

Environmental Product Declaration

 **EPD**
INTERNATIONAL EPD SYSTEM



in accordance with ISO 14025:2006 and EN 15804:2012+A2:2019/AC:2021 for:

Sikadur-Combiflex[®]

EPD of multiple products, based on the average results of the product group

**SG10, SG20, TF10, TF20
from Sika Services AG**



BUILDING TRUST

Programme:	The International EPD System, www.environdec.com
Programme operator:	EPD International AB
Type of EPD:	EPD of multiple products from a company
EPD registration number:	EPD-IES-0026318:001
Version date:	2026-05-29
Validity date:	2031-05-28

An EPD may be updated or depublished if conditions change. To find the latest version of the EPD and to confirm its validity, see www.environdec.com

Product recently on the market – Results of this EPD shall be used with care as the LCI data is not yet based on 1 year of production which may result in increased uncertainty



General information

Programme Information	
Programme:	The International EPD® System
Address:	EPD International AB Box 210 60 SE-100 31 Stockholm Sweden
Website:	www.environdec.com
E-mail:	support@environdec.com

Product Category Rules (PCR)
CEN standard EN 15804 serves as the Core Product Category Rules (PCR)
Product Category Rules (PCR): PCR 2019:14 Construction products (EN 15804+A2) (2.0.1) UN CPC code: 3699, Articles of plastics n.e.c.
PCR review was conducted by: The Technical Committee of the International EPD System. A full list of members is available on www.environdec.com . The review panel may be contacted via support@environdec.com . Chairs of the PCR review: Rob Rouwette (chair), Noa Meron (co-chair).

Third-party Verification
Independent third-party verification of the declaration and data, according to ISO 14025:2006, via: ☒ Individual EPD verification without a pre-verified LCA/EPD tool Third-party verifier: <i>Marcel Gómez Consultoria Ambiental</i> Approved by: International EPD System
Procedure for follow-up of data during EPD validity involves third party verifier: ☐ Yes ☒ No

The EPD owner has the sole ownership, liability, and responsibility for the EPD.

EPDs within the same product category but published in different EPD programmes, may not be comparable. For two EPDs to be comparable, they shall be based on the same PCR (including the same first-digit version number) or be based on fully aligned PCRs or versions of PCRs; cover products with identical functions, technical performances and use (e.g. identical declared/functional units); have identical scope in terms of included life-cycle stages (unless the excluded life-cycle stage is demonstrated to be insignificant); apply identical impact assessment methods (including the same version of characterisation factors); and be valid at the time of comparison.

For further information about comparability, see EN 15804 and ISO 14025.

Information about EPD owner

Owner of the EPD: Sika Services AG

Address: Sika Services AG, Tüffenwies 16, 8048 Zürich

Contact: Elma Avdyli, avdyli.elma@ch.sika.com

LCA practitioner: Greenize Projects

Description of the organisation: Sika is a specialty chemicals company with a globally leading position in the development and production of systems and products for bonding, sealing, damping, reinforcing, and protection in the building sector and industrial manufacturing. Sika has subsidiaries in 102 countries around the world and, in over 400 factories, produces innovative technologies for customers worldwide.

Product-related or management system-related certifications:

- ISO 9001: Quality Management System (CH15/1206.00)
- ISO 14001: Environmental Management System (CH15/1207.00)
- ISO 45001: Occupational Health & Safety (CH20/1034.00)

Product information

Product name: Sikadur-Combiflex®

UN CPC code: 3699, Articles of plastics n.e.c.

Product description: Sikadur-Combiflex® System is a high-performance system for sealing joints and cracks and is ideal for sealing construction joints, connection joints and movement or expansion joints. The system allows high levels of movement in one or more directions while maintaining a watertight seal. It consists of a waterproof tape based on flexible modified polyolefin (FPO). The system has improved adhesion properties and is available in 1 and 2 mm thicknesses.

