid content	~100%	

TECHNICAL INFORMATION

Shore D Hardness	~76 (7 days / +23°C)	(DIN 53 505)
Abrasion resistance	41 mg (CS 10/1000/1000) (8 days / +23°C)	(DIN 53 109)
Compressive strength	Resin (filled 1: 0.9 with SD 501): ~ 53 N/mm ² (28 days / +23°C)	(EN 196-1)
Tensile strength in flexure	Resin (filled 1: 0.9 with SD 501): ~ 20 N/mm ² (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.	
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

Sikafloor® MultiDur ES-05 RC AP:

Build-up	Product
Primer:	Sikafloor®-264 HC N
Roller coat:	Sikafloor®-264 HC N

Sikafloor® MultiDur ES-05 AP:

Build-up	Product
Primer:	Sikafloor®-161 HC
Self-smoothing topping:	Sikafloor®-264 HC N

Sikafloor® MultiDur ES-10 AP:

Build-up	Product
Primer:	Sikafloor®-161 HC
Self-smoothing topping:	Sikafloor®-264 HC N

Sikafloor® MultiDur ES-15 AP:

Build-up	Product
Primer:	Sikafloor®-161 HC
Self-smoothing topping:	Sikafloor®-264 HC N

Sikafloor® MultiDur ES-30 AP:

Build-up	Product
Primer:	Sikafloor®-161 HC
Self-smoothing topping:	Sikafloor®-264 HC N

Sikafloor® MultiDur ET-05 AP:

Build-up	Product
Primer:	Sikafloor®-264 HC N
Texture coating:	Sikafloor®-264 HC N + + 2% Sika® Extender T

Sikafloor® MultiDur ET-05 HSR AP:

Build-up	Product
Primer:	Sikafloor®-264 HC N
Textured coating:	Sikafloor®-264 HC N + 2-3% Sika Extender T + 10% quartz sand (0.4 - 0.7 mm)

Sikafloor® MultiDur EB-10 AP:

Build-up	Product
Base/ receiver coat + Broadcast:	Sikafloor®-264 HC N + Quartz sand (0.4 - 0.6mm)
Seal coat:	Sikafloor®-264 HC N

Sikafloor® MultiDur EB-15 AP:

Build-up	Product
Primer:	Sikafloor®-161 HC
Base coat:	Sikafloor®-264 HC N + Quartz sand (0.4 - 0.8mm)
Seal Coat:	Sikafloor®-264 HC N

Sikafloor® MultiDur EB-40 AP:

Build-up	Product
Primer:	Sikafloor®-161 HC
Base /receiver coat + Broadcast	Sikafloor®-264 HC N + Quartz sand (0.4- 0.8mm)
Seal coat	Sikafloor®-264 HC N

APPLICATION INFORMATION

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

Consumption**Sikafloor® MultiDur ES-05 RC AP:**

Build-up	Product	Consumption
Primer	Sikafloor®-264 HC N	0.25-0.50 kg/m ²
Roller Coat	Sikafloor®-264 HC N	0.25-0.50 kg/m ²

Sikafloor® MultiDur ES-05 AP:

Build-up	Product	Consumption
Primer	Sikafloor®-161 HC	0.35-0.50 kg/m ²
0.5 mm self smoothening topping	Sikafloor®-264 HC N	0.70 kg/m ²

Sikafloor® MultiDur ES-10 AP:

Build-up	Product	Consumption
Primer	Sikafloor®-161 HC	0.35-0.50 kg/m ²
Self-smoothening topping	Sikafloor®-264 HC N	0.90 kg/m ²
Filler	0.4 pbw quartz filler	0.40 kg/m ²

Sikafloor® MultiDur ES-15 AP:

Build-up	Product	Consumption
Primer	Sikafloor®-161 HC	0.35-0.50 kg/m ²
Self-smoothening topping	1 pbw Sikafloor®-264 HC N	1.15 kg/m ²
Filler	0.8 pbw quartz sand (0.1 - 0.3 mm)	0.95 kg/m ²

Sikafloor® MultiDur ES-30 AP:

Build-up	Product	Consumption
Primer	Sikafloor®-161 HC	0.35-0.50 kg/m ²
Self-smoothening topping	1 pbw Sikafloor®-264 HC N	2.25 kg/m ²
Filler	1 pbw quartz sand (0.1 - 0.3 mm)	2.25 kg/m ²

Sikafloor® MultiDur ET-05 AP:

Build-up	Product	Consumption
Primer	Sikafloor®-264 HC N	0.35-0.50 kg/m ²
Texture coating	Sikafloor®-264 HC N	0.50 kg/m ²
Thixotropic agent	Sika® Extender T 2%	0.01 kg/m ²

