

Environmental Product Declaration

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

OLTRE Panic Exit Device

from

Fapim S.p.A.



Life in evolution

Programme:	The International EPD System, www.environdec.com
Programme operator:	EPD International AB
Type of EPD:	EPDs of multiple products from a company, based on <i>Worst-case</i>
EPD registration number:	EPD-IES-0002451:002
Version date:	2026-03-26
Validity date:	2031-03-26

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



GENERAL INFORMATION

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

Product Category Rules (PCR)
CEN standard EN 15804 serves as the Core Product Category Rules (PCR)
Product Category Rules (PCR): Construction products, PCR 2019:14 (EN 15804: A2+A2:2019), version 2.0.1.
PCR review was conducted by: <i>Guido Croce, independent verifier. For more information, the review chair can be contacted through the programme operator EPD International</i>

Third-party Verification
Independent third-party verification of the declaration and data, according to ISO 14025:2006, via:
<input checked="" type="checkbox"/> Individual EPD verification without a pre-verified LCA/EPD tool Third-party verifier: Guido Croce, independent verifier Approved by: International EPD System
*EPD process certification involves an accredited certification body certifying and periodically auditing the EPD process and conducting external and independent verification of EPDs that are regularly published. More information can be found in the General Programme Instructions on www.envrondec.com .
Procedure for follow-up of data during EPD validity involves third party verifier: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

EPDs within the same product category but published in different EPD programmes, may not be comparable. For two EPDs to be comparable, they shall be based on the same PCR (including the same first-digit 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 identical scope in terms of included life-cycle stages (unless the excluded life-cycle stage is demonstrated to be insignificant); apply identical impact assessment methods (including the same version of characterisation factors); and be valid at the time of comparison. For further information about comparability, see EN 15804 and ISO 14025.

INFORMATION ABOUT EPD OWNER

Owner of the EPD: Fapim S.p.A.

Address: Via delle Cerbaie, 114, 55011 Altopascio LU

Contact: Edoardo Bartoletti (Edoardo.bartoletti@fapim.it), Jacopo Bocca (jacopo.bocca@fapim.it)

Description of the organisation: Fapim is one of the world's leading producers of high-quality solutions and fittings for windows and doors and a point of reference for all the industry operators. The corporate's portfolio includes 18.000 items in various designs and finishes, operates across an industrial area of 100.000 sq. m and employs almost 500 people, with branch offices and sales organizations in Argentina, Russia, United States as well as throughout Europe.

FAPIM was established in 1974 with the purpose of producing fittings for aluminum windows and doors combining innovation, functionality and ease of use. After more than 40 years this is still the corporate "core business", underpinned by a strong commitment to research and development, customer satisfaction, and sustainable manufacturing. The corporation continuously invests in product advancement, optimizes production processes, selects environmentally responsible materials, and implements initiatives that promote circular economy principles.

Product-related or management system-related certifications: ISO 9001:2015, ISO 14001:2015 certificates, UL 305 (Safety for Panic Hardware), EN 1125:2008, EN 179:2008.

PRODUCT INFORMATION

Product name: OLTRE Panic Exit Device

Product identification: OLTRE Panic Exit Device is a wide catalogue of options and solution.



UN CPC code: 4212 "Doors, windows and their frames and thresholds for doors, of iron, steel or aluminium"

Product description:

The OLTRE line by Fapim S.p.A. is a complete and modular range of panic and emergency exit devices designed to ensure maximum safety, high performance, and ease of installation, fully aligned with the European classification systems for emergency exit hardware. The family includes BAR and PUSH versions for panic exit devices. All models are certified in accordance with EN 1125:2008 and EN 179:2008 and bear the mandatory CE marking, making them suitable for standard doors as well as fire-resistant and smoke-resistant doors.

The OLTRE range is offered in multiple configurations that vary in dimensions, number of locking points (one, two, or three), operating mechanisms, and a broad selection of finishes, providing extensive adaptability to different door types. The devices incorporate high-performance components such as AISI 304 stainless steel latch bolts, ensuring excellent mechanical strength, corrosion resistance, and REI 90 fire performance across all versions.

