



ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025

Brymec End Feed & End Braze Fittings



EPD HUB, EPD number HUB-5664

Published on 09.03.2026, last updated on 09.03.2026, valid until 08.03.2031

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.

GENERAL INFORMATION

MANUFACTURER

Manufacturer	Brymec Ltd.
Address	Unit C, Redlands, Coulsdon, Surrey, United Kingdom, CR5 2HT
Contact details	sales@brymec.com
Website	https://www.brymec.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	n/a
Scope of the EPD	Cradle to gate with modules C1-C4, D
EPD author	Adeleh Ghodsizadeh, Blue Marble Environmental Partnerships Ltd.
EPD verification	Independent verification of this EPD and data, according to ISO 14025: <input type="checkbox"/> Internal verification <input checked="" type="checkbox"/> 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	Brymec End Feed & End Braze Fittings
Additional labels	-
Product reference	See Annex for List of Included Products
Place(s) of raw material origin	China
Place of production	China
Place(s) of installation and use	United Kingdom
Period for data	Calendar Year (2023)
Averaging in EPD	Multiple products
Variation in GWP-fossil for A1-A3 (%)	-15.67% / 1.17%
A1-A3 Specific data (%)	2.72

ENVIRONMENTAL DATA SUMMARY

Declared unit	1 kg
Declared unit mass	1 kg
Mass of packaging	0.345 kg
GWP-fossil, A1-A3 (kgCO ₂ e)	1.04E+01
GWP-total, A1-A3 (kgCO ₂ e)	1.05E+01
Secondary material, inputs (%)	42
Secondary material, outputs (%)	94.1
Total energy use, A1-A3 (kWh)	43.5
Net freshwater use, A1-A3 (m ³)	0.25

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

Brymec Ltd is a turnkey solutions provider to the building services industry, delivering complete M&E solutions alongside end-to-end project support, all backed by exceptional customer service and technical expertise.

Established in 1974 as a family business, Brymec manufactures a wide range of high-quality M&E products, delivered directly to site through a single point of contact via its innovative supply chain model: Brymec Breeze.

PRODUCT DESCRIPTION

This EPD is representative of Brymec End Feed & End Braze Feed Fittings manufactured from copper, brass and bronze. All fittings conform to BS EN1254-1:1998 and are guaranteed against manufacturing defects for 25 years. For full traceability all fittings are etched or stamped with unique branding; together with the EN specification reference and fitting size where space permits.

Product Application: Suitable for use on hot and cold potable water systems, gravity fed or pressurised unvented heating systems, gas installation pipework and drainage & rainwater applications.

The results of this EPD are representative for 1kg of Brymec End Feed & End Braze Feed Fittings. To calculate actual impacts per unit the results should be multiplied by the unit mass contained in the annex.

Further information can be found at: <https://www.brymec.com/>

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass %	Material origin
Metals	99.05	China
Minerals	-	-
Fossil materials	0.95	China
Bio-based materials	-	-

BIOGENIC CARBON CONTENT

Product's biogenic carbon content at the factory gate

Biogenic carbon content in product, kg C	-
Biogenic carbon content in packaging, kg C	0.0198

FUNCTIONAL UNIT AND SERVICE LIFE

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

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	ND	ND	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

Modules not declared = ND. Modules not relevant = MNR

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.

This EPD is representative of Brymec End Feed & End Braze Feed Fittings manufactured from copper, brass and bronze. The products are sourced from a single manufacturing facility in China where the raw material is received from Chinese suppliers, cast into the desired shape, finished and packed for shipping to the UK. (A1/A2)

Transportation to the Brymec warehouse in the UK is via a combination of >32 tonne lorry and container ship (A2).

The products are received at the Brymec warehouse where they are unloaded and stored in the Brymec warehouse ready for dispatch. Medium voltage electricity drawn from the UK grid is used to supply energy to the warehouse. An Ecoinvent country-specific average electricity dataset (residual mix) has been used to model direct supply of electricity.

When an order is ready to be shipped it is packaged in recycled plastic packaging and cardboard box and loaded for onward transportation to the customer (A3).

TRANSPORT AND INSTALLATION (A4-A5)

This EPD does not consider the transportation to site and installation modules. Air, soil, and water impacts during the construction phase have not been studied.

