

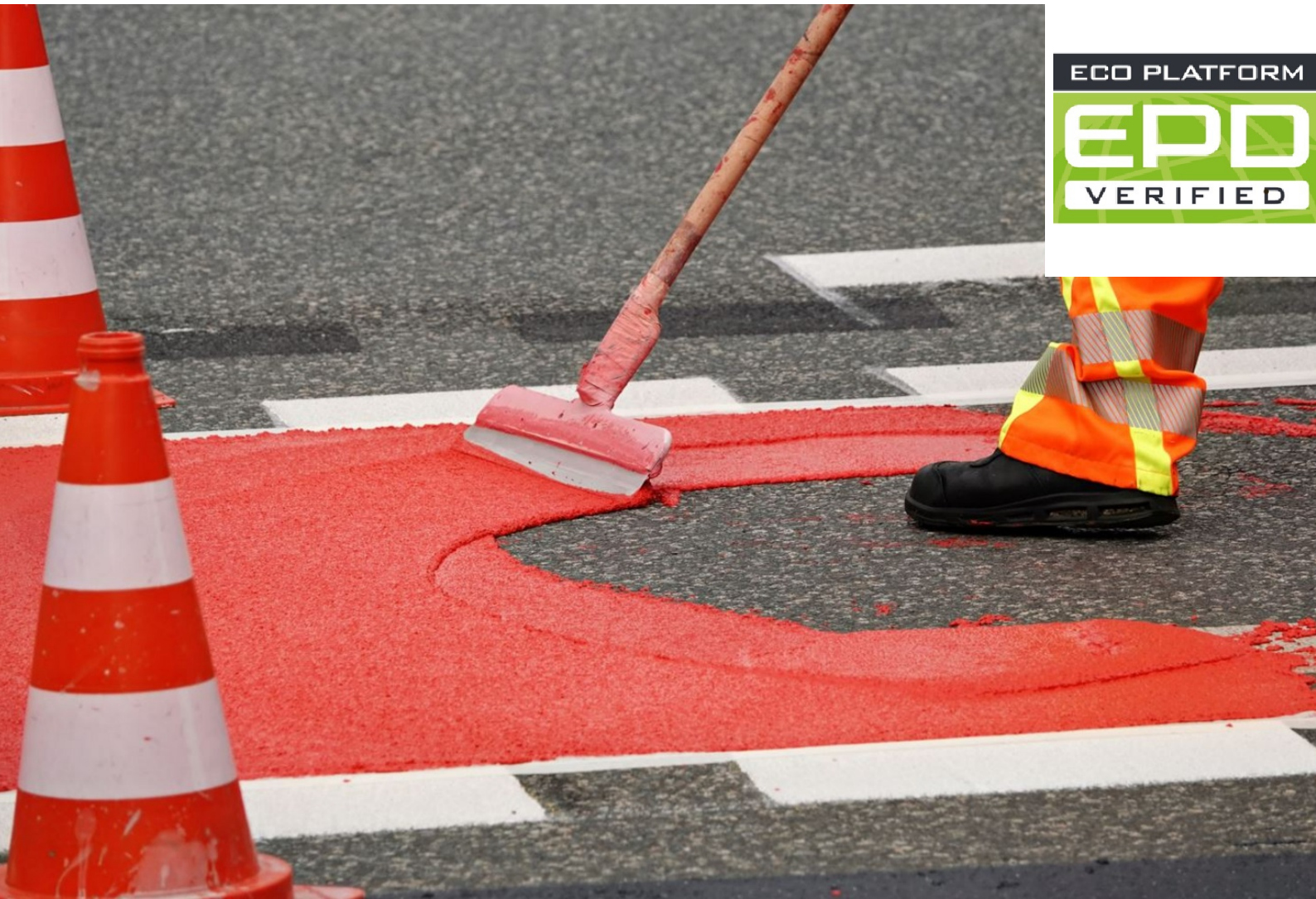
ENVIRONMENTAL PRODUCT DECLARATION

as per ISO 14025 and EN 15804+A2




Owner of the Declaration	SWARCO AG
Publisher	Institut Bauen und Umwelt e.V. (IBU)
Programme holder	Institut Bauen und Umwelt e.V. (IBU)
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SWARCOPLAST Tex high-friction plastic
SWARCO

