

PRODUCT DATA SHEET

Sikafloor®-264 HC

2- PART EPOXY ROLLER AND SELF-SMOOTHENING TOPPING

DESCRIPTION

Sikafloor®-264 HC is a two part, economic, coloured epoxy resin.

USES

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

ENVIRONMENTAL INFORMATION

Green Building Contribution

Sikafloor®-264 HC conforms to the requirements of LEED v2009 IEQc 4.2: Low-Emitting Materials - Paints and Coatings.

APPROVALS / STANDARDS

- 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, Re-port-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.
- ISEGA Certificate of Conformity 36314 U 13



PRODUCT INFORMATION

Chemical base	Epoxy		
Packaging	Part A (Pigmented resin)	15.80 kg containers	
	Part A (Clear resin)	13.43 kg containers	
	Part B	4.2 kg containers	
	Colour pack (RAL)	2.37kgx2nos	
	Part A+B (Pigmented resin)	20 kg ready to mix units	
	Part A+B (Pigmented resin)	20 kg ready to mix units	
Appearance / Colour	Pigmented resin - part A:	coloured, liquid	
	Clear resin - part A:	light brownish liquid	
	Hardener - part B	transparent, liquid	
	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.		
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 resin	~ 1.40 kg/L	
	All Density values at +23°C.		
Solid content by weight	~100%		
Solid content by volume	~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)	(EN196-1)
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.	
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	<i>Sikafloor MultiDur ES-C:</i>	
	Primer:	1 x Sikafloor®-264 HC
	Coating:	1 - 2 x Sikafloor®-264 HC
	<i>Sikafloor MultiDur ET:</i>	
	Primer*:	1 x Sikafloor®-264 HC
	Coating:	1 x Sikafloor®-264 HC + Extender T
	<i>Sikafloor MultiDur ET PRO (improved slip resistance):</i>	
	Primer*:	1 x Sikafloor®-264 HC
	Coating:	1 x Sikafloor®-264 HC + Extender T + Sikadur 502
	<i>Sikafloor MultiDur ES-10 (1.0 mm):</i>	
	Primer:	1 x Sikafloor®-161 HC
	Wearing course:	1 x Sikafloor®-264 HC + Sikadur 504
	<i>Sikafloor MultiDur ES-15/30 (1.5 - 3.0 mm):</i>	
	Primer:	1 x Sikafloor®-161 HC
	Wearing course:	1 x Sikafloor®-264 HC + Sikadur 501

APPLICATION INFORMATION

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

Consumption	System	Product	Consumption
Sikafloor MultiDur ES-C			
	Primer	Sikafloor®-264 HC	0.35-0.50 kg/m ²
	Roller coating	Sikafloor®-264 HC	0.35 - 0.50 kg/m ²
Sikafloor MultiDur ET			
	Primer	Sikafloor®-264 HC	0.35-0.50 kg/m ²
	Texture Coating	Sikafloor®-264 HC + + 1.5 – 3% Extender T	0.55 - 0.7 kg/m ²
Sikafloor MultiDur ET PRO (improved slip resistance):			
	Primer	Sikafloor®-264 HC	0.35 - 0.50 kg/m ²
	Texture Coating	Sikafloor®-264 HC + 1.5 – 3% Extender T + 10% Sikadur 502	0.55 - 0.7 kg/m ²
Sikafloor MultiDur EB			
	Primer	Sikafloor®-161 HC	0.70 kg/m ²
	Medium Broadcast	Sikadur 502	3.00 kg/m ²
	Top Coat	Sikafloor®-264 HC	0.70 kg/m ²
Sikafloor MultiDur EB PRO			
	Primer	Sikafloor®-161 HC	0.35 - 0.50 kg/m ²
	Wearing coat	Sikafloor®-264 HC	0.70 kg/m ²
	Fully Broadcast	Sikadur®-502	3.00 kg/m ²
	Top Coat	Sikafloor®-264 HC	0.70 kg/m ²
Sikafloor MultiDur ES-10			
	1.0 mm: Primer	Sikafloor®-161 HC	0.35 - 0.50 kg/m ²
	Self-smoothing	Sikafloor®-264 HC + Sikadur 504	0.90 kg/m ² 0.40 kg/m ²

Sikafloor MultiDur ES-15/30		
1.5 mm	Sikafloor-161HC	0.35 - 0.50 kg/m ²
Primer		
	Sikafloor®-264 HC	1.10 kg/m ²
Self-smoothing	+ Sikadur 501	1.10 kg/m ²
2.0 mm	Sikafloor-161HC	0.35 - 0.50 kg/m ²
Primer		
	Sikafloor®-264 HC	1.45 kg/m ²
Self-smoothing 2.0 mm	+ Sikadur 501	1.45 kg/m ²
3.0 mm	Sikafloor-161HC	0.35 - 0.50 kg/m ²
Primer		
	Sikafloor®-264 HC	2.20 kg/m ²
Self-smoothing 3.0 mm	+ Sikadur 501	2.20 kg/m ²
Leveling Option for all above System:	Sikafloor®-161 HC	Refer to PDS of Sikafloor®-161 HC

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

Please consult with Sika representative in case application is at lower temperature (Less than 15Deg.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 \leq 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 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®-264 HC on Sikafloor®-264 HC allow:

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

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

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.
- 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 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.

MIXING

Pre - mix is recommended for component A with quartz filler 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.

De-can 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 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 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.

CLEANING OF TOOLS

Clean all tools and application equipment with suitable solvent 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 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

FURTHER DOCUMENTS

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".

NOTES AND LIMITATIONS

- 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 $\leq 4\%$ 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.
- **Material Temperature:** Precondition material for at least 24 hours between 18° to 24°C
- **Ambient Temperature:** Minimum/Maximum $8^{\circ}/35^{\circ}\text{C}$
- **Substrate Temperature:** Minimum/Maximum $8^{\circ}/35^{\circ}\text{C}$. 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.

BASIS OF PRODUCT DATA

All technical data stated in this 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 and recommended uses for this product may vary from country to country. Please consult the local Product Data Sheet for the exact product data and uses.

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®-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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