

Environmental product declaration

in accordance with ISO 14025 and EN 15804+A2

Abstracta Agile



abstracta

The Norwegian EPD Foundation

Owner of the declaration:

Abstracta AB

Product:

Abstracta Agile

Declared unit:

1 pcs

This declaration is based on Product Category Rules:

CEN Standard EN 15804:2012+A2:2019 serves as core PCR

NPCR 026:2022 Part B for Furniture

Program operator:

The Norwegian EPD Foundation

Declaration number:

NEPD-8569-8234-EN

Registration number:

NEPD-8569-8234-EN

Issue date: 19.12.2024

Valid to: 19.12.2029

EPD software:

LCAno EPD generator ID: 719368

General information

Product

Abstracta Agile

Program operator:

The Norwegian EPD Foundation
Post Box 5250 Majorstuen, 0303 Oslo, Norway
Phone: +47 977 22 020
web: www.epd-norge.no

Declaration number:

NEPD-8569-8234-EN

This declaration is based on Product Category Rules:

CEN Standard EN 15804:2012+A2:2019 serves as core PCR
NPCR 026:2022 Part B for Furniture

Statement of liability:

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

Declared unit:

1 pcs Abstracta Agile

Declared unit (cradle to gate) with option:

A1-A3,A4,A5,B2,B3,B4,C1,C2,C3,C4,D

Functional unit:

This EPD covers one piece of Abstracta Agile with polyester upholstery, including packaging. The product functions both as a sound-absorbing floor screen and a whiteboard, with the possibility to equip it with a LCD display and video conference solution. At the end of its lifecycle, it can be dismantled and either recycled or returned to Abstracta for reuse or recycling.

General information on verification of EPD from EPD tools:

Independent verification of data, other environmental information and the declaration according to ISO 14025:2010, § 8.1.3 and § 8.1.4. Verification of each EPD is made according to EPD-Norway'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-Norway, and iii) the process is reviewed annually by an independent third party verifier. See Appendix G of EPD-Norway's General Programme Instructions for further information on EPD tools

Verification of EPD tool:

Owner of the declaration:

Abstracta AB
Contact person: Tim Wisme
Phone:
e-mail: tim.wisme@abstracta.se

Manufacturer:

Abstracta AB

Place of production:

Abstracta AB
Lammengatan 2
363 45 Lammhult, Sweden

Management system:

ISO 9001, 14001 och 45001

Organisation no:

556046-3852

Issue date:

19.12.2024

Valid to:

19.12.2029

Year of study:

2023

Comparability:

EPD of construction products may not be comparable if they not comply with EN 15804 and seen in a building context.

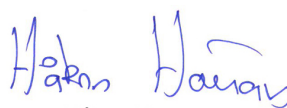
Development and verification of EPD:

The declaration is created using EPD tool lca.tools ver EPD2022.03, developed by LCA.no. The EPD tool is integrated in the company's management system, and has been approved by EPD Norway.

Developer of EPD: Tim Wisme

Reviewer of company-specific input data and EPD: Erik Graesen

Approved:



Håkon Hauan
Managing Director of EPD-Norway

Independent third party verification of the EPD tool, background data and test-EPD in accordance with EPDNorway's procedures and guidelines for verification and approval of EPD tools.

Third party verifier:

Elisabet Amat, GREENIZE projects

(no signature required)

Product

Product description:

Designer: Studio Stockholm

Abstracta Agile is a multi-tool that fills a void. Its inspiration comes from how today's tech companies work on projects.

"We've done a lot of interior design projects for software companies that work in teams in a really agile way. So, there's a need, for example, to be able to huddle for a quick coordination meeting and then move on. This is where the idea behind the product came from," explains designer Martin Eckerberg.

It works like a project workspace on wheels, equipped with all the necessary tools: a whiteboard, an acoustic panel, a smart fold-out table for laptops, and a USB-C cable. The whiteboard is an e3 ceramic steel surface from PolyVision.

