

Environmental Product Declaration

Average EPD

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

Stabilized asphalt mixture MAS 16 with polymer-modified bitumen (MASm 16)

GENERAL TRUST ARGES SRL



Programme

EPD Square | www.epdsquare.com

Programme operator

EPD Square, s.r.o.

EPD Registration number

SQ 00-085

Publication date

28.10.2026

Valid until

27.10.2031

General information

Product

Stabilized asphalt mixture MAS 16 with polymer-modified bitumen (MASm 16)

Programme operator

EPD Square, s.r.o.
Lermontovova 3, 811 05,
Bratislava, Slovak Republic
Email: info@epdsquare.com

Registration number

SQ 00-085

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Valid until date

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Owner of the declaration

GENERAL TRUST ARGEŞ S.R.L.
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Manufacturer

GENERAL TRUST ARGEŞ S.R.L.
Piteşti, Piteşti–Bucharest Road No. 866, Argeş County,
Romania
Telephone: 0248/208510, 0732/630338
Email: generaltrustarges@yahoo.com

Place of production

Bascov – 56B Serelor Street, pct. OFAM, Argeş County,
Romania
Slatina – 225B Vladimirescu Street, Olt County, Romania
Both plants are containerized mobile units. The
addresses above are their registered base locations; the
plants may be temporarily relocated within Romania for
the execution of specific projects.

Product Category Rules (PCR)

EPD Square PCR v1.0.1, 2025
EN 15804 serves as core PCR

Declared unit

1 ton

Mass per DU

1000 kg

UN CPC code

37940 - Bituminous mixtures based on natural and
artificial stone materials and bitumen, natural asphalt or
related substances as a binder

Geographical scope

Romania

Year of study

07/2025 - 06/2026

Comparability

EPDs of construction products may not be comparable if
they do not comply with EN 15804 and if they are not
compared in the context of the building.

EPD author

Ľudmila Vaculová Mečiarová, EPD Clarity, s.r.o.



Verification type

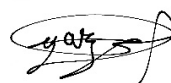
Independent verification of the declaration and data,
according to ISO 14025:2006

Internal: ☐

External: ☒

Verified by

Yazan Badour



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

System boundaries

Cradle to gate, modules C1-C4 and module D. This is EPD of multiple products produced at multiple locations, based on the average results of the product group. The declared results are the production-weighted average of four mix designs manufactured at two plants during the reference year: PmB 45/80-55 at Bascov, PmB 45/80-65 at Slatina, PmB 45/80-65 at Bascov, and PmB 45/80-55 at Slatina. The EPD covers only these two plants and this product group.

Modules declared and geographical scope

	Product stage			Construction process stage		Use stage							End of life stage				Resource recovery stage
	Raw material supply	Transport	Manufacturing	Transport	Construction 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	✓	✓	✓	MND	MND	MND	MND	MND	MND	MND	MND	MND	✓	✓	✓	✓	✓
Geographic scope	RO	RO	RO	MND	MND	MND	MND	MND	MND	MND	MND	MND	RO	RO	RO	RO	RO

Modules not declared = MND

Description of organization

S.C. GENERAL TRUST ARGEŞ S.R.L. is a Romanian company established in 2003, with its registered office located in Piteşti, Şoseaua Piteşti–Bucureşti, No. 866 (DN 65B, km 3+800), Argeş County, Romania.

The company's main activity is construction works for roads and motorways, corresponding to CAEN code 4211.

As a result of the opportunities offered by the road infrastructure sector and a strategy focused on operational efficiency, the company has developed several working sites strategically located to support its production and construction activities.

The core activity of the company is the execution of road construction works.

Manufactured products, such as asphalt mixtures and quarry products, as well as traded goods (asphalt and concrete), represent a limited share of the overall business volume and are mainly produced for internal use in the company's own construction projects. This approach ensures enhanced quality control of materials and optimized technological processes.