Due to this EPD not disclosing the Installation phase, packaging waste has been modelled as leaving the system boundary at end-of-life.

In line with EPD Hub Core PCR Version 1.2, 24 Mar 2025, due to the exclusion of module A5, biogenic CO₂ of packaging has been balanced-out in the A1-A3 results.

the avoided impact from the recycling process by not producing virgin material.

PRODUCT USE AND MAINTENANCE (B1-B7)

This EPD does not consider the use phase modules.

Air, soil, and water impacts during the use phase have not been studied.

PRODUCT END OF LIFE (C1-C4, D)

At the end of its life the product is assumed to be collected separately due to its high resale value. Manual dismantling of pipework is anticipated therefore no energy is required. (C1).

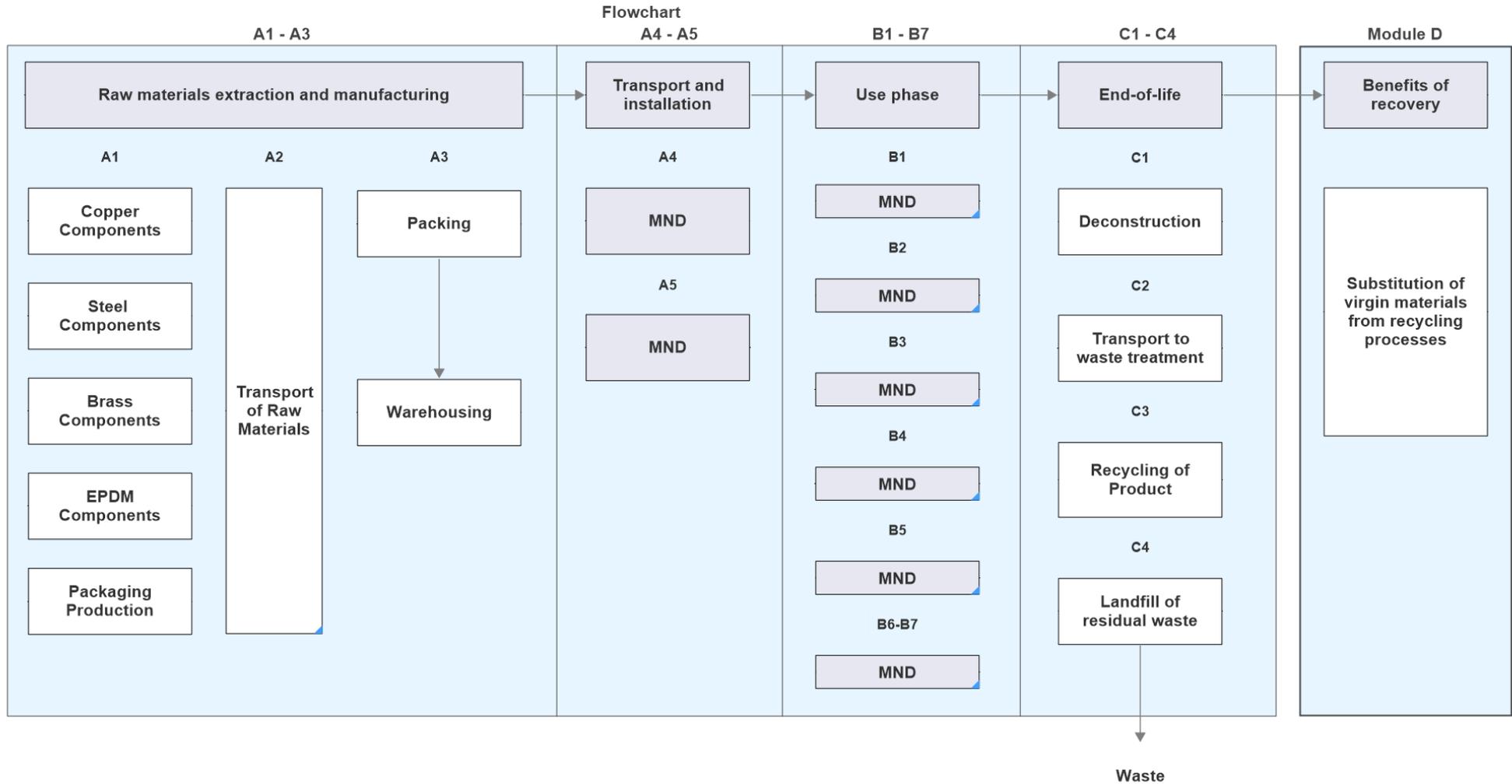
The product is assumed to be transported no more than 50km via >32 tonne lorry for recycling / waste treatment. (C2)

