

ENVIRONMENTAL PRODUCT DECLARATION

In accordance with ISO 14025 and EN 15804:2012+A2:2019 for Walkmats
Manufactured by Petronan Kimya San. Tic A.Ş

Programme:
**The International
EPD® System**

Programme Operator:
EPD International AB

Type of EPD:
**EPD of multiple
products, based on a
representative product**

EPD registration number
EPD-IES-0030951

Version Date
2026-04-24

Validity Date
2031-04-23

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	support@environdec.com

Product Category Rules (PCR)

- CEN standard EN 15804 serves as the Core Product Category Rules (PCR)
- Product Category Rules (PCR): PCR 2019:14 Construction products Version 2.0.1 UN CPC code: 36910
- PCR review was conducted by: The Technical Committee of the International EPD® System. <https://www.environdec.com/about-us/the-international-epd-system-about-the-system>. The review panel may be contacted via the Secretariat www.environdec.com/contact.

Life Cycle Assessment (LCA)

- LCA practitioner: Can Sönmez, MSc. - GreeniX Sustainability Solutions

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: İpek Gökteş Kalkan, EPDLogy
 - Approved by: The International EPD® System
-

- Procedure for follow-up of data during EPD validity involves third party verifier:
 - Yes No
-

EPDs within the same product category but registered in different EPD programmes 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-of rules and impact assessment methods (including the same version of characterization factors); have equivalent content declarations; and be valid at the time of comparison for further information about comparability, see EN 15804 and ISO 14025.

Petronan Kimya San. Tic A.Ş. has the sole ownership, liability, and responsibility for the EPD.

Information About EPD Owner

Petronan Kimya San. Tic A.Ş

Contact:

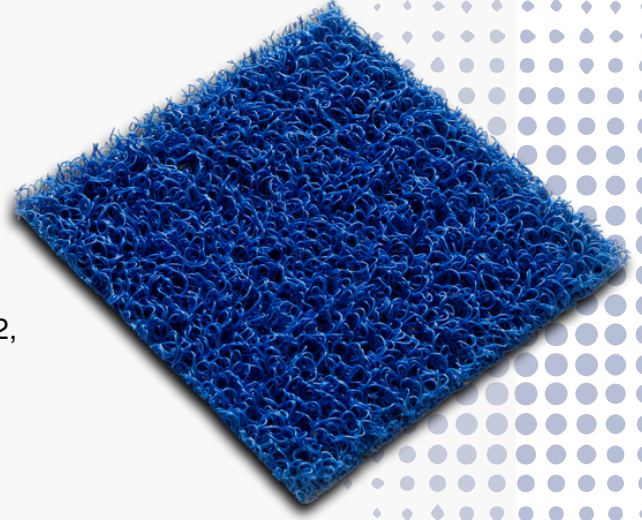
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LCA Practitioner:

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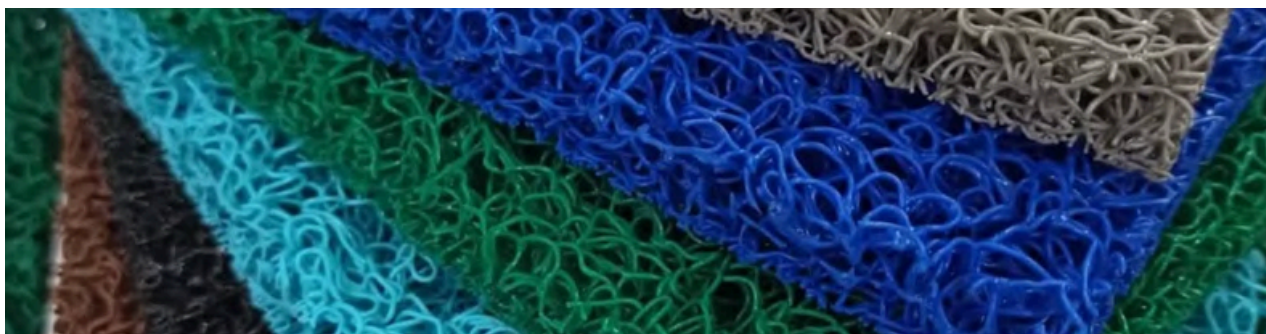


Description of the Organisation

Petronan Kimya San. Tic. A.Ş. has been operating as a parent manufacturing company capable of producing a wide range of plastic-based products since its establishment in 1997. Today, the company continues its manufacturing activities under the WALKMATS and MARSEL brands.

With its innovative, technology-driven production facilities, Petronan manufactures products in compliance with international standards and places strong emphasis on its corporate values in order to maintain customer satisfaction in both domestic and international markets. Throughout its production processes, the company closely follows and implements developments that contribute positively to environmental protection, employee well-being, and product quality. Acting with a strong awareness of sustainability, Petronan is committed to environmental protection, adherence to universal values, ensuring occupational health and safety, and maintaining a peaceful and safe working environment.

Aiming to expand its manufacturing activities and branding efforts into different sectors in the future, Petronan continuously pursues growth by forming strategic collaborations with solution partners and entrepreneurial individuals or companies from various fields. By maintaining its role as a manufacturer within these business models, the company plans to further expand and strengthen its global network.



Product Name

14 mm Slender Walkmats

Product Identification

The technical specifications of the product are as follows:

Property	Test Method	Value
Density (20°C, g/cm ³)	EN 3745-505	1,50 ± 0,03
Hardness (Shore A)	ASTM D 2240	88 ± 3
Tensile Stress (N/m ²)	EN 3745-505	≥ 10,00
Elongation at Break (%)	IEC 60811-1	≥ 210

Material	PVC (Curly Mats)
Registered Name	WALKMATS – Anti Slip
Thickness	14 mm
Weight	3,3 kg/m ²
Backing	Non-slip, suitable for door entrances of commercial offices, homes, and public buildings
Preferred use	Wet/icy/slippery surfaces such as pool edges
Roll Width	100 cm (without backing)
Roll Length	15 m
Applications	Apartments, drawers, government institutions, subways, gardens, bathrooms, sidewalks, hotels, restaurants, sports venues

UN CPC Code

36910 - Floor coverings of plastics, in rolls or in the form of tiles; wall or ceiling coverings of plastics.

Product Description

Built to perform, Walkmats redefine ground protection and anti-slip solutions with a perfect balance of strength, flexibility, and design. Created for those who demand reliability under pressure, Walkmats deliver unmatched stability and cleanliness across every setting — from residential entrances and commercial walkways to construction zones, industrial sites, and large outdoor venues. Each mat is engineered from premium-grade PVC compounds, ensuring superior grip, impact resistance, and durability in all weather conditions — indoors or outdoors.

