icobit
waterproofing & flooring

EPD®
THE INTERNATIONAL EPD® SYSTEM

ECO PLATFORM
EPD
VERIFIED

Environmental Product Declaration

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

Waterproofing acrylic dispersions

from

Icobit Italia s.r.l.

Registered office: Viale Luca Gaurico 9/11 - 00143 Rome, Italy
Production site: Via Custoza 21 - 66100 Chieti (CH), Italy

The EPD covers multiple products, based on the average results of the product group.

Programme:	The International EPD® System, www.environdec.com
Programme operator:	EPD International AB
EPD registration number:	
Publication date:	
Version	
Valid until:	

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
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): *Construction product, PCR 1019:14, version 1.3.4*
PCR review was conducted by: The Technical Committee of the International EPD® System. See www.environdec.com/TC for a list of members. The review panel may be contacted via the Secretariat www.environdec.com/contact.
Life Cycle Assessment (LCA)
LCA accountability: *ICOBIT ITALIA srl*
Third-party verification
Independent third-party verification of the declaration and data, according to ISO 14025:2006, via: ☒ EPD verification by accredited certification body Third-party verification: Bureau Veritas Italia S.p.A. is an approved certification body accountable for the third-party verification The certification body is accredited by: Accredia, Accreditation certificate n. 0009VV of 08/11/2023.
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.

Name and contact information of LCA practitioners:
Esalex srl
www.esalex.eu, info@esalex.eu

Company information

Owner of the EPD: Icobit Italia srl

Contact: Antonio Miglietta, a.miglietta@icobititalia.com

Description of the organisation: Icobit was born in the mid-70s in Chieti. The production of solvents and bitumen began in the early 1980s, the first step towards a path of growth and technological and scientific innovation continued for decades. Subsequently, Icobit research will bring waterproofing solutions never created before, in order to intervene directly on old roofs and building surfaces. Thus was born the first liquid waterproofing in aqueous emulsion by Icobit: **Icoper**. In the early 1990s Icobit participated in active manner in the initiative relating to the encapsulation of asbestos which will lead to the drafting of the Ministerial Decree 08/20/1999 concerning the treatment of asbestos in Italy: Icobit products for the encapsulation of asbestos will become a point of reference in terms of health and environmental protection. In the months following the launch, the Icoper line underwent a fundamental technical evolution brought about by the arrival of Icoper-Hp: the waterproofing ready for use and within everyone's reach which does not require further protections and reinforcement reinforcements, being already rich in fiber inside.

More information: www.icobit.com

Name and location of production site:
Icobit Italia srl
Via Custoza 21,
66100 Chieti (CH)
T. +39 0871.58701
info@icobititalia.com

Product information

Product name: "one-component continuous membrane waterproofing"

Product description and identification: coloured one-component multipurpose continuous waterproofing membrane in water emulsion and resistant to water stagnation. It is used for waterproofing and protection roofing in general, old bituminous membranes, foundation walls, retaining walls, eaves, cornices, concrete terraces, chimneys, canopies, walls, facades, coverings insulated with polyurethane foam. It can also be applied on flat substrates, without slopes, where, therefore, water stagnation may occur and it is UV-resistant, thus it does not need protection. It is an elastic product, easy to use, adaptable to any geometry of the surface to be coated. It is a solvent-free product, safe for laying operations.

The products covered by the EPD are:

1. ICOPER MULTIUSO, ICOPER HP, ICOPER STAR, ICOPER STRONG, ICOPER GOLD, UNICO, UNICO FIBER, ICOSPORT, ICOPAV CITY, VERIMP, HYPERGUM, ICOQUARZ, ICOFORCE, ICOPROT, ICOPROT STAR, WHITE PROTECT, ICOPAS WATER, VERAP.

In the LCA study, all raw materials used for the production of the product have been considered, with the relative transportation. In A3 module the consumptions and emissions are allocated for the whole production for the average product under study. The variability of the products is determined by the different recipe, different percentage of raw materials. In the study, the variability of results between the worst scenario - average scenario and the variability between the best scenario – average scenario have been evaluated. The variability of results for all indicators is declared in the additional information chapter.

UN CPC code: **35110** Paints and varnishes and related products

Geographical scope: Europe
The communication of the EPD is B2B and B2C.

