Environmental Profile

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

Ecochain v3.5.80

Product:	3025540 - PVC Access Piece GY 125 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	1.16E+0	5.68E-2	5.82E-2	1.27E+0	1.58E-2	6.52E-1	4.96E-3	-6.42E-1	1.30E+0
GWP-f	kg CO2 eq	1.34E+0	5.68E-2	4.50E-2	1.44E+0	1.58E-2	4.56E-1	4.96E-3	-7.21E-1	1.19E+0
GWP-b	kg CO2 eq	-1.81E-1	3.45E-5	1.32E-2	-1.68E-1	9.58E-6	1.97E-1	6.25E-6	8.01E-2	1.09E-1
GWP-luluc	kg CO2 eq	1.69E-3	2.01E-5	5.37E-5	1.76E-3	5.59E-6	1.96E-4	1.31E-7	-1.09E-3	8.78E-4
ODP	kg CFC11 eq	6.77E-7	1.31E-8	5.96E-9	6.96E-7	3.64E-9	5.44E-8	1.87E-10	-3.38E-7	4.16E-7
AP	mol H+ eq	6.53E-3	3.23E-4	2.99E-4	7.15E-3	8.99E-5	9.40E-4	4.53E-6	-3.01E-3	5.17E-3
EP-fw	kg P eq	6.36E-5	4.67E-7	1.09E-6	6.52E-5	1.30E-7	6.57E-6	5.90E-9	-3.24E-5	3.95E-5
EP-m	kg N eq	1.23E-3	1.16E-4	8.44E-5	1.43E-3	3.22E-5	2.33E-4	2.88E-6	-5.58E-4	1.14E-3
EP-T	mol N eq	1.34E-2	1.28E-3	1.07E-3	1.57E-2	3.55E-4	2.57E-3	1.81E-5	-6.07E-3	1.26E-2
POCP	kg NMVOC eq	4.25E-3	3.65E-4	2.50E-4	4.86E-3	1.01E-4	7.68E-4	6.21E-6	-2.01E-3	3.73E-3
ADP-mm	kg Sb eq	1.25E-3	1.47E-6	1.14E-6	1.25E-3	4.08E-7	3.71E-6	4.54E-9	-1.46E-5	1.24E-3
ADP-f	MJ	3.23E+1	8.72E-1	6.20E-1	3.38E+1	2.42E-1	2.53E+0	1.36E-2	-1.70E+1	1.95E+1
WDP	m3 depriv.	2.03E+0	2.67E-3	1.17E+0	3.20E+0	7.44E-4	9.83E-2	8.79E-5	-1.07E+0	2.23E+0
PM	disease inc.	5.07E-8	5.12E-9	4.21E-9	6.01E-8	1.42E-9	1.17E-8	9.37E-11	-2.65E-8	4.68E-8
IR	kBq U-235 eq	7.61E-2	3.81E-3	1.70E-3	8.16E-2	1.06E-3	8.96E-3	6.26E-5	-3.67E-2	5.50E-2
ETP-fw	CTUe	4.36E+1	7.08E-1	7.08E-1	4.50E+1	1.97E-1	1.92E+1	2.11E-1	-1.61E+1	4.85E+1
HTP-c	CTUh	1.17E-9	2.52E-11	4.93E-11	1.25E-9	7.00E-12	2.83E-10	3.73E-13	-4.52E-10	1.08E-9
HTP-nc	CTUh	3.58E-8	8.44E-10	1.35E-9	3.80E-8	2.35E-10	6.73E-9	4.06E-11	-1.41E-8	3.09E-8
SQP	Pt	2.45E+1	7.46E-1	4.45E+0	2.97E+1	2.07E-1	1.55E+0	3.48E-2	-2.81E+1	3.43E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	5.45E+0	1.25E-2	1.13E+0	6.59E+0	3.48E-3	1.80E-1	5.06E-4	-5.12E+0	1.66E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	5.45E+0	1.25E-2	1.13E+0	6.59E+0	3.48E-3	1.80E-1	5.06E-4	-5.12E+0	1.66E+0
PENRE	MJ	3.46E+1	9.25E-1	6.69E-1	3.62E+1	2.57E-1	2.69E+0	1.45E-2	-1.83E+1	2.09E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.46E+1	9.25E-1	6.69E-1	3.62E+1	2.57E-1	2.69E+0	1.45E-2	-1.83E+1	2.09E+1
PET	MJ	4.01E+1	9.38E-1	1.80E+0	4.28E+1	2.61E-1	2.87E+0	1.50E-2	-2.35E+1	2.25E+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	2.35E-2	9.86E-5	2.75E-2	5.11E-2	2.74E-5	2.72E-3	1.67E-5	-1.32E-2	4.07E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.81E-4	2.23E-6	8.57E-7	1.84E-4	6.20E-7	4.18E-6	1.66E-8	-1.52E-5	1.73E-4
NHWD	kg	1.74E-1	5.40E-2	6.29E-3	2.34E-1	1.50E-2	9.24E-2	6.05E-2	-6.31E-2	3.39E-1
RWD	kg	6.93E-5	5.93E-6	1.73E-6	7.70E-5	1.65E-6	9.68E-6	8.87E-8	-3.31E-5	5.53E-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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