Environmental Product Declaration

In accordance with ISO 14025 and UNE-EN 15804:2012+A2:2019 for:

C5, C10, C15, C20, C25, C30, C35, C40, C45, C50, C55, C60, C65 and C70.

from

CAVITI

Programme:	The International EPD® System, www.environdec.com
Programme operator:	EPD International AB
EPD registration number:	S-P-05325
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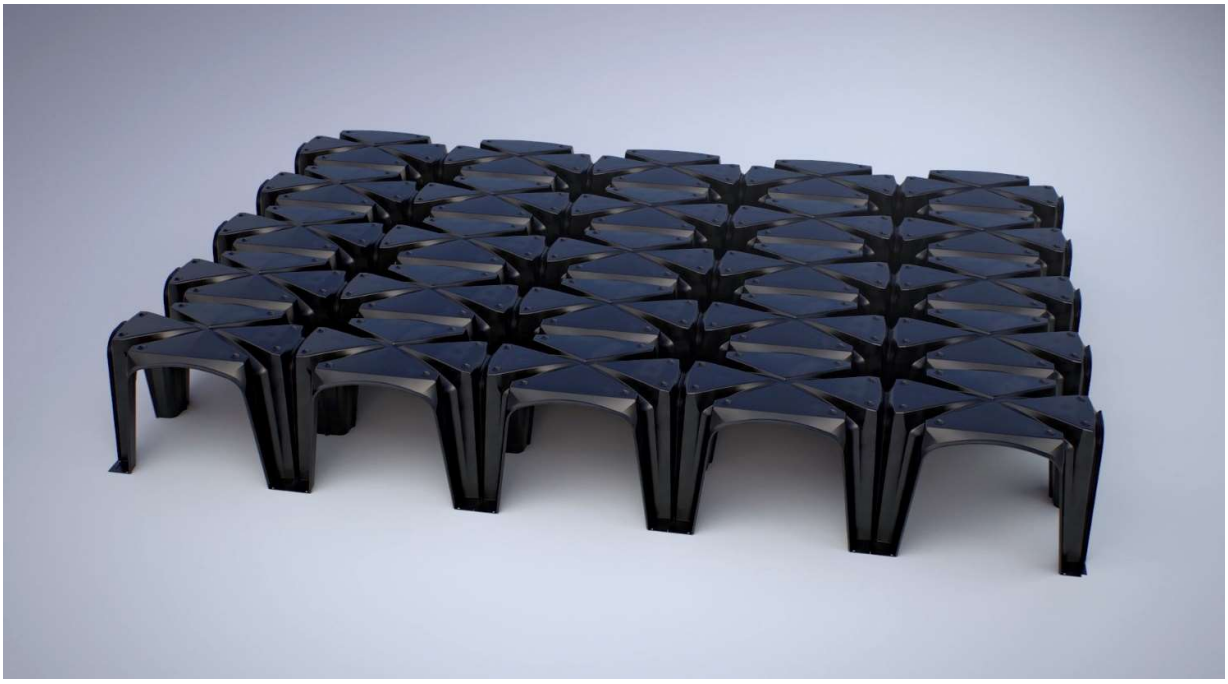
An EPD should provide current information and may be updated if conditions change. The stated validity is therefore subject to the continued registration and publication at www.environdec.com



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
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CEN standard UNE-EN 15804 serves as the Core Product Category Rules (PCR)
Product category rules (PCR): Construction Products, PCR 2019:14, 2020-09-14 (version 1.1).
PCR review was conducted by: The Technical Committee of the International EPD® System. See www.environdec.com/TC for a list of members. Review chair: Claudia A. Peña. The review panel may be contacted via the Secretariat info@environdec.com
Independent third-party verification of the declaration and data, according to ISO 14025:2006: ☐ EPD process certification ☒ EPD verification
Third party verifier: *Lorena Pereda* *lpereda@ctme.es* *Fundación Centro Tecnológico de Miranda de Ebro, CTME* 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 from different programmes may not be comparable. EPDs of construction products may not be comparable if they do not comply with UNE-EN 15804. For further information about comparability, see UNE-EN 15804 and ISO 14025.