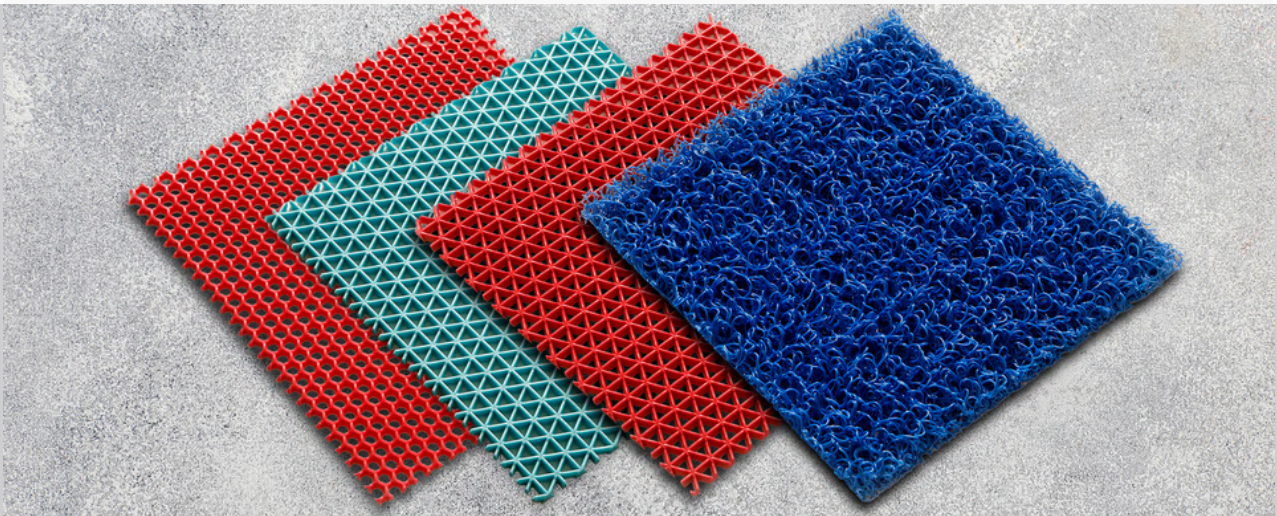
Available in Slim, Thin, Simple, Slender, Medium, Elegant, Maxi, Star and Honeycomb models, every version is purpose-built for specific surface types and load levels, offering maximum efficiency with minimal maintenance. Walkmats are not just functional — they are customizable in color, logo, and size, transforming safe footing into a signature look.

Walkmats are preferred for commercial offices, public buildings, wet floors at the edges of pools, icy surfaces and outdoor areas with high pedestrian traffic. Due to their special texture, these mats keep dust, dirt and moisture brought in by shoes away from working and living spaces, thereby reducing cleaning costs.

Name and Location of Production Site

Petronan Kimya, Bursa Facility

Further information about the manufacturer is available at: <https://www.petronan.com.tr>



Content Declaration

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

The mass of the product per declared unit is 3,3 kg.

Content of the product in the form of a list of materials and substances, and their mass

The main constituents of the product are PVC, filler, plasticizer and additives. Smaller proportions of stabilizer, lubricant, and pigment are also present. The percentage composition by weight is presented below.

Product Composition	Weight (%)	Post-consumer material weight- %	Biogenic material, mass-% of product	Biogenic material, kg C/product
PVC	30-35	0	0	0
Filler	35-45	0	0	0
Plasticizer	20-25	0	0	0
Additives	1-5	0	0,77%	0,025

The mass and the content of distribution and consumer packaging

Packaging Materials	Weight, kg	Weight-% (versus the product)	Biogenic material kg C / declared unit
Shrink	0,013	0,41%	0
Cardboard	0,017	0,51%	0,008
Plastics	0,001	0,03%	0
Wood	0,119	3,59%	0,056

Information on the environmental and hazardous/toxic properties of substances contained in the product

No substances included in the Candidate List of Substances of Very High Concern for authorization under the REACH regulations are present in this product either above the threshold for registration with the European Chemicals Agency or above 0.1%(wt/wt).

Other information on substances with hazardous and toxic properties

The product does not contain any substances classified as hazardous or toxic according to current European regulations.

Biogenic Carbon Content

The biogenic carbon content reported in this EPD is associated with both the product and the packaging materials (cardboard and wooden pallet). Within the product, biogenic carbon originates from stearic acid and epoxidized soybean oil, while in the packaging system it originates from the cellulose-based materials.

LCA Information

Declared Unit

The declared unit is 1 square meter of walkmats at the facility gate, in accordance with EN 15804 + A2.

Conversion Factor

1 declared unit corresponds to 3,3 kg of walkmats. Results may be linearly scaled to other quantities (e.g., 1 kg = 0,303 declared unit).

Reference Service Life (RSL)

The reference service life (RSL) of the PVC walkmats are assumed to be 10 years under normal conditions of use and maintenance.

Time Representativeness

01.01.2024 - 31.12.2024

Geographical Scope

The processes in modules A1–A3 have been modelled to represent the production of walkmats in Bursa, Türkiye. The raw materials are sourced from within Türkiye. The declared product is intended for global markets.

Database(s) and LCA Software

Ecoinvent 3.10 and SimaPro 10.3

Description of System Boundaries

The system boundary covers cradle to gate (A1–A3) with optional modules A4, C1–C4, D as mentioned below. The review framework comprises the following details:

- A1: Raw Materials Supply
- A2: Raw Material Transport (Upstream Transportation)
- A3: Manufacturing Phase
- A4: Final Product Shipment (Downstream Transportation)
- C1–C4: End-of-life Scenarios for the Declared Product
- D: Benefit Stage

