

Environmental Profile

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

Ecochain v3.5.80



Product: 3003258 - PVCU Cap for Spigot GY 40 Drain 50
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	5.35E-2	7.86E-4	1.45E-4	5.45E-2	7.86E-4	6.95E-2	2.55E-4	-4.53E-2	7.97E-2
GWP-f	kg CO2 eq	8.64E-2	7.85E-4	1.46E-4	8.73E-2	7.86E-4	3.52E-2	2.55E-4	-4.72E-2	7.63E-2
GWP-b	kg CO2 eq	-3.29E-2	4.77E-7	-1.54E-6	-3.29E-2	4.77E-7	3.43E-2	3.12E-7	2.01E-3	3.36E-3
GWP-luluc	kg CO2 eq	9.61E-5	2.78E-7	1.49E-7	9.65E-5	2.78E-7	9.82E-6	6.96E-9	-5.34E-5	5.32E-5
ODP	kg CFC11 eq	3.39E-8	1.81E-10	8.26E-12	3.41E-8	1.81E-10	2.71E-9	9.33E-12	-1.84E-8	1.86E-8
AP	mol H+ eq	4.18E-4	4.47E-6	1.47E-6	4.23E-4	4.48E-6	4.88E-5	2.29E-7	-1.75E-4	3.02E-4
EP-fw	kg P eq	3.72E-6	6.46E-9	8.24E-9	3.73E-6	6.47E-9	3.28E-7	3.09E-10	-1.67E-6	2.40E-6
EP-m	kg N eq	7.60E-5	1.60E-6	1.55E-7	7.78E-5	1.60E-6	1.25E-5	1.38E-7	-3.46E-5	5.74E-5
EP-T	mol N eq	8.38E-4	1.76E-5	1.85E-6	8.58E-4	1.76E-5	1.38E-4	9.08E-7	-3.80E-4	6.34E-4
POCP	kg NMVOC eq	2.91E-4	5.04E-6	6.28E-7	2.97E-4	5.05E-6	4.10E-5	3.14E-7	-1.31E-4	2.12E-4
ADP-mm	kg Sb eq	5.04E-5	2.03E-8	1.97E-8	5.04E-5	2.03E-8	1.87E-7	2.33E-10	-7.83E-7	4.98E-5
ADP-f	MJ	2.05E+0	1.21E-2	1.36E-3	2.06E+0	1.21E-2	1.28E-1	6.83E-4	-1.05E+0	1.15E+0
WDP	m3 depriv.	1.13E-1	3.70E-5	5.22E-5	1.13E-1	3.70E-5	4.87E-3	5.85E-6	-5.36E-2	6.43E-2
PM	disease inc.	3.45E-9	7.09E-11	9.08E-12	3.53E-9	7.09E-11	6.05E-10	4.70E-12	-1.65E-9	2.56E-9
IR	kBq U-235 eq	4.16E-3	5.27E-5	1.02E-6	4.22E-3	5.27E-5	4.56E-4	3.11E-6	-1.96E-3	2.77E-3
ETP-fw	CTUe	2.16E+0	9.79E-3	1.21E-2	2.18E+0	9.79E-3	9.43E-1	1.03E-2	-7.85E-1	2.36E+0
HTP-c	CTUh	7.66E-11	3.48E-13	6.17E-13	7.76E-11	3.49E-13	1.68E-11	1.98E-14	-3.16E-11	6.31E-11
HTP-nc	CTUh	1.99E-9	1.17E-11	1.57E-11	2.02E-9	1.17E-11	3.49E-10	2.00E-12	-7.20E-10	1.66E-9
SQP	Pt	3.16E+0	1.03E-2	2.24E-3	3.17E+0	1.03E-2	8.02E-2	1.74E-3	-2.83E+0	4.30E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	6.07E-1	1.73E-4	2.40E-2	6.32E-1	1.73E-4	9.02E-3	2.47E-5	-4.59E-1	1.82E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	6.07E-1	1.73E-4	2.40E-2	6.32E-1	1.73E-4	9.02E-3	2.47E-5	-4.59E-1	1.82E-1
PENRE	MJ	2.20E+0	1.28E-2	1.44E-3	2.21E+0	1.28E-2	1.37E-1	7.25E-4	-1.14E+0	1.23E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.20E+0	1.28E-2	1.44E-3	2.21E+0	1.28E-2	1.37E-1	7.25E-4	-1.14E+0	1.23E+0
PET	MJ	2.81E+0	1.30E-2	2.55E-2	2.84E+0	1.30E-2	1.46E-1	7.50E-4	-1.59E+0	1.41E+0
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	1.47E-3	1.36E-6	1.46E-6	1.47E-3	1.36E-6	1.36E-4	8.30E-7	-6.41E-4	9.70E-4

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	7.73E-6	3.08E-8	2.73E-13	7.76E-6	3.08E-8	2.16E-7	8.44E-10	-1.07E-6	6.93E-6
NHWD	kg	9.69E-3	7.47E-4	1.05E-6	1.04E-2	7.48E-4	5.33E-3	2.99E-3	-4.14E-3	1.54E-2
RWD	kg	3.73E-6	8.20E-8	1.10E-13	3.81E-6	8.20E-8	4.97E-7	4.42E-9	-1.82E-6	2.58E-6
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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