

ENVIRONMENTAL PRODUCT DECLARATION

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

Weholite (Nordics)
Uponor Corporation



EPD HUB, HUB-1148

Publishing date 21 February 2024, last updated on 21 February 2024, valid until 21 February 2029.

GENERAL INFORMATION

MANUFACTURER

Manufacturer	Uponor Corporation
Address	Ilmalantori 4, 00240 Helsinki, Finland
Contact details	info@uponor.com
Website	www.uponor.com

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 1.0, 1 Feb 2022
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	Dr. Shima Holder Hjort, Uponor Corporation
EPD verification	Independent verification of this EPD and data, according to ISO 14025: <input type="checkbox"/> Internal certification <input checked="" type="checkbox"/> External verification
EPD verifier	Magaly González Vázquez, 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	Weholite (Nordics)
Additional labels	
Product reference	1010041 1066599 1066620 1066621 1066623 1066625 1066626 1066627 1066629 1066630 1066632 1066633 1066634 1066638 1066639 1066640 1066643 1066646 1066650 1066654 1066657 1066661 1066664 1066668 1066669 1066672 1066675 1066679 1066682 1066690 1066693 1066696 1066703 1066717 1066829 1066830 1066831 1066832 1066833 1066834 1066835 1066836 1066837 1066838 1066840 1066841 1066842 1066843 1066844 1066847 1066849 1066851 1066854 1066855 1066857 1066858 1066859 1066862 1066863 1066864 1066865 1066870 1066871 1066872 1066873 1066875 1066876 1066879 1066882 1066883 1066886 1066887 1066890 1066894 1066897 1066900 1066901 1066904 1066907 1066908 1067095 1067096 1067097 1067098 1067099 1067100 1067101 1067102 1067103 1067104 1067105 1067106 1067107 1067108 1067109 1067110 1067111 1067112 1067113 1067114 1067563 1068716 1068721 1068723 1068724 1068726 1068729 1068738 1068740 1068759 1068765 1068767 1068769 1068770 1068773 1068775 1068778 1068781 1068783 1068785 1068788 1068791 1068793 1068796 1068797 1078209 1084808 1085253 1085254 1085779 1086407 1086640 1088200 1088201 1088966 1089612 1089613 1133068 1133069 1133070 1133071 1135486 1137650 1137651 1140069 1140235 1140411 1140412
Place of production	Industrivägen 11, 513 32 Fristad, Sweden; Kappelinmäentie 240, 65380 Vaasa, Finland
Period for data	2021

Averaging in EPD	No averaging
Variation in GWP-fossil for A1-A3	%

ENVIRONMENTAL DATA SUMMARY

Declared unit	1 kg of pipe
Declared unit mass	1 kg
GWP-fossil, A1-A3 (kgCO2e)	1,84E+00
GWP-total, A1-A3 (kgCO2e)	1,84E+00
Secondary material, inputs (%)	14,8
Secondary material, outputs (%)	2,94
Total energy use, A1-A3 (kWh)	8,47
Total water use, A1-A3 (m3e)	2,18E-02

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

Uponor is rethinking water for future generations. Our offering, including safe drinking water delivery, energy-efficient radiant heating and cooling and reliable infrastructure, enables a more sustainable living environment. We help our customers in residential and commercial construction, municipalities and utilities, as well as different industries to work faster and smarter. We employ about 3,800 professionals in 26 countries in Europe and North America. Over 100 years of expertise and trust form the basis of any successful partnership. This is the basis, on which they can build, in a literal and metaphorical sense. We create trust together with our partners: Customers, prospective customers and suppliers. We establish this with shared knowledge, quality and sustainable results.

PRODUCT DESCRIPTION

The patented wall structure of the Weholite pipe makes it possible to produce flexible and long-lasting lightweight PE pipes up to 3500 mm. Under normal operating conditions, the PE material is chemically resistant. Weholite does not rust or corrode due to chemical or electrical reactions in the soil. The material's excellent abrasion resistance and flexibility make Weholite a truly multifunctional pipe that can be easily and quickly installed thanks to its lightweight construction.

Further information can be found at www.uponor.com.

PRODUCT RAW MATERIAL MAIN COMPOSITION

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

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	1 kg of 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	MN	MN	MN	MN	MN	MN	MN	x	x	x	x	x		
Raw materials	Transport	Manufacturing	Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstr./demol.	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 stages are:

- Material conveying
- Extrusion (melting, material processing and coating)
- Pipe profile corrugation
- Cooling
- Winding and Welding
- Cutting
- Socketing (if the pipe is with socket)

The finished product is then transported to the warehouse for further delivery to customers.

MANUFACTURING PROCESS



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. The transportation distance is defined according to the PCR. The average distance of transportation from the production plant to the installation site is based on the actual sales average figures of the company in the local markets. The installation scenarios in Uponor’s infrastructure product EPDs are based on TEPPFA’s (The European Plastic Pipe and Fittings Association) industry averaged EPDs. These documents and their background reports include industry consensus estimates of the resource use, emissions and affluents of typical European installations; these parameters have been used as input for the Uponor EPD modelling. Environmental

PRODUCT USE AND MAINTENANCE (B1-B7)

This EPD does not cover the use phase. Air, soil, and water impacts during the use phase have not been studied.

PRODUCT END OF LIFE (C1-c4, D)

Since the consumption of energy and natural resources is negligible for disassembling of the end-of-life product, the impacts of demolition are assumed negligible (C1). After ca 100 years of service life 5% of the end-of-life product is assumed to be sent to the closest treatment facilities (C2). The collected 5% from the demolition site is sent to recycling (C3), whereas the remaining 95% is left inert under the ground (C4). Due to the recycling of PE, the end-of-life product is converted into recycled PE (D).

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

AVERAGES AND VARIABILITY

Type of average	No averaging
Averaging method	Not applicable
Variation in GWP-fossil for A1-A3	%

This EPD is product and factory specific and does not contain average calculations.

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. Ecoinvent v3.8 and One Click LCA databases were used 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 ₂ e	1,75E+00	4,84E-02	4,25E-02	1,84E+00	3,76E-02	1,19E-01	MND	MND	MND	MND	MND	MND	MND	2,67E-06	2,35E-04	3,74E-02	7,25E-03	2,92E-02
GWP – fossil	kg CO ₂ e	1,75E+00	4,83E-02	4,25E-02	1,84E+00	3,75E-02	1,19E-01	MND	MND	MND	MND	MND	MND	MND	2,66E-06	2,35E-04	3,74E-02	7,25E-03	2,91E-02
GWP – biogenic	kg CO ₂ e	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
GWP – LULUC	kg CO ₂ e	5,27E-04	1,78E-05	1,94E-05	5,64E-04	1,38E-05	1,49E-05	MND	MND	MND	MND	MND	MND	MND	8,74E-09	8,65E-08	4,21E-06	6,15E-06	7,02E-06
Ozone depletion pot.	kg CFC ₁₁ e	3,75E-08	1,11E-08	1,46E-09	5,01E-08	8,64E-09	2,52E-08	MND	MND	MND	MND	MND	MND	MND	1,77E-13	5,40E-11	7,19E-11	1,95E-09	3,91E-10
Acidification potential	mol H ⁺ e	6,21E-03	2,05E-04	1,18E-04	6,53E-03	1,59E-04	1,21E-03	MND	MND	MND	MND	MND	MND	MND	3,24E-08	9,93E-07	1,32E-05	5,44E-05	1,00E-04
EP-freshwater ²⁾	kg Pe	2,68E-05	3,96E-07	8,00E-07	2,80E-05	3,07E-07	9,32E-07	MND	MND	MND	MND	MND	MND	MND	1,89E-10	1,92E-09	5,67E-09	1,06E-07	3,68E-07
EP-marine	kg Ne	1,08E-03	6,08E-05	2,35E-05	1,16E-03	4,72E-05	5,35E-04	MND	MND	MND	MND	MND	MND	MND	3,64E-09	2,95E-07	6,37E-06	1,89E-05	1,69E-05
EP-terrestrial	mol Ne	1,18E-02	6,71E-04	2,45E-04	1,27E-02	5,21E-04	5,79E-03	MND	MND	MND	MND	MND	MND	MND	4,18E-08	3,26E-06	6,54E-05	2,07E-04	1,84E-04
POCP (“smog”) ³⁾	kg NMVOCe	5,82E-03	2,15E-04	8,99E-05	6,12E-03	1,67E-04	1,60E-03	MND	MND	MND	MND	MND	MND	MND	1,39E-08	1,04E-06	3,58E-05	5,96E-05	8,90E-05
ADP-minerals & metals ⁴⁾	kg Sbe	1,19E-05	1,13E-07	9,00E-07	1,29E-05	8,80E-08	8,41E-08	MND	MND	MND	MND	MND	MND	MND	5,80E-10	5,50E-10	1,27E-09	2,53E-08	1,93E-07
ADP-fossil resources	MJ	6,14E+01	7,26E-01	2,39E-01	6,24E+01	5,64E-01	1,59E+00	MND	MND	MND	MND	MND	MND	MND	2,99E-05	3,52E-03	5,78E-03	1,44E-01	1,04E+00
Water use ⁵⁾	m ³ e depr.	8,33E-01	3,25E-03	8,53E-03	8,44E-01	2,52E-03	7,68E-03	MND	MND	MND	MND	MND	MND	MND	1,14E-06	1,58E-05	6,17E-04	8,86E-04	1,20E-02

