

Environmental Profile

This LCA is calculated according to: ISO 14044, ISO 14040 and EN 15804

Ecochain v3.5.80



Product: 3003316 - PVCU Access Piece GY 125 S/S
Unit: 1 piece
Manufacturer: Wavin - PL -Buk - Extra products

PVC external sewage pipes with a solid wall are produced in two classes of circumferential stiffness (SN8, SN4), which enables optimal selection depending on the load conditions. A wide portfolio of system fittings facilitates the construction of many schemes of sewage networks, as well as connections with systems made of other materials. Diameter range DN/OD 110-500mm. The pipes meet the requirements of the PN-EN 1401-1 standard.

LCA standard: EN15804+A2 (2019)
Standard database: Worldwide - Ecoinvent v 3.6 Cut-Off
Externally verified: Yes
Issue date: 08-06-2023
End of validity: 08-06-2028
Verifier: Martijn van Hövell - SGS Search



This LCA was evaluated according to EN15804+A2. It was concluded that the LCA complies with this standard

The LCA background information and project dossier have been registered in the online Ecochain application in the account Wavin - PL -Buk - Extra products (2020). (☑ = module declared, MND = module not declared).

A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
☑	☑	☑	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	☑	☑	☑	☑

Product stage	Use stage	End-of-Life stage
A1 Raw material supply A2 Transport A3 Manufacturing	B1 Use B2 Maintenance B3 Repair B4 Replacement B5 Refurbishment B6 Operational energy use B7 Operational water use	C1 De-construction demolition C2 Transport C3 Waste processing C4 Disposal
Construction process stage		Benefits and loads beyond the system boundaries
A4 Transport gate to site A5 Assembly / Construction installation process		D Reuse- Recovery- Recycling- potential

Environmental impacts and parameters

GWP-total = EF EN15804+A2 Climate Change [kg CO2 eq]; **GWP-f** = EF Climate change - Fossil [kg CO2 eq]; **GWP-b** = EF EN15804+A2 Climate Change - Biogenic [kg CO2 eq]; **GWP-luluc** = EF EN15804+A2 Climate Change - Land use and LU change [kg CO2 eq]; **ODP** = EF Ozone depletion [kg CFC11 eq]; **AP** = EF Acidification [mol H+ eq]; **EP-fw** = EF Eutrophication, freshwater [kg P eq]; **EP-m** = EF Eutrophication, marine [kg N eq]; **EP-T** = EF Eutrophication, terrestrial [mol N eq]; **POCP** = EF Photochemical ozone formation [kg NMVOC eq]; **ADP-mm** = EF Resource use, minerals and metals [kg Sb eq]; **ADP-f** = EF Resource use, fossils [MJ]; **WDP** = EF Water use [m3 depriv.]; **PM** = EF Particulate matter [disease inc.]; **IR** = EF Ionising radiation [kBq U-235 eq]; **ETP-fw** = EF Ecotoxicity, freshwater [CTUe]; **HTP-c** = EF Human toxicity, cancer [CTUh]; **HTP-nc** = EF Human toxicity, non-cancer [CTUh]; **SQP** = EF Land use [Pt]; **PERE** = Use of renewable primary energy excluding renewable primary energy resources used as raw materials [MJ]; **PERM** = Use of renewable primary energy resources used as raw materials [MJ]; **PERT** = Total use of renewable primary energy resources [MJ]; **PENRE** = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials [MJ]; **PENRM** = Use of non-renewable primary energy resources used as raw materials [MJ]; **PENRT** = Total use of non-renewable primary energy resources [MJ]; **PET** = Total energy [MJ]; **SM** = Use of secondary material [kg]; **RSF** = Use of renewable secondary fuels [MJ]; **NRSF** = Use of non-renewable secondary fuels [MJ]; **FW** = Use of net fresh water [m3]; **HWD** = Hazardous waste disposed [kg]; **NHWD** = Non-hazardous waste disposed [kg]; **RWD** = Radioactive waste disposed [kg]; **CRU** = Components for re-use [kg]; **MFR** = Materials for recycling [kg]; **MER** = Materials for energy recovery [kg]; **EE** = Exported energy [MJ]; **EET** = Exported energy thermic [MJ]; **EEE** = Exported energy electric [MJ]