The system is used for sealing:

- Movement joints
- Construction joints
- Pipes
- Fissures and cracks
- Structural components where differential settlement is expected

The system is used for sealing joints and cracks in different structures and applications, such as:

- Tunnels
- Sewers
- Hydroelectric plants
- Wastewater treatment plants
- Foundations and other buried structures
- Water retention structures
- Drinking water reservoirs
- Swimming pools

The most relevant features of the products are:

- Versatile system suitable for difficult applications
- Very good crack bridging ability
- No activation required
- Good resistance to specific chemicals
- Easy to install
- Good resistance to ageing
- Good resistance to permanent exposure to UV radiation
- Good resistance to root penetration
- Wide service temperature range
- Different types of adhesives available
- Free of plasticisers
- Hot air weldable
- Suitable for contact with drinking water¹

Additional information about the products can be found on www.sika.com.

Name and location of production site(s): Sika Manufacturing AG Industriestr. 26, 6060 Sarnen, Switzerland

¹ The product is certified as **suitable** for contact with drinking water in accordance with RD 3/2023, LABAQUA, test report number 4161456

Content declaration

1 m ² of Sikadur-Combiflex®				
Product content	Content %	Post-consumer recycled material mass-% of product	Biogenic material mass-% of product	Biogenic material kg C/declared unit
Polymer	79,6-98,3	0	0	0,000
Filler	0,0-14,9	0	0	0,000
Pigment	0,7-4,9	0	0	0,000
Stabilizer	0,6-1,1	0	0	0,000
TOTAL	100,0	0	0	0,000

Packaging materials	Mass kg	Mass % (versus the product)	Biogenic material kg C/declared unit
Packaging film	0,0032	0,16-0,33	0,00
Cardboard	0,0252	1,22-2,62	0,01
Palette	0,0890	4,32-9,27	0,04
Adhesive tape	0,0002	0,01-0,02	0,00
TOTAL	0,1175	5,71-12,24	0,05

1 kg biogenic carbon in the product/packaging is equivalent to the uptake of 44/12 kg of CO₂.

No substances included in the *Candidate List of Substances of Very High Concern for authorization under REACH Regulations* are present in the products above the threshold for registration with the European Chemicals Agency (< 0,1% wt/wt).

LCA information

Declared unit: 1 m² of Sikadur-Combiflex®

Conversion factor to mass: The grammage of the products under study varies from 959,00 g/m² (TF10) to 2177,53 g/m² (SG20). For calculation purposes, an average grammage of 1,5 kg/m² was used as the conversion factor.

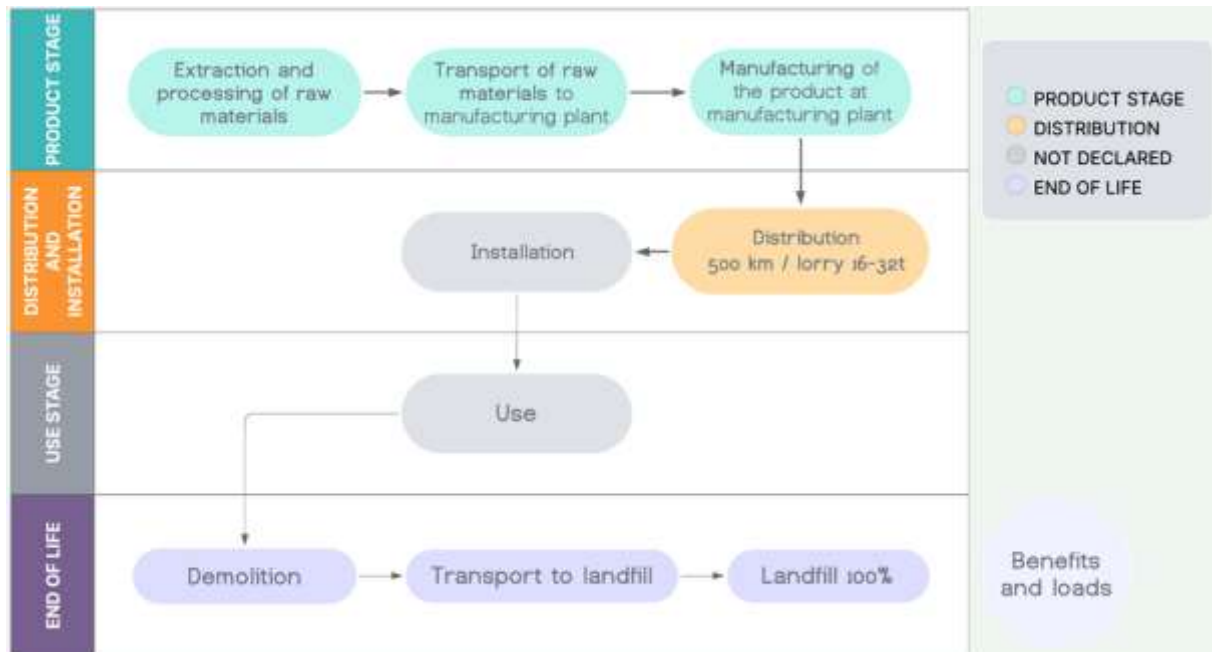
Time representativeness: 2025.

