ENVIRONMENTAL PRODUCT DECLARATION

Diplast CRC70 Polypropylene Corrugated Formwork

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

Products included in the EPD:

Diplast CRC70 Polypropylene Corrugated Formwork

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

EPD of multiple products based on the average results of the product group

EPD Owner
Beaulieu International Group

Programme
International EPD System
www.environdec.com

Programme operator
EPD International AB

Registration number
EPD-IES-0024265:001

Version date
2025-11-12

Validity date
2030-11-11

INTERNATIONAL EPD SYSTEM

ECO PLATFORM EPD VERIFIED

Beaulieu International Group
Distriplast

GENERAL INFORMATION

Programme information

Programme	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

CEN standard EN 15804 serves as the Core Product Category Rules (PCR)	
Product Category Rules (PCR)	PCR 2019:14 Construction products (EN 15804+A2) (2.0.1)
PCR review was conducted by	The Technical Committee of the International EPD System. See www.environdec.com for a list of members. Review chair: Rob Rouwette (chair), Noa Meron (co-chair). The review panel may be contacted via the Secretariat www.environdec.com/support.

Verification

LCA accountability	Berk Celiktas, berk.celiktas@bintg.com, Beaulieu International Group
Independent third-party verification of the declaration and data, according to ISO 14025:2006, via	☑ EPD verification through an individual EPD verification ☐ EPD verification through EPD Process Certification* ☐ EPD verification through a fully pre-verified tool
Third-party verifier	Matt Fishwick (Fishwick Environmental)
Approved by	International EPD System
Procedure for follow-up of data during EPD validity involves third party verifier	☐ Yes ☑ No

*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.environdec.com. International EPD System.

Ownership and limitations on use of EPD

Limitations

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.

Ownership

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

INFORMATION ABOUT EPD OWNER

EPD Owner	Beaulieu International Group
Contact person name	Berk Celiktas
Contact person e-mail	berk.celiktas@bintg.com
Organisation address	Belgium Waregem 8790 Kalkhoevestraat 16 box 0.1

Description of the organisation of the EPD Owner

Distriplast is a leading European manufacturer of high-performance solutions using polypropylene (PP) corrugated sheets. As an expert in extrusion and transformation, we offer customized conversions to meet your specific needs. From our HQ in Dunkirk, France, we develop solutions for diverse applications, including protection and packaging, building solutions, signage and displays.

Our offerings are fit for purpose, innovative, and sustainable in both their material and design. By focusing on circular and sustainable solutions, we underline our commitment to our sustainability strategy. In everything we do, we remain true to our DNA, defined by reliability, proximity, co-development, and our role as a strategic partner for the future.

Product-related or management system-related certifications
ISO 9001: 2015 Quality Management
ISO 14001: 2015 Environmental Management
ISO 50001: 2018 Energy Management
ISO 45001: 2018 Health & Safety Management
LNE 40345-1 - Incorporation of Recycled Plastic Materials
LNE 40346-2 - Incorporation of Recycled Plastic Materials

PRODUCT INFORMATION

Product name	Diplast CRC70 Polypropylene Corrugated Formwork
Product identification	This EPD represents a group of beamform sheet products with 71% recycled content that differ in size and thickness. These types are: Diplast BMD10 black corrugated PP sheet 10mm; Diplast BMD8 black corrugated PP sheet 8mm; Diplast BLD7 black corrugated PP sheet 7mm All types are black, made from the same formulation, and are produced at Distriplast's manufacturing site in Dunkerque, France. The product portfolio comprises both standard and custom-made beamform sheets manufactured to meet the specific dimensional requirements of individual customers. The environmental impacts presented in this study represent the average results for the entire product group, calculated based on production volume shares for the year 2024. EPD type: EPD of multiple products, based on the average results of the product group. The product range includes sheets with the following dimensions: Thickness: 7-10 mm Length: 1200–4000 mm Width: 1200-2400 mm
Product description	The product in focus is Diplast CRC70 polypropylene corrugated formwork, used primarily in the construction sector. It is designed to function as a formwork during building activities. Beamform combines mechanical strength, lightweight, and durability, making it cost-effective. The sheet is produced through an extrusion process, where molten polypropylene is shaped into a hollow structure using a corrugation moulding system.
Product information from external sources	https://www.distriplast.com/en
Technical purpose of product	The primary objective of this study is to perform a comprehensive Life Cycle Assessment (LCA) and develop an Environmental Product Declaration (EPD) for Diplast CRC70 polypropylene corrugated formwork containing 71% recycled content. The results will also serve as a basis for B2B communication by showcasing the sustainability performance of Diplast CRC70 and emphasizing its high recycled content to customers and other stakeholders.
Manufacturing or service provision description	The Diplast CRC70 polypropylene corrugated formwork is produced at Distriplast's facility in Dunkerque, France. The process involves extrusion of a polypropylene blend containing approximately 71% recycled PP, followed by forming, cooling, and cutting. Finished sheets are palletized and prepared for shipment to the construction sector.
Material properties	Volumetric mass density: 160 kg/m^3
Manufacturing site	Distriplast France Dunkerque 59944 Z.I. de Petite-Synthe Rue d'Amsterdam BP 20106
UN CPC code	3633. Plates, sheets, film, foil and strip, of plastics, not self-adhesive, non-cellular and not reinforced, laminated, supported or similarly combined with other materials

