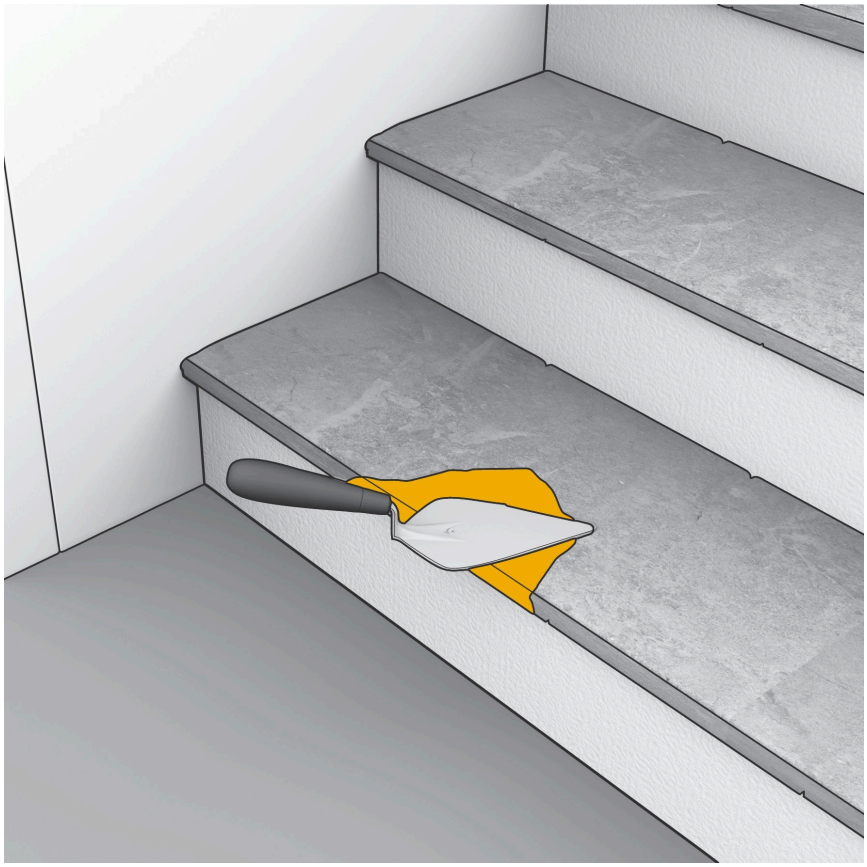
epd-global
Powered by EPD-Norway

ENVIRONMENTAL PRODUCT DECLARATION

In accordance with ISO 14025 and EN 15804+A2

Sika Services AG
Sika MonoTop®-4200 Multi Flow



BUILDING TRUST

Owner of the declaration
Sika Services AG
16 Tüffenwies
8048 Zürich
Switzerland

Product
Sika MonoTop®-4200 Multi Flow

Declared product / Declared unit
1 kg of applied mortar

This declaration is based on Product Category Rules
EN 15804:2012 + A2:2019,
NPCR Part A:2021 ,
NPCR 009 Part B for Technical chemical Products for Construction

Program operator:
EPD Global
Majorstuen P.O. Box 5250
N-0303 Oslo
Norway

Declaration number
NEPD-30358-30358-2

Registration number
NEPD-30358-30358-2

Issue date
06.11.2026

Valid to
05.11.2031

EPD Software
Emidat Platform v1.0.0

General Information

Product
Sika MonoTop®-4200 Multi Flow

Program Operator
EPD Global
Majorstuen P.O. Box 5250
N-0303 Oslo
Norway
Phone: +47 23 08 80 00
Email: post@epd-norge.no

Declaration Number
NEPD-30358-30358-2

This declaration is based on Product Category Rules
EN 15804:2012 + A2:2019,
NPCR Part A:2021 ,
NPCR 009 Part B for Technical chemical Products for Construction

Statements
The owner of the declaration shall be liable for the underlying information and evidence. The Norwegian EPD Foundation shall not be liable with respect to manufacturer, life cycle assessment data and evidences.