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	6,21E-08	5,57E-09	1,78E-09	6,94E-08	4,33E-09	3,20E-08	MND	MND	MND	MND	MND	MND	MND	2,82E-13	2,70E-11	1,74E-08	1,04E-09	1,06E-09
Ionizing radiation ⁶⁾	kBq U235e	1,16E-01	3,46E-03	1,22E-03	1,21E-01	2,68E-03	7,46E-03	MND	MND	MND	MND	MND	MND	MND	1,66E-07	1,68E-05	2,44E-05	7,69E-04	1,50E-03
Ecotoxicity (freshwater)	CTUe	9,55E+00	6,53E-01	7,32E-01	1,09E+01	5,07E-01	1,19E+00	MND	MND	MND	MND	MND	MND	MND	2,56E-04	3,17E-03	4,84E-01	1,13E-01	1,35E-01
Human toxicity, cancer	CTUh	5,23E-10	1,60E-11	1,00E-10	6,39E-10	1,25E-11	5,95E-11	MND	MND	MND	MND	MND	MND	MND	1,33E-14	7,79E-14	6,32E-11	4,85E-12	7,17E-12
Human tox. non-cancer	CTUh	1,12E-08	6,46E-10	8,62E-10	1,27E-08	5,02E-10	8,08E-10	MND	MND	MND	MND	MND	MND	MND	3,48E-13	3,14E-12	3,44E-10	9,06E-11	1,76E-10
SQP ⁷⁾	-	1,62E+00	8,36E-01	3,86E-01	2,84E+00	6,50E-01	2,18E-01	MND	MND	MND	MND	MND	MND	MND	3,08E-05	4,06E-03	1,55E-02	2,81E-01	2,33E-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	1,04E+00	8,18E-03	4,42E+00	5,47E+00	6,35E-03	1,35E-02	MND	MND	MND	MND	MND	MND	MND	3,90E-04	3,97E-05	1,29E-04	2,92E-03	1,47E-02
Renew. PER as material	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
Total use of renew. PER	MJ	1,04E+00	8,18E-03	4,42E+00	5,47E+00	6,35E-03	1,35E-02	MND	MND	MND	MND	MND	MND	MND	3,90E-04	3,97E-05	1,29E-04	2,92E-03	1,47E-02
Non-re. PER as energy	MJ	2,41E+01	7,26E-01	2,39E-01	2,50E+01	5,64E-01	1,59E+00	MND	MND	MND	MND	MND	MND	MND	3,00E-05	3,52E-03	5,78E-03	1,44E-01	5,62E-01
Non-re. PER as material	MJ	3,73E+01	0,00E+00	0,00E+00	3,73E+01	0,00E+00	0,00E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	-1,87E+00	-3,55E+01	0,00E+00
Total use of non-re. PER	MJ	6,14E+01	7,26E-01	2,39E-01	6,24E+01	5,64E-01	1,59E+00	MND	MND	MND	MND	MND	MND	MND	3,00E-05	3,52E-03	-1,86E+00	-3,53E+01	5,62E-01
Secondary materials	kg	1,48E-01	2,02E-04	1,55E-03	1,50E-01	1,57E-04	1,09E-03	MND	MND	MND	MND	MND	MND	MND	1,72E-07	9,78E-07	3,99E-06	5,80E-05	3,99E-05
Renew. secondary fuels	MJ	2,36E-05	2,03E-06	4,65E-06	3,03E-05	1,58E-06	2,19E-06	MND	MND	MND	MND	MND	MND	MND	6,61E-10	9,87E-09	2,42E-08	1,55E-06	3,96E-07
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	2,15E-02	9,40E-05	1,79E-04	2,18E-02	7,30E-05	1,62E-04	MND	MND	MND	MND	MND	MND	MND	3,14E-08	4,56E-07	1,84E-06	1,17E-04	3,09E-04

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	4,08E-02	9,63E-04	4,74E-03	4,65E-02	7,48E-04	3,13E-03	MND	MND	MND	MND	MND	MND	MND	4,68E-07	4,67E-06	1,10E-04	2,78E-04	6,72E-04
Non-hazardous waste	kg	1,14E+00	1,58E-02	4,13E-02	1,20E+00	1,23E-02	2,31E-02	MND	MND	MND	MND	MND	MND	MND	9,49E-06	7,68E-05	4,95E-03	4,18E-01	1,56E-02
Radioactive waste	kg	3,64E-05	4,86E-06	6,93E-07	4,20E-05	3,77E-06	1,09E-05	MND	MND	MND	MND	MND	MND	MND	8,68E-11	2,36E-08	3,28E-08	9,06E-07	4,46E-07

END OF LIFE – OUTPUT FLOWS

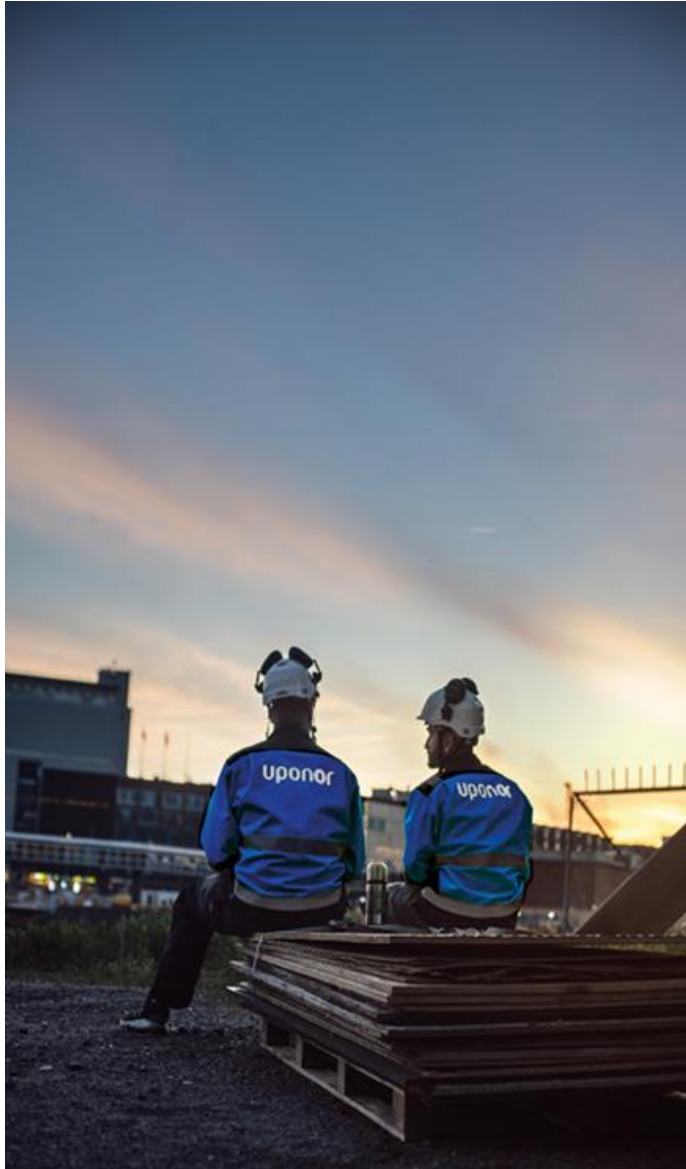
Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Components for re-use	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for recycling	kg	0,00E+00	0,00E+00	3,93E-03	3,93E-03	0,00E+00	3,70E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	5,00E-02	0,00E+00	0,00E+00
Materials for energy rec	kg	0,00E+00	0,00E+00	3,93E-03	3,93E-03	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
Exported energy	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

