

# ENVIRONMENTAL PRODUCT DECLARATION

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

Owner of declaration	ETS Nord AS
Program operator	The Building Information Foundation RTS sr
Declaration number	RTS_288_24
Publishing date	20.3.2024
EPD valid until	20.3.2029

### VENTILATION DUCTS AND BENDS (EXCLUDING SPIRAL DUCTS)

LCA SUPPORT



 **ETS NORD**



## GENERAL INFORMATION

The EPD owner has the sole ownership, liability, and responsibility for the EPD. Construction products EPDs may not be comparable if they do not comply with EN 15804 and if they are not compared in a building context.

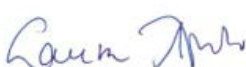
EPDs within the same product category but from different programmes may not be comparable.

### EPD program operator

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### Publishing date

20.3.2024

### Valid until

20.3.2029

### Product category rules

The CEN standard EN 15804 serves as the core PCR. In addition, the RTS PCR (English version, 26.8.2020) is used.

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### Verification date

27 February 2024

Independent verification of this EPD and data, according to ISO 14025:2010:

Internal  External

### Manufacturer

ETS Nord AS

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ETS NORD is one of the largest companies in Northern Europe specializing in comprehensive ventilation solutions.

With significant product development and our own production, we are at the forefront of creating a new and sustainable future for indoor comfort, in a customer-oriented and responsible way.

### Place of production

Tallinn, Estonia

### Products

Ventilation ducts and bends (excluding spiral ducts)

### Declared unit

1 kg

### Mass of declared unit

1 kg

### Data period

2022



# PRODUCT INFORMATION

<b>Product name</b>	Ventilation ducts and bends (NTOP and NTOV) Ventilation ducts and bends (excluding NTOP, NTOV and spiral ducts)
<b>Place of production</b>	Tallinn, Estonia

## PRODUCT DESCRIPTION AND APPLICATION

The NORDduct product group includes round ventilation ducts and components, including bends, fittings, adapter fittings, mounting collars, T-pieces, covers and extraction cones. The NORDirect rectangular duct system includes custom-made rectangular ventilation ducts and their components.

NORDduct products are suitable for all types of construction work: new constructions and renovations, residential and commercial premises, schools, hotels, spas and swimming pools, and hospitals. Products are used for building ventilation systems. If space is an issue, rectangular ducts are an ideal choice. They are particularly suitable for confined spaces such as engine rooms. Rectangular ducts are widely used in public industrial and commercial construction.

## TECHNICAL SPECIFICATIONS AND PRODUCT STANDARDS

NORDduct round ducts and parts are manufactured according to the standard EVS-EN 1506:2007. NORDduct ducts and parts meet tightness class D requirements provided that the products are assembled according to instructions. NORDduct ducts and parts are cleanliness classified M1. Standard material for NORDirect ducts and parts is galvanized steel sheet coated with minimum thickness of zinc inside and out of 275 g/m<sup>2</sup> (material thickness 0,7-1,2 mm). NORDirect rectangular duct system's duct and part measurements are based on the standard EVS-EN 1505:2001 unless otherwise indicated.

## PRODUCT RAW MATERIAL COMPOSITION PER DECLARED UNIT

Raw material category	Amount, mass- % and material origin*
<b>Metals</b>	100%
<b>Minerals</b>	0%
<b>Fossil materials</b>	0%
<b>Bio-based materials</b>	0%
<b>Total</b>	100%

Product components	Amount, mass%*	Material origin	Post-consumer recycled material, mass%
<b>Galvanized steel</b>	100%	Europe	8.2%
<b>Other materials</b>	<1%	Europe	-
<b>Total</b>	100%		

\* Order of magnitude, not exact composition. All values are rounded.

The products do not contain any biogenic carbon. The packaging does contain biogenic carbon.

<b>Biogenic carbon content in product</b>	0 kg
<b>Biogenic carbon content in packaging</b>	0 kg NTOP and NTOV <0.01 kg all other products

Note. 1 kg biogenic carbon is equivalent to 44/12 kg of biogenic CO<sub>2</sub>.

## SUBSTANCES, REACH - VERY HIGH CONCERN

The product does not contain any REACH SVHC substances in amounts greater than 0.1 % (1000 ppm).