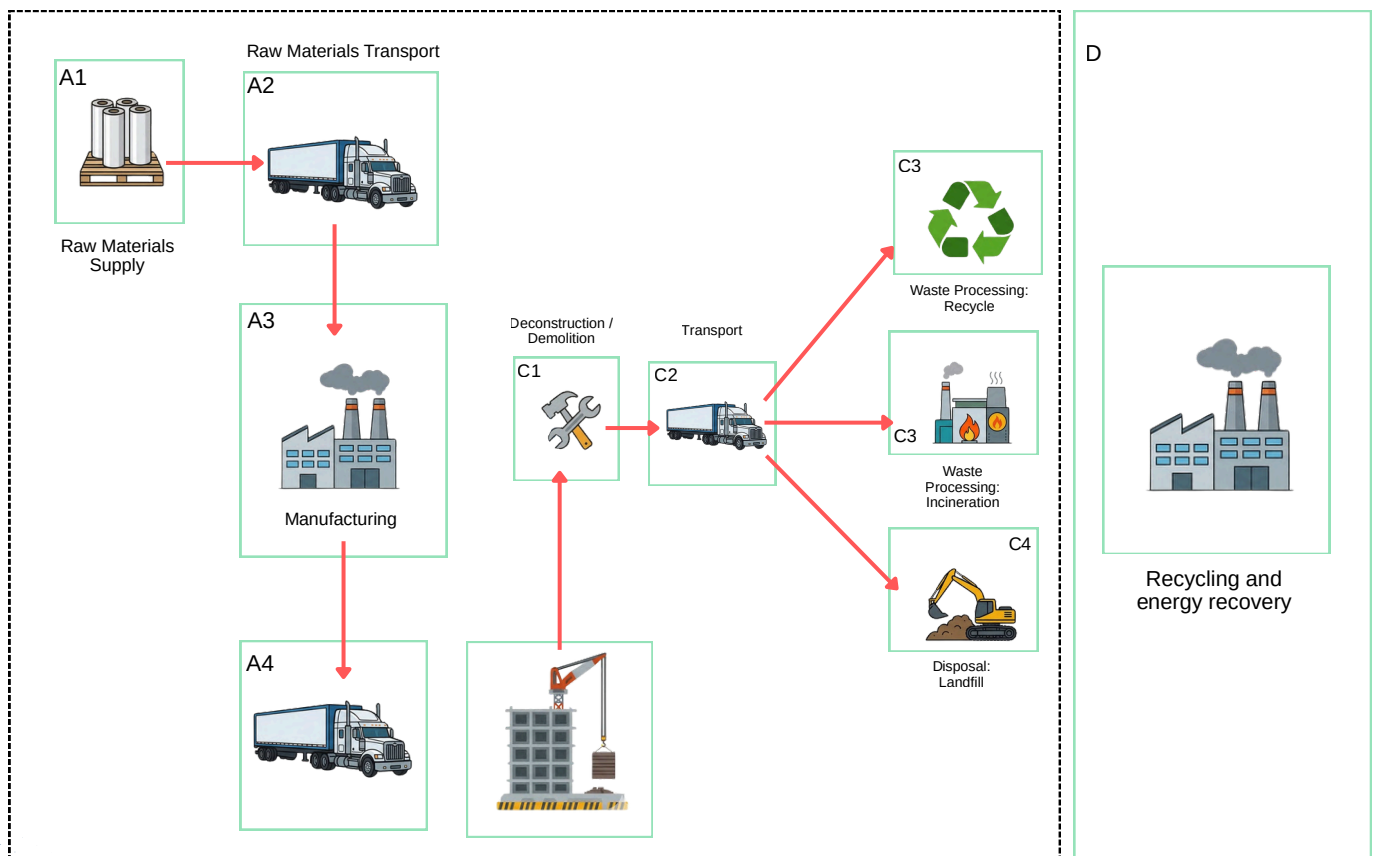
The system boundaries are explained in detail below. The included scenarios are currently in use and represent one of the most likely alternatives.

LCA Information

Process Flow Diagram

The process flow diagram illustrates the main stages of the life cycle of the declared product. Raw material is supplied from a single manufacturer located approximately 60 km from the production facility and transported by truck. At the production site, the material is mixed and fed into the production line, where it is processed using injection and extrusion technologies to achieve the final walkmats form. The manufacturing process includes material feeding, extrusion, shaping, drying, and final packaging. Packaging materials brought to the facility for this purpose are also included within the product system. Electricity is the only energy input used during the manufacturing stage.

The packaged products are then transported to customers via road and sea transport. At the end of the service life, the products are removed and transported to appropriate waste treatment facilities. The material is subjected to different waste processing routes, through which part of the material is recovered as secondary raw material and part is used for energy recovery.



More Information

A1: Raw Material

Module A1 includes the extraction and processing of raw materials used in the production of the PVC mat. This covers the supply of PVC resin as the primary material, along with additives such as plasticizers, stabilizers, fillers, and pigments. The environmental impacts of upstream raw material production processes are included in this module.

A2 : Raw Material Transport

This stage covers the transportation of raw materials from their extraction or production sites to the walkmats production facility. All relevant transport activities, including supplier-specific routes, distances, and modes of transport, are considered in this stage.

A3 : Manufacturing

This stage includes all processes within the production facility located in Türkiye related to the manufacturing of the declared product. Module A3 covers the production of the PVC mat, including the mixing and compounding of PVC resin with additives, calendaring or extrusion for mat formation, surface finishing, cutting to size, and internal handling operations.

Energy consumption (electricity) generated during production is considered. Production losses arising within the facility are assumed to be internally recycled. The environmental impacts associated with the packaging of the final product are also included in this module.

Electricity is consumed during the manufacturing. The dataset representing the residual electricity mix used is provided in the table below.

Electricity Data	Electricity, medium voltage {TR} market for electricity, medium voltage Cut-off, S
GWP of Electricity Data	0,994 CO2 eq./ kWh

As no dataset for residual electricity mix is available in the applied database, the residual electricity mix has been modelled manually. In this approach, the renewable share of the national grid electricity mix has been excluded, and the residual mix has been constructed based on the non-renewable share. The environmental impacts have then been recalculated accordingly.

A4: Transport to Customer

This stage concerns the delivery of the final product to the intended markets and customers. At this stage, road and sea transportation are used. Calculations are based on actual distances, using 2024 sales data.

Transport Type	Vehicle Type	Fuel Type	Fuel Consumption	Average Load Factor	Volume Capacity Utilization Factor
Truck (Road)	Lorry, Size Class: >32 metric ton, EURO 5	Diesel	0,0322 L/tkm	50%	<1
Ship (Sea)	Container Ship	Heavy Fuel Oil	0,0028 L/tkm	n/a	n/a

End-of-Life Scenario

Processes	Unit
Collection process specified by type	3,3 kg collected separately
Recovery system specified by type	1,320 kg for recycling
	1,155 kg for incineration with energy recovery
Disposal specified by type	0,825 kg material for final disposal (landfill)
Assumptions for transportation	80 km distance for recycling
	130 km distance for incineration with energy recovery
	80 km distance for landfill

More Information (End-of-Life)

C1: Deconstruction / Demolition

This stage covers the deconstruction and removal of the Walkmats at the end of its service life. The product is assumed to be manually removed without the use of energy, equipment, or auxiliary materials. Therefore, no environmental impacts are associated with this module.

C2 : Waste Transport

Module C2 covers the transportation of the discarded product to waste treatment facilities. Due to limited site-specific data, transport distances have been assumed based on typical conditions. A distance of 80 km is assumed for transport to recycling and landfill facilities, and 130 km for transport to incineration facilities, all modelled using Euro 5 motor trucks. The environmental impacts associated with these transportation activities are included in this module.

C3 : Waste Processing

Module C3 includes the waste processing of the PVC material at the end of its service life. As the majority of the target market is located in Europe, the end-of-life (EoL) scenario has been modelled based on European waste management data and practices. Accordingly, based on the European Parliament publication “Plastic waste and recycling in the EU: facts and figures”, 40% of the EoL product is assumed to be recycled and 35% incinerated with energy recovery.

For the incineration pathway, a generalised modelling approach has been applied based on the publications “Enough is Enough – Waste-to-Energy Moratorium” (Zero Waste Europe, 2023), “Debunking Efficient Recovery” (Zero Waste Europe, 2023), and the CEWEP “Waste-to-Energy Climate Roadmap – Technical Annex” (2022).