Sikafloor® MultiDur ET-05 HSR AP:

Build-up	Product	Consumption
Primer	Sikafloor®-264 HC N	0.35-0.50 kg/m ²
Textured coating	Sikafloor®-264 HC N	0.70 kg/m ²
Thixotropic agent	Sika Extender T 2-3%	0.014 kg/m ²
Broadcast sand	Quartz sand 10%	0.070 kg/m ²

Sikafloor® MultiDur EB-10 AP:

Build-up	Product	Consumption
Base/receiver coat	Sikafloor®-264 HC N	0.40 kg/m ²
Broad cast in excess	Quartz sand (0.4 - 0.6 mm)	2.0 kg/m ²
Sealer coat	Sikafloor®-264 HC N	0.6 kg/m ²

Sikafloor® MultiDur EB-15 AP:

Build-up	Product	Consumption
Primer	Sikafloor®-161 HC	0.35-0.5 kg/m ²
Base coat	Sikafloor®-264 HC N	0.40 kg/m ²
Full broadcast	Quartz sand (0.4 - 0.8 mm)	3.0 kg/m ²
Seal coat	Sikafloor®-264 HC N	0.6-0.7 kg/m ²

Sikafloor® MultiDur EB-40 AP:

Build-up	Product	Consumption
Primer	Sikafloor®-161 HC	0.35-0.5 kg/m ²
Base/receiver coat	Sikafloor®-264 HC N	2.0 kg/m ²
Quartz filler	Quartz sand (0.1 - 0.3 mm)	2.0 kg/m ²
Broad cast	Quartz sand (0.4 - 0.8 mm)	6.0 kg/m ²
Seal coat	Sikafloor®-264 HC N	0.6-0.7 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. Additional coat may require for lighter colour.

Please consult with Sika representative in case application is at lower temperature (< 15°C)

Ambient air temperature	+10 °C min. / +35 °C max.
Relative air humidity	80 % r.h. max.
Dew point	Beware of condensation! The substrate must be at least 3°C above the Dew Point to reduce the risk of condensation, which may lead to adhesion failure or “blushing” on the floor finish. Be aware that the substrate temperature may be lower than the ambient temperature
Substrate temperature	+10 °C min. / +35 °C max.
Substrate moisture content	Moisture content of concrete substrate must be ≤ 4% by mass (pbw – part by weight) as measured with a Tramex® CME/CMExpert type concrete moisture meter on mechanically prepared surface according to this product data sheet (preparation to CSP-3 to CSP-4 as per ICRI guidelines). Do not apply to concrete substrate with moisture levels > 4% mass (pbw – part by weight) as measured with Tramex® CME/CMExpert type concrete moisture meter. If moisture content of concrete substrate is > 4% by mass (pbw – part by weight) as measured with Tramex® CME/CMExpert type concrete moisture meter, use Sikafloor 81 EpoCem

Pot Life	Temperature	Time
	+10°C	~ 50 minutes
	+20°C	~ 25 minutes
	+30°C	~ 15 minutes

Curing time	Before applying Sikafloor®-264 HC N on Sikafloor®-161 HC allow:		
	Substrate temperature	Minimum	Maximum
	+10 °C	24 hours	3 days
	+20 °C	12 hours	2 days
	+30 °C	08 hours	1 day

Curing time	Before applying Sikafloor®-264 HC N on Sikafloor®-264 HC 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
	+20°C	~ 24 hours	~ 4 days	~ 07 days
	+30°C	~ 18 hours	~ 2 days	~ 05 days

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

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

- 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.
- 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.

MIXING

Pre - mix is recommended for component A & colour component one day prior to application. Prior to mixing, stir part A mechanically when all of part B has been added to part A, mix continuously for 2-3 minutes until a uniform mix has been achieved. Decan whole mixed materials to another container & mix for a further 1 minute to achieve consistent mix &

avoid any lumps or unmixed particle in the container. Over mixing must be avoided to minimize air entrainment.

MIXING TOOLS

Sikafloor®-264 HC N must be thoroughly mixed using a low speed electric stirrer (300 - 400 rpm) or other suitable equipment. For the preparation of mortars use a forced action mixer of rotating pan, paddle or trough type. Free fall mixers should not be used.

APPLICATION

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 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 HC by brush, roller or squeegee. Preferred application is by using a squeegee and then back rolling crosswise.

Levelling

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

Coating

Sikafloor®-264 HC N as coating, can be applied by short-piled roller (crosswise).

Seal Coat

Sealer coats can be applied by squeegee and then back-rolled (crosswise) with a short-piled roller.

Self smoothening

Sikafloor®-264 HC N as self smoothening topping can be applied by pin rack, notch trowel back roll with spike-roller crosswise.