Geographical scope(s)	Europe, France
Geographical scope description	The system boundaries cover processes occurring in France and Europe. All manufacturing data represent operations at the B.I.G Distriplast production site in Dunkerque. The production process under scope reflects B.I.G. Distriplast's production technologies and pathways at this site. Raw material supply and transport are based on actual supplier locations and transport distances within Europe.

PRODUCT IMAGES

TECHNICAL CHARACTERISTICS AND PERFORMANCE

Technical performance

Product name	Type of product	Thickness (mm)	Colors	Length&width (mm)	Weight/sheet (kg)	Weight surface area (kg/m2)
Diplast CRC70	BMD10	10+0/-0.5	Black	2700×2400	10.37	1.60
Diplast CRC70	BMD10	10+0/-0.5	Black	2700×1200	4.61	1.60
Diplast CRC70	BMD8	8±0.1	Black	2400×1200	4.18	1.45
Diplast CRC70	BMD8	8±0.1	Black	1200×2400	4.18	1.45
Diplast CRC70	BLD7	7±0.1	Black	2400×1200	3.45	1.2
Diplast CRC70	BLD7	7±0.1	Black	1200×2400	3.45	1.2

CONTENT DECLARATION

Content declaration of multiple products	The product portfolio comprises both standard and custom-made corrugated sheets manufactured to meet the specific dimensional requirements of individual customers. The environmental impacts presented in this study represent the average results for the entire product group, calculated based on production volume shares for the year 2024. The mass (weight) of one unit of the declared unit is 1 kg. The biogenic carbon of the wooden pallets is offset in A1-A3, as A5 is excluded.
Hazardous and toxic substances	The product does not contain any substances from the SVHC candidate list in concentrations exceeding 0.1% of its weight.

PRODUCT CONTENT

Content name	Mass, kg	Post-consumer recycled material, mass-% of product	Biogenic material, mass-% of product	Biogenic material[1], kg C/declared unit
Recycled PP	0.71	2.84	0	0
Polymer	0.08	0	0	0
Filler 1	0.15	0	0	0
Filler 2	0.05	0	0	0
Additive	0.01	0	0	0
Total	**1**	**2.84**	**0**	**0**
Note 1	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2			

PACKAGING MATERIALS

Material name	Mass, kg	Mass-% (versus the product)	Biogenic material[1], kg C/declared unit
Wooden pallet	0.06	6.56	0.02
PE stretch film	0.01	0.17	0
Total	**0.07**	**6.73**	**0.02**
Note 1	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2		