## MANUFACTURING PROCESS

NVP 125/90 Pressed ventilation bends blank for pressing is cut to size mechanically from straightened coil of sheet metal. The blank then moves to hydraulic pressing technology. Two pressed half-bends are stichwelded together. Then the seals are attached and mechanical forming of bends end geometry is done in the next step. Bends are then

packaged. Rectangular ducts are cut from straightened coil of sheet metal to the desired size. After that the sheet moves to profiling machine to give more stiffness to the material. Sheets are then folded and closed with a mechanical joint to give the rectangular shape. Then the end-connections, stiffening details and sealing is done in the assembly step.

Figure 1. Manufacturing process



## PRODUCT LIFE-CYCLE AND LIFE-CYCLE ASSESSMENT

Period for data	2022
Declared unit	1 kg
Mass per declared unit	1 kg
Mass of packaging	0 kg (NTOV and NTOV) 0.01 kg (all other products)

Both products are averages. First product is an average of NTOV and NTOV round ducts. The second product is an average of all other ventilation ducts and bends (except spiral ducts).

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.

Co-product allocation has not been used.

The data sources for the study are Ecoinvent 3.8 (2021) and One Click LCA databases. The tools used for the study were One Click LCA and Open LCA.

### SYSTEM BOUNDARY

The scope of the EPD is cradle to gate with options (A1-A4), modules C1-C4 and module D.

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	D	D
x	x	x	x	MND	MND	MND	MND	MND	MND	MND	MND	x	x	x	x	x	x	x
Raw materials	Transport	Manufacturing	Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstruction/ demolition	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 materials used in the production as well as packaging materials and other ancillary materials.

Vehicle capacity utilization volume factor is assumed to be 1, which means full load. In reality, it may vary but as role of transportation emission in total results is small and so the variety in load is assumed to be negligible. Empty returns are not taken into account as it is assumed that return trip is used by transportation company to serve the needs of other clients.

Fuels used by machines, and handling of waste formed in the production processes at the manufacturing facilities are included in this stage. All fuel and energy use was allocated based on production volume. The electricity used in the plant is grid energy and this has been modelled based on Estonian residual mix for 2020-2022. The study also considers the material losses occurring during the manufacturing processes as well as losses during electricity transmission.

<b>Electricity data source and quality</b>	Modelled electricity based on Estonian residual mix for 2020-2022
<b>Specific emissions</b>	0.64 kg CO <sub>2</sub> e/kWh

### TRANSPORT AND INSTALLATION (A4-A5)

Transportation impacts occurred from final products delivery to construction site (A4) cover fuel direct exhaust emissions, environmental impacts of fuel production, as well as related infrastructure emissions.

The transportation distance is defined according to RTS PCR - from the place of manufacture to Helsinki, Finland. According to the manufacturer, transportation doesn't cause losses as products are packaged properly. The final product is transported 425 km (75 km by ferry, 50 km by lorry). Vehicle capacity utilization volume factor is assumed to be 1.

<b>Vehicle type used for transport and distance</b>	125 km (75 km by ferry, 50 km by lorry)
<b>Specific transport emissions</b>	Ferry: 0.11 kg CO <sub>2</sub> e Lorry: 0.17 kg CO <sub>2</sub> e
<b>Capacity utilisation (including empty returns)</b>	100%
<b>Volume capacity utilisation factor</b>	1

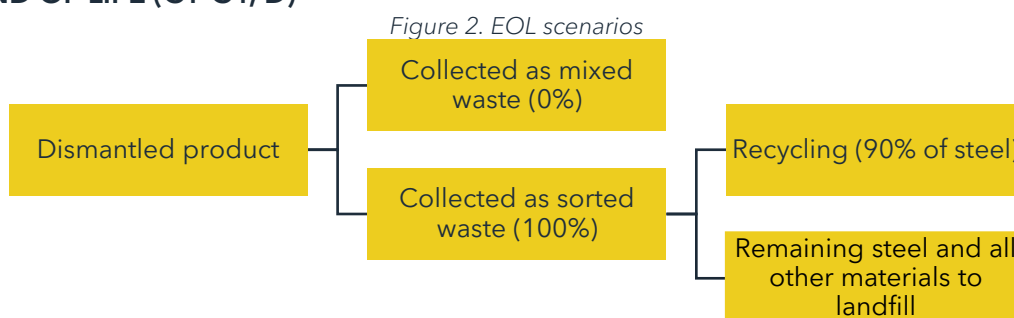
A5 has not been declared.

