ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025

CuTex
GEOfabrics Limited

EPD HUB, HUB-6223

Published on 07.05.2026, last updated on 07.05.2026, valid until 06.05.2031
Life Cycle Assessment study has been performed in accordance with the requirements of EN 15804, EPD Hub PCR version 1.2 (24 Mar 2025) and JRC characterization factors EF 3.1.

Created with One Click LCA

GENERAL INFORMATION

MANUFACTURER

Manufacturer	GEOfabrics Limited
Address	Skelton Grange Road, Stourton, Leeds, West Yorkshire, LS10 1RZ, United Kingdom
Contact details	info@geofabrics.com
Website	www.geofabrics.com

EPD STANDARDS, SCOPE AND VERIFICATION

Program operator	EPD Hub, hub@epdhub.com
Reference standard	EN 15804:2012+A2:2019/AC:2021 and ISO 14025
PCR	EPD Hub Core PCR Version 1.2, 24 Mar 2025
Sector	Construction product
Category of EPD	Third party verified EPD
Parent EPD number	-
Scope of the EPD	Cradle to gate with options, A4-A5, and modules C1-C4, D
EPD author	Clare Harvey, GEOfabrics Limited
EPD verification	Independent verification of this EPD and data, according to ISO 14025: ☐ Internal verification ☑ External verification
EPD verifier	D.V as an authorized verifier for EPD Hub

This EPD is intended for business-to-business and/or business-to-consumer communication. The manufacturer has the sole ownership, liability, and responsibility for the EPD. EPDs within the same product category but from different programs may not be comparable. EPDs of construction products may not be comparable if they do not comply with EN 15804 and if they are not compared in a building context.

PRODUCT

Product name	CuTex
Additional labels	-
Product reference	-
Place(s) of raw material origin	United Kingdom
Place of production	Leeds, United Kingdom
Place(s) of installation and use	United Kingdom
Period for data	2023 calendar year
Averaging in EPD	No grouping
Variation in GWP-fossil for A1-A3 (%)	-
GTIN (Global Trade Item Number)	-
NOBB (Norwegian Building Product Database)	-
A1-A3 Specific data (%)	18.1

ENVIRONMENTAL DATA SUMMARY

Declared unit	1kg
Declared unit mass	1 kg
Mass of packaging	0.05059 kg
GWP-fossil, A1-A3 ($kgCO_2e$)	4.5
GWP-total, A1-A3 ($kgCO_2e$)	4.48
Secondary material, inputs (%)	8.77
Total energy use, A1-A3 (kWh)	20.8
Net freshwater use, A1-A3 (m^3)	0.07

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

GEOfabrics manufacture geotextiles and geocomposites that fulfill a variety of different functions, including protection, filtration, drainage and separation. The products are used in many fields of civil engineering and construction works, including landfill engineering, containment, hydraulic engineering, green and blue roofing, rail and other construction activities.

The factory in Leeds, UK, where the needle punching, extrusion, forming and lamination processes are housed. The production facility is certified to ISO 9001 and ISO 14001, and also on-site is an ISO 17025 accredited testing laboratory to ensure quality and consistency across all stages of production and finished goods.

PRODUCT DESCRIPTION

CuTex is a geocomposite root barrier system, typically used in applications where a high and consistent level of performance is needed for protection against root intrusion, particularly from aggressive or invasive plants. Produced from high quality virgin polypropylene elements encapsulating a copper layer, CuTex is supplied in rolls of up to 5.2 meters wide and a variety of lengths.

CuTex geocomposite is versatile, and may be used as a single layer or as part of a multilayered system according to design requirements. The copper acts as a signal layer that plants avert their growth from, meaning CuTex acts as a barrier to roots yet is highly permeable to water and nutrients. This combination of characteristics provides protection to utilities infrastructure and is beneficial in applications within containment engineering, hydraulic engineering and various other demanding civil engineering sectors.