CLEANING OF EQUIPMENT

Clean all tools and application equipment with Thinner C or suitable solvent 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®-264 HC 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. Refer to the document "Cleaning & Maintenance guideline"

FURTHER INFORMATION

Substrate quality & Preparation

Please refer to Sika Method Statement: "EVALUATION AND PREPARATION OF SURFACES FOR FLOORING SYSTEMS".

Application Instructions

Please refer to Sika Method Statement: "MIXING & APPLICATION OF FLOORING SYSTEMS".

Maintenance

Please refer to "Sikafloor®- CLEANING REGIME".

IMPORTANT CONSIDERATIONS

- Prior to application, measure and confirm Substrate Moisture Content, Ambient Relative Humidity, Ambient and Surface Temperature and Dew Point. During installation, confirm and record above values at least once every 3 hours, or more frequently whenever conditions change (e.g. Ambient Temperature rise/fall, Relative Humidity increase/decrease, etc.).
- Substrate Moisture Content: Moisture content of concrete substrate must be ≤4% by mass (pbw –part by weight) as measured with a Tramex®CME/CMExpert type concrete moisture meter on mechanically prepared surface according to this product data sheet (preparation to CSP-3 to CSP-4 as per ICRI guidelines). Do not apply to concrete substrate with moisture levels > 4% mass (pbw –part by weight) as measured with Tramex®CME/CMExpert type concrete moisture meter. If moisture content of concrete substrate is >4% by mass (pbw – part by weight) as measured with Tramex® CME/CMExpert type concrete moisture meter, use Sikafloor 81 Epo-Cem.
- Material Temperature: Precondition material for at least 24 hours between 18° to 24°C.

- Ambient Temperature: Minimum/Maximum 8°/35°C.
- Substrate Temperature: Minimum/Maximum 8°/35°C. Substrate temperature must be at least 3°C above measured Dew Point. Mixing and Application attempted at Material, Ambient and/or Substrate Temperature conditions less than 18°C will result in a decrease in product workability, slower cure rates and may occur of surface blushing.
- Ambient Relative Humidity: Maximum ambient humidity 85% (during application and curing).
- Dew Point: Beware of condensation! The substrate must be at least 3°C above the Dew Point to reduce the risk of condensation, which may lead to adhesion failure or "blushing" on the floor finish. Be aware that the substrate temperature may be lower than the ambient temperature.
- Mixing: Do not hand mix Sikafloor materials. Mechanically mix only.
- Do not thin this product. Addition of thinners (e.g. water, solvent, etc.) will slow cure and reduce ultimate properties of this product. Use of thinners will void any applicable Sika warranty. Improper mixing procedure or incorrect mixing ratio may result in moisture sensitivity, whitening, slow cure, soft spots, and other defects.
- Application: If used as a primer apply material to the prepared substrate using a squeegee and back roll to provide uniform coverage. Ensure that the substrate is pore-free and pinhole free and provides uniform and complete coverage over the entire substrate. If necessary, apply an additional coat to ensure the substrate is pore-free and pinhole-free and provides uniform and complete coverage over the entire substrate.
- Do not apply while ambient and substrate temperatures are rising, as pinholes may occur. Ensure there is no vapor drive at the time of application. Refer to ASTM D4263, may be used for a visual indication of vapor drive.
- Freshly applied material should be protected from dampness, condensation and water for at least 72 hrs.
- Will discolor over time when exposed to sunlight (UV) and under certain artificial lighting conditions. Use of clear UV resistant top coat may not prevent discoloration of underlying coatings.
- Do not apply Sikafloor to concrete substrate containing aggregates susceptible to ASR (Alkali Silica Reaction) due to risk of natural alkali redistribution below the Sikafloor product after application. If concrete substrate has or is suspected to have ASR (Alkali Silica Reaction) present, do not proceed. Consult with design professional prior to use.
- Any aggregate used with Sikafloor systems must be non-reactive and oven-dried.
- This product is not designed for negative side waterproofing.
- Typically, not recommended for exterior slabs on grade where freeze/thaw conditions may exist.
- Use of unvented heaters and certain heat sources may result in defects (e.g. blushing, whitening, debonding, etc.).
- Beware of air flow and changes in air flow. Introduction of dust, debris, and particles, etc. may result in surface imperfections and other defects.
- For professional use only by experienced applicators.

Product Data Sheet

Sikafloor®-264 HC N

August 2020, Version 01.01

020811020020000188

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 declared data for this product may vary from country to country. Please consult the local Product Data Sheet for the exact product data.

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 Material Safety Data Sheet 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®-264 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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020811020020000188

Sikafloor-264HCN-en-BD-(08-2020)-1-1.pdf