An end-of-life scenario for MEP products has been assumed, based on RICS v2. 90% of the metal in the product is assumed to be recycled, with the remaining 10% reaching landfill. Very small amounts of plastic in certain products are assumed to reach landfill with no benefits. (C3/C4).

Due to this EPD not disclosing the Installation phase, packaging waste has been modelled as leaving the system boundary at end-of-life. Cardboard packaging is assumed to be recycled at a rate of 74.3% with the remaining percentage assumed to reach landfill with no benefits (DEFRA, 2024). Lightweight plastic packaging is conservatively assumed to reach landfill with no benefits. (C3/C4).

Module D accounts for the benefits and loads beyond the system boundary. The benefits from the provision of recyclates (copper, brass, steel, cardboard) to subsequent lifecycles is expressed as a negative figure, after first deducting the loads of the recycling process. The negative figure / benefit represents

SYSTEM BOUNDARY 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.

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	Partly allocated by revenue
Packaging material	No allocation
Ancillary materials	Not applicable
Manufacturing energy and waste	Allocated by revenue

The results in this EPD are for multiple products, based on the average results of the product group. The mass of each product has been scaled to 1kg then weighted according to shares of total revenue during the reference period. The GWP fossil A1-A3 impacts do not exceed +/-50% difference for any one product within the group. The products are manufactured using similar processes from similar raw materials and serve a similar functional purpose (fittings).

The variation is based on assuming a 100% Brass product (-15.67% variation in GWP-fossil for A1-A3) and a 100% Copper product (1.17% variation in GWP-fossil for A1-A3).

PRODUCT & MANUFACTURING SITES GROUPING

Type of grouping	Multiple products
Grouping method	Based on average results of product group - by total revenue
Variation in GWP-fossil for A1-A3, %	-15.67% / 1.17%

LCA SOFTWARE AND BIBLIOGRAPHY

This EPD has been created using One Click LCA EPD Generator. 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 and One Click LCA databases as sources of environmental data. Allocation used in Ecoinvent 3.10.1/3.11 environmental data sources follow the methodology 'allocation, Cut-off, EN 15804+A2'.

End of life scenarios for product have been taken from RICS v2, Section 5.6.1 on End-of-Life Scenarios.

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 ₂ e	9.73E+00	2.69E-01	5.26E-01	1.05E+01	ND	0.00E+00	6.96E-03	8.45E-02	5.58E-02	-4.83E+00								
GWP – fossil	kg CO ₂ e	9.61E+00	2.69E-01	5.55E-01	1.04E+01	ND	0.00E+00	6.95E-03	2.55E-02	3.54E-02	-4.78E+00								
GWP – biogenic	kg CO ₂ e	1.02E-01	4.47E-05	-3.20E-02	7.04E-02	ND	0.00E+00	1.46E-06	5.90E-02	2.04E-02	-4.66E-02								
GWP – LULUC	kg CO ₂ e	1.77E-02	1.41E-04	2.61E-03	2.05E-02	ND	0.00E+00	2.71E-06	2.94E-05	1.38E-06	-8.04E-03								
Ozone depletion pot.	kg CFC ₋₁₁ e	9.09E-08	3.88E-09	6.71E-09	1.01E-07	ND	0.00E+00	1.45E-10	2.68E-10	1.20E-10	-4.40E-08								
Acidification potential	mol H ⁺ e	6.71E-01	6.76E-03	2.70E-03	6.81E-01	ND	0.00E+00	1.64E-05	2.65E-04	2.70E-05	-6.67E-01								
EP-freshwater ²⁾	kg Pe	5.36E-02	1.05E-05	2.01E-04	5.38E-02	ND	0.00E+00	4.86E-07	1.35E-05	3.06E-07	-3.36E-02								
EP-marine	kg Ne	3.41E-02	1.69E-03	7.11E-04	3.65E-02	ND	0.00E+00	4.31E-06	5.95E-05	9.60E-05	-2.31E-02								
EP-terrestrial	mol Ne	4.70E-01	1.88E-02	6.00E-03	4.95E-01	ND	0.00E+00	4.66E-05	6.64E-04	1.13E-04	-3.32E-01								
POCP (“smog”) ³⁾	kg NMVOCe	1.33E-01	5.17E-03	1.86E-03	1.40E-01	ND	0.00E+00	2.85E-05	1.96E-04	5.68E-05	-1.03E-01								
ADP-minerals & metals ⁴⁾	kg Sbe	8.63E-03	3.41E-07	1.99E-06	8.63E-03	ND	0.00E+00	1.99E-08	1.45E-06	8.09E-09	-9.58E-03								
ADP-fossil resources	MJ	1.21E+02	3.39E+00	6.81E+00	1.31E+02	ND	0.00E+00	1.04E-01	2.96E-01	8.81E-02	-5.59E+01								
Water use ⁵⁾	m ³ e depr.	7.30E+00	1.08E-02	3.40E-01	7.65E+00	ND	0.00E+00	5.35E-04	4.79E-03	5.62E-04	-4.05E+00								

