ENVIRONMENTAL PRODUCT DECLARATION

as per *ISO 14025* and *EN 15804+A2*

Owner of the Declaration	PT. Sika Indonesia
Publisher	Institut Bauen und Umwelt e.V. (IBU)
Programme holder	Institut Bauen und Umwelt e.V. (IBU)
Declaration number	EPD-SIK-20250385-CBA1-EN
Issue date	12/08/2025
Valid to	11/08/2030

Sikafloor®-264 HC

Sika Indonesia

Institut Bauen und Umwelt e.V.

ECO PLATFORM EPD VERIFIED

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General Information

Sika Indonesia

Programme holder

IBU – Institut Bauen und Umwelt e.V.
Hegelplatz 1
10117 Berlin
Germany

Declaration number

EPD-SIK-20250385-CBA1-EN

This declaration is based on the product category rules:

Reaction resin products, 01/08/2021
(PCR checked and approved by the SVR)

Issue date

12/08/2025

Valid to

11/08/2030

Dipl.-Ing. Hans Peters
(Chairman of Institut Bauen und Umwelt e.V.)

Florian Pronold
(Managing Director Institut Bauen und Umwelt e.V.)

Sikafloor®-264 HC

Owner of the declaration

PT. Sika Indonesia
Jl. Raya Cibinong-Bekasi Km.20 00
16820 Bogor
Indonesia

Declared product / declared unit

1 kg Sikafloor®-264 HC with packaging

Scope:

The EPD applies to Sikafloor®-264 HC, a 2-part epoxy coloured coating manufactured at Sika's plant in Bogor, Indonesia. The EPD covers the product stages, construction process stages, and disposal at end-of-life stage. The product declared in this EPD is available with different packaging options. While the EPD presents average values for packaging impacts across the relevant life cycle stages, an annex is provided for transparency. The annex includes a detailed breakdown of the individual packaging options considered in the averaging.
The owner of the declaration shall be liable for the underlying information and evidence; the IBU shall not be liable with respect to manufacturer information, life cycle assessment data and evidences.

The EPD was created according to the specifications of EN 15804+A2. In the following, the standard will be simplified as *EN 15804*.

Verification

The standard EN 15804 serves as the core PCR
Independent verification of the declaration and data according to ISO 14025:2011
☐ internally ☒ externally

Mr Stephen Forson ,
(Independent verifier)

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Product

Product description/Product definition

Sikafloor®-264 HC is a 2-part epoxy coloured coating that can provide a hard wearing, seamless, low-maintenance, smooth glossy finish or slip resistant finish when broadcast with different aggregate grades. The product is used as roller coat for concrete and cement screeds and seal coat for broadcast systems.
The two-component product is available as separate packaged parts, and also 20 kg and 10 kg A+B sets. Density of the mixed product is 1.40 kg/L. For the use and application of the product the respective national provisions at the place of use apply, in Germany for example the building codes of the federal states and the corresponding national specifications.

Application

Sikafloor®-264 HC may only be used by experienced professionals. It is used as roller coat for concrete and cement screeds with normal up to medium heavy wear, e.g. storage and assembly halls, maintenance workshops, garages and loading ramps. Alternatively, it can also be used as seal coat for broadcast systems, such as multi-storey and underground carparks, maintenance hangars and for wet process areas, e.g. beverage and food industry.

Technical Data

Sikafloor®-263 SL HC has been tested according to *DIN 53505*, *DIN 53109*, *EN 196-1*, *ISO 4624* to obtain the following technical information.

Constructional data

Name	Value	Unit
Density Mixed resin	1.4	kg/m^3
Shore D Hardness (7 days) acc. to DIN 53505	~76	
Abrasion resistance acc. to DIN 53109	41	mg
Compressive strength (28 days) acc. to EN 196-1	~53	N/mm^2
Tensile strength in flexure (28 days) acc. to EN 196-1	~20	N/mm^2
Tensile adhesion strength (failure in concrete) acc. to ISO 4624	>1.5	N/mm^2

Note: both the compressive strength and the tensile strength in flexure were tested with aggregate blended mixture formed by mixing the mixed resin with aggregate F36 in 1:0.9 ratio.