LCA INFORMATION

EPD based on declared or functional unit	Declared unit
Declared unit and reference flow	Diplast CRC70 PP Corrugated Formwork Mass: 1 kg
Conversion factor to mass	1
Are infrastructure or capital goods included in any upstream, core or downstream processes?	☐ Yes ☑ No
Data sources used for this EPD	GaBi database (general) Sphera MLC (fka GaBi) Databases Edition 2025.1
LCA Software	LCA for Experts (formerly GaBi Software) N/A
Additional information about the underlying LCA-based information	Regional and temporal differences have been consistently taken into account throughout the study. EN 15804 A2 and ILCD guidelines have met temporal data quality requirements. Where available, datasets with geographical coverage representing France or Germany have been prioritized. For processes where country-specific datasets were not available, datasets representing the European region (RER) were selected. For key contributing datasets (e.g., polypropylene granulate), the selection was based on both geographical and technological representativeness. In such cases, the most conservative dataset among those with similar technological scope was selected to ensure robustness of the results. Cut-off rules applied: Following EN15804, cut-off criteria were defined as 1% of renewable and non-renewable primary energy usage and 1% of the total mass input of that unit process, with the total of neglected input flows being a maximum of 5% of energy usage and mass. -Ink for Printing: The ink used for product labeling is excluded due to its very low consumption per kg of product -Minor transit packaging materials, like RPP securing straps and RPP corner protection, are excluded from the product system but fall below the 1% mass threshold per kg of product -Losses from internal recycling were considered negligible -Small-volume externally processed waste flows have been excluded due to their low mass and relevance to the beamform product system. -The caliber is a cooling and forming unit placed right after the extrusion die. As the molten PP exits the die in a corrugated shape, it enters the caliber, and it cools the extruded sheet to help it solidify while maintaining its shape. As its contribution to energy or water consumption is negligible, it is not included in the model. The product contains recycled polypropylene from multiple suppliers. The recycled content is composed of approximately 96 % pre-consumer and 4 % post-consumer sources. The post-consumer rPP fraction is considered burden-free (cut-off approach), meaning that no upstream impacts from the previous life cycle are assigned, and only the reprocessing steps are included within the system boundary.

	The dataset “RER: Plastic granulate, secondary (low metal contamination) Sphera <p-agg>” was used to model the reprocessing of recycled polypropylene (rPP). This dataset represents mechanical recycling processes within the European (RER) system boundary, including collection, sorting, washing, and extrusion of plastics with low metal contamination. For pre-consumer recycled polypropylene, a value-based economic allocation (scrap value ratio of 50%) was applied to the virgin PP dataset (DE: Polypropylene granulate, Sphera) in accordance with PCR Sections 4.5.1 and 4.5.3 to determine the associated environmental burden. No additional reprocessing burden was included to avoid double-counting, as the recycled material is already supplied in granulate form. Waste and materials for recycling from module A3 are modeled using the cut-off approach, meaning that recycling burdens are excluded from the system boundary. For module C, the same cut-off approach is applied: no additional burdens are assigned to material leaving the system for disposal or potential recovery. No energy or material recovery is assumed at the end of life; therefore, no benefits are declared in module D. Site-level energy use, emissions, and waste generation in module A3 are allocated between multiple products based on their mass output. The calculation of PERM and PENRM was performed in accordance with Option B of Annex 3 in the PCR document.
Version of the EN 15804 reference package	EF Reference Package 3.1
Characterisation methods	EN15804:A2 EF3.1 Reference Package
Technology description including background system	The declared product is a lightweight corrugated beamform sheet composed primarily of externally recycled polypropylene (65-75 wt%) and other components. It is manufactured through an extrusion process at Distriplast’s facility in Dunkerque, France. The background system includes raw material extraction and processing, energy supply (e.g., electricity mix specific to France), transport of materials, and end-of-life processes such as landfilling or recycling of waste streams. These background processes are modeled using secondary datasets from the Sphera database, selected for their technological, geographical, and temporal representativeness in line with EN 15804+A2 requirements. At the end-of-life stage, the product is assumed to remain embedded in construction waste and is landfilled as part of mixed construction and demolition waste, without undergoing separate treatment or recycling.
Scrap (recycled material) inputs contribution level	More than 10% of the GWP-GHG results in modules A1-A3 come from scrap inputs

SCRAP (RECYCLED MATERIAL) INPUTS DATA

Material scrap name	Material scrap value
Externally recycled PP	700, kg CO_2 eq./tonne

The share of the total scrap input that was assumed to come with an environmental burden	96 %

Data quality assessment

Description of data quality assessment and reference years	The data used for the LCA study is primary data from Distriplast's production plant in Dunkerque, France. The primary data used for the assessment of the foreground system refers to the year 2024. Where primary data were not available, secondary data were sourced from the Sphera/GaBi database, with a preference for datasets with high technological, geographical, and temporal representativeness. Primary data quality has been validated internally for plausibility, completeness, and relevance.

