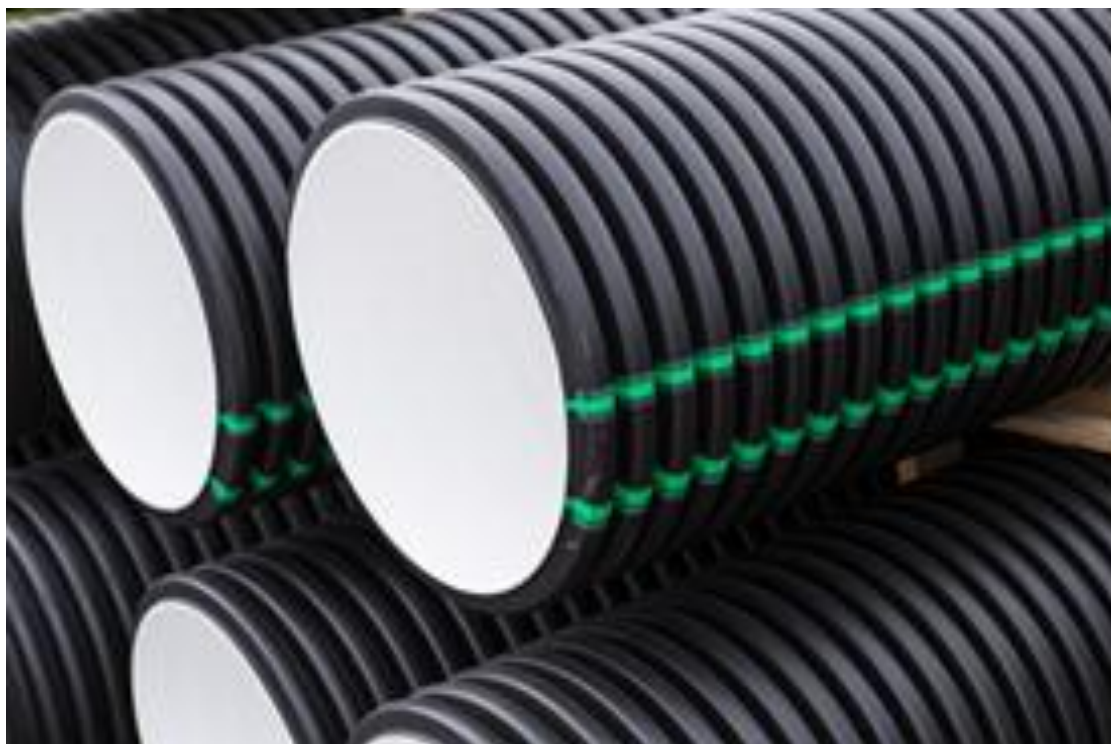


# ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025 / ISO 21930

## JITA STORMWATER AND DRAINAGE PIPES, CLASS SN8



**EPD HUB, HUB-2499**

Publishing date 11 December 2024, last updated on 31 January 2025, valid until 11 December 2029.

## GENERAL INFORMATION

### MANUFACTURER

Manufacturer	Jita Oy
Address	Lakarintie 10, 34800 Virrat, Finland
Contact details	info@jita.fi
Website	www.jita.fi

### EPD STANDARDS, SCOPE AND VERIFICATION

Program operator	EPD Hub, hub@epdhub.com
Reference standard	EN 15804+A2:2019 and ISO 14025
PCR	EPD Hub Core PCR version 1.0, 1 Feb 2022
Sector	Construction product
Category of EPD	Third party verified EPD
Parent EPD number	-
Scope of the EPD	Cradle to gate with options, A4-A5, and modules C1-C4, D
EPD author	Dr. Qian Wang, Uponor Corporation
EPD verification	Independent verification of this EPD and data, according to ISO 14025: <input type="checkbox"/> Internal verification <input checked="" type="checkbox"/> External verification
EPD verifier	Magaly González Vázquez, as an authorized verifier acting for EPD Hub Limited

The manufacturer has the sole ownership, liability, and responsibility for the EPD. EPDs within the same product category but from different programs may not be comparable. EPDs of construction products may not be comparable if they do not comply with EN 15804 and if they are not compared in a building context.