Declared unit
1 kg of applied mortar

General information on verification of EPD from EPD tools
Independent verification of data, other environmental information and the declaration according to ISO 14025:2011-10, § 8.1.3 and § 8.1.4. Verification of each EPD is made according to EPD Global's guidelines for verification and approval requiring that tools are i) integrated into the company's environmental management system, ii) the procedures for use of the EPD tool are approved by EPD Global, and iii) the process is reviewed annually by an independent third-party verifier. See Appendix G of EPD Global's General Programme Instructions for further information on EPD tools.

Verification
Independent third-party verification based on the verification of the EPD tool, background data and test-EPD in accordance with EPD Global's procedures and guidelines for verification and approval of EPD tools.
Third-party verifier: Charlotte Merlin, FORCE Technology

Owner of the declaration
Sika Services AG

Contact person
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Phone
+41 58 436 6800

Email
product.sustainability@ch.sika.com

Manufacturer
Sika Services AG
16 Tüffenwies
8048 Zürich, Switzerland

Place of production
Cabanillas del Campo, Spain

Management system
ISO 9001 , ISO 14001 , ISO 45001

Organisation no
Sika Services AG

Issue date
06.11.2026

Valid to
05.11.2031

Year of study
2025

Comparability
EPDs of construction products may not be comparable if they do not comply with EN 15804 and are not seen in a building context. EPD data may not be comparable if the datasets used are not developed in accordance with EN 15804 and if the background systems are not based on the same database (including primary and secondary data).

Development and verification of EPD
The declaration was created using the Emidat EPD tool v1.0, developed by Emidat GmbH which is third-party verified and approved as a Reference Flow Tool with internal review under administration and surveillance by EPD Global under provisions stated in general information on verification of EPD from EPD tools.

Developer of EPD: Ana Arenas
Reviewer of company-specific input data and EPD: Katherine Agapitos

Approved

Håkon Hauan, The Norwegian EPD Foundation

Product

Product description

Sika MonoTop-4200® Multi Flow is a single-component, sulphur-resistant, hand-applied, pumpable and sprayable cementitious mortar for the repair and reinforcement of structures. It reaches high initial and final resistances. Suitable for all types of concrete structures in building or civil works, as well as marine structures. Application thickness up to 80 mm (60 mm with flowable consistency)

Application description

Sika MonoTop-4200® Multi Flow should be used only by specialized personnel.

Suitable for concrete repair work (Principle 3, method 3.1, 3.2 and 3.3 of UNE-EN 1504-9). Repair of chips and deterioration of concrete in buildings, bridges, infrastructures and superstructures

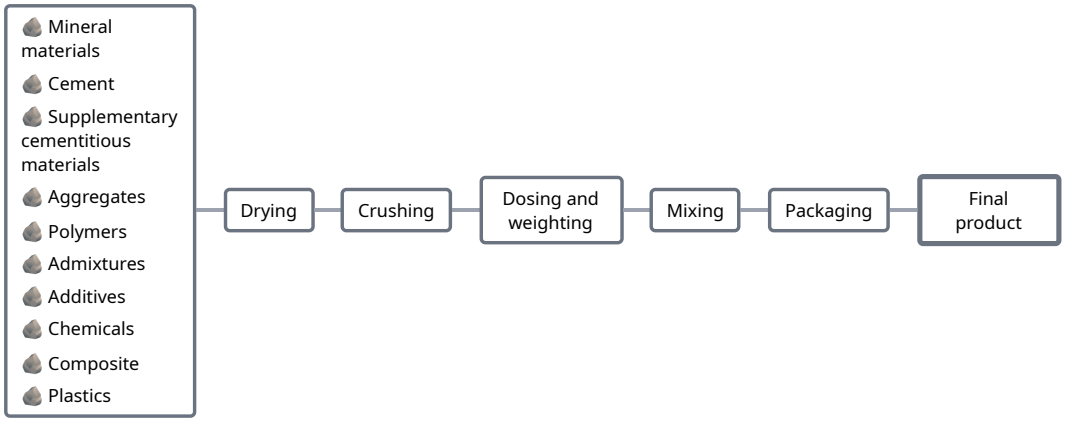
Suitable for structural reinforcement of concrete (Principle 4, method 4.4 of UNE-EN 1504-9). Increasing the bearing capacity of concrete structures through the addition of mortar