Statement of Confidentiality

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Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	1.55E+0	2.40E-2	1.45E-4	1.58E+0	1.97E-2	9.68E-1	6.43E-3	-8.72E-1	1.70E+0
GWP-f	kg CO2 eq	1.80E+0	2.40E-2	1.46E-4	1.83E+0	1.97E-2	6.58E-1	6.43E-3	-9.64E-1	1.55E+0
GWP-b	kg CO2 eq	-2.50E-1	1.46E-5	-1.54E-6	-2.50E-1	1.19E-5	3.09E-1	8.04E-6	9.29E-2	1.52E-1
GWP-luluc	kg CO2 eq	2.14E-3	8.49E-6	1.49E-7	2.14E-3	6.96E-6	2.46E-4	1.67E-7	-1.35E-3	1.04E-3
ODP	kg CFC11 eq	8.65E-7	5.53E-9	8.26E-12	8.71E-7	4.53E-9	6.86E-8	2.37E-10	-4.33E-7	5.11E-7
AP	mol H+ eq	8.72E-3	1.37E-4	1.47E-6	8.86E-3	1.12E-4	1.19E-3	5.77E-6	-3.88E-3	6.29E-3
EP-fw	kg P eq	8.35E-5	1.97E-7	8.24E-9	8.37E-5	1.62E-7	8.25E-6	7.57E-9	-4.09E-5	5.13E-5
EP-m	kg N eq	1.58E-3	4.89E-5	1.55E-7	1.63E-3	4.01E-5	2.96E-4	3.82E-6	-7.25E-4	1.25E-3
EP-T	mol N eq	1.71E-2	5.39E-4	1.85E-6	1.77E-2	4.42E-4	3.26E-3	2.30E-5	-7.89E-3	1.35E-2
POCP	kg NMVOC eq	5.65E-3	1.54E-4	6.28E-7	5.81E-3	1.26E-4	9.72E-4	7.93E-6	-2.63E-3	4.29E-3
ADP-mm	kg Sb eq	1.56E-3	6.21E-7	1.97E-8	1.56E-3	5.09E-7	4.65E-6	5.78E-9	-1.91E-5	1.55E-3
ADP-f	MJ	4.35E+1	3.68E-1	1.36E-3	4.39E+1	3.02E-1	3.16E+0	1.73E-2	-2.25E+1	2.49E+1
WDP	m3 depriv.	2.64E+0	1.13E-3	5.22E-5	2.64E+0	9.27E-4	1.24E-1	1.13E-4	-1.35E+0	1.41E+0
PM	disease inc.	6.64E-8	2.17E-9	9.08E-12	6.86E-8	1.78E-9	1.46E-8	1.19E-10	-3.41E-8	5.10E-8
IR	kBq U-235 eq	9.92E-2	1.61E-3	1.02E-6	1.01E-1	1.32E-3	1.12E-2	7.96E-5	-4.67E-2	6.67E-2
ETP-fw	CTUe	5.57E+1	2.99E-1	1.21E-2	5.60E+1	2.45E-1	2.43E+1	2.68E-1	-2.01E+1	6.08E+1
HTP-c	CTUh	1.58E-9	1.06E-11	6.17E-13	1.59E-9	8.73E-12	3.60E-10	4.79E-13	-5.95E-10	1.37E-9
HTP-nc	CTUh	4.77E-8	3.57E-10	1.57E-11	4.81E-8	2.92E-10	8.52E-9	5.16E-11	-1.80E-8	3.90E-8
SQP	Pt	3.24E+1	3.15E-1	2.24E-3	3.27E+1	2.58E-1	1.93E+0	4.43E-2	-3.85E+1	-3.64E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.06E+1	5.28E-3	2.40E-2	1.06E+1	4.33E-3	2.26E-1	6.50E-4	-6.88E+0	3.96E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.06E+1	5.28E-3	2.40E-2	1.06E+1	4.33E-3	2.26E-1	6.50E-4	-6.88E+0	3.96E+0
PENRE	MJ	4.66E+1	3.91E-1	1.44E-3	4.70E+1	3.21E-1	3.37E+0	1.84E-2	-2.42E+1	2.65E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	4.66E+1	3.91E-1	1.44E-3	4.70E+1	3.21E-1	3.37E+0	1.84E-2	-2.42E+1	2.65E+1
PET	MJ	5.72E+1	3.96E-1	2.55E-2	5.76E+1	3.25E-1	3.59E+0	1.90E-2	-3.11E+1	3.05E+1
SM	kg	0	0	0	0	0	0	0	0	0
RSF	MJ	0	0	0	0	0	0	0	0	0
NRSF	MJ	0	0	0	0	0	0	0	0	0
FW	m3	3.14E-2	4.17E-5	1.46E-6	3.15E-2	3.42E-5	3.48E-3	2.12E-5	-1.65E-2	1.85E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.25E-4	9.42E-7	2.73E-13	2.26E-4	7.72E-7	5.26E-6	2.11E-8	-2.04E-5	2.11E-4
NHWD	kg	1.91E-1	2.28E-2	1.05E-6	2.14E-1	1.87E-2	1.18E-1	7.61E-2	-8.21E-2	3.45E-1
RWD	kg	9.05E-5	2.50E-6	1.10E-13	9.30E-5	2.05E-6	1.21E-5	1.13E-7	-4.23E-5	6.49E-5
CRU	kg	0	0	0	0	0	0	0	0	0
MFR	kg	0	0	0	0	0	0	0	0	0
MER	kg	0	0	0	0	0	0	0	0	0
EE	MJ	0	0	0	0	0	0	0	0	0
EET	MJ	0	0	0	0	0	0	0	0	0
EEE	MJ	0	0	0	0	0	0	0	0	0



Ecochain Technologies BV
H.J.E. Wenckebachweg 123, 1096 AM Amsterdam, The Netherlands
<https://www.ecochain.com>
+31 20 3035 777