Environmental Product Declaration

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

Protective wallcovering Acrovyn PVC-Free

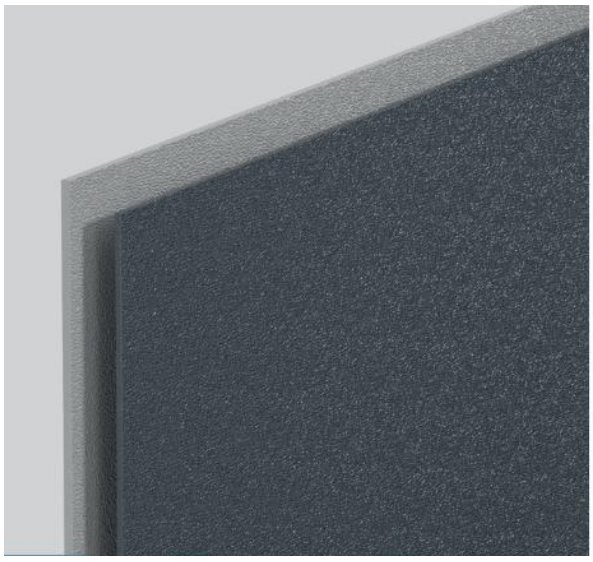
from

CS

Programme:	The International EPD® System, www.environdec.com
Programme operator:	EPD International AB
EPD registration number:	S-P-02037
Version date:	2025-04-08
Valid until:	2030-04-08

An EPD may be updated or depublished if conditions change. To find the latest version of the EPD and to confirm its validity, see www.environdec.com

EPD of multiple products, based on the average results of the product group.
Products : Acrovyn PVC-Free 1 mm, Acrovyn PVC-Free 1.5mm



General information

Programme information

Programme:	The International EPD® System
Address:	EPD International AB Box 210 60 SE-100 31 Stockholm Sweden
Website:	www.environdec.com
E-mail:	info@environdec.com

Accountabilities for PCR, LCA and independent, third-party verification
Product Category Rules (PCR)
CEN standard EN 15804 serves as the Core Product Category Rules (PCR)
Product Category Rules (PCR): PCR 2019:14 Construction products (EN 15804+A2), version 1.3.4
PCR review was conducted by: The Technical Committee of the International EPD® System.
Life Cycle Assessment (LCA)
LCA accountability: Evea
Third-party verification
Independent third-party verification of the declaration and data, according to ISO 14025:2006, via: ☒ EPD verification by individual verifier Third-party verifier: Etienne Lees-Perasso, TIDE Approved by: The International EPD® System
Procedure for follow-up of data during EPD validity involves third party verifier: ☐ Yes ☒ No

The EPD owner has the sole ownership, liability, and responsibility for the EPD.

EPDs within the same product category but registered in different EPD programmes, or not compliant with EN 15804, may not be comparable. For two EPDs to be comparable, they must be based on the same PCR (including the same version number) or be based on fully-aligned PCRs or versions of PCRs; cover products with identical functions, technical performances and use (e.g. identical declared/functional units); have equivalent system boundaries and descriptions of data; apply equivalent data quality requirements, methods of data collection, and allocation methods; apply identical cut-off rules and impact assessment methods (including the same version of characterisation factors); have equivalent content declarations; and be valid at the time of comparison. For further information about comparability, see EN 15804 and ISO 14025.

Company information

Owner of the EPD: CS
Contact: Eric Allard, e.allard@c-sgroup.com
Description of the organisation:
Founded in the United States, CS has been a global manufacturer and supplier of a range of specialist building products for over 70 years. Operating through 22 offices worldwide, with key manufacturing locations or sales offices in most European countries, we employ over 2,000 people. With 40+ registered product patents, our product ranges include wall protection systems, entrance matting systems, specialist coatings for walls and floors, expansion joint covers, solar shading, louvres, cubicle curtain track and pressure relief systems. These have been successfully installed in many of the world's most prestigious buildings, across a spectrum of business sectors including healthcare, transport, retail, education, leisure and commercial offices.