### PRODUCT

Product name	Jita Stormwater and Drainage Pipes, Class SN8
Additional labels	Range OD (outer diameter) 110 – 1154 mm
Product reference	2512301, 30217, 961160, 961162, 961163, 961662 961663, 1104817, 963620, 962062, 962008, 962362, 962308, 963625, 962562, 962508, 30552, 963631, 963162, 963108, 963110, 963462, 963408, 963410, 963640, 963562, 963508, 963510, 964562, 964508, 964510, 965062, 965008, 965010, 966762, 966708, 966710, 966862, 966808, 966810, 961062, 961008, 961010 2518601, 30224, 961140, 961168, 969668, 961668, 962068, 962114, 962568, 963168, 964468
Place of production	Jita Oy, Lakarintie 10, 34800 Virrat, Finland
Period for data	2022
Averaging in EPD	No averaging
Variation in GWP-fossil for A1-A3	-

## ENVIRONMENTAL DATA SUMMARY

<b>Declared unit</b>	1 kg of pipe
<b>Declared unit mass</b>	1 kg
<b>GWP-fossil, A1-A3 (kgCO<sub>2</sub>e)</b>	4,40E+00
<b>GWP-total, A1-A3 (kgCO<sub>2</sub>e)</b>	4,40E+00
<b>Secondary material, inputs (%)</b>	0.47
<b>Secondary material, outputs (%)</b>	2.94
<b>Total energy use, A1-A3 (kWh)</b>	16.5
<b>Total water use, A1-A3 (m<sup>3</sup>e)</b>	1,07E-02

## PRODUCT AND MANUFACTURER

### ABOUT THE MANUFACTURER

Jita is Finnish plastics industry company with almost half a century expertise. Our offering includes wide range of plastics solutions that are used for making living environment better. Whether the case is stormwater or network infra, or highly reliable wastewater treatment, we always deliver it – in sustainable way.

### PRODUCT DESCRIPTION

Jita's stormwater and drainage pipes are used in plastics piping systems for non-pressure underground drainage and sewerage. Pipes have double wall structure, and they are made of polyethylene (PE) or polypropylene (PP). Socket can be welded, injection moulded, produced in-line or be with nails. Pipes are used in various kinds of applications like municipalities, transport, commercial, residential as well as agriculture and forestry.

This EPD covers stormwater pipes and drainage pipes in ring stiffness class SN8.

#### 1) Stormwater pipes

- Pipes have a smooth inside layer and a corrugated outside layer.
- Pipes are available from outer diameter 110 mm up to outer diameter 1154 mm.
- Raw material is polyethylene (PE) or polypropylene (PP).
- Colour of the outside is black and colour of the inside is black, grey or white. Other colours are also possible.
- Pipes have a green stripe on top.
- Straight lengths are 6 m, 8 m, or 10 m. Lengths 8 m and 10 m are produced without socket.

#### 2) Drainage pipes

- Pipes have a smooth inside layer and a corrugated outside layer.
- Pipes are available from outer diameter 110 mm up to outer diameter 400 mm.
- Raw material is polyethylene (PE) or polypropylene (PP).
- Slots are situated in 3 or 6 rows.
- Straight length is 6 m.
- Colour of the pipes is black.
- Pipes have a green stripe on top (except the product 969668, which has no stripe).

NPM classified pipes meet the standard EN 13476-3 and INSTA-CERT's specific rules for Nordic Certification in accordance with EN 13476-1, 2 and 3. Ring stiffness is tested according to standard EN ISO 9969.

Further information can be found at [www.jita.fi](http://www.jita.fi).

### PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass- %	Material origin
Metals	-	-
Minerals	-	-
Fossil materials	100	-
Bio-based materials	-	-

### BIOGENIC CARBON CONTENT

Product's biogenic carbon content at the factory gate

Biogenic carbon content in product, kg C	-
Biogenic carbon content in packaging, kg C	0.002

### FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	1 kg of pipe
Mass per declared unit	1 kg
Functional unit	1 meter of Jita SN8 pipe of a certain dimension
Reference service life	-

### SUBSTANCES, REACH - VERY HIGH CONCERN

The product does not contain any REACH SVHC substances in amounts greater than 0,1 % (1000 ppm).