Suitable for the conservation or restoration of passivation (Principle 7, method 7.1 and 7.2 of UNE-EN 1504-9). Increasing coating with additional mortar and replacing contaminated or carbonated concrete

Repairs to reinforced concrete structures requiring a Class R4, R3, R2, R1 mortar

Vertical, horizontal and ceiling application

Production process



Product specification

Name of ingredient	Share of total weight
Additives	0 - 2 %
Admixtures	0 - 2 %
Aggregates	50 - 70 %
Cement	30 - 50 %
Chemicals	0 - 2 %
Composite	2 - 10 %
Mineral materials	0 - 2 %
Plastics	0 - 2 %
Polymers	0 - 2 %
Supplementary cementitious materials	2 - 10 %

Packaging

Name	Quantity, kg
Plastic film	1.12e-03
Wooden pallets	0.02
Multi-layer bags (paper and plastic)	2.09e-04

Technical data

	Unit	Value
Fresh mortar density	kg / m³	2100
Mixing water demand	l / kg	0.184

Market

Spain

Recipients

B2B

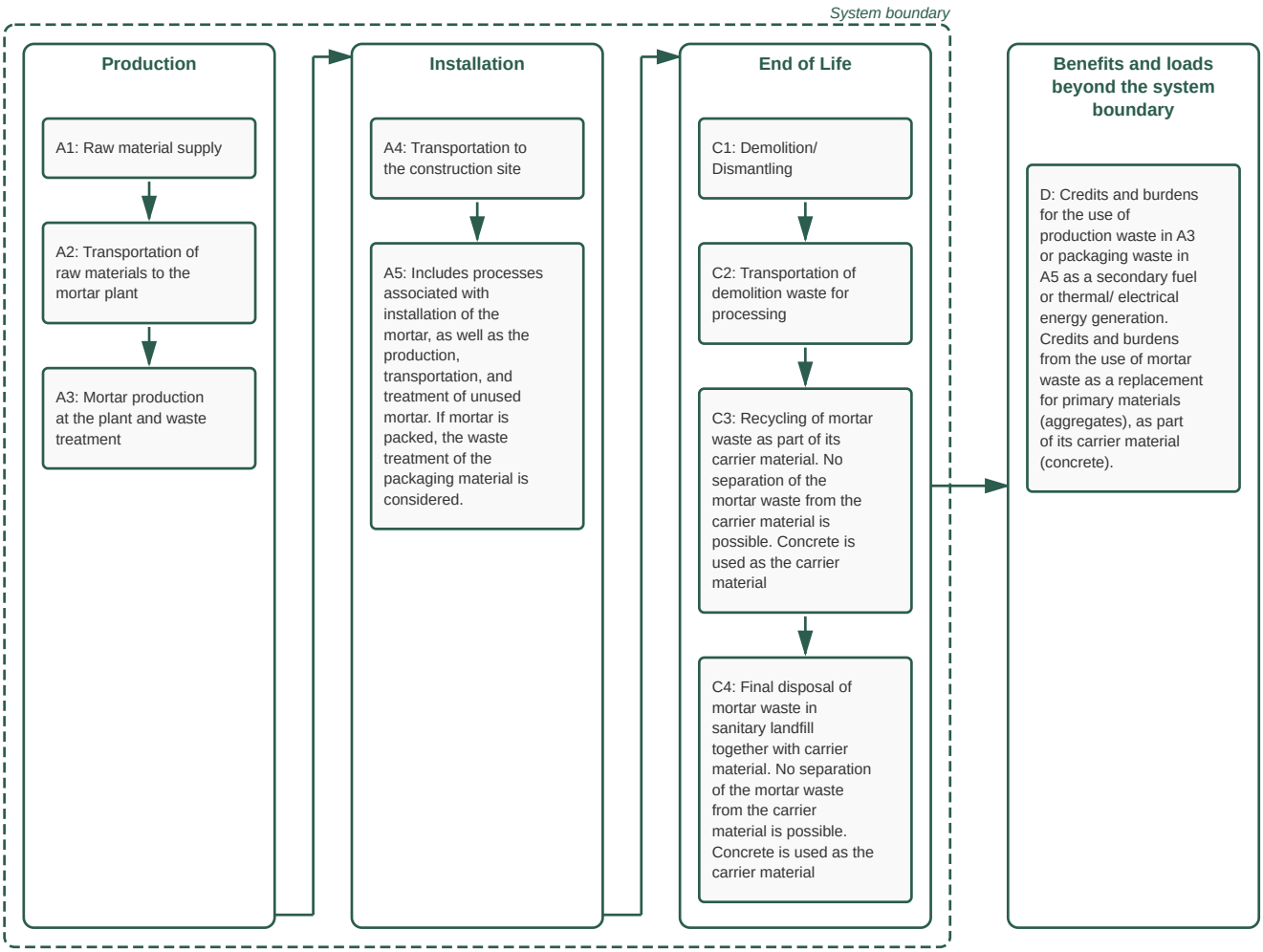
LCA: Calculation rules

Declared unit
1 kg of applied mortar

Product lifetime
50 years
This value represents a conventional product lifespan, not a guaranteed performance duration, and assumes normal exposure conditions, adequate design, and routine maintenance.

Reference service life
Not declared

System boundary



Data quality
The foreground data are based on extensive and detailed data collection at the production site of the manufacturer, covering key processes such as raw material sourcing, formulation, and manufacturing. These foreground data are fully linked with corresponding datasets from the background database (ecoinvent 3.10) or with EN15804+A2-compliant EPDs, ensuring consistency, reliability, and maintaining alignment with the latest industry standards.

The overall data representativeness is rated as fair with an overall score of 3.00/5, in accordance with EN 15804+A2 Annex E guidance on data quality assessment for the calculation of the environmental footprint of products (Table E.2), considering geographical, technical, and temporal representativeness.

The following table discloses all processes or activities assessed with very poor or poor data representativeness according to EN 15804+A2, as well as those assessed as fair that contribute more than 30 % to any core impact indicator in A1–A3:

Element	Source	Year
