

Environmental Profile

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

Ecochain v3.5.80



Product: 3003269 - PVCU Cap for Spigot GY 160
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	2.86E-1	4.04E-3	1.45E-4	2.90E-1	3.71E-3	2.00E-1	1.18E-3	-1.70E-1	3.25E-1
GWP-f	kg CO2 eq	3.49E-1	4.04E-3	1.46E-4	3.54E-1	3.71E-3	1.24E-1	1.18E-3	-1.89E-1	2.93E-1
GWP-b	kg CO2 eq	-6.34E-2	2.45E-6	-1.54E-6	-6.34E-2	2.25E-6	7.56E-2	1.48E-6	1.97E-2	3.19E-2
GWP-luluc	kg CO2 eq	4.28E-4	1.43E-6	1.49E-7	4.30E-4	1.31E-6	4.71E-5	3.13E-8	-2.80E-4	1.98E-4
ODP	kg CFC11 eq	1.63E-7	9.31E-10	8.26E-12	1.64E-7	8.54E-10	1.31E-8	4.39E-11	-8.35E-8	9.42E-8
AP	mol H+ eq	1.69E-3	2.30E-5	1.47E-6	1.71E-3	2.11E-5	2.28E-4	1.07E-6	-7.65E-4	1.19E-3
EP-fw	kg P eq	1.62E-5	3.32E-8	8.24E-9	1.62E-5	3.05E-8	1.58E-6	1.41E-9	-8.09E-6	9.75E-6
EP-m	kg N eq	3.10E-4	8.23E-6	1.55E-7	3.19E-4	7.56E-6	5.71E-5	6.60E-7	-1.45E-4	2.39E-4
EP-T	mol N eq	3.37E-3	9.07E-5	1.85E-6	3.46E-3	8.33E-5	6.30E-4	4.27E-6	-1.58E-3	2.60E-3
POCP	kg NMVOC eq	1.10E-3	2.59E-5	6.28E-7	1.13E-3	2.38E-5	1.88E-4	1.47E-6	-5.26E-4	8.14E-4
ADP-mm	kg Sb eq	2.98E-4	1.04E-7	1.97E-8	2.98E-4	9.59E-8	8.93E-7	1.08E-9	-3.54E-6	2.96E-4
ADP-f	MJ	8.34E+0	6.20E-2	1.36E-3	8.41E+0	5.69E-2	6.07E-1	3.21E-3	-4.38E+0	4.69E+0
WDP	m3 depriv.	5.06E-1	1.90E-4	5.22E-5	5.06E-1	1.75E-4	2.36E-2	2.22E-5	-2.62E-1	2.68E-1
PM	disease inc.	1.29E-8	3.65E-10	9.08E-12	1.32E-8	3.35E-10	2.83E-9	2.21E-11	-6.98E-9	9.43E-9
IR	kBq U-235 eq	1.84E-2	2.71E-4	1.02E-6	1.86E-2	2.49E-4	2.16E-3	1.47E-5	-9.15E-3	1.19E-2
ETP-fw	CTUe	1.09E+1	5.03E-2	1.21E-2	1.10E+1	4.62E-2	4.62E+0	5.07E-2	-4.05E+0	1.16E+1
HTP-c	CTUh	3.09E-10	1.79E-12	6.17E-13	3.12E-10	1.64E-12	7.12E-11	8.97E-14	-1.21E-10	2.64E-10
HTP-nc	CTUh	9.15E-9	6.00E-11	1.57E-11	9.23E-9	5.51E-11	1.63E-9	9.74E-12	-3.53E-9	7.40E-9
SQP	Pt	7.57E+0	5.30E-2	2.24E-3	7.63E+0	4.87E-2	3.72E-1	8.22E-3	-8.82E+0	-7.67E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.15E+0	8.90E-4	2.40E-2	2.18E+0	8.16E-4	4.33E-2	1.19E-4	-1.54E+0	6.76E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.15E+0	8.90E-4	2.40E-2	2.18E+0	8.16E-4	4.33E-2	1.19E-4	-1.54E+0	6.76E-1
PENRE	MJ	8.95E+0	6.58E-2	1.44E-3	9.02E+0	6.04E-2	6.46E-1	3.41E-3	-4.72E+0	5.01E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	8.95E+0	6.58E-2	1.44E-3	9.02E+0	6.04E-2	6.46E-1	3.41E-3	-4.72E+0	5.01E+0
PET	MJ	1.11E+1	6.67E-2	2.55E-2	1.12E+1	6.12E-2	6.89E-1	3.53E-3	-6.26E+0	5.69E+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	6.07E-3	7.02E-6	1.46E-6	6.08E-3	6.44E-6	6.50E-4	3.93E-6	-3.26E-3	3.49E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	4.35E-5	1.59E-7	2.73E-13	4.36E-5	1.46E-7	1.01E-6	3.92E-9	-4.03E-6	4.08E-5
NHWD	kg	3.83E-2	3.84E-3	1.05E-6	4.21E-2	3.53E-3	2.30E-2	1.41E-2	-1.65E-2	6.62E-2
RWD	kg	1.63E-5	4.22E-7	1.10E-13	1.67E-5	3.87E-7	2.34E-6	2.09E-8	-8.31E-6	1.12E-5
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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