Functionally, OLTRE devices enhance the safety and usability of escape routes by ensuring fast, intuitive opening traffic environments such as schools, hospitals, and public buildings. Their suitability

for fire and smoke control doors, combined with full compliance with European standards, contributes positively to the building's operational safety and emergency performance.

For more information, please visit the website: [Fapim S.p.A. | Made in Italy](#).

Name and location of production site:

- Fapim S.p.A.: Via delle Cerbaie, 114, 55011 Altopascio (LU).

LCA INFORMATION

Functional unit /Declared unit:

The declared unit is 1 kg of product.

The product is represented by the Oltre device panic exit door with the highest material content, therefore for each indicator, declare the highest result of the line products (“worst-case product”).

Reference service life: 25 years

Time representativeness: 2024

Geographical scope: Europe

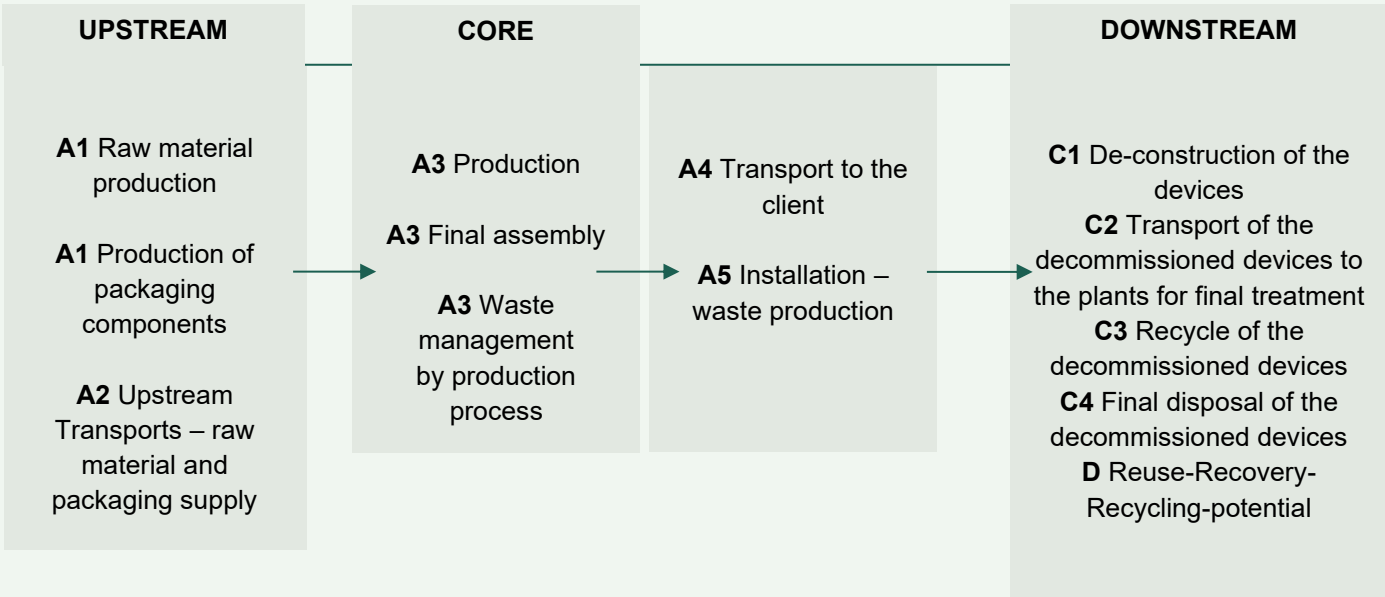
Database(s) and LCA software used: OpenLCA and Ecoinvent v3.11.

Description of system boundaries: Cradle to gate with options, module C1-C4, module D and optional modules.

