Environmental Profile

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

Ecochain v3.5.80

Product:	3025976 - PVC Access Plug GY 125 BC
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	5.90E-1	3.63E-2	3.33E-2	6.60E-1	7.79E-3	3.52E-1	2.48E-3	-3.17E-1	7.05E-1
GWP-f	kg CO2 eq	7.08E-1	3.62E-2	2.50E-2	7.69E-1	7.78E-3	2.37E-1	2.48E-3	-3.68E-1	6.48E-1
GWP-b	kg CO2 eq	-1.19E-1	2.20E-5	8.24E-3	-1.10E-1	4.73E-6	1.15E-1	3.13E-6	5.15E-2	5.60E-2
GWP-luluc	kg CO2 eq	9.36E-4	1.28E-5	3.85E-5	9.88E-4	2.75E-6	9.71E-5	6.45E-8	-6.26E-4	4.61E-4
ODP	kg CFC11 eq	3.44E-7	8.35E-9	3.39E-9	3.56E-7	1.79E-9	2.71E-8	9.29E-11	-1.68E-7	2.17E-7
AP	mol H+ eq	3.47E-3	2.06E-4	2.02E-4	3.88E-3	4.43E-5	4.71E-4	2.25E-6	-1.55E-3	2.84E-3
EP-fw	kg P eq	3.27E-5	2.98E-7	6.20E-7	3.36E-5	6.40E-8	3.26E-6	2.92E-9	-1.71E-5	1.99E-5
EP-m	kg N eq	6.75E-4	7.39E-5	5.49E-5	8.04E-4	1.59E-5	1.18E-4	1.48E-6	-2.92E-4	6.47E-4
EP-T	mol N eq	7.29E-3	8.14E-4	7.33E-4	8.83E-3	1.75E-4	1.30E-3	8.99E-6	-3.19E-3	7.13E-3
POCP	kg NMVOC eq	2.32E-3	2.33E-4	1.62E-4	2.72E-3	5.00E-5	3.87E-4	3.09E-6	-1.04E-3	2.11E-3
ADP-mm	kg Sb eq	4.62E-4	9.38E-7	8.37E-7	4.64E-4	2.01E-7	1.86E-6	2.25E-9	-7.44E-6	4.58E-4
ADP-f	MJ	1.69E+1	5.56E-1	3.39E-1	1.78E+1	1.19E-1	1.26E+0	6.78E-3	-8.61E+0	1.06E+1
WDP	m3 depriv.	1.01E+0	1.71E-3	5.80E-1	1.59E+0	3.67E-4	4.88E-2	4.14E-5	-5.44E-1	1.10E+0
PM	disease inc.	2.92E-8	3.27E-9	2.75E-9	3.52E-8	7.02E-10	5.85E-9	4.66E-11	-1.44E-8	2.74E-8
IR	kBq U-235 eq	4.01E-2	2.43E-3	8.66E-4	4.34E-2	5.22E-4	4.47E-3	3.12E-5	-1.89E-2	2.95E-2
ETP-fw	CTUe	2.28E+1	4.52E-1	4.83E-1	2.38E+1	9.70E-2	9.55E+0	1.05E-1	-8.90E+0	2.46E+1
HTP-c	CTUh	5.92E-10	1.61E-11	3.02E-11	6.38E-10	3.45E-12	1.40E-10	1.84E-13	-2.34E-10	5.47E-10
HTP-nc	CTUh	1.77E-8	5.39E-10	8.86E-10	1.91E-8	1.16E-10	3.34E-9	2.02E-11	-7.22E-9	1.53E-8
SQP	Pt	1.55E+1	4.76E-1	3.63E+0	1.96E+1	1.02E-1	7.68E-1	1.73E-2	-1.69E+1	3.57E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	3.59E+0	7.98E-3	9.21E-1	4.52E+0	1.71E-3	8.94E-2	2.54E-4	-3.05E+0	1.56E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	3.59E+0	7.98E-3	9.21E-1	4.52E+0	1.71E-3	8.94E-2	2.54E-4	-3.05E+0	1.56E+0
PENRE	MJ	1.81E+1	5.91E-1	3.65E-1	1.91E+1	1.27E-1	1.34E+0	7.19E-3	-9.26E+0	1.13E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.81E+1	5.91E-1	3.65E-1	1.91E+1	1.27E-1	1.34E+0	7.19E-3	-9.26E+0	1.13E+1
PET	MJ	2.17E+1	5.99E-1	1.29E+0	2.36E+1	1.29E-1	1.43E+0	7.44E-3	-1.23E+1	1.28E+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	1.20E-2	6.30E-5	1.36E-2	2.56E-2	1.35E-5	1.37E-3	8.31E-6	-6.96E-3	2.01E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	7.02E-5	1.42E-6	4.23E-7	7.21E-5	3.05E-7	2.09E-6	8.22E-9	-7.78E-6	6.67E-5
NHWD	kg	1.03E-1	3.45E-2	3.11E-3	1.41E-1	7.40E-3	4.61E-2	3.00E-2	-3.25E-2	1.92E-1
RWD	kg	3.80E-5	3.78E-6	8.55E-7	4.26E-5	8.12E-7	4.84E-6	4.41E-8	-1.71E-5	3.12E-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

Ecochain Technologies BV
H.J.E. Wenckebachweg 123, 1096 AM Amsterdam, The Netherlands
https://www.ecochain.com
+31 20 3035 777