Product-related or management system-related certifications: ISO 9001

Name and location of production site(s):
CS FRANCE - 135, rue Edouard Isambard 27120 PACY-SUR-EURE FRANCE

Product information

Product name: Acrovyn PVC-Free 1mm, Acrovyn PVC-Free 1.5mm
Product identification: Polyethylene Terephthalate Glycol (PETG) rigid protective wallcovering panels for internal use in buildings
Product description: Products are intended to protect the wall ensuring the performance described in the standards EN ISO 6603-1:2000(1) and ASTM D4060(2) for a reference service life of 25 years.

(1) Impact behavior
(2) Abrasion resistance

Acrovyn PVC-Free 1 mm: 1.46 kg/m²
Acrovyn PVC-Free 1.5mm: 1.89 kg/m²

UN CPC code: 36330 Plates, sheets, film, foil and strip, of plastics, not self-adhesive, non-cellular and not reinforced, laminated, supported or similarly combined with other materials.

Geographical scope: Europe.

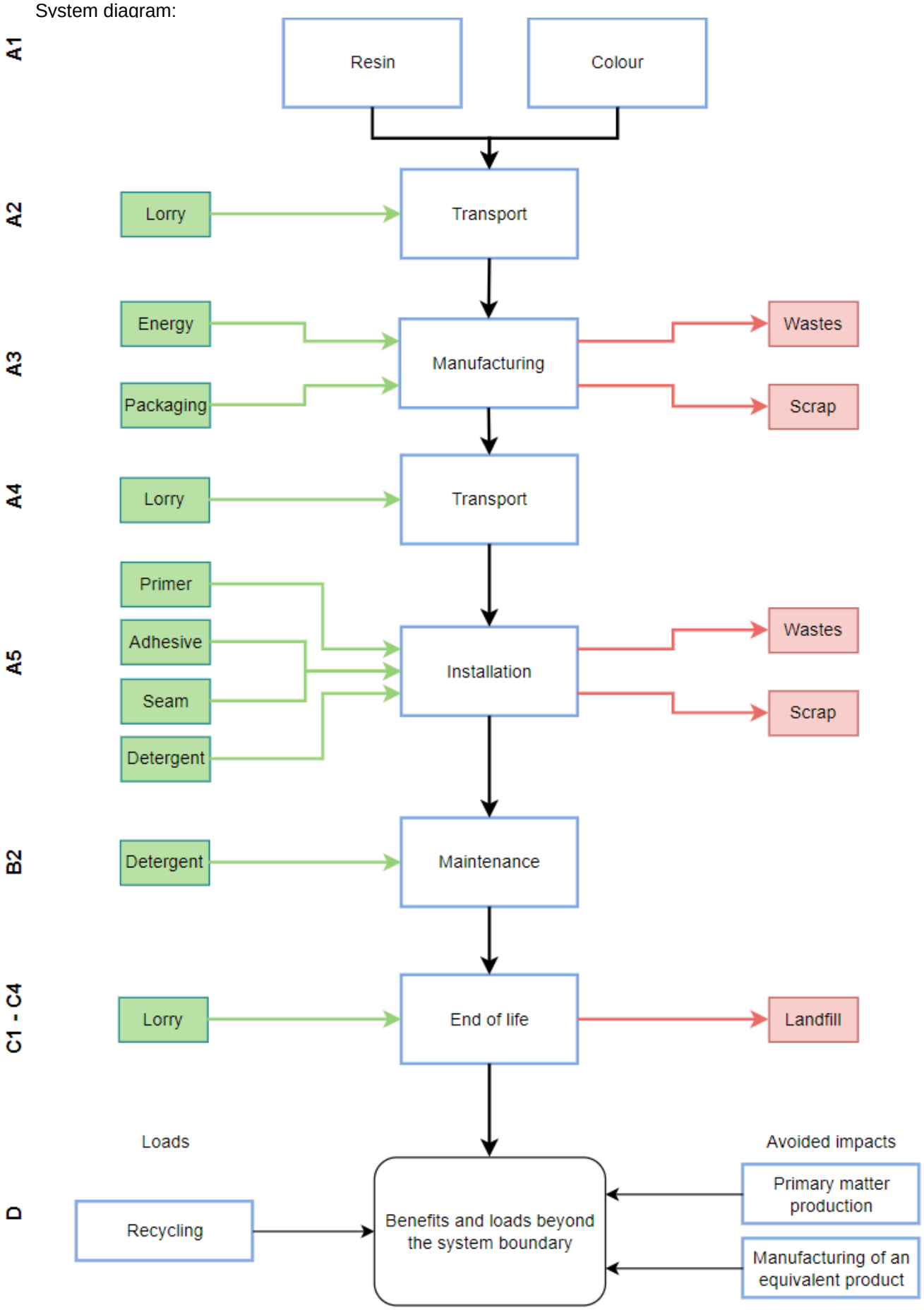
LCA information

Declared unit: One square meter of PETG protective wallcovering.
Reference service life: 25 years
Time representativeness: 2022
Database(s) and LCA software used:

- ecoinvent 3.9.1 allocation cut-off by classification
- SimaPro 9.6

Description of system boundaries:
Cradle to gate with options, modules C1–C4, module D and with optional modules (A1–A3 + C + D and additional modules A4-A5 and B2).
Energy Mix used for A3: French market energy mix with a GWP-GHG of 2.15^{E}-02 kgCO_2eq/kWh.

System diagram:



More information:
Installation scenario:

Parameter	Unit	Value
Description	-	The products are hand-glued with polymer mastic adhesive and are joined with a silicone seam. The percentage of scrap on site is estimated at 5%.
Auxiliary inputs	kg/DU	Primer: 1.00^{E}-01 Polyurethane adhesive: 5.00^{E}-01 Silicone seam: 3.70^{E}-02 Detergent: 3.00^{E}-01