Geographical scope: A1-A2, Global; A3, Switzerland (Sarnen); A4, C and D, Global.

Database(s) and LCA software used: Database ecoinvent 3.10 (compiled March 2024) and LCA software Simapro 9.6.0.1.

Description of system boundaries: *Cradle-to-gate with options, modules C1-C4, module D and optional module A4 (A1–A3 + C + D and additional module A4).*

Process flow diagram: The diagram for the Sikadur-Combiflex® production process is shown below.



Production

The production of Sikadur Combiflex® SG10, SG20, TF10 and TF20 takes place at Sika's manufacturing plant in Sarnen, Switzerland. At this facility, the raw materials are dosed and mixed, and the resulting product undergoes the required quality controls. After this, the products are packed and prepared for distribution. Production waste is properly sorted and delivered to a local certified waste management company.

Electricity used at the manufacturing site is modelled according to the market-based approach. The plant is supplied with 100% renewable electricity, certified through Guarantees of Origin (GoO)². The climate impact factor (GWP-GHG) associated with this electricity is 0,0014 kg CO₂ eq./kWh.

To avoid cut-offs, data gaps were filled using generic proxies. The share of raw materials modelled with these generic data is well below 1% by mass. Secondary data were selected and evaluated based on their technological, geographical and temporal representativeness.

Distribution and Installation

The distribution scenario assumes a road transport using a 16-32 tonne EURO5 lorry and a distance of 500 km to the customer. The installation process is not included in this study.

End of life

The end-of-life scenario considered realistic for the declared products, due to their difficult recyclability and in accordance with the default scenarios indicated in PCR 2019:14, is described below.

Parameters of C1-C4 Modules	Value per 1 m ² of Sikadur® Combiflex
Collection process, specified by type, module C1	1,5 kg collected with mixed construction waste 1,1 kWh/tonne
Assumptions for scenario development (transport of waste to waste manager), module C2	16-32 tonne EURO5 truck 80 km from the construction site to the landfill
Recovery system, specified by type, module C3	0% - 0,0 kg for recycling
Disposal, specified by type, module C4	100% - 1,5 kg for landfill

Module D

Module D includes the loads and benefits derived from the recycling and incineration of product and packaging waste. In this case, there are no benefits or loads due to the end-of-life scenario considered.

Parameters of D module	Value per 1 m ² of Sikadur® Combiflex
Material for recycling	0,0 kg of product waste

² The company commits to maintaining the purchase of these Guarantees of Origin throughout the entire validity period of this EPD. Should there be any change in the electricity supply or the availability of these certificates, the environmental impact results will be updated accordingly.

Cut-off rules and exceptions

According to EN 15804:2012+A2:2019/AC:2021, inputs may be excluded when they represent less than 1% of the renewable and non-renewable primary energy use or 1% of the mass of a unit process, with a maximum of 5% omitted per module. Under these criteria, processes such as administrative consumables and employee travel are excluded due to their environmental relevance being below 1%.

Missing data were completed using generic proxies, which account for well under 1% of raw material mass, and secondary data were selected based on technological, geographical, and temporal representativeness.

Data quality

Data quality was assessed in accordance with EN 15804:2012+A2:2019/AC:2021, EN 15941, ISO 14044 and PCR 2019:14 v2.0.1, considering representativeness, completeness, consistency and reliability. Primary production data was collected from January to June 2025. This 6-month period is considered the most representative record of the current manufacturing state of the production plant. The manufacturer will monitor and validate these figures against full-year data as soon as it becomes available.