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 ₂ e	1,66E+00	4,78E-02	4,19E-02	1,75E+00	3,72E-02	1,17E-01	MND	MND	MND	MND	MND	MND	MND	2,59E-06	2,32E-04	3,50E-02	7,14E-03	2,75E-02
Ozone depletion Pot.	kg CFC ₁₁ e	3,26E-08	8,81E-09	1,27E-09	4,26E-08	6,84E-09	2,00E-08	MND	MND	MND	MND	MND	MND	MND	1,56E-13	4,27E-11	5,79E-11	1,55E-09	3,41E-10
Acidification	kg SO ₂ e	5,18E-03	1,59E-04	9,72E-05	5,44E-03	1,23E-04	8,61E-04	MND	MND	MND	MND	MND	MND	MND	2,76E-08	7,72E-07	9,36E-06	4,11E-05	8,39E-05
Eutrophication	kg PO ₄ ³ e	1,32E-03	3,62E-05	4,52E-05	1,40E-03	2,81E-05	2,09E-04	MND	MND	MND	MND	MND	MND	MND	1,00E-08	1,76E-07	7,76E-04	1,24E-05	1,86E-05
POCP ("smog")	kg C ₂ H ₄ e	5,28E-04	6,21E-06	6,73E-06	5,41E-04	4,82E-06	2,02E-05	MND	MND	MND	MND	MND	MND	MND	1,45E-09	3,01E-08	1,19E-05	1,57E-06	5,52E-06
ADP-elements	kg Sbe	1,19E-05	1,10E-07	8,91E-07	1,29E-05	8,52E-08	8,27E-08	MND	MND	MND	MND	MND	MND	MND	5,78E-10	5,33E-10	1,18E-09	2,45E-08	1,92E-07
ADP-fossil	MJ	6,14E+01	7,26E-01	2,39E-01	6,23E+01	5,64E-01	1,59E+00	MND	MND	MND	MND	MND	MND	MND	2,99E-05	3,52E-03	5,78E-03	1,44E-01	1,04E+00

ENVIRONMENTAL IMPACTS – TRACI 2.1. / 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 ₂ e	1,61E+00	4,79E-02	4,18E-02	1,70E+00	3,72E-02	1,18E-01	MND	MND	MND	MND	MND	MND	MND	2,58E-06	2,32E-04	3,41E-02	7,13E-03	2,67E-02
Ozone Depletion	kg CFC ₁₁ e	3,23E-08	8,80E-09	1,26E-09	4,24E-08	6,84E-09	2,00E-08	MND	MND	MND	MND	MND	MND	MND	1,54E-13	4,27E-11	5,79E-11	1,55E-09	3,38E-10
Acidification	kg SO ₂ e	2,73E-01	9,73E-03	5,25E-03	2,88E-01	7,56E-03	6,21E-02	MND	MND	MND	MND	MND	MND	MND	1,36E-06	4,72E-05	9,04E-04	2,67E-03	4,39E-03
Eutrophication	kg Ne	2,00E-04	2,04E-05	8,11E-06	2,28E-04	1,58E-05	1,01E-04	MND	MND	MND	MND	MND	MND	MND	9,99E-10	9,88E-08	1,23E-06	4,52E-06	2,91E-06
POCP ("smog")	kg O ₃ e	3,25E-03	1,57E-04	5,67E-05	3,46E-03	1,22E-04	1,36E-03	MND	MND	MND	MND	MND	MND	MND	8,83E-09	7,63E-07	2,90E-05	4,88E-05	4,52E-05
ADP-fossil	MJ	8,44E+00	9,93E-02	2,11E-02	8,56E+00	7,71E-02	2,22E-01	MND	MND	MND	MND	MND	MND	MND	2,50E-06	4,82E-04	7,78E-04	1,91E-02	1,45E-01



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.

Magaly González Vázquez, as an authorized verifier acting for EPD Hub Limited
21.02.2024



ANNEX 1: CONVERSION TABLE FOR PRODUCT STAGE (A1-A3) GWP – EN 15804+A2, PEF

Product Number	Product Description	Unit Product Weight (kg/m of pipe)	GWP – total, Stages A1-A3 (kg CO2e/m of pipe)	Product Length (m)	GWP – total, Stages A1-A3 (kg CO2e)
1010041	WEHOLITE PIPE 800 SN8 BLACK SPECIAL LENGTH PP	39,00	7,18E+1	#N/A	#N/A
1066599	WEHOLITE PIPE THREAD 1575/1400 SN8 BLACK SPECIAL LENGTH PE	156,14	2,87E+2	#N/A	#N/A
1066620	WEHOLITE SOCKET PIPE 450/400 SN8 BLACK 6M PE	12,15	2,24E+1	6	1,34E+2
1066621	WEHOLITE SOCKET PIPE 450/400 SN8 BLACK 12M PE	12,15	2,24E+1	12	2,68E+2
1066623	WEHOLITE SOCKET PIPE 560/500 SN8 BLACK 6M PE	21,04	3,87E+1	6	2,32E+2
1066625	WEHOLITE SOCKET PIPE 560/500 SN8 BLACK SPECIAL LENGTH PE	21,04	3,87E+1	#N/A	#N/A
1066626	WEHOLITE SOCKET PIPE 675/600 SN8 BLACK 6M PE	28,50	5,24E+1	6	3,15E+2
1066627	WEHOLITE SOCKET PIPE 675/600 SN8 BLACK 12M PE	28,50	5,24E+1	12	6,29E+2
1066629	WEHOLITE SOCKET PIPE 788/700 SN8 BLACK 6M PE	36,37	6,69E+1	6	4,02E+2
1066630	WEHOLITE SOCKET PIPE 788/700 SN8 BLACK 12M PE	38,75	7,13E+1	12	8,56E+2
1066632	WEHOLITE SOCKET PIPE 900/800 SN8 BLACK 6M PE	47,92	8,82E+1	6	5,29E+2
1066633	WEHOLITE SOCKET PIPE 900/800 SN8 BLACK 12M PE	47,92	8,82E+1	12	1,06E+3
1066634	WEHOLITE SOCKET PIPE 900/800 SN8 BLACK SPECIAL LENGTH PE	47,92	8,82E+1	#N/A	#N/A
1066638	WEHOLITE SOCKET PIPE 1125/1000 SN8 BLACK 6M PE	74,24	1,37E+2	6	8,20E+2
1066639	WEHOLITE SOCKET PIPE 1125/1000 SN8 BLACK 12M PE	74,24	1,37E+2	12	1,64E+3
1066640	WEHOLITE SOCKET PIPE 1125/1000 SN8 BLACK SPECIAL LENGTH PE	74,24	1,37E+2	#N/A	#N/A
1066643	WEHOLITE PIPE Z-JOINT 338/300 SN8 BLACK SPECIAL LENGTH PE	6,47	1,19E+1	#N/A	#N/A
1066646	WEHOLITE PIPE Z-JOINT 450/400 SN8 BLACK SPECIAL LENGTH PE	12,15	2,24E+1	#N/A	#N/A
1066650	WEHOLITE PIPE Z-JOINT 560/500 SN8 BLACK SPECIAL LENGTH PE	21,04	3,87E+1	#N/A	#N/A
1066654	WEHOLITE PIPE Z-JOINT 675/600 SN8 BLACK SPECIAL LENGTH PE	28,50	5,24E+1	#N/A	#N/A
1066657	WEHOLITE PIPE Z-JOINT 788/700 SN8 BLACK SPECIAL LENGTH PE	36,37	6,69E+1	#N/A	#N/A
1066661	WEHOLITE PIPE Z-JOINT 900/800 SN8 BLACK SPECIAL LENGTH PE	47,92	8,82E+1	#N/A	#N/A
1066664	WEHOLITE PIPE Z-JOINT 1013/900 SN8 BLACK SPECIAL LENGTH PE	59,66	1,10E+2	#N/A	#N/A
1066668	WEHOLITE PIPE Z-JOINT 1125/1000 SN8 BLACK SPECIAL LENGTH PE100	74,24	1,37E+2	#N/A	#N/A
1066669	WEHOLITE PIPE Z-JOINT 1300/1200 SN2 BLACK SPECIAL LENGTH PE	55,20	1,02E+2	#N/A	#N/A
1066672	WEHOLITE PIPE Z-JOINT 1325/1200 SN4 BLACK SPECIAL LENGTH PE	72,00	1,32E+2	#N/A	#N/A
1066675	WEHOLITE PIPE Z-JOINT 1350/1200 SN8 BLACK SPECIAL LENGTH PE	115,31	2,12E+2	#N/A	#N/A
1066679	WEHOLITE PIPE Z-JOINT 1550/1400 SN4 BLACK SPECIAL LENGTH PE	98,00	1,80E+2	#N/A	#N/A
1066682	WEHOLITE PIPE Z-JOINT 1575/1400 SN8 BLACK SPECIAL LENGTH PE	156,14	2,87E+2	#N/A	#N/A
1066690	WEHOLITE PIPE Z-JOINT 1725/1600 SN2 BLACK SPECIAL LENGTH PE	92,50	1,70E+2	#N/A	#N/A
1066693	WEHOLITE PIPE Z-JOINT 1775/1600 SN4 BLACK SPECIAL LENGTH PE	124,00	2,28E+2	#N/A	#N/A
1066696	WEHOLITE PIPE Z-JOINT 1792/1600 SN8 BLACK SPECIAL LENGTH PE	227,15	4,18E+2	#N/A	#N/A
1066703	WEHOLITE PIPE Z-JOINT 2016/1800 SN8 BLACK SPECIAL LENGTH PE	287,67	5,29E+2	#N/A	#N/A