Further information can be found at: www.geofabrics.com

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass %	Material origin
Metals	0	-
Minerals	0	-
Fossil materials	100	UK, EU
Bio-based materials	0	-

BIOGENIC CARBON CONTENT

Product's biogenic carbon content at the factory gate

Biogenic carbon content in product, kg C	0
Biogenic carbon content in packaging, kg C	0.01

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	1kg
Mass per declared unit	1 kg
Functional unit	-
Reference service life	years

SUBSTANCES, REACH - VERY HIGH CONCERN

The product does not contain any REACH SVHC substances in amounts greater than 0,1 % (1000 ppm).

PRODUCT LIFE-CYCLE

SYSTEM BOUNDARY

This EPD covers the life-cycle modules listed in the following table.

Product stage			Assembly stage		Use stage							End of life stage				Beyond the system boundaries		
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D		
x	x	x	x	x	ND	ND	ND	ND	ND	ND	ND	x	x	x	x	x		
Raw materials	Transport	Manufacturing	Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstruction/ demolition	Transport	Waste processing	Disposal	Reuse	Recovery	Recycling

Not declared = ND.

MANUFACTURING AND PACKAGING (A1-A3)

The environmental impacts considered for the product stage cover the manufacturing of raw materials used in the production as well as packaging materials and other ancillary materials. Also, fuels used by machines, and handling of waste formed in the production processes at the manufacturing facilities are included in this stage. The study also considers the material losses occurring during the manufacturing processes as well as losses during electricity transmission.

A market-based approach is used in modelling the electricity mix utilized in the factory.
Densely packed bales of polypropylene fibre are opened and separated. A carding process aligns the fibres and creates continuous sheets which are then folded and layered by a cross lapper to achieve the desired width and weight per square metre. A needling process mechanically binds the layers into a single cohesive geotextile sheet. The geotextile is trimmed, and the trimmings sold for recycling. Production losses have been calculated at 3%. The finished geotextile is rolled to the required length, then rolls are packaged in a plastic foil sleeve secured with bungs. Samples are tested at the prescribed intervals to ensure the material meets specification.
All transport assumptions and distances for raw and packaging materials have been obtained directly from the manufacturers.

TRANSPORT AND INSTALLATION (A4-A5)

Transportation impacts occurred from final products delivery to construction site (A4) cover fuel direct exhaust emissions, environmental impacts of fuel production, as well as related infrastructure emissions.

