Environmental Profile

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

Ecochain v3.5.80

Product:	3022272 - PVC Click Inlet GY 500x200
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

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Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	5.86E+0	1.90E-1	2.67E-1	6.32E+0	7.30E-2	3.17E+0	2.54E-2	-3.21E+0	6.38E+0
GWP-f	kg CO2 eq	6.29E+0	1.90E-1	2.10E-1	6.69E+0	7.30E-2	2.77E+0	2.54E-2	-3.29E+0	6.27E+0
GWP-b	kg CO2 eq	-4.41E-1	1.15E-4	5.74E-2	-3.83E-1	4.43E-5	3.96E-1	3.05E-5	9.03E-2	1.03E-1
GWP-luluc	kg CO2 eq	6.63E-3	6.72E-5	2.11E-4	6.90E-3	2.58E-5	8.33E-4	6.44E-7	-2.76E-3	5.01E-3
ODP	kg CFC11 eq	2.95E-6	4.37E-8	2.74E-8	3.02E-6	1.68E-8	2.26E-7	9.07E-10	-1.44E-6	1.83E-6
AP	mol H+ eq	3.13E-2	1.08E-3	1.23E-3	3.36E-2	4.16E-4	4.01E-3	2.21E-5	-1.19E-2	2.61E-2
EP-fw	kg P eq	2.87E-4	1.56E-6	5.02E-6	2.93E-4	6.00E-7	2.78E-5	2.90E-8	-1.15E-4	2.06E-4
EP-m	kg N eq	5.43E-3	3.87E-4	3.58E-4	6.17E-3	1.49E-4	9.97E-4	1.68E-5	-2.15E-3	5.19E-3
EP-T	mol N eq	6.00E-2	4.26E-3	4.36E-3	6.86E-2	1.64E-3	1.10E-2	8.80E-5	-2.31E-2	5.83E-2
POCP	kg NMVOC eq	2.07E-2	1.22E-3	1.06E-3	2.29E-2	4.69E-4	3.27E-3	3.05E-5	-7.98E-3	1.87E-2
ADP-mm	kg Sb eq	6.89E-3	4.91E-6	4.36E-6	6.90E-3	1.89E-6	1.55E-5	2.21E-8	-7.00E-5	6.85E-3
ADP-f	MJ	1.61E+2	2.91E+0	2.92E+0	1.67E+2	1.12E+0	1.07E+1	6.63E-2	-7.79E+1	1.01E+2
WDP	m3 depriv.	9.09E+0	8.94E-3	5.80E+0	1.49E+1	3.44E-3	4.22E-1	4.44E-4	-4.21E+0	1.11E+1
PM	disease inc.	2.43E-7	1.71E-8	1.78E-8	2.78E-7	6.59E-9	4.92E-8	4.55E-10	-8.73E-8	2.47E-7
IR	kBq U-235 eq	3.78E-1	1.27E-2	8.29E-3	3.99E-1	4.90E-3	3.75E-2	3.05E-4	-1.43E-1	2.99E-1
ETP-fw	CTUe	1.77E+2	2.37E+0	2.89E+0	1.82E+2	9.10E-1	8.09E+1	8.92E-1	-4.91E+1	2.16E+2
HTP-c	CTUh	5.31E-9	8.42E-11	2.18E-10	5.61E-9	3.24E-11	1.21E-9	1.82E-12	-1.69E-9	5.16E-9
HTP-nc	CTUh	1.63E-7	2.82E-9	5.71E-9	1.71E-7	1.08E-9	2.87E-8	1.76E-10	-5.45E-8	1.47E-7
SQP	Pt	6.73E+1	2.49E+0	1.54E+1	8.52E+1	9.58E-1	6.64E+0	1.69E-1	-5.16E+1	4.14E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.52E+1	4.18E-2	3.93E+0	1.91E+1	1.61E-2	7.65E-1	2.50E-3	-1.02E+1	9.71E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.52E+1	4.18E-2	3.93E+0	1.91E+1	1.61E-2	7.65E-1	2.50E-3	-1.02E+1	9.71E+0
PENRE	MJ	1.72E+2	3.09E+0	3.16E+0	1.78E+2	1.19E+0	1.14E+1	7.03E-2	-8.40E+1	1.07E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.72E+2	3.09E+0	3.16E+0	1.78E+2	1.19E+0	1.14E+1	7.03E-2	-8.40E+1	1.07E+2
PET	MJ	1.87E+2	3.14E+0	7.08E+0	1.98E+2	1.21E+0	1.22E+1	7.28E-2	-9.42E+1	1.17E+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	1.13E-1	3.30E-4	1.36E-1	2.49E-1	1.27E-4	1.24E-2	8.11E-5	-4.74E-2	2.15E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	9.33E-4	7.45E-6	4.24E-6	9.45E-4	2.86E-6	1.80E-5	8.07E-8	-6.63E-5	8.99E-4
NHWD	kg	6.67E-1	1.81E-1	3.11E-2	8.78E-1	6.94E-2	4.11E-1	2.94E-1	-2.39E-1	1.41E+0
RWD	kg	3.66E-4	1.98E-5	8.59E-6	3.94E-4	7.62E-6	4.04E-5	4.31E-7	-1.29E-4	3.14E-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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