

# Environmental Profile

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

Ecochain v3.5.80



Product: 3025977 - PVC Access Plug GY 100 BC  
 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	☑	☑	☑	☑									

## 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	3.15E-1	1.12E-2	1.68E-2	3.43E-1	4.34E-3	1.88E-1	1.39E-3	-1.74E-1	3.63E-1
GWP-f	kg CO2 eq	3.57E-1	1.12E-2	1.28E-2	3.81E-1	4.33E-3	1.31E-1	1.39E-3	-1.99E-1	3.18E-1
GWP-b	kg CO2 eq	-4.25E-2	6.82E-6	4.03E-3	-3.85E-2	2.63E-6	5.74E-2	1.70E-6	2.57E-2	4.46E-2
GWP-luluc	kg CO2 eq	4.75E-4	3.97E-6	1.79E-5	4.97E-4	1.53E-6	5.22E-5	3.75E-8	-3.23E-4	2.28E-4
ODP	kg CFC11 eq	1.79E-7	2.59E-9	1.72E-9	1.83E-7	9.98E-10	1.43E-8	5.15E-11	-9.15E-8	1.07E-7
AP	mol H+ eq	1.79E-3	6.39E-5	9.59E-5	1.95E-3	2.47E-5	2.53E-4	1.26E-6	-8.35E-4	1.39E-3
EP-fw	kg P eq	1.74E-5	9.24E-8	3.14E-7	1.79E-5	3.56E-8	1.74E-6	1.67E-9	-9.11E-6	1.05E-5
EP-m	kg N eq	3.31E-4	2.29E-5	2.64E-5	3.80E-4	8.83E-6	6.35E-5	8.06E-7	-1.56E-4	2.97E-4
EP-T	mol N eq	3.60E-3	2.52E-4	3.47E-4	4.20E-3	9.73E-5	6.99E-4	5.00E-6	-1.70E-3	3.30E-3
POCP	kg NMVOC eq	1.14E-3	7.21E-5	7.82E-5	1.29E-3	2.78E-5	2.09E-4	1.72E-6	-5.58E-4	9.69E-4
ADP-mm	kg Sb eq	4.47E-4	2.90E-7	3.87E-7	4.48E-4	1.12E-7	9.98E-7	1.27E-9	-4.05E-6	4.45E-4
ADP-f	MJ	8.70E+0	1.72E-1	1.74E-1	9.04E+0	6.65E-2	6.81E-1	3.76E-3	-4.67E+0	5.13E+0
WDP	m3 depriv.	5.38E-1	5.29E-4	3.10E-1	8.49E-1	2.04E-4	2.60E-2	2.95E-5	-2.94E-1	5.81E-1
PM	disease inc.	1.40E-8	1.01E-9	1.32E-9	1.63E-8	3.91E-10	3.18E-9	2.59E-11	-7.59E-9	1.23E-8
IR	kBq U-235 eq	2.12E-2	7.53E-4	4.58E-4	2.24E-2	2.91E-4	2.41E-3	1.72E-5	-1.02E-2	1.49E-2
ETP-fw	CTUe	1.29E+1	1.40E-1	2.29E-1	1.33E+1	5.40E-2	5.01E+0	5.49E-2	-4.66E+0	1.38E+1
HTP-c	CTUh	3.29E-10	4.98E-12	1.49E-11	3.48E-10	1.92E-12	7.99E-11	1.06E-13	-1.25E-10	3.05E-10
HTP-nc	CTUh	1.01E-8	1.67E-10	4.26E-10	1.07E-8	6.44E-11	1.80E-9	1.07E-11	-3.89E-9	8.64E-9
SQP	Pt	6.11E+0	1.47E-1	1.62E+0	7.88E+0	5.69E-2	4.21E-1	9.58E-3	-8.48E+0	-1.11E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.20E+0	2.47E-3	4.12E-1	1.61E+0	9.54E-4	4.79E-2	1.37E-4	-1.54E+0	1.21E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.20E+0	2.47E-3	4.12E-1	1.61E+0	9.54E-4	4.79E-2	1.37E-4	-1.54E+0	1.21E-1
PENRE	MJ	9.32E+0	1.83E-1	1.88E-1	9.70E+0	7.06E-2	7.24E-1	3.99E-3	-5.02E+0	5.47E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	9.32E+0	1.83E-1	1.88E-1	9.70E+0	7.06E-2	7.24E-1	3.99E-3	-5.02E+0	5.47E+0
PET	MJ	1.05E+1	1.85E-1	6.00E-1	1.13E+1	7.15E-2	7.72E-1	4.13E-3	-6.56E+0	5.59E+0
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	6.46E-3	1.95E-5	7.28E-3	1.38E-2	7.52E-6	7.27E-4	4.58E-6	-3.71E-3	1.08E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	6.22E-5	4.41E-7	2.26E-7	6.29E-5	1.70E-7	1.14E-6	4.62E-9	-4.19E-6	6.00E-5
NHWD	kg	4.09E-2	1.07E-2	1.66E-3	5.32E-2	4.12E-3	2.54E-2	1.67E-2	-1.74E-2	8.20E-2
RWD	kg	1.96E-5	1.17E-6	4.58E-7	2.13E-5	4.52E-7	2.62E-6	2.44E-8	-9.20E-6	1.51E-5
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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