ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025 / ISO 21930

Instantor Pex-Al-Pex pipe
Sanbra Fyffe Ltd T/A Instantor

EPD HUB, HUB-2938
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Created with One Click LCA

GENERAL INFORMATION

MANUFACTURER

Manufacturer	Sanbra Fyffe Ltd T/A Instantor
Address	Instantor Works, Santry Ave, D09 K160, DUBLIN, IE
Contact details	Sales@instantor.ie
Website	www.instantor.ie

EPD STANDARDS, SCOPE AND VERIFICATION

Program operator	EPD Hub, hub@epdhub.com
Reference standard	EN 15804+A2:2019 and ISO 14025
PCR	EPD Hub Core PCR Version 1.1, 5 Dec 2023
Sector	Construction product
Category of EPD	Third party verified EPD
Scope of the EPD	Cradle to gate with options, A4-A5, and modules C1-C4, D
EPD author	Jose Vasquez - Sanbra Fyffe Ltd T/A Instantor
EPD verification	Independent verification of this EPD and data, according to ISO 14025: ☐ Internal verification ☑ External verification
EPD verifier	Sarah Curpen, as an authorized verifier acting for EPD Hub Limited

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	Instantor Pex-Al-Pex pipe
Additional labels	PE-xB / Al / PE-xB
Product reference	IPAP111, IPAP101, IPAP105, and IPAP107
Place of production	China
Period for data	January 2023 to January 2024
Averaging in EPD	Multiple products
Variation in GWP-fossil for A1-A3	-19% / +8.1% %

ENVIRONMENTAL DATA SUMMARY

Declared unit	1 Kg of Pex-Al-Pex pipe
Declared unit mass	1 kg
GWP-fossil, A1-A3 ($kgCO_2e$)	4,87E+00
GWP-total, A1-A3 ($kgCO_2e$)	4,88E+00
Secondary material, inputs (%)	44.6
Secondary material, outputs (%)	80
Total energy use, A1-A3 (kWh)	16.2
Net freshwater use, A1-A3 (m^3)	0.05

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

Sanbra Fyffe Ltd T/A Instantor® has been a trusted name in plumbing solutions since 1926, leading the way in innovative and high-quality products for professional plumbers across Ireland. From our humble beginnings at St James Gate, Dublin, with the creation of the first brass compression fitting, we have become market leaders in press solutions. Our commitment to quality, continuous innovation, and exceptional customer service has made us a go-to choice for plumbing and heating professionals.

Our dedication to excellence is reflected in our certifications, including ISO 9001:2015, ISO 14001:2015, and our Press System manufactured to ISO 21003:2008.

PRODUCT DESCRIPTION

The product is a multilayer pipe PE-xB / Al / PE-xB used in potable water, underfloor heating and all general plumbing and heating applications. The pipe is constructed with a double inner and outer layer of Silane method crosslinked polyethylene PE-xB, then bound by quality adhesive to a longitudinally TIG butt welded 100% oxygen tight aluminium layer. The aluminium layer allows the pipe to maintain its shape after bending. Total hygiene and high corrosion resistance is ensured as fluids come in contact with the inner PE-xB layer only.

The pipes are available in different diameters: 16, 20, 26, 32, 40, 50 and 63mm. The different sizes are also presented in 4m lengths or 50, 100 and 500m coils.

Additionally, the pipes can be enclosed in a scratch resistant, closed cell polyethylene foam insulating sheath. The insulated pipe is normally used to reduce heat transfer or loss, condensation, expansion, noise transmission and pipe protection.

Further information can be found at www.instantor.ie.

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass %	Material origin
Metals	30.5%	China
Minerals	0%	China
Fossil materials	69.5%	China
Bio-based materials	0%	China

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	0.0004582

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	1 Kg of Pex-Al-Pex pipe
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	x	x	MND	MND	MND	MND	MND	MND	MND	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 = MND. 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.

The manufacturing process of the multilayer pipe starts with the sheet rolling of the aluminium which gives the thickness and round form. The sheet is TIG welded to form an oxygen tight barrier. To form the inner layer, adhesive is extruded before the high-density polyethylene into the welded aluminium pipe. The outer layer is mixed with the master batch to get the characteristic white colour of the pipe and extruded around the adhesive on the aluminium pipe. Both layers of polyethylene are cross-linked using the silane method for enhanced properties.