For facilities with $R1 \geq 0.60/0.65$, useful energy recovery is modelled as 17% net electricity and 38% net thermal energy. These values represent scenario-based assumptions derived from European fleet averages and literature-reported performance ranges and are applied consistently within the EoL modelling framework.

C4 : Final Disposal

Module C4 includes the final disposal of waste. It is assumed that 25% of the material remaining after recycling and incineration processes is sent to sanitary landfill for final disposal.

D: Benefits & Loads

Module D includes the potential benefits and loads beyond the system boundary resulting from the recovery of PVC waste at the end of its service life. In the applied end-of-life scenario, 40% of the PVC waste is assumed to be recycled, generating benefits through the substitution of virgin plastic material, while 35% is assumed to be incinerated with energy recovery, resulting in benefits from the generation of electricity and thermal energy.

Allocations

There are no co-products in the production of PVC walkmats; therefore, no co-product allocation was required. In line with EN 15804, allocation was avoided wherever possible by using process-specific data. Based on manufacturing data, transport, energy, and materials used for raw material preparation within the plant were allocated among the different product models. Separate measurements were conducted on the production lines during data collection to ensure accuracy. The Mass Balance Approach has not been applied.

Cut-Off Rules

A 1% cut-off rule has been applied in accordance with EN 15804 and PCR 2.0.1. Input flows contributing less than 1% individually, up to a cumulative maximum of 5%, have been excluded, ensuring that at least 95% of the total environmental impacts are included.

As prescribed by the PCR, installation, infrastructure and machinery maintenance are excluded from the system boundaries. Furthermore, impacts related to office operations, employee commuting, forklift operation, and other minor contributions have not been modelled, as they are considered to be negligible.

Period Under Review

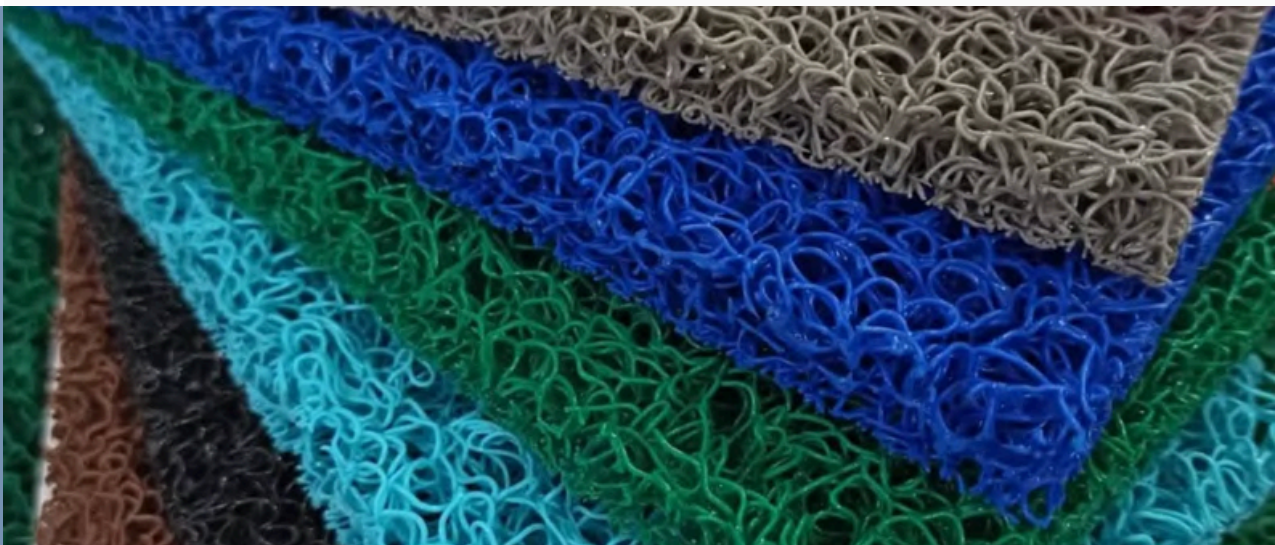
01.01.2024 - 31.12.2024

CO2 certificates

Petronan Kimya does not currently have CO₂ certification.

Data Quality Assessment

The data used in this study is based on a combination of primary data collected from Petronan's facility in Türkiye (reference year 2024) and secondary background data from the Ecoinvent v3.10 database. Primary data represents site-specific operations with high temporal, geographical, and technological relevance. Secondary data was selected to ensure consistency with the system boundaries and processes not covered by primary data. Overall, the quality of the data is considered to be high and suitable for the intended use of this EPD.



LCA Information

	Product Stage			Construction Process Stage		Use Stage							End of Life Stage				Benefits and Loads
	Raw Material Supply	Transport	Manufacturing	Transport	Construction Installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational Energy Use	Operational Water Use	Deconstruction / Demolition	Transport	Waste Processing	Disposal	Future reuse, recycling or energy recovery potentials
Module	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Module Declared	X	X	X	X	ND	ND	ND	ND	ND	ND	ND	ND	X	X	X	X	X
Geography	TR	TR	TR	GLO	-	-	-	-	-	-	-	-	GLO	GLO	GLO	GLO	GLO
Specific Data Used	18,8%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation - Products	-39,4% / +36,4%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation - Sites	0%			-	-	-	-	-	-	-	-	-	-	-	-	-	-

X: Included in LCA
 ND: Not declared

The results of the LCA study with the indicators according to EPD requirement are given in the following tables for the considered system boundaries. The system boundaries in tabular form for all modules are shown in the table above. All energy calculations were obtained using Cumulative Energy Demand (LHV) methodology, while freshwater use is calculated with the addition of the water flows within the inventory. As per PCR requirements, net freshwater does not include cooling, turbine, salt (sole) and salt (ocean) water.

Declaration of sources and share of primary data: The share of primary data is calculated in accordance with the applied methodology. The data quality assessment has been conducted in conformity with the requirements of the applicable PCR and has been developed in an external calculation file that is available upon request.

PROCESS	SOURCE TYPE	SOURCE	REFERENCE YEAR	DATA CATEGORY	SHARE OF PRIMARY DATA, OF GWP-GHG RESULTS FOR A1-A3
Generation of Electricity	Database	Ecoinvent v.3.10	2024	Primary Data	18,5%
Transport of Raw Materials	Database	Ecoinvent v.3.10	2024	Primary Data	0,3%
TOTAL SHARE OF PRIMARY DATA, OF GWP-GHG RESULTS FOR A1-A3					18,8%

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



Biogenic carbon and inherent energy in the packaging leaving the product system in module A5 have already been balanced out in modules A1–A3, as module A5 is not included within the system boundary. Option A is applied for energy balancing, and all inherent energy in the packaging is assumed to be lost within the system boundary as a conservative scenario.