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General Information

SWARCO Programme holder IBU – Institut Bauen und Umwelt e.V. Hegelplatz 1 10117 Berlin Germany	SWARCOPLAST Tex high-friction plastic Owner of the declaration SWARCO AG Blattenwaldweg 8 6112 Wattens Austria								
Declaration number EPD-SWA-20240416-CBC1-EN	Declared product / declared unit 1 kg of SWARCOPLAST Tex high-friction plastic.								
This declaration is based on the product category rules: Reaction resin products, 01/08/2021 (PCR checked and approved by the SVR)	Scope: This Environmental Product Declaration (EPD) covers SWARCOPLAST Tex high-friction plastic, a solvent-free cold plastic system developed specifically for high-friction bike lane and road markings. By enhancing the skid resistance of pavement surfaces, the product contributes to improved road safety. The product is manufactured at the production site of SWARCO LIMBURGER LACKFABRIK GmbH, Diez (Germany). The environmental data used in this EPD are from year 2023 and represent 100% of the annual production volume of the SWARCOPLAST Tex high-friction plastic. 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 <i>EN 15804</i> .								
Issue date 16/07/2025	Verification <table border="1"> <tr> <td colspan="2">The standard EN 15804 serves as the core PCR</td> </tr> <tr> <td colspan="2">Independent verification of the declaration and data according to ISO 14025:2011</td> </tr> <tr> <td><input type="checkbox"/></td> <td>internally</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>externally</td> </tr> </table>	The standard EN 15804 serves as the core PCR		Independent verification of the declaration and data according to ISO 14025:2011		<input type="checkbox"/>	internally	<input checked="" type="checkbox"/>	externally
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 Dipl.-Ing. Hans Peters (Chairman of Institut Bauen und Umwelt e.V.)	 Dr.-Ing. Nikolay Minkov, (Independent verifier)								
 Florian Pronold (Managing Director Institut Bauen und Umwelt e.V.)									

Product

Product description/Product definition

SWARCOPLAST Tex high-friction plastic is a solvent-free, multi-component cold plastic marking system based on reactive resins. Upon application, it cures chemically to form a thermosetting compound that is stable and resistant to softening under heat.

The product is placed on the market outside the scope of harmonised European product legislation (e.g. the Construction Products Regulation), as it is not subject to such requirements.

Thanks to its high elasticity and inherently textured surface, the material offers excellent skid resistance without the need for additional additives. It is suitable for various road marking applications, including but not limited to bike lanes.

PRODUCT PICTURE



SWARCOPLAST Tex is supplied in tins (16 or 25 kg net weight) and has a shelf life of up to six months when unopened. This representative EPD refers to SWARCOPLAST Tex high-friction plastic in traffic red (RAL 3020), supplied in a 16 kg tinplate bucket. This colour variant was selected as it represented the highest share of the total SWARCOPLAST Tex production volume during the reference year. The declaration also covers the colour variants RAL 3013 tomato red, RAL 5017 traffic blue, RAL 9017 traffic black, RAL 3011 brown red, RAL 1023 traffic yellow, RAL 6024 traffic green, RAL 5002 ultramarine blue, and RAL 5015 sky blue.

All listed variants belong to the same product class and differ only in colour. There are no technical, functional, or application-relevant differences between the variants. The product class has been defined such that all listed variants deviate by no more than $\pm 11\%$ from the representative product in terms of GWP-total (modules A1–A3), with the exception of RAL 6024 traffic green, which shows a deviation of approx. $+25\%$. These deviations are transparently documented in the background report in accordance with the applicable PCR.

The product is designed to meet the performance requirements of EN 1436, which defines the performance characteristics and testing methods for road marking materials. For the use and application of the product, the respective national provisions at the place of use apply — for example, in Germany, the building codes of the federal states and the corresponding national specifications.

Application

The product is suitable for use on bituminous surfaces and on concrete surfaces that have been pre-treated with a suitable primer. Application is carried out manually using a squeegee or a smoothing trowel.

The material is not suitable for use on resin floors or other surfaces, as these substrates are too flexible and may impair adhesion. The product is particularly suitable for areas with high traffic volumes and increased safety requirements, such as intersections or bike lanes, due to its durability and high skid resistance.

