

Environmental Profile

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

Ecochain v3.5.80



Product: 3025582 - Gutter PVC Pipe WT 80 L= 4 SG/CH
 Unit: 1 Piece
 Manufacturer: Wavin - FR - Varennes

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



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.

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]

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Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	4.07E+0	1.24E-1	1.83E-1	4.37E+0	5.56E-2	1.60E+0	1.67E-2	-2.19E+0	3.86E+0
GWP-f	kg CO2 eq	4.16E+0	1.24E-1	1.44E-1	4.43E+0	5.55E-2	1.46E+0	1.67E-2	-2.17E+0	3.79E+0
GWP-b	kg CO2 eq	-9.94E-2	7.53E-5	3.83E-2	-6.10E-2	3.37E-5	1.33E-1	2.07E-5	-1.53E-2	5.68E-2
GWP-luluc	kg CO2 eq	1.05E-2	4.39E-5	1.34E-4	1.06E-2	1.96E-5	6.50E-4	4.54E-7	-1.43E-3	9.88E-3
ODP	kg CFC11 eq	2.12E-6	2.86E-8	1.88E-8	2.16E-6	1.28E-8	1.74E-7	6.41E-10	-1.09E-6	1.26E-6
AP	mol H+ eq	2.43E-2	7.06E-4	8.01E-4	2.58E-2	3.16E-4	3.02E-3	1.55E-5	-8.32E-3	2.08E-2
EP-fw	kg P eq	1.89E-4	1.02E-6	3.43E-6	1.94E-4	4.57E-7	2.16E-5	2.03E-8	-8.06E-5	1.35E-4
EP-m	kg N eq	3.45E-3	2.53E-4	2.36E-4	3.94E-3	1.13E-4	7.36E-4	9.42E-6	-1.44E-3	3.36E-3
EP-T	mol N eq	3.66E-2	2.78E-3	2.82E-3	4.22E-2	1.25E-3	8.11E-3	6.18E-5	-1.55E-2	3.61E-2
POCP	kg NMVOC eq	1.26E-2	7.96E-4	6.98E-4	1.41E-2	3.56E-4	2.44E-3	2.12E-5	-5.36E-3	1.16E-2
ADP-mm	kg Sb eq	1.82E-3	3.21E-6	2.73E-6	1.83E-3	1.44E-6	1.19E-5	1.56E-8	-4.44E-5	1.79E-3
ADP-f	MJ	1.02E+2	1.90E+0	2.01E+0	1.06E+2	8.52E-1	8.33E+0	4.67E-2	-5.31E+1	6.17E+1
WDP	m3 depriv.	6.73E+0	5.84E-3	4.08E+0	1.08E+1	2.62E-3	3.22E-1	3.41E-4	-3.15E+0	8.00E+0
PM	disease inc.	1.47E-7	1.12E-8	1.17E-8	1.70E-7	5.01E-9	3.80E-8	3.20E-10	-5.34E-8	1.60E-7
IR	kBq U-235 eq	2.22E-1	8.32E-3	5.80E-3	2.36E-1	3.72E-3	2.90E-2	2.13E-4	-1.02E-1	1.68E-1
ETP-fw	CTUe	8.71E+1	1.54E+0	1.87E+0	9.05E+1	6.92E-1	6.15E+1	6.78E-1	-3.08E+1	1.23E+2
HTP-c	CTUh	3.91E-9	5.50E-11	1.46E-10	4.12E-9	2.46E-11	9.59E-10	1.28E-12	-1.15E-9	3.95E-9
HTP-nc	CTUh	1.11E-7	1.84E-9	3.76E-9	1.16E-7	8.25E-10	2.20E-8	1.31E-10	-3.99E-8	9.92E-8
SQP	Pt	2.66E+1	1.63E+0	9.11E+0	3.73E+1	7.29E-1	5.22E+0	1.18E-1	-7.97E+0	3.54E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	6.94E+0	2.73E-2	2.32E+0	9.29E+0	1.22E-2	5.94E-1	1.67E-3	-2.77E+0	7.13E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	6.94E+0	2.73E-2	2.32E+0	9.29E+0	1.22E-2	5.94E-1	1.67E-3	-2.77E+0	7.13E+0
PENRE	MJ	1.09E+2	2.02E+0	2.18E+0	1.13E+2	9.05E-1	8.86E+0	4.95E-2	-5.72E+1	6.59E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.09E+2	2.02E+0	2.18E+0	1.13E+2	9.05E-1	8.86E+0	4.95E-2	-5.72E+1	6.59E+1
PET	MJ	1.16E+2	2.05E+0	4.50E+0	1.23E+2	9.17E-1	9.46E+0	5.12E-2	-6.00E+1	7.31E+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	7.90E-2	2.15E-4	9.56E-2	1.75E-1	9.64E-5	8.81E-3	5.69E-5	-3.30E-2	1.51E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.63E-4	4.87E-6	2.99E-6	2.71E-4	2.18E-6	1.34E-5	5.70E-8	-4.35E-5	2.43E-4
NHWD	kg	6.22E-1	1.18E-1	2.19E-2	7.62E-1	5.28E-2	3.10E-1	2.11E-1	-1.68E-1	1.17E+0
RWD	kg	1.96E-4	1.29E-5	6.05E-6	2.15E-4	5.80E-6	3.12E-5	3.03E-7	-8.95E-5	1.63E-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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