Product specification

Abstracta Agile works like a project workspace on wheels, equipped with all the necessary tools. One side of the screen features a full-length magnetic whiteboard, the other side contains an acoustic panel, and the top section can accommodate an LCD display with video conferencing solution. There is a fold-out table for laptops on one side of the frame, which features an integrated cable (USB-C) for screen sharing. The cable is not included in this EPD.

The product can be equipped with a video conferencing solution, consisting of: NEC Multisync M551 LCD 55" display and Bose Videobar™ VB1. These are not included in the product and are sold separately and are therefore also not included in this EPD.

See the product sheet for more information: https://lammhults.sharepoint.com/:b:/s/abs-webpage/ETMSu_7t621Mowhd_7KyhSQB5TFhCfkZs2GF56jhQgh0CA?e=Bxrezl

Materials	kg	%	Recycled share in material (kg)	Recycled share in material (%)
Filt	2,81	3,14	1,41	50,00
Glue for wood	0,11	0,12	0,00	0,00
Plastic - Melamine	2,30	2,57	0,00	0,00
Plastic - Nylon (PA)	0,11	0,13	0,00	0,00
Plastic - Polyethylene (LDPE)	0,00	0,00	0,00	0,00
Plastic - Polypropylene (PP)	0,01	0,01	0,00	0,00
Plastic - Polyurethane (PUR)	0,33	0,37	0,00	0,00
Powder coating	0,14	0,16	0,00	0,00
Tape	0,01	0,01	0,00	0,00
Unverified data	9,05	10,11	0,29	3,24
Wood - Chipboard	13,00	14,53	0,00	0,00
Wood - Fibreboard	15,71	17,56	0,00	0,00
Metal - Aluminium	13,67	15,28	10,44	76,39
Metal - Stainless steel	0,46	0,51	0,10	21,83
Metal - Steel	24,19	27,03	0,00	0,00
Textile - Polyester	0,54	0,60	0,00	0,00
Wood	7,05	7,88	0,00	0,00
Total	89,49	100,00	12,24	

Packaging	kg	%	Recycled share in material (kg)	Recycled share in material (%)
Packaging - Paper	0,07	0,09	0,00	0,00
Packaging - Plastic	0,01	0,01	0,00	0,00
Packaging - Plastic straps	0,22	0,29	0,00	0,00
Packaging - Wood	65,68	84,07	0,00	0,00
Recycled cardboard	12,14	15,54	12,14	100,00
Total incl. packaging	167,61	100,00	24,38	

Technical data:

The dimensions of Agile are 1300x1900x540. For more information on the technical data of Agile, see the technical data sheet: https://lammhults.sharepoint.com/:b:/s/abs-webpage/EUnhI9gzUHRLh4_K0QLnh5UB3pFFAHOObPkxbFPhs4-0LXg?e=ddqWTb

Market:

The product is available worldwide. The distance to the market is based on shipping to Scandinavia or Western Europe.

Reference service life, product

Estimated to be 15 years, with a 5-year warranty and a 10-year spare part guarantee.

Reference service life, building

Assumed to be 60 years.

LCA: Calculation rules

Declared unit:

1 pcs Abstracta Agile

Cut-off criteria:

All major raw materials and all the essential energy is included. The production processes for raw materials and energy flows with very small amounts (less than 1%) are not included. These cut-off criteria do not apply for hazardous materials and substances.

Allocation:

The allocation is made in accordance with the provisions of EN 15804. Incoming energy and water and waste production in-house is allocated equally among all products through mass allocation. Effects of primary production of recycled materials is allocated to the main product in which the material was used. The recycling process and transportation of the material is allocated to this analysis.

Data quality:

Specific data for the product composition are provided by the manufacturer. They represent the production of the declared product and were collected for EPD development in the year of study. Background data is based on registered EPDs according to EN 15804, Ostfold Research databases, ecoinvent and other LCA databases. The data quality of the raw materials in A1 is presented in the table below.

