

Environmental Profile

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

Ecochain v3.5.80



Product: 3043369 - PVCU Adaptor ClayPipe BR 200x200 S 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	4.98E+0	4.35E-2	2.81E-2	5.05E+0	7.36E-2	2.26E+0	2.04E-2	-2.82E+0	4.57E+0
GWP-f	kg CO2 eq	5.22E+0	4.35E-2	2.84E-2	5.29E+0	7.35E-2	1.96E+0	2.04E-2	-2.80E+0	4.54E+0
GWP-b	kg CO2 eq	-2.47E-1	2.64E-5	-2.99E-4	-2.47E-1	4.47E-5	2.95E-1	2.65E-5	-1.94E-2	2.79E-2
GWP-luluc	kg CO2 eq	4.09E-3	1.54E-5	2.90E-5	4.13E-3	2.60E-5	8.73E-4	5.51E-7	-1.84E-3	3.19E-3
ODP	kg CFC11 eq	2.84E-6	1.00E-8	1.60E-9	2.86E-6	1.69E-8	2.35E-7	8.35E-10	-1.40E-6	1.71E-6
AP	mol H+ eq	2.33E-2	2.48E-4	2.86E-4	2.38E-2	4.19E-4	4.06E-3	1.99E-5	-1.06E-2	1.76E-2
EP-fw	kg P eq	2.24E-4	3.58E-7	1.60E-6	2.26E-4	6.05E-7	2.90E-5	2.49E-8	-1.03E-4	1.53E-4
EP-m	kg N eq	3.94E-3	8.86E-5	3.01E-5	4.06E-3	1.50E-4	9.92E-4	1.22E-5	-1.86E-3	3.35E-3
EP-T	mol N eq	4.26E-2	9.76E-4	3.60E-4	4.39E-2	1.65E-3	1.09E-2	7.99E-5	-2.00E-2	3.66E-2
POCP	kg NMVOC eq	1.48E-2	2.79E-4	1.22E-4	1.52E-2	4.72E-4	3.28E-3	2.71E-5	-6.84E-3	1.21E-2
ADP-mm	kg Sb eq	1.41E-4	1.12E-6	3.82E-6	1.46E-4	1.90E-6	1.60E-5	1.97E-8	-5.66E-5	1.07E-4
ADP-f	MJ	1.32E+2	6.67E-1	2.63E-1	1.33E+2	1.13E+0	1.12E+1	6.05E-2	-6.78E+1	7.78E+1
WDP	m3 depriv.	8.49E+0	2.05E-3	1.01E-2	8.50E+0	3.46E-3	4.33E-1	3.21E-4	-4.00E+0	4.94E+0
PM	disease inc.	1.67E-7	3.92E-9	1.76E-9	1.73E-7	6.64E-9	5.09E-8	4.14E-10	-6.88E-8	1.62E-7
IR	kBq U-235 eq	2.78E-1	2.92E-3	1.98E-4	2.81E-1	4.93E-3	3.90E-2	2.78E-4	-1.29E-1	1.96E-1
ETP-fw	CTUe	8.81E+1	5.42E-1	2.35E+0	9.09E+1	9.17E-1	8.32E+1	9.15E-1	-4.00E+1	1.36E+2
HTP-c	CTUh	3.54E-9	1.93E-11	1.20E-10	3.68E-9	3.26E-11	1.22E-9	1.56E-12	-1.48E-9	3.44E-9
HTP-nc	CTUh	1.12E-7	6.46E-10	3.04E-9	1.16E-7	1.09E-9	2.94E-8	1.76E-10	-5.12E-8	9.56E-8
SQP	Pt	4.35E+1	5.71E-1	4.35E-1	4.45E+1	9.66E-1	6.98E+0	1.53E-1	-1.29E+1	3.97E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.46E+1	9.57E-3	4.66E+0	1.92E+1	1.62E-2	7.98E-1	2.18E-3	-4.06E+0	1.60E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.46E+1	9.57E-3	4.66E+0	1.92E+1	1.62E-2	7.98E-1	2.18E-3	-4.06E+0	1.60E+1
PENRE	MJ	1.42E+2	7.08E-1	2.80E-1	1.43E+2	1.20E+0	1.19E+1	6.41E-2	-7.31E+1	8.31E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.42E+2	7.08E-1	2.80E-1	1.43E+2	1.20E+0	1.19E+1	6.41E-2	-7.31E+1	8.31E+1
PET	MJ	1.57E+2	7.18E-1	4.94E+0	1.62E+2	1.21E+0	1.27E+1	6.63E-2	-7.71E+1	9.91E+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	9.11E-2	7.55E-5	2.83E-4	9.15E-2	1.28E-4	1.19E-2	7.42E-5	-4.18E-2	6.17E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.06E-4	1.71E-6	5.30E-11	1.08E-4	2.89E-6	1.80E-5	7.27E-8	-5.67E-5	7.18E-5
NHWD	kg	5.00E-1	4.14E-2	2.05E-4	5.41E-1	7.00E-2	4.18E-1	2.80E-1	-2.15E-1	1.09E+0
RWD	kg	2.46E-4	4.54E-6	2.13E-11	2.51E-4	7.68E-6	4.19E-5	3.95E-7	-1.14E-4	1.86E-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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