Environmental Profile

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

Ecochain v3.5.80

Ecochain

Product:	3025978 - PVC Access Plug GY 80 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

WAVIN
An Orbia business.

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	2.33E-1	7.55E-3	1.70E-2	2.58E-1	3.18E-3	1.59E-1	1.01E-3	-1.32E-1	2.89E-1
GWP-f	kg CO2 eq	2.76E-1	7.54E-3	1.23E-2	2.96E-1	3.17E-3	1.03E-1	1.01E-3	-1.55E-1	2.48E-1
GWP-b	kg CO2 eq	-4.35E-2	4.58E-6	4.68E-3	-3.88E-2	1.93E-6	5.62E-2	1.25E-6	2.33E-2	4.07E-2
GWP-luluc	kg CO2 eq	3.82E-4	2.67E-6	2.50E-5	4.10E-4	1.12E-6	3.89E-5	2.70E-8	-2.74E-4	1.76E-4
ODP	kg CFC11 eq	1.34E-7	1.74E-9	1.72E-9	1.38E-7	7.31E-10	1.07E-8	3.77E-11	-6.84E-8	8.08E-8
AP	mol H+ eq	1.37E-3	4.30E-5	1.24E-4	1.53E-3	1.81E-5	1.91E-4	9.17E-7	-6.50E-4	1.09E-3
EP-fw	kg P eq	1.33E-5	6.21E-8	3.14E-7	1.37E-5	2.61E-8	1.30E-6	1.21E-9	-7.18E-6	7.87E-6
EP-m	kg N eq	2.58E-4	1.54E-5	3.25E-5	3.06E-4	6.47E-6	4.83E-5	5.86E-7	-1.24E-4	2.37E-4
EP-T	mol N eq	2.78E-3	1.69E-4	4.57E-4	3.41E-3	7.13E-5	5.32E-4	3.65E-6	-1.35E-3	2.66E-3
POCP	kg NMVOC eq	8.91E-4	4.84E-5	9.61E-5	1.04E-3	2.04E-5	1.59E-4	1.26E-6	-4.41E-4	7.75E-4
ADP-mm	kg Sb eq	2.98E-4	1.95E-7	5.55E-7	2.99E-4	8.21E-8	7.51E-7	9.23E-10	-3.02E-6	2.97E-4
ADP-f	MJ	6.77E+0	1.16E-1	1.62E-1	7.05E+0	4.87E-2	5.09E-1	2.75E-3	-3.59E+0	4.03E+0
WDP	m3 depriv.	4.06E-1	3.55E-4	2.34E-1	6.40E-1	1.49E-4	1.93E-2	2.02E-5	-2.24E-1	4.36E-1
PM	disease inc.	1.11E-8	6.81E-10	1.63E-9	1.34E-8	2.86E-10	2.40E-9	1.89E-11	-6.23E-9	9.89E-9
IR	kBq U-235 eq	1.61E-2	5.06E-4	3.70E-4	1.70E-2	2.13E-4	1.81E-3	1.26E-5	-7.87E-3	1.11E-2
ETP-fw	CTUe	9.89E+0	9.41E-2	2.99E-1	1.03E+1	3.95E-2	3.75E+0	4.10E-2	-3.82E+0	1.03E+1
HTP-c	CTUh	2.44E-10	3.35E-12	1.68E-11	2.64E-10	1.41E-12	5.99E-11	7.68E-14	-9.95E-11	2.26E-10
HTP-nc	CTUh	7.37E-9	1.12E-10	5.28E-10	8.01E-9	4.71E-11	1.35E-9	7.94E-12	-3.00E-9	6.42E-9
SQP	Pt	5.70E+0	9.91E-2	2.60E+0	8.40E+0	4.17E-2	3.14E-1	7.01E-3	-7.88E+0	8.80E-1

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.07E+0	1.66E-3	6.58E-1	1.73E+0	6.99E-4	3.57E-2	1.01E-4	-1.40E+0	3.64E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.07E+0	1.66E-3	6.58E-1	1.73E+0	6.99E-4	3.57E-2	1.01E-4	-1.40E+0	3.64E-1
PENRE	MJ	7.26E+0	1.23E-1	1.74E-1	7.56E+0	5.17E-2	5.42E-1	2.92E-3	-3.86E+0	4.29E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	7.26E+0	1.23E-1	1.74E-1	7.56E+0	5.17E-2	5.42E-1	2.92E-3	-3.86E+0	4.29E+0
PET	MJ	8.33E+0	1.25E-1	8.32E-1	9.29E+0	5.24E-2	5.78E-1	3.02E-3	-5.26E+0	4.66E+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	4.92E-3	1.31E-5	5.50E-3	1.04E-2	5.51E-6	5.42E-4	3.35E-6	-2.92E-3	8.06E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	4.22E-5	2.96E-7	1.69E-7	4.26E-5	1.25E-7	8.55E-7	3.36E-9	-3.29E-6	4.03E-5
NHWD	kg	3.15E-2	7.18E-3	1.26E-3	4.00E-2	3.02E-3	1.92E-2	1.22E-2	-1.37E-2	6.08E-2
RWD	kg	1.50E-5	7.88E-7	3.43E-7	1.61E-5	3.31E-7	1.98E-6	1.79E-8	-7.16E-6	1.13E-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