Quality, environmental and occupational health & safety management

The company operates an Integrated Management System, certified in accordance with the following international standards:

- ISO 9001 – Quality Management Systems

- ISO 14001 – Environmental Management Systems
- ISO 45001 – Occupational Health and Safety Management Systems

For the manufactured products, the company holds certificates of conformity, demonstrating compliance with applicable legal and technical requirements in the construction sector and supporting the effective implementation of the integrated management system.

Continuous and efficient operation has been supported by a consistent investment policy, focused on the modernization of the technical base through the acquisition of modern machinery and high-performance equipment.

As a result, the company currently has a strong technical capacity, enabling the execution of large-scale and complex construction works under favourable conditions for clients.

The company's development has been driven by reliability in relations with beneficiaries, timely execution of contracts and a high level of quality in completed works, which have strengthened its reputation in the road construction market.

The main objectives of the company include:

- maintaining a high level of activity in a competitive economic environment;
- participation in public procurement procedures for new construction projects;
- increasing the volume of executed works while ensuring quality, efficiency and environmental responsibility.

Product information

Product name

Stabilized asphalt mixture MAS 16 with polymer-modified bitumen (MASm 16)

Product identification

Stabilized asphalt mixture MAS 16 with polymer-modified bitumen PmB 45/80-65 and PmB 45/80-55 (MASm 16)

Product description

MASm 16 is a hot-mix stabilized stone mastic asphalt (MAS 16 / SMA 16). MAS ("stabilized asphalt mixture") is the Romanian designation used in AND 605/2023, corresponding to stone mastic asphalt (SMA) as defined in EN 13108-5.

It is produced with polymer-modified bitumen, indicated by the letter "m", and has a maximum aggregate size of 16 mm, being manufactured in accordance with EN 13108-5 and AND 605/2023.

The mixture consists of crushed quarry aggregates to EN 13043, limestone filler and class 4 polymer-modified bitumen (penetration 45/80 at 25 °C, EN 1426) to EN 14023. Stabilizing additives (cellulose fibres) and, where applicable, adhesion agents are added.

The product is manufactured in two mix designs, differing in the softening point of the binder (EN 1427):

- MASm 16 with PmB 45/80-65: softening point ≥ 65 °C (class 5, EN 14023);
- MASm 16 with PmB 45/80-55: softening point ≥ 55 °C (class 7, EN 14023).

The binder is selected according to the climatic zone, as per AND 605/2023.

The product complies with EN 13108-5:2006/AC:2008 and Regulation (EU) No 305/2011, which continues to apply to products covered by harmonised standards cited under it, in accordance with the transitional provisions of Regulation (EU) 2024/3110. Constancy of performance is assessed and verified under AVCP system 2+, and factory production control is carried out in accordance with EN 13108-21.

Product application

It is used for wearing courses on roads and other trafficked areas. It provides high resistance to permanent deformation, impermeability and a durable running surface.

More information about the product and company can be found: <https://www.gtag.ro/>