The results of the end-of-life stage (modules C1-C4) should be considered when using the results of the product stage (modules A1-A3).

LCA Results for 1 square meter of Walkmats

Impact Category	Unit	A1-A3	A4	C1	C2	C3	C4	D
GWP - Fossil	kg CO2 eq	6,57E +00	1,17E -01	0,00E +00	3,47E -02	3,28E +00	7,70E -02	-6,26E +00
GWP - Biogenic	kg CO2 eq	7,00E -02	3,38E -06	0,00E +00	1,19E -06	6,87E -02	2,34E -02	1,48E -02
GWP - Luluc	kg CO2 eq	4,83E -02	4,71E -05	0,00E +00	1,39E -05	3,09E -04	5,51E -06	3,69E -04
GWP - Total	kg CO2 eq	6,69E +00	1,17E -01	0,00E +00	3,47E -02	3,35E +00	1,00E -01	-6,25E +00
ODP	kg CFC-11 eq	1,09E -06	1,73E -09	0,00E +00	5,12E -10	7,00E -09	2,40E -10	-1,36E -09
AP	mol H+ eq	2,91E -02	4,46E -04	0,00E +00	1,18E -04	1,97E -03	7,00E -05	-4,07E -02
EP - Freshwater	kg P eq	3,43E -03	9,11E -06	0,00E +00	2,73E -06	7,49E -05	1,05E -06	-2,83E -04
EP - Marine	kg N eq	5,70E -03	1,42E -04	0,00E +00	3,89E -05	8,89E -04	1,74E -03	-4,60E -03
EP - Terrestrial	mol N eq	5,46E -02	1,55E -03	0,00E +00	4,23E -04	7,30E -03	2,80E -04	-5,19E -02
POCP	kg NMVOC	2,61E -02	6,18E -04	0,00E +00	1,74E -04	2,48E -03	1,12E -04	-1,97E -02
ADPE	kg Sb eq	1,43E -04	3,15E -07	0,00E +00	9,44E -08	2,25E -06	2,06E -08	3,60E -06
ADPF	MJ	1,34E +02	1,69E +00	0,00E +00	5,03E -01	5,70E +00	2,08E -01	-9,55E +01
WDP	m3 depriv.	4,56E +00	8,62E -03	0,00E +00	2,58E -03	1,72E -01	-1,31E -01	-3,08E +00
PM	disease inc.	2,34E -07	1,16E -08	0,00E +00	3,47E -09	2,75E -08	1,51E -09	-1,17E -06
IR	kBq U-235 eq	4,78E -01	1,49E -03	0,00E +00	4,45E -04	1,98E -02	2,26E -04	1,04E -01
ETP - FW	CTUe	1,07E +02	8,15E -01	0,00E +00	2,43E -01	1,72E +01	5,75E +00	-3,65E +02
HTTP - C	CTUh	4,38E -08	5,80E -10	0,00E +00	1,72E -10	5,61E -09	5,87E -11	-3,67E -08
HTTP - NC	CTUh	6,70E -08	1,08E -09	0,00E +00	3,24E -10	1,25E -08	1,85E -09	-1,15E -07
SQP	Pt	3,64E +01	1,68E +00	0,00E +00	5,06E -01	3,97E +00	4,79E -01	4,68E +00

Acronyms	GWP-total: Climate change, GWP-fossil: Climate change- fossil, GWP-biogenic: Climate change - biogenic, GWP-luluc: Climate change - land use and transformation, ODP: Ozone layer depletion, AP: Acidification terrestrial and freshwater, EP-freshwater: Eutrophication freshwater, EP-marine: Eutrophication marine, EP-terrestrial: Eutrophication terrestrial, POCP: Photochemical oxidation, ADPE: Abiotic depletion - elements, ADPF: Abiotic depletion - fossil resources, WDP: Water scarcity, PM: Respiratory inorganics - particulate matter, IR: Ionising radiation, ETP-FW: Ecotoxicity freshwater, HTP-c: Cancer human health effects, HTP-nc: Non-cancer human health effects, SQP: Land use related impacts, soil quality.
Legend	A1: Raw Material Supply, A2: Transport, A3: Manufacturing, A1-A3: Sum of A1, A2, and A3, A4: Transport to Site, C1: Deconstruction / Demolition, C2: Transport, C3: Waste Processing, C4: Disposal, D: Benefits and Loads Beyond the System Boundary.
Disclaimer 1	This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.
Disclaimer 2	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.

Resource Use

Resource Use								
Impact Category	Unit	A1-A3	A4	C1	C2	C3	C4	D
PERE	MJ	1,05E +01	2,14E -02	0,00E +00	6,40E -03	4,95E -01	3,23E -01	-1,33E +00
PERM	MJ	1,28E +00	0,00E +00	0,00E +00	0,00E +00	-9,59E -01	-3,20E -01	5,12E -01
PERT	MJ	1,18E +01	2,14E -02	0,00E +00	6,40E -03	-4,65E -01	3,19E -03	-8,20E -01
PENRE	MJ	1,35E +02	1,69E +00	0,00E +00	5,03E -01	9,86E +00	6,80E +00	-9,55E +01
PENRM	MJ	2,64E +01	0,00E +00	0,00E +00	0,00E +00	-1,98E +01	-6,59E +00	1,05E +01
PENRT	MJ	1,61E +02	1,69E +00	0,00E +00	5,03E -01	-9,92E +00	2,08E -01	-8,50E +01
SM	kg	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
NRSF	MJ	0,00E +00	0,00E +00	0,00E +00	0,00E +00	0,00E +00	0,00E +00	0,00E +00
FW	m3	4,42E +00	8,66E -03	0,00E +00	2,59E -03	1,51E -01	-1,31E -01	-3,08E +00
Acronyms	PERE: Use of renewable primary energy excluding resources used as raw materials, PERM: Use of renewable primary energy resources used as raw materials, PERT: Total use of renewable primary energy, PENRE: Use of non-renewable primary energy excluding 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, SM: Secondary material, RSF: Renewable secondary fuels, NRSF: Non-renewable secondary fuels, FW: Net use of fresh water.							