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	1.61E-06	1.10E-08	5.22E-08	1.67E-06	ND	0.00E+00	6.78E-10	3.69E-09	6.05E-10	-1.14E-06								
Ionizing radiation ⁶⁾	kBq I1235e	9.99E-01	1.79E-03	4.31E-02	1.04E+00	ND	0.00E+00	1.26E-04	1.13E-03	1.27E-04	-3.18E-01								
Ecotoxicity (freshwater)	CTUe	4.63E+03	2.93E-01	2.57E+00	4.63E+03	ND	0.00E+00	1.23E-02	1.75E-01	5.96E-01	-5.65E+02								
Human toxicity, cancer	CTUh	7.01E-08	5.49E-11	4.02E-10	7.06E-08	ND	0.00E+00	1.16E-12	2.02E-11	1.27E-12	-8.18E-08								
Human tox. non-cancer	CTUh	7.00E-06	1.08E-09	5.74E-09	7.01E-06	ND	0.00E+00	6.75E-11	1.27E-09	1.87E-10	-8.54E-06								
SQP ⁷⁾	-	2.21E+02	8.54E-01	7.59E+00	2.29E+02	ND	0.00E+00	1.05E-01	5.52E-01	2.04E-01	-2.13E+02								

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	3.12E+01	2.97E-02	1.05E+00	3.22E+01	ND	0.00E+00	1.70E-03	-6.05E-01	-2.39E-01	-1.65E+01								
Renew. PER as material	MJ	0.00E+00	0.00E+00	7.02E-01	7.02E-01	ND	0.00E+00	0.00E+00	-5.21E-01	-1.80E-01	-4.09E-03								
Total use of renew. PER	MJ	3.12E+01	2.97E-02	1.75E+00	3.29E+01	ND	0.00E+00	1.70E-03	-1.13E+00	-4.19E-01	-1.65E+01								
Non-re. PER as energy	MJ	1.21E+02	3.39E+00	1.64E-01	1.24E+02	ND	0.00E+00	1.04E-01	2.96E-01	-1.13E+01	-5.59E+01								
Non-re. PER as material	MJ	3.43E-05	0.00E+00	6.66E+00	6.66E+00	ND	0.00E+00	0.00E+00	-4.23E-03	-1.50E-03	0.00E+00								
Total use of non-re. PER	MJ	1.21E+02	3.39E+00	6.82E+00	1.31E+02	ND	0.00E+00	1.04E-01	2.91E-01	-1.13E+01	-5.59E+01								
Secondary materials	kg	4.20E-01	1.58E-03	4.07E-01	8.29E-01	ND	0.00E+00	4.52E-05	3.56E-04	3.24E-05	9.60E-01								
Renew. secondary fuels	MJ	3.30E-03	6.28E-06	1.39E-02	1.73E-02	ND	0.00E+00	5.70E-07	1.53E-05	5.63E-07	-5.39E-03								
Non-ren. secondary fuels	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00								
Use of net fresh water	m ³	2.45E-01	2.81E-04	8.06E-03	2.54E-01	ND	0.00E+00	1.54E-05	1.31E-04	-1.34E-03	-1.91E-01								

