Environmental Profile

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

Ecochain v3.5.80

Product:	3025975 - PVC Access Plug GY 160 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	1.29E+0	7.66E-2	6.68E-2	1.44E+0	1.59E-2	6.82E-1	5.16E-3	-6.64E-1	1.48E+0
GWP-f	kg CO2 eq	1.48E+0	7.66E-2	5.05E-2	1.61E+0	1.59E-2	5.10E-1	5.16E-3	-7.39E-1	1.40E+0
GWP-b	kg CO2 eq	-1.92E-1	4.65E-5	1.62E-2	-1.76E-1	9.66E-6	1.72E-1	6.49E-6	7.61E-2	7.27E-2
GWP-luluc	kg CO2 eq	1.78E-3	2.71E-5	7.40E-5	1.88E-3	5.63E-6	1.97E-4	1.33E-7	-1.05E-3	1.04E-3
ODP	kg CFC11 eq	7.28E-7	1.76E-8	6.82E-9	7.52E-7	3.67E-9	5.48E-8	1.92E-10	-3.39E-7	4.71E-7
AP	mol H+ eq	7.24E-3	4.36E-4	3.92E-4	8.07E-3	9.06E-5	9.47E-4	4.66E-6	-3.00E-3	6.12E-3
EP-fw	kg P eq	6.72E-5	6.30E-7	1.25E-6	6.91E-5	1.31E-7	6.61E-6	6.02E-9	-3.20E-5	4.38E-5
EP-m	kg N eq	1.38E-3	1.56E-4	1.07E-4	1.65E-3	3.24E-5	2.35E-4	3.19E-6	-5.54E-4	1.36E-3
EP-T	mol N eq	1.50E-2	1.72E-3	1.42E-3	1.81E-2	3.57E-4	2.59E-3	1.86E-5	-6.02E-3	1.51E-2
POCP	kg NMVOC eq	4.86E-3	4.92E-4	3.18E-4	5.66E-3	1.02E-4	7.72E-4	6.40E-6	-1.99E-3	4.55E-3
ADP-mm	kg Sb eq	8.90E-4	1.98E-6	1.60E-6	8.94E-4	4.12E-7	3.71E-6	4.64E-9	-1.52E-5	8.83E-4
ADP-f	MJ	3.58E+1	1.18E+0	6.86E-1	3.76E+1	2.44E-1	2.53E+0	1.40E-2	-1.73E+1	2.31E+1
WDP	m3 depriv.	2.14E+0	3.61E-3	1.20E+0	3.34E+0	7.49E-4	9.96E-2	8.20E-5	-1.06E+0	2.38E+0
PM	disease inc.	6.00E-8	6.91E-9	5.37E-9	7.23E-8	1.44E-9	1.17E-8	9.62E-11	-2.59E-8	5.96E-8
IR	kBq U-235 eq	8.50E-2	5.14E-3	1.78E-3	9.19E-2	1.07E-3	8.97E-3	6.46E-5	-3.65E-2	6.55E-2
ETP-fw	CTUe	4.39E+1	9.55E-1	9.36E-1	4.58E+1	1.98E-1	1.95E+1	2.15E-1	-1.58E+1	5.00E+1
HTP-c	CTUh	1.21E-9	3.40E-11	5.98E-11	1.30E-9	7.06E-12	2.77E-10	3.79E-13	-4.44E-10	1.14E-9
HTP-nc	CTUh	3.66E-8	1.14E-9	1.73E-9	3.94E-8	2.36E-10	6.78E-9	4.14E-11	-1.40E-8	3.25E-8
SQP	Pt	2.67E+1	1.01E+0	6.83E+0	3.45E+1	2.09E-1	1.54E+0	3.58E-2	-2.58E+1	1.05E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	6.88E+0	1.69E-2	1.73E+0	8.63E+0	3.50E-3	1.81E-1	5.29E-4	-4.75E+0	4.06E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	6.88E+0	1.69E-2	1.73E+0	8.63E+0	3.50E-3	1.81E-1	5.29E-4	-4.75E+0	4.06E+0
PENRE	MJ	3.84E+1	1.25E+0	7.40E-1	4.03E+1	2.59E-1	2.69E+0	1.49E-2	-1.87E+1	2.46E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.84E+1	1.25E+0	7.40E-1	4.03E+1	2.59E-1	2.69E+0	1.49E-2	-1.87E+1	2.46E+1
PET	MJ	4.52E+1	1.26E+0	2.47E+0	4.90E+1	2.63E-1	2.87E+0	1.54E-2	-2.34E+1	2.87E+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	2.51E-2	1.33E-4	2.82E-2	5.34E-2	2.76E-5	2.81E-3	1.72E-5	-1.30E-2	4.32E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.36E-4	3.01E-6	8.77E-7	1.40E-4	6.25E-7	4.20E-6	1.70E-8	-1.54E-5	1.29E-4
NHWD	kg	2.18E-1	7.29E-2	6.45E-3	2.97E-1	1.51E-2	9.30E-2	6.20E-2	-6.21E-2	4.05E-1
RWD	kg	8.14E-5	7.99E-6	1.77E-6	9.12E-5	1.66E-6	9.67E-6	9.12E-8	-3.30E-5	6.96E-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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