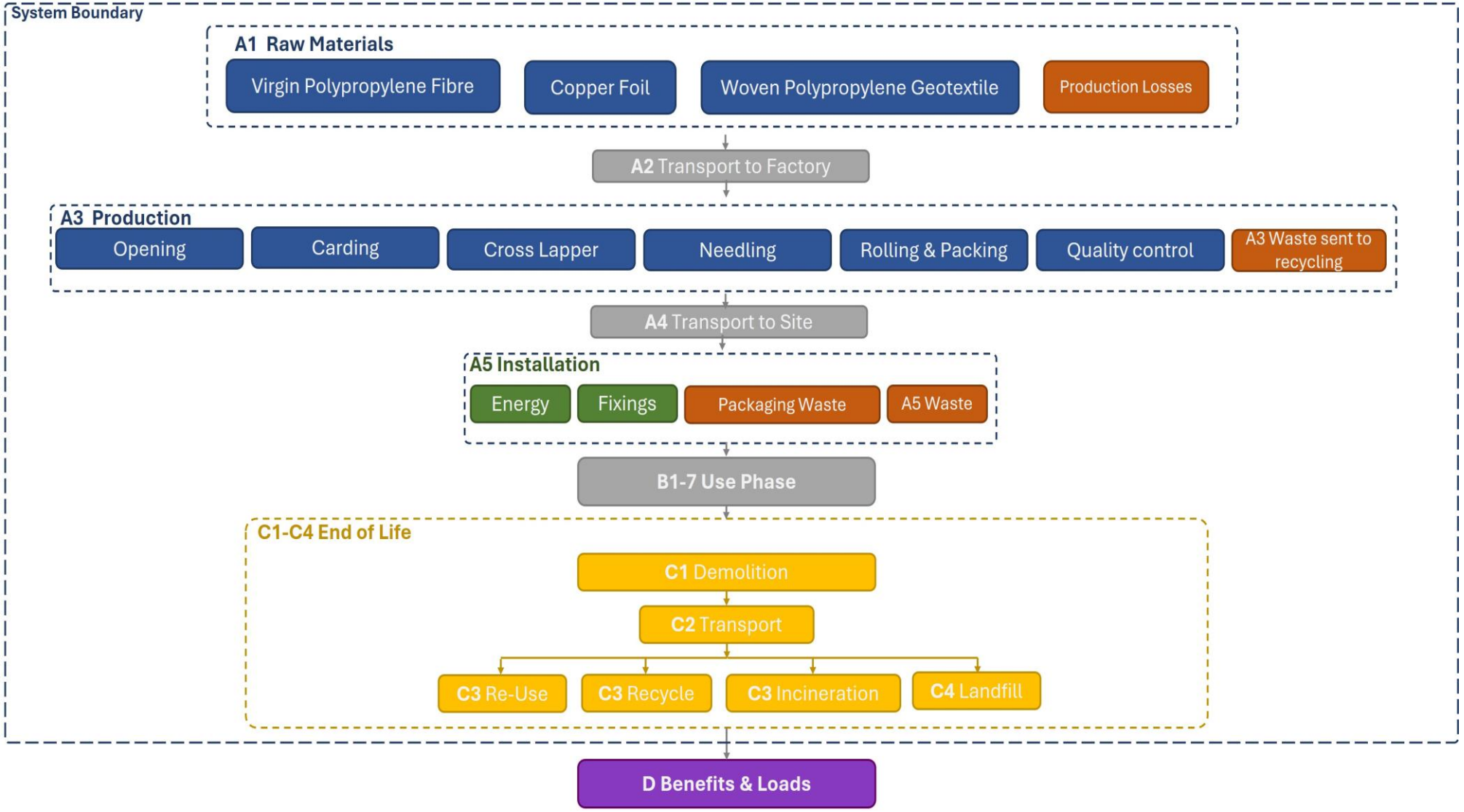
Transport to site may be arranged by GEOfabrics, a distributer or an end user. Therefore the scenario assumptions used are that transport is by lorry travelling an average distance of 188km, vehicle capacity is fully utilised as full loads are preferred, and back loads are typically utilised. Transportation does not cause losses as the product is packed appropriately.

PRODUCT END OF LIFE (C1-C4, D)

CuTex is potentially fully recyclable as a code 5 plastic. However as the disposal method cannot be accurately predicted a plausible end of life scenario was developed using data published by the Plastics Europe Association in 2018, from the polypropylene construction waste dataset. Removal (C1) is assumed to be manual extraction.. End of life transport (C2) is assumed to be by lorry to the nearest facility assumed to be 50km away.

Disposal (C3 and C4) is based on 2018 data which shows 23% of polypropylene waste from the construction industry was mechanically recycled, 50% was incinerated for energy recovery and 27% is either incinerated without energy recovery or landfilled.
Benefits and Loads (D) of the end-of-life product and its packaging are considered, including conversion to recycled plastic and the heat and energy produced by the incineration of waste.

SYSTEM DIAGRAM



LIFE-CYCLE ASSESSMENT

CUT-OFF CRITERIA

The study does not exclude any modules or processes which are stated mandatory in the reference standard and the applied PCR. The study does not exclude any hazardous materials or substances. The study includes all major raw material and energy consumption. All inputs and outputs of the unit processes, for which data is available for, are included in the calculation. There is no neglected unit process more than 1% of total mass or energy flows. The module specific total neglected input and output flows also do not exceed 5% of energy usage or mass.