### 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)



Demolition is not assumed to require any energy or resources. It is assumed that the dismantled product is transported 100 km by lorry. All waste is assumed to be collected as sorted waste. 90% of metals are sent to waste treatment and recycled. All other materials are landfilled.

Any material that left the product system in C3 has been considered in module D. Only net flows are considered. Waste packaging from A5 has not been considered. Module D scenario is representative of Europe.

The scrap content of the steel was 8.2%. The recycled steel can be used to produce new steel products.

<b>EOL mass of product</b>		1 kg
<b>Collection</b>	<b>Collected separately</b>	1 kg (all products)
	<b>Collected with mixed waste</b>	0 kg (all products)
<b>Recovery</b>	<b>Re-use</b>	0 kg (all products)
	<b>Recycling</b>	0.90 kg (all products)
	<b>Incineration with energy recovery</b>	0 kg (all products)
<b>Disposal</b>	<b>Incineration without energy</b>	0 kg (all products)
	<b>Landfill</b>	0.10 kg (all products)
<b>Total</b>		1 kg
<b>Scenario assumptions e.g. transportation</b>		End-of-life product is transported 100 km with an average lorry

Note. All values in the table are rounded.

## BIBLIOGRAPHY

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ISO 14040:2006 Environmental management. Life cycle assessment. Principles and frameworks.

ISO 14044:2006 Environmental management. Life cycle assessment. Requirements and guidelines.

ISO 21930:2017 Sustainability in buildings and civil engineering works – Core rules for environmental product declarations of construction products and services

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# VENTILATION DUCTS AND BENDS (NTOV AND NTOV)

## ENVIRONMENTAL IMPACTS - CORE INDICATORS, EN 15804+A2, PEF

Impact category	Unit	A1-A3	A4	C1	C2	C3	C4	D
Global warming potential - total	kg CO2e	4.03E+0	1.68E-2	0.00E+0	1.70E-2	8.93E-4	1.10E-3	-1.32E+0
Global warming potential - fossil	kg CO2e	4.03E+0	1.68E-2	0.00E+0	1.70E-2	8.91E-4	1.10E-3	-1.32E+0
Global warming potential - biogenic	kg CO2e	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
Global warming potential - LULUC	kg CO2e	3.94E-3	8.65E-6	0.00E+0	6.50E-6	1.89E-6	1.10E-6	-2.05E-4
Ozone depletion potential	kg CFC-11e	3.30E-7	3.55E-9	0.00E+0	3.80E-9	5.58E-11	3.20E-10	-5.07E-8
Acidification potential	mol H+e	1.14E-1	3.04E-4	0.00E+0	6.70E-5	5.40E-6	8.90E-6	-5.32E-3
Eutrophication potential - freshwater	kg Pe	1.94E-4	8.70E-8	0.00E+0	1.20E-7	8.55E-8	1.60E-8	-5.40E-5
Eutrophication potential - marine	kg Ne	7.10E-3	7.75E-5	0.00E+0	2.00E-5	9.00E-7	3.00E-6	-1.12E-3
Eutrophication potential - terrestrial	mol Ne	4.72E-1	8.60E-4	0.00E+0	2.20E-4	1.08E-5	3.30E-5	-1.32E-2
Photochemical ozone formation ("smog")	kg NMVOCe	1.77E-2	2.29E-4	0.00E+0	6.80E-5	2.88E-6	9.60E-6	-6.55E-3
Abiotic depletion potential - minerals & metals	kg Sbe	3.54E-4	4.00E-8	0.00E+0	5.90E-8	8.28E-9	3.50E-9	-2.49E-5
Abiotic depletion potential - fossil resources	MJ	5.11E+1	2.27E-1	0.00E+0	2.47E-1	1.80E-2	2.40E-2	-1.14E+1
Water use	m3e depr.	2.07E+0	8.35E-4	0.00E+0	1.10E-3	4.59E-4	1.40E-4	-2.37E-1

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 experienced with the indicator.