Aggregates	ecoinvent 3.10	2023
Chemicals	ecoinvent 3.10	2023
Composite	ecoinvent 3.10	2023
Landfill	ecoinvent 3.10	2023
Packaging	ecoinvent 3.10	2023
Wastewater	ecoinvent 3.10	2023
Polymers	ecoinvent 3.10	2023

System boundaries (X=included, MND=module not declared)

	Production			Installation		Use stage							End-of-Life				Next product system
	Raw material supply	Transport	Manufacturing	Transport	Installation Process	Use	Maintenance	Repair	Replacement	Refurbishment	Operational Energy Use	Operational Water Use	Demolition	Transport	Waste Processing	Disposal	Benefits and loads beyond the system boundary
Module	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Modules declared	x	x	x	x	x	MND	MND	MND	MND	MND	MND	MND	x	x	x	x	x
Geography			ES	ES	ES	MND	MND	MND	MND	MND	MND	MND	ES	ES	ES	ES	ES

For the geographies modeled in A1 and A2, refer to *Product specification*.

Type of EPD: Cradle to gate with options, modules A4, A5, C1-C4 + D

Product and construction stage

Module A1: Raw material supply
Module A2: Transportation of raw materials to the mortar plant
Module A3: Mortar production at the plant and waste treatment
Module A4: Transportation to the construction site
Module A5: Includes processes associated with installation of the mortar, as well as the production, transportation, and treatment of unused mortar. If mortar is packed, the waste treatment of the packaging material is considered.

Disposal Stage

Module C1: Demolition/Dismantling
Module C2: Transportation of demolition waste for processing
Module C3: Recycling of mortar waste as part of its carrier material. No separation of the mortar waste from the carrier material is possible. Concrete is used as the carrier material
Module C4: Final disposal of mortar waste in sanitary landfill together with carrier material. No separation of the mortar waste from the carrier material is possible. Concrete is used as the carrier material

Credits and burdens outside the system boundaries

Module D: Credits and burdens for the use of production waste in A3 or packaging waste in A5 as a secondary fuel or thermal/electrical energy generation. Credits and burdens from the use of mortar waste as a replacement for primary materials (aggregates), as part of its carrier material

(concrete).