The current EPD certificate follows the indications reported in the second option of Table 2 in the paragraph 2.2.2.4 of the reference PCR (2019:14 Construction products), and it considers the results of the “worst-case product”.

Process flow diagram:

Process flow diagram of the product system, divided into the life-cycle stages and modules, showing the main processes included and the system boundary of the LCA.



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

	Product stage			Distribution & Installation stage		Use stage							End-of-life stage				Beyond product life cycle
	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	ND	ND	ND	ND	ND	ND	X	X	X	X	X
Geography	EU27	EU27	ITA	EU27	EU27	ND	ND	ND	ND	ND	ND	ND	EU27	EU27	EU27	EU27	EU27
Share of primary data	55%			-	-	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-
Variation – products	13%			-	-	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-
Variation – sites	-			-	-	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-

About module B1-B7: the product is designed to last throughout its service life without deterioration. The impacts associated with these modules were considered negligible and, in some module, not relevant for this type of device.

Below is a description of what is included in each stage.

Module A1: Upstream supply of constituent materials. For the OLTRE device, recycled content is included primarily in aluminium, steel, and zamak (zinc alloy) inputs.

Module A2: Transport of input materials and components to the manufacturing site is modelled using a diesel freight lorry in the 16–32 t class (EURO 5), consistently with the scope of module A2 within the product stage. Distances were calculated based on supplier locations and the Fapim manufacturing sites.

Module A3 includes the processing and assembly operations required to produce the OLTRE device up to the factory gate. Electricity consumption in Module A3 has been modelled in accordance with EN 15804:2012+A2:2019 and EN 15941.

Grid electricity - The electricity used at the Fapim S.p.A. manufacturing site is purchased from the public grid and—since no contractual instruments (e.g., Guarantees of Origin) are in place—is modelled as the Italian Residual Mix for the 2024 reference year. The life-cycle inventory is based on the ecoinvent v3.11 dataset “electricity, medium voltage, residual mix, IT” (documented in ecoQuery). The climate impact used for disclosure is GWP-GHG = 0.441 kg CO₂-eq/kWh (Italy, Residual Mix 2024) as per AIB’s 2024 results.

On-site PV self-generation - Primary data for 2024 also include electricity self-generated on site from grid-connected photovoltaic panels (low voltage). This contribution is modelled using the corresponding ecoinvent v3.11 “photovoltaic electricity production” dataset consistent with the installed technology (grid-connected PV, low-voltage output). The per-kWh climate impact (GWP-GHG) for the PV self-generation is taken directly

Module A4: Transport to Site. Transport is modelled on the location of the organization’s clients and is based on a diesel freight lorry in the 16–32 t class (EURO 5) for road transport.

Module A5: Installation of the OLTRE device does not require energy consumption or generate installation waste. As a result, the only process included in A5 is the management of the packaging materials delivered with the product. Therefore, the only contribution included in Module A5 is the end-of-life treatment of the packaging materials delivered with the product. The choice of end-of-life destination routes was based on values commonly reported in the scientific literature.

End-of-Life Stage (Modules C1–C4) are modelled using a mixed scenario representative of current European practice for multi material products (metals and technical polymers) integrated within a door assembly, in accordance with the applicable PCR requirements for defining end of life scenarios.

Given the multi material composition of the OLTRE device (metals and technical polymers) and its integration within a door assembly, the end-of-life modelling is based on a mixed scenario representative of current European practice for comparable assemblies, reflecting that the final routing may depend on how the overall door assembly is managed at end of life. The choice of end-of-life destination routes was based on values commonly reported in the scientific literature. About transport assumptions, all end-of-life transports to the relevant treatment facilities are modelled using a diesel freight lorry in the 16–32 t class (EURO 5). Distances and load factors are defined by the selected scenario assumptions documented in the system boundary / end-of-life scenario section. Specifically, the following distances were considered: 30 km for the disposal plant, 30 km for the incineration plant, and 250 km for the recycling plant.

