Environmental Profile

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

Ecochain v3.5.80

Product:	3025979 - PVC Access Plug GY 50 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	5.84E-2	2.16E-3	3.89E-3	6.45E-2	8.17E-4	5.89E-2	2.60E-4	-3.22E-2	9.23E-2
GWP-f	kg CO2 eq	8.06E-2	2.15E-3	2.85E-3	8.56E-2	8.17E-4	3.02E-2	2.60E-4	-4.53E-2	7.15E-2
GWP-b	kg CO2 eq	-2.23E-2	1.31E-6	1.03E-3	-2.12E-2	4.96E-7	2.87E-2	3.20E-7	1.32E-2	2.07E-2
GWP-luluc	kg CO2 eq	1.49E-4	7.62E-7	5.28E-6	1.55E-4	2.89E-7	9.87E-6	6.96E-9	-1.25E-4	3.97E-5
ODP	kg CFC11 eq	3.41E-8	4.96E-10	3.95E-10	3.50E-8	1.88E-10	2.76E-9	9.78E-12	-1.76E-8	2.03E-8
AP	mol H+ eq	4.11E-4	1.23E-5	2.66E-5	4.50E-4	4.65E-6	5.21E-5	2.37E-7	-2.06E-4	3.01E-4
EP-fw	kg P eq	4.07E-6	1.77E-8	7.22E-8	4.16E-6	6.72E-9	3.31E-7	3.11E-10	-2.48E-6	2.02E-6
EP-m	kg N eq	8.42E-5	4.39E-6	7.08E-6	9.57E-5	1.66E-6	1.38E-5	1.63E-7	-4.16E-5	6.96E-5
EP-T	mol N eq	9.00E-4	4.84E-5	9.79E-5	1.05E-3	1.83E-5	1.52E-4	9.46E-7	-4.63E-4	7.54E-4
POCP	kg NMVOC eq	2.81E-4	1.38E-5	2.09E-5	3.15E-4	5.24E-6	4.52E-5	3.25E-7	-1.45E-4	2.21E-4
ADP-mm	kg Sb eq	1.00E-4	5.57E-8	1.17E-7	1.00E-4	2.11E-8	2.04E-7	2.38E-10	-8.58E-7	9.96E-5
ADP-f	MJ	1.88E+0	3.31E-2	3.80E-2	1.96E+0	1.25E-2	1.35E-1	7.13E-4	-1.00E+0	1.10E+0
WDP	m3 depriv.	1.06E-1	1.01E-4	5.88E-2	1.65E-1	3.85E-5	4.86E-3	5.14E-6	-6.59E-2	1.04E-1
PM	disease inc.	3.72E-9	1.94E-10	3.55E-10	4.27E-9	7.37E-11	6.62E-10	4.89E-12	-2.45E-9	2.56E-9
IR	kBq U-235 eq	4.62E-3	1.44E-4	9.08E-5	4.86E-3	5.48E-5	4.85E-4	3.27E-6	-2.48E-3	2.92E-3
ETP-fw	CTUe	3.71E+0	2.68E-2	6.43E-2	3.80E+0	1.02E-2	9.35E-1	1.00E-2	-1.55E+0	3.20E+0
HTP-c	CTUh	7.60E-11	9.55E-13	3.73E-12	8.07E-11	3.62E-13	1.63E-11	1.97E-14	-3.30E-11	6.44E-11
HTP-nc	CTUh	2.16E-9	3.20E-11	1.15E-10	2.30E-9	1.21E-11	3.49E-10	1.96E-12	-9.17E-10	1.75E-9
SQP	Pt	2.70E+0	2.83E-2	5.34E-1	3.26E+0	1.07E-2	8.38E-2	1.81E-3	-4.10E+0	-7.38E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	4.73E-1	4.74E-4	1.35E-1	6.09E-1	1.80E-4	9.09E-3	2.60E-5	-7.11E-1	-9.28E-2
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	4.73E-1	4.74E-4	1.35E-1	6.09E-1	1.80E-4	9.09E-3	2.60E-5	-7.11E-1	-9.28E-2
PENRE	MJ	2.02E+0	3.51E-2	4.10E-2	2.10E+0	1.33E-2	1.44E-1	7.56E-4	-1.08E+0	1.18E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.02E+0	3.51E-2	4.10E-2	2.10E+0	1.33E-2	1.44E-1	7.56E-4	-1.08E+0	1.18E+0
PET	MJ	2.49E+0	3.56E-2	1.76E-1	2.71E+0	1.35E-2	1.53E-1	7.82E-4	-1.79E+0	1.08E+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	1.42E-3	3.74E-6	1.38E-3	2.80E-3	1.42E-6	1.41E-4	8.70E-7	-1.01E-3	1.93E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.38E-5	8.45E-8	4.27E-8	1.40E-5	3.21E-8	2.37E-7	8.70E-10	-9.98E-7	1.32E-5
NHWD	kg	1.01E-2	2.05E-3	3.16E-4	1.25E-2	7.77E-4	5.29E-3	3.20E-3	-4.40E-3	1.73E-2
RWD	kg	4.35E-6	2.25E-7	8.64E-8	4.66E-6	8.53E-8	5.44E-7	4.64E-9	-2.30E-6	3.00E-6
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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