1066717	WEHOLITE PIPE Z-JOINT 2440/2200 SN8 BLACK SPECIAL LENGTH PE	398,00	7,32E+2	#N/A	#N/A
1066829	WEHOLITE PIPE 338/300 SN8 BLACK SPECIAL LENGTH PE	6,47	1,19E+1	#N/A	#N/A
1066830	WEHOLITE PIPE 450/400 SN8 BLACK 6M PE	12,15	2,24E+1	6	1,34E+2
1066831	WEHOLITE PIPE 450/400 SN8 BLACK 12M PE	12,15	2,24E+1	12	2,68E+2
1066832	WEHOLITE PIPE 450/400 SN8 BLACK SPECIAL LENGTH PE	12,15	2,24E+1	#N/A	#N/A
1066833	WEHOLITE PIPE 560/500 SN8 BLACK 6M PE	21,04	3,87E+1	6	2,32E+2
1066834	WEHOLITE PIPE 560/500 SN8 BLACK 12M PE	21,04	3,87E+1	12	4,65E+2
1066835	WEHOLITE PIPE 560/500 SN8 BLACK SPECIAL LENGTH PE	21,04	3,87E+1	#N/A	#N/A
1066836	WEHOLITE PIPE 675/600 SN8 BLACK 6M PE	28,50	5,24E+1	6	3,15E+2
1066837	WEHOLITE PIPE 675/600 SN8 BLACK 12M PE	28,50	5,24E+1	12	6,29E+2
1066838	WEHOLITE PIPE 675/600 SN8 BLACK SPECIAL LENGTH PE	28,50	5,24E+1	#N/A	#N/A
1066840	WEHOLITE PIPE 788/700 SN8 BLACK 12M PE	36,37	6,69E+1	12	8,03E+2
1066841	WEHOLITE PIPE 788/700 SN8 BLACK SPECIAL LENGTH PE	36,37	6,69E+1	#N/A	#N/A
1066842	WEHOLITE PIPE 900/800 SN8 BLACK 6M PE	47,92	8,82E+1	6	5,29E+2
1066843	WEHOLITE PIPE 900/800 SN8 BLACK 12M PE	47,92	8,82E+1	12	1,06E+3
1066844	WEHOLITE PIPE 900/800 SN8 BLACK SPECIAL LENGTH PE	47,92	8,82E+1	#N/A	#N/A
1066847	WEHOLITE PIPE 1013/900 SN8 BLACK SPECIAL LENGTH PE	59,66	1,10E+2	#N/A	#N/A
1066849	WEHOLITE PIPE 1125/1000 SN8 BLACK 6M PE	74,24	1,37E+2	6	8,20E+2
1066851	WEHOLITE PIPE 1125/1000 SN8 BLACK SPECIAL LENGTH PE	82,00	1,51E+2	#N/A	#N/A
1066854	WEHOLITE PIPE 1325/1200 SN4 BLACK 12M PE	72,00	1,32E+2	12	1,59E+3
1066855	WEHOLITE PIPE 1325/1200 SN4 BLACK SPECIAL LENGTH PE	72,00	1,32E+2	#N/A	#N/A
1066857	WEHOLITE PIPE 1350/1200 SN8 BLACK 12M PE	115,31	2,12E+2	12	2,55E+3
1066858	WEHOLITE PIPE 1350/1200 SN8 BLACK SPECIAL LENGTH PE	115,31	2,12E+2	#N/A	#N/A
1066859	WEHOLITE PIPE 1525/1400 SN2 BLACK SPECIAL LENGTH PE	75,33	1,39E+2	#N/A	#N/A
1066862	WEHOLITE PIPE 1550/1400 SN4 BLACK SPECIAL LENGTH PE	98,00	1,80E+2	#N/A	#N/A
1066863	WEHOLITE PIPE 1575/1400 SN8 BLACK 6M PE	156,14	2,87E+2	6	1,72E+3
1066864	WEHOLITE PIPE 1575/1400 SN8 BLACK 12M PE	156,14	2,87E+2	12	3,45E+3
1066865	WEHOLITE PIPE 1575/1400 SN8 BLACK SPECIAL LENGTH PE	156,14	2,87E+2	#N/A	#N/A
1066870	WEHOLITE PIPE 1680/1500 SN8 BLACK 6M PE	200,19	3,68E+2	6	2,21E+3
1066871	WEHOLITE PIPE 1680/1500 SN8 BLACK 12M PE	200,19	3,68E+2	12	4,42E+3
1066872	WEHOLITE PIPE 1680/1500 SN8 BLACK SPECIAL LENGTH PE	200,19	3,68E+2	#N/A	#N/A
1066873	WEHOLITE PIPE 1725/1600 SN2 BLACK SPECIAL LENGTH PE	92,50	1,70E+2	#N/A	#N/A
1066875	WEHOLITE PIPE 1775/1600 SN4 BLACK 12M PE	124,00	2,28E+2	12	2,74E+3
1066876	WEHOLITE PIPE 1775/1600 SN4 BLACK SPECIAL LENGTH PE	124,00	2,28E+2	#N/A	#N/A
1066879	WEHOLITE PIPE 1792/1600 SN8 BLACK SPECIAL LENGTH PE	227,15	4,18E+2	#N/A	#N/A
1066882	WEHOLITE PIPE 1992/1800 SN4 BLACK 12M PE	164,00	3,02E+2	12	3,62E+3
1066883	WEHOLITE PIPE 1992/1800 SN4 BLACK SPECIAL LENGTH PE	164,00	3,02E+2	#N/A	#N/A
1066886	WEHOLITE PIPE 2016/1800 SN8 BLACK SPECIAL LENGTH PE	287,67	5,29E+2	#N/A	#N/A
1066887	WEHOLITE PIPE 2175/2000 SN2 BLACK SPECIAL LENGTH PE	162,84	3,00E+2	#N/A	#N/A
1066890	WEHOLITE PIPE 2216/2000 SN4 BLACK SPECIAL LENGTH PE	209,00	3,85E+2	#N/A	#N/A