For the fractions of product routed to recycling, the model includes the transport to the waste treatment facility and the pre-treatment operations required to prepare the materials for recycling, including sorting and any necessary mechanical processing. The end of waste state is assumed to be reached after these sorting/pre-treatment processes, i.e., at the output of the waste processing step that meets the end of waste criteria and constitutes a usable secondary material flow. Beyond this point, recovered materials are treated as secondary materials and any potential benefits and loads beyond the product system boundary are reported separately in Module D, where declared.

Summary of data quality:

EPD Module	Processes	Data contribution to GWP (%)	Geographical representativeness	Temporal representativeness	Technological representativeness	DQR
A1	Electricity supply	43%	Good	Good	Good	Good
A1	Fossil fuels & thermal energy	24,9%	Good	Good	Good	Good
A1	pig iron production	5,8%	Good	Good	Good	Good

A1	primary aluminium production	6,3%	Good	Good	Good	Good
A2	Diesel-related	6,88%	Good	Good	Good	Good
A2	Natural gas-related	13,06%	Good	Good	Good	Good
A2	Raw material transport (freight transport - Lorry)	62,32%	Very good	Very good	Very good	Very good
A3	On-site electricity	60%	Very good	Very good	Very good	Very good
A3	Heat production	15%	Good	Very good	Very good	Good
A3	Natural gas	15%	Very good	Very good	Very good	Very good

The quality of the data has been assessed in accordance with EN 15941. Modules A1–A3 (reference year 2024) account for more than 80% of the contribution to the declared environmental impact indicators (GWP-GHG, AP, EP, ADP, EDP).

The data quality presented in the table above is considered good and compliant with PCR 2019:14 and EN 15941:

Primary data were collected directly at the Fapim S.p.A. manufacturing site (Altopascio, Italy) and are representative of actual operating conditions in 2024, as most primary data have been collected directly from the manufacturing site, including electricity use, natural gas consumption and relevant transport routes. They cover all relevant on-site processes, including machining, metalworking, surface treatment, mechanical processing, assembly, and packaging management.

Supplier data (raw material) were sourced from ecoinvent v3.11. Datasets were selected to ensure the best possible geographical, temporal, and technological consistency with the modelled supply chains and production technologies. Although the selected datasets reflect Italy, the EU or the most appropriate available regional coverage, certain geographical limitations inherent to the database remain.

This EPD may be revised in the future as additional years of production data become available, further reducing temporal uncertainty.

CONTENT DECLARATION

Product content	Mass, kg <i>Worst -case</i>	Post-consumer recycled material, mass % of product	Biogenic material, mass-% of product
Aluminium	2,67	31%	-
Steel & iron (incl. stainless)	2,55	10%	-
Zamak (zinc alloy)	1,02	13%	-
Plastics	0,06	0%	-
TOTAL	6,30	-	-

Packaging materials	Mass, kg <i>Worst -case</i>	Mass-% (versus the product)	Biogenic material, kg C/product *
Packaging paper & board	1,11	17,5%	0,56
Packaging wood	0,03	0,3%	0,02
Packaging plastics	0,05	0,7%	-
TOTAL	1,19	-	0,58

* 1kg biogenic carbon in the product/packaging is equivalent to the uptake of 44/12 kg of CO₂

The product does not contain substances which exceed the limits for registration with the European Chemicals Agency regarding the "Candidate List of Substances of Very High Concern for authorization".

