

Environmental Profile

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

Ecochain v3.5.80



Product: 3003259 - PVCU Cap for Spigot GY 50 Drain 60
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	6.52E-2	1.01E-3	1.45E-4	6.63E-2	9.18E-4	7.36E-2	3.00E-4	-5.04E-2	9.08E-2
GWP-f	kg CO2 eq	9.78E-2	1.01E-3	1.46E-4	9.90E-2	9.17E-4	3.89E-2	3.00E-4	-5.33E-2	8.58E-2
GWP-b	kg CO2 eq	-3.27E-2	6.12E-7	-1.54E-6	-3.27E-2	5.57E-7	3.47E-2	3.64E-7	2.97E-3	4.94E-3
GWP-luluc	kg CO2 eq	1.15E-4	3.57E-7	1.49E-7	1.16E-4	3.25E-7	1.13E-5	8.27E-9	-6.40E-5	6.32E-5
ODP	kg CFC11 eq	3.89E-8	2.32E-10	8.26E-12	3.91E-8	2.11E-10	3.12E-9	1.09E-11	-2.13E-8	2.12E-8
AP	mol H+ eq	4.82E-4	5.74E-6	1.47E-6	4.90E-4	5.23E-6	5.63E-5	2.68E-7	-2.01E-4	3.51E-4
EP-fw	kg P eq	4.38E-6	8.30E-9	8.24E-9	4.40E-6	7.55E-9	3.79E-7	3.66E-10	-1.96E-6	2.82E-6
EP-m	kg N eq	8.84E-5	2.05E-6	1.55E-7	9.06E-5	1.87E-6	1.44E-5	1.60E-7	-3.93E-5	6.77E-5
EP-T	mol N eq	9.77E-4	2.26E-5	1.85E-6	1.00E-3	2.06E-5	1.59E-4	1.06E-6	-4.32E-4	7.50E-4
POCP	kg NMVOC eq	3.30E-4	6.47E-6	6.28E-7	3.37E-4	5.89E-6	4.72E-5	3.67E-7	-1.48E-4	2.43E-4
ADP-mm	kg Sb eq	9.87E-5	2.61E-8	1.97E-8	9.87E-5	2.37E-8	2.16E-7	2.74E-10	-9.05E-7	9.81E-5
ADP-f	MJ	2.30E+0	1.55E-2	1.36E-3	2.32E+0	1.41E-2	1.49E-1	7.99E-4	-1.20E+0	1.29E+0
WDP	m3 depriv.	1.29E-1	4.75E-5	5.22E-5	1.30E-1	4.32E-5	5.61E-3	7.34E-6	-6.31E-2	7.21E-2
PM	disease inc.	3.88E-9	9.10E-11	9.08E-12	3.98E-9	8.28E-11	7.00E-10	5.50E-12	-1.88E-9	2.88E-9
IR	kBq U-235 eq	4.87E-3	6.76E-5	1.02E-6	4.93E-3	6.15E-5	5.27E-4	3.63E-6	-2.28E-3	3.25E-3
ETP-fw	CTUe	2.89E+0	1.26E-2	1.21E-2	2.92E+0	1.14E-2	1.08E+0	1.19E-2	-9.38E-1	3.09E+0
HTP-c	CTUh	9.40E-11	4.47E-13	6.17E-13	9.51E-11	4.07E-13	1.95E-11	2.35E-14	-3.52E-11	7.99E-11
HTP-nc	CTUh	2.53E-9	1.50E-11	1.57E-11	2.56E-9	1.36E-11	4.02E-10	2.30E-12	-8.42E-10	2.13E-9
SQP	Pt	3.24E+0	1.32E-2	2.24E-3	3.26E+0	1.20E-2	9.29E-2	2.04E-3	-3.02E+0	3.41E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	6.63E-1	2.22E-4	2.40E-2	6.87E-1	2.02E-4	1.04E-2	2.86E-5	-4.97E-1	2.00E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	6.63E-1	2.22E-4	2.40E-2	6.87E-1	2.02E-4	1.04E-2	2.86E-5	-4.97E-1	2.00E-1
PENRE	MJ	2.47E+0	1.64E-2	1.44E-3	2.49E+0	1.49E-2	1.58E-1	8.48E-4	-1.29E+0	1.37E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.47E+0	1.64E-2	1.44E-3	2.49E+0	1.49E-2	1.58E-1	8.48E-4	-1.29E+0	1.37E+0
PET	MJ	3.13E+0	1.67E-2	2.55E-2	3.18E+0	1.52E-2	1.69E-1	8.76E-4	-1.79E+0	1.57E+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	1.70E-3	1.75E-6	1.46E-6	1.70E-3	1.59E-6	1.57E-4	9.68E-7	-7.62E-4	1.10E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.40E-5	3.96E-8	2.73E-13	1.41E-5	3.60E-8	2.50E-7	9.91E-10	-1.19E-6	1.32E-5
NHWD	kg	1.11E-2	9.59E-4	1.05E-6	1.20E-2	8.73E-4	6.10E-3	3.49E-3	-4.65E-3	1.78E-2
RWD	kg	4.33E-6	1.05E-7	1.10E-13	4.43E-6	9.58E-8	5.75E-7	5.16E-9	-2.11E-6	3.00E-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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