Geographical scope

Romania

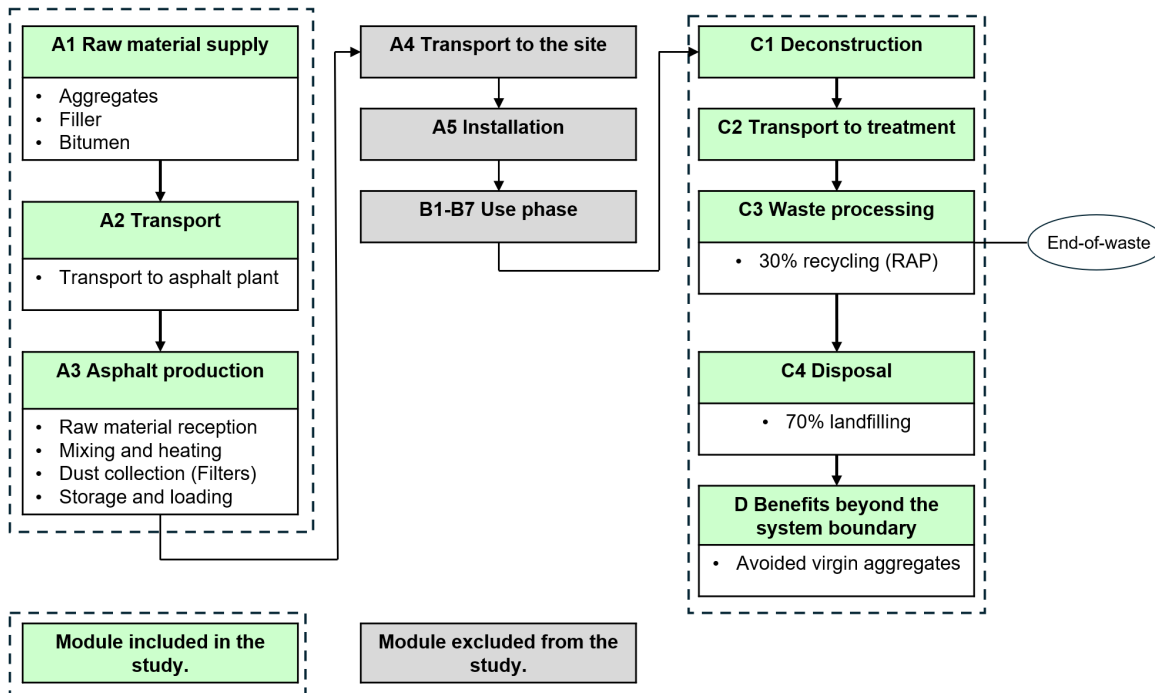
Product contents information

Product components	Weight, kg	Post-consumer material, weight-%	Renewable material, weight-%
Crushed coarse and fine aggregates	837 - 849	0	0
Filler	88 - 100	0	0
Polymer-modified bitumen	55 - 59	0	0
Cellulose fibre	3 - 5	0	100
Additive	0,16 - 0,19	0	0
TOTAL	1000	0	0,42

There is no packaging (bulk delivery).

Manufacturing process

SMA 16 is produced by hot mixing of mineral aggregates, limestone filler, cellulose fibre and polymer-modified bitumen, according to the mix design established for the plant. The received aggregates are stored by fractions and are metered into the drying drum, where moisture is removed and the material is heated to the required mixing temperature. The polymer-modified bitumen is kept in heated tanks, equipped with an agitation and recirculation system, to maintain the process temperature. The heated aggregates, the filler, the cellulose fibre and the bitumen are then metered according to the mix design and mixed in the mixer, under controlled temperature conditions, until all particles are uniformly coated with binder. The finished asphalt mixture is discharged into tipper trucks covered with tarpaulins, which maintain the optimum temperature during transport to the construction site, where it is laid using a paver-finisher and subsequently compacted with compaction rollers.



Life cycle assessment

Cut-off criteria

The study does not exclude any modules or processes which are stated mandatory in the EN 15804:2012+A2:2019 and the applied PCR. The study does not exclude any hazardous materials or substances. The study includes all major raw material and energy consumption. All inputs and outputs of the unit processes, for which data is available for, are included in the calculation. There is no neglected unit process more than 1% of total mass or energy flows. The module specific total neglected input and output flows also do not exceed 5% of energy usage or mass. Additives are included in this study. The production of capital equipment, construction activities, maintenance and operation of capital equipment, personnel-related activities, energy and water use related to company management and sales activities are excluded. Infrastructure is included in upstream processes.

Allocation, estimations, and assumptions

Allocation is based on annual production rate and made with high accuracy and precision. The values for 1 ton of the products which are used within this study are calculated by considering the total product weight per annual production. In the production plant, several kinds of products are produced; since the production processes of these products are similar, the annual production percentages are taken into consideration for allocation. According to the ratio of the annual production of the declared product to the total annual production at the factory, the annual total energy consumption per the declared product is allocated. Subsequently, the produced products output fixed to 1 ton and the corresponding amount of product is used in the calculations.

Database(s) and LCA software

This EPD has been created using One Click LCA EPD Generator. Ecoinvent v3.11, One Click LCA database, and critically reviewed LCA 'Eurobitume Life Cycle Assessment 4.0 for bitumen' by the European Bitumen Association were used as sources of environmental data.