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	3.15E+00	4.72E-03	4.45E-02	3.20E+00	ND	0.00E+00	1.51E-04	2.36E-03	1.33E-04	-2.51E+00								
Non-hazardous waste	kg	2.13E+02	6.91E-02	1.05E+00	2.14E+02	ND	0.00E+00	3.02E-03	6.68E-02	1.75E+00	-2.22E+02								
Radioactive waste	kg	2.59E-04	4.37E-07	1.03E-05	2.70E-04	ND	0.00E+00	3.11E-08	2.79E-07	3.00E-08	-8.66E-05								

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	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	0.00E+00	0.00E+00	ND	0.00E+00	0.00E+00	9.41E-01	0.00E+00	0.00E+00								
Materials for energy rec	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00								
Exported energy	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	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	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	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 ₂ e	9.69E+00	2.67E-01	6.10E-01	1.06E+01	ND	0.00E+00	6.91E-03	2.58E-02	5.21E-02	-4.77E+00								
Ozone depletion Pot.	kg CFC _{-11e}	7.83E-08	3.08E-09	6.17E-09	8.75E-08	ND	0.00E+00	1.15E-10	2.22E-10	9.58E-11	-3.74E-08								
Acidification	kg SO ₂ e	5.89E-01	5.39E-03	2.18E-03	5.97E-01	ND	0.00E+00	1.30E-05	2.13E-04	1.99E-05	-5.92E-01								
Eutrophication	kg PO ₄ ^{3e}	2.96E-02	6.07E-04	9.57E-04	3.12E-02	ND	0.00E+00	3.25E-06	3.09E-05	2.54E-05	-2.04E-02								
POCP (“smog”)	kg C ₂ H ₄ e	2.47E-02	2.72E-04	1.75E-04	2.51E-02	ND	0.00E+00	1.33E-06	1.29E-05	1.07E-05	-2.42E-02								
ADP-elements	kg Sbe	8.62E-03	3.35E-07	1.87E-06	8.62E-03	ND	0.00E+00	1.94E-08	1.45E-06	7.82E-09	-9.57E-03								
ADP-fossil	MJ	1.06E+02	3.36E+00	6.17E+00	1.15E+02	ND	0.00E+00	1.02E-01	2.78E-01	8.61E-02	-5.17E+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 ₂ e	9.63E+00	2.69E-01	5.58E-01	1.05E+01	ND	0.00E+00	6.96E-03	2.55E-02	3.54E-02	-4.78E+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

Manufacturing energy scenario documentation

Scenario parameter	Value
Electricity data source and quality	Electricity, medium voltage, residual mix (Reference product: electricity, medium voltage)
Electricity CO2e / kWh	0.44 kg CO2e / kWh
District heating data source and quality	Not applicable
District heating CO2e / kWh	Not applicable

End of life scenario documentation

Scenario information	Value
Collection process – kg collected separately	1
Collection process – kg collected with mixed waste	0
Recovery process – kg for re-use	0
Recovery process – kg for recycling	0.9
Recovery process – kg for energy recovery	0
Disposal (total) – kg for final deposition	0.1
Scenario assumptions e.g. transportation	Assumed transport distance to waste treatment / disposal is 50km via Transport, freight, lorry >32 metric ton, EURO6 - Europe (average laden vehicle)

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 09.03.2026



ANNEX – LIST OF INCLUDED PRODUCTS

Couplers		
Code	Size	Mass (kg)
30014	15mm	0.050
30015	22mm	0.080
30016	28mm	0.130
30017	35mm	0.230
30018	42mm	0.280
30019	54mm	0.610
30020	67mm	1.200
30021	76mm	1.690
30022	108mm	0.010
33105	133mm	0.020
33106	159mm	0.030
Slip Couplers		
Code	Size	Mass (kg)