Cut-off criteria

All inputs and outputs related to the declared modules of Mortar, including raw materials, packaging, transportation, energy usage and ancillary materials, were comprehensively considered in line with EN 15804+A2 and if applicable the product-specific PCR. Furthermore, all known hazardous substances (within the REACH list and the Norwegian Priority List), regulated materials, and significant emissions were declared and are not excluded under the cut-off rules.

The following processes are considered below the EN 15804+A2 cut-off threshold and were excluded:

- Impacts related to the manufacturer's infrastructure and assets
- Manufacturing of means of production, buildings or other capital goods
- Transportation of personnel to the plant
- Transportation of personnel within the plant
- Research and development activities
- Long-term emissions

Allocation

Foreground inventory data (energy and fuels, ancillary materials, emissions and waste) was collected at the production process level. Allocation based on mass was applied to allocate the total output of the production process in 2025 to the reference product.

Ground granulated blast furnace slag (GGBS) is based on blast furnace slag (BFS). BFS is a low revenue co-product of the blast furnace iron making process. Economic allocation was used to allocate impacts from the blast furnace process, based on the market values of pig iron and BFS.

Key assumptions and estimates

Production process flows are allocated to the reference product, as described under allocation. If applied, mass-based allocation assumes a uniform distribution of production impacts across products of the same production process. Where it is applied, foreground inventory data is checked for consistency of production process, to ensure the validity of the allocated results.

LCA: Scenarios and additional technical information

The following information describe the scenarios in the different modules of the EPD. Mass and energy flows are reported per 1 kg of product.

Transport to the building site (A4)	Value	Unit
Location of the production site	Spain	
Location of the installation site	Spain	
Transported mass: Product and packaging	1.02	kg
Transport modality: Truck	transport, freight, lorry >32 metric ton, EURO6	-
Distance	300.00	km
Litres of fuel	36.48	l / 100km
Energy demand	1.58	MJ / t*km
Energy demand (km)	1.62e-03	MJ / km
Capacity utilization	53.30	%

Transport of the product and its packaging from the production site to the installation site. Transport distances are based on external sources such as reported market averages, standards or PCRs. Vehicle type, fuel consumption and capacity utilization assumptions stem from the underlying background transport datasets and are stated below.

Installation into the building (A5)	Value	Unit
Ancillary materials for installation	0	kg
Water use during installation	1.84e-04	m^3
Use of other resources during installation	0	kg
Energy consumption during installation		
Energy impacts of mixing plaster mass	1.00	kg
Material waste on the construction site before waste processing		
Plastic film	1.12e-03	kg
Wooden pallets	0.02	kg
Multi-layer bags (paper and plastic)	2.09e-04	kg
Installation loss rate	5.00	%
Installation loss amount	0.05	kg
Direct emissions to ambient air, soil and water	0	kg
Treatment of packaging waste	Plastic film	
Landfill	23.00	%
Recycling	42.00	%
Incineration	35.00	%
Treatment of packaging waste	Wooden pallets	
Reuse	100.00	%
Treatment of packaging waste	Multi-layer bags (paper and plastic)	
Incineration	100.00	%
Treatment of installation loss waste		

Installation into the building (A5)	Value	Unit
Landfill	100.00	%
Product mass after installation	1.18	kg

Installation losses are accounted for by scaling up the quantity of product required at the construction site by the loss percentage. The production, transportation and treatment of the lost material is assigned to A5. During installation, water is added to the product. For the remaining lifecycle stages, this LCA considers the total mass of the product including the water. The use of mechanized construction equipment during product installation is included as energy use under module A5.

End-of-life scenario (C1-C4)	Value	Unit
Diesel for dismantling	0.07	MJ
PM 2.5 emissions	1.97e-05	kg
PM 10 emissions	7.51e-05	kg
Collection process specified by type		
Collected individually	0	kg
Collected with mixed construction and demolition waste	1.18	kg
Recovery system specified by type		
Destined for reuse	0	kg
Recycling rate	10.00	%
Destined for recycling	0.12	kg
Destined for energy recovery	0	kg
Disposal specified by type		
Product or material destined for final disposal	1.07	kg
Transport		
Distance to landfill	50.00	km
Distance to recycling	50.00	km
Transport modality: Truck	transport, freight, lorry >32 metric ton, EURO6	-
Energy demand	1.58	MJ / t*km
Energy demand (km)	1.87e-03	MJ / km
Capacity utilization	53.30	%

Module C2 includes the impact of transportation of material after deconstruction, during the End-of-Life stage.