Some Technical specifications:

ESSENTIAL CHARACTERISTICS	TEST METHOD	REQUIREMENTS
Permeability to CO_2	EN 1062-6	SD > 50m
Water vapor permeability	EN ISO 7783-1-2	CLASS I (S_D < 5m)
Capillary absorption and water permeability	EN 1062-3	w < 0,1 Kg/m^2 · h^{0,5}
Bond strength by pull off test	EN 1542	≥ 0.8 MPa
Freeze-thaw cycling without de-icing salt immersion	EN 13687-3	≥ 0.8 MPa
Exposure to artificial atmospheric agents	EN 1062-11:2002	No visible defects
Crack bridging properties (low Temp.)	EN 1062-7	class A5
Reaction to fire	EN 13501-1	Euroclass E
Classification using data from external fire exposure to roofs tests	EN 13501-5	B_{roof} (t1), (t2), (t4)
Solar Reflectance Index	ASTM E1920-11	103÷107
Emissions Into Indoor Air A+	EN ISO 16000-9	Class A+

LCA information

Declaration unit: 1 kg of one-component continuous membrane waterproofing
The product is used mainly on the external surfaces of buildings.
The study comprises the raw material extraction, raw material transportation, manufacturing, transportation to costumer, installation, end-of-life of product.

Reference service life: 10 years

Time representativeness: primary data refer to 2023 year. The generic data has been updated in 2024 (Ecoinvent 3.10).

Geographical representativeness: primary data are derived from Icobit Italia production site in Chieti (Italy). The secondary data are derived by database Ecoinvent 3.10 (RER or GLO records).

Technological representativeness: primary data are derived from processes and products of Icobit Italia under study. The secondary data are derived from databases of Icobit Italia similar technology.

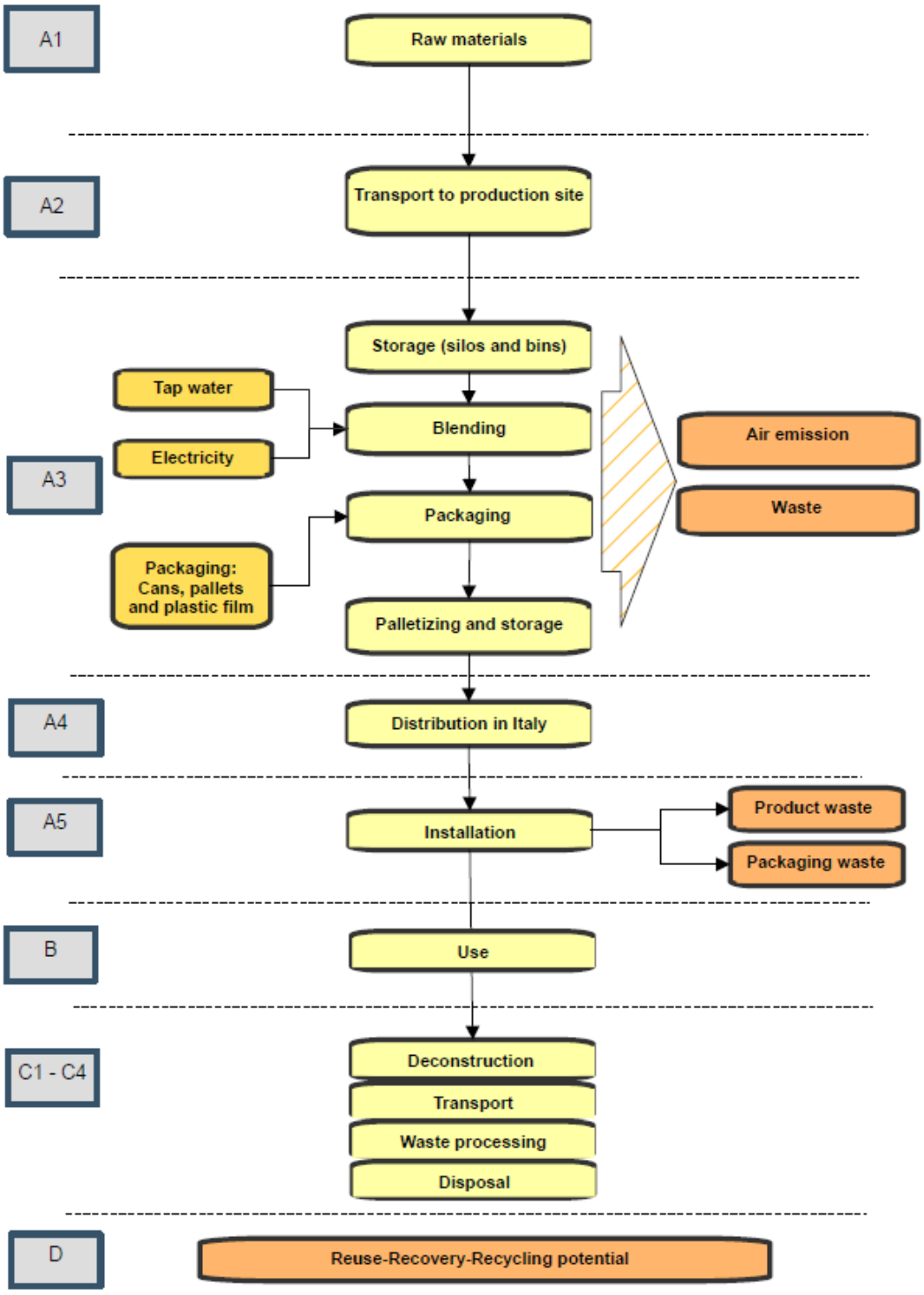
Data quality: The time representativeness, the geographical representativeness, technological representativeness with parameter uncertainty are assessed for both primary and secondary data, following the criteria of Product Environmental Footprint Category Rules (declared in EN 15804:2012+A2:2019/AC:2021 Annex E).