The verifier and the program operator have no responsibility for the legality of the product, with the technical support provided by ISOLANA AHORRO ENERGETICO SL.

Company information

Owner of the EPD: Forjados Sanitarios Caviti SL
Avda. Manuel Rivera 3, 34002 Palencia, Spain

Contact: (+34) 979 69 38 89
caviti@caviti.com
www.caviti.com

Description of the organisation: The Caviti system, developed in 1998, was the pioneer in incorporating plastic elements as formwork for construction.

Caviti is a revolutionary product, made in Spain, which simplifies the implementation of insulating suspended flooring, ventilated screeds and lightweight floor screeds with a reduction in time and costs.

Behind Caviti, there is a team of people who are convinced of the usefulness of this system and the added value it provides in construction. The team devotes all their expertise and enthusiasm to attend to clients and their specific needs.

Caviti insulating suspended flooring reinforces the values of dynamism and customer service that have characterized the brand over the years to create a market leading product. For this reason, we have brought together in a new project, the patent developed by Caviti, the technical support, production capacity and the guarantee of ITeC (DAU 14/086).

Caviti, in its commitment to the environment, manufactures all its formwork with 100% recycled materials, and cares about developing quickly installed products that reduce the consumption of materials as well as commissioning and installation costs.

The company is currently marketing and supporting clients all over the country. More specifically, and in collaboration with domestic companies and foreign partners, we are trading in international markets while maintaining the quality levels that are characteristic of the brand.

Product-related or management system-related certifications: Caviti has been certified with *Fitness for use document* (Certification number: DAU 14/086), which also lays down detailed information regarding the product's definition and quality control aspects.

Name and location of production site(s): Cáviti–Envaplas, Camí Pla de Museros, Pol. Ind. Les Forques, ES12550 Almazora (Castellón) Spain.

Product information

Product name: C5, C10, C15, C20, C25, C30, C35, C40, C45, C50, C55, C60, C65 and C70 formworks.

Product identification: The Caviti construction system is made by joining pieces of formwork of varying heights depending on the characteristics and plan of the construction project. The modules are made of black recycled thermo-injected polypropylene.

Product description: Caviti formworks exhibit a flat-topped sinusoidal geometry, presenting equally spaced perpendicular ridges which begin at the midpoint of each element descending and terminating at the structural columns of the formwork that are on its vertices. The Caviti system consists of precast recycled polypropylene sections which are assembled together quickly and easily, to produce a continuous formwork with its own supports, in blocks ranging from 5 to 70 cm.

The structural pillar formed by the union of four Caviti modules is completely watertight.

The pieces are joined together with rebates and in the order indicated by the arrows located on the upper dome of the modules, which results in the formation of the slab.

There are no special pieces for perimeters or joinings with protruding elements on construction sites. The Caviti system is easily adaptable to the geometry of works by means of conventional cutting machinery, such as a jig saw or similar.

All of the different references mentioned below analysed on this study just differs from their shape, since the production process and the materials used are the same for each one of them:

Product reference	Height (mm)	Weight per unit (kg/unit)
C5	50	0,7
C10	100	1,65
C15	150	1,64
C20	200	1,77
C25	250	1,83
C30	300	2,12
C35	350	2,22
C40	400	2,31
C45	450	2,65
C50	500	2,75
C55	550	2,85
C60	600	3,94
C65	650	4,16
C70	750	4,39

UN CPC code: 347 Plastics in primary forms.

LCA information

Declared unit: 1 kg of Caviti formworks system.

Reference service life: 50 years properties tests and the quality guarantee offered to the customer.

Time and geographic representativeness: data from factory (primary data) is from 2020. The products are manufactured in the manufacturing plants in Spain listed previously. The amount used of recycled materials (polypropylene) as well as energy consumption, waste production, pollutant emissions and transport distance (in A2 and A4) have been obtained from the manufacturing plants (primary data).

Primary data has been obtained through a production of single product over the total production of the company in Spain in 2020.

Secondary data was obtained from the Ecoinvent 3.6 database of recognized international prestige.

The treatment and processing of the data has been carried out according to the international standards ISO 14025, ISOs 14040 and 14044 for the preparation of life cycle analysis and inventories, selecting the characterization factors established in the UNE-EN 15804:2012+A2:2019.