Materials	Source	Data quality	Year
Filt	S-P-04908	EPD	2020
Glue for wood	ecoinvent 3.6	Database	2019
Metal - Aluminium	ecoinvent 3.6	Database	2019
Metal - Aluminium	S-P-07358	EPD	2021
Metal - Stainless steel	ecoinvent 3.6	Database	2019
Metal - Steel	ecoinvent 3.6	Database	2019
Packaging - Paper	ecoinvent 3.6	Database	2019
Packaging - Plastic	ecoinvent 3.6	Database	2019
Packaging - Plastic straps	ecoinvent 3.6	Database	2019
Packaging - Wood	Modified ecoinvent 3.6	Database	2019
Plastic - Melamine	ecoinvent 3.6	Database	2019
Plastic - Nylon (PA)	ecoinvent 3.6	Database	2019
Plastic - Polyethylene (LDPE)	ecoinvent 3.6	Database	2019
Plastic - Polypropylene (PP)	ecoinvent 3.6	Database	2019
Plastic - Polyurethane (PUR)	ecoinvent 3.6	Database	2019
Powder coating	Ecoinvent 3.6	Database	2019
Recycled cardboard	Modified ecoinvent 3.6	Database	2019
Tape	Ecoinvent 3.6	Database	2019
Textile - Polyester	ecoinvent 3.6	Database	2019
Unverified data	ecoinvent 3.6	Database	2019
Wood	ecoinvent 3.6	Database	2019
Wood - Chipboard	ecoinvent 3.6	Database	2019
Wood - Fibreboard	modified ecoinvent 3.6	Database	2019

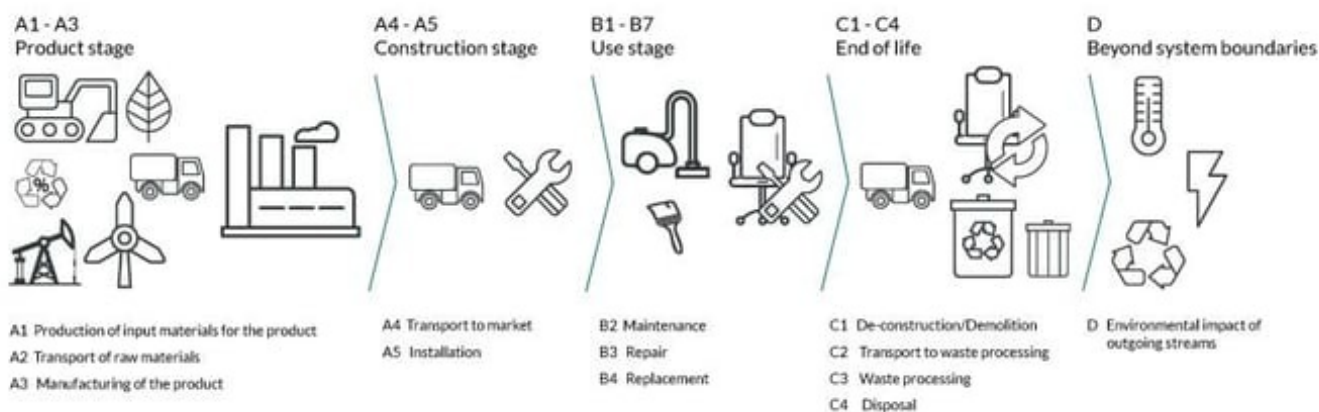
System boundaries (X=included, MND=module not declared, MNR=module not relevant)

Product stage			Construction installation stage		Use stage							End of life stage				Beyond the system boundaries
Raw materials	Transport	Manufacturing	Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling-potential
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	X	X	MNR	X	X	X	MNR	MNR	MNR	X	X	X	X	X

System boundary:

The EPD is a cradle-to-grave analysis (A1-D), excluding certain B-stages (use phase) assumed negligible.