## USE OF NATURAL RESOURCES

Impact category	Unit	A1-A3	A4	C1	C2	C3	C4	D
Renewable primary energy resources as energy	MJ	4.46E+0	2.41E-3	0.00E+0	3.50E-3	3.33E-3	4.20E-4	-9.58E-1
Renewable primary energy resources as material	MJ	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
Total use of renewable primary energy resources	MJ	4.46E+0	2.41E-3	0.00E+0	3.50E-3	3.33E-3	4.20E-4	-9.58E-1
Non-renewable primary energy resources as energy	MJ	5.11E+1	2.27E-1	0.00E+0	2.47E-1	1.80E-2	2.40E-2	-1.14E+1
Non-renewable primary energy resources as material	MJ	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
Total use of non-renewable primary energy resources	MJ	5.11E+1	2.27E-1	0.00E+0	2.47E-1	1.80E-2	2.40E-2	-1.14E+1
Secondary materials	kg	3.38E-1	8.43E-5	0.00E+0	8.30E-5	4.68E-6	8.80E-6	1.58E+0
Renewable secondary fuels	MJ	3.37E-4	5.75E-7	0.00E+0	9.10E-7	1.71E-8	3.40E-7	-1.23E-4
Non-renewable secondary fuels	MJ	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
Use of net fresh water	m3	4.89E-2	2.17E-5	0.00E+0	3.10E-5	1.44E-5	2.60E-5	-2.70E-3

## END OF LIFE - WASTE

Impact category	Unit	A1-A3	A4	C1	C2	C3	C4	D
Hazardous waste	kg	1.19E+0	2.68E-4	0.00E+0	2.80E-4	7.02E-5	0.00E+0	-4.42E-1
Non-hazardous waste	kg	7.70E+0	3.50E-3	0.00E+0	4.90E-3	3.87E-3	1.00E-1	-2.15E+0
Radioactive waste	kg	1.69E-4	1.59E-6	0.00E+0	1.70E-6	1.26E-7	0.00E+0	4.09E-6

## END OF LIFE - OUTPUT FLOWS

Impact category	Unit	A1-A3	A4	C1	C2	C3	C4	D
Components for re-use	kg	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
Materials for recycling	kg	0.00E+0	0.00E+0	0.00E+0	0.00E+0	9.00E-1	0.00E+0	0.00E+0
Materials for energy recovery	kg	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
Exported energy	MJ	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0

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

Impact category	Unit	A1-A3	A4	C1	C2	C3	C4	D
Global Warming Potential	kg CO2e	3.90E+0	1.63E-2	0.00E+0	1.60E-2	8.82E-4	1.00E-3	-1.24E+0
Ozone depletion potential	kg CFC-11e	3.01E-7	2.78E-9	0.00E+0	3.00E-9	4.77E-11	2.50E-10	-5.73E-8
Acidification	kg SO2e	6.57E-2	2.44E-4	0.00E+0	5.20E-5	4.50E-6	6.70E-6	-4.42E-3
Eutrophication	kg PO43e	1.98E-2	3.00E-5	0.00E+0	1.20E-5	3.15E-6	2.20E-6	-2.21E-3
Photochemical ozone formation ("smog")	kg C2H4e	1.41E-3	6.53E-6	0.00E+0	2.10E-6	1.80E-7	2.70E-7	-7.37E-4
Abiotic depletion potential - elements	kg Sbe	3.54E-4	3.88E-8	0.00E+0	5.80E-8	8.25E-9	3.40E-9	-2.50E-5
Abiotic depletion potential - fossil	MJ	5.10E+1	2.27E-1	0.00E+0	2.47E-1	1.79E-2	2.40E-2	-1.14E+1