1066894	WEHOLITE PIPE 2380/2200 SN2 BLACK SPECIAL LENGTH PE	212,18	3,90E+2	#N/A	#N/A
1066897	WEHOLITE PIPE 2440/2200 SN4 BLACK SPECIAL LENGTH PE	246,00	4,53E+2	#N/A	#N/A
1066900	WEHOLITE PIPE 2440/2200 SN8 BLACK SPECIAL LENGTH PE	398,00	7,32E+2	#N/A	#N/A
1066901	WEHOLITE PIPE 2592/2400 SN2 BLACK SPECIAL LENGTH PE	247,11	4,55E+2	#N/A	#N/A
1066904	WEHOLITE PIPE 2640/2400 SN4 BLACK SPECIAL LENGTH PE	318,00	5,85E+2	#N/A	#N/A
1066907	WEHOLITE PIPE 2640/2400 SN8 BLACK SPECIAL LENGTH PE	451,00	8,30E+2	#N/A	#N/A
1066908	WEHOLITE PIPE 3320/3000 SN4 BLACK SPECIAL LENGTH PE	681,00	1,25E+3	#N/A	#N/A
1067095	WEHOLITE CHAMBER PIPE 866/800 SN2 SPECIAL LENGTH PE	25,20	4,64E+1	#N/A	#N/A
1067096	WEHOLITE CHAMBER PIPE 900/800 SN4 SPECIAL LENGTH PE	38,92	7,16E+1	#N/A	#N/A
1067097	WEHOLITE CHAMBER PIPE 1088/1000 SN2 SPECIAL LENGTH PE	40,60	7,47E+1	#N/A	#N/A
1067098	WEHOLITE CHAMBER PIPE 1125/1000 SN4 SPECIAL LENGTH PE	60,00	1,10E+2	#N/A	#N/A
1067099	WEHOLITE CHAMBER PIPE 1300/1200 SN2 SPECIAL LENGTH PE	55,20	1,02E+2	#N/A	#N/A
1067100	WEHOLITE CHAMBER PIPE 1325/1200 SN4 SPECIAL LENGTH PE	72,00	1,32E+2	#N/A	#N/A
1067101	WEHOLITE CHAMBER PIPE 1525/1400 SN2 SPECIAL LENGTH PE	75,33	1,39E+2	#N/A	#N/A
1067102	WEHOLITE CHAMBER PIPE 1550/1400 SN4 SPECIAL LENGTH PE	98,00	1,80E+2	#N/A	#N/A
1067103	WEHOLITE CHAMBER PIPE 1625/1500 SN2 SPECIAL LENGTH PE	82,55	1,52E+2	#N/A	#N/A
1067104	WEHOLITE CHAMBER PIPE 1665/1500 SN4 SPECIAL LENGTH PE	111,00	2,04E+2	#N/A	#N/A
1067105	WEHOLITE CHAMBER PIPE 1725/1600 SN2 SPECIAL LENGTH PE	92,50	1,70E+2	#N/A	#N/A
1067106	WEHOLITE CHAMBER PIPE 1775/1600 SN4 SPECIAL LENGTH PE	124,00	2,28E+2	#N/A	#N/A
1067107	WEHOLITE CHAMBER PIPE 1950/1800 SN2 SPECIAL LENGTH PE	125,59	2,31E+2	#N/A	#N/A
1067108	WEHOLITE CHAMBER PIPE 1992/1800 SN4 SPECIAL LENGTH PE	164,00	3,02E+2	#N/A	#N/A
1067109	WEHOLITE CHAMBER PIPE 2175/2000 SN2 SPECIAL LENGTH PE	162,84	3,00E+2	#N/A	#N/A
1067110	WEHOLITE CHAMBER PIPE 2216/2000 SN4 SPECIAL LENGTH PE	209,00	3,85E+2	#N/A	#N/A
1067111	WEHOLITE CHAMBER PIPE 2380/2200 SN2 SPECIAL LENGTH PE	212,18	3,90E+2	#N/A	#N/A
1067112	WEHOLITE CHAMBER PIPE 2440/2200 SN4 SPECIAL LENGTH PE	246,00	4,53E+2	#N/A	#N/A
1067113	WEHOLITE CHAMBER PIPE 2592/2400 SN2 SPECIAL LENGTH PE	247,11	4,55E+2	#N/A	#N/A
1067114	WEHOLITE CHAMBER PIPE 2640/2400 SN4 SPECIAL LENGTH PE	318,00	5,85E+2	#N/A	#N/A
1067563	WEHOLITE PIPE 900/800 SN4 BLACK SPECIAL LENGTH PE	39,30	7,23E+1	#N/A	#N/A
1068716	WEHOLITE MULTI PIPE THREAD 1075/1000 6M PE	39,86	7,33E+1	6	4,40E+2
1068721	WEHOLITE PIPE 1125/1000 SN4 BLACK SPECIAL LENGTH PE	58,20	1,07E+2	#N/A	#N/A
1068723	WEHOLITE PIPE THREAD 1125/1000 SN4 BLACK 6M PE	58,20	1,07E+2	6	6,43E+2
1068724	WEHOLITE PIPE 1125/1000 SN4 BLACK 12M PE	58,20	1,07E+2	12	1,29E+3
1068726	WEHOLITE PIPE THREAD 1325/1200 SN4 BLACK 6M PE	79,72	1,47E+2	6	8,80E+2
1068729	WEHOLITE PIPE THREAD 1550/1400 SN4 BLACK 6M PE	98,60	1,81E+2	6	1,09E+3
1068738	WEHOLITE PIPE THREAD 1775/1600 SN4 BLACK 6M PE	128,30	2,36E+2	6	1,42E+3
1068740	WEHOLITE PIPE 1800/1600 SN8 BLACK SPECIAL LENGTH PE	227,15	4,18E+2	#N/A	#N/A
1068759	WEHOLITE PIPE 2664/2400 SN8 BLACK SPECIAL LENGTH PE	447,00	8,22E+2	#N/A	#N/A
1068765	WEHOLITE MULTI PIPE THREAD 400/372 6M PE	7,71	1,42E+1	6	8,51E+1
1068767	WEHOLITE SOCKET PIPE 400/360 SN4 BLACK 6M PE	9,15	1,68E+1	6	1,01E+2
1068769	WEHOLITE PIPE THREAD 400/360 SN4 BLACK 6M PE	8,53	1,57E+1	6	9,42E+1

1068770	WEHOLITE PIPE 400/360 SN8 BLACK SPECIAL LENGTH PE	10,79	1,99E+1	#N/A	#N/A
1068773	WEHOLITE SOCKET PIPE 450/400 SN4 BLACK 6M PE	10,97	2,02E+1	6	1,21E+2
1068775	WEHOLITE PIPE THREAD 450/400 SN4 BLACK 6M PE	10,12	1,86E+1	6	1,12E+2
1068778	WEHOLITE PIPE 560/500 SN4 BLACK SPECIAL LENGTH PE	14,39	2,65E+1	#N/A	#N/A
1068781	WEHOLITE PIPE THREAD 560/500 SN4 BLACK 6M PE	14,39	2,65E+1	6	1,59E+2
1068783	WEHOLITE MULTI PIPE THREAD 650/600 6M PE	15,20	2,80E+1	6	1,68E+2
1068785	WEHOLITE PIPE 675/600 SN4 BLACK SPECIAL LENGTH PE	20,63	3,80E+1	#N/A	#N/A
1068788	WEHOLITE PIPE THREAD 675/600 SN4 BLACK 6M PE	20,63	3,80E+1	6	2,28E+2
1068791	WEHOLITE SOCKET PIPE 788/700 SN4 BLACK 6M PE	31,96	5,88E+1	6	3,53E+2
1068793	WEHOLITE MULTI PIPE THREAD 860/800 6M PE	28,54	5,25E+1	6	3,15E+2
1068796	WEHOLITE PIPE THREAD 900/800 SN4 BLACK 6M PE	36,78	6,77E+1	6	4,06E+2
1068797	WEHOLITE SOCKET PIPE 1125/1000 SN4 BLACK 6M PE	62,20	1,14E+2	6	6,87E+2
1078209	WEHOLITE PIPE 788/700 SN4 BLACK SPECIAL LENGTH PE	29,74	5,47E+1	#N/A	#N/A
1084808	WEHOLITE PIPE 3240/3000 SN2 BLACK SPECIAL LENGTH PE	350,00	6,44E+2	#N/A	#N/A
1085253	WEHOLITE PIPE 2716/2500 SN2 BLACK SPECIAL LENGTH PE	266,00	4,89E+2	#N/A	#N/A
1085254	WEHOLITE PIPE 2764/2500 SN4 BLACK SPECIAL LENGTH PE	328,00	6,04E+2	#N/A	#N/A
1085779	WEHOLITE PIPE 2264/2000 SN8 BLACK SPECIAL LENGTH PE	313,00	5,76E+2	#N/A	#N/A
1086407	WEHOLITE PIPE 975/900 SN2 BLACK SPECIAL LENGTH PE	32,00	5,89E+1	#N/A	#N/A
1086640	WEHOLITE PIPE 2200/2000 SN4 BLACK PN1 SPECIAL LENGTH PP	0,00	0,00E+0	#N/A	#N/A
1088200	WEHOLITE PIPE 3664/3400 WHITE INSIDE SN2 SPECIAL LENGTH PE	490,00	9,02E+2	#N/A	#N/A
1088201	WEHOLITE PIPE 3740/3400 SN4 SPECIAL LENGTH PE	625,00	1,15E+3	#N/A	#N/A
1088966	WEHOLITE PIPE 1200 SN4 BLACK SPECIAL LENGTH PP	55,70	1,02E+2	#N/A	#N/A
1089612	WEHOLITE PIPE 3864/3500 SN4 BLACK SPECIAL LENGTH PE	634,00	1,17E+3	#N/A	#N/A
1089613	WEHOLITE PIPE 2820/2500 SN8 BLACK SPECIAL LENGTH PE	473,00	8,70E+2	#N/A	#N/A
1133068	WEHOLITE PIPE NPM 1125/1000 SN4 BLACK SPECIAL LENGTH PE	58,20	1,07E+2	#N/A	#N/A
1133069	WEHOLITE PIPE NPM 1125/1000 SN8 BLACK SPECIAL LENGTH PE	74,24	1,37E+2	#N/A	#N/A
1133070	WEHOLITE PIPE NPM 1325/1200 SN4 BLACK SPECIAL LENGTH PE	72,00	1,32E+2	#N/A	#N/A
1133071	WEHOLITE PIPE NPM 1350/1200 SN8 BLACK SPECIAL LENGTH PE	115,31	2,12E+2	#N/A	#N/A
1135486	WEHOLITE CHAMBER PIPE 3520/3200 SN4 SPECIAL LENGTH PE	635,00	1,17E+3	#N/A	#N/A
1137650	WEHOLITE CHAMBER PIPE 3240/3000 SN2 6M PE	0,00	0,00E+0	6	0,00E+0
1137651	WEHOLITE CHAMBER PIPE 3240/3000 SN2 12M PE	0,00	0,00E+0	12	0,00E+0
1140069	WEHOLITE CHAMBER PIPE 2016/1800 SN8 SPECIAL LENGTH PE	0,00	0,00E+0	#N/A	#N/A
1140235	WEHOLITE PIPE 760/700 SN2 BLACK SPECIAL LENGTH PP	22,64	4,17E+1	#N/A	#N/A
1140411	WEHOLITE PIPE 675/600 SN8 SPECIAL LENGTH PP	0,00	0,00E+0	#N/A	#N/A
1140412	WEHOLITE PIPE 900/800 SN8 SPECIAL LENGTH PP	0,00	0,00E+0	#N/A	#N/A