# PRODUCT LIFE-CYCLE

## SYSTEM BOUNDARY

This EPD covers the life-cycle modules listed in the following table.

Product stage			Assembly stage		Use stage							End of life stage				Beyond the system boundaries			
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D			
x	x	x	MND	MND	MND	MND	MND	MND	MND	MND	MND	x	x	x	x	x			
Raw materials	Transport	Manufacturing	Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstr./demol.	Transport	Waste processing	Disposal	Reuse	Recovery	Recycling	

Modules not declared = MND. Modules not relevant = MNR.

### MANUFACTURING AND PACKAGING (A1-A3)

The environmental impacts considered for the product stage cover the manufacturing of raw material used in the production as well as packaging materials and other ancillary materials. Also, fuels used by machines, and handling of waste formed in the production processes at the manufacturing facilities are included in this stage. The study also considers the material losses occurring during the manufacturing processes as well as losses during electricity transmission.

The production method is a pipe extrusion. The different stages for the manufacturing process are:

- Material conveying
- Extrusion (melting and processing of material)
- Pipe profile corrugation
- Cooling
- Cutting

- Socketing (if not in-line socket in corrugation stage or lengths 8 m and 10 m)
- Packing



The finished straight lengths products are packed on a wooden U-frame with a wooden lath on top of it. The amount of pipes on a frame differs depending on the pipe diameter. Pipes with outside diameter 902 and 1154 mm are not packed. The wooden frame has a nail plate on the edge to strengthen the structure as well as a plastic or steel band around to tighten the package.

### TRANSPORT AND INSTALLATION (A4-A5)

Transportation impacts from final products delivery to construction site cover direct exhaust emissions of fuel, environmental impacts of fuel production, as well as related infrastructure emissions. The installation scenarios in Jita's infrastructure product EPDs are based on TEPPFA's (The European Plastic Pipe and Fittings Association) industry average EPDs. These documents and their background reports include industry consensus estimates of the resource use, emissions and effluents of typical European installations, including the size of installation trenches, machinery used for digging/excavation, volume of backfilling sand required for the installation, etc. These parameters have been used as input for the Uponor EPD modelling. Reference: <https://www.teppfa.eu/sustainability/environmental-footprint/epd/>

### PRODUCT USE AND MAINTENANCE (B1-B7)

This EPD does not cover the use phase. Air, soil, and water impacts during the use phase have not been studied.

### PRODUCT END OF LIFE (C1-C4, D)

Since the consumption of energy and natural resources is negligible for disassembling of the end-of-life product, the impacts of demolition are assumed zero (C1). After ca 100 years of service life 5 % of the end-of-life product is assumed to be sent to the closest treatment facilities (C2). The collected 5 % from the demolition site is sent to recycling (C3), whereas the remaining 95 % is left inert under the ground (C4). Due to the recycling of PE or PP, the end-of-life product is converted into recycled PE or PP (D).

## LIFE-CYCLE ASSESSMENT

### CUT-OFF CRITERIA

The study does not exclude any modules or processes which are stated mandatory in the reference standard 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.

### ALLOCATION, ESTIMATES AND ASSUMPTIONS

Allocation is required if some material, energy, and waste data cannot be measured separately for the product under investigation. All allocations are done as per the reference standards and the applied PCR. In this study, allocation has been done in the following ways:

### AVERAGES AND VARIABILITY

Type of average	No averaging
Averaging method	Not applicable
Variation in GWP-fossil for A1-A3	%

This EPD is product and factory specific and does not contain average calculations.

### LCA SOFTWARE AND BIBLIOGRAPHY

This EPD has been created using One Click LCA EPD Generator. The LCA and EPD have been prepared according to the reference standards and ISO 14040/14044. Ecoinvent and One Click LCA databases were used as sources of environmental data.