All relevant flows were included, and primary data underwent internal verification, complemented by secondary data sourced from the peer-reviewed ecoinvent 3.10 database (2024).

Overall data quality is rated as “Good” (3,4), supported by the combination of verified primary information and high-quality secondary datasets. This approach ensures that the model reflects real production conditions while maintaining consistency with established LCA and EPD standards.

Assumptions and allocation rules

Sikadur-Combiflex® is produced at the Sika Manufacturing AG plant in Sarnen, Switzerland. The environmental profile for the manufacturing stage (A3) is modelled based on the following criteria:

- **Electricity Mix:** The electricity used at the manufacturing site is modeled using a market-based approach. The energy supply is composed of on-site photovoltaic generation complemented by grid-purchased 100% renewable hydropower, fully backed by Guarantees of Origin (GoO).
- **Data Period:** All primary production data, including energy and water consumption, is based on verified values from January–June 2025. This period is considered representative of the annual production cycle following the stabilization of the new centralized facility. The manufacturer commits to validating these results once a full year of production data is available to ensure long-term accuracy.
- **Allocation:** Energy and water consumption, as well as production losses and waste generated at the A3 stage, have been allocated based on the plant's total production volume for the reference period. All values refer to the declared unit of 1 m² of product.
- **Co-products:** As no co-products are generated during the manufacturing process of the considered products, no allocation of inputs or outputs between different product streams was necessary.

Modules declared, geographical scope, share of primary data (in GWP-GHG results) and data variation (in GWP-GHG results):

	Product stage			Distribution / installation		Use stage							End-of-life stage				Beyond product life cycle
	Raw material supply	Transport	Manufacturing	Transport	Installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling-potential
Module	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Modules declared	X	X	X	X	ND	ND	ND	ND	ND	ND	ND	ND	X	X	X	X	X
Geography	EU	EU	CH	GLO	-	-	-	-	-	-	-	-	GLO	GLO	GLO	GLO	GLO
Share of primary data	1,34%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – products	5%-63%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – sites	0%			-	-	-	-	-	-	-	-	-	-	-	-	-	-

GLO: Global; EU: Europe; CH: Switzerland

ND: Not declared; X: Declared

Process	Source type	Source	Reference year	Data category	Share of primary data, of GWP-GHG results for A1-A3
Extraction and processing of raw materials	Database	ecoinvent 3.11	2024	Secondary data	0,00%
Transport of raw materials	Collected data Database	EPD Owner ecoinvent 3.11	2025	Primary data	1,28%
Manufacturing of the product	Collected data	EPD owner	2025	Primary data	0,06%
Total share of primary data, of GWP-GHG results for A1-A3					1,34%

Environmental performance

The estimated impact results are only relative statements, which do not indicate the endpoints of the impact categories, exceeding threshold values, safety margins and/or risks. The results of the end-of-life stage (modules C1-C4) should be considered when using the results of the product stage (modules A1-A3). Biogenic carbon in packaging has been balanced out already in modules A1-A3.

These values are calculated as the average result in accordance with PCR 2019:14 and EN 15804. They do not describe the performance of any specific product, but rather the average of the declared product group.

Mandatory impact category indicators according to EN 15804 (EF 3.1)