MANUAL APPLICATION



Technical Data

The production of SWARCOPLAST Tex high-friction plastic is subject to continuous quality control to ensure consistent product performance. It is manufactured according to internal specifications and designed for high durability and surface friction. The following technical properties apply:

- Product classification: Solvent-free, multi-component cold plastic system with a textured surface to provide high friction performance. No additional drop-on materials are required.
- Skid resistance: Field-tested PTV (Pendulum Test Value) is measuring the SRT (Skid Resistance Tester) value in accordance with standardised procedures.
- Declared values: Based on internal test procedures and validated through long-term field trials under real traffic conditions.

These characteristics support the suitability of the product for use in areas with increased demands on skid resistance and long-term durability, such as bike lanes on intersections or curves.

Constructional data

Name	Value	Unit
Density acc. to EN ISO 2811-1	~ 1.86	kg/l
Pot life acc. to DIN EN ISO 9514	5-10	minutes
Curing time acc. to DIN EN ISO 9117-5	30-40	minutes
VOC content (Volatile Organic Compounds)	~ 3	g/l
Processing temperature	$\geq +5$	$^{\circ}\text{C}$
Relative humidity	≤ 75	%
Applied layer thickness	2-5	mm
Theoretical consumption	~ 5	kg/m ²

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

Base materials/Ancillary materials

SWARCOPLAST Tex high-friction plastic requires no additional anti-skid materials for drop-on applications, as skid-resistant aggregates are already integrated. Unlike mineral-based materials, it is a multi-component reactive resin system containing substances classified as hazardous under *Regulation (EC) No. 1272/2008 [CLP]*, including methyl methacrylate and n-butyl acrylate, which pose risks such as flammability, skin irritation, and sensitisation.

This product contains substances listed in the *REACH* candidate list (date: 2024-01-23) exceeding 0.1% by mass: no.

This product contains other carcinogenic, mutagenic, reprotoxic (CMR) substances in categories 1A or 1B which are not on the 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 (EU) *Ordinance on Biocide Products No. 528/2012*): no.

The Bill of Materials refers to 1 kg of product and has been adjusted to 100 %. Packaging is included based on typical delivery units.

Composition of SWARCOPLAST Tex high-friction plastic

Name	Value	Unit
Fillers	75-80	%
Binders and Resins	15-20	%
Additives	2-4	%
Pigments	1-3	%
TOTAL	100	%

Composition of packaging of SWARCOPLAST Tex high-friction plastic

Name	Value	Unit
Tinplate bucket (16 kg)	55.1	%
Pallet	44.4	%
PE packaging film	0.5	%
TOTAL	100	%

Reference service life

Climatic conditions, road surface types, traffic volume and composition, as well as maintenance activities such as snow removal and gritting, have a significant influence on the durability of SWARCOPLAST Tex high-friction plastic. In particular, performance aspects like colour retention and skid resistance are affected over time and are subject to the requirements of relevant standards (e.g. *EN 1436*).

Based on long-term field observations under real traffic conditions and practical manufacturer experience, the product typically achieves a service life of 5 to 10 years when applied and used under standard central European conditions.

No Reference Service Life (RSL) in accordance with *ISO 15686* is declared, as the actual durability strongly depends on site-specific parameters such as climate, traffic load, and surface conditions.

This indicative period does not represent an RSL as defined in *ISO 15686*. Modules B1–B7 are not declared.

LCA: Calculation rules

Declared Unit

The conversion from kilograms (kg) to litres (l) is based on the density of 1.86 kg/l.

Name	Value	Unit
Declared unit	1	kg
Density	1.86	kg/l

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

System boundary

The representative EPD is classified as "cradle to gate with options, modules C1-C4, and module D (A1-A3 + C + D and additional module A4-A5)".

This EPD is based on a modular approach in accordance with *EN 15804*. The following life cycle modules are included in this study:

- A1–A3: Raw material supply, transport, and manufacturing
- A4–A5: Transport and assembly
- C1–C4: Deconstruction, transport, waste processing, and disposal
- D: Reuse, recovery, or recycling potential

The study excludes wooden pallets as they are classified as capital goods due to their reuse in a return system. Their transport weight is included in Module A4.