# ENVIRONMENTAL IMPACT DATA

## CORE ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, PEF

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP – total <sup>1)</sup>	kg CO <sub>2</sub> e	2,27E+00	1,79E+00	3,40E-01	4,40E+00	5,78E-02	1,32E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,19E-04	5,41E-03	6,21E-03	-5,75E-02
GWP – fossil	kg CO <sub>2</sub> e	2,26E+00	1,78E+00	3,56E-01	4,40E+00	5,77E-02	1,31E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,19E-04	1,17E-02	6,17E-03	-6,08E-02
GWP – biogenic	kg CO <sub>2</sub> e	1,10E-02	3,52E-03	-1,65E-02	-1,89E-03	3,54E-05	8,56E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,95E-07	-6,33E-03	3,68E-05	3,31E-03
GWP – LULUC	kg CO <sub>2</sub> e	6,32E-04	1,06E-03	1,64E-04	1,86E-03	2,04E-05	1,71E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,12E-07	1,30E-05	3,26E-06	3,98E-05
Ozone depletion pot.	kg CFC <sub>11</sub> e	4,77E-08	3,73E-07	2,83E-09	4,24E-07	1,32E-08	2,79E-08	MND	MND	MND	MND	MND	MND	MND	0,00E+00	7,30E-11	1,49E-09	1,60E-09	8,96E-10
Acidification potential	mol H <sup>+</sup> e	7,98E-03	9,95E-03	1,90E-04	1,81E-02	2,38E-04	1,26E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,31E-06	5,97E-05	4,62E-05	-1,51E-04
EP-freshwater <sup>2)</sup>	kg Pe	1,10E-04	9,27E-05	1,20E-05	2,15E-04	1,53E-06	2,44E-06	MND	MND	MND	MND	MND	MND	MND	0,00E+00	8,44E-09	1,04E-06	3,00E-07	-2,98E-07
EP-marine	kg Ne	1,35E-03	2,95E-03	6,07E-05	4,36E-03	7,04E-05	5,44E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,89E-07	2,00E-05	1,61E-05	-1,27E-05
EP-terrestrial	mol Ne	1,50E-02	3,29E-02	6,38E-04	4,86E-02	7,78E-04	5,97E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,29E-06	1,77E-04	1,77E-04	-1,88E-04
POCP (“smog”) <sup>3)</sup>	kg NMVOCe	7,26E-03	1,07E-02	1,54E-04	1,81E-02	2,44E-04	1,66E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,35E-06	5,80E-05	5,06E-05	-1,73E-04
ADP-minerals & metals <sup>4)</sup>	kg Sbe	1,99E-05	4,07E-05	3,10E-07	6,09E-05	1,44E-06	4,34E-07	MND	MND	MND	MND	MND	MND	MND	0,00E+00	7,95E-09	2,41E-07	1,01E-07	-4,45E-07
ADP-fossil resources	MJ	8,08E+01	2,65E+01	3,22E-01	1,08E+02	8,81E-01	1,82E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,86E-03	1,94E-01	1,19E-01	-3,13E+00
Water use <sup>5)</sup>	m <sup>3</sup> e depr.	1,49E+00	1,39E-01	3,16E-02	1,66E+00	3,13E-03	1,24E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,73E-05	3,94E-03	3,57E-03	-5,08E-02

1) GWP = Global Warming Potential; 2) EP = Eutrophication potential. Required characterisation method and data are in kg P-eq. Multiply by 3,07 to get PO<sub>4</sub>e; 3) POCP = Photochemical ozone formation; 4) ADP = Abiotic depletion potential; 5) EN 15804+A2 disclaimer for Abiotic depletion and Water use and optional indicators except Particulate matter and Ionizing radiation, human health. 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 experience with the indicator.