The production of capital equipment, construction activities, and infrastructure, maintenance and operation of capital equipment, personnel-related activities, energy and water use related to company management and sales activities are excluded.

Nothing excluded

VALIDATION OF DATA

Data collection for production, transport, and packaging was conducted using time and site-specific information, as defined in the general information section on page 1 and 2. Upstream process calculations rely on generic data as defined in the Bibliography section. Manufacturer-provided specific and generic data were used for the product's manufacturing stage. The analysis was performed in One Click LCA EPD Generator, with the 'Cut-Off, EN 15804+A2' allocation method, and characterization factors according to EN 15804:2012+A2:2019/AC:2021 and JRC EF 3.1.

ALLOCATION, ESTIMATES AND ASSUMPTIONS

Allocation is required if some material, energy, and waste data cannot be measured separately for the product under investigation. All allocations are done as per the reference standards and the applied PCR. In this study, allocation has been done in the following ways:

Data type	Allocation
Raw materials	Allocated by mass or volume
Packaging material	Allocated by mass or volume
Ancillary materials	Allocated by mass or volume
Manufacturing energy and waste	Allocated by mass or volume

No recycling of Polypropylene datapoint - proxy used.

PRODUCT & MANUFACTURING SITES GROUPING

Type of grouping	No grouping
Grouping method	Not applicable
Variation in GWP-fossil for A1-A3, %	-

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LCA SOFTWARE AND BIBLIOGRAPHY

This EPD has been created using One Click LCA EPD Generator for EPD Hub V3 and EPD Process Certification v3.2.5. The LCA and EPD have been prepared according to the reference standards and ISO 14040/14044. The EPD Generator uses Ecoinvent v3.10.1/3.11/3.12 and One Click LCA databases as sources of environmental data. Allocation used in Ecoinvent 3.10.1/3.11/3.12 environmental data sources follow the methodology ‘allocation, Cut-off, EN 15804+A2‘.

