

Environmental Profile

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

Ecochain v3.5.80



Product: 3017487 - PVCU Adaptor ClaySocket BR 200x200 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	3.99E+0	3.27E-2	1.98E-1	4.22E+0	6.23E-2	2.11E+0	1.72E-2	-2.30E+0	4.11E+0
GWP-f	kg CO2 eq	4.30E+0	3.27E-2	2.00E-1	4.53E+0	6.22E-2	1.76E+0	1.72E-2	-2.28E+0	4.09E+0
GWP-b	kg CO2 eq	-3.10E-1	1.99E-5	-2.11E-3	-3.13E-1	3.78E-5	3.44E-1	2.18E-5	-1.52E-2	1.66E-2
GWP-luluc	kg CO2 eq	3.39E-3	1.16E-5	2.04E-4	3.61E-3	2.20E-5	6.96E-4	4.79E-7	-1.48E-3	2.85E-3
ODP	kg CFC11 eq	2.27E-6	7.53E-9	1.13E-8	2.29E-6	1.43E-8	1.83E-7	7.07E-10	-1.11E-6	1.38E-6
AP	mol H+ eq	1.97E-2	1.86E-4	2.02E-3	2.19E-2	3.55E-4	3.29E-3	1.69E-5	-8.55E-3	1.70E-2
EP-fw	kg P eq	1.82E-4	2.69E-7	1.13E-5	1.93E-4	5.12E-7	2.30E-5	2.14E-8	-8.17E-5	1.35E-4
EP-m	kg N eq	3.32E-3	6.66E-5	2.12E-4	3.60E-3	1.27E-4	8.15E-4	1.07E-5	-1.51E-3	3.05E-3
EP-T	mol N eq	3.62E-2	7.34E-4	2.53E-3	3.95E-2	1.40E-3	8.99E-3	6.76E-5	-1.63E-2	3.37E-2
POCP	kg NMVOC eq	1.29E-2	2.10E-4	8.58E-4	1.40E-2	4.00E-4	2.70E-3	2.29E-5	-5.53E-3	1.16E-2
ADP-mm	kg Sb eq	1.86E-4	8.46E-7	2.69E-5	2.14E-4	1.61E-6	1.29E-5	1.68E-8	-4.72E-5	1.81E-4
ADP-f	MJ	1.11E+2	5.02E-1	1.85E+0	1.13E+2	9.55E-1	9.07E+0	5.12E-2	-5.48E+1	6.82E+1
WDP	m3 depriv.	6.66E+0	1.54E-3	7.13E-2	6.73E+0	2.93E-3	3.42E-1	3.30E-4	-3.16E+0	3.91E+0
PM	disease inc.	1.53E-7	2.95E-9	1.24E-8	1.68E-7	5.62E-9	4.18E-8	3.50E-10	-5.58E-8	1.60E-7
IR	kBq U-235 eq	2.42E-1	2.19E-3	1.39E-3	2.45E-1	4.18E-3	3.14E-2	2.34E-4	-1.03E-1	1.78E-1
ETP-fw	CTUe	7.57E+1	4.08E-1	1.65E+1	9.26E+1	7.76E-1	6.43E+1	7.03E-1	-3.24E+1	1.26E+2
HTP-c	CTUh	3.00E-9	1.45E-11	8.43E-10	3.85E-9	2.76E-11	1.04E-9	1.34E-12	-1.19E-9	3.73E-9
HTP-nc	CTUh	9.11E-8	4.86E-10	2.14E-8	1.13E-7	9.25E-10	2.35E-8	1.37E-10	-4.08E-8	9.67E-8
SQP	Pt	4.60E+1	4.29E-1	3.06E+0	4.95E+1	8.17E-1	5.77E+0	1.29E-1	-1.24E+1	4.38E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.47E+1	7.20E-3	3.29E+1	4.75E+1	1.37E-2	6.36E-1	1.79E-3	-3.66E+0	4.45E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.47E+1	7.20E-3	3.29E+1	4.75E+1	1.37E-2	6.36E-1	1.79E-3	-3.66E+0	4.45E+1
PENRE	MJ	1.19E+2	5.33E-1	1.97E+0	1.21E+2	1.01E+0	9.65E+0	5.43E-2	-5.91E+1	7.27E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.19E+2	5.33E-1	1.97E+0	1.21E+2	1.01E+0	9.65E+0	5.43E-2	-5.91E+1	7.27E+1
PET	MJ	1.33E+2	5.40E-1	3.48E+1	1.69E+2	1.03E+0	1.03E+1	5.61E-2	-6.27E+1	1.17E+2
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	7.44E-2	5.68E-5	1.99E-3	7.64E-2	1.08E-4	9.58E-3	6.24E-5	-3.33E-2	5.29E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	9.11E-5	1.28E-6	3.73E-10	9.24E-5	2.44E-6	1.48E-5	6.19E-8	-4.62E-5	6.34E-5
NHWD	kg	4.17E-1	3.11E-2	1.44E-3	4.49E-1	5.92E-2	3.51E-1	2.40E-1	-1.72E-1	9.28E-1
RWD	kg	2.30E-4	3.41E-6	1.50E-10	2.34E-4	6.50E-6	3.41E-5	3.34E-7	-9.17E-5	1.83E-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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