- A1-A4 stages: These encompass the extraction and production of raw materials, transportation to the production site, the production process itself, and an estimated transport distance to the market.
- A5 stage: This includes the waste generated from the product’s packaging after customer assembly.
- B stage: Only B2 is considered relevant, involving assumptions on customer care based on Abstracta’s care instructions.
- C and D stages: These cover the use of materials and energy for deconstruction, transportation to waste management, waste processing, disposal of non-processable materials, and the potential for reuse, recovery, and recycling of the product.



Additional technical information:

Care instructions

Fabric

To maintain the color and appearance of the fabric, it should be vacuum cleaned regularly with a soft nozzle.

Stain Removal for Polyester:

- Use colorless towel or a washcloth to absorb as much as possible of still-moist stain. Dried stains should be vacuumed.
- Wet the stain sparingly with a white pure cotton cloth, warm water and possibly a little pH-neutral cleaner.
- Dab the area with a dry cloth or colorless paper towel to absorb the moisture and stain.
- Repeat this process until the stain is gone.
- On the final repetition, use only clean water with no detergent added.
- Finish by dabbing up moisture with a dry cloth or paper towel.

Stain Removal for wool:

Dab or wipe gently with a damp cloth.

Whiteboards and glass boards

Remove any protective film from the writing board and thoroughly clean the surface before first use. Moderately-used writing boards should then be cleaned a couple of times a week. The board must be absolutely dry when used. Use only pens intended for whiteboards. Replace the felt on the eraser on a regular basis.

Clean as follows:

- Wipe with approved cleaning fluid intended for whiteboards.
- Then wash away residual cleaning solution with clean lukewarm water.
- Wipe dry with a cloth.
- Repeat if necessary.
- Easier soiled paintings can be cleaned with only lukewarm water.
- Wipe dry with a cloth.

Note: Avoid detergents that are not intended for whiteboards (e.g. soap or detergent) since they can leave residues which hinder erasure.

Abstracta offers a reuse service for our clients. This involves us collecting worn-out products to facilitate reuse, renovation, or recycling. In order to make circularity easier, most of our products feature replaceable parts, simplifying repair. We do this in the hope that we can help contribute in the transition to a more sustainable future. Read more about the service here: <https://abstracta.se/story/abstracta-is-introducing-a-new-recycling-service-for-used-products-abstracta/> or contact our Sales Support for more information. Otherwise, try to ensure that the product can be reused when possible, or else, dismantle it so that as much of the materials can be recycled as possible.

LCA: Scenarios and additional technical information

The following information describe the scenarios in the different modules of the EPD.

Scenario description

Certain assumptions have been made regarding the product's lifetime after it leaves the factory.

- A4-stage: It is assumed that the product is transported to customers in Scandinavia, Germany, the UK, or France, which accounted for 88% of sales in 2023. An average distance to the customer has been calculated based on this data.
- A5-stage: The packaging of the product becomes waste, and the impacts are automatically added according to the EPD tool's assumptions on on-site waste handling.
- B-stage: It is assumed that the customer maintains the product by vacuuming it for 0.5 minutes/m² with a 600 W vacuum cleaner each month.
- C-stage: It is assumed that there is a 50 km distance from the customer to a waste terminal. The remaining values for waste-handling are automatically filled in by the tool.
- D-stage: Automatic values are filled in according to generic data.