30275	15mm	0.010
30276	22mm	0.020
30277	28mm	0.030
30278	35mm	0.050
30279	42mm	0.080
30280	54mm	0.130
Crossovers		
Code	Size	Mass (kg)
30230	15mm	0.050
30231	22mm	0.100
30237	15mm - partial	0.030
30238	22mm - partial	0.070
90° Elbows		
Code	Size	Mass (kg)
30030	15mm	0.010
30031	22mm	0.030
30032	28mm	0.050
30033	35mm	0.080
30034	42mm	0.120
30035	54mm	0.220
30036	67mm	0.330
30037	76mm	0.460
30038	108mm	1.130
30142	133mm	2.290
30143	159mm	3.510
90° Street Elbows		
Code	Size	Mass (kg)
30129	15mm	0.012
30130	22mm	0.030
30131	28mm	0.060

30133	35mm	0.087
30134	42mm	0.130
30135	54mm	0.280
90° Street Elbows Long Radius		
Code	Size	Mass (kg)
30137	15mm	0.020
30138	22mm	0.040
45° Elbows		
Code	Size	Mass (kg)
30063	15mm	0.100
30064	22mm	0.023
30065	28mm	0.051
30066	35mm	0.080
30067	42mm	0.120
30068	54mm	0.200
30069	67mm	0.380
30070	76mm	0.530
30071	108mm	1.160
33107	133mm	1.700
33108	159mm	2.350
45° Street Elbows		
Code	Size	Mass (kg)
30144	15mm	0.110
30145	22mm	0.032
30146	28mm	0.050
30147	35mm	0.100
30148	42mm	0.100
30149	54mm	0.190
30150	67mm	0.340
30151	76mm	0.450

End caps		
Code	Size	Mass (kg)
30079	15mm	0.010
30080	22mm	0.020
30081	28mm	0.030
30082	35mm	0.040
30083	42mm	0.060
30084	54mm	0.090
30085	67mm	0.200
30086	76mm	0.240
Flanges		
Code	Size	Mass (kg)
33121	42mm	1.700
33122	54mm	2.087
33126	67mm	2.606
33123	76mm	3.386
33125	108mm	4.478
Fitting Reducers		
Code	Size	Mass (kg)
30095	15 x 10mm	0.010
30097	22 x 15mm	0.020
30098	28 x 15mm	0.030
30099	28 x 22mm	0.025
30100	35 x 15mm	0.060
30101	35 x 22mm	0.050
30102	35 x 28mm	0.050
30107	42 x 15mm	0.080
30108	42 x 22mm	0.080
30103	42 x 28mm	0.070
30104	42 x 35mm	0.080

30109	54 x 15mm	0.120
30110	54 x 22mm	0.120
30111	54 x 28mm	0.120
30105	54 x 35mm	0.113
30106	54 x 42mm	0.120
30023	67 x 28mm	0.170
30024	67 x 35mm	0.240
30025	67 x 42mm	0.240
30114	67 x 54mm	0.190
30026	76 x 35mm	0.230
30027	76 x 42mm	0.280
30088	76 x 54mm	0.240
30089	76 x 67mm	0.260
30090	108 x 42mm	0.770
30091	108 x 54mm	0.750
30092	108 x 67mm	0.720
30093	108 x 76mm	0.100
33111	133 x 67mm	1.360
33112	133 x 76mm	1.160
33113	133 x 108mm	1.290
33115	159 x 108mm	1.670
33116	159 x 133mm	1.680
Reducing Couplers		
Code	Size	Mass (kg)
30122	22 x 15mm	0.020
30123	28 x 22mm	0.020
30116	28 x 15mm	0.030
30117	35 x 15mm	0.060
30118	35 x 22mm	0.060
30124	35 x 28mm	0.060