ENVIRONMENTAL IMPACT DATA

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

CORE ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, EF 3.1

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP – total[1)]	kg CO_2e	3.61E+00	4.87E-01	3.84E-01	4.48E+00	3.82E-02	1.13E-01	ND	ND	ND	ND	ND	ND	ND	0.00E+00	5.38E-03	1.56E+00	2.77E-02	-1.59E+00
GWP – fossil	kg CO_2e	3.59E+00	4.87E-01	4.28E-01	4.50E+00	3.82E-02	2.61E-02	ND	ND	ND	ND	ND	ND	ND	0.00E+00	5.37E-03	1.56E+00	2.78E-02	-1.58E+00
GWP – biogenic	kg CO_2e	1.25E-02	1.10E-04	-4.42E-02	-3.16E-02	7.57E-06	8.70E-02	ND	ND	ND	ND	ND	ND	ND	0.00E+00	1.19E-06	-6.41E-03	-1.70E-05	-1.95E-03
GWP – LULUC	kg CO_2e	4.27E-03	2.17E-04	4.18E-04	4.91E-03	1.35E-05	1.50E-06	ND	ND	ND	ND	ND	ND	ND	0.00E+00	2.30E-06	2.55E-05	1.94E-06	-2.77E-03
Ozone depletion pot.	kg $CFC\text{-}_{11}$e	1.67E-07	7.21E-09	1.79E-08	1.92E-07	7.60E-10	2.29E-11	ND	ND	ND	ND	ND	ND	ND	0.00E+00	8.71E-11	3.04E-10	7.79E-11	-4.27E-08
Acidification potential	mol H^+e	1.35E-01	1.66E-03	1.72E-03	1.39E-01	1.19E-04	1.04E-05	ND	ND	ND	ND	ND	ND	ND	0.00E+00	1.81E-05	2.53E-04	2.14E-05	-7.46E-03
EP-freshwater[2)]	kg Pe	7.83E-04	3.79E-05	9.05E-05	9.11E-04	2.53E-06	4.27E-07	ND	ND	ND	ND	ND	ND	ND	0.00E+00	4.03E-07	7.02E-06	3.13E-07	-9.23E-04
EP-marine	kg Ne	7.19E-03	5.45E-04	3.73E-04	8.11E-03	4.03E-05	1.14E-05	ND	ND	ND	ND	ND	ND	ND	0.00E+00	5.99E-06	1.23E-04	6.16E-05	-1.22E-03
EP-terrestrial	mol Ne	9.99E-02	5.93E-03	3.76E-03	1.10E-01	4.38E-04	3.92E-05	ND	ND	ND	ND	ND	ND	ND	0.00E+00	6.51E-05	1.18E-03	8.73E-05	-1.16E-02
POCP ("smog")[3)]	kg NMVOCe	3.28E-02	2.45E-03	1.96E-03	3.72E-02	1.87E-04	1.26E-05	ND	ND	ND	ND	ND	ND	ND	0.00E+00	2.74E-05	3.04E-04	3.68E-05	-5.84E-03
ADP-minerals & metals[4)]	kg Sbe	3.11E-03	1.36E-06	1.72E-06	3.11E-03	1.25E-07	1.31E-08	ND	ND	ND	ND	ND	ND	ND	0.00E+00	1.50E-08	1.75E-07	6.78E-09	-6.73E-06
ADP-fossil resources	MJ	7.96E+01	7.06E+00	1.20E+01	9.87E+01	5.36E-01	2.01E-02	ND	ND	ND	ND	ND	ND	ND	0.00E+00	7.80E-02	2.60E-01	6.69E-02	-4.02E+01
Water use[5)]	m^3e depr.	1.96E+00	3.49E-02	8.92E-02	2.08E+00	2.64E-03	1.01E-03	ND	ND	ND	ND	ND	ND	ND	0.00E+00	3.89E-04	4.00E-02	3.22E-04	-6.39E-01

1) GWP = Global Warming Potential; 2) EP = Eutrophication potential. Required characterisation method and data are in kg P-eq. Multiply by 3,07 to get PO4e; 3) POCP = Photochemical ozone formation; 4) ADP = Abiotic depletion potential; 5) EN 15804+A2 disclaimer for Abiotic depletion and Water use and optional indicators except Particulate matter and Ionizing radiation, human health. The results of these environmental impact indicators shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.

ADDITIONAL (OPTIONAL) ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, EF 3.1

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Particulate matter	Incidence	3.47E-07	4.86E-08	1.45E-08	4.10E-07	3.00E-09	1.29E-10	ND	ND	ND	ND	ND	ND	ND	0.00E+00	5.37E-10	2.10E-09	4.85E-10	-3.85E-08
Ionizing radiation[6)]	kBq U235e	3.00E-01	6.18E-03	9.89E-02	4.05E-01	6.84E-04	1.07E-04	ND	ND	ND	ND	ND	ND	ND	0.00E+00	7.49E-05	1.18E-03	6.53E-05	-5.98E-01
Ecotoxicity (freshwater)	CTUe	1.15E+03	1.00E+00	7.46E+00	1.16E+03	7.04E-02	4.71E-02	ND	ND	ND	ND	ND	ND	ND	0.00E+00	1.05E-02	4.37E-01	8.54E-02	-3.35E+00
Human toxicity, cancer	CTUh	2.37E-08	8.04E-11	4.03E-10	2.42E-08	6.51E-12	2.14E-12	ND	ND	ND	ND	ND	ND	ND	0.00E+00	8.87E-13	6.17E-11	1.44E-12	-2.84E-10
Human tox. non-cancer	CTUh	1.72E-06	4.57E-09	3.05E-09	1.73E-06	3.37E-10	9.27E-11	ND	ND	ND	ND	ND	ND	ND	0.00E+00	5.05E-11	2.51E-09	2.65E-10	-1.33E-08
SQP[7)]	-	4.57E+01	7.07E+00	4.96E+00	5.77E+01	3.19E-01	1.99E-02	ND	ND	ND	ND	ND	ND	ND	0.00E+00	7.85E-02	2.56E-01	1.56E-01	-6.53E+00

6) EN 15804+A2 disclaimer for Ionizing radiation, human health. 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; 7) SQP = Land use related impacts/soil quality.