Database and LCA software used: for the elaboration of data SimaPro v. 9.6.0.1; the database used is Ecoinvent 3.10.

Description of system boundaries: Cradle-to-grave and module D (A + B + C + D)

Excluded lifecycle stages: all life stages are included in the LCA study

Production process
The system boundary is presented in the flow chart below:



The productive process begins with the arrival of the raw materials that are stored in silos or more rarely in bags. the dosage of raw materials takes place through pumps according to the recipe developed by the internal laboratory. Production consists of mixing the compounds with water in a batch, in two alternating production lines. Once mixed, the product comes out of the bottom and it is poured into the packages of the different formats. The product is then stored and when shipped it is placed on pallets and it is wrapped in the plastic film.

Additional information:

- The allocation is applied in the LCA study: when necessary, mass allocation is used.
- Cut-off: at least 95% of the energy and materials used by module has been introduced, as well as 99% of the total use of energy and materials
- The modularity principle, as well as the polluter payer principle have been followed
- The long-term emissions have not been included.
- The next processes have not been included since its impact is not significant:
    - Environmental impact from infrastructure, construction, production equipment, and tools that are not directly consumed in the production process.
    - Personnel-related impacts, such as transportation to and from work.

- The impact method used are:
    - Environmental footprint 3.1
    - Cumulative energy demand (LHV) v. 1.01 for resource use
    - EDIP 2003 v. 1.07 for waste production.

The verifier and the program operator do not make any claim nor have any responsibility of the legality of the product.

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

	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	X	X	X	X	X	X	X	X	X	X	X	X
Geography	Europe	Italy	Italy	Italy	Italy	Italy	Italy	Italy	Italy	Italy	Italy	Italy	Italy	Italy	Italy	Italy	Italy
Specific data used	12%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – products	-10%, + 19%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – sites	0%			-	-	-	-	-	-	-	-	-	-	-	-	-	-

- Module A1 – Raw material supply: this module includes the extraction and production of raw material. All the raw materials are virgin.

- Module A2 – Transport: this module includes the transportation of raw materials from the production site to the Icobit Italia gate. The specific distance of supply of each raw material is included in the study.

- Module A3 – Manufacturing: this module considers Icobit Italia internal processes of the Chieti site, including consumption of energy, resources, packaging and generation of waste and emissions in air. The electricity used in the productive process is modelled from the supplier mix and Terna information (1 kWh – medium voltage = 0,599 kg CO_2eq).

- Module A4 – Transport: this module considers the transport of product to construction site. The distances are calculated as average weighted (in Italy) of all transports of 2023; for the model the distances from Icobit site to Italian province of delivery are considered.