Installation wastes	Kg/DU	Cardboard: 1.32^{E}-01 Staples: 6.84^{E}-04 Polypropylene strapping: 9.09^{E}-04 Adhesive tape: 3.54^{E}-03 Polyethylene film: 7.19^{E}-03 Wooden pallet: 3.83^{E}-01 Scrap: 9.90^{E}-02

Maintenance scenario: The product is cleaned twice per year with water and a detergent diluted to 1%. Waste is considered from the packaging of the detergent: 1.00E-03 kg of PEHD per declared unit.

Modules declared, geographical scope, share of specific data (in GWP-GHG results) and data variation (in GWP-GHG results):

	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	x	x	x	x	x	ND	x	ND	ND	ND	ND	ND	x	x	x	x	X
Geography	EU			EU	EU	-	EU	-	-	-	-	-	EU				EU
Specific data used	x			x	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – products	-16% / +2%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – sites	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-

x: included / ND: not declared / EU: European.

Content information

Product components	Weight, kg	Post-consumer material, weight-%	Biogenic material, weight-% and kg C/kg
PETG Resin	$1.76^{E}00$	0	0
Colour	$9,25^{E}-02$	0	0
TOTAL	$1.85^{E}00$	0	0
Packaging materials	**Weight, kg**	**Weight-% (versus the product)**	**Weight biogenic carbon, kg C/kg**
Cardboard	$1,32^{E}-01$	6,53%	$2.99^{E}-02$
Staples	$6,84^{E}-04$	0,03%	0
Polypropylene strapping	$9,09^{E}-04$	0,04%	0
Adhesive tape	$3,54^{E}-03$	0,18%	0
Polyethylene film	$7,19^{E}-03$	0,36%	0
Wooden pallet	$3,83^{E}-01$	18,96%	$8.58^{E}-02$
TOTAL	$5,27^{E}-01$	26,10%	$1.16^{E}-01$

The product does not contain any substance included in the Candidate List of Substances of Very High Concern (SVHCs) for authorization with concentrations higher than 0.1% weight by weight (w/w).

Results of the environmental performance indicators

The life cycle impact assessment (LCIA) results represent an average product and were calculated based on a weighted average taking into account the production of each type of products in 2022.