DATA QUALITY ASSESSMENT

Process name	Source type	Source	Reference year	Data category	Share of primary data, of GWP-GHG results for A1-A3
Manufacturing of Diplast CRC70 polypropylene corrugated formwork	Collected Data	EPD owner, Distriplast	<5 years old	Primary data	7.9%
Transport of raw materials	Collected Data	EPD owner, Distriplast	<5 years old	Primary data	2.8%
Production of recycled PP	Database	Sphera	<5 years old	Secondary data	
Other processes	Database	Sphera	<5 years old	Secondary data	
Total share of primary data, of GWP-GHG results for A1-A3					**10.7%**
Note	The share of primary data is calculated based on GWP-GHG results. It is a simplified indicator for data quality that supports the use of more primary data to increase the representativeness of and comparability between EPDs. Note that the indicator does not capture all relevant aspects of data quality and is not comparable across product categories.				

ELECTRICITY USED IN THE MANUFACTURING PROCESS IN A3 (A5 FOR SERVICES)

Type of electricity mix	Residual electricity mix on the market	
Energy sources	Hydro	1.01%
	Wind	1.99%
	Solar	3.13%
	Biomass	1.11%
	Geothermal	0%

	Waste	0%
	Nuclear	87.87%
	Natural gas	4.25%
	Coal	0.18%
	Oil	0.45%
	Peat	0%
	Other	0%
Climate impact (GWP-GHG):	0.15 kg CO_2 eq./kWh	

Method used to calculate residual electricity mix	The Diplast CRC70 polypropylene corrugated formwork production process uses electricity (France) as its sole energy source; no other fuels or thermal energy carriers are used. The electricity supply is modeled using the AIB European Residual Mixes, particularly for France, calculated with the issuance-based method. For more information, see the AIB methodology documentation at: https://www.aib-net.org/facts/european-residual-mix.

SYSTEM BOUNDARY

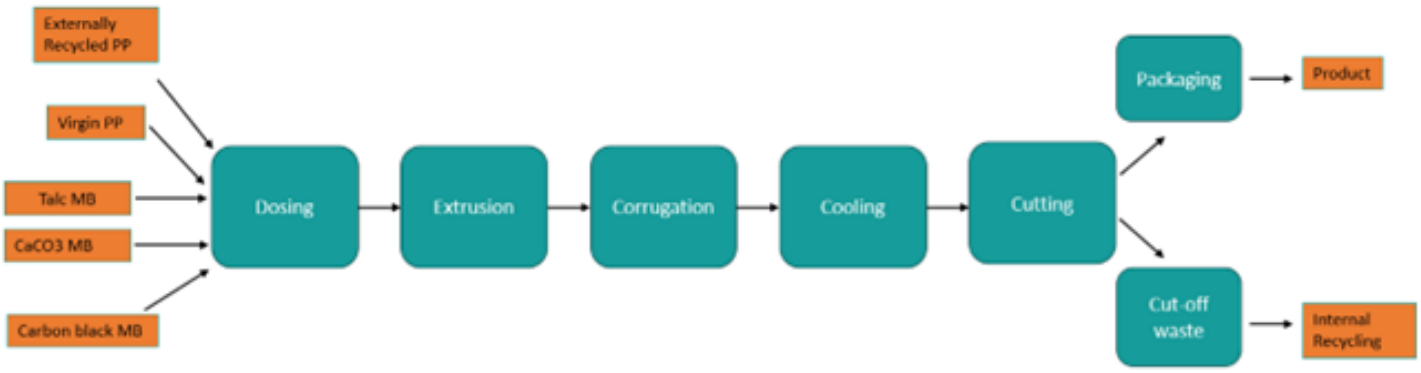
Description of the System boundary	a) Cradle to gate with modules C1-C4 and module D (A1-A3 + C + D).
Excluded modules	Yes, there is an excluded module, or there are excluded modules
Justification for omission of modules	A4, A5, and B1-7 modules are excluded. A4-A5: It is used in a wide range of construction projects, and transport distances, installation methods, and on-site handling can vary significantly between projects and regions. B1-B7: It remains embedded in the concrete foundation and is not removed after installation; it does not interact with the building during its use phase. The sheet does not require maintenance, repair, or replacement.