PARAMETER	DESCRIPTION / VALUE for DU
Fuel type and consumption of vehicle or vehicle type used for transport e.g. long distance truck, boat, etc	From Ecoinvent Truck (16-32 metric ton): 0,0374 kg of diesel low sulfur for ton*km transported Ferry: 0,025 kg of heavy fuel oil for ton*km transported
Distance	The distances are calculated as weighted average of all transportation in Italy and abroad in 2023: - Truck: 451,26 Km Ferry: 4,04 km
Capacity utilisation (including empty returns)	From Ecoinvent database: Truck: 66% Ferry: 50%
Bulk density of transported products (kg/m3)	1403,97 kg/m^3
Volume capacity utilisation factor	1

- Module A5 – Construction installation: this module considers the installation of product in the building.

PARAMETER	DESCRIPTION	VALUE for FU
Auxiliary materials for installation	(kg)	0
Use of water	m^3	0
Use of other resources	kg	0
Quantitative description of energy type and consumption during the preparation and installation process	Electric energy (kWh)	0 (manual installation)
Direct emissions to ambient air, soil and water	kg	0
Waste materials on the building site, before waste processing, generated by the product's installation; specified by type	Product loss	2,5%
	Wood packaging (kg)	6,01E-03
	Polypropylene can (kg)	4,39E-02
	LDPE film (kg)	1,56E-04
Output materials (specified by type) as result of waste processing at the building site e.g. of collection for recycling, for energy recovery, disposal; specified by route	Landfill	35,10% of pallet (2,11E-03 kg), 52,00% of polypropylene can (2,28E-02 kg), 100% of LDPE film (4,39E-02 kg) and 100% of product loss (0,025 kg)
	Recycling	64,90% of pallet (3,90E-03 kg), 48,00% of polypropylene can (2,11E-02 kg)

- Module B – Use stage: Once the product has been installed, the use phase does not have impacts; the product is stable throughout its life, without need of use of resource, energy, repairs, maintenance, replacement, refurbishment.

- Module C1 – Deconstruction/demolition: The product is uninstalled with the use of jackhammer and the consume of 0,03 kWh/DU of electricity.

- Module C2 – Transport to waste processing: the product is then transported to disposal; the scenario provides the transport for 50 km.

- Module C3 - Waste processing for reuse, recovery and/or recycling: the product is sent to landfill; any process of reuse, recovery and/or recycling isn't considered in the study.

- Module C4 - Disposal: the product is totally disposed in landfill.

PARAMETER	DESCRIPTION / VALUE for FU
Collection process specified by type	Product waste are collected with 16-32 metric ton truck
Recovery system specified by type	There is no recovery, recycling or reuse
Disposal specified by type	100 % Landfill (1 kg of inert waste)
Assumptions for scenario development (e.g. transportation)	16-32 metric ton truck Distance: 50 km

Module D - Reuse-Recovery-Recycling potential: Module D calculates the potential environmental benefits and impacts of the recycling or reuse of materials. The benefits/impacts linked to the recycling the product packaging in A5 module are accounted in D module, applying the formula of EN 15804:2012+A2:2019/AC:2021.

Content information (1 kg)

The variation of impacts is presented as additional information.

Product components	Weight, %	Post-consumer material, weight-%	Biogenic material, weight-% and kg C/kg
Dispersed polymer	35,0 - 55,1%	0	0
Charges	41,2 - 53,8%	0	0
Pigments	1,1 - 8,2%	0	0
Additives	2,3 - 2,9%	0	0
Biocide	0,1%	0	0
TOTAL Kg	1,00	0	0
Packaging materials	**Weight, kg**	**Weight-% (versus the product)**	**Weight biogenic carbon, kg C/kg**
Wood pallet	6,01E-03	0,60%	0,47
Polypropylene can	4,39E-02	4 - 6,50%	0
LDPE film	1,56E-04	0,01 - 0,02%	0
TOTAL	5,01E-02	/	/

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.

Results of the environmental performance indicators

The following results refers to 1 kg of average product of Icobit Italia srl.

The estimated impact results are only relative statements which do not indicate the end points of the impact categories, exceeding threshold values, safety margins or risks.