Lastly, the pipe is cooled down with water, marked and tested previous packaging.

During manufacturing, there are few losses of raw material when the machines start up or need debugging. There are losses of aluminium while trimming the strips for the pipe formation.

Packaging consists of the use of packaging film and kraft paper.

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.

Transportation impacts occur when the final product is transported from the factory to the customer or construction site. The transport distance is an average distance considering the different customers locations, and the method of transport is assumed to be share between container ship and light commercial vehicles. There are no product losses of as it is properly packaged.

The packaging is considered in A5, during the installation as it is removed from the product. The packaging film is sorted for recycling, incineration and

landfill.

The installation consists in manual labour. Minimal energy is used when pressing the fittings with the equipment. The installation is neglectable.

PRODUCT USE AND MAINTENANCE (B1-B7)

This EPD does not include the use and maintenance phase.

The products are design to have a life span of up to 50 years depending on the application.

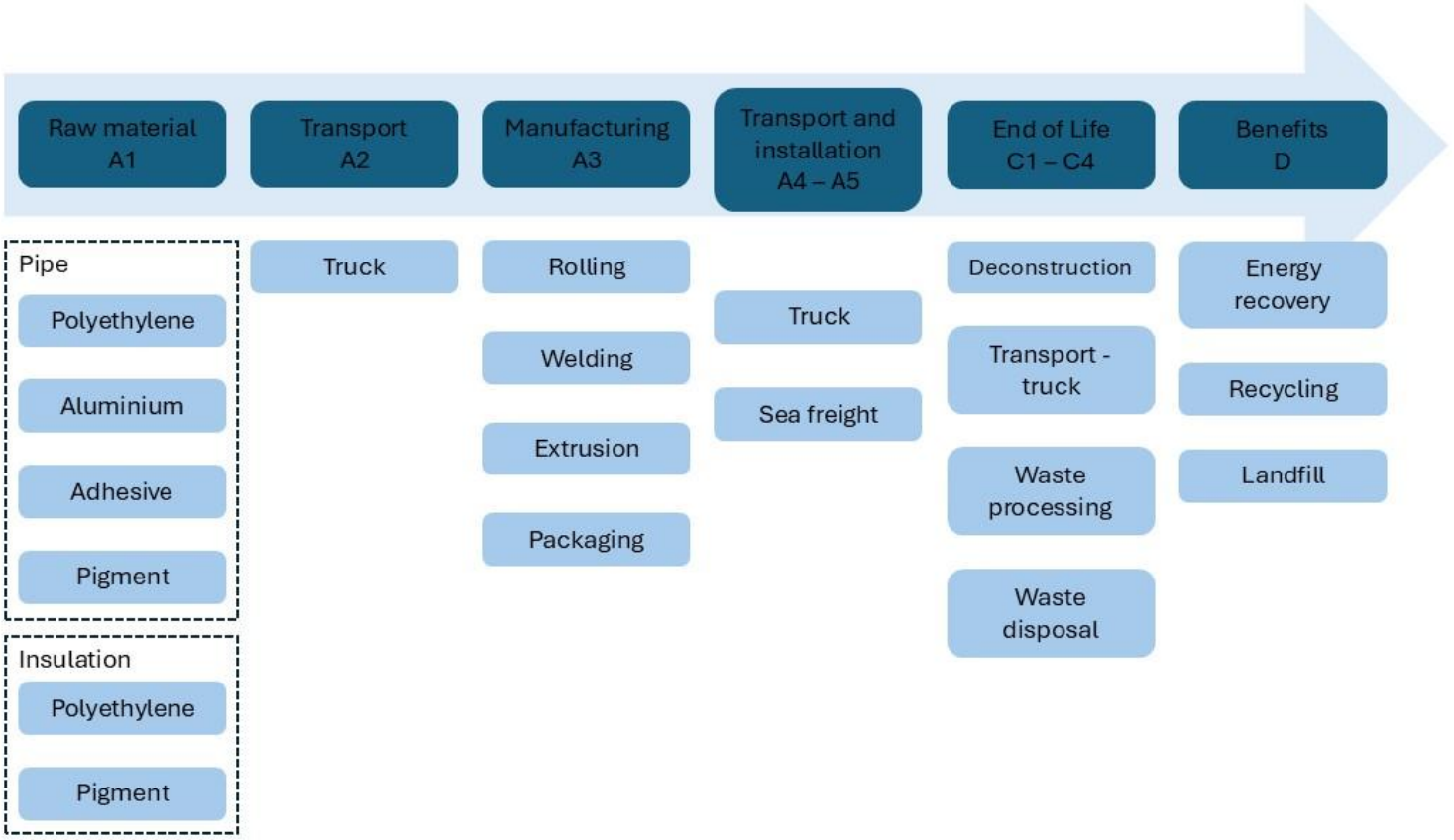
Air, soil, and water impacts during the use phase have not been studied.

