

Environmental Profile

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

Ecochain v3.5.80



Product: 3017490 - PVCU End Cap BR 500 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	2.27E+1	2.04E-1	8.96E-2	2.30E+1	3.70E-1	1.20E+1	9.88E-2	-1.34E+1	2.20E+1
GWP-f	kg CO2 eq	2.51E+1	2.04E-1	9.04E-2	2.54E+1	3.70E-1	9.32E+0	9.87E-2	-1.33E+1	2.19E+1
GWP-b	kg CO2 eq	-2.43E+0	1.24E-4	-9.54E-4	-2.43E+0	2.24E-4	2.67E+0	1.28E-4	-9.31E-2	1.44E-1
GWP-luluc	kg CO2 eq	2.02E-2	7.23E-5	9.24E-5	2.04E-2	1.31E-4	4.27E-3	2.72E-6	-9.02E-3	1.58E-2
ODP	kg CFC11 eq	1.36E-5	4.70E-8	5.11E-9	1.37E-5	8.52E-8	1.13E-6	4.14E-9	-6.70E-6	8.20E-6
AP	mol H+ eq	1.13E-1	1.16E-3	9.12E-4	1.15E-1	2.11E-3	2.00E-2	9.85E-5	-5.17E-2	8.56E-2
EP-fw	kg P eq	1.08E-3	1.68E-6	5.09E-6	1.09E-3	3.04E-6	1.42E-4	1.22E-7	-4.96E-4	7.38E-4
EP-m	kg N eq	1.93E-2	4.16E-4	9.59E-5	1.98E-2	7.53E-4	4.92E-3	5.93E-5	-9.08E-3	1.64E-2
EP-T	mol N eq	2.10E-1	4.59E-3	1.15E-3	2.15E-1	8.30E-3	5.42E-2	3.95E-4	-9.85E-2	1.80E-1
POCP	kg NMVOC eq	7.20E-2	1.31E-3	3.88E-4	7.37E-2	2.37E-3	1.63E-2	1.33E-4	-3.32E-2	5.93E-2
ADP-mm	kg Sb eq	7.07E-4	5.28E-6	1.22E-5	7.24E-4	9.56E-6	7.87E-5	9.74E-8	-2.72E-4	5.40E-4
ADP-f	MJ	6.33E+2	3.13E+0	8.39E-1	6.37E+2	5.67E+0	5.51E+1	2.99E-1	-3.23E+2	3.75E+2
WDP	m3 depriv.	4.06E+1	9.62E-3	3.23E-2	4.06E+1	1.74E-2	2.10E+0	1.64E-3	-1.92E+1	2.35E+1
PM	disease inc.	8.70E-7	1.84E-8	5.62E-9	8.94E-7	3.34E-8	2.53E-7	2.05E-9	-3.40E-7	8.43E-7
IR	kBq U-235 eq	1.34E+0	1.37E-2	6.30E-4	1.35E+0	2.48E-2	1.92E-1	1.37E-3	-6.23E-1	9.47E-1
ETP-fw	CTUe	4.32E+2	2.54E+0	7.48E+0	4.42E+2	4.61E+0	3.99E+2	4.38E+0	-1.98E+2	6.52E+2
HTP-c	CTUh	1.79E-8	9.06E-11	3.81E-10	1.84E-8	1.64E-10	6.11E-9	7.64E-12	-7.20E-9	1.75E-8
HTP-nc	CTUh	5.48E-7	3.03E-9	9.68E-9	5.61E-7	5.49E-9	1.43E-7	8.42E-10	-2.48E-7	4.62E-7
SQP	Pt	3.24E+2	2.68E+0	1.39E+0	3.28E+2	4.85E+0	3.48E+1	7.56E-1	-8.62E+1	2.82E+2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	9.42E+1	4.50E-2	1.49E+1	1.09E+2	8.14E-2	3.90E+0	1.06E-2	-2.44E+1	8.87E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	9.42E+1	4.50E-2	1.49E+1	1.09E+2	8.14E-2	3.90E+0	1.06E-2	-2.44E+1	8.87E+1
PENRE	MJ	6.79E+2	3.33E+0	8.93E-1	6.83E+2	6.02E+0	5.87E+1	3.17E-1	-3.48E+2	4.00E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	6.79E+2	3.33E+0	8.93E-1	6.83E+2	6.02E+0	5.87E+1	3.17E-1	-3.48E+2	4.00E+2
PET	MJ	7.73E+2	3.37E+0	1.58E+1	7.92E+2	6.10E+0	6.26E+1	3.28E-1	-3.73E+2	4.89E+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	4.37E-1	3.55E-4	9.03E-4	4.38E-1	6.42E-4	5.77E-2	3.66E-4	-2.01E-1	2.95E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	5.20E-4	8.01E-6	1.69E-10	5.28E-4	1.45E-5	8.89E-5	3.59E-7	-2.70E-4	3.62E-4
NHWD	kg	2.48E+0	1.94E-1	6.52E-4	2.67E+0	3.52E-1	2.09E+0	1.41E+0	-1.04E+0	5.48E+0
RWD	kg	1.19E-3	2.13E-5	6.78E-11	1.21E-3	3.86E-5	2.07E-4	1.96E-6	-5.50E-4	9.09E-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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