Environmental Profile

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

Ecochain v3.5.80

Product:	3025344 - PVC Access Plug WT 40 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	6.84E-2	2.18E-3	2.96E-3	7.35E-2	7.05E-4	5.75E-2	2.37E-4	-2.43E-2	1.08E-1
GWP-f	kg CO2 eq	9.04E-2	2.17E-3	2.15E-3	9.47E-2	7.05E-4	2.64E-2	2.37E-4	-4.27E-2	7.93E-2
GWP-b	kg CO2 eq	-2.21E-2	1.32E-6	7.96E-4	-2.13E-2	4.28E-7	3.11E-2	2.64E-7	1.86E-2	2.84E-2
GWP-luluc	kg CO2 eq	1.79E-4	7.70E-7	4.14E-6	1.84E-4	2.49E-7	7.88E-6	7.12E-9	-1.60E-4	3.28E-5
ODP	kg CFC11 eq	2.74E-8	5.01E-10	3.00E-10	2.82E-8	1.62E-10	2.15E-9	8.45E-12	-1.56E-8	1.49E-8
AP	mol H+ eq	8.02E-4	1.24E-5	2.08E-5	8.35E-4	4.01E-6	4.52E-5	2.09E-7	-2.13E-4	6.71E-4
EP-fw	kg P eq	4.77E-6	1.79E-8	5.48E-8	4.84E-6	5.80E-9	2.62E-7	3.03E-10	-2.78E-6	2.33E-6
EP-m	kg N eq	1.07E-4	4.43E-6	5.49E-6	1.16E-4	1.44E-6	1.26E-5	1.29E-7	-4.43E-5	8.63E-5
EP-T	mol N eq	1.10E-3	4.88E-5	7.64E-5	1.23E-3	1.58E-5	1.38E-4	8.24E-7	-4.97E-4	8.83E-4
POCP	kg NMVOC eq	3.47E-4	1.40E-5	1.62E-5	3.77E-4	4.52E-6	4.15E-5	2.86E-7	-1.50E-4	2.74E-4
ADP-mm	kg Sb eq	9.94E-5	5.62E-8	9.18E-8	9.96E-5	1.82E-8	1.79E-7	2.20E-10	-7.83E-7	9.90E-5
ADP-f	MJ	1.78E+0	3.34E-2	2.86E-2	1.84E+0	1.08E-2	1.17E-1	6.20E-4	-9.25E-1	1.05E+0
WDP	m3 depriv.	1.06E-1	1.02E-4	4.32E-2	1.49E-1	3.32E-5	3.69E-3	8.54E-6	-6.70E-2	8.62E-2
PM	disease inc.	5.25E-9	1.96E-10	2.75E-10	5.72E-9	6.36E-11	6.02E-10	4.26E-12	-2.84E-9	3.55E-9
IR	kBq U-235 eq	4.88E-3	1.46E-4	6.72E-5	5.09E-3	4.73E-5	4.18E-4	2.76E-6	-2.59E-3	2.97E-3
ETP-fw	CTUe	4.72E+0	2.71E-2	5.01E-2	4.80E+0	8.78E-3	6.81E-1	7.05E-3	-1.89E+0	3.60E+0
HTP-c	CTUh	1.35E-10	9.64E-13	2.87E-12	1.39E-10	3.13E-13	1.71E-11	1.98E-14	-3.36E-11	1.23E-10
HTP-nc	CTUh	2.55E-9	3.23E-11	8.90E-11	2.67E-9	1.05E-11	2.87E-10	1.44E-12	-9.39E-10	2.03E-9
SQP	Pt	3.02E+0	2.86E-2	4.24E-1	3.47E+0	9.25E-3	7.42E-2	1.55E-3	-5.05E+0	-1.49E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	5.29E-1	4.79E-4	1.07E-1	6.36E-1	1.55E-4	7.24E-3	2.03E-5	-8.81E-1	-2.37E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	5.29E-1	4.79E-4	1.07E-1	6.36E-1	1.55E-4	7.24E-3	2.03E-5	-8.81E-1	-2.37E-1
PENRE	MJ	1.91E+0	3.54E-2	3.08E-2	1.98E+0	1.15E-2	1.24E-1	6.58E-4	-9.94E-1	1.12E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.91E+0	3.54E-2	3.08E-2	1.98E+0	1.15E-2	1.24E-1	6.58E-4	-9.94E-1	1.12E+0
PET	MJ	2.44E+0	3.59E-2	1.38E-1	2.61E+0	1.16E-2	1.31E-1	6.78E-4	-1.87E+0	8.81E-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	1.85E-3	3.78E-6	1.01E-3	2.87E-3	1.22E-6	1.09E-4	7.36E-7	-1.14E-3	1.84E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.39E-5	8.54E-8	3.13E-8	1.40E-5	2.77E-8	2.14E-7	7.91E-10	-9.56E-7	1.33E-5
NHWD	kg	2.62E-2	2.07E-3	2.32E-4	2.86E-2	6.70E-4	4.80E-3	2.75E-3	-4.47E-3	3.23E-2
RWD	kg	4.72E-6	2.27E-7	6.33E-8	5.01E-6	7.36E-8	4.88E-7	3.98E-9	-2.42E-6	3.16E-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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