	Product stage			**Construction process stage**		**Use stage**							**End of life stage**				**Beyond product life cycle**
	Raw material supply	Transport	Manufacturing	Transport to site	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	ND	ND	ND	ND	ND	ND	ND	ND	ND	X	X	X	X	X
Geography	Europe	Europe	France	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Europe	Europe	Europe	Europe	Europe
Share of specific data	10.7%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation - products	5%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation - sites	0%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Disclaimer	The share of specific/primary data and both variations (products and sites) refer to GWP-GHG results only.																

Description of the process flow diagram(s)

Diplast CRC70 polypropylene corrugated formwork production involves the extrusion of a polypropylene-based blend containing externally recycled PP and other components. These raw materials are first dosed and mixed before being fed into an extrusion line, where they are melted and homogenized. The molten material is then shaped through a flat die and passed through a forming system that creates the characteristic hollow, corrugated structure. The extruded sheet undergoes cooling before being cut to the desired dimensions. The product is often embedded in the foundation of buildings and is not removed. It is demolished along with the rest of the building waste at the end of the building's life. Then, it is transported, along with the general construction waste, to the landfill area.

Process flow diagram(s) related images



Module A3 -Manufacturing

DEFAULT SCENARIO

Name of the default scenario	End-of-Life Scenario – 100% Landfill
Description of the default scenario	Diplast CRC70 polypropylene corrugated formwork is embedded in the foundations of buildings and is not removed separately at end-of-life. As such, no active deconstruction or dismantling is performed. The sheet is demolished together with the rest of the building structure and disposed of as part of the general construction and demolition waste stream. A 100% landfill scenario is assumed.

Module C: End-of-life

Explanatory name of the default scenario in module C	End-of-life
Description of the default scenario in module C	Diplast CRC70 polypropylene corrugated formwork is often embedded in the foundation of buildings and is not removed. Therefore, no active deconstruction or dismantling is performed. However, it is demolished along with the rest of the building waste at the end of the building's life. Then, the sheet is assumed to be disposed of as part of mixed construction and demolition waste and landfilled without separate treatment. Transport of the mixed waste to a landfill site is assumed to be 80 km and the sheet is modeled as 100% landfill.

Module C information	Value	Unit
Transport of the general construction and demolition waste to a landfill site	80	km
Share of the product going to landfill	100	%

Module D: Beyond product life cycle

Explanatory name of the default scenario in module D	No benefits
Description of the default scenario in module D	Since Diplast CRC70 polypropylene corrugated formwork is landfilled, there are no benefits claimed.

ENVIRONMENTAL PERFORMANCE

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.

Mandatory environmental performance indicators according to EN 15804

Impact category	Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Climate change - total	GWP-total	kg CO_2 eq.	8.77E-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00E+0	1.05E-2	0.00E+0	3.03E-2	0.00E+0
Climate change - fossil	GWP-fossil	kg CO_2 eq.	8.76E-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00E+0	1.04E-2	0.00E+0	3.02E-2	0.00E+0
Climate change - biogenic	GWP-biogenic	kg CO_2 eq.	0.00E+0	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
Climate change - land use and land-use change	GWP-luluc	kg CO_2 eq.	7.05E-4	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00E+0	1.10E-4	0.00E+0	8.27E-5	0.00E+0
Ozone depletion	ODP	kg CFC-11 eq.	9.11E-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00E+0	1.26E-15	0.00E+0	1.03E-13	0.00E+0
Acidification	AP	mol H^+ eq.	1.58E-3	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00E+0	6.93E-5	0.00E+0	1.80E-4	0.00E+0
Eutrophication aquatic freshwater	EP-freshwater	kg P eq.	1.38E-6	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00E+0	2.89E-8	0.00E+0	1.68E-5	0.00E+0
Eutrophication aquatic marine	EP-marine	kg N eq.	4.56E-4	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00E+0	3.44E-5	0.00E+0	3.90E-5	0.00E+0
Eutrophication terrestrial	EP-terrestrial	mol N eq.	4.83E-3	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00E+0	3.75E-4	0.00E+0	4.25E-4	0.00E+0
Photochemical ozone formation	POCP	kg NMVOC eq.	1.66E-3	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00E+0	6.55E-5	0.00E+0	1.23E-4	0.00E+0
Depletion of abiotic resources - minerals and metals	ADP-minerals&metals[1]	kg Sb eq.	1.22E-7	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00E+0	7.09E-10	0.00E+0	2.05E-9	0.00E+0
Depletion of abiotic resources - fossil fuels	ADP-fossil[1]	MJ, net calorific value	3.93E+1	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00E+0	1.36E-1	0.00E+0	5.00E-1	0.00E+0
Water use	WDP[1]	m^3 world eq. deprived	4.26E-2	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00E+0	4.28E-5	0.00E+0	3.72E-3	0.00E+0
Acronyms	GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption																
General disclaimer	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/A1-A5 for services).																
Disclaimer 1	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 environmental performance indicators

