Environmental Profile

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

Ecochain v3.5.80

Product:	3025713 - PVC Access Plug GY 140 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	9.48E-1	1.72E-2	3.73E-2	1.00E+0	5.08E-3	6.71E-1	1.66E-3	-4.35E-1	1.25E+0
GWP-f	kg CO2 eq	1.04E+0	1.72E-2	2.82E-2	1.09E+0	5.07E-3	5.47E-1	1.65E-3	-5.09E-1	1.13E+0
GWP-b	kg CO2 eq	-9.53E-2	1.05E-5	9.13E-3	-8.61E-2	3.08E-6	1.24E-1	2.04E-6	7.37E-2	1.12E-1
GWP-luluc	kg CO2 eq	1.31E-3	6.09E-6	4.19E-5	1.35E-3	1.79E-6	6.52E-5	4.37E-8	-7.13E-4	7.08E-4
ODP	kg CFC11 eq	2.44E-7	3.97E-9	3.81E-9	2.52E-7	1.17E-9	1.85E-8	6.12E-11	-1.35E-7	1.37E-7
AP	mol H+ eq	4.92E-3	9.81E-5	2.21E-4	5.24E-3	2.89E-5	3.82E-4	1.49E-6	-1.42E-3	4.24E-3
EP-fw	kg P eq	4.33E-5	1.42E-7	6.96E-7	4.42E-5	4.17E-8	2.19E-6	1.96E-9	-1.52E-5	3.12E-5
EP-m	kg N eq	9.31E-4	3.51E-5	6.05E-5	1.03E-3	1.03E-5	1.09E-4	1.02E-6	-3.01E-4	8.46E-4
EP-T	mol N eq	1.02E-2	3.87E-4	8.02E-4	1.14E-2	1.14E-4	1.20E-3	5.93E-6	-3.32E-3	9.38E-3
POCP	kg NMVOC eq	3.70E-3	1.11E-4	1.79E-4	3.99E-3	3.26E-5	3.53E-4	2.04E-6	-1.07E-3	3.31E-3
ADP-mm	kg Sb eq	5.10E-4	4.45E-7	9.08E-7	5.11E-4	1.31E-7	1.36E-6	1.50E-9	-5.41E-6	5.07E-4
ADP-f	MJ	2.53E+1	2.64E-1	3.82E-1	2.60E+1	7.78E-2	9.14E-1	4.47E-3	-1.02E+1	1.67E+1
WDP	m3 depriv.	9.33E-1	8.11E-4	6.66E-1	1.60E+0	2.39E-4	3.22E-2	3.18E-5	-4.25E-1	1.21E+0
PM	disease inc.	4.07E-8	1.55E-9	3.02E-9	4.53E-8	4.58E-10	4.71E-9	3.07E-11	-1.45E-8	3.59E-8
IR	kBq U-235 eq	4.73E-2	1.16E-3	9.89E-4	4.95E-2	3.40E-4	3.28E-3	2.05E-5	-1.63E-2	3.69E-2
ETP-fw	CTUe	2.85E+1	2.15E-1	5.28E-1	2.92E+1	6.32E-2	6.16E+0	6.50E-2	-9.26E+0	2.62E+1
HTP-c	CTUh	5.93E-10	7.64E-12	3.35E-11	6.34E-10	2.25E-12	1.47E-10	1.24E-13	-2.03E-10	5.79E-10
HTP-nc	CTUh	1.72E-8	2.56E-10	9.75E-10	1.84E-8	7.53E-11	2.60E-9	1.26E-11	-5.79E-9	1.53E-8
SQP	Pt	1.42E+1	2.26E-1	3.89E+0	1.83E+1	6.66E-2	5.76E-1	1.14E-2	-2.06E+1	-1.61E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.84E+0	3.79E-3	9.88E-1	3.83E+0	1.12E-3	6.02E-2	1.65E-4	-3.64E+0	2.51E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.84E+0	3.79E-3	9.88E-1	3.83E+0	1.12E-3	6.02E-2	1.65E-4	-3.64E+0	2.51E-1
PENRE	MJ	2.71E+1	2.81E-1	4.13E-1	2.78E+1	8.26E-2	9.73E-1	4.74E-3	-1.11E+1	1.77E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.71E+1	2.81E-1	4.13E-1	2.78E+1	8.26E-2	9.73E-1	4.74E-3	-1.11E+1	1.77E+1
PET	MJ	3.00E+1	2.84E-1	1.40E+0	3.17E+1	8.38E-2	1.03E+0	4.90E-3	-1.48E+1	1.80E+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	1.51E-2	2.99E-5	1.56E-2	3.07E-2	8.81E-6	9.77E-4	5.46E-6	-6.39E-3	2.53E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	7.97E-5	6.76E-7	4.85E-7	8.08E-5	1.99E-7	1.67E-6	5.45E-9	-1.05E-5	7.22E-5
NHWD	kg	1.02E-1	1.64E-2	3.57E-3	1.22E-1	4.82E-3	5.12E-2	1.98E-2	-2.71E-2	1.71E-1
RWD	kg	4.30E-5	1.80E-6	9.82E-7	4.58E-5	5.29E-7	3.71E-6	2.90E-8	-1.54E-5	3.47E-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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