LCA scenarios and additional technical information

Module A1

This module includes the extraction and processing of all raw materials used in the asphalt mixture, including aggregates (Crushed coarse and fine aggregates), limestone filler, bitumen, cellulose fibre and additive. It covers upstream energy use, raw material extraction, processing, and internal handling prior to transport to the asphalt plant.

Module A2

The considered transportation impacts include exhaust emissions resulting from transportation of all raw materials from suppliers to production plant as well as the environmental impacts of production of the used fuel. Transport distances and vehicle types are based on supplier-specific data. Aggregates, limestone filler, polymer-modified bitumen and cellulose fibre are delivered by road in 16–32 tonne lorries (EURO 6); the additive, which is supplied in small quantities, is delivered in a 7,5–16 tonne lorry (EURO 6). Sand is modelled using theecoinvent market activity, which already includes the average transport of the material to the customer. No separate transport distance is therefore declared for sand in module A2.

Module A3

This module covers all processes at the asphalt mixing plant, including:

- Reception and storage of raw materials
- Aggregate dosing
- Drying and heating of aggregates (rotary drum)
- Dust collection and filtration
- Dosing of bitumen, filler, and additives
- Mixing process
- Optional storage in silos
- Loading for delivery
- Quality control procedures
- Energy consumption (electricity, heating), process emissions, and internal material handling are included.

The environmental impacts of this stage have been calculated using the most recent data applicable to the factory. The study considers also the losses occurring during the manufacturing processes.

Manufacturing energy scenario (A3)

Electricity data source and quality	Electricity, low voltage, residual mix (Romania)	Ecoinvent 3.11
Electricity CO _{2e} / kWh	0,3	
Heat data source and quality	Heat production, natural gas, at industrial furnace >100kW (Romania)	Ecoinvent 3.11
Heat kg CO _{2e} / MJ	0,0754	

Module A4

Not included in the study.

Module A5

Not included in the study.

Module C1

Module C1 covers the removal of the asphalt layer by cold milling, together with sweeping and cleaning of the pavement surface. The scenario follows the removal set defined for a removal rate of 400 tonnes per day in the Dutch industry LCA background report for asphalt mixtures (Bak, Overmars & van der Kruk, 2022), which assigns that scenario to SMA wearing courses.

Module C2

Transportation distance to the closest disposal area is estimated as 50 km and the transportation method is assumed as lorry (Transport freight lorry >32 metric tonne) which is the most common.

Module C3

The scenario assumes that 30 % of the removed asphalt (300 kg per declared unit) is crushed and screened into reclaimed asphalt. After processing it reaches end-of-waste status and is used in hot-recycled mixtures for binder and base courses in accordance with DD 509-2024, or as a granular material in unbound pavement layers; it is not returned to wearing courses. The 30 % share corresponds to the maximum dosage of reclaimed asphalt in a recycled mixture prescribed by DD 509-2003 and is declared here as a scenario assumption, since no national statistics on the end-of-life routing of milled asphalt in Romania are available.

Module C4

The remaining 70 % of the removed asphalt (700 kg per declared unit) is assumed to be landfilled in an inert waste landfill, including landfill operations and the associated emissions. This is the conservative assumption: directing the larger share to landfill increases the impacts declared in module C4 and reduces the credit declared in module D, compared with a higher recycling rate.

End of life (C1, C3, C4)

	Value	Unit
Collected separately	1000	kg
Reuse	0	kg
Recycling	300	kg
Energy recovery	0	kg
To landfill	700	kg

Module D

The Module D benefit is conservatively calculated based solely on the avoided production of virgin aggregate from the 30 % of the product that is recycled at end of life; the potential credit associated with the recovered bitumen fraction has been intentionally excluded from this calculation. These benefits account for avoided production of virgin aggregates, in accordance with EN 15804+A2 provisions for system expansion.

