Environmental Profile

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

Ecochain v3.5.80

Product:	3025479 - PVC TAD Pipe GY 80 L=4 SG/CH
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	4.31E+0	1.52E-1	2.39E-1	4.70E+0	7.40E-2	2.19E+0	1.97E-2	-2.47E+0	4.52E+0
GWP-f	kg CO2 eq	4.62E+0	1.52E-1	1.89E-1	4.96E+0	7.39E-2	1.82E+0	1.97E-2	-2.45E+0	4.42E+0
GWP-b	kg CO2 eq	-3.49E-1	9.23E-5	4.92E-2	-3.00E-1	4.49E-5	3.76E-1	2.54E-5	-1.70E-2	5.98E-2
GWP-luluc	kg CO2 eq	3.59E-2	5.38E-5	1.65E-4	3.62E-2	2.62E-5	8.40E-4	5.39E-7	-1.62E-3	3.54E-2
ODP	kg CFC11 eq	2.47E-6	3.50E-8	2.45E-8	2.53E-6	1.70E-8	2.21E-7	8.25E-10	-1.21E-6	1.56E-6
AP	mol H+ eq	2.21E-2	8.66E-4	1.01E-3	2.39E-2	4.21E-4	3.93E-3	1.96E-5	-9.36E-3	1.89E-2
EP-fw	kg P eq	2.11E-4	1.25E-6	4.49E-6	2.17E-4	6.08E-7	2.78E-5	2.43E-8	-8.98E-5	1.56E-4
EP-m	kg N eq	3.87E-3	3.10E-4	3.00E-4	4.48E-3	1.51E-4	9.64E-4	1.20E-5	-1.64E-3	3.97E-3
EP-T	mol N eq	4.02E-2	3.41E-3	3.54E-3	4.72E-2	1.66E-3	1.06E-2	7.86E-5	-1.77E-2	4.18E-2
POCP	kg NMVOC eq	1.36E-2	9.76E-4	8.88E-4	1.55E-2	4.75E-4	3.20E-3	2.66E-5	-6.06E-3	1.31E-2
ADP-mm	kg Sb eq	1.56E-3	3.93E-6	3.34E-6	1.56E-3	1.91E-6	1.55E-5	1.94E-8	-4.93E-5	1.53E-3
ADP-f	MJ	1.16E+2	2.33E+0	2.65E+0	1.21E+2	1.14E+0	1.09E+1	5.96E-2	-5.94E+1	7.32E+1
WDP	m3 depriv.	7.50E+0	7.16E-3	5.44E+0	1.29E+1	3.48E-3	4.12E-1	3.21E-4	-3.49E+0	9.87E+0
PM	disease inc.	1.62E-7	1.37E-8	1.49E-8	1.91E-7	6.67E-9	5.01E-8	4.07E-10	-6.11E-8	1.87E-7
IR	kBq U-235 eq	2.51E-1	1.02E-2	7.71E-3	2.68E-1	4.96E-3	3.78E-2	2.73E-4	-1.13E-1	1.98E-1
ETP-fw	CTUe	9.05E+1	1.89E+0	2.36E+0	9.47E+1	9.22E-1	7.76E+1	8.50E-1	-3.54E+1	1.39E+2
HTP-c	CTUh	3.43E-9	6.74E-11	1.88E-10	3.69E-9	3.28E-11	1.19E-9	1.51E-12	-1.30E-9	3.62E-9
HTP-nc	CTUh	1.14E-7	2.26E-9	4.77E-9	1.21E-7	1.10E-9	2.80E-8	1.64E-10	-4.47E-8	1.06E-7
SQP	Pt	4.98E+1	2.00E+0	1.06E+1	6.24E+1	9.71E-1	6.92E+0	1.50E-1	-1.32E+1	5.72E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.09E+1	3.35E-2	2.70E+0	1.36E+1	1.63E-2	7.67E-1	2.11E-3	-3.94E+0	1.04E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.09E+1	3.35E-2	2.70E+0	1.36E+1	1.63E-2	7.67E-1	2.11E-3	-3.94E+0	1.04E+1
PENRE	MJ	1.24E+2	2.48E+0	2.87E+0	1.29E+2	1.20E+0	1.16E+1	6.32E-2	-6.40E+1	7.82E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.24E+2	2.48E+0	2.87E+0	1.29E+2	1.20E+0	1.16E+1	6.32E-2	-6.40E+1	7.82E+1
PET	MJ	1.35E+2	2.51E+0	5.57E+0	1.43E+2	1.22E+0	1.24E+1	6.53E-2	-6.80E+1	8.86E+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	8.25E-2	2.64E-4	1.27E-1	2.10E-1	1.28E-4	1.13E-2	7.30E-5	-3.67E-2	1.85E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.46E-4	5.97E-6	3.98E-6	2.56E-4	2.90E-6	1.75E-5	7.15E-8	-4.92E-5	2.27E-4
NHWD	kg	4.82E-1	1.45E-1	2.92E-2	6.56E-1	7.03E-2	4.12E-1	2.81E-1	-1.88E-1	1.23E+0
RWD	kg	2.19E-4	1.59E-5	8.06E-6	2.43E-4	7.72E-6	4.09E-5	3.90E-7	-9.99E-5	1.92E-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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