PRODUCT END OF LIFE (C1-C4, D)

The End of Life occurs when the building is demolished, and the pipe is removed from the site. It is assumed that the average travelling distance from the building site to the waste treatment facility is 50 Km, and it is transported by truck (Dos Santos Gervasio and Dimova, 2018, p. 41).

In the waste facility, it is assumed that 26% of the pipe can be recycle, 47.5% can be recovered as energy and the remaining 26.5% goes to landfill.
Adapted from: Plastics Europe Final Report Plastic waste from B&C in EU 2018.

MANUFACTURING PROCESS



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.

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	No allocation
Packaging material	Allocated by mass or volume
Ancillary materials	Allocated by mass or volume
Manufacturing energy and waste	Allocated by mass or volume

AVERAGES AND VARIABILITY

Type of average	Multiple products
Averaging method	Representative product
Variation in GWP-fossil for A1-A3	-19% / +8.1% %

This is an average EPD done through representative product approach. Taking 16mm pipe (champion on sales) as the baseline and compare the baseline with other products in the same family (please see folder). Therefore, the products showed the highest GWP fossil A1-A3 variation +8.1% and -19%.

In total 5 additional products LCA's were created and compared with the baseline to assure that the whole family which carries 11 products in total have their impacts are within the +/- 50% GWP A1-A3 fossil statistical range.

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 v3.8, Plastics Europe, Federal LCA Commons and One Click LCA databases as sources of environmental data.

ENVIRONMENTAL IMPACT DATA

CORE ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, PEF

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	4,13E+00	4,72E-02	6,95E-01	4,88E+00	4,92E-01	2,56E-03	MND	MND	MND	MND	MND	MND	MND	3,31E-03	4,74E-03	8,24E-01	2,19E-02	-5,22E+00
GWP – fossil	kg CO_2e	4,13E+00	4,72E-02	6,96E-01	4,87E+00	4,92E-01	8,77E-04	MND	MND	MND	MND	MND	MND	MND	3,31E-03	4,73E-03	8,24E-01	2,19E-02	-5,22E+00
GWP – biogenic	kg CO_2e	0,00E+00	0,00E+00	-1,68E-03	-1,68E-03	0,00E+00	1,68E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP – LULUC	kg CO_2e	7,06E-03	1,92E-05	8,86E-05	7,16E-03	3,31E-04	4,35E-08	MND	MND	MND	MND	MND	MND	MND	3,30E-07	1,75E-06	3,27E-05	4,89E-07	-1,13E-03
Ozone depletion pot.	kg $CFC\text{-}_{11}$e	1,39E-07	1,11E-08	4,35E-09	1,54E-07	1,01E-07	4,97E-12	MND	MND	MND	MND	MND	MND	MND	7,07E-10	1,09E-09	6,09E-09	6,60E-10	-1,62E-07
Acidification potential	mol H^+e	2,24E-02	2,68E-04	3,56E-03	2,62E-02	7,86E-03	3,46E-07	MND	MND	MND	MND	MND	MND	MND	3,44E-05	2,00E-05	2,71E-04	1,65E-05	-4,83E-02
EP-freshwater[2)]	kg Pe	1,58E-04	3,48E-07	1,46E-05	1,73E-04	4,90E-06	1,40E-09	MND	MND	MND	MND	MND	MND	MND	1,10E-08	3,88E-08	9,34E-07	1,71E-08	-3,15E-04
EP-marine	kg Ne	3,97E-03	9,63E-05	7,44E-04	4,81E-03	2,02E-03	3,29E-07	MND	MND	MND	MND	MND	MND	MND	1,52E-05	5,96E-06	1,06E-04	2,90E-05	-5,68E-03
EP-terrestrial	mol Ne	4,17E-02	1,06E-03	8,16E-03	5,10E-02	2,25E-02	1,31E-06	MND	MND	MND	MND	MND	MND	MND	1,67E-04	6,57E-05	1,12E-03	6,67E-05	-6,35E-02
POCP ("smog")[3)]	kg NMVOCe	1,35E-02	3,03E-04	2,12E-03	1,59E-02	6,20E-03	3,98E-07	MND	MND	MND	MND	MND	MND	MND	4,59E-05	2,10E-05	2,92E-04	2,36E-05	-1,88E-02
ADP-minerals & metals[4)]	kg Sbe	3,74E-05	1,61E-07	6,52E-07	3,82E-05	4,89E-06	5,91E-10	MND	MND	MND	MND	MND	MND	MND	1,68E-09	1,11E-08	5,86E-07	7,35E-09	-5,47E-06
ADP-fossil resources	MJ	6,02E+01	7,13E-01	6,12E+00	6,71E+01	6,79E+00	5,30E-04	MND	MND	MND	MND	MND	MND	MND	4,45E-02	7,11E-02	2,78E-01	4,79E-02	-5,62E+01
Water use[5)]	m^3e depr.	1,61E+00	3,43E-03	7,51E-02	1,69E+00	3,97E-02	3,60E-05	MND	MND	MND	MND	MND	MND	MND	1,20E-04	3,18E-04	2,46E-02	5,99E-04	-6,20E-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, PEF

