Environmental Product Declaration

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

Panelia (PVC, Acrylic, PET Panel Board)

EPD of multiple products, based on a representative product
from

Çamsan Entegre Ağaç Sanayi ve Ticaret A.Ş.

Programme:	The International EPD System, www.environdec.com
Programme operator:	EPD International AB
Licensee:	EPD Türkiye
Type of EPD:	EPD of multiple products from a company
EPD registration number:	EPD-IES-0026945:001
Version date:	2026-02-05
Validity date:	2031-02-04
	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:	The International EPD® System	EPD Türkiye
Address:	EPD International AB Box 210 60 SE-100 31 Stockholm Sweden	Nef 09 B Blok No:7/15 34415 Kağıthane / İstanbul
Website:	www.environdec.com	epdturkey.org
E-mail:	info@environdec.com	info@epdturkey.org

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 products, 2019:14, version 2.0.1. Date: 2025-06-05, UN CPC code: 3142 Other plywood, veneered panels and similar laminated wood, except of bamboo
PCR review was conducted by: Rob Rouwette (chair), Noa Meron (co-chair). The review panel may be contacted via the Secretariat: www.environdec.com/support
c-PCR
c-PCR-006 (to PCR 2019:14) Wood and wood-based products for use in construction (EN 16485:2014) Version: 1.0.0 2019-12-20
Life Cycle Assessment (LCA)
LCA accountability: Ceren Naz Güleçyüz, *Greenlife Consultancy* *Kıymet Eda Sakınmaz, Greenlife Consultancy*

Third-party Verification
Independent third-party verification of the declaration and data, according to ISO 14025:2006, via: ☒ **Individual EPD verification without a pre-verified LCA/EPD tool** Third-party verifier: Callum Hill, JCH Industrial Ecology Ltd Approved by: 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 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 ISO 14025.

INFORMATION ABOUT EPD OWNER

Owner of the EPD: Çamsan Entegre Ağaç Sanayi ve Ticaret A.Ş.

Address: Sakarya 2. Organized Industrial Zone Hendek/SAKARYA

Contact: vedat.sarikaya@camsan.com.tr

Description of the organisation: Çamsan Entegre was established in 1978 as Turkey's first manufacturer of laminate flooring, Medium Density Fibreboard (MDF), and MDFLAM.

Carrying the pride of being the company that first introduced this technology to our country, Çamsan Entegre Ağaç Sanayi ve Ticaret A.Ş. continues to maintain its leadership in the sector in terms of both quality and product range. Embracing the full responsibility of being the first and pioneering company in its industry, Çamsan Entegre Ağaç Sanayi ve Ticaret A.Ş. has become the leading brand that comes to mind when it comes to MDF and laminate flooring, thanks to its uncompromising commitment to quality.

Ranked among Turkey's top 500 companies for many years in terms of financial scale, our company has strengthened its position as the domestic market and industry leader while also expanding its exports and influence in international markets.
Currently exporting to more than 30 countries, our company continues to increase its market share abroad through the consistent quality of its products.

In addition to high-quality raw MDF boards available in various specifications and dimensions, Çamsan Entegre operates as an integrated facility with production units for MDFLAM (Melamine-Faced Boards) and laminate flooring. In 2020, we commissioned our PANEL production line and continue to produce panels under the brand name Çamsan PANELIA.

In 2016, we launched our new investment worth 85 million euros, including MDF, coating press, and laminate flooring production facilities. Our factory, equipped with high-capacity MDF production lines, is established on a total area of 300,000 m², of which 90,000 m² is covered.

PRODUCT INFORMATION

Product name: Panelia

Product identification: PVC, Acrylic, PET Panel Board

UN CPC code: 3142

Product description: Panel Boards are produced to meet the demand for high-gloss or matte surfaces in the furniture and interior decoration industries. They are manufactured by laminating PVC, PVC/PET, PET, Scratch-Resistant Alkaline, or Industrial Alkaline films onto MDF board surfaces. Owing to their smooth texture, special decorative finishes that replicate the natural feel of wood, and glass-like surface quality with high gloss levels, these panels are particularly suitable for decorative and interior design applications.