Data quality

Specific data for the product composition are provided by the manufacturers. The data represents the production of the declared product and was collected for EPD development in the year of study. Background data is based on critically reviewed LCA according to EN 15804 and different LCA databases. The data quality information has been provided according to the requirements of EN 15941. The data assessment was done using the Product Environmental Footprint Category Rules. The data has been collected internally, considering the latest available average production amounts and measurements during the period of July 2025 - June 2026. In accordance with EN 15804, Annex E, E.2, the quality of the relevant data is generally good, with no data classified as low or very low quality. Time representativeness is very good, as the difference between the validity period of all data used and the reference year does not exceed two years. Geographical representativeness is very good for electricity data, heating and limestone, good for modified bitumen, transport, and crushing of asphalt, and fair for all other data. Technical representativeness is very good for electricity, fair for waste treatment and asphalt crushing, and good for all other materials.

A summary of the data quality assessment is listed below. The share of primary data is calculated based on GWP-GHG results. It is a simplified indicator for data quality that supports the use of more primary data, to increase the representativeness of and comparability between EPDs. Note that the indicator does not capture all relevant aspects of data quality and is not comparable across product categories.

Process	Source type	Source	Reference year	Data category	Share of primary data, of GWP-GHG results for A1-A3
Manufacturing of raw materials	Collected data, database	Ecoinvent v3.11	07/2025-06/2026	Secondary data	0%
Bitumen	Critically reviewed LCA	The Eurobitume Life Cycle Assessment 4.0 for bitumen	07/2025-06/2026	Secondary data	0%
Transport of raw materials	Collected data, database	Ecoinvent v3.11	07/2025-06/2026	Primary data (50%), secondary data (50%)	17,9%
Energy used in manufacturing of product	Collected data, database	Ecoinvent v3.11	07/2025-06/2026	Primary data	20,7%
Waste treatment	Collected data, Database	Ecoinvent v3.11	07/2025-06/2026	Secondary data	0%
Total share of primary data, of GWP-GHG results for A1-A3					38,6%

LCA results

Results are presented per 1 ton (Declared Unit) of the product. Estimated impact results are only relative statements which do not indicate the end points of the impact categories, exceeding threshold values, safety margins or risks

Core environmental impact indicators – EN 15804+A2

Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
GWP-total	kg CO ₂ eq.	1,16E+02	MND	MND	1,21E+00	5,09E+00	6,81E-02	4,37E+00	-2,97E+00
GWP-fossil	kg CO ₂ eq.	1,16E+02	MND	MND	1,21E+00	5,09E+00	7,47E-02	4,38E+00	-2,97E+00
GWP-biogenic	kg CO ₂ eq.	2,26E-02	MND	MND	0,00E+00	0,00E+00	-6,78E-03	-1,58E-02	0,00E+00
GWP-LULUC	kg CO ₂ eq.	5,16E-02	MND	MND	1,24E-04	1,90E-03	2,13E-04	2,51E-03	-2,97E-03
ODP	kg CFC-11 eq.	2,21E-06	MND	MND	1,79E-08	1,15E-07	1,21E-09	1,22E-07	-2,39E-08
AP	mol H ⁺ eq.	3,21E-01	MND	MND	1,08E-02	1,24E-02	3,68E-04	3,07E-02	-1,85E-02
EP-freshwater	kg P eq.	8,86E-03	MND	MND	3,88E-05	3,72E-04	6,63E-05	3,83E-04	-1,06E-03
EP-marine	kg N eq.	7,99E-02	MND	MND	5,02E-03	3,25E-03	6,59E-05	1,18E-02	-4,40E-03
EP-terrestrial	mol N eq.	8,79E-01	MND	MND	5,50E-02	3,52E-02	5,74E-04	1,29E-01	-5,29E-02
POCP	kg NMVOC eq.	3,87E-01	MND	MND	1,65E-02	2,07E-02	1,88E-04	4,64E-02	-1,47E-02
ADP-M&M	kg Sb eq.	4,93E-04	MND	MND	4,34E-07	1,52E-05	1,80E-07	6,53E-06	-1,76E-05
ADP-fossil	MJ	3,88E+03	MND	MND	1,57E+01	7,72E+01	1,70E+00	1,07E+02	-3,76E+01
WDP	m ³	5,30E+01	MND	MND	4,05E-02	4,49E-01	4,46E-02	4,71E+00	-4,57E+00