A1–A3: Product Stage

A1 – Raw material supply: The product consists of synthetic resins, mineral fillers, pigments, and functional additives. This phase includes the sourcing and storage of raw materials prior to production.

A2 – Transport: All raw materials are delivered to the production facility by truck. Transport distances and modes reflect supplier locations and typical practices. LCA calculations assume an average load factor of 50 % (fully loaded inbound, empty return) to represent realistic transport conditions.

A3 – Manufacturing: The production process involves weighing and mixing of raw materials, followed by homogenization and quality control. The product is then filled into a tinplate bucket and packaged for delivery. Energy consumption during manufacturing is primarily electrical and is modelled using site-specific data.

A4–A5: Construction Process Stage

A4 – Transport from the gate to the site: Transport of the finished product to application sites is carried out by truck. Distances are based on internal logistics data and customer distribution patterns. Energy consumption and emissions were calculated based on transport distance and load weight.

A5 – Assembly: The product is applied as a high-friction surface marking. Application is carried out manually, often involving the mixing of a reactive component. This module also takes waste from packaging (tinplate bucket, PE film) into account.

B1–B7: Use Stage

The use stage (B1–B7) is excluded from the study as SWARCOPLAST Tex high-friction plastic is a passive product. It does not consume energy or resources during its use phase. Potential particle release due to traffic wear is not considered due to insufficient knowledge and the lack of a relevant particle flow indicator in the methodology.

C1–C4: End-of-Life Stage

To provide a realistic overview of end-of-life scenarios, various practical pathways have been considered in line with current road marking practices. The focus lies on how markings are handled after their service life ends.

C1 – Deconstruction/Demolition: Depending on the application scenario, the product may be selectively removed or be removed along with the asphalt layer during road maintenance. Removal is performed either with dedicated grinding equipment or as part of asphalt milling. The share of material removed without the asphalt is modelled in detail, while scenarios involving joint removal with asphalt are considered negligible due to the low product mass share (< 1 %).

C2 – Transport: This phase includes the transport of dismantled material from the site of removal to an appropriate waste treatment or disposal facility. Transport mode and distance are based on typical practices within the road construction and recycling sector.

C3 – Waste Processing: No dedicated waste processing is considered for SWARCOPLAST Tex high-friction plastic in this module, therefore, module C3 is set to zero in this assessment.

C4 – Disposal: This stage covers the final disposal of SWARCOPLAST Tex high-friction plastic. The disposed quantity is based on the remaining product mass after use, assuming removal without reuse, recovery, or recycling. Landfilling is modelled as the end-of-life scenario, and associated emissions are included accordingly.

D: Benefits and Loads Beyond the System Boundaries

This module considers potential environmental benefits associated with the recovery of packaging materials after use. Tinplate buckets are assumed to be collected and recycled as scrap metal, which leads to a reduction in the need for primary metal production. Plastic packaging components such as films may be partially recycled or thermally treated with energy recovery. These end-of-life benefits are included in the assessment based on the material quantities and common waste treatment practices. The recycling potential of the product itself, along with the abraded asphalt, was not taken into account due to its low product mass share (<1 %).

Geographic Representativeness

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

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 life cycle assessment was carried out using the software Ecochain Helix 4.3.1 (© 2025 Ecochain Technologies B.V.). Background data were based on Ecoinvent v3.9.1 and the CEPE LCI Database (Life Cycle Inventory for coatings industry, PEF standard, CEPE, version 03.01.000, 2024).

LCA: Scenarios and additional technical information

Characteristic product properties of biogenic carbon

There is no biogenic carbon contained in the product and the content of packaging (pallet) has been cut off.

Biogenic carbon content

Name	Value	Unit
Biogenic carbon content in product	-	kg C
Biogenic carbon content in accompanying packaging	-	kg C

Note: 1 kg of biogenic carbon is equivalent to 44/12 kg of CO₂.

The electricity mix used in modules A1–A3 entails a global warming potential (GWP-GHG) of **0.7252 kg CO₂e/kWh** (Data: Electricity, residual mix of Germany).