In the Panelia production line, both raw MDF and single-sided MDFLAM boards can be processed. For raw MDF panels, a primer coating is first applied, after which the primed boards are returned to the line for surface lamination. For single-sided MDFLAM boards, only the surface lamination process is carried out.

These panel boards combine visual appeal with durability and easy maintenance, offering a practical and aesthetic solution for modern furniture and interior applications.

Name and location of production site(s): Sakarya Second Organized Industrial Zone Hendek/SAKARYA

Technical Specifications:

Technical Data	Unit	Value	Test Standard
Surface Soundness	N/mm^2	≥ 1.00	TS EN 311
Element Thickness	mm	For ≤ 20 mm: +0.5 / -0.3 For > 20 mm: ±0.5 For all classes: t_{max}- t_{min}≤ 0.60	TS EN 14323
Deviation from Flatness	mm/m	For < 15 mm: - | For ≥ 15 mm: ≤ 2	
Surface Layer Width and Length	mm	±5 ±2.5	
Warping (PVC)	mm/2800 mm	No specification	
Warping (Acrylic)	mm/2800 mm	No specification	
Surface Blemish Size and Quantity	-	0–2.5 mm: for 1 m² 4 pieces 2.5–6 mm: 1 m² 3 pieces 6–10 mm: 1 m² 2 pieces 10–15 mm: 1 m² 1 piece	
Scratch Resistance	N	≥ 1.0 for acrylic products ≥ 0.5 for other products	
Assessment of Light Exposure Effect	-	Grey scale: minimum 4/5 Blue wool scale: > 6	TS EN 15186 Method B
Gloss Level (60°)	Gloss	≥ 70	TS EN 15187
Colour Difference (ΔE)	Unit	<1	TS EN 13722
Evaluation of Surface Resistance to Micro-Scratching	-	≤ 10	TS EN 13721
Resistance to Cold Liquids (Chemical Resistance)	Scale	Coffee: 5 Acetone: 5	TSE CEN/TS 16611 (Method A) TS EN 12720+A1
Surface Resistance to Dry Heat (70 °C)	Scale	5	
Determination of Surface Resistance to Wet Heat (70 °C)	Scale	PET and Acrylic foils: 5 PVC and PVC+PET foils: 4	TS EN 12722
Formaldehyde Emission	mg/m²·h	E0: < 1.75 E1: ≤ 3.5	TS EN 12721

CONTENT DECLARATION

- The mass (weight) of one unit of a product, as purchased or per declared unit: 731.7 kg

- Information on the environmental and hazardous/toxic properties of a substances contained in the product: Products meet the REACH requirement (reporting limit: 0.1% raw material), by default since no SVHC (substance of very high concern) exceeds 0.1%.

Product content	Mass, kg	Post-consumer recycled material, mass-% of product	Biogenic material, mass-% of product	Biogenic material, kg C/product or declared unit
Wood	652.91	0	100	361.46
Glue	65.29	0	0	0
Mould-release agent	0.078	0	0	0
Paraffin	1.74	0	0	0
PET	0.77	0	0	0
PVC	5.18	0	0	0
Coating	5.72	0	89.5	0.925
TOTAL	731.	0	89.5	362.38

Packaging materials	Mass, kg	Mass-% (versus the product)	Biogenic material, kg C/product or declared unit
Steel hoop	0.1512	0.0002	0
TOTAL	0.1512	0.0002	0

1 kg biogenic carbon in the product/packaging is equivalent to the uptake of 44/12 kg of CO_2.

Biogenic carbon content is calculated according to EN 16449.