Transport from production place to user (A4)	Capacity utilisation (incl. return) %	Distance (km)	Fuel/Energy Consumption	Unit	Value (Liter/tonne)
Ship, Ferry, Sea (km)	50,0 %	8	0,034	l/tkm	0,27
Truck, 16-32 tonnes, EURO 6 (km)	36,7 %	502	0,043	l/tkm	21,59
Assembly (A5)		Unit	Value		
Waste, packaging, pallet, EUR wooden pallet, reusable, average treatment (kg)	kg	65,68			
Waste, packaging, cardboard, 100 % recycled, to average treatment (kg)	kg	12,14			
Waste, packaging, PET straps, to average treatment - A5 (kg)	kg	0,22			
Waste, packaging, plastic film (LDPE), to average treatment - A5 (kg)	kg	0,01			
Waste, packaging, kraft paper, unbleached, to average treatment (kg)	kg	0,07			
Maintenance (B2)		Unit	Value		
Electricity, Nordic (kWh)	kWh	1,51			
Transport to waste processing (C2)	Capacity utilisation (incl. return) %	Distance (km)	Fuel/Energy Consumption	Unit	Value (Liter/tonne)
Truck, 16-32 tonnes, EURO 6 (km)	36,7 %	50	0,043	l/tkm	2,15
Waste processing (C3)		Unit	Value		
Copper to recycling (kg)	kg	15,85			
Waste treatment per kg Scrap steel, incineration with fly ash extraction (kg)	kg	45,33			
Waste treatment per kg Scrap aluminium, incineration with fly ash extraction (kg)	kg	0,95			
Waste treatment per kg Non-hazardous waste, incineration with fly ash extraction - C3 (kg)	kg	2,44			
Waste treatment per kg Glass, incineration with fly ash extraction (kg)	kg	1,09			
Waste treatment per kg Polyurethane (PU), incineration (kg)	kg	0,33			
Waste treatment per kg Plastics, Mixture, municipal incineration with fly ash extraction (kg)	kg	0,11			
Waste treatment per kg Polypropylene (PP), incineration with fly ash extraction - C3 (kg)	kg	0,01			
Waste treatment per kg Polyethylene, PE, incineration with fly ash extraction - C3 (kg)	kg	0,00			
Waste treatment per kg Wood, incineration with fly ash extraction (kg)	kg	35,76			
Waste treatment per kg Textile, incineration with fly ash extraction (kg)	kg	0,54			
Waste treatment per kg Polyethylene terephthalate, PET, incineration with fly ash extraction - C3 (kg)	kg	2,81			
Waste treatment per kg Hazardous waste, incineration (kg)	kg	0,11			

Disposal (C4)	Unit	Value			
Landfilling of ashes and residues from incineration of Scrap steel (kg)	kg	29,95			
Landfilling of ashes and residues from incineration of Scrap aluminium (kg)	kg	0,85			
Landfilling of ashes from incineration of Non-hazardous waste, process per kg ashes and residues - C4 (kg)	kg	0,58			
Landfilling of ashes from incineration of Glass, process of ashes and residues (kg)	kg	1,09			
Landfilling of ashes from incineration of Polyurethane (PU), process per kg ashes and residues - C4 (kg)	kg	0,01			
Landfilling of ashes from incineration of Plastics, Mixture, municipal incineration with fly ash extraction, process per kg ashes and residues - C4 (kg)	kg	0,00			
Landfilling of ashes from incineration of Polypropylene, PP, process per kg ashes and residues - C4 (kg)	kg	0,00			
Landfilling of non-hazardous waste (kg)	kg	0,00			
Landfilling of ashes from incineration of Polyethylene, PE, process per kg ashes and residues - C4 (kg)	kg	0,00			
Landfilling of ashes from incineration of Wood, process per kg ashes and residues (kg)	kg	0,41			
Landfilling of ashes from incineration of Textile, soiled, process per kg ashes and residues (kg)	kg	0,03			
Landfilling of ashes from incineration of Polyethylene terephthalate, PET, process per kg ashes and residues - C4 (kg)	kg	0,06			
Landfilling of ashes from incineration of Hazardous waste, from incineration (kg)	kg	0,02			

Benefits and loads beyond the system boundaries (D)	Unit	Value			
Substitution of primary steel with net scrap (kg)	kg	17,01			
Substitution of primary aluminium with net scrap (kg)	kg	0,10			
Substitution of electricity, in Norway (MJ)	MJ	30,43			
Substitution of thermal energy, district heating, in Norway (MJ)	MJ	460,37			

LCA: Results

The LCA results are presented below for the declared unit defined on page 2 of the EPD document.