This EPD contains the module C; we strongly discourage the use of the results of modules A1 - A3 without considering the results of module C.

Potential environmental impact – mandatory indicators according to EN 15804

The results are referring to a 1 kg of average product.

Results per functional unit									
Indicator	**Tot.A1-A3**	**A4**	**A5**	**B**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-fossil (kg CO_2 eq.)	2,43E+00	8,72E-02	6,63E-02	0,00E+00	1,15E-02	9,61E-03	0,00E+00	6,25E-03	-3,48E-02
GWP-biogenic (kg CO_2 eq.)	-7,51E-03	1,42E-05	1,05E-02	0,00E+00	4,69E-05	1,57E-06	0,00E+00	1,53E-06	1,32E-03
GWP-luluc (kg CO_2 eq)	4,52E-04	2,88E-05	1,25E-05	0,00E+00	2,18E-06	3,16E-06	0,00E+00	3,22E-06	-2,56E-06
GWP-total (kg CO_2 eq)	2,44E+00	8,73E-02	6,64E-02	0,00E+00	1,15E-02	9,62E-03	0,00E+00	6,26E-03	-3,35E-02
ODP (kg CFC 11 eq.)	2,51E-08	1,74E-09	6,96E-10	0,00E+00	2,65E-10	1,92E-10	0,00E+00	1,81E-10	-1,96E-09
AP (mol H^+ eq.)	7,65E-03	3,60E-04	2,06E-04	0,00E+00	4,84E-05	3,83E-05	0,00E+00	4,43E-05	-7,27E-05
EP-freshwater (kg P eq)	3,10E-05	6,73E-07	8,01E-07	0,00E+00	2,62E-07	7,44E-08	0,00E+00	6,15E-08	-8,99E-08
EP-marine (kg N eq.)	1,49E-03	1,33E-04	4,31E-05	0,00E+00	6,77E-06	1,43E-05	0,00E+00	1,68E-05	-1,56E-05
EP-terrestrial (mol N eq.)	1,51E-02	1,46E-03	4,39E-04	0,00E+00	7,88E-05	1,57E-04	0,00E+00	1,84E-04	-1,79E-04
POCP (kg NMVOC eq.)	7,24E-03	5,36E-04	2,04E-04	0,00E+00	3,38E-05	5,82E-05	0,00E+00	6,60E-05	-2,25E-04
ADP-minerals&metals (kg Sb eq.) []	6,46E-06	2,80E-07	1,72E-07	0,00E+00	1,44E-07	3,09E-08	0,00E+00	9,77E-09	-2,48E-09
ADP-fossil (MJ) []	4,94E+01	1,23E+00	1,29E+00	0,00E+00	1,85E-01	1,36E-01	0,00E+00	1,53E-01	-1,34E+00
WDP (m^3) []	1,15E+00	5,04E-03	2,56E-02	0,00E+00	8,34E-03	5,57E-04	0,00E+00	6,70E-03	-2,00E-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								

[] 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.

Potential environmental impact – additional mandatory and voluntary indicators

Results per functional unit									
Indicator	**Tot.A1-A3**	**A4**	**A5**	**B**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-GHG [2] (kg CO_2 eq.)	2,43E+00	8,73E-02	6,63E-02	0,00E+00	1,15E-02	9,62E-03	0,00E+00	6,26E-03	-3,48E-02

[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 EN 15804:2012+A1:2013.

Information on biogenic carbon content

Results per functional unit		
BIOGENIC CARBON CONTENT	**Unit**	**QUANTITY**
Biogenic carbon content in product	kg C	0,00E+00
Biogenic carbon content in packaging	kg C	2,83E-03

