Environmental Profile

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

Ecochain v3.5.80

Product:	3025994 - PVC Saddle GY 100-110/40 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	1.69E-1	6.07E-3	1.02E-2	1.85E-1	2.27E-3	9.63E-2	7.07E-4	-8.89E-2	1.95E-1
GWP-f	kg CO2 eq	1.89E-1	6.06E-3	7.51E-3	2.03E-1	2.26E-3	6.53E-2	7.07E-4	-1.07E-1	1.64E-1
GWP-b	kg CO2 eq	-2.10E-2	3.68E-6	2.63E-3	-1.84E-2	1.37E-6	3.10E-2	8.74E-7	1.82E-2	3.08E-2
GWP-luluc	kg CO2 eq	2.75E-4	2.15E-6	1.30E-5	2.90E-4	8.01E-7	2.78E-5	1.94E-8	-2.02E-4	1.16E-4
ODP	kg CFC11 eq	9.36E-8	1.40E-9	1.03E-9	9.61E-8	5.22E-10	7.65E-9	2.65E-11	-4.88E-8	5.55E-8
AP	mol H+ eq	9.46E-4	3.45E-5	6.64E-5	1.05E-3	1.29E-5	1.36E-4	6.47E-7	-4.62E-4	7.34E-4
EP-fw	kg P eq	9.44E-6	4.99E-8	1.89E-7	9.67E-6	1.86E-8	9.28E-7	8.62E-10	-5.22E-6	5.40E-6
EP-m	kg N eq	1.80E-4	1.24E-5	1.78E-5	2.10E-4	4.61E-6	3.42E-5	3.89E-7	-8.71E-5	1.62E-4
EP-T	mol N eq	1.94E-3	1.36E-4	2.43E-4	2.32E-3	5.08E-5	3.77E-4	2.57E-6	-9.52E-4	1.80E-3
POCP	kg NMVOC eq	5.99E-4	3.89E-5	5.27E-5	6.90E-4	1.45E-5	1.13E-4	8.85E-7	-3.08E-4	5.11E-4
ADP-mm	kg Sb eq	2.45E-4	1.57E-7	2.86E-7	2.46E-4	5.86E-8	5.39E-7	6.55E-10	-2.09E-6	2.44E-4
ADP-f	MJ	4.56E+0	9.31E-2	1.01E-1	4.75E+0	3.47E-2	3.65E-1	1.94E-3	-2.50E+0	2.65E+0
WDP	m3 depriv.	2.86E-1	2.86E-4	1.62E-1	4.48E-1	1.07E-4	1.37E-2	1.55E-5	-1.63E-1	3.00E-1
PM	disease inc.	7.35E-9	5.47E-10	8.92E-10	8.79E-9	2.04E-10	1.72E-9	1.33E-11	-4.42E-9	6.30E-9
IR	kBq U-235 eq	1.09E-2	4.07E-4	2.47E-4	1.16E-2	1.52E-4	1.29E-3	8.84E-6	-5.66E-3	7.35E-3
ETP-fw	CTUe	7.40E+0	7.56E-2	1.60E-1	7.63E+0	2.82E-2	2.66E+0	2.90E-2	-2.81E+0	7.54E+0
HTP-c	CTUh	1.75E-10	2.69E-12	9.53E-12	1.88E-10	1.00E-12	4.33E-11	5.50E-14	-6.86E-11	1.63E-10
HTP-nc	CTUh	5.40E-9	9.01E-11	2.88E-10	5.78E-9	3.36E-11	9.59E-10	5.62E-12	-2.15E-9	4.63E-9
SQP	Pt	3.28E+0	7.96E-2	1.28E+0	4.64E+0	2.97E-2	2.25E-1	4.94E-3	-5.22E+0	-3.14E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	6.52E-1	1.34E-3	3.25E-1	9.79E-1	4.99E-4	2.55E-2	6.98E-5	-9.50E-1	5.49E-2
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	6.52E-1	1.34E-3	3.25E-1	9.79E-1	4.99E-4	2.55E-2	6.98E-5	-9.50E-1	5.49E-2
PENRE	MJ	4.89E+0	9.88E-2	1.09E-1	5.09E+0	3.69E-2	3.88E-1	2.06E-3	-2.69E+0	2.83E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	4.89E+0	9.88E-2	1.09E-1	5.09E+0	3.69E-2	3.88E-1	2.06E-3	-2.69E+0	2.83E+0
PET	MJ	5.54E+0	1.00E-1	4.34E-1	6.07E+0	3.74E-2	4.13E-1	2.13E-3	-3.64E+0	2.89E+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	3.43E-3	1.05E-5	3.82E-3	7.26E-3	3.93E-6	3.79E-4	2.36E-6	-2.14E-3	5.51E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	3.43E-5	2.38E-7	1.18E-7	3.47E-5	8.89E-8	6.10E-7	2.38E-9	-2.25E-6	3.31E-5
NHWD	kg	2.20E-2	5.77E-3	8.72E-4	2.86E-2	2.15E-3	1.36E-2	8.61E-3	-9.55E-3	4.34E-2
RWD	kg	9.82E-6	6.33E-7	2.39E-7	1.07E-5	2.36E-7	1.41E-6	1.26E-8	-5.11E-6	7.24E-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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