LCA INFORMATION

Declared unit	1 m^3 of Panel
Reference service life	NA
Time representativeness	Data is representative for 2024 production year. Primary production data for the year 2024 was used in the LCA.
Geographical Scope	Türkiye and Global
Database(s) and LCA software used	Ecoinvent 3.10 database and SimaPro software

Thickness (mm)	8-30
Conversion factor to mass (kg/m^3)	731.7

Description of system boundaries: Cradle to gate (A1-A3) with modules A4-A5, modules C1-C4, and module D.

Raw Material Supply (A1): Çamsan's manufacturing activities begin with wood logs as the primary raw material. The company procures these logs from appropriate forest enterprises across various regions of Türkiye. This stage covers all operations carried out in the forest, including the harvesting, initial processing, and pre-treatment of the logs prior to their transportation to the production site.

Transportation (A2): Transportation stage covers the transportation of all raw materials and packaging materials to Çamsan's production facility. Transport is primarily conducted by road using trucks. The transport data for this module is modelled based on the weighted average transport distances of all raw materials and packaging materials procured in 2024.

Manufacturing (A3): At the manufacturing stage, the impact of fuel consumption and electricity usage throughout the production process, and water consumption are considered. Also, packaging and wastewater treatment were included in manufacturing.

During the manufacturing of Panelia, electricity is used as energy sources.

Details of electricity data used in LCA model
Country: Türkiye
Source Type: 100% Grid
Energy Sources: Coal: 62.7%
Oil: 0.7%
Natural gas: 36.6%
Electricity Data: Residual mix is calculated from "Electricity, medium voltage {TR}| market for electricity, medium voltage | Cut-off, S"
Electricity Emission Factor (GWP-GHG result): 0.573 kg CO_2eq/kWh

Transportation (A4): This stage covers the transportation of finished Panelia from Çamsan's production facility to the construction site or customer location. Transport is carried out primarily by road and sea, using trucks and containerships. The transport model is based on the weighted average transport distances of all product deliveries completed in 2024.

Construction (A5): The installation of MDF-based products is typically performed manually or with small hand-held tools. Consequently, the electricity and fuel consumption associated with installation activities is very low and considered negligible compared to the upstream production impacts (A1–A3). Therefore, no significant additional energy use is included in this module. Environmental impacts associated with packaging materials that leave the system during the construction stage are also accounted for within this module.

De-Construction Demolition (C1): During the deconstruction or demolition stage, electricity consumption is required for the dismantling and removal of the material. An energy use of 0.323 MJ per kilogram of material is assumed for this module, based on Gervasio & Dimova (2018).

Waste Transport (C2): A transport distance of 100 km is assumed for the movement of the product as waste after the end of its use phase.

Waste Processing (C3): No additional waste processing is required in this module, as the waste is directly sent to landfill or incineration facilities. Therefore, no further treatment prior to final disposal is considered.

Disposal (C4): In the end-of-life scenario, 75% of the Panelia waste is disposed of in landfill, while the remaining 25% is sent to incineration.

Resource Recovery Stage (D): For the assessment of benefits and burdens beyond the system boundary, a calorific value of 18.6 MJ per kilogram of Panelia was assumed to estimate the amount of electricity that could be avoided through heat recovery (Günther et al., 2012). In this stage, the electricity generation efficiency of the incineration plant is assumed to be 20 % (Intergovernmental Panel on Climate Change [IPCC], 2019). Thus, the heat generated from Panelia incineration is considered to be converted into electricity, which in turn substitutes an equivalent amount of electricity that would otherwise be drawn from the grid.

Cut-off Rule

All the related data have been collected through detailed data sheets from the manufacturer. Data that is sent by the manufacturer has been analysed and modelled. All data related to inputs and outputs for processes has been included. In situations where there were data gaps, generic data (Ecoinvent 3.10) has been used. The cut-off criteria have been set to allow the omission of individual input flows that account for less than 1% of the total, provided that the cumulative contribution does not exceed 5%.

The data that is omitted from the LCA modelling is as follows.