Performance data of the product with respect to its characteristics in accordance with the relevant technical provision (no CE-marking).

Base materials/Ancillary materials

Indicative Formulation Components

The formulation of Sikafloor®-264 HC can be coded as shown in the table below.

Name	Value	Unit
Epoxy resin	20-45	%
Hardener	5-20	%
Filler	30-55	%
Plasticizer	5-20	%
Other additive	0-15	%

This product/article/at least one partial article contains substances listed in the *candidate list* (date: 09.05.2025) exceeding 0.1 percentage by mass: no
This product/article/at least one partial article contains other cancerogenic, mutagenic, reprotoxic (CMR) substances in categories 1A or 1B which are not on the *ECHA* candidate list, exceeding 0.1 percentage by mass: no
Biocide products were added to this construction product or it has been treated with biocide products (this then concerns a treated product as defined by the *REGULATION (EU) No 528/2012*: no

Reference service life

Cured reactive epoxy products comply with a variety of, often specific, functions in the construction or refurbishment of building structures. They decisively improve the usability of building structures and significantly extend their original service lives. The anticipated reference service life depends on the specific installation situation and the exposure associated with the product. It can be influenced by weathering as well as mechanical or chemical loads.

LCA: Calculation rules

Declared Unit

The declared unit is 1 kg Sikafloor®-264 HC at the ratio that the two components must be mixed before processing.
The mixing ratio of Part A: Part B is 79: 21 by weight.

Declared unit and mass reference

Name	Value	Unit
Declared unit	1	kg
Productiveness Roller coating per layer	0.3 - 0.5	kg/m^2
Productiveness Textured roller coating per layer	0.5 - 0.8	kg/m^2
Productiveness Broadcast system wearing course	~2	kg/m^2
Productiveness Broadcast system top coat per layer	0.6 - 0.8	kg/m^2
Gross density	1400	kg/m^3

Note: these figures are theoretical and do not allow for any additional material required due to surface porosity, surface profile, variations in level, wastage or any other variations etc.

Apply the product to a test area to calculate the exact consumption for the specific substrate conditions and proposed application equipment.

Other declared units are allowed if the conversion is shown transparently.

System boundary

This EPD is based on the system boundary cradle-to-gate with options, module C1 - C4 and D.
The LCA includes the following modules:
A1: Extraction and processing of raw materials used in the production of the product. Materials required to produce 1 kg of the product are included.
A2: Transportation of raw materials used in the production of the product to the factory gate in Bogor, Indonesia.
A3: Production processes and input energy and water for cooling and cleaning. Waste processing of production waste and wastewater. Manufacturing of packaging.
A4: Transportation of the packed product from the production site in Bogor Indonesia to the construction site which are mostly on the Java Island.

A5: The end-of-life treatment of packaging material, material loss from product residue in the packaging and the manual mixing to prepare for installation are included in this module. Material loss refers to the amount of product not used during the application phase in the building. This amount is 5 % of the product. Impacts related to the production and disposal of this part are charged to the A5 module.
C1: Construction demolition of the building where the flooring is applied.
C2: Transport of the construction demolition material to a waste-processing facility.
C3: Energy consumption for shredding in a waste-processing facility.
C4: Disposal of the construction demolition material in landfill.
D: Benefits for reuse, recovery, and/or recycling - not applicable in this LCA study.

Geographic Representativeness

Land or region, in which the declared product system is manufactured, used or handled at the end of the product´s lifespan: Indonesia

Comparability

Basically, a comparison or an evaluation of EPD data is only possible if all the data sets to be compared were created according to *EN 15804* and the building context, respectively the product-specific characteristics of performance, are taken into account. The main database used is *Sphera* Managed LCA content *CUP2024.2*, complemented with *Ecoinvent* 3.10.