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

Use of resources

Results per functional unit									
Indicator	**Tot.A1-A3**	**A4**	**A5**	**B**	**C1**	**C2**	**C3**	**C4**	**D**
PERE (MJ)	8,61E-01	2,01E-02	7,68E-02	0,00E+00	7,93E-02	2,23E-03	0,00E+00	1,37E-03	-6,18E-02
PERM (MJ)	8,08E-02	0,00E+00	-5,24E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT (MJ)	9,42E-01	2,01E-02	2,43E-02	0,00E+00	7,93E-02	2,23E-03	0,00E+00	1,37E-03	-6,18E-02
PENRE (MJ)	3,38E+01	1,23E+00	1,99E+00	0,00E+00	1,85E-01	1,36E-01	0,00E+00	1,53E-01	-1,34E+00
PENRM (MJ)	1,56E+01	0,00E+00	-7,00E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT (MJ)	4,94E+01	1,23E+00	1,29E+00	0,00E+00	1,85E-01	1,36E-01	0,00E+00	1,53E-01	-1,34E+00
SM (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
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)	8,36E-03	1,83E-04	2,32E-04	0,00E+00	4,66E-05	2,02E-05	0,00E+00	1,59E-04	-6,51E-05
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 production and output flows

Waste production

Results per functional unit									
Indicator	**Tot.A1-A3**	**A4**	**A5**	**B**	**C1**	**C2**	**C3**	**C4**	**D**
Hazardous waste disposed (kg)	1,64E-04	8,29E-06	4,45E-06	0,00E+00	9,22E-07	9,15E-07	0,00E+00	9,69E-07	-3,02E-05
Non-hazardous waste disposed (kg)	1,45E-01	5,82E-02	5,34E-02	0,00E+00	7,31E-04	6,45E-03	0,00E+00	1,00E+00	1,20E-03
Radioactive waste disposed (kg)	1,56E-05	3,91E-07	4,05E-07	0,00E+00	3,63E-07	4,33E-08	0,00E+00	2,38E-08	2,02E-07

Output flows

Results per functional unit									
Indicator	**Tot.A1-A3**	**A4**	**A5**	**B**	**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	0,00E+00	0,00E+00	0,00E+00
Material for recycling (kg)	0,00E+00	0,00E+00	2,51E-02	0,00E+00	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)	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, thermal (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

Additional information

Variability on indicators results

The variability of results declared below is between the average product and the minimum/maximum product considering A to C modules.

Potential environmental impacts	**% MIN**	**% MAX**
Climate change - Fossil	-9,63%	17,73%
Climate change - Biogenic	-12,80%	20,90%
Climate change - Land use and LU change	-0,53%	3,45%
Climate change	-9,63%	17,73%
Ozone depletion	-5,57%	15,68%
Acidification	-5,39%	11,85%
Eutrophication, freshwater	-2,61%	8,75%
Eutrophication, marine	-5,40%	11,97%
Eutrophication, terrestrial	-4,58%	10,79%
Photochemical ozone formation	-5,64%	13,02%
Resource use, minerals and metals	-2,89%	3,16%
Resource use, fossils	-11,55%	20,41%
Water use	-11,06%	19,18%
Use of resources	**% MIN**	**% MAX**
PERE	0,00%	5,45%
PERM	0,00%	0,00%
PERT	0,00%	5,31%
PENRE	-9,83%	4,46%
PENRM	-16,13%	25,10%
PENRT	-11,55%	11,40%
SM	0,00%	0,00%
RSF	0,00%	0,00%
NRSF	0,00%	0,00%
FW	0,00%	0,71%
Waste production	**% MIN**	**% MAX**
Hazardous waste disposed	-4,80%	17,91%
Non-hazardous waste disposed	-0,07%	1,28%
Radioactive waste disposed	0,00%	5,23%
Output flow	**% MIN**	**% MAX**
Components for re-use	0,00%	0,00%
Material for recycling	-8,23%	28,84%
Materials for energy recovery	0,00%	0,00%
Exported energy, electricity	0,00%	0,00%
Exported energy, thermal	0,00%	0,00%

Differences versus previous versions

First emission of EPD.

References

- General Programme Instructions of the International EPD® System. Version 5.0.
- PCR 2019:14. CONSTRUCTION PRODUCTS. Version 1.3.4
- ISO 14040:2006 Environmental management-Life Cycle Assessment - Principles and framework
- ISO 14044:2006 Environmental management-Life Cycle Assessment - Requirements and guidelines
- ISO 14025:2010 Environmental labels and declarations-Type III Environmental Declarations-Principles and procedures
- EN 15804:2012+A2:2019/AC:2021, Sustainability of construction works — Environmental product declarations
- Project report rev.2 of 21/01/2025 – Life cycle assessment: Membrana continua impermeabilizzante monocomponente

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