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	4,68E-07	5,23E-09	5,05E-08	5,24E-07	3,88E-08	4,79E-12	MND	MND	MND	MND	MND	MND	MND	9,22E-10	5,46E-10	2,55E-09	3,50E-10	-2,96E-07
Ionizing radiation[6)]	kBq U235e	1,68E-01	3,75E-03	1,02E-02	1,82E-01	3,95E-02	4,75E-06	MND	MND	MND	MND	MND	MND	MND	2,05E-04	3,39E-04	3,67E-03	3,51E-04	-3,42E-01
Ecotoxicity (freshwater)	CTUe	1,22E+02	6,01E-01	1,81E+01	1,40E+02	6,27E+00	2,72E-03	MND	MND	MND	MND	MND	MND	MND	2,68E-02	6,40E-02	2,84E+00	1,19E+01	-9,75E+01
Human toxicity, cancer	CTUh	5,23E-09	2,29E-11	1,46E-10	5,40E-09	6,14E-10	1,64E-13	MND	MND	MND	MND	MND	MND	MND	1,03E-12	1,57E-12	1,85E-10	1,90E-12	8,91E-10
Human tox. non-cancer	CTUh	7,80E-08	6,69E-10	6,90E-09	8,56E-08	6,87E-09	2,64E-12	MND	MND	MND	MND	MND	MND	MND	1,94E-11	6,33E-11	1,93E-09	4,44E-11	-9,76E-08
SQP[7)]	-	1,23E+01	6,20E-01	1,56E+00	1,45E+01	2,45E+00	6,19E-04	MND	MND	MND	MND	MND	MND	MND	5,79E-03	8,19E-02	4,56E-01	1,23E-01	-1,35E+01