LCA: Scenarios and additional technical information

Characteristic product properties of biogenic carbon

No renewable raw materials are used in the product or the packaging. The biogenic carbon value is therefore reported as zero.

Packaging per declared unit

The product comes with three packaging options: 200 L drum, 20 L and 10 L tinplated cans. The packaging options were grouped into option 1: 200 L drum + label and option 2: tinplated can + label.

Name	Value	Unit
Mild steel Packaging option 1	0.0755	kg
Plastic film Packaging option 1	0.00027	kg
Steel tinplated Packaging option 2	0.0795	kg
Plastic film Packaging option 2	0.00027	kg

LCA results in this EPD is an average of all packaging types

Note: 1 kg of biogenic carbon is equivalent to 44/12 kg of CO_2.

The following technical information serves as a basis for the declared modules or can be used for the development of specific scenarios in the context of a building assessment.

Transport to the building site (A4)

Name	Value	Unit
Litres of fuel	0.012	l/100km
Transport distance	100	km
Capacity utilisation (including empty runs)	53	%

In case a **reference service life** according to applicable ISO standards is declared then the assumptions and in-use conditions underlying the determined RSL shall be declared. In addition, it shall be stated that the RSL applies to the reference conditions only.

The same holds for a service life declared by the manufacturer. Corresponding information related to in-use conditions needs not be provided if a service life taken from the list of service life by *BNB* is declared.

End of life (C1-C4)

A conservative end-of-life scenario, including 100 % landfilling of the construction product, was applied

Name	Value	Unit
Collected as mixed construction waste	1	kg
Transport to waste-processing facility	100	km
Energy consumption for waste-processing	2	kWh/ton
Landfilling	1	kg

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LCA: Results

DESCRIPTION OF THE SYSTEM BOUNDARY (X = INCLUDED IN LCA; MND = MODULE OR INDICATOR NOT DECLARED; MNR = MODULE NOT RELEVANT)

Product stage			Construction process stage		Use stage							End of life stage				Benefits and loads beyond the system boundaries
Raw material supply	Transport	Manufacturing	Transport from the gate to the site	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling-potential
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	X	X	MND	MND	MNR	MNR	MNR	MND	MND	X	X	X	X	X

RESULTS OF THE LCA - ENVIRONMENTAL IMPACT according to EN 15804+A2: 1 kg Sikafloor®-264 HC

Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
GWP-total	kg CO_2 eq	4.01E+00	3.66E-02	2.87E-01	6.07E-04	3.39E-02	2.01E-03	5.19E-02	0
GWP-fossil	kg CO_2 eq	3.94E+00	3.67E-02	1.92E-01	6.09E-04	3.4E-02	2.01E-03	1.53E-02	0
GWP-biogenic	kg CO_2 eq	6.02E-02	0	9.55E-02	0	0	1.06E-06	3.66E-02	0
GWP-luluc	kg CO_2 eq	2.92E-03	8.83E-04	1.71E-04	1.43E-05	8.19E-04	4.08E-06	8.3E-06	0
ODP	kg CFC11 eq	3.26E-08	1.53E-15	1.73E-09	2.48E-17	1.42E-15	1.88E-16	4.09E-14	0
AP	mol H^+ eq	1.21E-02	3.25E-04	6.05E-04	3.03E-06	3.02E-04	1.14E-05	1.14E-04	0
EP-freshwater	kg P eq	2.55E-04	4.1E-08	1.57E-05	6.64E-10	3.8E-08	3.25E-09	7.59E-08	0
EP-marine	kg N eq	2.99E-03	1.64E-04	1.72E-04	1.45E-06	1.52E-04	3.22E-06	3.17E-05	0
EP-terrestrial	mol N eq	3.22E-02	1.82E-03	1.63E-03	1.62E-05	1.69E-03	3.58E-05	3.46E-04	0
POCP	kg NMVOC eq	1.07E-02	3.1E-04	5.67E-04	4.11E-06	2.87E-04	8.67E-06	1.07E-04	0
ADPE	kg Sb eq	1.26E-05	1.14E-08	4.37E-07	1.84E-10	1.06E-08	8.19E-11	6.38E-10	0
ADPF	MJ	7.47E+01	4.7E-01	3.55E+00	7.61E-03	4.36E-01	2.14E-02	1.99E-01	0
WDP	m^3 world eq deprived	7.64E-01	1.64E-04	3.66E-02	2.65E-06	1.52E-04	2.77E-04	1.66E-03	0