Mandatory impact category indicators according to EN 15804

Results per declared unit										
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**B2**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-fossil	kg CO_2 eq.	9,55E+00	6,73E-01	3,75E+00	3,25E-02	0,00E+00	2,21E-02	0,00E+00	2,04E-01	-1,56E-01
GWP-biogenic	kg CO_2 eq.	-7,76E-01	2,18E-04	8,60E-01	2,56E-04	0,00E+00	7,11E-06	0,00E+00	2,81E-05	-3,37E-02
GWP-luluc	kg CO_2 eq.	1,03E-02	3,36E-04	2,70E-03	6,75E-03	0,00E+00	1,10E-05	0,00E+00	5,34E-06	-1,82E-03
GWP-total	kg CO_2 eq.	8,79E+00	6,74E-01	4,61E+00	3,95E-02	0,00E+00	2,21E-02	0,00E+00	2,05E-01	-1,91E-01
ODP	kg CFC 11 eq.	3,61E-05	1,46E-08	2,00E-06	8,26E-10	0,00E+00	4,80E-10	0,00E+00	6,74E-10	-5,27E-09
AP	mol H^+ eq.	4,96E-02	1,53E-03	1,99E-02	1,70E-04	0,00E+00	4,82E-05	0,00E+00	1,53E-04	-7,05E-04
EP-freshwater	kg P eq.	2,81E-04	5,48E-06	1,84E-04	4,49E-06	0,00E+00	1,79E-07	0,00E+00	1,85E-07	-1,10E-05
EP-marine	kg N eq.	7,90E-03	3,77E-04	4,97E-03	1,22E-04	0,00E+00	1,19E-05	0,00E+00	3,44E-04	-3,24E-04
EP-terrestrial	mol N eq.	7,85E-02	3,93E-03	3,73E-02	4,34E-04	0,00E+00	1,24E-04	0,00E+00	6,93E-04	-2,19E-03
POCP	kg NMVOC eq.	3,37E-02	2,32E-03	1,83E-02	1,15E-04	0,00E+00	7,48E-05	0,00E+00	3,08E-04	-7,81E-04
ADP-minerals&metals*	kg Sb eq.	6,89E-05	2,25E-06	4,43E-05	4,00E-07	0,00E+00	7,39E-08	0,00E+00	5,28E-08	-6,28E-07
ADP-fossil*	MJ	2,21E+02	9,56E+00	8,18E+01	5,36E-01	0,00E+00	3,13E-01	0,00E+00	5,35E-01	-2,83E+00
WDP*	m^3	4,35E+00	4,00E-02	2,76E+00	1,25E-01	0,00E+00	1,31E-03	0,00E+00	2,43E-03	-6,79E-02
Acronyms	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									

** Disclaimer: The results of this environmental impact indicator shall be used with care as the uncertainties of these results are high or as there is limited experience with the indicator.*

Additional mandatory and voluntary impact category indicators

Results per declared unit										
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**B2**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-GHG[1]	kg CO_2 eq.	9,56E+00	6,74E-01	3,75E+00	3,93E-02	0,00E+00	2,21E-02	0,00E+00	2,04E-01	-1,58E-01
Potential incidence of disease due to PM emissions PM	Disease incidence	4,68E-07	5,00E-08	3,05E-07	1,89E-09	0,00E+00	1,64E-09	0,00E+00	3,69E-09	-9,94E-09
Potential Human exposure efficiency relative to U235 IRP	kBq U 235 eq.	4,01E-01	4,87E-03	8,06E-02	1,50E-03	0,00E+00	1,59E-04	0,00E+00	6,53E-04	-1,06E-02
Potential Comparative Toxic Unit for ecosystems ETP-fw	CTUe	4,47E+01	4,73E+00	1,58E+02	6,13E-01	0,00E+00	1,55E-01	0,00E+00	7,77E-01	-1,06E+00
Potential Comparative Toxic Unit for humans. cancer effects HTP-c	CTUh	5,32E-09	3,07E-10	2,70E-08	3,14E-11	0,00E+00	1,01E-11	0,00E+00	1,25E-11	-3,87E-10
Potential Comparative Toxic Unit for humans. not cancer effects HTP-nc	CTUh	9,79E-08	6,77E-09	6,32E-08	7,30E-10	0,00E+00	2,22E-10	0,00E+00	4,56E-10	-1,43E-09
Potential soil quality index SQP	-	1,30E+02	5,77E+00	1,49E+01	5,14E-01	0,00E+00	1,89E-01	0,00E+00	1,30E+00	-2,51E+01

[1] This indicator accounts for all greenhouse gases except biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. As such, the indicator is identical to GWP-total except that the CF for biogenic CO_2 is set to zero.