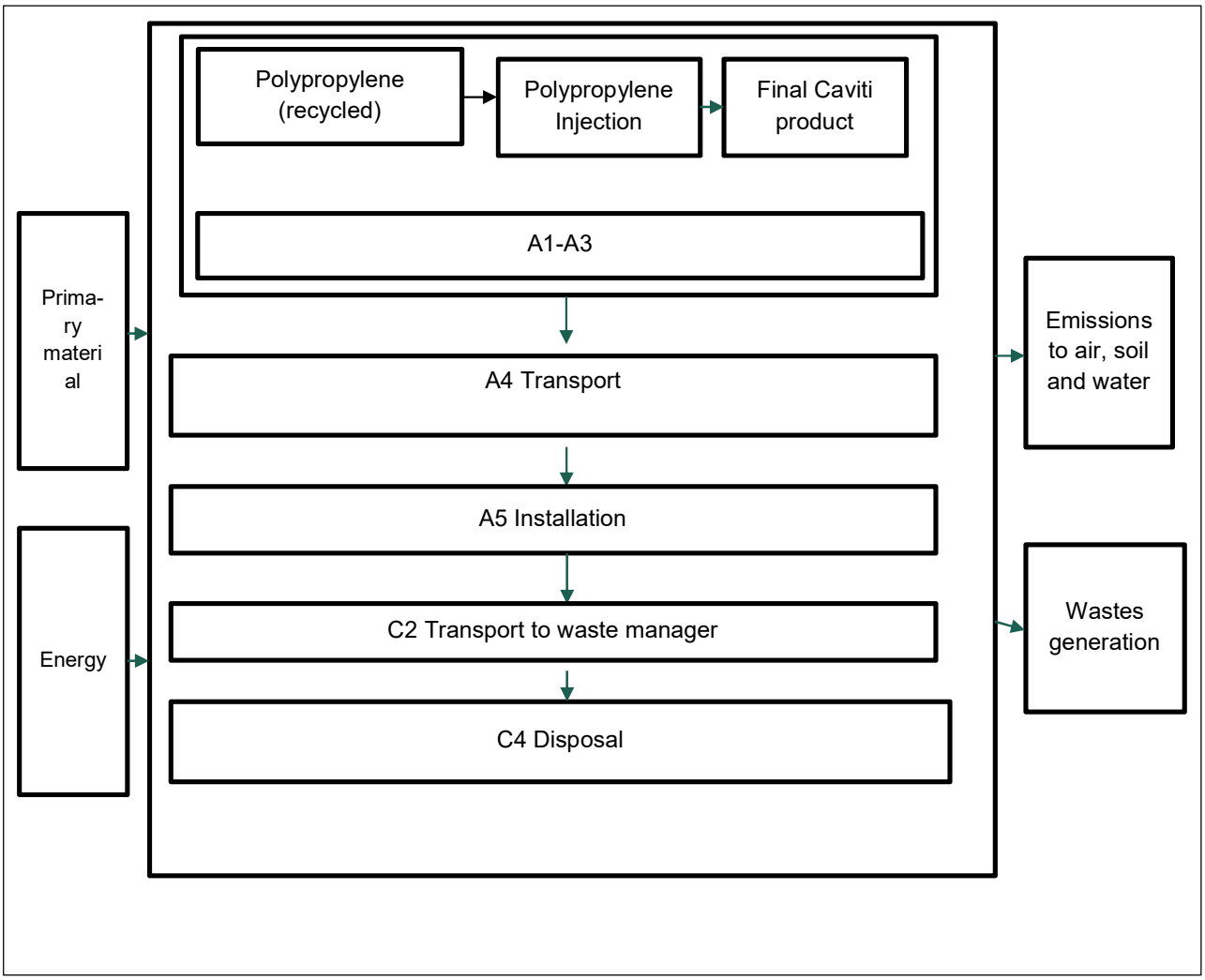
The geographic scope of the EPD is global.

Database(s) and LCA software used: Generic data on the impact per unit of matter or energy have been taken to determine emissions per kg of matter, kWh of energy or kgkm transported. These data have been obtained from the Ecoinvent database version 3.6 and Simapro 9.2. The impact models used are those indicated in UNE-EN 15804:2012+A2:2019.

