

PRODUCT DATA SHEET

Sikafloor®-304 W NA

FLEXIBLE CLEAR POLYURETHANE MATTE TOPCOAT

PRODUCT DESCRIPTION

Sikafloor®-304 W NA is a low VOC, clear, two-part, water based polyurethane, matte finish coat for use with flexible membrane systems.

USES

Sikafloor®-304 W NA may only be used by experienced professionals.

Matte finish top coat for use with decorative Sikafloor® systems and flexible Sika ComfortFloor® Systems.

CHARACTERISTICS / ADVANTAGES

- Water based
- Very low odor, low VOC
- Good UV resistance, non-yellowing
- Easy to clean
- Clear matte finish

PRODUCT INFORMATION

Chemical Base

Packaging

Component A	1.51 US gal. (5.71 L)
Component B	0.35 US gal. (1.32 L)
Component A+B:	1.86 US gal. (7.03 L)

Mix complete units only

Appearance / Color

Clear. Not intended for field pigmentation.

Shelf Life

12 months in unopened container

Storage Conditions

Store in dry and cool conditions at temperatures ranging between 40 and 90 °F (4 and 32°C).

Volatile organic compound (VOC) content

31 g/L

(A+B Combined)

TECHNICAL INFORMATION

Shore D Hardness	80	ASTM D2240 at 73°F (23°C) and 50% R.H
Abrasion Resistance	CS-17/1,000 rotations/1,000 g -0.029g	ASTM D4060 at 73°F(23°C) and 50% R.H
Tensile Strength	2,422 Psi (16.7 MPa)	ASTM D638 at 73°F(23°C) and 50% R.H
Elongation at Break	27.6 %	ASTM D638 at 73 °F (23°C) and 50 % R.H
Tensile Adhesion Strength	>500 Psi (3.5 MPa) (concrete failure)	ASTM D4151 at 73°F(23°C) and 50% R.H
Impact Strength	16ft.lb	ASTM D2794 at 73 °F (23°C) and 50 % R.H
Indentation	6.4%	ASTM MII-PRF -24613 at 73°F(23°C) and 50% R.H
Chemical Resistance	Please consult Sikafloor® Technical Services.	
Water Absorption	5.13% (24hr) 5.5% (7days)	ASTM D570 at 73 °F (23°C) and 50 % R.H
Coefficient of Friction	0.51	ANSI 137.1 at 73 °F (23°C) and 50 % R.H

APPLICATION INFORMATION

Mixing Ratio	4.3:1 by volume			
Coverage	Coverage rates are calculated based on material needed for finishing of smooth surfaces. Approximately 313 sq. ft. per gallon at 5 wet mils. Kit coverage is approximately 595 sq. ft. at 5 mils wet.			
Pot Life	Material Temperature	Time		
	50 °F (10 °C)	~ 40 minutes		
	68°F (20 °C)	~ 30 minutes		
	86 °F (30 °C)	~ 20 minutes		
Cure Time	Ambient & Substrate Temperature	Foot traffic	Light traffic	Full cure
	50 °F (10 °C)	~ 48 hours	~ 4 days	~ 7 days
	73 °F (23 °C)	~ 24 hours	~ 2 days	~ 4 days
	86 °F (30 °C)	~ 8 hours	~ 24 hours	~ 2 days
Waiting / Recoat Times	Ambient & Substrate Temperature	Time		
	50 °F (10 °C)	~ 16 hours		
	73 °F (23 °C)	~ 5 hours		
	86°F (30 °C)	~ 2 hours		

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

LIMITATIONS

Notes on 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® 1610 or Sikafloor® 22 NA PurCem®. or Sikafloor® 24 NA PurCem®.

When relative humidity tests for concrete substrate are conducted per ASTM F2170 for project specific requirements, values must be $\leq 85\%$. If values are $> 85\%$ according to ASTM F2170 use Sikafloor® 1610 or Sikafloor® 22 NA PurCem® or Sikafloor® 24NA PurCem®.

Material Temperature: Precondition material for at least 24 hours between 65 °F to 75 °F (18–24 °C)

Ambient Temperature: Minimum/Maximum 50/85 °F (10/30 °C)

Substrate Temperature: Minimum/Maximum 50/85 °F (10/30 °C). Substrate temperature must be at least 5 °F (3 °C) above measured Dew Point. Mixing and Application must adhere to Material, Ambient and Substrate temperatures listed above or a decrease in product workability and slower cure rates will occur.

Relative Ambient Humidity: Maximum ambient humidity 75 % (during application and curing). Sikafloor®-304 W NA is a water-based product. Significant amounts of water vapor may accumulate in closed areas with inadequate ventilation causing arrested curing of the coating which may not be reversible. Insure adequate ventilation and air changes before applying this product.

Dew Point: Beware of condensation!

The substrate must be at least 5 °F (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.

- If heating is required do not use gas, oil, diesel or other fossil fuel heaters since these heaters produce large quantities of both carbon dioxide and water vapor, which may adversely affect the finish. For heating use only electric powered warm air blower systems.
- Do not apply while ambient and substrate temperatures are rising, as pinholes may occur.
- 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.
- 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.