USE OF NATURAL RESOURCES

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Renew. PER as energy[8)]	MJ	6.82E+00	9.70E-02	6.77E-01	7.60E+00	9.27E-03	-4.79E-01	ND	ND	ND	ND	ND	ND	ND	0.00E+00	1.12E-03	1.90E-02	1.03E-03	-5.39E+00
Renew. PER as material	MJ	0.00E+00	0.00E+00	4.86E-01	4.86E-01	0.00E+00	-4.86E-01	ND	ND	ND	ND	ND	ND	ND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Total use of renew. PER	MJ	6.82E+00	9.70E-02	1.16E+00	8.08E+00	9.27E-03	-9.65E-01	ND	ND	ND	ND	ND	ND	ND	0.00E+00	1.12E-03	1.90E-02	1.03E-03	-5.39E+00
Non-re. PER as energy	MJ	5.43E+01	7.06E+00	5.78E+00	6.72E+01	5.37E-01	-7.90E-01	ND	ND	ND	ND	ND	ND	ND	0.00E+00	7.80E-02	-2.46E+01	-1.04E+01	-4.22E+01
Non-re. PER as material	MJ	2.53E+01	0.00E+00	3.21E-01	2.56E+01	0.00E+00	-7.93E-01	ND	ND	ND	ND	ND	ND	ND	0.00E+00	0.00E+00	0.00E+00	-2.48E+01	8.03E+00
Total use of non-re. PER	MJ	7.97E+01	7.06E+00	6.10E+00	9.28E+01	5.37E-01	-1.58E+00	ND	ND	ND	ND	ND	ND	ND	0.00E+00	7.80E-02	-2.46E+01	-3.52E+01	-3.41E+01
Secondary materials	kg	8.77E-02	3.01E-03	2.02E-02	1.11E-01	2.46E-04	4.81E-05	ND	ND	ND	ND	ND	ND	ND	0.00E+00	3.33E-05	9.99E-04	2.42E-05	2.53E-01
Renew. secondary fuels	MJ	5.33E-04	3.82E-05	1.11E-04	6.83E-04	3.10E-06	3.48E-07	ND	ND	ND	ND	ND	ND	ND	0.00E+00	4.23E-07	7.11E-06	4.55E-07	-3.24E-05
Non-ren. secondary fuels	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	ND	ND	ND	ND	ND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Use of net fresh water	m^3	6.37E-02	1.04E-03	1.59E-03	6.63E-02	7.22E-05	-1.56E-05	ND	ND	ND	ND	ND	ND	ND	0.00E+00	1.15E-05	3.42E-04	-9.99E-04	-2.11E-02

8) PER = Primary energy resources.

END OF LIFE – WASTE

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Hazardous waste	kg	5.97E-01	1.20E-02	3.91E-02	6.48E-01	7.70E-04	4.45E-04	ND	ND	ND	ND	ND	ND	ND	0.00E+00	1.27E-04	1.52E-02	1.17E-04	-8.26E-02
Non-hazardous waste	kg	4.71E+01	2.21E-01	6.87E-01	4.80E+01	1.62E-02	5.28E-02	ND	ND	ND	ND	ND	ND	ND	0.00E+00	2.39E-03	6.06E-01	1.34E+00	-8.82E+00
Radioactive waste	kg	1.03E-04	1.51E-06	2.18E-05	1.26E-04	1.70E-07	2.72E-08	ND	ND	ND	ND	ND	ND	ND	0.00E+00	1.84E-08	3.02E-07	1.60E-08	-1.53E-04