GWP-total: Global Warming Potential; **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; See "additional requirements" for indicator given as PO₄ eq. **EP-marine:** Eutrophication potential, fraction of nutrients reaching marine end compartment; **EP-terrestrial:** Eutrophication potential, Accumulated Exceedance; **POCP:** Formation potential of tropospheric ozone; **ADP-M&M:** Abiotic depletion potential for non-fossil resources (minerals and metals); **ADP-fossil:** Abiotic depletion potential for fossil resources; **WDP:** Water deprivation potential, deprivation weighted water consumption

Additional (optional) environmental impact indicators – EN 15804+A2

Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
PM	Disease incidence	6,09E-06	MND	MND	3,08E-07	5,05E-07	1,68E-09	7,05E-07	-2,87E-07
IRP	kBq U235 eq.	4,32E+00	MND	MND	6,69E-03	8,64E-02	4,68E-02	6,42E-02	-2,96E-01
ETP-fw	CTUe	2,81E+03	MND	MND	8,98E+00	6,64E+01	1,89E+00	7,16E+01	-8,73E+01
HTP-c	CTUh	4,21E-08	MND	MND	1,23E-10	8,47E-10	2,44E-11	7,94E-10	-8,21E-10
HTP-nc	CTUh	1,33E-06	MND	MND	1,93E-09	4,96E-08	1,18E-09	1,79E-08	-2,46E-08
SQP	Dimensionless	5,88E+02	MND	MND	1,04E+00	7,76E+01	2,47E-01	2,11E+02	-3,37E+01

PM: Particulate matter emissions; **IRP:** Ionising radiation, human health; **ETP-fw:** Ecotoxicity (freshwater); **HTP-c:** Human toxicity, cancer effects; **HTP-nc:** Human toxicity, non-cancer effects; **SQP:** Land use related impacts / soil quality

Use of natural resources

Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
RPEE	MJ	5,31E+01	MND	MND	9,87E-02	1,19E+00	3,75E-01	1,11E+00	-3,68E+00
RPEM	MJ	1,61E-01	MND	MND	0,00E+00	0,00E+00	-4,82E-02	-1,13E-01	0,00E+00
TPE	MJ	5,32E+01	MND	MND	9,87E-02	1,19E+00	3,27E-01	1,00E+00	-3,68E+00
NRPE	MJ	1,75E+03	MND	MND	1,57E+01	7,72E+01	1,70E+00	1,59E+03	-3,76E+01
NRPM	MJ	2,12E+03	MND	MND	0,00E+00	0,00E+00	-6,36E+02	-1,48E+03	0,00E+00
TRPE	MJ	3,87E+03	MND	MND	1,57E+01	7,72E+01	-6,34E+02	1,07E+02	-3,76E+01
SM*	kg	4,38E+00	MND	MND	6,51E-03	3,26E-02	1,04E-03	2,67E-02	-4,13E-02
RSF	MJ	4,56E-03	MND	MND	1,71E-05	4,30E-04	1,11E-06	5,57E-04	-2,95E-04
NRSF	MJ	0,00E+00	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
W	m ³	8,06E-01	MND	MND	1,01E-03	1,04E-02	1,03E-03	1,11E-01	-1,06E-01

RPEE: Renewable primary energy resources used as energy carrier; **RPEM:** Renewable primary energy resources used as raw materials; **TPE:** Total use of renewable primary energy resources; **NRPE:** Non-renewable primary energy resources used as energy carrier; **NRPM:** Non-renewable primary energy resources used as materials; **TRPE:** Total use of non-renewable primary energy resources; **SM:** Use of secondary materials; **RSF:** Use of renewable secondary fuels; **NRSF:** Use of non-renewable secondary fuels; **W:** Use of net fresh water

* The "Use of secondary materials" parameter reflects the stabilising cellulose fibre, which is produced from recovered cellulose and enters the product system as a market product after reaching end-of-waste status.