Impact category	Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Climate change - GWP-GHG	GWP-GHG[1]	kg CO_2 eq.	8.77E-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00E+0	1.05E-2	0.00E+0	3.03E-2	0.00E+0
Acronyms	GWP-GHG = Global warming potential greenhouse gas.																
General disclaimer	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/A1-A5 for services).																
Disclaimer 1	The GWP-GHG indicator is termed GWP-IOBC/GHG in the ILCD+EPD+ data format. The 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 CO_2 is set to zero.																

Additional voluntary environmental performance indicators according to EN 15804

Impact category	Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Particulate matter emissions	PM	Disease incidence	2.30E-8	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00E+0	2.74E-10	0.00E+0	1.85E-9	0.00E+0
Ionizing radiation - human health	IRP[1]	kBq U235 eq.	1.20E+0	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00E+0	2.49E-5	0.00E+0	9.67E-4	0.00E+0
Eco-toxicity - freshwater	ETP-fw[2]	CTUe	1.75E+1	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00E+0	1.77E-1	0.00E+0	1.14E+0	0.00E+0
Human toxicity - cancer effects	HTP-c[2]	CTUh	3.25E-10	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00E+0	2.38E-12	0.00E+0	1.57E-11	0.00E+0
Human toxicity - non-cancer effects	HTP-nc[2]	CTUh	5.74E-9	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00E+0	1.34E-10	0.00E+0	2.80E-10	0.00E+0
Land-use related impacts/soil quality	SQP[2]	Dimensionless	1.28E+1	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00E+0	6.05E-2	0.00E+0	7.73E-2	0.00E+0
Acronyms	PM = Potential incidence of disease due to particulate matter emissions; IRP = Potential human exposure efficiency relative to U235; ETP-fw = Potential comparative toxic unit for ecosystems; HTP-c = Potential comparative toxic unit for humans; HTP-nc = Potential comparative toxic unit for humans; SQP = Potential soil quality index.																
General disclaimer	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/A1-A5 for services).																
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 of these results are high or as there is limited experience with the indicator.																

Resource use indicators according to EN 15804

Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
PERE	MJ, net calorific value	4.12E+0	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00E+0	1.00E-2	0.00E+0	8.34E-2	0.00E+0
PERM	MJ, net calorific value	5.90E-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
PERT	MJ, net calorific value	4.71E+0	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00E+0	1.00E-2	0.00E+0	8.34E-2	0.00E+0
PENRE	MJ, net calorific value	3.93E+1	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00E+0	1.36E-1	0.00E+0	5.00E-1	0.00E+0
PENRM	MJ, net calorific value	3.63E+1	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
PENRT	MJ, net calorific value	7.55E+1	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00E+0	1.36E-1	0.00E+0	5.00E-1	0.00E+0
SM	kg	7.10E-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
RSF	MJ, net calorific value	2.26E-24	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
NRSF	MJ, net calorific value	2.66E-23	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
FW	m^3	6.21E-3	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00E+0	4.83E-6	0.00E+0	1.09E-4	0.00E+0
Acronyms	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy re-sources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water.															
General disclaimer	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/A1-A5 for services).															