END OF LIFE – OUTPUT FLOWS

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Components for re-use	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	ND	ND	ND	ND	ND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Materials for recycling	kg	0.00E+00	0.00E+00	1.15E-02	1.15E-02	0.00E+00	3.30E-02	ND	ND	ND	ND	ND	ND	ND	0.00E+00	0.00E+00	2.30E-01	0.00E+00	0.00E+00
Materials for energy rec	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	ND	ND	ND	ND	ND	0.00E+00	0.00E+00	5.00E-01	0.00E+00	0.00E+00
Exported energy	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.31E-01	ND	ND	ND	ND	ND	ND	ND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Exported energy – Electricity	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.49E-02	ND	ND	ND	ND	ND	ND	ND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Exported energy – Heat	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.60E-02	ND	ND	ND	ND	ND	ND	ND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

ENVIRONMENTAL IMPACTS – EN 15804+A1, CML

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Global Warming Pot.	kg CO_2e	3.51E+00	4.84E-01	4.25E-01	4.42E+00	3.80E-02	2.92E-02	ND	ND	ND	ND	ND	ND	ND	0.00E+00	5.34E-03	1.57E+00	2.66E-02	-1.56E+00
Ozone depletion Pot.	kg $CFC_{-11}e$	1.38E-07	5.75E-09	1.44E-08	1.58E-07	6.05E-10	1.88E-11	ND	ND	ND	ND	ND	ND	ND	0.00E+00	6.94E-11	2.55E-10	6.23E-11	-3.46E-08
Acidification	kg SO_2e	1.19E-01	1.27E-03	1.41E-03	1.21E-01	9.08E-05	7.75E-06	ND	ND	ND	ND	ND	ND	ND	0.00E+00	1.38E-05	1.81E-04	1.59E-05	-6.31E-03
Eutrophication	kg PO_4^3e	3.57E-02	3.09E-04	9.80E-04	3.70E-02	2.31E-05	6.54E-06	ND	ND	ND	ND	ND	ND	ND	0.00E+00	3.39E-06	6.40E-05	9.79E-06	-1.04E-03
POCP (“smog”)	kg C_2H_4e	4.79E-03	1.13E-04	1.25E-04	5.03E-03	8.65E-06	1.45E-06	ND	ND	ND	ND	ND	ND	ND	0.00E+00	1.24E-06	1.45E-05	5.25E-06	-4.37E-04
ADP-elements	kg Sbe	3.11E-03	1.33E-06	1.70E-06	3.11E-03	1.22E-07	1.28E-08	ND	ND	ND	ND	ND	ND	ND	0.00E+00	1.46E-08	1.65E-07	6.58E-09	-6.65E-06

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
ADP-fossil	MJ	7.82E+01	6.97E+00	1.07E+01	9.59E+01	5.25E-01	1.82E-02	ND	ND	ND	ND	ND	ND	ND	0.00E+00	7.68E-02	2.40E-01	6.59E-02	-2.96E+01

ADDITIONAL INDICATOR – GWP-GHG

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-GHG[9)]	kg CO_2e	3.59E+00	4.87E-01	4.29E-01	4.51E+00	3.82E-02	2.61E-02	ND	ND	ND	ND	ND	ND	ND	0.00E+00	5.38E-03	1.56E+00	2.78E-02	-1.59E+00

9) This indicator includes all greenhouse gases excluding biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. In addition, the characterisation factors for the flows – CH4 fossil, CH4 biogenic and Dinitrogen monoxide – were updated. This indicator is identical to the GWP-total of EN 15804:2012+A2:2019 except that the characterisation factor for biogenic CO2 is set to zero