ANNEX 2: CONVERSION TABLE FOR PRODUCT STAGE (A1-A3) GWP – EN 15804+A1, CML/ISO 21930

Product Number	Product Description	Unit Product Weight (kg/m of pipe)	GWP – total, Stages A1-A3 (kg CO2e/m of pipe)	Product Length (m)	GWP – total, Stages A1-A3 (kg CO2e)
1010041	WEHOLITE PIPE 800 SN8 BLACK SPECIAL LENGTH PP	39,00	6,83E+1	#N/A	#N/A
1066599	WEHOLITE PIPE THREAD 1575/1400 SN8 BLACK SPECIAL LENGTH PE	156,14	2,73E+2	#N/A	#N/A
1066620	WEHOLITE SOCKET PIPE 450/400 SN8 BLACK 6M PE	12,15	2,13E+1	6	1,28E+2
1066621	WEHOLITE SOCKET PIPE 450/400 SN8 BLACK 12M PE	12,15	2,13E+1	12	2,55E+2
1066623	WEHOLITE SOCKET PIPE 560/500 SN8 BLACK 6M PE	21,04	3,68E+1	6	2,21E+2
1066625	WEHOLITE SOCKET PIPE 560/500 SN8 BLACK SPECIAL LENGTH PE	21,04	3,68E+1	#N/A	#N/A
1066626	WEHOLITE SOCKET PIPE 675/600 SN8 BLACK 6M PE	28,50	4,99E+1	6	2,99E+2
1066627	WEHOLITE SOCKET PIPE 675/600 SN8 BLACK 12M PE	28,50	4,99E+1	12	5,99E+2
1066629	WEHOLITE SOCKET PIPE 788/700 SN8 BLACK 6M PE	36,37	6,36E+1	6	3,82E+2
1066630	WEHOLITE SOCKET PIPE 788/700 SN8 BLACK 12M PE	38,75	6,78E+1	12	8,14E+2
1066632	WEHOLITE SOCKET PIPE 900/800 SN8 BLACK 6M PE	47,92	8,39E+1	6	5,03E+2
1066633	WEHOLITE SOCKET PIPE 900/800 SN8 BLACK 12M PE	47,92	8,39E+1	12	1,01E+3
1066634	WEHOLITE SOCKET PIPE 900/800 SN8 BLACK SPECIAL LENGTH PE	47,92	8,39E+1	#N/A	#N/A
1066638	WEHOLITE SOCKET PIPE 1125/1000 SN8 BLACK 6M PE	74,24	1,30E+2	6	7,80E+2
1066639	WEHOLITE SOCKET PIPE 1125/1000 SN8 BLACK 12M PE	74,24	1,30E+2	12	1,56E+3
1066640	WEHOLITE SOCKET PIPE 1125/1000 SN8 BLACK SPECIAL LENGTH PE	74,24	1,30E+2	#N/A	#N/A
1066643	WEHOLITE PIPE Z-JOINT 338/300 SN8 BLACK SPECIAL LENGTH PE	6,47	1,13E+1	#N/A	#N/A
1066646	WEHOLITE PIPE Z-JOINT 450/400 SN8 BLACK SPECIAL LENGTH PE	12,15	2,13E+1	#N/A	#N/A
1066650	WEHOLITE PIPE Z-JOINT 560/500 SN8 BLACK SPECIAL LENGTH PE	21,04	3,68E+1	#N/A	#N/A
1066654	WEHOLITE PIPE Z-JOINT 675/600 SN8 BLACK SPECIAL LENGTH PE	28,50	4,99E+1	#N/A	#N/A
1066657	WEHOLITE PIPE Z-JOINT 788/700 SN8 BLACK SPECIAL LENGTH PE	36,37	6,36E+1	#N/A	#N/A
1066661	WEHOLITE PIPE Z-JOINT 900/800 SN8 BLACK SPECIAL LENGTH PE	47,92	8,39E+1	#N/A	#N/A
1066664	WEHOLITE PIPE Z-JOINT 1013/900 SN8 BLACK SPECIAL LENGTH PE	59,66	1,04E+2	#N/A	#N/A
1066668	WEHOLITE PIPE Z-JOINT 1125/1000 SN8 BLACK SPECIAL LENGTH PE100	74,24	1,30E+2	#N/A	#N/A
1066669	WEHOLITE PIPE Z-JOINT 1300/1200 SN2 BLACK SPECIAL LENGTH PE	55,20	9,66E+1	#N/A	#N/A
1066672	WEHOLITE PIPE Z-JOINT 1325/1200 SN4 BLACK SPECIAL LENGTH PE	72,00	1,26E+2	#N/A	#N/A
1066675	WEHOLITE PIPE Z-JOINT 1350/1200 SN8 BLACK SPECIAL LENGTH PE	115,31	2,02E+2	#N/A	#N/A
1066679	WEHOLITE PIPE Z-JOINT 1550/1400 SN4 BLACK SPECIAL LENGTH PE	98,00	1,72E+2	#N/A	#N/A
1066682	WEHOLITE PIPE Z-JOINT 1575/1400 SN8 BLACK SPECIAL LENGTH PE	156,14	2,73E+2	#N/A	#N/A
1066690	WEHOLITE PIPE Z-JOINT 1725/1600 SN2 BLACK SPECIAL LENGTH PE	92,50	1,62E+2	#N/A	#N/A
1066693	WEHOLITE PIPE Z-JOINT 1775/1600 SN4 BLACK SPECIAL LENGTH PE	124,00	2,17E+2	#N/A	#N/A
1066696	WEHOLITE PIPE Z-JOINT 1792/1600 SN8 BLACK SPECIAL LENGTH PE	227,15	3,98E+2	#N/A	#N/A
1066703	WEHOLITE PIPE Z-JOINT 2016/1800 SN8 BLACK SPECIAL LENGTH PE	287,67	5,03E+2	#N/A	#N/A

