

Environmental Profile

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

Ecochain v3.5.80



Product: 3001400 - PVC U3 Click Inlet GY/GD 630x160 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	4.27E+0	4.31E-2	1.45E-4	4.31E+0	5.11E-2	2.98E+0	1.83E-2	-2.44E+0	4.92E+0
GWP-f	kg CO2 eq	4.94E+0	4.31E-2	1.46E-4	4.98E+0	5.11E-2	2.20E+0	1.83E-2	-2.59E+0	4.66E+0
GWP-b	kg CO2 eq	-6.78E-1	2.62E-5	-1.54E-6	-6.78E-1	3.10E-5	7.75E-1	2.23E-5	1.54E-1	2.52E-1
GWP-luluc	kg CO2 eq	4.81E-3	1.52E-5	1.49E-7	4.83E-3	1.81E-5	6.01E-4	4.36E-7	-2.81E-3	2.64E-3
ODP	kg CFC11 eq	2.21E-6	9.93E-9	8.26E-12	2.22E-6	1.18E-8	1.66E-7	6.45E-10	-1.03E-6	1.37E-6
AP	mol H+ eq	2.30E-2	2.45E-4	1.47E-6	2.33E-2	2.91E-4	2.96E-3	1.56E-5	-9.38E-3	1.72E-2
EP-fw	kg P eq	2.03E-4	3.54E-7	8.24E-9	2.03E-4	4.20E-7	2.01E-5	2.01E-8	-9.22E-5	1.32E-4
EP-m	kg N eq	4.04E-3	8.78E-5	1.55E-7	4.13E-3	1.04E-4	7.46E-4	1.26E-5	-1.77E-3	3.22E-3
EP-T	mol N eq	4.36E-2	9.67E-4	1.85E-6	4.45E-2	1.15E-3	8.22E-3	6.26E-5	-1.92E-2	3.47E-2
POCP	kg NMVOC eq	1.59E-2	2.77E-4	6.28E-7	1.62E-2	3.28E-4	2.43E-3	2.18E-5	-6.59E-3	1.24E-2
ADP-mm	kg Sb eq	6.79E-4	1.11E-6	1.97E-8	6.80E-4	1.32E-6	1.13E-5	1.55E-8	-5.23E-5	6.40E-4
ADP-f	MJ	1.27E+2	6.61E-1	1.36E-3	1.27E+2	7.84E-1	7.76E+0	4.71E-2	-6.02E+1	7.57E+1
WDP	m3 depriv.	6.69E+0	2.03E-3	5.22E-5	6.69E+0	2.41E-3	3.08E-1	2.27E-4	-3.12E+0	3.88E+0
PM	disease inc.	1.95E-7	3.89E-9	9.08E-12	1.99E-7	4.61E-9	3.59E-8	3.24E-10	-7.96E-8	1.60E-7
IR	kBq U-235 eq	2.77E-1	2.89E-3	1.02E-6	2.80E-1	3.43E-3	2.74E-2	2.19E-4	-1.10E-1	2.02E-1
ETP-fw	CTUe	1.05E+2	5.37E-1	1.21E-2	1.06E+2	6.37E-1	5.95E+1	6.55E-1	-4.34E+1	1.23E+2
HTP-c	CTUh	3.25E-9	1.91E-11	6.17E-13	3.27E-9	2.27E-11	8.43E-10	1.24E-12	-1.42E-9	2.72E-9
HTP-nc	CTUh	9.71E-8	6.40E-10	1.57E-11	9.78E-8	7.59E-10	2.09E-8	1.28E-10	-4.16E-8	7.80E-8
SQP	Pt	8.20E+1	5.66E-1	2.24E-3	8.26E+1	6.71E-1	4.75E+0	1.21E-1	-8.49E+1	3.22E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.10E+1	9.48E-3	2.40E-2	2.11E+1	1.12E-2	5.53E-1	1.85E-3	-1.50E+1	6.66E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.10E+1	9.48E-3	2.40E-2	2.11E+1	1.12E-2	5.53E-1	1.85E-3	-1.50E+1	6.66E+0
PENRE	MJ	1.36E+2	7.02E-1	1.44E-3	1.36E+2	8.32E-1	8.26E+0	5.00E-2	-6.50E+1	8.06E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.36E+2	7.02E-1	1.44E-3	1.36E+2	8.32E-1	8.26E+0	5.00E-2	-6.50E+1	8.06E+1
PET	MJ	1.57E+2	7.11E-1	2.55E-2	1.58E+2	8.44E-1	8.81E+0	5.18E-2	-7.99E+1	8.73E+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	8.20E-2	7.48E-5	1.46E-6	8.21E-2	8.87E-5	9.17E-3	5.82E-5	-3.77E-2	5.37E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.30E-4	1.69E-6	2.73E-13	1.32E-4	2.00E-6	1.32E-5	5.66E-8	-5.28E-5	9.45E-5
NHWD	kg	4.80E-1	4.10E-2	1.05E-6	5.21E-1	4.86E-2	3.02E-1	2.08E-1	-1.94E-1	8.85E-1
RWD	kg	2.78E-4	4.50E-6	1.10E-13	2.82E-4	5.33E-6	2.96E-5	3.08E-7	-1.01E-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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