

Environmental Profile

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

Ecochain v3.5.80



Product: 3001399 - PVC U3 Click Inlet GY/GD 500x160 SN8
Unit: 1 piece
Manufacturer: Wavin - PL -Buk - Extra products

Wavin carries a complete PVC range of outdoor sewers. With PVC as a material, a smooth-walled, flexible and completely watertight piping system is obtained. Moreover, PVC is absolutely resistant to all substances that occur in domestic wastewater. By working with a light material, large pipe lengths and plug connections, a very fast installation is guaranteed.

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	4.34E+0	4.39E-2	1.45E-4	4.38E+0	5.22E-2	2.99E+0	1.86E-2	-2.48E+0	4.96E+0
GWP-f	kg CO2 eq	5.01E+0	4.39E-2	1.46E-4	5.06E+0	5.22E-2	2.21E+0	1.86E-2	-2.64E+0	4.70E+0
GWP-b	kg CO2 eq	-6.76E-1	2.66E-5	-1.54E-6	-6.76E-1	3.17E-5	7.75E-1	2.27E-5	1.54E-1	2.53E-1
GWP-luluc	kg CO2 eq	4.86E-3	1.55E-5	1.49E-7	4.88E-3	1.85E-5	6.16E-4	4.44E-7	-2.84E-3	2.68E-3
ODP	kg CFC11 eq	2.26E-6	1.01E-8	8.26E-12	2.27E-6	1.20E-8	1.71E-7	6.57E-10	-1.06E-6	1.40E-6
AP	mol H+ eq	2.33E-2	2.50E-4	1.47E-6	2.36E-2	2.97E-4	3.02E-3	1.59E-5	-9.57E-3	1.73E-2
EP-fw	kg P eq	2.06E-4	3.61E-7	8.24E-9	2.07E-4	4.29E-7	2.07E-5	2.04E-8	-9.42E-5	1.34E-4
EP-m	kg N eq	4.09E-3	8.94E-5	1.55E-7	4.18E-3	1.06E-4	7.62E-4	1.27E-5	-1.80E-3	3.26E-3
EP-T	mol N eq	4.41E-2	9.86E-4	1.85E-6	4.50E-2	1.17E-3	8.40E-3	6.38E-5	-1.96E-2	3.51E-2
POCP	kg NMVOC eq	1.60E-2	2.82E-4	6.28E-7	1.63E-2	3.35E-4	2.49E-3	2.22E-5	-6.71E-3	1.25E-2
ADP-mm	kg Sb eq	6.72E-4	1.14E-6	1.97E-8	6.74E-4	1.35E-6	1.16E-5	1.58E-8	-5.31E-5	6.33E-4
ADP-f	MJ	1.28E+2	6.74E-1	1.36E-3	1.29E+2	8.01E-1	7.95E+0	4.80E-2	-6.13E+1	7.66E+1
WDP	m3 depriv.	6.84E+0	2.07E-3	5.22E-5	6.84E+0	2.46E-3	3.15E-1	2.31E-4	-3.20E+0	3.96E+0
PM	disease inc.	1.96E-7	3.96E-9	9.08E-12	2.00E-7	4.71E-9	3.67E-8	3.30E-10	-8.08E-8	1.61E-7
IR	kBq U-235 eq	2.81E-1	2.94E-3	1.02E-6	2.84E-1	3.50E-3	2.81E-2	2.23E-4	-1.12E-1	2.03E-1
ETP-fw	CTUe	1.06E+2	5.47E-1	1.21E-2	1.07E+2	6.51E-1	6.11E+1	6.72E-1	-4.41E+1	1.25E+2
HTP-c	CTUh	3.30E-9	1.95E-11	6.17E-13	3.32E-9	2.32E-11	8.63E-10	1.27E-12	-1.44E-9	2.76E-9
HTP-nc	CTUh	9.89E-8	6.52E-10	1.57E-11	9.95E-8	7.76E-10	2.14E-8	1.31E-10	-4.26E-8	7.93E-8
SQP	Pt	8.21E+1	5.76E-1	2.24E-3	8.27E+1	6.85E-1	4.87E+0	1.23E-1	-8.50E+1	3.38E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.11E+1	9.66E-3	2.40E-2	2.12E+1	1.15E-2	5.68E-1	1.88E-3	-1.50E+1	6.70E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.11E+1	9.66E-3	2.40E-2	2.12E+1	1.15E-2	5.68E-1	1.88E-3	-1.50E+1	6.70E+0
PENRE	MJ	1.38E+2	7.15E-1	1.44E-3	1.38E+2	8.51E-1	8.46E+0	5.09E-2	-6.62E+1	8.16E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.38E+2	7.15E-1	1.44E-3	1.38E+2	8.51E-1	8.46E+0	5.09E-2	-6.62E+1	8.16E+1
PET	MJ	1.59E+2	7.25E-1	2.55E-2	1.60E+2	8.62E-1	9.03E+0	5.28E-2	-8.12E+1	8.83E+1
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	8.33E-2	7.62E-5	1.46E-6	8.34E-2	9.07E-5	9.36E-3	5.92E-5	-3.85E-2	5.44E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.32E-4	1.72E-6	2.73E-13	1.34E-4	2.05E-6	1.34E-5	5.77E-8	-5.37E-5	9.55E-5
NHWD	kg	4.87E-1	4.18E-2	1.05E-6	5.28E-1	4.97E-2	3.08E-1	2.11E-1	-1.98E-1	8.99E-1
RWD	kg	2.80E-4	4.58E-6	1.10E-13	2.84E-4	5.45E-6	3.03E-5	3.14E-7	-1.03E-4	2.17E-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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