Waste indicators according to EN 15804

Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
HWD	kg	5.70E-3	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00E+0	4.93E-12	0.00E+0	1.12E-10	0.00E+0
NHWD	kg	1.16E-2	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00E+0	1.79E-5	0.00E+0	9.96E-1	0.00E+0
RWD	kg	4.78E-3	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00E+0	1.79E-7	0.00E+0	7.20E-6	0.00E+0
Acronyms	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed.															
General disclaimer	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/A1-A5 for services).															

Output flow indicators according to EN 15804

Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
CRU	kg	0.00E+0	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
MFR	kg	6.70E-3	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
MER	kg	0.00E+0	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
EEE	MJ, net calorific value	0.00E+0	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
EET	MJ, net calorific value	0.00E+0	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
Acronyms	CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy.															
General disclaimer	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/A1-A5 for services).															

ADDITIONAL ENVIRONMENTAL INFORMATION

No hazardous substances are used in the manufacturing process.

Based on supplier declarations and to the best of our knowledge, the product does not contain any Substances of Very High Concern (SVHCs) listed by ECHA above the 0.1% threshold. Under normal storage and use conditions, the sheets can be handled without precautions or special protective equipment.

INFORMATION RELATED TO EPDS OF MULTIPLE PRODUCTS

Description of how the averages have been determined	The environmental impacts presented in this study represent the average results for the entire product group, calculated based on production volume shares for the year 2024.

ABBREVIATIONS

EPD Environmental Product Declaration

LCA Life Cycle Assessment

PCR Product Category Rules

rPP Recycled Polypropylene

SVHC Substances of Very High Concern

A1–A3 Product stage (Raw material supply, transport, manufacturing)

A4–A5 Construction process stage (Transport to site, installation)

B1–B7 Use stage (use, maintenance, repair, replacement, etc.)

C1–C4 End of life stage (deconstruction, transport, processing, disposal)

D Beyond product life cycle (reuse, recovery, recycling potential)

GWP Global Warming Potential

GWP-fossil Global Warming Potential – Fossil

GWP-biogenic Global Warming Potential – Biogenic

GWP-luluc Global Warming Potential – Land Use and Land Use Change

ODP Ozone Depletion Potential

AP Acidification Potential

EP Eutrophication Potential

EP-freshwater Eutrophication Potential – Freshwater

EP-marine Eutrophication Potential – Marine

EP-terrestrial Eutrophication Potential – Terrestrial

POCP Photochemical Ozone Creation Potential

ADP Abiotic Depletion Potential

ADP-minerals&metals Abiotic Depletion Potential – Minerals & Metals

ADP-fossil Abiotic Depletion Potential – Fossil fuels

WDP Water Deprivation Potential

PM Particulate Matter (Health effects)

IRP Ionizing Radiation Potential (Human health)

ETP-fw Ecotoxicity Potential – Freshwater

HTP-c Human Toxicity Potential – Cancer effects

HTP-nc Human Toxicity Potential – Non-cancer effects

SQP Soil Quality Potential

PERE Primary Energy – Renewable (as energy carrier)

PERM Primary Energy – Renewable (as raw material)

PERT Total Primary Energy – Renewable

PENRE Primary Energy – Non-renewable (as energy carrier)

PENRM Primary Energy – Non-renewable (as raw material)

PENRT Total Primary Energy – Non-renewable

SM Secondary Material

RSF Renewable Secondary Fuels

NRSF Non-renewable Secondary Fuels

FW Net use of Fresh Water

HWD Hazardous Waste Disposed

NHWD Non-Hazardous Waste Disposed

RWD Radioactive Waste Disposed

CRU Components for Reuse

MFR Material for Recycling

MER Material for Energy Recovery

EEE Exported Electrical Energy

EET Exported Thermal Energy

REFERENCES

a) ISO 14040: 2006/A1 2020

b) ISO 14044: 2006

c) ISO 14025: 2006

d) EN 15804: 2012+A2 2019/AC:2021

e) General Programme Instructions of International EPD System. Version 5.0.1

f) EPD International (2024): PCR 2019:14 Construction products and construction services, version 2.0.1. Available from www.environdec.com

g) Sphera MLC (fka GaBi) Databases Edition 2025.1

h) 2025 LCA background report Distriplast according to EN 15804 + A2 v1

VERSION HISTORY

Version 001, 2025-11-12

Original version of the EPD