Waste & Output Flows

Waste & Output Flows								
Impact Category	Unit	A1-A3	A4	C1	C2	C3	C4	D
HWD	kg	0,00E +00	0,00E +00	0,00E +00	0,00E +00	0,00E +00	8,25E -01	0,00E +00
NHWD	kg	0,00E +00	0,00E +00	0,00E +00	0,00E +00	0,00E +00	0,00E +00	0,00E +00
RWD	kg	0,00E +00	0,00E +00	0,00E +00	0,00E +00	0,00E +00	0,00E +00	0,00E +00
CRU	kg	0,00E +00	0,00E +00	0,00E +00	0,00E +00	0,00E +00	0,00E +00	0,00E +00
MFR	kg	0,00E +00	0,00E +00	0,00E +00	0,00E +00	1,32E +00	0,00E +00	0,00E +00
MER	kg	0,00E +00	0,00E +00	0,00E +00	0,00E +00	0,00E +00	0,00E +00	0,00E +00
EEE	MJ	0,00E +00	0,00E +00	0,00E +00	0,00E +00	1,65E +00	0,00E +00	0,00E +00
EET	MJ	0,00E +00	0,00E +00	0,00E +00	0,00E +00	3,68E +00	0,00E +00	0,00E +00
Acronyms	HWD: Hazardous waste disposed, NHWD: Non-hazardous waste disposed, RWD: Radioactive waste disposed, CRU: Components for reuse, MFR: Material for recycling, MER: Materials for energy recovery, EEE: Exported electrical energy, EET: Exported thermal energy							
Indicator	Unit	A1-A3	A4	C1	C2	C3	C4	D
*GHG-GWP	kg CO2 eq	6,78E +00	1,17E -01	0,00E +00	3,47E -02	3,28E +00	7,70E -02	-6,21E +00

GWP-GHG = Global Warming Potential total excl. biogenic carbon following IPCC AR6 methodology

* 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

Abbreviations

General Abbreviations	
EN	European Norm (Standard)
EPD	Environmental Product Declaration
EF	Environmental Footprint
GPI	General Programme Instructions
ISO	International Organization for Standardization
LCA	Life Cycle Assessment
PCR	Product Category Rules
c-PCR	Complementary Product Category Rules
CEN	European Committee for Standardization
CPC	Central product classification
Environmental Impact Indicators	
GWP	Global warming potential
GWP-luluc	Global warming potential- land use and land use change
ODP	Ozone depletion potential
AP	Acidification Potential
EP	Eutrophication potential (for freshwater, marine, terrestrial compartments)
POCP	Photochemical ozone creation potential
ADP	Abiotic depletion potential
WDP	Water deprivation potential
GWP-GHG	Global warming potential- accounts for all greenhouse gases except biogenic CO ₂ uptake and emissions and biogenic carbon stored in the product and/or the packaging.
PM	Particulate Matter
IRP	Ionizing radiation Potential
ETP-FW	Ecotoxicity Potential- freshwaters
HTTP-C	Human Toxicity potential- Cancer
HTTP-NC	Human Toxicity potential- Non-Cancer

Abbreviations

Environmental Impact Indicators	
SQP	Index of soil quality potential
PERE	Use of 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	Use of Total use of non-renewable primary energy resources
SM	Use of secondary materials
RSF	Use of renewable secondary fuels
NSRF	Use of non-renewable secondary fuels
FW	Use of fresh water (net)
HW	Hazardous Waste (disposed) (kg)
NHW	Non-Hazardous Waste (disposed) (kg)
RW	Radioactive Waste (disposed) (kg)
CFR	Components for Reuse (kg)
MR	Material for Recycling (kg)
MER	Materials for Energy Recovery (kg)
EEE	Exported Energy, Electricity (MJ)
EET	Exported Energy, Thermal (MJ)

References

ISO 14025

EN ISO 14025:2011-10: Environmental labels and declarations — Type III environmental declarations — Principles and procedures

ISO 14044/44

Environmental management - Life cycle assessment Principles and framework (ISO14040:2006) and Requirements and guidelines (ISO 14044:2006)

Product Category Rules (PCR)

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EN 15804

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GPI

EPD International. (2021). General Programme Instructions for the International EPD® System. Version 5.0.1. www.environdec.com

SimaPro

SimaPro 10.3 software for LCA calculations, developed by PRé Sustainability, Stationsplein 121, 3818 LE Amersfoort, Netherlands, <https://simapro.com>

Ecoinvent

Ecoinvent dataset v3.10, developed by the Swiss Centre for Life Cycle inventories, Technoparkstrasse 1,8005 Zurich, Switzerland <https://ecoinvent.org/>

European Parliament

Plastic waste and recycling in the EU: facts and figures: <https://www.europarl.europa.eu/topics/en/article/20181212STO21610/plastic-waste-and-recycling-in-the-eu-facts-and-figures>

Zero Waste Europe

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Petronan

www.petronan.com.tr

Version History

Original Version of the EPD, 2026-04-24

This is the original version of the EPD; revisions are not applicable.

Additional Environmental Information

1) Methodology to calculate environmental performances indicators for different product thicknesses (EN15804+A2)

This Environmental Product Declaration (EPD) covers a range of PVC Walkmats products with similar material composition and manufacturing processes but different product thicknesses. While the material density remains constant, the thickness per square meter varies among the product variants. As a result, the product weight ranges between 2.0 kg/m² and 4.5 kg/m² depending on the specific product type.

The product "Walkmats Slender", with a thickness of 14 mm and a weight of 3.3 kg/m², has been selected as the reference product for the LCA modelling and the declared results presented in this EPD. This EPD also covers the following product variants manufactured under the same production conditions and using comparable materials:

- Walkmats Elegant (Thickness: 14 mm, Weight: 2,6 kg/m²)
- Walkmats Maxi (Thickness: 16 mm, Weight: 4,3 kg/m²)
- Walkmats Medium (Thickness: 12 mm, Weight: 2,2 kg/m²)
- Walkmats Simple (Thickness: 9 mm, Weight: 2,0 kg/m²)
- Walkmats Thin (Thickness: 12 mm, Weight: 2,4 kg/m²)
- Walkmats Slim (Thickness: 14 mm, Weight: 3,0 kg/m²)
- Walkmats Star (Thickness: 5,5 mm, Weight: 3,3 kg/m²)
- Walkmats Flatbed Honeycomb (Thickness: 5 mm, Weight: 4,5 kg/m²)
- Walkmats Honeycomb (Thickness: 3,6 mm, Weight: 2,4 kg/m²)

In accordance with the applicable PCR requirements for multi-product EPDs, the environmental impacts for the covered product range are additionally reported as minimum and maximum values, reflecting the variation in product weight per square meter. In the table, the "min" values represent a product of 2.0 kg/m², and the "max" values represent a product of 4.5 kg/m²