GWP = Global warming potential; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential of land and water; EP = Eutrophication potential; POCP = Formation potential of tropospheric ozone photochemical oxidants; ADPE = Abiotic depletion potential for non-fossil resources; ADPF = Abiotic depletion potential for fossil resources; WDP = Water (user) deprivation potential)

RESULTS OF THE LCA - INDICATORS TO DESCRIBE RESOURCE USE according to EN 15804+A2: 1 kg Sikafloor®-264 HC

Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
PERE	MJ	8.09E+00	4.36E-02	3.87E-01	7.06E-04	4.04E-02	1.16E-02	2.94E-02	0
PERM	MJ	0	0	0	0	0	0	0	0
PERT	MJ	8.09E+00	4.36E-02	3.87E-01	7.06E-04	4.04E-02	1.16E-02	2.94E-02	0
PENRE	MJ	5.8E+01	4.7E-01	2.72E+00	7.61E-03	4.36E-01	2.14E-02	1.99E-01	0
PENRM	MJ	1.67E+01	0	8.36E-01	0	0	0	0	0
PENRT	MJ	7.47E+01	4.7E-01	3.55E+00	7.61E-03	4.36E-01	2.14E-02	1.99E-01	0
SM	kg	0	0	0	0	0	0	0	0
RSF	MJ	0	0	0	0	0	0	0	0
NRSF	MJ	0	0	0	0	0	0	0	0
FW	m^3	2.19E-02	7.36E-05	9.66E-04	1.19E-06	6.83E-05	9.06E-06	4.66E-05	0

PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water

RESULTS OF THE LCA – WASTE CATEGORIES AND OUTPUT FLOWS according to EN 15804+A2: 1 kg Sikafloor®-264 HC

Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
HWD	kg	5.22E-02	3.49E-12	2.68E-03	5.65E-14	3.24E-12	1.94E-13	4.87E-11	0
NHWD	kg	1.63E+00	2.45E-05	1.87E-01	3.96E-07	2.27E-05	7.62E-06	9.92E-01	0
RWD	kg	7.58E-04	7.38E-08	3.39E-05	1.2E-09	6.85E-08	3.61E-09	1.82E-06	0
CRU	kg	0	0	0	0	0	0	0	0
MFR	kg	0	0	0	0	0	0	0	0
MER	kg	0	0	0	0	0	0	0	0
EEE	MJ	0	0	0	0	0	0	0	0
EET	MJ	0	0	0	0	0	0	0	0

HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy

RESULTS OF THE LCA – additional impact categories according to EN 15804+A2-optional:
1 kg Sikafloor®-264 HC

Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
PM	Disease incidence	1.98E-07	2.17E-09	8.14E-09	3.59E-11	2.01E-09	3.25E-10	1.36E-09	0
IR	kBq U235 eq	1.23E-01	7.38E-06	5.78E-03	1.19E-07	6.84E-06	6.37E-07	1.89E-04	0
ETP-fw	CTUe	7.7E+01	8.76E-02	3.87E+00	1.42E-03	8.12E-02	1.09E-02	1.57E-01	0
HTP-c	CTUh	6.25E-09	1.86E-12	3.46E-10	2.94E-14	1.73E-12	1.16E-12	3.1E-12	0
HTP-nc	CTUh	3.98E-08	5.99E-11	2.19E-09	9.71E-13	5.56E-11	7.23E-11	1.49E-10	0
SQP	SQP	8.96E+00	5.32E-01	4.52E-01	8.61E-03	4.93E-01	7.93E-03	2.48E-02	0