## KEY INFORMATION PER KG

Impact category	Unit	A1-A3	A4	C1	C2	C3	C4	D
Global warming potential - total	kg CO2e	4.03E+0	1.68E-2	0.00E+0	1.70E-2	8.93E-4	1.10E-3	-1.32E+0
Global warming potential - fossil	kg CO2e	4.03E+0	1.68E-2	0.00E+0	1.70E-2	8.91E-4	1.10E-3	-1.32E+0
Global warming potential - biogenic	kg CO2e	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
Abiotic depletion potential - minerals & metals	kg Sbe	3.54E-4	4.00E-8	0.00E+0	5.90E-8	8.28E-9	3.50E-9	-2.49E-5
Abiotic depletion potential - fossil	MJ	5.11E+1	2.27E-1	0.00E+0	2.47E-1	1.80E-2	2.40E-2	-1.14E+1
Water use	m3e depr.	2.07E+0	8.35E-4	0.00E+0	1.10E-3	4.59E-4	1.40E-4	-2.37E-1
Secondary materials	kg	3.38E-1	8.43E-5	0.00E+0	8.30E-5	4.68E-6	8.80E-6	1.58E+0
Biogenic carbon in product (A3)	kg C	0.00E+0	N/A	N/A	N/A	N/A	N/A	N/A
Biogenic carbon in packaging (A3)	kg C	0.00E+0	N/A	N/A	N/A	N/A	N/A	N/A

# VENTILATION DUCTS AND BENDS (EXCLUDING SPIRAL DUCTS, NTOP AND NTOV)

## ENVIRONMENTAL IMPACTS - CORE INDICATORS, EN 15804+A2, PEF

Impact category	Unit	A1-A3	A4	C1	C2	C3	C4	D
Global warming potential - total	kg CO2e	3.84E+0	1.68E-2	0.00E+0	1.70E-2	8.92E-4	1.11E-3	-1.32E+0
Global warming potential - fossil	kg CO2e	3.83E+0	1.68E-2	0.00E+0	1.70E-2	8.90E-4	1.11E-3	-1.32E+0
Global warming potential - biogenic	kg CO2e	7.90E-3	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
Global warming potential - LULUC	kg CO2e	3.36E-3	8.70E-6	0.00E+0	6.50E-6	1.89E-6	1.11E-6	-2.04E-4
Ozone depletion pot.	kg CFC-11e	2.98E-7	3.57E-9	0.00E+0	3.80E-9	5.58E-11	3.22E-10	-5.07E-8
Acidification potential	mol H+e	8.72E-2	3.05E-4	0.00E+0	6.70E-5	5.40E-6	8.96E-6	-5.32E-3
Eutrophication potential - freshwater	kg Pe	1.79E-4	8.75E-8	0.00E+0	1.20E-7	8.54E-8	1.61E-8	-5.40E-5
Eutrophication potential - marine	kg Ne	5.98E-3	7.79E-5	0.00E+0	2.00E-5	8.99E-7	3.02E-6	-1.12E-3
Eutrophication potential - terrestrial	mol Ne	3.52E-1	8.65E-4	0.00E+0	2.20E-4	1.08E-5	3.32E-5	-1.32E-2
Photochemical ozone formation ("smog")	kg NMVOCe	1.68E-2	2.30E-4	0.00E+0	6.80E-5	2.88E-6	9.66E-6	-6.54E-3
Abiotic depletion potential - minerals & metals	kg Sbe	2.73E-4	4.02E-8	0.00E+0	5.90E-8	8.27E-9	3.52E-9	-2.49E-5
Abiotic depletion potential - fossil resources	MJ	4.74E+1	2.28E-1	0.00E+0	2.47E-1	1.80E-2	2.42E-2	-1.14E+1
Water use	m3e depr.	1.83E+0	8.40E-4	0.00E+0	1.10E-3	4.59E-4	1.41E-4	-2.37E-1

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 experienced with the indicator.

## USE OF NATURAL RESOURCES

Impact category	Unit	A1-A3	A4	C1	C2	C3	C4	D
Renewable primary energy resources as energy	MJ	4.14E+0	2.42E-3	0.00E+0	3.50E-3	3.33E-3	4.23E-4	-9.57E-1
Renewable primary energy resources as material	MJ	6.87E-2	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
Total use of renewable primary energy resources	MJ	4.21E+0	2.42E-3	0.00E+0	3.50E-3	3.33E-3	4.23E-4	-9.57E-1
Non-renewable primary energy resources as energy	MJ	4.73E+1	2.28E-1	0.00E+0	2.47E-1	1.80E-2	2.42E-2	-1.14E+1
Non-renewable primary energy resources as material	MJ	2.11E-2	0.00E+0	0.00E+0	0.00E+0	0.00E+0	-1.84E-2	0.00E+0
Total use of non-renewable primary energy resources	MJ	4.74E+1	2.28E-1	0.00E+0	2.47E-1	1.80E-2	5.78E-3	-1.14E+1
Secondary materials	kg	3.45E-1	8.47E-5	0.00E+0	8.30E-5	4.68E-6	8.86E-6	1.58E+0
Renewable secondary fuels	MJ	1.79E-3	5.78E-7	0.00E+0	9.10E-7	1.71E-8	3.42E-7	-1.23E-4
Non-renewable secondary fuels	MJ	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
Use of net fresh water	m3	4.32E-2	2.18E-5	0.00E+0	3.10E-5	1.44E-5	2.62E-5	-2.70E-3