ENVIRONMENTAL PERFORMANCE

LCA results of the product - main environmental performance results

Mandatory impact category indicators according to EN 15804

Results per functional or declared unit									
Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
GWP-total	kg CO ₂ eq.	8,78E+00	1,12E+00	4.74E-02	0,00E+00	3,50E-02	1,08E-01	2,48E-02	-1,69E+00
GWP-fossil	kg CO ₂ eq.	9,67E+00	1,12E+00	2.56E-02	0,00E+00	3,50E-02	1,08E-01	2,47E-02	-1,69E+00
GWP-biogenic	kg CO ₂ eq.	-9,14E-01	4,99E-04	9,13E-01	0,00E+00	2,41E-05	4,19E-04	5,17E-05	6,26E-03
GWP-luluc	kg CO ₂ eq.	1,83E-02	2,44E-04	2.70E-06	0,00E+00	1,16E-05	5,97E-05	7,57E-07	-4,94E-03
ODP	kg CFC 11 eq.	1,40E-07	2,09E-08	3.00E-11	0,00E+00	7,63E-10	1,05E-09	5,91E-11	-8,88E-09

AP	mol H ⁺ eq.	4,85E-02	4,11E-03	2,04E-05	0,00E+00	1,12E-04	4,40E-04	1,64E-05	-1,16E-02
EP-freshwater	kg P eq.	3,67E-04	5,27E-06	1,13E-07	0,00E+00	2,56E-07	2,47E-06	2,44E-08	-4,77E-05
EP-marine	kg N eq.	9,39E-03	1,50E-03	7,02E-06	0,00E+00	3,74E-05	5,94E-05	7,52E-06	-1,76E-03
EP-terrestrial	mol N eq.	1,08E-01	1,64E-02	6,99E-05	0,00E+00	4,12E-04	7,05E-04	7,39E-05	-1,98E-02
POCP	kg NMVOC eq.	3,84E-02	5,99E-03	1,92E-05	0,00E+00	1,70E-04	2,25E-04	2,34E-05	-6,18E-03
ADP-minerals&metals*	kg Sb eq.	5,61E-04	2,17E-06	3,75E-08	0,00E+00	1,21E-07	3,10E-06	6,39E-09	7,03E-06
ADP-fossil*	MJ	1,15E+02	1,54E+01	3,11E-02	0,00E+00	4,96E-01	7,34E-01	4,63E-02	-1,69E+01
WDP*	m ³	3,16E+00	5,43E-02	3,17E-03	0,00E+00	2,60E-03	1,76E-02	3,72E-03	-4,04E-01
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 on these results are high or as there is limited experience with the indicator.

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

Additional mandatory impact category indicators

Results per functional or declared unit									
Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
GWP-GHG ¹	kg CO ₂ eq.	9,71E+00	1,12E+00	2,70E-02	0,00E+00	3,50E-02	1,08E-01	2,47E-02	-1,69E+00

Resource use indicators

Results per functional or declared unit									
Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
PERE	MJ	2,91E+01	1,64E-01	3,95E-03	0,00E+00	8,08E-03	1,19E-01	3,17E-03	-1,77E+00
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
PERT	MJ	2,91E+01	1,64E-01	3,95E-03	0,00E+00	8,08E-03	1,19E-01	3,17E-03	-1,77E+00

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 CO₂ is set to zero.

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
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

Variation between the best case and the worst case.

Mandatory impact category indicators according to EN 15804		
Indicator	Unit	A1-A3
GWP-total	%	3.68
GWP-fossil	%	13.12
GWP-biogenic	%	104.07
GWP-luluc	%	22.37
ODP	%	3.90
AP	%	1.01
EP-freshwater	%	11.74
EP-marine	%	10.46
EP-terrestrial	%	3.62
POCP	%	16.69
ADP-minerals&metals	%	165.31
ADP-fossil	%	6.66
WDP	%	73.31
Additional mandatory impact category indicators		
Indicator	Unit	A1-A3
GWP-GHG	%	13.14

In the following tables, the results considering the end-of-life alternative scenario:

Landfill 100%

Mandatory impact category indicators according to EN 15804						
Results per functional or declared unit						
Indicator	Unit	C1	C2	C3	C4	D
GWP-total	kg CO ₂ eq.	0	0.00571228	0	0.01759403	5.433680979
GWP-fossil	kg CO ₂ eq.	0	0.00570646	0	0.01732021	5.437922279
GWP-biogenic	kg CO ₂ eq.	0	3.927E-06	0	0.00027121	-0.02016201
GWP-luluc	kg CO ₂ eq.	0	1.8899E-06	0	2.5969E-06	0.015920711
ODP	kg CFC 11 eq.	0	1.2435E-10	0	3.1368E-10	2.86172E-08
AP	mol H ⁺ eq.	0	1.8321E-05	0	6.3734E-05	0.037495048
EP-freshwater	kg P eq.	0	4.1797E-08	0	9.6691E-08	0.000153733
EP-marine	kg N eq.	0	6.0994E-06	0	3.3089E-05	0.005655015
EP-terrestrial	mol N eq.	0	6.7102E-05	0	0.00028326	0.063709096
POCP	kg NMVOC eq.	0	2.7785E-05	0	0.00010132	0.019895239
ADP-minerals&metals	kg Sb eq.	0	1.9693E-08	0	2.7261E-08	-2.2643E-05
ADP-fossil	MJ	0	0.0809292	0	0.24302817	54.34138871
WDP	m ³	0	0.00042394	0	0.01276553	1.302631999
Additional mandatory impact category indicators						
Results per functional or declared unit						
Indicator	Unit	C1	C2	C3	C4	D
GWP-GHG	kg CO ₂ eq.	0	0.00570924	0	0.0173284	5.442956695
Results per functional or declared unit						
Indicator	Unit	C1	C2	C3	C4	D
PERE	MJ	0	0.0013178	0	0.01726699	5.715923589
PERM	MJ	0	0	0	0	0
PERT	MJ	0	0.0013178	0	0.01726699	5.715923589
PENRE	MJ	0	0.08093265	0	0.24303128	54.34186409
PENRM	MJ	0	0	0	0	0
PENRT	MJ	0	0.08093265	0	0.24303128	54.34186409
SM	kg	0	0	0	0	0
RSF	MJ	0	0	0	0	0
NRSF	MJ	0	0	0	0	0
FW	m ³	0	9.7783E-06	0	-0.00222489	0.033477158
Results per functional or declared unit						
Indicator	Unit	C1	C2	C3	C4	D
Hazardous waste disposed	kg	0	8.2296E-05	0	0.00196424	1.106737617
Non-hazardous waste disposed	kg	0	0.00088072	0	3.09939107	-3.03886583

Radioactive waste disposed	kg	0	2.3808E-08	0	2.5044E-07	1.84337E-05
Results per functional or declared unit						
Indicator	Unit	C1	C2	C3	C4	D
Components for re-use	kg	0	0	0	0	0
Material for recycling	kg	0	0	0	0	0
Materials for energy recovery	kg	0	0	0	0	0
Exported energy, electricity	MJ	0	0	0	0	0
Exported energy, thermal	MJ	0	0	0	0	0

Incineration 100%

Mandatory impact category indicators according to EN 15804

Results per functional or declared unit						
Indicator	Unit	C1	C2	C3	C4	D
GWP-total	kg CO ₂ eq.	0	0.00571228	0	0.20054333	5.433680979
GWP-fossil	kg CO ₂ eq.	0	0.00570646	0	0.20048277	5.437922279
GWP-biogenic	kg CO ₂ eq.	0	3.927E-06	0	5.0742E-05	-0.02016201
GWP-luluc	kg CO ₂ eq.	0	1.8899E-06	0	9.8225E-06	0.015920711
ODP	kg CFC 11 eq.	0	1.2435E-10	0	5.0256E-10	2.86172E-08
AP	mol H ⁺ eq.	0	1.8321E-05	0	0.00017362	0.037495048
EP-freshwater	kg P eq.	0	4.1797E-08	0	3.0446E-07	0.000153733
EP-marine	kg N eq.	0	6.0994E-06	0	7.3804E-05	0.005655015
EP-terrestrial	mol N eq.	0	6.7102E-05	0	0.00079903	0.063709096
POCP	kg NMVOC eq.	0	2.7785E-05	0	0.00023833	0.019895239
ADP-minerals&metals*	kg Sb eq.	0	1.9693E-08	0	6.8192E-08	-2.2643E-05
ADP-fossil	MJ	0	0.0809292	0	0.35834938	54.34138871
WDP	m ³	0	0.00042394	0	0.02121773	1.302631999