This document will be used for B2B communication, with a global scope.

Description of system boundaries: From cradle to grave or “Cradle to grave and module D”. The EPD covers modules A1-A3, A4-A5, B1-B7, C1-C4 and D.

System diagram:



More information: www.caviti.es

- The modularity principle, as well as the polluter-payer principle have been followed. Allocation procedure: where necessary (energy, waste generation) an allocation based in mass has been used.
- All primary data have been obtained from Caviti. Secondary data have been obtained from the Ecoinvent 3.6 database.
- The electricity mix used in the manufacturing plant is of 100% certified renewable origin.
- The included scenarios are currently in use and are representative of one of the most likely alternatives.
- The next processes have not been included since its impact is not significant:
  - Manufacture of equipment used in production, buildings or any other capital good;
  - Transportation of personnel to the plant;
  - Transportation of personnel within the plant;
  - Research and development activities.
  - Long-term emissions.

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

Module	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
	A1	**A2**	**A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
Modules declared	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Geography	ES	ES	ES	EU	EU	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES
Specific data	More than 99% specific data is used in the EPD.					-	-	-	-	-	-	-	-	-	-	-	-
Product variation	One product analyzed					-	-	-	-	-	-	-	-	-	-	-	-
Site variation	One production site					-	-	-	-	-	-	-	-	-	-	-	-

- **A1-A3 Product stage**
  - **A1 Raw materials supply:** this module takes into account the extraction and processing of raw and recycled materials and the production of energy which is consumed at the manufacturing plant.
  - **A2 Transport:** this module includes the transport of the different raw materials from the manufacturer to the factory.
  - **A3 Manufacturing:** this module includes the consumption of energy during the manufacturing process and production of packaging material used for the further distribution. Moreover, transport and management of the factory-produced waste are considered.
- **A4-A5 Construction process stage**
  - **A4 Transport**

PARAMETER	VALUE/DESCRIPTION
Fuel type and consumption of vehicle or vehicle type used for transport e.g., long distance truck, boat, etc.	Truck of 16- 32 ton.
Distance (Average distance are calculated from factory to customers)	Truck: 515,87 km Ship: 47,3 km
Capacity utilisation (including empty returns)	% assumed in Ecoinvent 3.6
Bulk density of transported products*	296 kg/m3
Volume capacity utilisation factor	1

  - **A5 Construction/Installation**

The product is directly transferred from the truck to the installation site, where manual operations are performed to install the analyzed product.

PARAMETER	VALUE/DESCRIPTION
Auxiliary materials for installation	No auxiliary material used.
Use of water	Not used.
Use of other resources	No other resource consumption.
Quantitative description of the type of energy (regional mix) and the consumption during the installation process	Not used.
Wastage of materials on the building site before waste processing, generated by the product's installation (specified by type)	Product losses (1%). Sent to recycling

- **B Use stage:** Use phase (B1), and require maintenance (B2), repair (B3), replacement (B4), refurbishment (B5), operational energy use (B6) or operational water use (B7) during its Reference Service Life.

- **C End of life stage**
  - **C1 Deconstruction/demolition:** The product is dismantled and landfilled.
  - **C2 Transport to waste processing:** the model use for the transportation (see A4, transportation to the building site) is applied with a distance of 50 km.
  - **C3 Waste processing for reuse, recovery and/or recycling:** the product is 0% recycled.
  - **C4 Disposal:** The product is 100% landfilled.

PARAMETER	VALUE/DESCRIPTION
Waste Collection process specified by type	100% to landfill, collected and mixed with the rest of the construction waste.
Recovery system specified by type	16-32 tn truck. Distance: 50 km.
Waste processing Recovery system specified by type; Recovery system specified by type	REUSE-0 kg. RECYCLE-0 kg. ENERGY RECOVERY- 0 kg. 100% landfill.
Disposal Characteristic performance, Disposal specified by type	1 kg.

MODULE D

Benefits of recycling. Despite the fact that module D has been considered, there are no recycling benefits since all the product is disposed of in a landfill as a mixture of construction products. 100% of the weight is sent to landfill.