### ADDITIONAL (OPTIONAL) ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, PEF

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Particulate matter	Incidence	6,77E-08	1,77E-07	2,99E-09	2,47E-07	4,46E-09	3,30E-08	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,46E-11	8,91E-10	7,89E-10	2,89E-12
Ionizing radiation <sup>6)</sup>	kBq U235e	4,72E-02	1,20E-01	1,83E-03	1,70E-01	3,85E-03	7,77E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,12E-05	5,01E-04	4,76E-04	-8,86E-04
Ecotoxicity (freshwater)	CTUe	1,15E+01	2,80E+01	2,02E+00	4,15E+01	6,88E-01	1,19E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,80E-03	2,69E-01	9,97E-02	3,59E-01
Human toxicity, cancer	CTUh	5,25E-10	2,72E-09	3,75E-11	3,28E-09	1,95E-11	5,75E-11	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,08E-13	1,70E-11	3,54E-12	1,95E-11
Human tox. non-cancer	CTUh	1,36E-08	3,56E-08	1,08E-09	5,03E-08	7,89E-10	1,22E-09	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,35E-12	2,62E-10	8,61E-11	7,82E-12
SQP <sup>7)</sup>	-	4,93E-01	1,43E+01	1,06E-01	1,49E+01	9,82E-01	3,66E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,42E-03	1,29E-01	3,12E-01	1,31E-01

6) EN 15804+A2 disclaimer for Ionizing radiation, human health. 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; 7) SQP = Land use related impacts/soil quality.

### USE OF NATURAL RESOURCES

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Renew. PER as energy <sup>8)</sup>	MJ	1,24E+00	6,88E-01	3,88E+00	5,81E+00	1,25E-02	1,54E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	6,90E-05	8,29E-03	2,05E-03	-1,23E-02
Renew. PER as material	MJ	0,00E+00	0,00E+00	2,83E-01	2,83E-01	0,00E+00	-2,83E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Total use of renew. PER	MJ	1,24E+00	6,88E-01	4,16E+00	6,10E+00	1,25E-02	-2,68E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	6,90E-05	8,29E-03	2,05E-03	-1,23E-02
Non-re. PER as energy	MJ	2,67E+01	2,65E+01	3,22E-01	5,35E+01	8,81E-01	1,82E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,86E-03	1,94E-01	1,19E-01	-7,43E-01
Non-re. PER as material	MJ	5,41E+01	0,00E+00	0,00E+00	5,41E+01	0,00E+00	0,00E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	-5,41E+01	0,00E+00	-2,39E+00
Total use of non-re. PER	MJ	8,08E+01	2,65E+01	3,22E-01	1,08E+02	8,81E-01	1,82E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,86E-03	-5,39E+01	1,19E-01	-3,13E+00
Secondary materials	kg	4,68E-03	0,00E+00	8,52E-04	5,53E-03	0,00E+00	0,00E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	4,98E-02
Renew. secondary fuels	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Non-ren. secondary fuels	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of net fresh water	m <sup>3</sup>	5,38E-03	4,66E-03	6,57E-04	1,07E-02	1,67E-04	6,48E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	9,21E-07	4,67E-05	9,37E-05	-6,13E-05

8) PER = Primary energy resources.



### END OF LIFE – WASTE

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Hazardous waste	kg	4,90E-02	4,68E-02	3,84E-03	9,97E-02	9,17E-04	2,74E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,06E-06	0,00E+00	2,16E-04	1,02E-03
Non-hazardous waste	kg	1,59E+00	2,27E+00	1,88E-01	4,05E+00	7,62E-02	5,06E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,20E-04	0,00E+00	3,08E-01	5,38E-03
Radioactive waste	kg	3,85E-05	1,77E-04	1,80E-06	2,17E-04	6,03E-06	1,25E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,32E-08	0,00E+00	7,27E-07	-4,06E-07

### END OF LIFE – OUTPUT FLOWS

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	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	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for recycling	kg	0,00E+00	0,00E+00	1,33E-01	1,33E-01	0,00E+00	0,00E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	5,00E-02	0,00E+00	0,00E+00
Materials for energy rec	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	4,00E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