- Employees' commuting to the workplace
- Infrastructure and machinery (Machinery refers to capital goods)
- Impacts due to the maintenance of the machinery
- Waste produced during the production.
- Ancillary material use (There is not an ancillary material use)

Allocations: In the production site of Çamsan, Panelia is produced in its own production line. Therefore, energy consumption, water use generated waste and packaging data have been obtained specific to the product from the EPD owner. Hence, the data was gathered for each product line separately and no allocation is required.

Characterization Factor
EN 15804 method based on EF 3.1 normalization and weight values, published in July 2022.

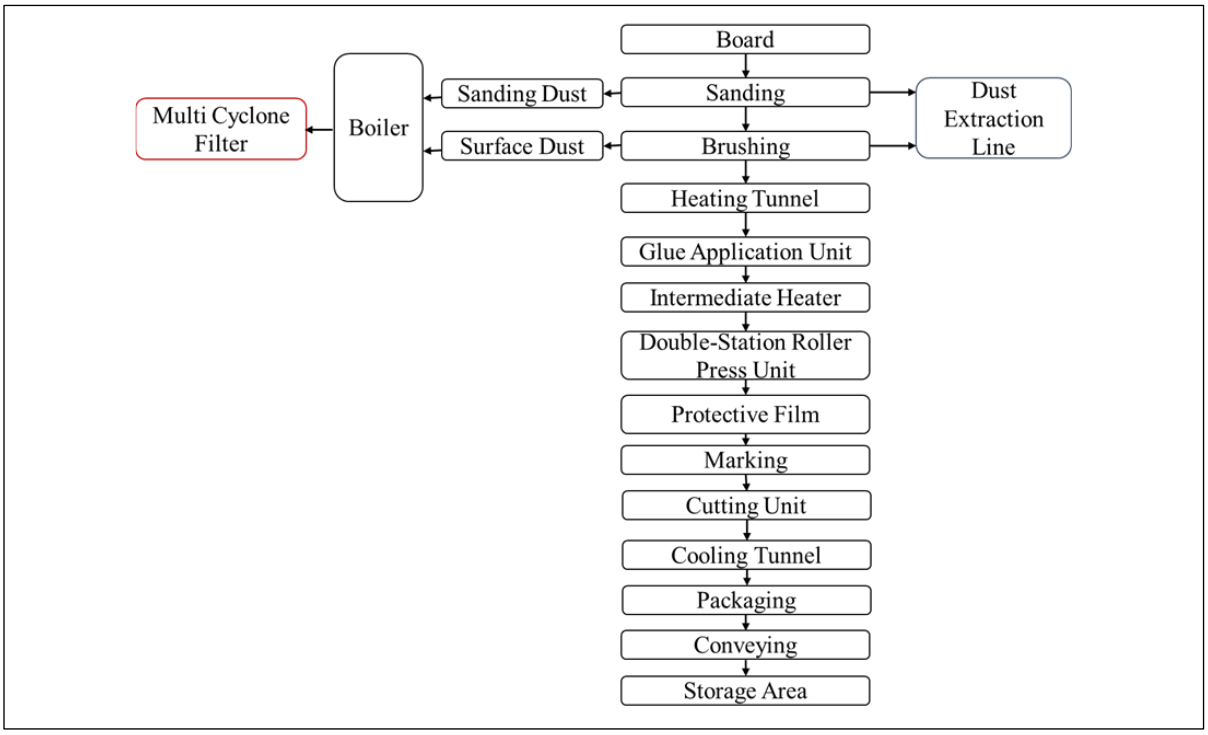
Process flow diagram: In this unit, the raw materials used include single-sided MDF laminate, raw MDF, acrylic, or PVC-PVC underlay. Single-sided laminated boards are placed on the panel feeding conveyor and transferred to the line. The flat lamination line starts with the automatic feeding station, where boards measuring 1.22 m × 2.80 m and 3 mm – 60 mm in thickness are loaded.

The boards then pass through the edge trimming machine and arrive at the sanding and calibration unit, where sanding operations are performed. The sanded boards proceed to the brush station, where surface dust is removed using brushes. After cleaning, the boards are heated to 40–60°C using IR lamps.

