Environmental Profile

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

Ecochain v3.5.80

Product:	3025475 - PVC TAD Pipe GY 125 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	5.81E+0	2.72E-1	3.65E-1	6.45E+0	1.19E-1	2.94E+0	3.16E-2	-2.65E+0	6.89E+0
GWP-f	kg CO2 eq	5.69E+0	2.72E-1	2.93E-1	6.25E+0	1.19E-1	2.91E+0	3.16E-2	-2.63E+0	6.68E+0
GWP-b	kg CO2 eq	7.14E-2	1.65E-4	7.20E-2	1.44E-1	7.21E-5	2.69E-2	4.07E-5	-1.64E-2	1.54E-1
GWP-luluc	kg CO2 eq	5.44E-2	9.62E-5	2.16E-4	5.47E-2	4.20E-5	1.35E-3	8.63E-7	-1.52E-3	5.46E-2
ODP	kg CFC11 eq	2.85E-6	6.26E-8	3.76E-8	2.95E-6	2.73E-8	3.55E-7	1.32E-9	-1.19E-6	2.15E-6
AP	mol H+ eq	2.75E-2	1.55E-3	1.40E-3	3.05E-2	6.76E-4	6.26E-3	3.15E-5	-9.05E-3	2.84E-2
EP-fw	kg P eq	2.72E-4	2.24E-6	6.88E-6	2.81E-4	9.76E-7	4.46E-5	3.89E-8	-8.61E-5	2.41E-4
EP-m	kg N eq	4.83E-3	5.54E-4	4.28E-4	5.81E-3	2.42E-4	1.52E-3	1.94E-5	-1.60E-3	5.99E-3
EP-T	mol N eq	4.92E-2	6.11E-3	4.84E-3	6.01E-2	2.67E-3	1.68E-2	1.26E-4	-1.71E-2	6.26E-2
POCP	kg NMVOC eq	1.65E-2	1.75E-3	1.27E-3	1.95E-2	7.62E-4	5.07E-3	4.26E-5	-5.95E-3	1.95E-2
ADP-mm	kg Sb eq	2.24E-3	7.03E-6	4.23E-6	2.25E-3	3.07E-6	2.49E-5	3.10E-8	-4.72E-5	2.23E-3
ADP-f	MJ	1.39E+2	4.17E+0	4.12E+0	1.48E+2	1.82E+0	1.74E+1	9.56E-2	-6.19E+1	1.05E+2
WDP	m3 depriv.	8.69E+0	1.28E-2	8.74E+0	1.74E+1	5.59E-3	6.61E-1	5.06E-4	-3.36E+0	1.47E+1
PM	disease inc.	1.90E-7	2.45E-8	2.12E-8	2.36E-7	1.07E-8	7.99E-8	6.53E-10	-5.68E-8	2.70E-7
IR	kBq U-235 eq	3.26E-1	1.82E-2	1.23E-2	3.56E-1	7.96E-3	6.05E-2	4.38E-4	-1.10E-1	3.15E-1
ETP-fw	CTUe	1.16E+2	3.39E+0	3.24E+0	1.23E+2	1.48E+0	1.25E+2	1.37E+0	-3.32E+1	2.17E+2
HTP-c	CTUh	4.14E-9	1.21E-10	2.79E-10	4.54E-9	5.26E-11	1.87E-9	2.42E-12	-1.24E-9	5.23E-9
HTP-nc	CTUh	1.39E-7	4.04E-9	6.78E-9	1.50E-7	1.76E-9	4.49E-8	2.64E-10	-4.25E-8	1.54E-7
SQP	Pt	2.32E+1	3.57E+0	1.11E+1	3.79E+1	1.56E+0	1.11E+1	2.41E-1	-6.12E+0	4.47E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	7.92E+0	5.99E-2	2.85E+0	1.08E+1	2.61E-2	1.23E+0	3.39E-3	-2.45E+0	9.64E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	7.92E+0	5.99E-2	2.85E+0	1.08E+1	2.61E-2	1.23E+0	3.39E-3	-2.45E+0	9.64E+0
PENRE	MJ	1.49E+2	4.43E+0	4.46E+0	1.58E+2	1.93E+0	1.86E+1	1.01E-1	-6.68E+1	1.12E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.49E+2	4.43E+0	4.46E+0	1.58E+2	1.93E+0	1.86E+1	1.01E-1	-6.68E+1	1.12E+2
PET	MJ	1.57E+2	4.49E+0	7.31E+0	1.69E+2	1.96E+0	1.98E+1	1.05E-1	-6.92E+1	1.22E+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	9.96E-2	4.72E-4	2.05E-1	3.05E-1	2.06E-4	1.81E-2	1.17E-4	-3.56E-2	2.87E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	3.37E-4	1.07E-5	6.40E-6	3.54E-4	4.66E-6	2.80E-5	1.15E-7	-5.27E-5	3.35E-4
NHWD	kg	6.07E-1	2.59E-1	4.69E-2	9.13E-1	1.13E-1	6.50E-1	4.51E-1	-1.79E-1	1.95E+0
RWD	kg	2.82E-4	2.84E-5	1.30E-5	3.24E-4	1.24E-5	6.54E-5	6.26E-7	-9.75E-5	3.04E-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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