Additional Information

- Cut off rules: according to UNE-EN 15804, have been included 95% of all central system mass and energy inputs and outputs, identified in the life cycle inventory included in this report. Those inputs and outputs, for which no data are available, which together represent less than 5% of the mass, such as auxiliary materials packaging waste, have not been considered.
- The quality of the input data has been evaluated according to its technological, temporal and geographical coverage. The representativeness of the selected processes is considered to be good, resulting in a value of 4,14 out of 5.

Content information

The result is for declared unit 1 kg of product, since the polypropylene is the only material in this product, the environmental impact of product is directly proportional to the weight of the product listed below.

Products	Product components	Weight, kg per piece	Pre-consumer material[1], weight-%	Renewable material, weight-%
C5	Polypropylene	0,70	100	0
C10	Polypropylene	1,65	100	0
C15	Polypropylene	1,64	100	0
C20	Polypropylene	1,77	100	0
C25	Polypropylene	1,83	100	0
C30	Polypropylene	2,12	100	0
C35	Polypropylene	2,22	100	0
C40	Polypropylene	2,31	100	0
C45	Polypropylene	2,65	100	0
C50	Polypropylene	2,75	100	0
C55	Polypropylene	2,85	100	0
C60	Polypropylene	3,94	100	0
C65	Polypropylene	4,16	100	0
C70	Polypropylene	4,39	100	0
Packaging materials	**Weight/kg**	**Weight-% (versus the product) for 1 kg**		
Packaging film	0,0016	0,0016		
Polypropylene	5,08E-05	5,08E-05		
Pallet	0,00086	0,00086		
TOTAL	**0,00254**	**0,00254**		

During the life cycle of the product any hazardous substance listed in the “Candidate List of Substances of Very High Concern (SVHC) for authorization” has not been used in a percentage higher than 0,1% of the weight of the product.

[1] Recycled Polypropylene from other industries

Environmental Information

LCA results are relative expressions and do not predict impacts on category endpoints, the exceeding of thresholds, safety margins or risks.

Potential environmental impact – mandatory indicators according to UNE-EN 15804

Results per declared Unit																
Indicator	**Unit**	**Tot.A1-A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-fossil	kg CO_2 eq.	3,62E-01	8,47E-02	1,08E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	8,17E-03	0,00E+00	1,05E-02	0
GWP-biogenic	kg CO_2 eq.	3,18E-03	3,12E-05	6,00E-05	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,02E-06	0,00E+00	8,54E-05	0
GWP-luluc	kg CO_2 eq.	1,20E-02	3,03E-05	1,24E-04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,91E-06	0,00E+00	4,75E-06	0
GWP-total	kg CO_2 eq.	3,77E-01	8,48E-02	1,10E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	8,17E-03	0,00E+00	1,06E-02	0
ODP	kg CFC 11 eq.	4,65E-08	1,93E-08	1,64E-09	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,86E-09	0,00E+00	3,27E-09	0
AP	mol H^+ eq.	1,92E-03	2,57E-04	5,98E-05	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,35E-05	0,00E+00	9,01E-05	0
EP-freshwater	kg PO_4^{3-} eq.	1,74E-04	2,65E-05	8,50E-06	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,45E-06	0,00E+00	1,19E-05	0
EP-freshwater	kg P eq	2,05E-05	6,75E-07	5,89E-07	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	6,52E-08	0,00E+00	1,76E-07	0
EP-marine	kg N eq.	2,77E-04	5,15E-05	1,31E-05	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	4,64E-06	0,00E+00	3,05E-05	0
EP-terrestrial	mol N eq.	3,21E-03	5,76E-04	1,11E-04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	5,19E-05	0,00E+00	3,36E-04	0
POCP	kg NMVOC eq.	9,28E-04	2,16E-04	3,97E-05	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,99E-05	0,00E+00	9,71E-05	0
ADP-minerals&metals*	kg Sb eq.	2,00E-06	2,33E-06	1,51E-07	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,25E-07	0,00E+00	1,13E-07	0
ADP-fossil*	MJ	7,21E+00	1,28E+00	2,06E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,23E-01	0,00E+00	2,48E-01	0
WDP*	m^3	3,22E-01	3,61E-03	8,21E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,50E-04	0,00E+00	1,07E-02	0
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*

Potential environmental impact – additional mandatory and voluntary indicators

Results per Declared Unit																
Indicator	**Unit**	**Tot.A1-A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-GHG[2]	kg CO_2 eq.	3,72E-01	8,41E-02	1,07E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	8,11E-03	0,00E+00	1,04E-02	0
Additional voluntary indicators e.g., the voluntary indicators from UNE-EN 15804 or the global indicators according to ISO 21930:2017.																