The heated boards are then transferred to the glue preparation and application unit. Solid bead adhesives are melted using electric resistances and pumped to the glue application station. At the glue application station, the melted adhesive is applied onto the boards using rollers.

The glued boards pass through the acrylic feeding line and enter the pressing unit. In the press unit, PVC rolls compress the glued boards to achieve adhesion. At the press exit, a protective layer is applied onto the board surface.

The laminated boards then pass through the cutting unit (guillotine) for sizing. After sizing, the boards proceed to the cooling unit, where fans reduce their temperature. Once cooled, the boards pass through the quality selection and star conveyor systems, reaching the final product stacking and unloading station.



Process	Source type	Source	Reference year	Data category	Share of primary data, of GWP-GHG results for A1-A3
Manufacturing of product	Collected data	EPD owner	2024	Primary data	0.1 %
Generation of electricity used in manufacturing of product	Database	Ecoinvent v3.10	2024	Primary data	18%
Transport of raw material to manufacturing site	Database	Ecoinvent v3.10	2024	Primary data	21.7%
Production of packaging	Database	Ecoinvent v3.10	2024	Secondary data	0%
Other processes	Database	Ecoinvent v3.10	2024	Secondary data	0%
Total share of primary data, of GWP-GHG results for A1-A3					39.8%

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

X: Declared Module, MND: Module Not Declared

	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	MND	MND	MND	MND	MND	MND	MND	X	X	X	X		X
Geography	GLO	GLO	TR	GLO	GLO	-	-	-	-	-	-	-	GLO	GLO	GLO	GLO		GLO
Share of primary data	39.8%			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – products	<10%			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – sites	0%			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

ENVIRONMENTAL PERFORMANCE

Impact category indicators

Results per functional or declared unit									
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	kg CO_2 eq.	-6.31E+02	9.94E+01	3.73E+01	5.94E+01	1.40E+01	0.00E+00	1.44E+03	-5.20E+02
GWP-fossil	kg CO_2 eq.	6.83E+02	9.94E+01	3.69E+01	5.94E+01	1.40E+01	0.00E+00	1.08E+02	-5.13E+02
GWP-biogenic	kg CO_2 eq.	-1.33E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E+03	-6.75E+00
GWP-luluc	kg CO_2 eq.	1.57E+01	4.68E-02	3.98E-01	3.86E-03	5.70E-03	0.00E+00	1.23E-02	-3.33E-02
ODP	kg CFC 11 eq.	2.85E-05	1.51E-06	2.20E-07	3.15E-07	2.08E-07	0.00E+00	0.00E+00	-2.72E-06
AP	mol H^+ eq.	5.76E+00	1.58E+00	2.42E-01	3.89E-01	3.21E-02	0.00E+00	0.00E+00	-3.36E+00
EP-freshwater	kg P eq.	2.41E-01	5.60E-03	3.73E-02	6.06E-02	1.11E-03	0.00E+00	9.16E-03	-5.24E-01
EP-marine	kg N eq.	1.33E+00	3.95E-01	4.26E-02	6.89E-02	7.46E-03	0.00E+00	8.17E-02	-5.95E-01
EP-terrestrial	mol N eq.	1.41E+01	4.38E+00	3.89E-01	6.28E-01	8.06E-02	0.00E+00	2.37E-01	-5.43E+00
POCP	kg NMVOC eq.	4.90E+00	1.28E+00	1.15E-01	1.86E-01	4.50E-02	0.00E+00	0.00E+00	-1.61E+00
ADP-minerals&metals*	kg Sb eq.	4.71E-03	1.88E-04	3.94E-05	1.37E-05	4.58E-05	0.00E+00	2.49E-05	-1.18E-04
ADP-fossil*	MJ	1.22E+04	1.36E+03	4.09E+02	6.63E+02	1.97E+02	0.00E+00	8.49E+01	-5.73E+03
WDP*	m^3	4.25E+02	5.22E+00	1.89E+01	3.85E+00	8.98E-01	0.00E+00	1.27E+01	-3.32E+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 of these results are high or as there is limited experience with the indicator.*