1066717	WEHOLITE PIPE Z-JOINT 2440/2200 SN8 BLACK SPECIAL LENGTH PE	398,00	6,97E+2	#N/A	#N/A
1066829	WEHOLITE PIPE 338/300 SN8 BLACK SPECIAL LENGTH PE	6,47	1,13E+1	#N/A	#N/A
1066830	WEHOLITE PIPE 450/400 SN8 BLACK 6M PE	12,15	2,13E+1	6	1,28E+2
1066831	WEHOLITE PIPE 450/400 SN8 BLACK 12M PE	12,15	2,13E+1	12	2,55E+2
1066832	WEHOLITE PIPE 450/400 SN8 BLACK SPECIAL LENGTH PE	12,15	2,13E+1	#N/A	#N/A
1066833	WEHOLITE PIPE 560/500 SN8 BLACK 6M PE	21,04	3,68E+1	6	2,21E+2
1066834	WEHOLITE PIPE 560/500 SN8 BLACK 12M PE	21,04	3,68E+1	12	4,42E+2
1066835	WEHOLITE PIPE 560/500 SN8 BLACK SPECIAL LENGTH PE	21,04	3,68E+1	#N/A	#N/A
1066836	WEHOLITE PIPE 675/600 SN8 BLACK 6M PE	28,50	4,99E+1	6	2,99E+2
1066837	WEHOLITE PIPE 675/600 SN8 BLACK 12M PE	28,50	4,99E+1	12	5,99E+2
1066838	WEHOLITE PIPE 675/600 SN8 BLACK SPECIAL LENGTH PE	28,50	4,99E+1	#N/A	#N/A
1066840	WEHOLITE PIPE 788/700 SN8 BLACK 12M PE	36,37	6,36E+1	12	7,64E+2
1066841	WEHOLITE PIPE 788/700 SN8 BLACK SPECIAL LENGTH PE	36,37	6,36E+1	#N/A	#N/A
1066842	WEHOLITE PIPE 900/800 SN8 BLACK 6M PE	47,92	8,39E+1	6	5,03E+2
1066843	WEHOLITE PIPE 900/800 SN8 BLACK 12M PE	47,92	8,39E+1	12	1,01E+3
1066844	WEHOLITE PIPE 900/800 SN8 BLACK SPECIAL LENGTH PE	47,92	8,39E+1	#N/A	#N/A
1066847	WEHOLITE PIPE 1013/900 SN8 BLACK SPECIAL LENGTH PE	59,66	1,04E+2	#N/A	#N/A
1066849	WEHOLITE PIPE 1125/1000 SN8 BLACK 6M PE	74,24	1,30E+2	6	7,80E+2
1066851	WEHOLITE PIPE 1125/1000 SN8 BLACK SPECIAL LENGTH PE	82,00	1,44E+2	#N/A	#N/A
1066854	WEHOLITE PIPE 1325/1200 SN4 BLACK 12M PE	72,00	1,26E+2	12	1,51E+3
1066855	WEHOLITE PIPE 1325/1200 SN4 BLACK SPECIAL LENGTH PE	72,00	1,26E+2	#N/A	#N/A
1066857	WEHOLITE PIPE 1350/1200 SN8 BLACK 12M PE	115,31	2,02E+2	12	2,42E+3
1066858	WEHOLITE PIPE 1350/1200 SN8 BLACK SPECIAL LENGTH PE	115,31	2,02E+2	#N/A	#N/A
1066859	WEHOLITE PIPE 1525/1400 SN2 BLACK SPECIAL LENGTH PE	75,33	1,32E+2	#N/A	#N/A
1066862	WEHOLITE PIPE 1550/1400 SN4 BLACK SPECIAL LENGTH PE	98,00	1,72E+2	#N/A	#N/A
1066863	WEHOLITE PIPE 1575/1400 SN8 BLACK 6M PE	156,14	2,73E+2	6	1,64E+3
1066864	WEHOLITE PIPE 1575/1400 SN8 BLACK 12M PE	156,14	2,73E+2	12	3,28E+3
1066865	WEHOLITE PIPE 1575/1400 SN8 BLACK SPECIAL LENGTH PE	156,14	2,73E+2	#N/A	#N/A
1066870	WEHOLITE PIPE 1680/1500 SN8 BLACK 6M PE	200,19	3,50E+2	6	2,10E+3
1066871	WEHOLITE PIPE 1680/1500 SN8 BLACK 12M PE	200,19	3,50E+2	12	4,20E+3
1066872	WEHOLITE PIPE 1680/1500 SN8 BLACK SPECIAL LENGTH PE	200,19	3,50E+2	#N/A	#N/A
1066873	WEHOLITE PIPE 1725/1600 SN2 BLACK SPECIAL LENGTH PE	92,50	1,62E+2	#N/A	#N/A
1066875	WEHOLITE PIPE 1775/1600 SN4 BLACK 12M PE	124,00	2,17E+2	12	2,60E+3
1066876	WEHOLITE PIPE 1775/1600 SN4 BLACK SPECIAL LENGTH PE	124,00	2,17E+2	#N/A	#N/A
1066879	WEHOLITE PIPE 1792/1600 SN8 BLACK SPECIAL LENGTH PE	227,15	3,98E+2	#N/A	#N/A
1066882	WEHOLITE PIPE 1992/1800 SN4 BLACK 12M PE	164,00	2,87E+2	12	3,44E+3
1066883	WEHOLITE PIPE 1992/1800 SN4 BLACK SPECIAL LENGTH PE	164,00	2,87E+2	#N/A	#N/A
1066886	WEHOLITE PIPE 2016/1800 SN8 BLACK SPECIAL LENGTH PE	287,67	5,03E+2	#N/A	#N/A
1066887	WEHOLITE PIPE 2175/2000 SN2 BLACK SPECIAL LENGTH PE	162,84	2,85E+2	#N/A	#N/A
1066890	WEHOLITE PIPE 2216/2000 SN4 BLACK SPECIAL LENGTH PE	209,00	3,66E+2	#N/A	#N/A

1066894	WEHOLITE PIPE 2380/2200 SN2 BLACK SPECIAL LENGTH PE	212,18	3,71E+2	#N/A	#N/A
1066897	WEHOLITE PIPE 2440/2200 SN4 BLACK SPECIAL LENGTH PE	246,00	4,31E+2	#N/A	#N/A
1066900	WEHOLITE PIPE 2440/2200 SN8 BLACK SPECIAL LENGTH PE	398,00	6,97E+2	#N/A	#N/A
1066901	WEHOLITE PIPE 2592/2400 SN2 BLACK SPECIAL LENGTH PE	247,11	4,32E+2	#N/A	#N/A
1066904	WEHOLITE PIPE 2640/2400 SN4 BLACK SPECIAL LENGTH PE	318,00	5,57E+2	#N/A	#N/A
1066907	WEHOLITE PIPE 2640/2400 SN8 BLACK SPECIAL LENGTH PE	451,00	7,89E+2	#N/A	#N/A
1066908	WEHOLITE PIPE 3320/3000 SN4 BLACK SPECIAL LENGTH PE	681,00	1,19E+3	#N/A	#N/A
1067095	WEHOLITE CHAMBER PIPE 866/800 SN2 SPECIAL LENGTH PE	25,20	4,41E+1	#N/A	#N/A
1067096	WEHOLITE CHAMBER PIPE 900/800 SN4 SPECIAL LENGTH PE	38,92	6,81E+1	#N/A	#N/A
1067097	WEHOLITE CHAMBER PIPE 1088/1000 SN2 SPECIAL LENGTH PE	40,60	7,11E+1	#N/A	#N/A
1067098	WEHOLITE CHAMBER PIPE 1125/1000 SN4 SPECIAL LENGTH PE	60,00	1,05E+2	#N/A	#N/A
1067099	WEHOLITE CHAMBER PIPE 1300/1200 SN2 SPECIAL LENGTH PE	55,20	9,66E+1	#N/A	#N/A
1067100	WEHOLITE CHAMBER PIPE 1325/1200 SN4 SPECIAL LENGTH PE	72,00	1,26E+2	#N/A	#N/A
1067101	WEHOLITE CHAMBER PIPE 1525/1400 SN2 SPECIAL LENGTH PE	75,33	1,32E+2	#N/A	#N/A
1067102	WEHOLITE CHAMBER PIPE 1550/1400 SN4 SPECIAL LENGTH PE	98,00	1,72E+2	#N/A	#N/A
1067103	WEHOLITE CHAMBER PIPE 1625/1500 SN2 SPECIAL LENGTH PE	82,55	1,44E+2	#N/A	#N/A
1067104	WEHOLITE CHAMBER PIPE 1665/1500 SN4 SPECIAL LENGTH PE	111,00	1,94E+2	#N/A	#N/A
1067105	WEHOLITE CHAMBER PIPE 1725/1600 SN2 SPECIAL LENGTH PE	92,50	1,62E+2	#N/A	#N/A
1067106	WEHOLITE CHAMBER PIPE 1775/1600 SN4 SPECIAL LENGTH PE	124,00	2,17E+2	#N/A	#N/A
1067107	WEHOLITE CHAMBER PIPE 1950/1800 SN2 SPECIAL LENGTH PE	125,59	2,20E+2	#N/A	#N/A
1067108	WEHOLITE CHAMBER PIPE 1992/1800 SN4 SPECIAL LENGTH PE	164,00	2,87E+2	#N/A	#N/A
1067109	WEHOLITE CHAMBER PIPE 2175/2000 SN2 SPECIAL LENGTH PE	162,84	2,85E+2	#N/A	#N/A
1067110	WEHOLITE CHAMBER PIPE 2216/2000 SN4 SPECIAL LENGTH PE	209,00	3,66E+2	#N/A	#N/A
1067111	WEHOLITE CHAMBER PIPE 2380/2200 SN2 SPECIAL LENGTH PE	212,18	3,71E+2	#N/A	#N/A
1067112	WEHOLITE CHAMBER PIPE 2440/2200 SN4 SPECIAL LENGTH PE	246,00	4,31E+2	#N/A	#N/A
1067113	WEHOLITE CHAMBER PIPE 2592/2400 SN2 SPECIAL LENGTH PE	247,11	4,32E+2	#N/A	#N/A
1067114	WEHOLITE CHAMBER PIPE 2640/2400 SN4 SPECIAL LENGTH PE	318,00	5,57E+2	#N/A	#N/A
1067563	WEHOLITE PIPE 900/800 SN4 BLACK SPECIAL LENGTH PE	39,30	6,88E+1	#N/A	#N/A
1068716	WEHOLITE MULTI PIPE THREAD 1075/1000 6M PE	39,86	6,98E+1	6	4,19E+2
1068721	WEHOLITE PIPE 1125/1000 SN4 BLACK SPECIAL LENGTH PE	58,20	1,02E+2	#N/A	#N/A
1068723	WEHOLITE PIPE THREAD 1125/1000 SN4 BLACK 6M PE	58,20	1,02E+2	6	6,11E+2
1068724	WEHOLITE PIPE 1125/1000 SN4 BLACK 12M PE	58,20	1,02E+2	12	1,22E+3
1068726	WEHOLITE PIPE THREAD 1325/1200 SN4 BLACK 6M PE	79,72	1,40E+2	6	8,37E+2
1068729	WEHOLITE PIPE THREAD 1550/1400 SN4 BLACK 6M PE	98,60	1,73E+2	6	1,04E+3
1068738	WEHOLITE PIPE THREAD 1775/1600 SN4 BLACK 6M PE	128,30	2,25E+2	6	1,35E+3
1068740	WEHOLITE PIPE 1800/1600 SN8 BLACK SPECIAL LENGTH PE	227,15	3,98E+2	#N/A	#N/A
1068759	WEHOLITE PIPE 2664/2400 SN8 BLACK SPECIAL LENGTH PE	447,00	7,82E+2	#N/A	#N/A
1068765	WEHOLITE MULTI PIPE THREAD 400/372 6M PE	7,71	1,35E+1	6	8,10E+1
1068767	WEHOLITE SOCKET PIPE 400/360 SN4 BLACK 6M PE	9,15	1,60E+1	6	9,60E+1
1068769	WEHOLITE PIPE THREAD 400/360 SN4 BLACK 6M PE	8,53	1,49E+1	6	8,96E+1