## END OF LIFE - WASTE

Impact category	Unit	A1-A3	A4	C1	C2	C3	C4	D
Hazardous waste	kg	1.19E+0	2.69E-4	0.00E+0	2.80E-4	7.01E-5	0.00E+0	-4.42E-1
Non-hazardous waste	kg	7.19E+0	3.52E-3	0.00E+0	4.90E-3	3.87E-3	1.01E-1	-2.15E+0
Radioactive waste	kg	1.53E-4	1.59E-6	0.00E+0	1.70E-6	1.26E-7	0.00E+0	4.09E-6

## END OF LIFE - OUTPUT FLOWS

Impact category	Unit	A1-A3	A4	C1	C2	C3	C4	D
Components for re-use	kg	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
Materials for recycling	kg	0.00E+0	0.00E+0	0.00E+0	0.00E+0	8.99E-1	0.00E+0	0.00E+0
Materials for energy recovery	kg	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
Exported energy	MJ	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0

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

Impact category	Unit	A1-A3	A4	C1	C2	C3	C4	D
Global Warming Potential	kg CO2e	3.69E+0	1.63E-2	0.00E+0	1.60E-2	8.81E-4	1.01E-3	-1.24E+0
Ozone depletion potential	kg CFC-11e	2.72E-7	2.79E-9	0.00E+0	3.00E-9	4.77E-11	2.52E-10	-5.72E-8
Acidification	kg SO2e	5.10E-2	2.45E-4	0.00E+0	5.20E-5	4.50E-6	6.74E-6	-4.42E-3
Eutrophication	kg PO43e	1.61E-2	3.02E-5	0.00E+0	1.20E-5	3.15E-6	2.21E-6	-2.21E-3
Photochemical ozone formation ("smog")	kg C2H4e	1.39E-3	6.56E-6	0.00E+0	2.10E-6	1.80E-7	2.72E-7	-7.36E-4
Abiotic depletion potential - elements	kg Sbe	2.73E-4	3.90E-8	0.00E+0	5.80E-8	8.25E-9	3.42E-9	-2.50E-5
Abiotic depletion potential - fossil	MJ	4.73E+1	2.28E-1	0.00E+0	2.47E-1	1.79E-2	2.42E-2	-1.14E+1

## KEY INFORMATION PER KG OF PRODUCT

Impact category	Unit	A1-A3	A4	C1	C2	C3	C4	D
Global warming potential - total	kg CO2e	3.84E+0	1.68E-2	0.00E+0	1.70E-2	8.92E-4	1.11E-3	-1.32E+0
Global warming potential - fossil	kg CO2e	3.83E+0	1.68E-2	0.00E+0	1.70E-2	8.90E-4	1.11E-3	-1.32E+0
Global warming potential - biogenic	kg CO2e	7.90E-3	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
Abiotic depletion potential - minerals & metals	kg Sbe	2.73E-4	4.02E-8	0.00E+0	5.90E-8	8.27E-9	3.52E-9	-2.49E-5
Abiotic depletion potential - fossil	MJ	4.74E+1	2.28E-1	0.00E+0	2.47E-1	1.80E-2	2.42E-2	-1.14E+1
Water use	m3e depr.	1.83E+0	8.40E-4	0.00E+0	1.10E-3	4.59E-4	1.41E-4	-2.37E-1
Secondary materials	kg	3.45E-1	8.47E-5	0.00E+0	8.30E-5	4.68E-6	8.86E-6	1.58E+0
Biogenic carbon in product (A3)	kg C	0.00E+0	N/A	N/A	N/A	N/A	N/A	N/A
Biogenic carbon in packaging (A3)	kg C	2.15E-3	N/A	N/A	N/A	N/A	N/A	N/A