LCA Scenarios and Additional Technical Information

The following scenarios describe the life cycle stages modelled after the production phase (A1–A3):

A4 – Transport from the gate to the site

Name	Value	Unit
Litres of fuel	-	l/100km
Transport distance	60	km
Capacity utilisation (including empty runs)	50	%
Gross density of products transported	1800	kg/m ³
Capacity utilisation volume factor	-	-

A5 – Assembly

Product installation is done manually without the use of machines or external energy. Therefore, no energy consumption is modelled for the application. However, packaging waste generated on-site (e.g. tinplate buckets, PE film) is considered in module A5. No material losses occur during installation.

End-of-life (C1 - C4)

Name	Value	Unit
Collected separately waste type waste type	0.045	kg
Collected as mixed construction waste	0.855	kg
Reuse	-	kg
Recycling (together with asphalt)	0.855	kg
Energy recovery	-	kg
Landfilling	0.045	kg

It is assumed that at end-of-service life, 10 % of the SWARCOPLAST Tex product is lost through abrasion.

Of the remainder, only 5 % is removed from the asphalt and landfilled. In all other cases, the marking is removed along with the asphalt and recycled. Since the share of the SWARCOPLAST Tex product in recycled asphalt is under 1 %, their impact is negligible and not considered further.

D - Benefits and Loads Beyond System Boundaries

Name	Value	Unit
Tinplate buckets recycling	90.2	%
PE packaging film incineration	44.9	%
PE packaging film recycling	37.8	%

LCA: Results

Declared Unit

The declared unit is "1 kilogram of SWARCOPLAST Tex high-friction plastic," including the associated packaging. This unit is used to quantify the environmental impacts across the product's life cycle, including production, application, end-of-life, disposal, and recycling.

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:

Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
GWP-total	kg CO ₂ eq	1.14E+00	5.77E-02	3.56E-03	6.6E-03	4.68E-04	0	4.46E-03	-1E-01
GWP-fossil	kg CO ₂ eq	1.06E+00	5.77E-02	2.76E-03	6.6E-03	4.68E-04	0	4.46E-03	-9.99E-02
GWP-biogenic	kg CO ₂ eq	7.47E-02	1.73E-05	8.02E-04	1.43E-06	1.4E-07	0	4.83E-07	-1.54E-04
GWP-luluc	kg CO ₂ eq	3.61E-04	2.82E-05	1.43E-06	2.03E-06	2.29E-07	0	1.04E-07	-9.87E-05
ODP	kg CFC11 eq	1.44E-08	1.27E-09	2.69E-11	1.26E-10	1.03E-11	0	1.33E-11	-1.06E-09
AP	mol H ⁺ eq	2.74E-03	2.69E-04	9.29E-06	4.53E-05	2.19E-06	0	3.1E-06	-5.73E-04
EP-freshwater	kg P eq	2.09E-05	4.74E-07	5.68E-08	3.96E-08	3.84E-09	0	3.66E-09	-4.09E-06
EP-marine	kg N eq	6.58E-04	1.06E-04	3.64E-06	1.99E-05	8.61E-07	0	6.58E-06	-9.44E-05
EP-terrestrial	mol N eq	6.65E-03	1.14E-03	2.99E-05	2.16E-04	9.29E-06	0	1.37E-05	-1.07E-03
POCP	kg NMVOC eq	2.59E-03	4E-04	9.65E-06	6.75E-05	3.25E-06	0	6.19E-06	-3.71E-04
ADPE	kg Sb eq	3.23E-06	1.8E-07	2.52E-08	1.18E-08	1.46E-09	0	1.01E-09	-2.89E-06
ADPF	MJ	2.37E+01	8.33E-01	2.01E-02	9.1E-02	6.76E-03	0	1.06E-02	-1.11E+00
WDP	m ³ world eq deprived	8.78E-01	3.64E-03	2.63E-04	3.07E-04	2.96E-05	0	4.73E-05	6.81E-04

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:

Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
PERE	MJ	7.38E-01	1.32E-02	1.85E-03	1.02E-03	1.07E-04	0	5.37E-04	-2.79E-01
PERM	MJ	5.07E-01	0	0	0	0	0	0	0
PERT	MJ	1.25E+00	1.32E-02	1.85E-03	1.02E-03	1.07E-04	0	5.37E-04	-2.79E-01
PENRE	MJ	1.88E+01	8.85E-01	2.13E-02	9.67E-02	7.18E-03	0	1.12E-02	-1.19E+00
PENRM	MJ	9.52E-01	0	0	0	0	0	0	0
PENRT	MJ	1.97E+01	8.85E-01	2.13E-02	9.67E-02	7.18E-03	0	1.12E-02	-1.19E+00
SM	kg	0	0	0	0	0	0	0	0
RSF	MJ	-3.72E-06	0	0	0	0	0	0	0
NRSF	MJ	-5.68E-05	0	0	0	0	0	0	0
FW	m ³	1.86E-02	1.17E-04	1E-05	9.87E-06	9.48E-07	0	1.3E-05	-2.56E-04

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:

Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
HWD	kg	6.21E-05	5.24E-06	1.06E-07	5.91E-07	4.26E-08	0	4.89E-08	-2.29E-06
NHWD	kg	1.04E-01	5.27E-02	7.84E-03	3.2E-03	4.27E-04	0	4.51E-02	-1.18E-01
RWD	kg	1.02E-04	2.8E-07	4.24E-08	2.12E-08	2.27E-09	0	7.09E-09	-1.44E-06
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:

Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
PM	Disease incidence	2.72E-08	5.66E-09	1.66E-10	1.15E-09	4.6E-11	0	7.29E-11	-8.65E-09
IR	kBq U235 eq	3.19E-02	4.31E-04	5.46E-05	3.41E-05	3.5E-06	0	1.29E-05	-2.26E-03
ETP-fw	CTUe	1.01E+01	4.1E-01	1.75E-02	4.42E-02	3.33E-03	0	2.11E-02	-3.27E-01
HTP-c	CTUh	1.58E-09	3.1E-11	2.62E-12	2.82E-12	2.52E-13	0	2.7E-13	-1.88E-10
HTP-nc	CTUh	1.14E-08	6.46E-10	4.67E-11	4.52E-11	5.24E-12	0	1.13E-11	-2.48E-09
SQP	SQP	2.65E+00	6.26E-01	5.9E-02	4.01E-02	5.08E-03	0	2.57E-02	-5.86E-01

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

EN 15804+A2

EN 15804:2012+A2:2019, 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

EN 1436

EN 1436:2007, Road marking materials — Road marking performance for road users.

ISO 9001

ISO 9001:2015, Quality management systems — Requirements.

ISO 14001

ISO 14001:2015, Environmental management systems — Requirements with guidance for use.

ISO 45001

ISO 45001:2018, Certified management systems for safety and health at work.

ISO 14044

ISO 14044:2006-10, Environmental management — Life Cycle Assessment - Requirements and guidelines, International Organization for Standardization

ISO 15686

ISO 15686:2011, Buildings and constructed assets – Service life planning.

DIN EN ISO 9117-5

DIN EN ISO 9117-5:2013, Paints and varnishes — Curing time (double-sphere method)

CEPE LCI Database

Life Cycle Inventory for coatings industry (PEF standard), CEPE, version 03.01.000 (2024)

DIN EN ISO 9514

DIN EN ISO 9514:2005, Paints and varnishes — Determination of pot life for multicomponent systems

EN ISO 2811-1

EN ISO 2811-1:2016, Paints and varnishes – Determination of density – Part 1: Pycnometer method

PCR Part A

Calculation Rules for the Life Cycle Assessment and Requirements on the Project Report according to EN 15804+A2:2019, version 1.4, valid as of April 15, 2024

PCR Part B

Reaction resin products, Version 11 (01/08/2024)

Regulation (EC) No. 1272/2008 (CLP)

Classification, Labelling and Packaging of substances and mixtures, European Parliament and Council, 2008.

Regulation (EU) No. 528/2012 (Biocidal Products Regulation)

Regulation concerning the making available on the market and use of biocidal products, European Parliament and Council, 2012.

REACH Regulation

Candidate List of Substances of Very High Concern for Authorisation

Software / Database

Ecochain Helix

Environmental Intelligence Platform for Life Cycle Assessment and Sustainability Management - Ecochain version 4.3.1, 2024

Ecoinvent

Comprehensive Life Cycle Inventory Database for Environmental Impact Assessment; Ecoinvent version 3.9.1

The product is not intended for indoor applications. Therefore, no testing according to AgBB is required.



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