1068770	WEHOLITE PIPE 400/360 SN8 BLACK SPECIAL LENGTH PE	10,79	1,89E+1	#N/A	#N/A
1068773	WEHOLITE SOCKET PIPE 450/400 SN4 BLACK 6M PE	10,97	1,92E+1	6	1,15E+2
1068775	WEHOLITE PIPE THREAD 450/400 SN4 BLACK 6M PE	10,12	1,77E+1	6	1,06E+2
1068778	WEHOLITE PIPE 560/500 SN4 BLACK SPECIAL LENGTH PE	14,39	2,52E+1	#N/A	#N/A
1068781	WEHOLITE PIPE THREAD 560/500 SN4 BLACK 6M PE	14,39	2,52E+1	6	1,51E+2
1068783	WEHOLITE MULTI PIPE THREAD 650/600 6M PE	15,20	2,66E+1	6	1,60E+2
1068785	WEHOLITE PIPE 675/600 SN4 BLACK SPECIAL LENGTH PE	20,63	3,61E+1	#N/A	#N/A
1068788	WEHOLITE PIPE THREAD 675/600 SN4 BLACK 6M PE	20,63	3,61E+1	6	2,17E+2
1068791	WEHOLITE SOCKET PIPE 788/700 SN4 BLACK 6M PE	31,96	5,59E+1	6	3,36E+2
1068793	WEHOLITE MULTI PIPE THREAD 860/800 6M PE	28,54	4,99E+1	6	3,00E+2
1068796	WEHOLITE PIPE THREAD 900/800 SN4 BLACK 6M PE	36,78	6,44E+1	6	3,86E+2
1068797	WEHOLITE SOCKET PIPE 1125/1000 SN4 BLACK 6M PE	62,20	1,09E+2	6	6,53E+2
1078209	WEHOLITE PIPE 788/700 SN4 BLACK SPECIAL LENGTH PE	29,74	5,20E+1	#N/A	#N/A
1084808	WEHOLITE PIPE 3240/3000 SN2 BLACK SPECIAL LENGTH PE	350,00	6,13E+2	#N/A	#N/A
1085253	WEHOLITE PIPE 2716/2500 SN2 BLACK SPECIAL LENGTH PE	266,00	4,66E+2	#N/A	#N/A
1085254	WEHOLITE PIPE 2764/2500 SN4 BLACK SPECIAL LENGTH PE	328,00	5,74E+2	#N/A	#N/A
1085779	WEHOLITE PIPE 2264/2000 SN8 BLACK SPECIAL LENGTH PE	313,00	5,48E+2	#N/A	#N/A
1086407	WEHOLITE PIPE 975/900 SN2 BLACK SPECIAL LENGTH PE	32,00	5,60E+1	#N/A	#N/A
1086640	WEHOLITE PIPE 2200/2000 SN4 BLACK PN1 SPECIAL LENGTH PP	0,00	0,00E+0	#N/A	#N/A
1088200	WEHOLITE PIPE 3664/3400 WHITE INSIDE SN2 SPECIAL LENGTH PE	490,00	8,58E+2	#N/A	#N/A
1088201	WEHOLITE PIPE 3740/3400 SN4 SPECIAL LENGTH PE	625,00	1,09E+3	#N/A	#N/A
1088966	WEHOLITE PIPE 1200 SN4 BLACK SPECIAL LENGTH PP	55,70	9,75E+1	#N/A	#N/A
1089612	WEHOLITE PIPE 3864/3500 SN4 BLACK SPECIAL LENGTH PE	634,00	1,11E+3	#N/A	#N/A
1089613	WEHOLITE PIPE 2820/2500 SN8 BLACK SPECIAL LENGTH PE	473,00	8,28E+2	#N/A	#N/A
1133068	WEHOLITE PIPE NPM 1125/1000 SN4 BLACK SPECIAL LENGTH PE	58,20	1,02E+2	#N/A	#N/A
1133069	WEHOLITE PIPE NPM 1125/1000 SN8 BLACK SPECIAL LENGTH PE	74,24	1,30E+2	#N/A	#N/A
1133070	WEHOLITE PIPE NPM 1325/1200 SN4 BLACK SPECIAL LENGTH PE	72,00	1,26E+2	#N/A	#N/A
1133071	WEHOLITE PIPE NPM 1350/1200 SN8 BLACK SPECIAL LENGTH PE	115,31	2,02E+2	#N/A	#N/A
1135486	WEHOLITE CHAMBER PIPE 3520/3200 SN4 SPECIAL LENGTH PE	635,00	1,11E+3	#N/A	#N/A
1137650	WEHOLITE CHAMBER PIPE 3240/3000 SN2 6M PE	0,00	0,00E+0	6	0,00E+0
1137651	WEHOLITE CHAMBER PIPE 3240/3000 SN2 12M PE	0,00	0,00E+0	12	0,00E+0
1140069	WEHOLITE CHAMBER PIPE 2016/1800 SN8 SPECIAL LENGTH PE	0,00	0,00E+0	#N/A	#N/A
1140235	WEHOLITE PIPE 760/700 SN2 BLACK SPECIAL LENGTH PP	22,64	3,96E+1	#N/A	#N/A
1140411	WEHOLITE PIPE 675/600 SN8 SPECIAL LENGTH PP	0,00	0,00E+0	#N/A	#N/A
1140412	WEHOLITE PIPE 900/800 SN8 SPECIAL LENGTH PP	0,00	0,00E+0	#N/A	#N/A