Additional mandatory impact category indicators

Results per functional or declared unit						
Indicator	Unit	C1	C2	C3	C4	D
GWP-GHG	kg CO ₂ eq.	0	0.00570924	0	0.20051265	5.442956695
Results per functional or declared unit						
Indicator	Unit	C1	C2	C3	C4	D
PERE	MJ	0	0.0013178	0	0.00785326	5.715923589
PERM	MJ	0	0	0	0	0
PERT	MJ	0	0.0013178	0	0.00785326	5.715923589

PENRE	MJ	0	0.08093265	0	0.35837523	54.34186409
PENRM	MJ	0	0	0	0	0
PENRT	MJ	0	0.08093265	0	0.35837523	54.34186409
SM	kg	0	0	0	0	0
RSF	MJ	0	0	0	0	0
NRSF	MJ	0	0	0	0	0
FW	m ³	0	9.7783E-06	0	0.00041207	0.033477158
Results per functional or declared unit						
Indicator	Unit	C1	C2	C3	C4	D
Hazardous waste disposed	kg	0	8.2296E-05	0	0.00243485	1.106737617
Non-hazardous waste disposed	kg	0	0.00088072	0	1.739688	-3.03886583
Radioactive waste disposed	kg	0	2.3808E-08	0	1.1843E-07	1.84337E-05
Results per functional or declared unit						
Indicator	Unit	C1	C2	C3	C4	D
Components for re-use	kg	0	0	0	0	0
Material for recycling	kg	0	0	0	0	0
Materials for energy recovery	kg	0	0	0	0	0
Exported energy, electricity	MJ	0	0	0	0	0
Exported energy, thermal	MJ	0	0	0	0	0

Recycling 100%

Mandatory impact category indicators according to EN 15804						
Results per functional or declared unit						
Indicator	Unit	C1	C2	C3	C4	D
GWP-total	kg CO ₂ eq.	0	0.04760231	0.13265359	0	-3.27916628
GWP-fossil	kg CO ₂ eq.	0	0.04755383	0.13206878	0	-3.28173448
GWP-biogenic	kg CO ₂ eq.	0	3.2725E-05	0.00051177	0	0.01217551
GWP-luluc	kg CO ₂ eq.	0	1.5749E-05	7.3041E-05	0	-0.00960732
ODP	kg CFC 11 eq.	0	1.0362E-09	1.2878E-09	0	-1.7287E-08
AP	mol H ⁺ eq.	0	0.00015268	0.0005379	0	-0.02262692
EP-freshwater	kg P eq.	0	3.4831E-07	3.0192E-06	0	-9.2772E-05
EP-marine	kg N eq.	0	5.0828E-05	7.2689E-05	0	-0.00341264
EP-terrestrial	mol N eq.	0	0.00055918	0.00086248	0	-0.03844658
POCP	kg NMVOC eq.	0	0.00023154	0.00027508	0	-0.01200791

ADP-minerals&metals	kg Sb eq.	0	1.641E-07	3.7921E-06	0	1.36622E-05
ADP-fossil	MJ	0	0.67441	0.89834278	0	-32.8039786
WDP	m ³	0	0.00353284	0.02158607	0	-0.7861706

