Environmental Profile

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

Ecochain v3.5.80

Product:	3025790 - PVC-C Wash Mac Trap GY 40 Kit Dble Horiz
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	1.08E+0	2.24E-2	6.15E-2	1.16E+0	1.49E-2	6.25E-1	4.63E-3	-6.18E-1	1.19E+0
GWP-f	kg CO2 eq	1.23E+0	2.24E-2	4.72E-2	1.30E+0	1.49E-2	4.28E-1	4.63E-3	-6.97E-1	1.05E+0
GWP-b	kg CO2 eq	-1.56E-1	1.36E-5	1.43E-2	-1.41E-1	9.04E-6	1.97E-1	5.93E-6	8.03E-2	1.36E-1
GWP-luluc	kg CO2 eq	8.39E-3	7.92E-6	6.05E-5	8.45E-3	5.27E-6	1.90E-4	1.20E-7	-1.07E-3	7.58E-3
ODP	kg CFC11 eq	6.49E-7	5.15E-9	6.29E-9	6.61E-7	3.43E-9	5.29E-8	1.75E-10	-3.24E-7	3.93E-7
AP	mol H+ eq	5.79E-3	1.27E-4	3.31E-4	6.25E-3	8.48E-5	9.07E-4	4.25E-6	-2.91E-3	4.33E-3
EP-fw	kg P eq	5.81E-5	1.84E-7	1.15E-6	5.94E-5	1.22E-7	6.36E-6	5.47E-9	-3.15E-5	3.45E-5
EP-m	kg N eq	1.09E-3	4.56E-5	9.25E-5	1.22E-3	3.03E-5	2.24E-4	2.67E-6	-5.41E-4	9.41E-4
EP-T	mol N eq	1.14E-2	5.02E-4	1.19E-3	1.31E-2	3.34E-4	2.47E-3	1.70E-5	-5.89E-3	1.00E-2
POCP	kg NMVOC eq	3.71E-3	1.44E-4	2.74E-4	4.12E-3	9.56E-5	7.39E-4	5.83E-6	-1.95E-3	3.02E-3
ADP-mm	kg Sb eq	4.82E-4	5.79E-7	1.29E-6	4.84E-4	3.85E-7	3.58E-6	4.23E-9	-1.38E-5	4.74E-4
ADP-f	MJ	3.04E+1	3.43E-1	6.47E-1	3.14E+1	2.29E-1	2.43E+0	1.28E-2	-1.64E+1	1.77E+1
WDP	m3 depriv.	1.95E+0	1.05E-3	1.19E+0	3.14E+0	7.01E-4	9.53E-2	7.17E-5	-1.03E+0	2.21E+0
PM	disease inc.	4.40E-8	2.02E-9	4.61E-9	5.06E-8	1.34E-9	1.12E-8	8.80E-11	-2.59E-8	3.74E-8
IR	kBq U-235 eq	6.76E-2	1.50E-3	1.74E-3	7.09E-2	9.99E-4	8.65E-3	5.90E-5	-3.54E-2	4.52E-2
ETP-fw	CTUe	3.40E+1	2.79E-1	7.86E-1	3.50E+1	1.86E-1	1.88E+1	2.06E-1	-1.57E+1	3.85E+1
HTP-c	CTUh	9.42E-10	9.92E-12	5.31E-11	1.00E-9	6.60E-12	2.66E-10	3.44E-13	-4.38E-10	8.40E-10
HTP-nc	CTUh	3.03E-8	3.32E-10	1.49E-9	3.21E-8	2.21E-10	6.50E-9	3.94E-11	-1.36E-8	2.53E-8
SQP	Pt	2.10E+1	2.94E-1	5.23E+0	2.65E+1	1.95E-1	1.48E+0	3.28E-2	-2.80E+1	1.70E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	4.13E+0	4.93E-3	1.33E+0	5.46E+0	3.28E-3	1.74E-1	4.81E-4	-5.09E+0	5.46E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	4.13E+0	4.93E-3	1.33E+0	5.46E+0	3.28E-3	1.74E-1	4.81E-4	-5.09E+0	5.46E-1
PENRE	MJ	3.27E+1	3.64E-1	6.99E-1	3.37E+1	2.43E-1	2.58E+0	1.36E-2	-1.77E+1	1.89E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.27E+1	3.64E-1	6.99E-1	3.37E+1	2.43E-1	2.58E+0	1.36E-2	-1.77E+1	1.89E+1
PET	MJ	3.68E+1	3.69E-1	2.03E+0	3.92E+1	2.46E-1	2.76E+0	1.41E-2	-2.28E+1	1.94E+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	2.18E-2	3.88E-5	2.80E-2	4.98E-2	2.59E-5	2.62E-3	1.57E-5	-1.28E-2	3.97E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	7.73E-5	8.78E-7	8.72E-7	7.90E-5	5.84E-7	4.00E-6	1.55E-8	-1.46E-5	6.90E-5
NHWD	kg	1.36E-1	2.13E-2	6.41E-3	1.64E-1	1.42E-2	8.84E-2	5.67E-2	-6.10E-2	2.62E-1
RWD	kg	6.02E-5	2.33E-6	1.77E-6	6.43E-5	1.55E-6	9.32E-6	8.34E-8	-3.19E-5	4.33E-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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