Environmental Profile

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

Ecochain v3.5.80

Product:	3025662 - PVC Wash Mac Trap GY 40 Kit Horiz 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	4.12E-1	2.04E-2	3.11E-2	4.63E-1	7.86E-3	3.35E-1	2.45E-3	-2.21E-1	5.87E-1
GWP-f	kg CO2 eq	4.93E-1	2.04E-2	2.37E-2	5.37E-1	7.86E-3	2.28E-1	2.45E-3	-2.54E-1	5.22E-1
GWP-b	kg CO2 eq	-8.81E-2	1.08E-5	7.37E-3	-8.07E-2	4.77E-6	1.06E-1	3.00E-6	3.29E-2	5.85E-2
GWP-luluc	kg CO2 eq	7.56E-3	7.81E-6	3.22E-5	7.60E-3	2.78E-6	9.41E-5	6.79E-8	-4.09E-4	7.29E-3
ODP	kg CFC11 eq	2.25E-7	4.65E-9	3.18E-9	2.33E-7	1.81E-9	2.56E-8	9.20E-11	-1.05E-7	1.55E-7
AP	mol H+ eq	2.51E-3	1.63E-4	1.73E-4	2.85E-3	4.48E-5	4.52E-4	2.24E-6	-9.99E-4	2.35E-3
EP-fw	kg P eq	2.48E-5	1.61E-7	5.81E-7	2.56E-5	6.47E-8	3.14E-6	3.01E-9	-1.08E-5	1.80E-5
EP-m	kg N eq	4.79E-4	5.19E-5	4.81E-5	5.79E-4	1.60E-5	1.13E-4	1.35E-6	-1.93E-4	5.16E-4
EP-T	mol N eq	4.94E-3	5.73E-4	6.26E-4	6.14E-3	1.76E-4	1.24E-3	8.92E-6	-2.12E-3	5.45E-3
POCP	kg NMVOC eq	1.57E-3	1.60E-4	1.42E-4	1.88E-3	5.05E-5	3.72E-4	3.07E-6	-6.95E-4	1.61E-3
ADP-mm	kg Sb eq	4.47E-4	4.97E-7	6.91E-7	4.48E-4	2.03E-7	1.78E-6	2.28E-9	-4.45E-6	4.46E-4
ADP-f	MJ	1.19E+1	3.09E-1	3.24E-1	1.26E+1	1.21E-1	1.23E+0	6.72E-3	-5.73E+0	8.20E+0
WDP	m3 depriv.	6.95E-1	9.13E-4	5.87E-1	1.28E+0	3.70E-4	4.65E-2	5.73E-5	-3.34E-1	9.96E-1
PM	disease inc.	2.01E-8	1.74E-9	2.40E-9	2.43E-8	7.09E-10	5.70E-9	4.62E-11	-9.60E-9	2.11E-8
IR	kBq U-235 eq	2.95E-2	1.35E-3	8.62E-4	3.17E-2	5.27E-4	4.32E-3	3.06E-5	-1.19E-2	2.46E-2
ETP-fw	CTUe	1.64E+1	2.47E-1	4.13E-1	1.71E+1	9.79E-2	8.94E+0	9.80E-2	-5.70E+0	2.05E+1
HTP-c	CTUh	4.39E-10	9.27E-12	2.73E-11	4.76E-10	3.49E-12	1.48E-10	1.92E-13	-1.58E-10	4.70E-10
HTP-nc	CTUh	1.27E-8	2.89E-10	7.74E-10	1.37E-8	1.17E-10	3.23E-9	1.90E-11	-4.54E-9	1.26E-8
SQP	Pt	1.11E+1	2.49E-1	2.86E+0	1.42E+1	1.03E-1	7.64E-1	1.71E-2	-1.31E+1	2.03E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.05E+0	4.27E-3	7.27E-1	2.78E+0	1.73E-3	8.63E-2	2.39E-4	-2.28E+0	5.91E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.05E+0	4.27E-3	7.27E-1	2.78E+0	1.73E-3	8.63E-2	2.39E-4	-2.28E+0	5.91E-1
PENRE	MJ	1.28E+1	3.28E-1	3.50E-1	1.35E+1	1.28E-1	1.30E+0	7.13E-3	-6.18E+0	8.75E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.28E+1	3.28E-1	3.50E-1	1.35E+1	1.28E-1	1.30E+0	7.13E-3	-6.18E+0	8.75E+0
PET	MJ	1.49E+1	3.32E-1	1.08E+0	1.63E+1	1.30E-1	1.39E+0	7.37E-3	-8.46E+0	9.34E+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	8.75E-3	3.36E-5	1.38E-2	2.25E-2	1.36E-5	1.28E-3	8.15E-6	-4.35E-3	1.95E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	6.48E-5	7.54E-7	4.28E-7	6.59E-5	3.08E-7	2.03E-6	8.28E-9	-5.43E-6	6.29E-5
NHWD	kg	6.19E-2	1.78E-2	3.15E-3	8.29E-2	7.48E-3	4.60E-2	2.99E-2	-2.14E-2	1.45E-1
RWD	kg	2.67E-5	2.11E-6	8.67E-7	2.97E-5	8.20E-7	4.69E-6	4.35E-8	-1.09E-5	2.43E-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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