Additional mandatory and voluntary impact category indicators

Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
GWP-GHG[1]	kg CO_2 eq.	6.99E+02	9.94E+01	3.73E+01	5.94E+01	1.40E+01	0.00E+00	1.08E+02	-5.13E+02

Resource use indicators

Results per functional or declared unit									
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	MJ	1.85E+04	1.38E+01	1.72E+02	1.21E+01	2.52E+00	0.00E+00	7.58E+03	-1.05E+02
PERM	MJ	1.04E+04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-1.04E+04	0.00E+00
PERT	MJ	2.89E+04	1.38E+01	1.72E+02	1.21E+01	2.52E+00	0.00E+00	-2.82E+03	-1.05E+02
PENRE	MJ	1.22E+04	1.36E+03	4.09E+02	6.63E+02	1.97E+02	0.00E+00	8.49E+01	-5.73E+03
PENRM	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
PENRT	MJ	1.22E+04	1.36E+03	4.09E+02	6.63E+02	1.97E+02	0.00E+00	8.49E+01	-5.73E+03
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
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
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
FW	m^3	4.14E+02	5.26E+00	1.91E+01	3.81E+00	9.02E-01	0.00E+00	1.26E+01	-3.29E+01
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								

[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.

Waste indicators

PARAMETER	UNIT	A1-A3	A4	A5	C1	C2	C3	C4	D
Hazardous waste disposed	kg	7.03E-02	8.16E-03	7.31E-04	1.15E-03	1.36E-03	0.00E+00	1.12E-03	-9.97E-03
Non-hazardous waste disposed	kg	1.27E+02	6.46E+01	1.22E+00	1.19E+00	9.44E+00	0.00E+00	5.14E+01	-1.02E+01
Radioactive waste disposed	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

Output flow indicators (optional)

PARAMETER	UNIT	A1-A3	A4	A5	C1	C2	C3	C4	D
Components for reuse	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
Material for recycling	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
Materials for energy recovery	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.49E+02	0.00E+00
Exported energy, electricity	MJ per energy carrier	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.04E+03	0.00E+00
Exported energy, thermal	MJ per energy carrier	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 mandatory and voluntary impact category indicators (100% Landfill End-of-Life Scenario)

Results per functional or declared unit								
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**
GWP-total	kg CO_2 eq.	-6.31E+02	9.94E+01	3.73E+01	5.94E+01	1.40E+01	0.00E+00	1.33E+03
GWP-fossil	kg CO_2 eq.	6.83E+02	9.94E+01	3.69E+01	5.94E+01	1.40E+01	0.00E+00	4.26E+00
GWP-biogenic	kg CO_2 eq.	-1.33E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E+03
GWP-luluc	kg CO_2 eq.	1.57E+01	4.68E-02	3.98E-01	3.86E-03	5.70E-03	0.00E+00	1.80E-03
ODP	kg CFC 11 eq.	2.85E-05	1.51E-06	2.20E-07	3.15E-07	2.08E-07	0,00E+00	5.57E-08
AP	mol H^+ eq.	5.76E+00	1.58E+00	2.42E-01	3.89E-01	3.21E-02	0,00E+00	3.49E-02
EP-freshwater	kg P eq.	2.41E-01	5.60E-03	3.73E-02	6.06E-02	1.11E-03	0.00E+00	4.81E-04
EP-marine	kg N eq.	1.33E+00	3.95E-01	4.26E-02	6.89E-02	7.46E-03	0.00E+00	1.51E-02
EP-terrestrial	mol N eq.	1.41E+01	4.38E+00	3.89E-01	6.28E-01	8.06E-02	0.00E+00	1.64E-01
POCP	kg NMVOC eq.	4.90E+00	1.28E+00	1.15E-01	1.86E-01	4.50E-02	0.00E+00	4.96E-02
ADP-minerals&metals*	kg Sb eq.	4.71E-03	1.88E-04	3.94E-05	1.37E-05	4.58E-05	0.00E+00	1.96E-06
ADP-fossil*	MJ	1.22E+04	1.36E+03	4.09E+02	6.63E+02	1.97E+02	0.00E+00	5.50E+01
WDP*	m^3	4.25E+02	5.22E+00	1.89E+01	3.85E+00	8.98E-01	0.00E+00	1.93E-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							