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	4,46E+00	1,04E-02	5,65E-01	5,03E+00	1,41E-01	4,17E-05	MND	MND	MND	MND	MND	MND	MND	2,54E-04	8,01E-04	5,18E-02	3,32E-03	-2,28E+00
Renew. PER as material	MJ	0,00E+00	0,00E+00	1,57E-02	1,57E-02	0,00E+00	-1,57E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Total use of renew. PER	MJ	4,46E+00	1,04E-02	5,81E-01	5,05E+00	1,41E-01	-1,57E-02	MND	MND	MND	MND	MND	MND	MND	2,54E-04	8,01E-04	5,18E-02	3,32E-03	-2,28E+00
Non-re. PER as energy	MJ	4,63E+01	7,13E-01	6,10E+00	5,31E+01	6,79E+00	5,30E-04	MND	MND	MND	MND	MND	MND	MND	4,45E-02	7,11E-02	2,78E-01	4,79E-02	-5,30E+01
Non-re. PER as material	MJ	2,84E+01	0,00E+00	-4,98E-01	2,79E+01	0,00E+00	-2,56E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	-2,05E+01	-7,39E+00	0,00E+00
Total use of non-re. PER	MJ	7,47E+01	7,13E-01	5,60E+00	8,10E+01	6,79E+00	-2,51E-02	MND	MND	MND	MND	MND	MND	MND	4,45E-02	7,11E-02	-2,02E+01	-7,34E+00	-5,30E+01
Secondary materials	kg	4,46E-01	2,39E-04	5,67E-04	4,47E-01	3,49E-03	1,35E-06	MND	MND	MND	MND	MND	MND	MND	1,74E-05	1,97E-05	6,79E-04	2,61E-05	3,13E-01
Renew. secondary fuels	MJ	7,37E-03	2,50E-06	2,38E-05	7,39E-03	2,54E-05	9,42E-09	MND	MND	MND	MND	MND	MND	MND	5,70E-08	1,99E-07	1,48E-05	8,11E-07	-6,62E-05
Non-ren. secondary fuels	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of net fresh water	m^3	4,23E-02	9,51E-05	9,46E-03	5,19E-02	9,97E-04	4,71E-07	MND	MND	MND	MND	MND	MND	MND	2,70E-06	9,21E-06	5,68E-04	6,39E-05	-1,69E-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	5,30E-01	8,25E-04	8,64E-02	6,17E-01	1,28E-02	4,64E-06	MND	MND	MND	MND	MND	MND	MND	5,96E-05	9,43E-05	2,20E-03	0,00E+00	-7,19E-01
Non-hazardous waste	kg	5,67E+00	1,46E-02	5,81E-01	6,27E+00	2,23E-01	6,93E-04	MND	MND	MND	MND	MND	MND	MND	4,19E-04	1,55E-03	3,70E-01	2,09E-01	-1,48E+01
Radioactive waste	kg	6,82E-05	4,90E-06	3,20E-06	7,63E-05	4,65E-05	2,00E-09	MND	MND	MND	MND	MND	MND	MND	3,13E-07	4,76E-07	8,33E-07	0,00E+00	-1,29E-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	MND	MND	MND	MND	MND	MND	MND	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	0,00E+00	1,12E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	4,70E-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	3,60E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	3,30E-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	8,94E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	1,02E+01	0,00E+00	0,00E+00

ENVIRONMENTAL IMPACTS – EN 15804+A1, CML / ISO 21930

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	3,99E+00	4,68E-02	6,65E-01	4,71E+00	4,85E-01	9,97E-04	MND	MND	MND	MND	MND	MND	MND	3,27E-03	4,69E-03	8,25E-01	1,78E-02	-5,11E+00
Ozone depletion Pot.	kg CFC_{-11}e	1,20E-07	8,77E-09	3,87E-09	1,33E-07	8,01E-08	4,14E-12	MND	MND	MND	MND	MND	MND	MND	5,60E-10	8,63E-10	5,89E-09	5,23E-10	-1,37E-07
Acidification	kg SO_2e	1,87E-02	2,01E-04	2,92E-03	2,18E-02	6,24E-03	2,58E-07	MND	MND	MND	MND	MND	MND	MND	2,45E-05	1,56E-05	1,97E-04	1,23E-05	-4,15E-02
Eutrophication	kg PO_4^3e	5,83E-03	4,70E-05	7,73E-04	6,65E-03	8,96E-04	1,48E-06	MND	MND	MND	MND	MND	MND	MND	5,69E-06	3,55E-06	2,12E-04	1,23E-03	-1,18E-02
POCP (“smog”)	kg C_2H_4e	1,15E-03	6,53E-06	1,10E-04	1,26E-03	2,40E-04	4,43E-08	MND	MND	MND	MND	MND	MND	MND	5,36E-07	6,08E-07	8,32E-06	3,22E-06	-2,13E-03
ADP-elements	kg Sbe	3,49E-05	1,58E-07	6,48E-07	3,58E-05	4,87E-06	5,78E-10	MND	MND	MND	MND	MND	MND	MND	1,65E-09	1,07E-08	5,02E-07	7,03E-09	-5,07E-06
ADP-fossil	MJ	6,02E+01	7,13E-01	6,12E+00	6,71E+01	6,78E+00	5,30E-04	MND	MND	MND	MND	MND	MND	MND	4,45E-02	7,11E-02	2,78E-01	4,79E-02	-5,62E+01