Impact Category	Unit	Range	A1-A3	A4	C1	C2	C3	C4	D
GWP - GHG	kg CO ₂ eq	Min.	4,11E +00	7,10E -02	0,00E +00	2,10E -02	1,99E +00	4,67E -02	-3,76E +00
		Max.	9,25E +00	1,60E -01	0,00E +00	4,73E -02	4,47E +00	1,05E -01	-8,47E +00
GWP - Fossil	kg CO ₂ eq	Min.	3,98E +00	7,09E -02	0,00E +00	2,10E -02	1,99E +00	4,66E -02	-3,80E +00
		Max.	8,96E +00	1,60E -01	0,00E +00	4,73E -02	4,47E +00	1,05E -01	-8,54E +00
GWP - Biogenic	kg CO ₂ eq	Min.	4,24E -02	2,05E -06	0,00E +00	7,20E -07	4,16E -02	1,42E -02	8,99E -03
		Max.	9,54E -02	4,61E -06	0,00E +00	1,62E -06	9,36E -02	3,19E -02	2,02E -02
GWP - Luluc	kg CO ₂ eq	Min.	2,93E -02	2,85E -05	0,00E +00	8,41E -06	1,87E -04	3,34E -06	2,24E -04
		Max.	6,59E -02	6,42E -05	0,00E +00	1,89E -05	4,21E -04	7,52E -06	5,04E -04
GWP - Total	kg CO ₂ eq	Min.	4,05E +00	7,10E -02	0,00E +00	2,10E -02	2,03E +00	6,08E -02	-3,79E +00
		Max.	9,12E +00	1,60E -01	0,00E +00	4,73E -02	4,56E +00	1,37E -01	-8,52E +00
ODP	kg CFC-11 eq	Min.	6,60E -07	1,05E -09	0,00E +00	3,10E -10	4,25E -09	1,46E -10	-8,26E -10
		Max.	1,48E -06	2,35E -09	0,00E +00	6,98E -10	9,55E -09	3,28E -10	-1,86E -09
AP	mol H+ eq	Min.	1,76E -02	2,70E -04	0,00E +00	7,17E -05	1,19E -03	4,24E -05	-2,47E -02
		Max.	3,96E -02	6,08E -04	0,00E +00	1,61E -04	2,68E -03	9,54E -05	-5,55E -02

Impact Category	Unit	Range	A1-A3	A4	C1	C2	C3	C4	D
EP - Freshwater	kg P eq	Min.	2,08E -03	5,52E -06	0,00E +00	1,65E -06	4,54E -05	6,35E -07	-1,72E -04
		Max.	4,68E -03	1,24E -05	0,00E +00	3,72E -06	1,02E -04	1,43E -06	-3,86E -04
EP - Marine	kg N eq	Min.	3,46E -03	8,62E -05	0,00E +00	2,36E -05	5,39E -04	1,05E -03	-2,79E -03
		Max.	7,78E -03	1,94E -04	0,00E +00	5,30E -05	1,21E -03	2,37E -03	-6,27E -03
EP - Terrestrial	mol N eq	Min.	3,31E -02	9,40E -04	0,00E +00	2,56E -04	4,43E -03	1,70E -04	-3,14E -02
		Max.	7,44E -02	2,11E -03	0,00E +00	5,77E -04	9,96E -03	3,82E -04	-7,07E -02
POCP	kg NMVOC	Min.	1,58E -02	3,75E -04	0,00E +00	1,06E -04	1,50E -03	6,77E -05	-1,20E -02
		Max.	3,56E -02	8,43E -04	0,00E +00	2,38E -04	3,38E -03	1,52E -04	-2,69E -02
ADPE	kg Sb eq	Min.	8,68E -05	1,91E -07	0,00E +00	5,72E -08	1,36E -06	1,25E -08	2,18E -06
		Max.	1,95E -04	4,30E -07	0,00E +00	1,29E -07	3,07E -06	2,81E -08	4,91E -06
ADPF	MJ	Min.	8,15E +01	1,03E +00	0,00E +00	3,05E -01	3,46E +00	1,26E -01	-5,79E +01
		Max.	1,83E +02	2,31E +00	0,00E +00	6,86E -01	7,78E +00	2,83E -01	-1,30E +02
WDP	m3 depriv.	Min.	2,76E +00	5,22E -03	0,00E +00	1,56E -03	1,04E -01	-7,96E -02	-1,86E +00
		Max.	6,21E +00	1,18E -02	0,00E +00	3,52E -03	2,34E -01	-1,79E -01	-4,19E +00
PM	Disease inc.	Min.	1,42E -07	7,02E -09	0,00E +00	2,10E -09	1,67E -08	9,13E -10	-7,10E -07
		Max.	3,19E -07	1,58E -08	0,00E +00	4,73E -09	3,75E -08	2,06E -09	-1,60E -06
IR	kBq U-235 eq	Min.	2,90E -01	9,02E -04	0,00E +00	2,70E -04	1,20E -02	1,37E -04	6,31E -02
		Max.	6,52E -01	2,03E -03	0,00E +00	6,07E -04	2,70E -02	3,08E -04	1,42E -01
ETP - FW	CTUe	Min.	6,50E +01	4,94E -01	0,00E +00	1,47E -01	1,04E +01	3,49E +00	-2,21E +02
		Max.	1,46E +02	1,11E +00	0,00E +00	3,31E -01	2,34E +01	7,84E +00	-4,97E +02
HTTP - C	CTUh	Min.	2,66E -08	3,52E -10	0,00E +00	1,04E -10	3,40E -09	3,56E -11	-2,22E -08
		Max.	5,97E -08	7,91E -10	0,00E +00	2,35E -10	7,65E -09	8,00E -11	-5,00E -08
HTTP - NC	CTUh	Min.	4,06E -08	6,55E -10	0,00E +00	1,96E -10	7,56E -09	1,12E -09	-6,99E -08
		Max.	9,13E -08	1,47E -09	0,00E +00	4,41E -10	1,70E -08	2,53E -09	-1,57E -07
SQP	Pt	Min.	2,21E +01	1,02E +00	0,00E +00	3,07E -01	2,41E +00	2,90E -01	2,84E +00
		Max.	4,96E +01	2,30E +00	0,00E +00	6,90E -01	5,42E +00	6,53E -01	6,38E +00

Additional Environmental Information



2) Environmental performance indicators considering different end-of-life scenario for PVC material. (EN15804+A2)

The table below presents the environmental performance indicators for the declared product considering alternative end-of-life scenarios for the PVC component. In addition to the base case scenario, a sensitivity analysis has been carried out assuming that the PVC material is entirely treated through landfilling (100%), recycling (100%), or incineration with energy recovery (100%) at the end of its service life. These alternative assumptions affect the environmental impacts reported in Modules C3, C4, and D. For reference, the base case scenario applied in the main LCA results assumes a waste management distribution of 40% recycling, 35% incineration with energy recovery, and 25% landfill for PVC at the end of life.

