Environmental Profile

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

Ecochain v3.5.80

Product:	3022271 - PVC Click Inlet GY 400x200
Unit:	1 Piece
Manufacturer:	Wavin - FR - Varennes

The Wavin range of PVC pipes and fittings to be glued covers all the usual diameters and allows you to create networks that are 100% compatible, homogeneous and meet the requirements of the French market.

LCA standard:	EN15804+A2 (2019)
Standard database:	Worldwide - Ecoinvent v 3.6 Cut-Off
Externally verified:	Yes
Issue date:	24-11-2022
End of validity:	24-11-2027
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 - FR - Varennes (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

A1 Raw material supply A2 Transport A3 Manufacturing

Construction process stage

A4 Transport gate to site
A5 Assembly / Construction installation process

Use stage

B1 Use B2 Maintenance B3 Repair B4 Replacement B5 Refurbishment
B6 Operational energy use B7 Operational water use

End-of-Life stage

C1 De-construction demolition C2 Transport C3 Waste processing
C4 Disposal

Benefits and loads beyond the system boundaries

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

Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	5.96E+0	1.93E-1	2.71E-1	6.42E+0	7.44E-2	3.20E+0	2.58E-2	-3.26E+0	6.47E+0
GWP-f	kg CO2 eq	6.39E+0	1.93E-1	2.12E-1	6.80E+0	7.43E-2	2.81E+0	2.58E-2	-3.35E+0	6.36E+0
GWP-b	kg CO2 eq	-4.40E-1	1.17E-4	5.84E-2	-3.81E-1	4.51E-5	3.96E-1	3.11E-5	8.99E-2	1.05E-1
GWP-luluc	kg CO2 eq	6.72E-3	6.84E-5	2.16E-4	7.00E-3	2.63E-5	8.49E-4	6.55E-7	-2.79E-3	5.09E-3
ODP	kg CFC11 eq	3.00E-6	4.45E-8	2.78E-8	3.08E-6	1.71E-8	2.31E-7	9.23E-10	-1.47E-6	1.86E-6
AP	mol H+ eq	3.17E-2	1.10E-3	1.26E-3	3.41E-2	4.23E-4	4.08E-3	2.25E-5	-1.21E-2	2.65E-2
EP-fw	kg P eq	2.91E-4	1.59E-6	5.08E-6	2.98E-4	6.11E-7	2.83E-5	2.95E-8	-1.17E-4	2.10E-4
EP-m	kg N eq	5.51E-3	3.94E-4	3.64E-4	6.27E-3	1.51E-4	1.02E-3	1.70E-5	-2.18E-3	5.27E-3
EP-T	mol N eq	6.09E-2	4.34E-3	4.45E-3	6.97E-2	1.67E-3	1.12E-2	8.96E-5	-2.35E-2	5.92E-2
POCP	kg NMVOC eq	2.10E-2	1.24E-3	1.08E-3	2.33E-2	4.77E-4	3.33E-3	3.11E-5	-8.12E-3	1.90E-2
ADP-mm	kg Sb eq	7.04E-3	5.00E-6	4.47E-6	7.05E-3	1.92E-6	1.58E-5	2.25E-8	-7.11E-5	7.00E-3
ADP-f	MJ	1.63E+2	2.96E+0	2.95E+0	1.69E+2	1.14E+0	1.09E+1	6.74E-2	-7.92E+1	1.02E+2
WDP	m3 depriv.	9.26E+0	9.10E-3	5.85E+0	1.51E+1	3.50E-3	4.31E-1	4.53E-4	-4.29E+0	1.13E+1
PM	disease inc.	2.46E-7	1.74E-8	1.81E-8	2.82E-7	6.71E-9	5.01E-8	4.63E-10	-8.86E-8	2.51E-7
IR	kBq U-235 eq	3.83E-1	1.30E-2	8.37E-3	4.05E-1	4.99E-3	3.83E-2	3.11E-4	-1.45E-1	3.03E-1
ETP-fw	CTUe	1.80E+2	2.41E+0	2.95E+0	1.85E+2	9.26E-1	8.25E+1	9.09E-1	-4.99E+1	2.20E+2
HTP-c	CTUh	5.40E-9	8.57E-11	2.21E-10	5.70E-9	3.30E-11	1.24E-9	1.85E-12	-1.72E-9	5.25E-9
HTP-nc	CTUh	1.66E-7	2.87E-9	5.82E-9	1.75E-7	1.10E-9	2.93E-8	1.79E-10	-5.56E-8	1.50E-7
SQP	Pt	6.76E+1	2.54E+0	1.60E+1	8.61E+1	9.76E-1	6.76E+0	1.72E-1	-5.18E+1	4.23E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.53E+1	4.25E-2	4.06E+0	1.94E+1	1.64E-2	7.80E-1	2.54E-3	-1.03E+1	9.93E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.53E+1	4.25E-2	4.06E+0	1.94E+1	1.64E-2	7.80E-1	2.54E-3	-1.03E+1	9.93E+0
PENRE	MJ	1.75E+2	3.15E+0	3.19E+0	1.81E+2	1.21E+0	1.16E+1	7.15E-2	-8.54E+1	1.09E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.75E+2	3.15E+0	3.19E+0	1.81E+2	1.21E+0	1.16E+1	7.15E-2	-8.54E+1	1.09E+2
PET	MJ	1.90E+2	3.19E+0	7.25E+0	2.01E+2	1.23E+0	1.24E+1	7.41E-2	-9.57E+1	1.19E+2
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	1.15E-1	3.36E-4	1.37E-1	2.52E-1	1.29E-4	1.26E-2	8.25E-5	-4.83E-2	2.17E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	9.53E-4	7.58E-6	4.28E-6	9.65E-4	2.92E-6	1.83E-5	8.21E-8	-6.74E-5	9.19E-4
NHWD	kg	6.77E-1	1.84E-1	3.14E-2	8.92E-1	7.07E-2	4.18E-1	2.99E-1	-2.44E-1	1.44E+0
RWD	kg	3.71E-4	2.02E-5	8.66E-6	4.00E-4	7.76E-6	4.12E-5	4.39E-7	-1.31E-4	3.18E-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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