ENVIRONMENTAL, HEALTH AND SAFETY

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

APPLICATION INSTRUCTIONS

SURFACE PREPARATION

Surface must be clean, sound and dry. Remove dust, laitance, grease, curing compounds, bond inhibiting impregnations, waxes and any other contaminants. All projections, rough spots, etc. should be removed to achieve a level surface prior to the application.

Concrete - Should be cleaned and prepared to achieve a laitance-free and contaminant-free, open-textured surface by shot-blasting or equivalent mechanical means (CSP-3 to CSP-4 as per ICRI guidelines). Sweep and vacuum any remaining dirt and dust with a wet/dry vacuum. Removing residual dust will help ensure a tenacious bond between the primer/membrane and substrate. Whenever "shot-blasting" is utilized, be careful to leave concrete with a uniform texture.

"Over-blasting" will result in reduced coverage rates of the primer/membrane and/or subsequent topcoats. The "shotblast" pattern may show through the last coat, known as "tracking". The compressive strength of the concrete substrate should be at least 3,626 psi (25 MPa) with a minimum pull of strength 218 psi (1.5 MPa) in tension at the time of application. For other substrates, please contact Sikafloor® Technical Services.

MIXING

Mixing Ratio - 4.3:1 by volume

Mix Full units only.

Premix Part A resin using a drill and jiffy blade (300–450 rpm). Add Part B hardener to Part A and mix with a jiffy mixer continuously for 3 minutes until a uniform mix has been achieved. To achieve a smoother surface texture an longer working time, 5 (12 oz.) to 10 % (24 oz.) water by volume should be added to each resin/ hardener mix.

Following addition of the water, mix with Jiffy mixer continuously for 1 minute. Wait one minute and then mix again for one additional minute. The quantity of water added must be the same in every mix. If the quantity is not the same, it can influence the gloss and texture of the cured film resulting in irregularity in the finished floor.

To ensure thorough mixing, pour materials into a second container following the initial mix and blend again to achieve a consistent mix. Over mixing may cause air entrainment.

APPLICATION

This material can be applied using either a spray or roller application. Most consistent finish results are obtained through spray application. Contact Sikafloor® Technical Service for more information regarding spraying this product.

Prior to application confirm relative air humidity and dew point. Minimize air movement during the topcoat application to ensure that surface dry does not happen prior to release of any bubbles or entrapped air. Ensure that sufficient air movement is restored following the application in order to ensure the required curing conditions are met.

Divide the area to be coated into equal sections for the number of units to be applied, to ensure the correct yield. Wet out rollers when starting application taking into consideration the amount of material the roller will absorb.

The roller will absorb approx. 10.5 oz.–17.6 oz. of coating. Start coating the floor by cutting in the edges with a brush and/or small roller. Only cut in edges of an area that can be top coated in 10 minutes, to attain minimal visibility of roller marking. Work quickly within the pot life to pour out the material and spread at the desired coverage rate. Overworking or under-application may also result in coating pick up or glossy holidays in the cured film.

IMPORTANT NOTE - This product does not have a visible end of pot life.

It is imperative that you watch the time and temperature to ensure you are working well within the pot life. To minimize roller marking when finish is applied via roller application, the material must be poured onto the floor then spread with a 3/8" nap roller in the pouring direction with the bead. The material should then be cross rolled covering a width of approximately 4 feet and a depth of approximately 5 feet.

Do not overlap more than 2" onto the prior pass. Porous areas where the surface of the self leveling layer is "opened" by sanding (such as after repairs), must be pre-coated a few minutes ahead of the final roll-out to ensure wet out and minimize visibility. A seamless finish can be achieved if a "wet" edge is maintained throughout the application.

OTHER RESTRICTIONS

See Legal Disclaimer.

LEGAL DISCLAIMER

- KEEP CONTAINER TIGHTLY CLOSED
- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- FOR PROFESSIONAL USE ONLY

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates ("SIKA"), the user must always read and follow the warnings and instructions on the product's most current product label, Product Data Sheet and Safety Data Sheet which are available at usa.sika.com or by calling SIKA's Technical Service Department at 1-800-933-7452. Nothing contained in any SIKA literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each SIKA product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within the product's shelf life. User determines suitability of product for intended use and assumes all risks. User's and/or buyer's sole remedy shall be limited to the purchase price or replacement of this product exclusive of any labor costs. **NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.**

Sale of SIKA products are subject to the Terms and Conditions of Sale which are available at <https://usa.sika.com/en/group/SikaCorp/termsandconditions.html> or by calling 1-800-933-7452.

Sika Corporation

201 Polito Avenue
Lyndhurst, NJ 07071
Phone: +1-800-933-7452
Fax: +1-201-933-6225
usa.sika.com

Sika Mexicana S.A. de C.V.

Carretera Libre Celaya Km. 8.5
Fracc. Industrial Balvanera
Corregidora, Queretaro
C.P. 76920
Phone: 52 442 2385800
Fax: 52 442 2250537



Product Data Sheet

Sikafloor®-304 W NA
February 2021, Version 01.03
020812060030000022

Sikafloor-304WNA-en-US-(02-2021)-1-3.pdf