Reuse, recovery and/or recycling potentials (D)	Value	Unit
Amount of secondary material that the system takes in	0	kg
Installation (packaging): Material for recycling/reuse	4.69e-04	kg
Installation (packaging): Net flow of secondary material	4.69e-04	kg
End-of-life (product): Material for recycling/reuse	0.12	kg
End-of-life (product): Net flow of secondary material	0.12	kg
Substitution of gravel	0.12	kg
Substitution of plastics	4.69e-04	kg
Installation (packaging): Material eligible for incineration credits	6.00e-04	kg
Installation (packaging): Exported energy eligible for credits	9.20e-03	MJ
Installation (production loss): Material eligible for incineration credits	0	kg
Installation (production loss): Exported energy eligible for credits	0	MJ
End-of-life (product): Material eligible for incineration credits	0	kg
End-of-life (product): Exported energy eligible for credits	0	MJ
Substitution of electricity production, grid mix	2.61e-03	MJ
Substitution of heat production from natural gas	6.59e-03	MJ

Calculation of loads and benefits per EN 15804+A2. Exported energy is credited only where it originates from the incineration of primary material; landfilled fractions receive no exported-energy credit and therefore no avoided primary energy consumption. Recycling or reuse benefits are credited for the net flow of secondary material.

LCA: Results

The following results are based on the market-based electricity approach applied to the foreground system (A3). Further details on electricity data are provided in the Additional Requirements section.

Core environmental impact indicators

Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
GWP-total	kg CO_2-eq.	4.01e-01	3.18e-02	6.44e-02	7.26e-03	6.14e-03	5.53e-04	6.98e-03	-1.94e-03
GWP-fossil	kg CO_2-eq.	4.33e-01	3.18e-02	2.75e-02	7.26e-03	6.13e-03	5.18e-04	6.66e-03	-1.92e-03
GWP-biogenic	kg CO_2-eq.	-3.25e-02	1.60e-05	3.69e-02	7.25e-07	3.08e-06	3.44e-05	3.09e-04	-1.36e-05
GWP-luluc	kg CO_2-eq.	1.53e-04	1.13e-05	1.13e-05	6.31e-07	2.18e-06	4.51e-08	3.46e-06	-2.44e-06
ODP	kg CFC-11-Eq	4.51e-09	6.63e-10	3.53e-10	1.11e-10	1.28e-10	7.93e-12	1.93e-10	-7.73e-11
AP	mol H+-Eq	1.34e-03	7.51e-05	8.82e-05	6.55e-05	1.45e-05	4.68e-06	4.72e-05	-5.98e-06
EP-freshwater	kg P-Eq	8.48e-05	2.24e-06	5.35e-06	2.11e-07	4.31e-07	1.51e-08	5.53e-07	-1.78e-07
EP-marine	kg N-Eq	3.57e-04	1.97e-05	2.33e-05	3.04e-05	3.80e-06	2.17e-06	1.80e-05	-1.64e-06
EP-terrestrial	mol N-Eq	3.68e-03	2.13e-04	2.37e-04	3.33e-04	4.11e-05	2.38e-05	1.96e-04	-1.84e-05
POCP	kg NMVOC-Eq	1.28e-03	1.30e-04	8.53e-05	9.92e-05	2.51e-05	7.08e-06	7.04e-05	-1.00e-05
ADPE	kg Sb-Eq	2.21e-06	9.09e-08	1.94e-07	2.60e-09	1.75e-08	1.86e-10	1.06e-08	-1.18e-08
ADPF	MJ, net calorific value	3.91e+00	4.78e-01	4.73e-01	9.50e-02	9.20e-02	6.78e-03	1.63e-01	-5.00e-02
WDP	m^3 world Eq deprived	7.24e-02	2.40e-03	4.16e-02	2.32e-04	4.62e-04	1.66e-05	4.57e-04	-5.15e-04