Impact Category	Unit	100% Recycling				100% Landfill				100% Incineration			
		C2	C3	C4	D	C2	C3	C4	D	C2	C3	C4	D
GWP - GHG	kg CO2 eq	2,85E -02	1,32E +00	0,00E +00	-1,43E +01	2,85E -02	0,00E +00	3,08E -01	0,00E +00	4,63E -02	7,85E +00	0,00E +00	-1,36E +00
GWP - Fossil	kg CO2 eq	2,85E -02	1,32E +00	0,00E +00	-1,45E +01	2,85E -02	0,00E +00	3,08E -01	0,00E +00	4,63E -02	7,85E +00	0,00E +00	-1,35E +00
GWP - Biogenic	kg CO2 eq	9,75E -07	8,95E -02	0,00E +00	3,83E -02	9,75E -07	0,00E +00	9,36E -02	0,00E +00	1,58E -06	9,38E -02	0,00E +00	-1,36E -03
GWP - Luluc	kg CO2 eq	1,14E -05	7,28E -04	0,00E +00	2,06E -03	1,14E -05	0,00E +00	2,21E -05	0,00E +00	1,85E -05	5,07E -05	0,00E +00	-1,30E -03
GWP - Total	kg CO2 eq	2,85E -02	1,41E +00	0,00E +00	-1,44E +01	2,85E -02	0,00E +00	4,01E -01	0,00E +00	4,63E -02	7,95E +00	0,00E +00	-1,36E +00
ODP	kg CFC-11 eq	4,20E -10	1,50E -08	0,00E +00	8,01E -09	4,20E -10	0,00E +00	9,61E -10	0,00E +00	6,82E -10	2,90E -09	0,00E +00	-1,30E -08
AP	mol H+ eq	9,71E -05	3,36E -03	0,00E +00	-9,74E -02	9,71E -05	0,00E +00	2,80E -04	0,00E +00	1,58E -04	1,79E -03	0,00E +00	-4,96E -03
EP - Freshwater	kg P eq	2,24E -06	1,66E -04	0,00E +00	-3,44E -04	2,24E -06	0,00E +00	4,19E -06	0,00E +00	3,63E -06	2,47E -05	0,00E +00	-4,15E -04
EP - Marine	kg N eq	3,19E -05	1,33E -03	0,00E +00	-1,06E -02	3,19E -05	0,00E +00	6,94E -03	0,00E +00	5,18E -05	1,02E -03	0,00E +00	-1,06E -03
EP - Terrestrial	mol N eq	3,47E -04	1,07E -02	0,00E +00	-1,20E -01	3,47E -04	0,00E +00	1,12E -03	0,00E +00	5,64E -04	8,68E -03	0,00E +00	-1,07E -02
POCP	kg NMVOC	1,43E -04	4,28E -03	0,00E +00	-4,60E -02	1,43E -04	0,00E +00	4,47E -04	0,00E +00	2,32E -04	2,18E -03	0,00E +00	-3,78E -03
ADPE	kg Sb eq	7,75E -08	5,28E -06	0,00E +00	9,96E -06	7,75E -08	0,00E +00	8,24E -08	0,00E +00	1,26E -07	3,93E -07	0,00E +00	-1,08E -06
ADPF	MJ	4,13E -01	1,29E +01	0,00E +00	-2,22E +02	4,13E -01	0,00E +00	8,31E -01	0,00E +00	6,71E -01	1,53E +00	0,00E +00	-1,87E +01
WDP	m3 depriv.	2,12E -03	2,07E -01	0,00E +00	-7,54E +00	2,12E -03	0,00E +00	-5,25E -01	0,00E +00	3,44E -03	2,54E -01	0,00E +00	-1,65E -01
PM	disease inc.	2,85E -09	6,07E -08	0,00E +00	-2,89E -06	2,85E -09	0,00E +00	6,03E -09	0,00E +00	4,63E -09	9,24E -09	0,00E +00	-4,29E -08
IR	kBq U-235 eq	3,65E -04	4,71E -02	0,00E +00	3,74E -01	3,65E -04	0,00E +00	9,04E -04	0,00E +00	5,93E -04	2,80E -03	0,00E +00	-1,30E -01
ETP - FW	CTUe	1,99E -01	1,53E +01	0,00E +00	-9,07E +02	1,99E -01	0,00E +00	2,30E +01	0,00E +00	3,24E -01	3,16E +01	0,00E +00	-5,59E +00
HTTP - C	CTUh	1,41E -10	1,25E -08	0,00E +00	-9,02E -08	1,41E -10	0,00E +00	2,35E -10	0,00E +00	2,30E -10	1,80E -09	0,00E +00	-1,68E -09
HTTP - NC	CTUh	2,66E -10	1,06E -08	0,00E +00	-2,83E -07	2,66E -10	0,00E +00	7,41E -09	0,00E +00	4,32E -10	2,35E -08	0,00E +00	-5,80E -09
SQP	Pt	4,15E -01	9,56E +00	0,00E +00	1,34E +01	4,15E -01	0,00E +00	1,91E +00	0,00E +00	6,75E -01	4,32E -01	0,00E +00	-1,95E +00

Additional Environmental Information



Impact Category	Unit	100% Recycling				100% Landfill				100% Incineration			
		C2	C3	C4	D	C2	C3	C4	D	C2	C3	C4	D
PERE	MJ	5,25E -03	6,82E -01	0,00E +00	-2,05E +00	5,25E -03	0,00E +00	1,29E +00	0,00E +00	8,53E -03	6,34E -01	0,00E +00	-1,46E +00
PERM	MJ	0,00E +00	-1,28E +00	0,00E +00	1,28E +00	0,00E +00	0,00E +00	-1,28E +00	0,00E +00	0,00E +00	-1,28E +00	0,00E +00	0,00E +00
PERT	MJ	5,25E -03	-5,97E -01	0,00E +00	-7,73E -01	5,25E -03	0,00E +00	1,28E -02	0,00E +00	8,53E -03	-6,45E -01	0,00E +00	-1,46E +00
PENRE	MJ	4,13E -01	1,29E +01	0,00E +00	-2,22E +02	4,13E -01	0,00E +00	2,72E +01	0,00E +00	6,71E -01	1,34E +01	0,00E +00	-1,87E +01
PENRM	MJ	0,00E +00	-2,64E +01	0,00E +00	2,64E +01	0,00E +00	0,00E +00	-2,64E +01	0,00E +00	0,00E +00	-2,64E +01	0,00E +00	0,00E +00
PENRT	MJ	4,13E -01	-1,35E +01	0,00E +00	-1,96E +02	4,13E -01	0,00E +00	8,31E -01	0,00E +00	6,71E -01	-1,30E +01	0,00E +00	-1,87E +01
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	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	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	0,00E +00	0,00E +00	0,00E +00
FW	m3	2,13E -03	2,06E -01	0,00E +00	-7,55E +00	2,13E -03	0,00E +00	-5,25E -01	0,00E +00	3,45E -03	2,52E -01	0,00E +00	-1,67E -01
HWD	kg	0,00E +00	0,00E +00	0,00E +00	0,00E +00	0,00E +00	0,00E +00	3,30E +00	0,00E +00	0,00E +00	0,00E +00	0,00E +00	0,00E +00
NHWD	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	0,00E +00	0,00E +00	0,00E +00
RWD	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	0,00E +00	0,00E +00	0,00E +00
CRU	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	0,00E +00	0,00E +00	0,00E +00
MRF	kg	0,00E +00	3,30E +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
MER	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	0,00E +00	0,00E +00	0,00E +00
EEE	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	4,70E -01	0,00E +00	0,00E +00
EET	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	1,05E +00	0,00E +00	0,00E +00

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