

Environmental Profile

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

Ecochain v3.5.80



Product: 3003963 - PVC U3 Click Inlet GY/GD 400x160 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	2.37E+0	2.33E-2	1.45E-4	2.39E+0	2.60E-2	2.05E+0	1.04E-2	-1.35E+0	3.12E+0
GWP-f	kg CO2 eq	2.90E+0	2.33E-2	1.46E-4	2.92E+0	2.60E-2	1.45E+0	1.04E-2	-1.47E+0	2.94E+0
GWP-b	kg CO2 eq	-5.31E-1	1.42E-5	-1.54E-6	-5.31E-1	1.58E-5	5.90E-1	1.20E-5	1.20E-1	1.79E-1
GWP-luluc	kg CO2 eq	2.98E-3	8.25E-6	1.49E-7	2.99E-3	9.20E-6	2.80E-4	2.37E-7	-1.75E-3	1.53E-3
ODP	kg CFC11 eq	1.08E-6	5.37E-9	8.26E-12	1.09E-6	5.99E-9	7.67E-8	3.46E-10	-4.90E-7	6.81E-7
AP	mol H+ eq	1.39E-2	1.33E-4	1.47E-6	1.41E-2	1.48E-4	1.46E-3	8.41E-6	-5.01E-3	1.07E-2
EP-fw	kg P eq	1.14E-4	1.92E-7	8.24E-9	1.14E-4	2.14E-7	9.36E-6	1.09E-8	-4.84E-5	7.52E-5
EP-m	kg N eq	2.46E-3	4.75E-5	1.55E-7	2.50E-3	5.30E-5	3.84E-4	7.77E-6	-9.83E-4	1.97E-3
EP-T	mol N eq	2.68E-2	5.23E-4	1.85E-6	2.73E-2	5.84E-4	4.23E-3	3.36E-5	-1.08E-2	2.14E-2
POCP	kg NMVOC eq	1.01E-2	1.50E-4	6.28E-7	1.02E-2	1.67E-4	1.24E-3	1.18E-5	-3.71E-3	7.93E-3
ADP-mm	kg Sb eq	6.09E-4	6.03E-7	1.97E-8	6.09E-4	6.73E-7	5.43E-6	8.33E-9	-2.92E-5	5.86E-4
ADP-f	MJ	7.48E+1	3.58E-1	1.36E-3	7.52E+1	3.99E-1	3.74E+0	2.53E-2	-3.34E+1	4.60E+1
WDP	m3 depriv.	3.38E+0	1.10E-3	5.22E-5	3.38E+0	1.23E-3	1.44E-1	1.27E-4	-1.53E+0	2.00E+0
PM	disease inc.	1.30E-7	2.10E-9	9.08E-12	1.32E-7	2.35E-9	1.77E-8	1.74E-10	-4.72E-8	1.05E-7
IR	kBq U-235 eq	1.64E-1	1.56E-3	1.02E-6	1.66E-1	1.74E-3	1.31E-2	1.18E-4	-5.65E-2	1.24E-1
ETP-fw	CTUe	6.71E+1	2.90E-1	1.21E-2	6.74E+1	3.24E-1	2.72E+1	2.96E-1	-2.49E+1	7.03E+1
HTP-c	CTUh	1.94E-9	1.03E-11	6.17E-13	1.96E-9	1.15E-11	4.24E-10	6.68E-13	-7.70E-10	1.62E-9
HTP-nc	CTUh	5.39E-8	3.46E-10	1.57E-11	5.43E-8	3.86E-10	9.98E-9	5.99E-11	-2.09E-8	4.39E-8
SQP	Pt	6.03E+1	3.06E-1	2.24E-3	6.06E+1	3.42E-1	2.32E+0	6.47E-2	-6.29E+1	4.52E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.62E+1	5.13E-3	2.40E-2	1.62E+1	5.73E-3	2.58E-1	1.01E-3	-1.07E+1	5.74E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.62E+1	5.13E-3	2.40E-2	1.62E+1	5.73E-3	2.58E-1	1.01E-3	-1.07E+1	5.74E+0
PENRE	MJ	8.02E+1	3.80E-1	1.44E-3	8.05E+1	4.24E-1	3.99E+0	2.68E-2	-3.61E+1	4.89E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	8.02E+1	3.80E-1	1.44E-3	8.05E+1	4.24E-1	3.99E+0	2.68E-2	-3.61E+1	4.89E+1
PET	MJ	9.63E+1	3.85E-1	2.55E-2	9.68E+1	4.30E-1	4.24E+0	2.78E-2	-4.68E+1	5.46E+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	4.65E-2	4.05E-5	1.46E-6	4.66E-2	4.52E-5	4.65E-3	3.12E-5	-2.00E-2	3.13E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	8.88E-5	9.15E-7	2.73E-13	8.97E-5	1.02E-6	6.62E-6	3.04E-8	-2.97E-5	6.77E-5
NHWD	kg	2.85E-1	2.22E-2	1.05E-6	3.07E-1	2.47E-2	1.58E-1	1.11E-1	-1.03E-1	4.98E-1
RWD	kg	1.75E-4	2.43E-6	1.10E-13	1.77E-4	2.72E-6	1.44E-5	1.65E-7	-5.32E-5	1.41E-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



Ecochain Technologies BV
H.J.E. Wenckebachweg 123, 1096 AM Amsterdam, The Netherlands
<https://www.ecochain.com>
+31 20 3035 777