GWP-total: Global Warming Potential - total , **GWP-fossil**: Global warming potential - fossil , **GWP-biogenic**: Global Warming Potential - biogenic , **GWP-luluc**: Global Warming Potential - luluc , **ODP**: Depletion potential of the stratospheric ozone layer , **AP**: Acidification potential, Accumulated Exceedance , **EP-freshwater**: Eutrophication potential - freshwater , **EP-marine**: Eutrophication potential - marine , **EP-terrestrial**: Eutrophication potential - terrestrial , **POCP**: Photochemical Ozone Creation Potential , **ADPE**: Abiotic depletion potential - non-fossil resources , **ADPF**: Abiotic depletion potential - fossil resources , **WDP**: Water (user) deprivation potential

Additional indicators

Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
PM	disease incidence	1.80e-08	3.10e-09	1.34e-09	1.07e-08	5.97e-10	1.01e-09	1.07e-09	-8.42e-11
IRP	kBq U235-Eq	1.79e-02	5.80e-04	1.44e-02	4.25e-05	1.12e-04	3.03e-06	1.04e-04	-2.65e-04
ETP-fw	CTUe	1.64e+00	1.13e-01	1.33e-01	1.35e-02	2.18e-02	9.61e-04	2.23e-02	-5.97e-03
HTP-c	CTUh	3.83e-09	2.04e-10	2.75e-10	2.84e-11	3.92e-11	2.03e-12	3.01e-11	-9.25e-12
HTP-nc	CTUh	3.35e-09	3.15e-10	2.78e-10	1.29e-11	6.07e-11	9.20e-13	2.93e-11	-1.18e-11
SQP	dimensionless	1.47e+00	4.80e-01	2.05e-01	6.65e-03	9.26e-02	4.75e-04	3.21e-01	-1.09e-02

PM: Potential incidence of disease due to PM emissions , **IRP**: Potential Human exposure efficiency relative to U235 , **ETP-fw**: Potential Comparative Toxic Unit for ecosystems , **HTP-c**: Potential Comparative Toxic Unit for humans - cancer effects , **HTP-nc**: Potential Comparative Toxic Unit for humans - non-cancer effects , **SQP**: Potential Soil quality index . **IRP**: 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 nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator. **ETP-fw, HTP-c, HTP-nc, SQP**: The results of these environmental impact indicators shall be used with care as the uncertainties on these results are high or as there is limited experienced with these indicators.

Use of resources

Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
PERE	MJ	2.91e-01	7.58e-03	2.67e-01	5.81e-04	1.46e-03	4.15e-05	1.51e-03	-3.03e-03
PERM	MJ	3.30e-01	0.00e+00	-3.10e-01	0.00e+00	0.00e+00	-3.75e-04	0.00e+00	0.00e+00
PERT	MJ	6.21e-01	7.58e-03	-4.27e-02	5.81e-04	1.46e-03	-3.33e-04	1.51e-03	-3.03e-03
PENRE	MJ	3.09e+00	4.78e-01	4.53e-01	9.50e-02	9.20e-02	6.78e-03	1.63e-01	-3.01e-02
PENRM	MJ	8.40e-01	0.00e+00	-2.04e-02	0.00e+00	0.00e+00	-7.67e-02	0.00e+00	-1.99e-02
PENRT	MJ	3.93e+00	4.78e-01	4.33e-01	9.50e-02	9.20e-02	-6.99e-02	1.63e-01	-5.00e-02
SM	kg	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	1.19e-01
RSF	MJ	0.00e+00	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	0.00e+00
FW	m^3	2.47e-03	6.94e-05	1.20e-03	6.17e-06	1.34e-05	4.40e-07	1.69e-04	-1.77e-04