1 m ² of Sikadur-Combiflex®								
Indicator	Unit	A1-A3	A4	C1	C2	C3	C4	D
GWP-total	kg CO ₂ eq.	4,66E+00	1,23E-01	5,55E-04	1,85E-02	0,00E+00	1,42E-02	0,00E+00
GWP-fossil	kg CO ₂ eq.	4,65E+00	1,23E-01	5,55E-04	1,85E-02	0,00E+00	1,41E-02	0,00E+00
GWP-biogenic	kg CO ₂ eq.	4,72E-03	4,21E-06	2,16E-08	6,33E-07	0,00E+00	2,24E-05	0,00E+00
GWP-luluc	kg CO ₂ eq.	3,43E-03	3,02E-06	1,91E-08	4,55E-07	0,00E+00	1,88E-06	0,00E+00
ODP	kg CFC 11 eq.	1,67E-07	2,51E-09	8,73E-12	3,78E-10	0,00E+00	4,60E-10	0,00E+00
AP	mol H ⁺ eq.	1,49E-02	3,07E-04	5,19E-06	4,62E-05	0,00E+00	1,64E-04	0,00E+00
EP-freshwater	kg P eq.	1,50E-04	1,18E-04	2,44E-06	1,77E-05	0,00E+00	4,25E-05	0,00E+00
EP-marine	kg N eq.	2,81E-03	1,29E-03	2,67E-05	1,94E-04	0,00E+00	4,58E-04	0,00E+00
EP-terrestrial	mol N eq.	2,91E-02	5,52E-02	2,53E-04	8,30E-03	0,00E+00	2,26E-01	0,00E+00
POCP	kg NMVOC eq.	2,09E-02	5,35E-04	7,95E-06	8,05E-05	0,00E+00	1,65E-04	0,00E+00
ADP-minerals&metals	kg Sb eq.	3,53E-06	4,07E-09	2,32E-11	6,12E-10	0,00E+00	3,87E-09	0,00E+00
ADP-fossil*	MJ	1,22E+02	1,63E+00	7,31E-03	2,45E-01	0,00E+00	3,38E-01	0,00E+00
WDP*	m ³	3,91E+00	6,91E-04	5,76E-06	1,04E-04	0,00E+00	-1,96E-01	0,00E+00

Acronyms: **GWP-fossil**: Global Warming Potential fossil fuels; **GWP-biogenic**: Global Warming Potential biogenic; **GWP-luluc**: Global Warming Potential land use and land use change; **ODP**: Depletion potential of the stratospheric ozone layer; **AP**: Acidification potential, Accumulated Exceedance; **EP-freshwater**: Eutrophication potential, fraction of nutrients reaching freshwater end compartment; **EP-marine**: Eutrophication potential, fraction of nutrients reaching marine end compartment; **EP-terrestrial**: Eutrophication potential, Accumulated Exceedance; **POCP**: Formation potential of tropospheric ozone; **ADP-minerals&metals**: Abiotic depletion potential for non-fossil resources; **ADP-fossil**: Abiotic depletion for fossil resources potential; **WDP**: Water (user) deprivation potential, deprivation-weighted water consumption

*Disclaimer: The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.

Additional mandatory and voluntary impact category indicators

1 m ² of Sikadur-Combiflex®								
Indicator	Unit	A1-A3	A4	C1	C2	C3	C4	D
GWP- GHG	kg CO ₂ eq.	4,66E+00	1,23E-01	5,55E-04	1,85E-02	0,00E+00	1,41E-02	0,00E+00

1 m ² of Sikadur-Combiflex®								
Indicator	Unit	A1-A3	A4	C1	C2	C3	C4	D
Human toxicity-cancer	CTUh	7,83E-09	9,26E-12	3,87E-14	1,39E-12	0,00E+00	1,52E-11	0,00E+00
Human toxicity-non cancer	CTUh	1,89E-08	8,12E-10	5,51E-13	1,22E-10	0,00E+00	3,86E-10	0,00E+00
Ecotoxicity	CTUe	1,56E-03	4,23E-05	8,27E-07	6,36E-06	0,00E+00	1,60E-05	0,00E+00
Land Use	Pt	2,25E+01	3,64E-03	1,55E-05	5,48E-04	0,00E+00	8,12E-01	0,00E+00
Particulate Matter	disease inc.	1,35E-07	8,09E-09	1,49E-10	1,22E-09	0,00E+00	2,56E-09	0,00E+00
Ionising radiation	kBq U-235 eq	1,73E-01	2,21E-04	6,53E-07	3,33E-05	0,00E+00	1,38E-04	0,00E+00

Resource use indicators

1 m ² of Sikadur-Combiflex®								
Indicator	Unit	A1-A3	A4	C1	C2	C3	C4	D
PERE	MJ	9,91E+00	5,65E-03	1,61E-05	8,50E-04	0,00E+00	5,47E-03	0,00E+00
PERM	MJ	1,76E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	1,17E+01	5,65E-03	1,61E-05	8,50E-04	0,00E+00	5,47E-03	0,00E+00
PENRE	MJ	1,22E+02	1,63E+00	7,31E-03	2,45E-01	0,00E+00	3,38E-01	0,00E+00
PENRM	MJ	4,72E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	1,69E+02	1,63E+00	7,31E-03	2,45E-01	0,00E+00	3,38E-01	0,00E+00
SM	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	m ³	7,48E-02	4,17E-05	2,29E-07	6,28E-06	0,00E+00	-4,21E-03	0,00E+00

