

Environmental Profile

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

Ecochain v3.5.80



Product: 3003959 - PVC U3 Click Inlet GY/GD 250x160 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	4.73E+0	4.64E-2	1.45E-4	4.78E+0	5.67E-2	2.85E+0	1.98E-2	-2.66E+0	5.05E+0
GWP-f	kg CO2 eq	5.23E+0	4.64E-2	1.46E-4	5.28E+0	5.67E-2	2.26E+0	1.98E-2	-2.77E+0	4.85E+0
GWP-b	kg CO2 eq	-5.06E-1	2.82E-5	-1.54E-6	-5.05E-1	3.44E-5	5.90E-1	2.44E-5	1.10E-1	1.95E-1
GWP-luluc	kg CO2 eq	4.76E-3	1.64E-5	1.49E-7	4.78E-3	2.01E-5	6.77E-4	4.76E-7	-2.60E-3	2.88E-3
ODP	kg CFC11 eq	2.45E-6	1.07E-8	8.26E-12	2.46E-6	1.31E-8	1.87E-7	7.06E-10	-1.15E-6	1.51E-6
AP	mol H+ eq	2.41E-2	2.64E-4	1.47E-6	2.44E-2	3.23E-4	3.27E-3	1.71E-5	-9.98E-3	1.80E-2
EP-fw	kg P eq	2.16E-4	3.82E-7	8.24E-9	2.17E-4	4.67E-7	2.27E-5	2.19E-8	-9.71E-5	1.43E-4
EP-m	kg N eq	4.17E-3	9.46E-5	1.55E-7	4.27E-3	1.16E-4	8.15E-4	1.31E-5	-1.84E-3	3.37E-3
EP-T	mol N eq	4.50E-2	1.04E-3	1.85E-6	4.60E-2	1.27E-3	8.99E-3	6.85E-5	-1.99E-2	3.64E-2
POCP	kg NMVOC eq	1.63E-2	2.98E-4	6.28E-7	1.66E-2	3.64E-4	2.67E-3	2.37E-5	-6.87E-3	1.28E-2
ADP-mm	kg Sb eq	6.98E-4	1.20E-6	1.97E-8	6.99E-4	1.47E-6	1.26E-5	1.69E-8	-5.57E-5	6.57E-4
ADP-f	MJ	1.35E+2	7.12E-1	1.36E-3	1.35E+2	8.70E-1	8.67E+0	5.15E-2	-6.50E+1	7.99E+1
WDP	m3 depriv.	7.40E+0	2.19E-3	5.22E-5	7.40E+0	2.67E-3	3.46E-1	2.48E-4	-3.43E+0	4.32E+0
PM	disease inc.	1.94E-7	4.19E-9	9.08E-12	1.98E-7	5.12E-9	3.97E-8	3.54E-10	-7.86E-8	1.65E-7
IR	kBq U-235 eq	2.91E-1	3.11E-3	1.02E-6	2.94E-1	3.80E-3	3.06E-2	2.39E-4	-1.18E-1	2.11E-1
ETP-fw	CTUe	1.05E+2	5.78E-1	1.21E-2	1.06E+2	7.07E-1	6.72E+1	7.41E-1	-4.31E+1	1.31E+2
HTP-c	CTUh	3.41E-9	2.06E-11	6.17E-13	3.43E-9	2.51E-11	9.34E-10	1.36E-12	-1.47E-9	2.92E-9
HTP-nc	CTUh	1.05E-7	6.89E-10	1.57E-11	1.06E-7	8.42E-10	2.34E-8	1.44E-10	-4.50E-8	8.52E-8
SQP	Pt	6.72E+1	6.09E-1	2.24E-3	6.78E+1	7.45E-1	5.30E+0	1.32E-1	-6.63E+1	7.71E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.92E+1	1.02E-2	2.40E-2	1.93E+1	1.25E-2	6.23E-1	2.01E-3	-1.21E+1	7.79E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.92E+1	1.02E-2	2.40E-2	1.93E+1	1.25E-2	6.23E-1	2.01E-3	-1.21E+1	7.79E+0
PENRE	MJ	1.44E+2	7.56E-1	1.44E-3	1.45E+2	9.24E-1	9.22E+0	5.47E-2	-7.01E+1	8.51E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.44E+2	7.56E-1	1.44E-3	1.45E+2	9.24E-1	9.22E+0	5.47E-2	-7.01E+1	8.51E+1
PET	MJ	1.63E+2	7.66E-1	2.55E-2	1.64E+2	9.36E-1	9.84E+0	5.67E-2	-8.23E+1	9.29E+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	8.78E-2	8.06E-5	1.46E-6	8.79E-2	9.85E-5	1.01E-2	6.36E-5	-3.98E-2	5.84E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.42E-4	1.82E-6	2.73E-13	1.44E-4	2.23E-6	1.45E-5	6.19E-8	-5.58E-5	1.05E-4
NHWD	kg	4.98E-1	4.41E-2	1.05E-6	5.42E-1	5.39E-2	3.31E-1	2.27E-1	-2.04E-1	9.50E-1
RWD	kg	2.84E-4	4.84E-6	1.10E-13	2.89E-4	5.92E-6	3.28E-5	3.37E-7	-1.07E-4	2.21E-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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