PERE: Primary energy resources - renewable: use as energy carrier , **PERM**: Primary energy resources - renewable: used as raw materials , **PERT**: Primary energy resources - renewable: total , **PENRE**: Primary energy resources - non-renewable: use as energy carrier , **PENRM**: Primary energy resources - non-renewable: used as raw materials , **PENRT**: Primary energy resources - non-renewable: total , **SM**: Use of secondary material , **RSF**: Renewable secondary fuels , **NRSF**: Non-renewable secondary fuels , **FW**: Net use of fresh water

Waste flows

Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
HWD	kg	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
NHWD	kg	2.68e-02	0.00e+00	5.22e-02	0.00e+00	0.00e+00	0.00e+00	1.07e+00	0.00e+00
RWD	kg	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00

HWD: Hazardous waste disposed , **NHWD**: Non hazardous waste disposed , **RWD**: Radioactive waste disposed

Output flows

Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
CRU	kg	0.00e+00	0.00e+00	2.27e-02	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
MFR	kg	0.00e+00	0.00e+00	4.69e-04	0.00e+00	0.00e+00	1.18e-01	0.00e+00	0.00e+00
MER	kg	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
EEE	MJ	2.03e-02	0.00e+00	3.62e-03	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
EET	MJ	4.16e-02	0.00e+00	8.67e-03	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00

CRU: Components for re-use , **MFR**: Materials for recycling , **MER**: Materials for energy recovery , **EEE**: Exported electrical energy , **EET**: Exported thermal energy

Name	Value	Unit
Biogenic carbon content in product	9.38e-05	kg C
Biogenic carbon content in accompanying packaging	1.02e-02	kg C

Additional requirements

Greenhouse gas emissions from the use of electricity in the manufacturing phase

Electricity consumption in the manufacturing phase is composed from the sources below. This EPD follows the market-based approach.

Approach	Electricity	Quantity [kWh]	Emission Factor [kg CO_2e/kWh]
market-based	ecoinvent: electricity production, wind, >3MW turbine, onshore (ES)	0.02	0.03
(location-based)	(ecoinvent: market for electricity, low voltage (ES))	(0.02)	(0.21)
market- and location-based	ecoinvent: electricity production, photovoltaic, 3kWp slanted-roof installation, single-Si, panel, mounted (ES)	1.17e-03	0.08

Rows marked with () are provided for reference and not used in the assessment.

Dangerous substances

The product contains dangerous substances, more than 0.1% by weight.

CAS no.	Share of total mass
1305-78-8	1.44 %

Additional environmental information

Secondary content

The product contains 0 % secondary material. Secondary material includes recycled, recovered and by-product content.

Additional environmental impact indicators required in NPCR Part A for construction products

Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
GWP-IOBC	kg CO_2-eq.	4.40e-01	3.18e-02	2.79e-02	7.26e-03	6.13e-03	5.18e-04	6.67e-03	-1.92e-03

GWP-IOBC: Global Warming Potential - Instantaneous oxidation of biogenic carbon

Global warming potential of co-products used as inputs

Co-product	GWP-total	GWP-IOBC
Ground granulated blast furnace slag (GGBS)	7.99e-02	7.98e-02
Silica fume	4.71e-01	4.70e-01

Values in kg CO2-eq per kg of co-product, excluding transport to the plant.

Bibliography

CEN/TR 15941:2010	Sustainability of construction works - Environmental product declarations - Methodology for selection and use of generic data
EN 15804:2012+A2:2019	Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products
EN 15942:2022-04	Sustainability of construction works - Environmental product declarations - Communication format business-to-business
ISO 14025:2011-10	Environmental labels and declarations - Type III environmental declarations - Principles and procedures
ISO 14040:2021-02	Environmental management - Life cycle assessment - Principles and framework
ISO 14044:2021-02	Environmental management - Life cycle assessment - Requirements and guidelines
EF 3.1	Environmental Footprint (EF) Life Cycle Impact Assessment method - Characterisation Factors version 3.1, European Commission, Joint Research Centre (JRC)
ecoinvent 3.10	ecoinvent, Zurich, Switzerland, database version 3.10
NPCR Part A:2021	Construction products and services, Version 2.0. Issue date: 24.03.2021; validity extended to 31.12.2026.
NPCR 009:2021	Product category rules, Part B: Technical chemical products for the building and construction industry. Issue date: 06.10.2021; validity extended to 31.12.2026.

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