Resource use indicators

Results per declared unit										
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**B2**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	MJ	1,48E+01	1,51E-01	7,14E+00	2,53E-01	0,00E+00	4,92E-03	0,00E+00	2,72E-02	-5,09E+00
PERM	MJ	9,33E+00	0,00E+00	-4,89E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,38E-01
PERT	MJ	2,41E+01	1,51E-01	2,26E+00	2,53E-01	0,00E+00	4,92E-03	0,00E+00	2,72E-02	-4,85E+00
PENRE	MJ	1,56E+02	9,56E+00	5,42E+01	-1,41E-01	0,00E+00	3,13E-01	0,00E+00	5,35E-01	-2,83E+00
PENRM	MJ	6,52E+01	0,00E+00	2,75E+01	6,76E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	2,21E+02	9,56E+00	8,16E+01	5,35E-01	0,00E+00	3,13E-01	0,00E+00	5,35E-01	-2,83E+00
SM	kg	1,38E-01	0,00E+00	6,90E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	m^3	1,18E-01	1,38E-03	6,68E-02	-5,37E-04	0,00E+00	4,51E-05	0,00E+00	6,62E-04	-2,21E-03
Acronyms	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 re-sources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water									

Waste indicators

Results per declared unit										
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**B2**	**C1**	**C2**	**C3**	**C4**	**D**
Hazardous waste disposed	kg	4,60E-01	9,24E-03	1,29E-01	1,85E-03	0,00E+00	3,02E-04	0,00E+00	6,11E-04	-6,78E-03
Non-hazardous waste disposed	kg	6,43E+00	5,51E-01	2,29E+00	1,89E-02	0,00E+00	1,81E-02	0,00E+00	2,30E+00	-6,23E-02
Radioactive waste disposed	kg	4,16E-04	3,16E-06	6,33E-05	1,17E-06	0,00E+00	1,03E-07	0,00E+00	3,59E-07	-1,14E-05

Output flow indicators

Results per declared unit										
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**B2**	**C1**	**C2**	**C3**	**C4**	**D**
Components for re-use	kg	3,11E-01	0,00E+00	1,55E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Material for recycling	kg	3,46E-02	0,00E+00	1,46E-01	2,14E-04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for energy recovery	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy, electricity	MJ	1,12E-02	0,00E+00	3,40E-01	1,75E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy, thermal	MJ	2,73E-02	0,00E+00	7,13E-01	3,54E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

Variability

Indicator	Unit	Min	Max
GWP-fossil	kg CO_2 eq.	84%	102%
GWP-biogenic	kg CO_2 eq.	98%	121%
GWP-luluc	kg CO_2 eq.	91%	101%
GWP-total	kg CO_2 eq.	84%	102%
ODP	kg CFC 11 eq.	78%	102%
AP	mol H^+ eq.	84%	102%
EP-freshwater	kg P eq.	87%	101%
EP-marine	kg N eq.	87%	101%
EP-terrestrial	mol N eq.	85%	102%
POCP	kg NMVOC eq.	86%	101%
ADP-minerals&metals	kg Sb eq.	86%	101%
ADP-fossil	MJ	84%	102%
WDP	m^3	86%	101%
GWP-GHG	kg CO_2 eq.	84%	102%

Additional environmental information

Not applicable.

Additional social and economic information

Not applicable.

Information related to Sector EPD

Not applicable.

Differences versus previous versions

The original version of this EPD was published on the 28th of April 2020.

The differences are due to better data collection, evolution of the background database, calculation methods and the new version of the EN 15804 standard.

References

General Programme Instructions of the International EPD® System. Version 5.0.

PCR 2019:14. Construction Products and Construction Services. Version 1.3.4

EN 15804:2012+A2:2019. Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products.

ISO 9001:2015 Quality management systems — Requirements

ISO 14040: 2006 Environmental management - Life cycle assessment – Principles and Framework

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

ISO 14025: 2006 Environmental labels and declarations -- Type III environmental declarations -- Principles and procedures

EPD®

www.environdec.com