Additional mandatory impact category indicators

Results per functional or declared unit						
Indicator	Unit	C1	C2	C3	C4	D
GWP-GHG	kg CO ₂ eq.	0	0.047577	0.13259606	0	-3.28476506
Results per functional or declared unit						
Indicator	Unit	C1	C2	C3	C4	D
PERE	MJ	0	0.01098168	0.14585921	0	-3.44936819
PERM	MJ	0	0	0	0	0
PERT	MJ	0	0.01098168	0.14585921	0	-3.44936819
PENRE	MJ	0	0.67443875	0.89837922	0	-32.8042655
PENRM	MJ	0	0	0	0	0
PENRT	MJ	0	0.67443875	0.89837922	0	-32.8042655
SM	kg	0	0	0	0	0
RSF	MJ	0	0	0	0	0
NRSF	MJ	0	0	0	0	0
FW	m ³	0	8.1486E-05	0.00051405	0	-0.02020556
Results per functional or declared unit						
Indicator	Unit	C1	C2	C3	C4	D
Hazardous waste disposed	kg	0	0.0006858	0.01127281	0	-0.66787413
Non-hazardous waste disposed	kg	0	0.00733935	0.16589231	0	1.828632246
Radioactive waste disposed	kg	0	1.984E-07	2.2697E-06	0	-1.1127E-05

Results per functional or declared unit						
Indicator	Unit	C1	C2	C3	C4	D
Components for re-use	kg	0	0	0	0	0
Material for recycling	kg	0	0	0	0	0
Materials for energy recovery	kg	0	0	0	0	0
Exported energy, electricity	MJ	0	0	0	0	0
Exported energy, thermal	MJ	0	0	0	0	0

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2024 La produzione di materia prima – end of waste - Dalla raccolta differenziata di carta e cartone -

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VERSION HISTORY

V1 – 2026-03-17 - Original version of the EPD

This declaration applies to products mentioned in the list:

Product			
8300	8106K	8895A	C8736SG
8311	8106XK	C8023K	C8736SR
8382	8116K	C8036K	81060054
8401	8116XK	C8041K	8315B030054
C8117	8223K	C8106XK	8416010888
C8280	8236K	C8223K	8416020888
C8311	8243K	C8236K	84360054
C8382	8263K	C8243K	88040054
C8416	8351A	C8263K	8805010054
C8436D	8352A	C8351A	8806010054
C8436S	8353A	C8352A	8806L0054
C8504F	8361A	C8353A	8814B
C8526	8362A	C8361A	8815B
C8527	8363A	C8362A	8816B
C8542X	8364A	C8365D	8816LB
C8595	8370A	C8365S	8825010054
C8595A	8370B	C8370A	8826010054
C8250A	8370C	C8370B	8835B
8016	8370D	C8370C	8836B
8023	8375	C8370D	884401
8036	8380A	C8375	884601
8039A	8380B	C8380A	885601
8041	8380C	C8380B	886601
8101	8380D	C8380C	8894A01
8106	8416K	C8416K	8895A01
8106X	8436K	C8436K	8895A02
8116	8453K	C8453K	C8504FB
8116X	8500AK	C8500AK	C8766G
8216	8503AK	C8503AK	C8766R
8223	8504FK	C8504X	C8795A
8236	8504X	C8508	
8241	8508	C8525AK	
8243	8525AK	C8540XK	
8250A	8527AK	C8542AX	
8261	8540XAK	C8714G	
8263	8542AX	C8714R	
8280A	8804	C8715ER	
8323	8805	C8715SR	
8336	8806	C8716EG	
8341	8806L	C8716ER	
8416	8814	C8716LG	
8436	8815	C8716LR	
8451	8816	C8716SG	
8453	8816L	C8716SR	
8455	8824	C8724G	
8481A	8825	C8724R	
8500A	8826	C8725ER	
8503A	8826L	C8725SR	
8504FA	8834	C8726EG	
8505A	8835	C8726ER	
8525A	8836	C8726LG	
8526A	8836L	C8726LR	
8527A	8844	C8726SG	
8529A	8845	C8726SR	
8540XA	8846	C8734G	
8542XA	8854	C8734R	
8544	8855	C8735ER	
8595	8856	C8735SR	
8595A	8864	C8736EG	
8023K	8865	C8736ER	
8036K	8866	C8736LG	
8041K	8894A	C8736LR	