### ENVIRONMENTAL IMPACTS – EN 15804+A1, CML / ISO 21930

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Global Warming Pot.	kg CO <sub>2</sub> e	2,08E+00	1,76E+00	3,58E-01	4,20E+00	5,72E-02	1,30E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,16E-04	1,31E-02	6,09E-03	-5,23E-02
Ozone depletion Pot.	kg CFC <sub>11</sub> e	4,78E-08	3,00E-07	2,61E-09	3,51E-07	1,05E-08	2,21E-08	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,81E-11	1,21E-09	1,27E-09	4,17E-10
Acidification	kg SO <sub>2</sub> e	6,73E-03	7,46E-03	1,43E-04	1,43E-02	1,18E-04	2,12E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	6,49E-07	4,44E-05	2,29E-04	-1,27E-04
Eutrophication	kg PO <sub>4</sub> <sup>3</sup> e	1,55E-03	2,04E-03	1,09E-04	3,69E-03	2,45E-05	4,38E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,35E-07	4,51E-05	7,98E-06	7,18E-05
POCP ("smog")	kg C <sub>2</sub> H <sub>4</sub> e	5,67E-04	6,45E-04	6,66E-06	1,22E-03	7,61E-06	2,11E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,20E-08	3,77E-06	1,29E-06	-9,74E-06
ADP-elements	kg Sbe	1,99E-05	4,07E-05	3,10E-07	6,09E-05	1,44E-06	4,34E-07	MND	MND	MND	MND	MND	MND	MND	0,00E+00	7,95E-09	2,41E-07	1,01E-07	-4,45E-07
ADP-fossil	MJ	8,08E+01	2,65E+01	3,22E-01	1,08E+02	8,81E-01	1,82E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,86E-03	1,94E-01	1,19E-01	-3,13E+00

### ENVIRONMENTAL IMPACTS – TRACI 2.1. / ISO 21930

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Global Warming Pot.	kg CO <sub>2</sub> e	2,10E+00	1,75E+00	3,58E-01	4,21E+00	5,71E-02	1,30E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,15E-04	1,33E-02	6,07E-03	-5,29E-02
Ozone Depletion	kg CFC <sub>11</sub> e	5,91E-08	3,99E-07	3,26E-09	4,61E-07	1,40E-08	2,95E-08	MND	MND	MND	MND	MND	MND	MND	0,00E+00	7,74E-11	1,61E-09	1,70E-09	8,06E-10
Acidification	kg SO <sub>2</sub> e	6,60E-03	8,63E-03	1,68E-04	1,54E-02	2,07E-04	1,15E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,14E-06	5,22E-05	4,12E-05	-1,14E-04
Eutrophication	kg Ne	4,83E-04	1,05E-03	4,99E-05	1,58E-03	2,92E-05	1,05E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,61E-07	1,09E-05	4,69E-06	3,03E-06
POCP ("smog")	kg O <sub>3</sub> e	8,62E-02	1,89E-01	3,17E-03	2,78E-01	4,46E-03	3,46E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,46E-05	1,01E-03	1,02E-03	-1,09E-03
ADP-fossil	MJ	1,16E+01	3,58E+00	2,91E-02	1,52E+01	1,26E-01	2,64E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	6,93E-04	2,42E-02	1,62E-02	-4,79E-01

## VERIFICATION STATEMENT

### VERIFICATION PROCESS FOR THIS EPD

This EPD has been verified in accordance with ISO 14025 by an independent, third-party verifier by reviewing results, documents and compliancy with reference standard, ISO 14025 and ISO 14040/14044, following the process and checklists of the program operator for:

- This Environmental Product Declaration
- The Life-Cycle Assessment used in this EPD
- The digital background data for this EPD

Why does verification transparency matter? [Read more online](#)  
 This EPD has been generated by One Click LCA EPD generator, which has been verified and approved by the EPD Hub.

### THIRD-PARTY VERIFICATION STATEMENT

I hereby confirm that, following detailed examination, I have not established any relevant deviations by the studied Environmental Product Declaration (EPD), its LCA and project report, in terms of the data collected and used in the LCA calculations, the way the LCA-based calculations have been carried out, the presentation of environmental data in the EPD, and other additional environmental information, as present with respect to the procedural and methodological requirements in ISO 14025:2010 and reference standard.



I confirm that the company-specific data has been examined as regards plausibility and consistency; the declaration owner is responsible for its factual integrity and legal compliance.

I confirm that I have sufficient knowledge and experience of construction products, this specific product category, the construction industry, relevant standards, and the geographical area of the EPD to carry out this verification.

I confirm my independence in my role as verifier; I have not been involved in the execution of the LCA or in the development of the declaration and have no conflicts of interest regarding this verification.

Magaly González Vázquez, as an authorized verifier acting for EPD Hub Limited  
Updated on 31.01.2025