Environmental impact							
Indicator	Unit	A1-A3	A4	A5	B2	B3	
GWP-total	kg CO ₂ -eq	1,19E+02	1,39E+01	1,21E+02	2,20E-01	0	
GWP-fossil	kg CO ₂ -eq	2,90E+02	1,39E+01	3,05E-01	2,05E-01	0	
GWP-biogenic	kg CO ₂ -eq	-1,72E+02	5,73E-03	1,20E+02	3,75E-03	0	
GWP-luluc	kg CO ₂ -eq	7,36E-01	4,98E-03	8,94E-05	1,12E-02	0	
ODP	kg CFC11 -eq	3,54E-05	3,14E-06	5,69E-08	2,22E-08	0	
AP	mol H+ -eq	1,65E+00	4,43E-02	1,67E-03	9,46E-04	0	
EP-FreshWater	kg P -eq	1,49E-02	1,10E-04	2,72E-06	1,36E-05	0	
EP-Marine	kg N -eq	3,21E-01	9,02E-03	6,35E-04	1,49E-04	0	
EP-Terrestrial	mol N -eq	3,63E+00	1,01E-01	6,70E-03	2,01E-03	0	
POCP	kg NMVOC -eq	1,20E+00	3,69E-02	1,83E-03	4,70E-04	0	
ADP-minerals&metals ¹	kg Sb-eq	5,50E-03	3,81E-04	6,34E-06	3,19E-06	0	
ADP-fossil ¹	MJ	4,13E+03	2,10E+02	3,88E+00	5,54E+00	0	
WDP ¹	m ³	3,09E+04	2,01E+02	5,37E+00	4,28E+02	0	







Indicator	Unit	B4	C1	C2	C3	C4	D
GWP-total	kg CO ₂ -eq	0	0	1,37E+00	7,37E+01	3,77E-01	-2,24E+01
GWP-fossil	kg CO ₂ -eq	0	0	1,37E+00	1,36E+01	3,75E-01	-2,23E+01
GWP-biogenic	kg CO ₂ -eq	0	0	5,67E-04	6,01E+01	2,17E-03	-1,99E-02
GWP-luluc	kg CO ₂ -eq	0	0	4,87E-04	3,04E-04	1,11E-04	-1,17E-01
ODP	kg CFC11 -eq	0	0	3,10E-07	1,35E-07	1,13E-07	-1,94E-01
AP	mol H+ -eq	0	0	3,93E-03	1,05E-02	2,59E-03	-1,21E-01
EP-FreshWater	kg P -eq	0	0	1,09E-05	2,53E-05	3,76E-06	-1,42E-03
EP-Marine	kg N -eq	0	0	7,78E-04	4,77E-03	9,24E-04	-2,72E-02
EP-Terrestrial	mol N -eq	0	0	8,71E-03	4,99E-02	1,02E-02	-2,83E-01
POCP	kg NMVOC -eq	0	0	3,34E-03	1,26E-02	2,93E-03	-1,18E-01
ADP-minerals&metals ¹	kg Sb-eq	0	0	3,78E-05	6,10E-06	6,29E-06	-3,48E-04
ADP-fossil ¹	MJ	0	0	2,07E+01	8,77E+00	8,35E+00	-2,07E+02
WDP ¹	m ³	0	0	2,00E+01	5,69E+00	1,78E+01	-6,89E+00







GWP-total = Global Warming Potential total; 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; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption

"Reading example: 9,0 E-03 = 9,0*10⁻³ = 0,009"
 *INA Indicator Not Assessed

1. The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator

Remarks to environmental impacts

Additional environmental impact indicators							
Indicator	Unit	A1-A3	A4	A5	B2	B3	
 PM	Disease incidence	2,19E-05	8,45E-07	2,29E-08	5,01E-09	0	
 IRP ²	kgBq U235 -eq	1,69E+01	9,16E-01	1,59E-02	1,26E-01	0	
 ETP-fw ¹	CTUe	1,29E+04	1,55E+02	4,94E+00	6,94E+00	0	
 HTP-c ¹	CTUh	1,07E-06	0,00E+00	2,43E-10	1,62E-10	0	
 HTP-nc ¹	CTUh	6,81E-06	1,70E-07	1,10E-08	4,26E-09	0	
 SQP ¹	dimensionless	5,82E+03	1,46E+02	2,57E+00	4,17E+00	0	











Indicator	Unit	B4	C1	C2	C3	C4	D
 PM	Disease incidence	0	0	8,38E-08	1,60E-07	4,71E-08	-2,95E-06
 IRP ²	kgBq U235 -eq	0	0	9,05E-02	2,35E-02	3,35E-02	-2,25E-01
 ETP-fw ¹	CTUe	0	0	1,53E+01	5,33E+01	5,10E+00	-1,26E+03
 HTP-c ¹	CTUh	0	0	0,00E+00	4,37E-09	1,84E-10	-9,60E-08
 HTP-nc ¹	CTUh	0	0	1,68E-08	9,68E-08	5,08E-09	1,73E-06
 SQP ¹	dimensionless	0	0	1,45E+01	1,80E+00	1,82E+01	-2,67E+02











PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)

"Reading example: 9,0 E-03 = 9,0*10⁻³ = 0,009"

*INA Indicator Not Assessed

1. The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator
2. 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.




Resource use								
Indicator		Unit	A1-A3	A4	A5	B2	B3	
	PERE	MJ	1,58E+03	2,99E+00	6,88E-02	5,45E+00	0	
	PERM	MJ	1,43E+03	0,00E+00	-9,84E+02	0,00E+00	0	
	PERT	MJ	3,00E+03	2,99E+00	-9,84E+02	5,45E+00	0	
	PENRE	MJ	4,05E+03	2,10E+02	3,88E+00	5,63E+00	0	
	PENRM	MJ	9,48E+01	0,00E+00	-5,61E+00	0,00E+00	0	
	PENRT	MJ	4,14E+03	2,10E+02	-1,73E+00	5,63E+00	0	
	SM	kg	2,44E+01	0,00E+00	0,00E+00	0,00E+00	0	
	RSF	MJ	2,71E+00	1,07E-01	2,18E-03	5,50E-02	0	
	NRSF	MJ	2,09E+01	3,81E-01	1,34E-02	0,00E+00	0	
	FW	m ³	9,27E+00	2,23E-02	2,10E-03	2,48E-02	0	




Indicator		Unit	B4	C1	C2	C3	C4	D
	PERE	MJ	0	0	2,96E-01	5,36E-01	1,61E-01	-2,53E+02
	PERM	MJ	0	0	0,00E+00	-4,34E+02	0,00E+00	0,00E+00
	PERT	MJ	0	0	2,96E-01	-4,34E+02	1,61E-01	-2,53E+02
	PENRE	MJ	0	0	2,07E+01	9,03E+00	8,35E+00	-2,07E+02
	PENRM	MJ	0	0	0,00E+00	-8,92E+01	0,00E+00	0,00E+00
	PENRT	MJ	0	0	2,07E+01	-8,02E+01	8,35E+00	-2,07E+02
	SM	kg	0	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00
	RSF	MJ	0	0	1,06E-02	1,20E-02	4,22E-03	6,33E-01
	NRSF	MJ	0	0	3,79E-02	0,00E+00	3,17E-01	5,70E+00
	FW	m ³	0	0	2,21E-03	1,51E-02	7,57E-03	-3,45E-01

PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non renewable primary energy resources used as raw materials; PENRT = Total use of non renewable primary energy resources; SM = Use of secondary materials; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water

"Reading example: 9,0 E-03 = 9,0*10⁻³ = 0,009"