PM = Potential incidence of disease due to PM emissions; IR = Potential Human exposure efficiency relative to U235; ETP-fw = Potential comparative Toxic Unit for ecosystems; HTP-c = Potential comparative Toxic Unit for humans (cancerogenic); HTP-nc = Potential comparative Toxic Unit for humans (not cancerogenic); SQP = Potential soil quality index

Disclaimer 1 – for the indicator 'Potential Human exposure efficiency relative to U235'. This impact category deals mainly with the eventual impact of low-dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure or radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, radon and from some construction materials is also not measured by this indicator.
Disclaimer 2 – for the indicators 'abiotic depletion potential for non-fossil resources', 'abiotic depletion potential for fossil resources', 'water (user) deprivation potential, deprivation-weighted water consumption', 'potential comparative toxic unit for ecosystems', 'potential comparative toxic unit for humans – cancerogenic', 'Potential comparative toxic unit for humans - not cancerogenic', 'potential soil quality index'. The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high as there is limited experience with the indicator.

References

Annex
Annex to Sikafloor 264 HC - Analysis of Different Packaging Options

Standards
EN 15804
EN 15804:2012+A1 2013, Sustainability of construction works — Environmental Product Declarations — Core rules for the product category of construction products.

EN 15804
EN 15804:2012+A2:2019+AC:2021, Sustainability of construction works — Environmental Product Declarations — Core rules for the product category of construction products.

ISO 14025
EN ISO 14025:2011, Environmental labels and declarations — Type III environmental declarations — Principles and procedures.

IBU 2021
Institut Bauen und Umwelt e.V.: General Instructions for the EPD programme of Institut Bauen und Umwelt e.V., Version 2.0, Berlin: Institut Bauen und Umwelt e.V., 2021
www.ibu-epd.com

DIN 53109
DIN 53109:2000-08, Testing of paper and board - Determination of abrasion by the abrasion wheel method

DIN 53505
DIN 53505:2000-08, Testing of rubber - Shore A and Shore D hardness test

ECHA/REACH Candidate List
European Chemicals Agency (ECHA): Candidate List of substances of very high concern for Authorisation. 09.05.2025.

Ecoinvent 3.10
Ecoinvent Version 3.10: Database for Life Cycle Assessment. Swiss Centre for Life Cycle Inventories (ecoinvent Centre), 2024.

EN 196-1
EN 196-1:2016, Methods of testing cement - Part 1: Determination of strength

ISO 4624
ISO 4624:2023, Paints and varnishes — Pull-off test for adhesion

Managed LCA content
CUP 2024.1. Life cycle assessment database, by Sphera Solutions GmbH, Leinfelden-Echterdingen

PCR Part A
Product Category Rules for Building-Related Products and Services, Part A: Calculation Rules for the Life Cycle Assessment and Requirements on the Project report, Version 1.3, Institut Bauen und Umwelt e.V., 31.08.2022

PCR Part B
Product Category Rules for Construction Products, Part B: Reaction resin products, v.8, 19.10.2023

Regulation (EU) No. 305/2011
Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011 laying down harmonised conditions for the marketing of construction products.

REGULATION (EU) No 528/2012
Regulation (EU) No 528/2012 of the European Parliament and of the Council of 22 May 2012 concerning the making available on the market and use of biocidal products.

Sphera LCA for Experts
Version 10.9. Life cycle assessment software, by Sphera Solutions GmbH, Leinfelden Echterdingen

The literature referred to in the Environmental Product Declaration must be listed in full.Standards already fully quoted in the EPD do not need to be listed here again.
The current version of PCR Part A and PCR Part B of the PCR document on which they are based must be referenced.

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