Additional mandatory and voluntary impact category indicators (100% Incineration End-of-Life Scenario)

Results per functional or declared unit									
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	kg CO_2 eq.	-6.31E+02	9.94E+01	3.73E+01	5.94E+01	1.40E+01	0.00E+00	1.33E+03	-1.66E+03
GWP-fossil	kg CO_2 eq.	6.83E+02	9.94E+01	3.69E+01	5.94E+01	1.40E+01	0.00E+00	2.73E+00	-1.62E+03
GWP-biogenic	kg CO_2 eq.	-1.33E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E+03	-2.78E+01
GWP-luluc	kg CO_2 eq.	1.57E+01	4.68E-02	3.98E-01	3.86E-03	5.70E-03	0.00E+00	5.14E-04	-1.11E+01
ODP	kg CFC 11 eq.	2.85E-05	1.51E-06	2.20E-07	3.15E-07	2.08E-07	0.00E+00	3.44E-08	-1.34E-05
AP	mol H^+ eq.	5.76E+00	1.58E+00	2.42E-01	3.89E-01	3.21E-02	0.00E+00	1.95E-01	-9.69E+00
EP-freshwater	kg P eq.	2.41E-01	5.60E-03	3.73E-02	6.06E-02	1.11E-03	0.00E+00	4.26E-04	-1.59E+00
EP-marine	kg N eq.	1.33E+00	3.95E-01	4.26E-02	6.89E-02	7.46E-03	0.00E+00	9.28E-02	-1.69E+00
EP-terrestrial	mol N eq.	1.41E+01	4.38E+00	3.89E-01	6.28E-01	8.06E-02	0.00E+00	1.08E+00	-1.52E+01
POCP	kg NMVOC eq.	4.90E+00	1.28E+00	1.15E-01	1.86E-01	4.50E-02	0.00E+00	2.86E-01	-4.76E+00
ADP-minerals&metals*	kg Sb eq.	4.71E-03	1.88E-04	3.94E-05	1.37E-05	4.58E-05	0.00E+00	5.17E-06	-1.80E-03
ADP-fossil*	MJ	1.22E+04	1.36E+03	4.09E+02	6.63E+02	1.97E+02	0.00E+00	3.67E+01	-1.86E+04
WDP*	m^3	4.25E+02	5.22E+00	1.89E+01	3.85E+00	8.98E-01	0.00E+00	8.42E+00	-5.53E+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								

ABBREVIATIONS

Abbreviation	Definition
ADP	Abiotic Depletion Potential
AP	Acidification Potential
Çamsan	Çamsan Entegre Ağaç Sanayi ve Ticaret A.Ş.
EN	European Norm (Standard)
EF	Environmental Footprint
EP	Eutrophication Potential
Eq	Equivalent
GPI	General Programme Instructions
GHG	Greenhouse Gases
GWP	Global Warming Potential
ISO	International Organization for Standardization
CEN	European Committee for Standardization
CPC	Central product classification
GRI	Global Reporting Initiative
LCA	Life Cycle Assessment
ND	Not Declared
ODP	Ozone Layer Depletion
PCR	Product Category Rules
POCP	Photochemical Oxidant Creation Potential
SVHC	Substances of Very High Concern
WDP	Water Deprivation Potential

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The International EPD® System / The International EPD® System is a programme for type III environmental declarations, maintaining a system to verify and register EPD®s as well as keeping a library of EPD®s and PCRs in accordance with ISO 14025. www.environdec.com

VERSION HISTORY

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