*INA Indicator Not Assessed






End of life - Waste								
Indicator		Unit	A1-A3	A4	A5	B2	B3	
	HWD	kg	2,37E+00	1,08E-02	0,00E+00	5,19E-04	0	
	NHWD	kg	1,06E+02	1,01E+01	1,57E+01	3,44E-02	0	
	RWD	kg	1,43E-01	1,43E-03	0,00E+00	5,80E-05	0	





Indicator		Unit	B4	C1	C2	C3	C4	D
	HWD	kg	0	0	1,07E-03	0,00E+00	3,26E+01	-9,54E-02
	NHWD	kg	0	0	1,01E+00	3,64E+00	4,34E-01	-8,81E+00
	RWD	kg	0	0	1,41E-04	0,00E+00	5,15E-05	-1,94E-04

HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed

"Reading example: 9,0 E-03 = 9,0*10⁻³ = 0,009"

*INA Indicator Not Assessed

End of life - Output flow								
Indicator		Unit	A1-A3	A4	A5	B2	B3	
	CRU	kg	0,00E+00	0,00E+00	6,24E+01	0,00E+00	0	
	MFR	kg	1,25E+00	0,00E+00	1,15E+01	0,00E+00	0	
	MER	kg	4,04E+00	0,00E+00	3,26E+00	0,00E+00	0	
	EEE	MJ	2,48E+00	0,00E+00	2,96E+00	0,00E+00	0	
	EET	MJ	3,76E+01	0,00E+00	4,48E+01	0,00E+00	0	

Indicator		Unit	B4	C1	C2	C3	C4	D
	CRU	kg	0	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00
	MFR	kg	0	0	0,00E+00	1,58E+01	0,00E+00	0,00E+00
	MER	kg	0	0	0,00E+00	8,95E+01	0,00E+00	0,00E+00
	EEE	MJ	0	0	0,00E+00	3,02E+01	0,00E+00	0,00E+00
	EET	MJ	0	0	0,00E+00	4,56E+02	0,00E+00	0,00E+00

CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported energy electrical; EET = Exported energy thermal

"Reading example: 9,0 E-03 = 9,0*10⁻³ = 0,009"

*INA Indicator Not Assessed

Biogenic Carbon Content		
Indicator	Unit	At the factory gate
Biogenic carbon content in product	kg C	1,62E+01
Biogenic carbon content in accompanying packaging	kg C	3,30E+01

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

Additional requirements

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

National production mix from import, low voltage (production of transmission lines, in addition to direct emissions and losses in grid) of applied electricity for the manufacturing process (A3).

Electricity mix	Source	Amount	Unit
Electricity, Sweden (kWh)	ecoinvent 3.6	54,94	g CO ₂ -eq/kWh

Dangerous substances

The product contains no substances given by the REACH Candidate list.

Indoor environment

Additional Environmental Information

Key Environmental Indicators

Key environmental indicators	Unit	A1-A3	A4	A1-C4	A1-D
GWPtotal	kg CO ₂ -eq	118,55	13,90	328,76	306,37
Total energy consumption	MJ	5645,27	213,17	5913,00	5460,05
Amount of recycled materials	%	12,75			

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

Indicator	Unit	A1-A3	A4	A5	B2	B3
GWPIOBC	kg CO ₂ -eq	2,97E+02	1,39E+01	3,05E-01	2,98E-01	0

Indicator	Unit	B4	C1	C2	C3	C4	D
GWPIOBC	kg CO ₂ -eq	0	0	1,37E+00	1,19E+01	3,85E-01	-3,16E+01

GWP-IOBC: Global warming potential calculated according to the principle of instantaneous oxidation. In order to increase the transparency of biogenic carbon contribution to climate impact, the indicator GWP-IOBC is required as it declares climate impacts calculated according to the principle of instantaneous oxidation. GWP-IOBC is also referred to as GWP-GHG in context to Swedish public procurement legislation.

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