Acronyms: **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 re-sources; **SM**: Use of secondary material; **RSF**: Use of renewable secondary fuels; **NRSF**: Use of non-renewable secondary fuels; **FW**: Use of net fresh water

Waste indicators

1 m ² of Sikadur-Combiflex®								
Indicator	Unit	A1-A3	A4	C1	C2	C3	C4	D
Hazardous waste disposed	kg	1,74E-03	1,08E-05	5,01E-08	1,62E-06	0,00E+00	2,21E-06	0,00E+00
Non-hazardous waste disposed	kg	3,43E-02	4,95E-05	2,13E-07	7,46E-06	0,00E+00	1,49E+00	0,00E+00
Radioactive waste disposed	kg	1,43E-04	1,53E-07	3,73E-10	2,30E-08	0,00E+00	9,39E-08	0,00E+00

Output flow indicators

1 m ² of Sikadur-Combiflex®								
Indicator	Unit	A1-A3	A4	C1	C2	C3	C4	D
Components for re-use	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Material for recycling	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for energy recovery	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy, electricity	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy, thermal	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

Variation between products

In this EPD, the declared results are based on average data representing a group of similar products. To provide further transparency, the variation in percentage from the minimum to the maximum values of the group are presented. The results and variation cover the full life-cycle scope from modules A to C.

Indicator	Unit	Variation % - Minimum vs. Maximum
GWP-total	kg CO ₂ eq.	90,88%
GWP-fossil	kg CO ₂ eq.	90,90%
GWP-biogenic	kg CO ₂ eq.	72,54%
GWP-luluc	kg CO ₂ eq.	93,66%
ODP	kg CFC 11 eq.	87,51%
AP	mol H ⁺ eq.	100,18%
EP-freshwater	kg P eq.	75,31%
EP-marine	kg N eq.	81,13%
EP-terrestrial	mol N eq.	68,11%
POCP	kg NMVOC eq.	79,16%
ADP-minerals&metals	kg Sb eq.	158,89%
ADP-fossil	MJ	86,95%
WDP	m ³	116,19%
GWP-GHG	kg CO ₂ eq.	90,90%

Abbreviations

Abbreviation	Definition
CEN	European Committee for Standardization
CH	Switzerland
EF	Environmental Footprint
EN	European Norm (Standard)
EPD	Environmental Product Declaration
EU	Europe
EURO 6	European Emission Standard Euro 6
EURO 5	European Emission Standard Euro 5
GLO	Global
GPI	General Programme Instructions
ISO	International Organization for Standardization
kWh	Kilowatt-hour
LCA	Life Cycle Assessment
ND	Not Declared
PCR	Product Category Rules
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
SVHC	Substances of Very High Concern
UN CPC	United Nations Central Product Classification

References

General Programme Instructions of the International EPD® System. Version 5.0.1

PCR 2019:14. Construction products. (EN 15804+A2) (2.0.1)

EN 15804:2012+A2:2019/AC:2021, Sustainability of construction works – Environmental product declarations – Core rules for the product category of construction products.

ISO 14025:2010 Environmental labels and declarations - Type III environmental declarations - Principles and procedures (ISO 14025:2006)

ISO 14040:2006/A1:2020 Environmental management - Life cycle assessment - Principles and framework - Amendment 1 (ISO 14040:2006/Amd 1:2020)

ISO 14044:2006/A1:2018 Environmental management - Life cycle assessment - Requirements and guidelines - Amendment 1 (ISO 14044:2006/Amd 1:2017)

EN 15941:2024, Sustainability of construction works – Data quality for environmental assessment of products and construction work – Selection and use of data.

European Directive 2008/98/CE.

LCA Background Report of Sikadur-Combiflex® (2025).

Version history

Original version of the EPD (2026-05-29).