Note: Based on different interpretations of EN 15804, there are three options for how to separate the use of primary energy into energy used as raw material and energy used as energy carrier: options A, B and C. Option A is used in this EPD.

End of life – Waste

Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
HW	kg	2,90E+00	MND	MND	1,76E-02	1,13E-01	4,41E-03	1,22E-01	-2,95E-01
NHW	kg	4,99E+01	MND	MND	2,57E-01	2,30E+00	3,28E-01	2,82E+00	-5,80E+00
RW	kg	3,36E-03	MND	MND	1,64E-06	2,12E-05	1,20E-05	1,56E-05	-7,19E-05

HW: Hazardous waste disposed; **NHW:** Non-hazardous waste disposed; **RW:** Radioactive waste disposed

End of life – Output flows

Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
CR	kg	0,00E+00	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MR	kg	0,00E+00	MND	MND	0,00E+00	0,00E+00	3,00E+02	0,00E+00	0,00E+00
MER	kg	0,00E+00	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EEE	MJ	0,00E+00	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
ETE	MJ	0,00E+00	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

CR: Components for reuse; **MR:** Materials for recycling; **MER:** Materials for energy recovery; **EEE:** Exported electric energy; **ETE:** Exported thermal energy

Information describing biogenic carbon content at factory gate

Biogenic carbon content	Value	Unit
Biogenic carbon content in product	1,88	kg C
Biogenic carbon content in the accompanying packaging	0	kg C

**Note: 1 kg biogenic carbon is equivalent to 44/12 kg CO₂. The only biogenic constituent is the cellulose fibre. The production-weighted average recipe contains 4,24 kg of cellulose fibre per tonne; cellulose is 44,4 % carbon by mass, which gives 4,24 × 0,444 = 1,88 kg of biogenic carbon per declared unit, equivalent to 6,89 kg CO₂ using the conversion factor 44/12. This is 0,188 % of the product mass, below the 5 % threshold at which declaration becomes mandatory, and is reported for information. The product is delivered in bulk, so the biogenic carbon content of the packaging is zero. GWP-biogenic does not include these 6,89 kg CO₂; the background dataset used for the cellulose fibre (ecoinvent 3.11) models no biogenic CO₂ uptake and therefore no release at end of life. The biogenic flows the dataset does report balance to zero over modules A–C. Given the low biogenic carbon content, the effect on the declared results is negligible.*

Specific data (GWP-GHG) and data variation for A1-A3

Specific data and data variation	Value-%
Specific data	38,6
Variation - product	-0,5; 0,5
Variation - site	-1,6; 1,9

Hazardous substances

☒ The product does not contain any REACH SVHC substances in amounts greater than 0,1 %.

Contact information

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Annex

Environmental impacts – GWP-GHG

Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
GWP - GHG	kg CO ₂ eq.	1,16E+02	MND	MND	1,21E+00	5,09E+00	7,49E-02	4,38E+00	-2,97E+00

GWP- GHG: Global Warming Potential, greenhouse gases

Additional LCA results (other environmental performance results) of the product(s)

The variability of results declared below is between the average product and the minimum/maximum product considering A1-A3 modules.

LCA result of one declared unit product (A1-A3)	Unit	Min %	Max %
GWP - total	kg CO ₂ eq.	-1,9	+2,0
GWP - fossil	kg CO ₂ eq.	-1,9	+2,0
GWP - biogenic	kg CO ₂ eq.	-18,1	+18,4
GWP - LULUC	kg CO ₂ eq.	-1,3	+2,1
ODP	kg CFC 11 eq.	-1,7	+2,0
AP	mol H ⁺ eq.	-2,0	+2,8
EP-freshwater	kg P eq.	-2,2	+3,8
EP- marine	kg N eq.	-2,0	+2,3
EP-terrestrial	mol N eq.	-1,8	+2,3
POCP	kg NMVOC eq.	-1,7	+1,8
ADP- minerals&metals	kg Sb eq.	-10,3	+11,1
ADP-fossil	MJ	-3,0	+2,9
WDP	m ³	-2,8	+2,8