**Other optional environmental impact categories are presented on LCA report.*

Use of resources

Results per Declared Unit																
Indicator	**Unit**	**Tot.A1-A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	MJ	2,43E+00	1,83E-02	3,12E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,77E-03	0,00E+00	4,05E-03	0
PERM	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0
PERT	MJ	2,43E+00	1,83E-02	3,12E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,77E-03	0,00E+00	4,05E-03	0
PENRE	MJ	7,60E+00	1,36E+00	2,19E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,31E-01	0,00E+00	2,63E-01	0
PENRM	MJ.	4,76E-02	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0
PENRT	MJ	7,65E+00	1,36E+00	2,19E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,31E-01	0,00E+00	2,63E-01	0
SM	kg	2,97E-04	0,00E+00	1,79E-03	0,00E+00	0,00E+00	0,00E+00	3,07E+02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0
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	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0
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	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0
FW	m^3	6,57E-03	1,37E-04	1,96E-04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,32E-05	0,00E+00	2,60E-04	0
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															

**LCIA results are relative expressions and do not predict impacts on category endpoints, the exceeding of thresholds, safety margins or risks Waste production and output flow*

[2] The indicator includes all greenhouse gases included in GWP-total but excludes biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. This indicator is thus equal to the GWP indicator originally defined in UNE-EN 15804:2012+A1:2013.

Waste production and output flows

Waste production

Results per Declared Unit																
Indicator	Unit	Tot.A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Hazardous waste disposed	kg	5,43E-02	6,20E-02	1,19E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	6,01E-03	0,00E+00	1,00E+00	0
Non-hazardous waste disposed	kg	5,23E-06	3,34E-06	1,69E-07	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,23E-07	0,00E+00	3,80E-07	0
Radioactive waste disposed	kg	4,61E-05	8,72E-06	8,26E-07	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	8,41E-07	0,00E+00	1,48E-06	0

Other output flows

Results per Declared Unit																
Indicator	Unit	Tot.A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Components for re-use	kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Material for recycling	kg	2,97E-4	0	1,79E-03	0	0	0	0	0	0	0	0	0	0	0	0
Materials for energy recovery	kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exported energy, electricity	MJ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exported energy, thermal	MJ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Information on biogenic carbon content

