

Environmental Profile

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

Ecochain v3.5.80



Product: 4001112 - PVCU Adaptor ClayPipe BR 200x200 NS UD
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	3.47E+0	2.90E-2	1.17E-1	3.62E+0	5.43E-2	1.73E+0	1.44E-2	-2.00E+0	3.41E+0
GWP-f	kg CO2 eq	3.73E+0	2.90E-2	1.18E-1	3.88E+0	5.43E-2	1.43E+0	1.44E-2	-1.99E+0	3.39E+0
GWP-b	kg CO2 eq	-2.62E-1	1.76E-5	-1.24E-3	-2.64E-1	3.30E-5	2.95E-1	1.87E-5	-1.36E-2	1.78E-2
GWP-luluc	kg CO2 eq	2.95E-3	1.03E-5	1.20E-4	3.08E-3	1.92E-5	6.25E-4	4.00E-7	-1.31E-3	2.42E-3
ODP	kg CFC11 eq	1.99E-6	6.69E-9	6.66E-9	2.00E-6	1.25E-8	1.66E-7	6.07E-10	-9.82E-7	1.20E-6
AP	mol H+ eq	1.67E-2	1.65E-4	1.19E-3	1.81E-2	3.09E-4	2.93E-3	1.44E-5	-7.54E-3	1.38E-2
EP-fw	kg P eq	1.60E-4	2.39E-7	6.63E-6	1.66E-4	4.47E-7	2.07E-5	1.80E-8	-7.23E-5	1.15E-4
EP-m	kg N eq	2.84E-3	5.91E-5	1.25E-4	3.03E-3	1.11E-4	7.21E-4	8.67E-6	-1.32E-3	2.54E-3
EP-T	mol N eq	3.09E-2	6.52E-4	1.49E-3	3.30E-2	1.22E-3	7.95E-3	5.79E-5	-1.43E-2	2.80E-2
POCP	kg NMVOC eq	1.07E-2	1.86E-4	5.05E-4	1.14E-2	3.49E-4	2.39E-3	1.96E-5	-4.86E-3	9.32E-3
ADP-mm	kg Sb eq	1.02E-4	7.51E-7	1.58E-5	1.18E-4	1.40E-6	1.15E-5	1.43E-8	-3.98E-5	9.16E-5
ADP-f	MJ	9.43E+1	4.45E-1	1.09E+0	9.58E+1	8.33E-1	8.08E+0	4.39E-2	-4.79E+1	5.69E+1
WDP	m3 depriv.	5.96E+0	1.37E-3	4.20E-2	6.01E+0	2.56E-3	3.07E-1	2.45E-4	-2.81E+0	3.51E+0
PM	disease inc.	1.25E-7	2.62E-9	7.32E-9	1.35E-7	4.90E-9	3.72E-8	3.00E-10	-4.91E-8	1.28E-7
IR	kBq U-235 eq	1.96E-1	1.95E-3	8.20E-4	1.99E-1	3.64E-3	2.81E-2	2.01E-4	-9.11E-2	1.40E-1
ETP-fw	CTUe	6.37E+1	3.62E-1	9.74E+0	7.38E+1	6.77E-1	5.82E+1	6.37E-1	-2.86E+1	1.05E+2
HTP-c	CTUh	2.60E-9	1.29E-11	4.97E-10	3.11E-9	2.41E-11	8.99E-10	1.12E-12	-1.05E-9	2.99E-9
HTP-nc	CTUh	8.02E-8	4.31E-10	1.26E-8	9.32E-8	8.07E-10	2.10E-8	1.23E-10	-3.61E-8	7.90E-8
SQP	Pt	3.89E+1	3.81E-1	1.80E+0	4.11E+1	7.13E-1	5.12E+0	1.11E-1	-1.08E+1	3.63E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.27E+1	6.39E-3	1.94E+1	3.21E+1	1.20E-2	5.70E-1	1.55E-3	-3.20E+0	2.95E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.27E+1	6.39E-3	1.94E+1	3.21E+1	1.20E-2	5.70E-1	1.55E-3	-3.20E+0	2.95E+1
PENRE	MJ	1.01E+2	4.73E-1	1.16E+0	1.03E+2	8.85E-1	8.60E+0	4.65E-2	-5.16E+1	6.07E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.01E+2	4.73E-1	1.16E+0	1.03E+2	8.85E-1	8.60E+0	4.65E-2	-5.16E+1	6.07E+1
PET	MJ	1.14E+2	4.79E-1	2.05E+1	1.35E+2	8.96E-1	9.17E+0	4.81E-2	-5.48E+1	9.02E+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	6.49E-2	5.04E-5	1.18E-3	6.61E-2	9.43E-5	8.43E-3	5.37E-5	-2.95E-2	4.53E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	7.53E-5	1.14E-6	2.20E-10	7.65E-5	2.13E-6	1.30E-5	5.27E-8	-4.02E-5	5.15E-5
NHWD	kg	3.60E-1	2.76E-2	8.49E-4	3.88E-1	5.16E-2	3.09E-1	2.06E-1	-1.52E-1	8.03E-1
RWD	kg	1.74E-4	3.03E-6	8.83E-11	1.77E-4	5.67E-6	3.04E-5	2.87E-7	-8.06E-5	1.33E-4
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



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