30125	42 x 22mm	0.080
30126	42 x 28mm	0.080
30127	42 x 35mm	0.100
30128	54 x 35mm	0.140
30132	54 x 42mm	0.160
Equal Tees		
Code	Size	Mass (kg)
30047	15mm	0.020
30048	22mm	0.050
30049	28mm	0.080
30050	35mm	0.140
30051	42mm	0.230
30052	54mm	0.380
30053	67mm	0.620
30054	76mm	1.040
30055	108mm	2.070
33109	133mm	4.000
33110	159mm	5.930
Reducing Tees		
Code	Size	Mass (kg)
30204	15 x 15 x 22mm	0.050
30205	22 x 15 x 15mm	0.040
30206	22 x 15 x 22mm	0.055
30207	22 x 22 x 15mm	0.035
30197	22 x 22 x 28mm	0.090
30198	28 x 15 x 15mm	0.070
30219	28 x 15 x 22mm	0.090
30209	28 x 15 x 28mm	0.080
30220	28 x 22 x 15mm	0.060
30208	28 x 22 x 22mm	0.070

30210	28 x 22 x 28mm	0.080
30211	28 x 28 x 15mm	0.060
30212	28 x 28 x 22mm	0.070
30222	35 x 15 x 35mm	0.150
30225	35 x 22 x 22mm	0.110
30228	35 x 22 x 35mm	0.150
30226	35 x 28 x 22mm	0.140
30227	35 x 28 x 28mm	0.130
30232	35 x 28 x 35mm	0.150
30223	35 x 35 x 15mm	0.100
30213	35 x 35 x 22mm	0.130
30229	35 x 35 x 28mm	0.120
30233	42 x 15 x 42mm	0.280
30234	42 x 22 x 42mm	0.240
30235	42 x 28 x 28mm	0.230
30236	42 x 28 x 42mm	0.230
30239	42 x 35 x 28mm	0.230
30240	42 x 35 x 35mm	0.210
30241	42 x 35 x 42mm	0.230
30242	42 x 42 x 15mm	0.120
30214	42 x 42 x 22mm	0.180
30243	42 x 42 x 28mm	0.170
30215	42 x 42 x 35mm	0.220
30247	54 x 42 x 42mm	0.470
30253	54 x 54 x 15mm	0.250
30254	54 x 54 x 22mm	0.260
30246	54 x 54 x 28mm	0.250
30216	54 x 54 x 35mm	0.340
30217	54 x 54 x 42mm	0.370
30248	67 x 67 x 28mm	0.420

30255	67 x 67 x 35mm	0.490
30256	67 x 67 x 42mm	0.530
30218	67 x 67 x 54mm	0.740
30257	76 x 76 x 28mm	0.570
30262	76 x 76 x 35mm	0.660
30263	76 x 76 x 42mm	0.690
30264	76 x 76 x 54mm	0.740
30265	76 x 76 x 67mm	0.760
30266	108 x 108 x 35mm	1.050
30270	108 x 108 x 42mm	1.440
30271	108 x 108 x 54mm	1.700
30272	108 x 108 x 67mm	1.960
30273	108 x 108 x 76mm	1.900
33117	159 x 159 x 76mm	3.670
33118	159 x 159 x 108mm	4.250
Male Iron Couplers - Parallel Thread		
Code	Size	Mass (kg)
30177	15mm	0.031
30178	22mm	0.056
30179	28mm	0.082
30180	35mm	0.104
30181	42mm	0.149
30182	54mm	0.227
30183	67mm	0.349
Male Iron Couplers - Taper Thread		
Code	Size	Mass (kg)
30200	15mm	0.023
30201	22mm	0.040
30202	28mm	0.060
30284	35mm	0.090

30285	42mm	0.140
30286	54mm	0.220
Female Iron Couplers		
Code	Size	Mass (kg)
30161	15mm	0.024
30162	22mm	0.040
30163	28mm	0.080
30164	35mm	0.170
30165	42mm	0.220
30166	54mm	0.399
30167	67mm	0.660
Male Iron Elbows		
Code	Size	Mass (kg)
30185	15mm	0.050
30186	22mm	0.090
30187	28mm	0.100
Female Iron Elbows		
Code	Size	Mass (kg)
30169	15mm	0.040
30170	22mm	0.090
Wall Plate Elbows		
Code	Size	Mass (kg)
30224	15mm	0.060
Copper Tail Wallplate		
Code	Size	Mass (kg)
30864	15mm	0.210
Tap Connectors		
Code	Size	Mass (kg)
30258	15mm x 1/2"	0.030
30259	15mm x 3/4"	0.054

30260	22mm x 3/4"	0.050
30267	15mm x 1/2" Bent	0.030