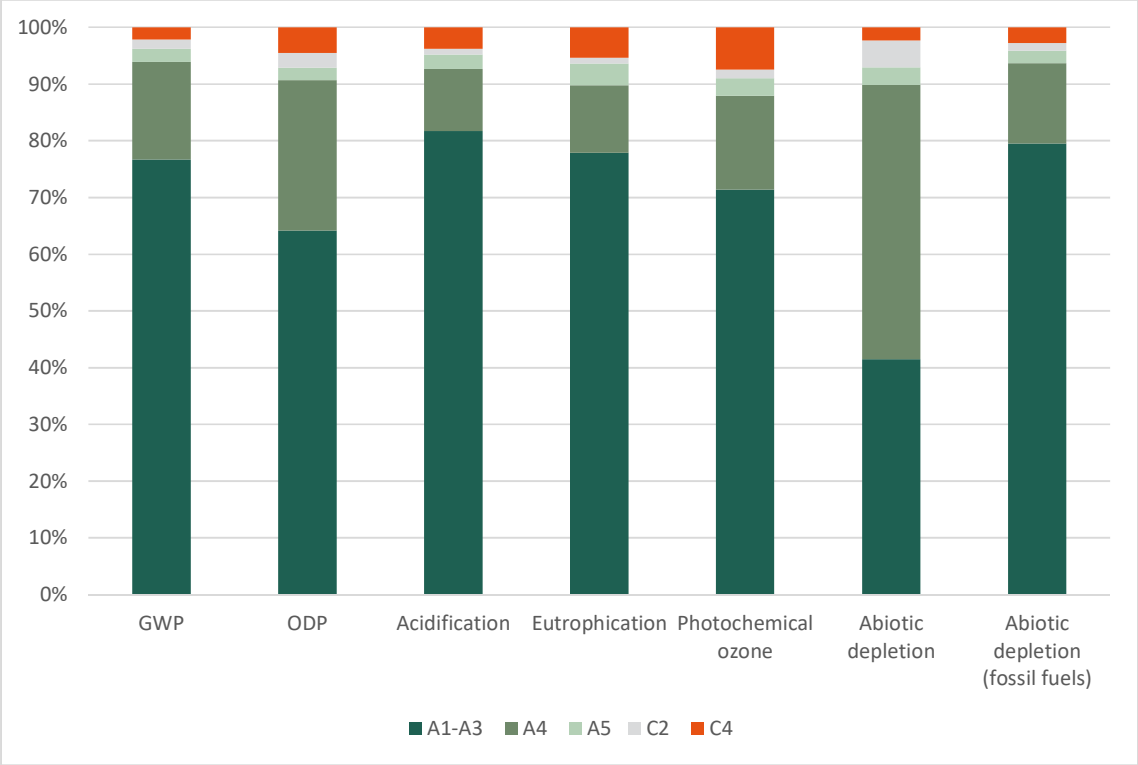
Results per Declared Unit		
BIOGENIC CARBON CONTENT	Unit	QUANTITY
Biogenic carbon content in product	kg C	0,00E+00
Biogenic carbon content in packaging	kg C	3,90E-02

Note: 1 kg biogenic carbon is equivalent to 44/12 kg CO_2.

LCA Interpretation

As we can see in from the graph, the product stage (A1-A3) is the Life Cycle Stage has the largest impact for all the impact categories analyzed, representing between 41,4% (Abiotic depletion elements) and 81,7% (Acidification) of the total impact of the product life cycle.

The A4 represents an intermediate impact for all the impact categories analyzed. Transport (A4) represents between 10,9% (Acidification) and 48,39% (Abiotic depletion elements) of the total life cycle impact. On the other hand, A5- stage represents 1% to 4% impact of all the impact categories analyzed, of total life cycle. In relation to End of life stages (C2) impact is between 1%(Acidification), 4,68% (Abiotic depletion of fossil fuels). In C4 photo chemical ozone have biggest impact 7,47% and the global warming has the lowest 2,16%.



Information related to Sector EPD

Individual EPD®.

Differences versus previous versions

First version of EPD®.

References

- General Programme Instruction of the International EPD® System - Version 3.01.
- ISO 14020:2000 Environmental labels and declarations - General principles.
- ISO 14025:2010 Environmental labels and declarations - Type III Environmental Declarations- Principles and procedures.
- ISO 14040:2006 Environmental management - Life Cycle Assessment-Principles and framework.
- ISO 14044:2006 Environmental management - Life Cycle Assessment-Requirements and guidelines.
- PCR 2019:14 Construction products (UNE-EN 15804:A2) version 1.1.
- UNE-EN 15804:2012+A2:2019 Sustainability of construction works - Environmental Product Declarations - Core rules for the product category of construction products.
- LCA report of Caviti v2, December 2021.

Annex 1

This EPD describes a kilogram range of between 0,70 kg to 4,39 kg but the results are only for 1 kg weight. The other weight are out of scope in this EPD. The following table shows the multiplication factors for each individual weight in the product family. In order to determine the environmental impacts associated with a given product, the results for 1 kg weight must be multiplied by the corresponding multiplication factor. To obtain this factor, a conservative principle has been followed, with the real impact being slightly lower than that indicated in the table.

Products	Weight, kg per piece
C5	0,70
C10	1,65
C15	1,64
C20	1,77
C25	1,83
C30	2,12
C35	2,22
C40	2,31
C45	2,65
C50	2,75
C55	2,85
C60	3,94
C65	4,16
C70	4,39

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