ENVIRONMENTAL IMPACTS – GWP-GHG - THE INTERNATIONAL EPD SYSTEM

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	4,13E+00	4,72E-02	6,96E-01	4,88E+00	4,92E-01	8,77E-04	MND	MND	MND	MND	MND	MND	MND	3,31E-03	4,74E-03	8,24E-01	2,19E-02	-5,22E+00

9) This indicator includes all greenhouse gases excluding biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product as defined by IPCC AR 5 (IPCC 2013). In addition, the characterisation factors for the flows - CH4 fossil, CH4 biogenic and Dinitrogen monoxide - were updated in line with the guidance of IES PCR 1.2.5 Annex 1. This indicator is identical to the GWP-total of EN 15804:2012+A2:2019 except that the characterization factor for biogenic CO2 is set to zero.

APPENDIX

DECLARED PRODUCTS

Description	Product code	Weight [Kg/m]
16mm Insulated pipe		
16mmx6mmx100M	IPAP201 (white) IPAP301 (red) IPAP401 (blue)	0.167
16mmx9mmx50M	IPAP501 (white)	0.231
16mmx9mmx50M	IPAP601 (white)	
20mm Insulated pipe		
20mmx6mmx50M	IPAP202 (white) IPAP302 (red) IPAP402 (blue)	0.201
20mmx13mmx50M	IPAP502 (white)	0.250
20mmx13mmx50M	IPAP602 (white)	
26mm Insulated pipe		
26mmx8mmx25M	IPAP203 (white) IPAP303 (red) IPAP403 (blue)	0.342
26mmx8mmx50M	IPAP205 (white)	
26mmx13mmx25M	IPAP503 (white)	0.382
26mmx13mmx25M	IPAP603 (white)	
32mm Insulated pipe		
32mmx8mmx25M	IPAP204 (white) IPAP304 (red) IPAP404 (blue)	0.450
32mmx13mmx25M	IPAP504	0.484

Description	Product code	Weight [Kg/m]
16mm		
16mm x 4M	IPAP111	0.112
16mm x 100M	IPAP101	
16mm x 500M	IPAP105	
16mm x 200M	IPAP107	
20mm		
20mm x 4M	IPAP112	0.148
20mm x 100M	IPAP102	
26mm		
26mm x 4M	IPAP113	0.266
26mm x 50M	IPAP103	
32mm		
32mm x 4M	IPAP114	0.362
32mm x 50M	IPAP104	
40mm		
40mm x 4M	IPAP115	0.557
50mm		
50mm x 4M	IPAP116	0.797
63mm		
63mm x 4M	IPAP117	1.270

VERIFICATION STATEMENT

VERIFICATION PROCESS FOR THIS EPD

This EPD has been verified in accordance with ISO 14025 by an independent, third-party verifier by reviewing results, documents and compliancy with reference standard, ISO 14025 and ISO 14040/14044, following the process and checklists of the program operator for:

- This Environmental Product Declaration
- The Life-Cycle Assessment used in this EPD
- The digital background data for this EPD

Why does verification transparency matter? Read more online
This EPD has been generated by One Click LCA EPD generator, which has been verified and approved by the EPD Hub.

THIRD-PARTY VERIFICATION STATEMENT

I hereby confirm that, following detailed examination, I have not established any relevant deviations by the studied Environmental Product Declaration (EPD), its LCA and project report, in terms of the data collected and used in the LCA calculations, the way the LCA-based calculations have been carried out, the presentation of environmental data in the EPD, and other additional environmental information, as present with respect to the procedural and methodological requirements in ISO 14025:2010 and reference standard.

I confirm that the company-specific data has been examined as regards plausibility and consistency; the declaration owner is responsible for its factual integrity and legal compliance.

I confirm that I have sufficient knowledge and experience of construction products, this specific product category, the construction industry, relevant standards, and the geographical area of the EPD to carry out this verification.

I confirm my independence in my role as verifier; I have not been involved in the execution of the LCA or in the development of the declaration and have no conflicts of interest regarding this verification.

Sarah Curpen, as an authorized verifier acting for EPD Hub Limited.
28.02.2025