SCENARIO DOCUMENTATION

DATA SOURCES

Manufacturing energy scenario documentation

1. Market for liquefied petroleum gas, United Kingdom, Ecoinvent, 1.09 kgCO2e/kg
2. Market for heat, central or small-scale, natural gas, United Kingdom, Ecoinvent, 0.0762 kgCO2e/MJ
3. Electricity, medium voltage, residual mix, United Kingdom, Ecoinvent, 0.47 kgCO2e/kWh

Transport scenario documentation - A4 (Transport resources)

1. Transport, freight, lorry 16-32 metric ton, EURO5, 188 km

Transport to the building site (A4) - Scenario documentation

Scenario parameter	Value
Capacity utilization (including empty return) %	50
Bulk density of transported products	1.69E-01
Volume capacity utilization factor	1

Installation at the building site (A5) - Scenario documentation

Scenario parameter	Value
Energy: type and consumption (MJ or kWh)	Electricity, medium voltage, residual mix. Taken from electricity bill.
Water use (m^3)	-
Ancillary materials: type and mass (kg)	-
Waste materials: type and mass (kg)	0.00937kg HDPE from plastic bungs used as packaging. 0.0305kg of cardboard from cardboard tube used as packaging, 0.00612kg of PP from slings used as packaging, 0.00457 LLDPE from sleeving used as packaging, 0.000107 of paper used from labels used in packaging.
Waste materials: output routes	Disposal (A3 manufacturing waste) is based on 2018 data which shows 23% of polypropylene waste from the construction industry was mechanically recycled, 50% was incinerated for energy recovery and 27% is either incinerated without energy recovery or landfilled. Transport for A3 waste have been taken directly from the waste recycling company or if unknown assumed 50 km.
Direct emissions (kg)	-

End of life (C1-C4) - Scenario documentation Scenario information	Value
Collection process: collected separately (kg)	-
Collection process: Mixed waste (kg)	-
Recovery: re-use (kg)	0
Recovery: recycling (kg)	0.23
Recovery: energy recovery (kg)	0.5
Disposal (kg)	0

Scenario assumptions e.g. transportation (mode, km) & other	CuTex is potentially fully recyclable as a code 5 plastic. However as the disposal method cannot be accurately predicted a plausible end of life scenario was developed using data published by the Plastics Europe Association in 2018, from the polypropylene construction waste dataset. Removal (C1) is assumed to be manual extraction.. End of life transport (C2) is assumed to be by lorry to the nearest facility assumed to be 50km away. Disposal (C3 and C4) is based on 2018 data which shows 23% of polypropylene waste from the construction industry was mechanically recycled, 50% was incinerated for energy recovery and 27% is either incinerated without energy recovery or landfilled. Benefits and Loads (D) of the end-of-life product and its packaging are considered, including conversion to recycled plastic and the heat and energy produced by the incineration of waste.

THIRD-PARTY VERIFICATION STATEMENT

EPD Hub declares that this EPD is verified in accordance with ISO 14025 by an independent, third-party verifier. The project report on the Life Cycle Assessment and the report(s) on features of environmental relevance are filed at EPD Hub. EPD Hub PCR and ECO Platform verification checklist are used.

EPD Hub is not able to identify any unjustified deviations from the PCR and EN 15804+A2 in the Environmental Product Declaration and its project report.

EPD Hub maintains its independence as a third-party body; it was not involved in the execution of the LCA or in the development of the declaration and has no conflicts of interest regarding this verification.

The company-specific data and upstream and downstream data have been examined as regards plausibility and consistency. The publisher is responsible for ensuring the factual integrity and legal compliance of this declaration.

The software used in creation of this LCA and EPD is verified by EPD Hub to conform to the procedural and methodological requirements outlined in ISO 14025:2010, ISO 14040/14044, EN 15804+A2, and EPD Hub Core Product Category Rules and General Program Instructions.

Verified tools

Tool verifier: Magaly Gonzalez Vazquez
Tool verification validity: 27 March 2025 - 26 March 2028

D.V as an authorized verifier for EPD Hub Limited 07.05.2026