

Environmental Profile

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

Ecochain v3.5.80



Product: 3026024 - PVC Branch 87°3 GY 50 S/S/S 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					Use stage							End-of-Life stage				
A1 Raw material supply A2 Transport A3 Manufacturing					B1 Use B2 Maintenance B3 Repair B4 Replacement B5 Refurbishment B6 Operational energy use B7 Operational water use							C1 De-construction demolition C2 Transport C3 Waste processing C4 Disposal				
Construction process stage												Benefits and loads beyond the system boundaries				
A4 Transport gate to site A5 Assembly / Construction installation process												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

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Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	1.99E-1	6.81E-3	9.15E-3	2.15E-1	2.79E-3	1.41E-1	8.59E-4	-1.14E-1	2.45E-1
GWP-f	kg CO2 eq	2.42E-1	6.80E-3	7.19E-3	2.56E-1	2.79E-3	8.50E-2	8.59E-4	-1.37E-1	2.07E-1
GWP-b	kg CO2 eq	-4.36E-2	4.13E-6	1.95E-3	-4.17E-2	1.69E-6	5.63E-2	1.08E-6	2.34E-2	3.80E-2
GWP-luluc	kg CO2 eq	3.51E-4	2.41E-6	7.05E-6	3.61E-4	9.88E-7	3.48E-5	2.31E-8	-2.65E-4	1.32E-4
ODP	kg CFC11 eq	1.18E-7	1.57E-9	9.39E-10	1.20E-7	6.43E-10	9.65E-9	3.26E-11	-6.07E-8	7.01E-8
AP	mol H+ eq	1.18E-3	3.87E-5	4.15E-5	1.27E-3	1.59E-5	1.71E-4	7.93E-7	-5.91E-4	8.61E-4
EP-fw	kg P eq	1.18E-5	5.60E-8	1.72E-7	1.21E-5	2.30E-8	1.16E-6	1.04E-9	-6.62E-6	6.63E-6
EP-m	kg N eq	2.28E-4	1.39E-5	1.21E-5	2.54E-4	5.69E-6	4.33E-5	4.83E-7	-1.13E-4	1.90E-4
EP-T	mol N eq	2.45E-3	1.53E-4	1.47E-4	2.75E-3	6.27E-5	4.77E-4	3.16E-6	-1.24E-3	2.05E-3
POCP	kg NMVOC eq	7.73E-4	4.37E-5	3.58E-5	8.53E-4	1.79E-5	1.43E-4	1.08E-6	-4.03E-4	6.12E-4
ADP-mm	kg Sb eq	2.47E-4	1.76E-7	1.45E-7	2.47E-4	7.22E-8	6.76E-7	7.96E-10	-2.62E-6	2.45E-4
ADP-f	MJ	5.86E+0	1.04E-1	1.00E-1	6.07E+0	4.28E-2	4.56E-1	2.38E-3	-3.18E+0	3.39E+0
WDP	m3 depriv.	3.60E-1	3.20E-4	2.00E-1	5.61E-1	1.31E-4	1.73E-2	1.66E-5	-2.02E-1	3.76E-1
PM	disease inc.	9.50E-9	6.14E-10	6.02E-10	1.07E-8	2.52E-10	2.15E-9	1.64E-11	-5.86E-9	7.28E-9
IR	kBq U-235 eq	1.36E-2	4.56E-4	2.86E-4	1.44E-2	1.87E-4	1.62E-3	1.09E-5	-7.15E-3	9.04E-3
ETP-fw	CTUe	8.84E+0	8.48E-2	9.74E-2	9.02E+0	3.48E-2	3.36E+0	3.66E-2	-3.61E+0	8.84E+0
HTP-c	CTUh	2.14E-10	3.02E-12	7.40E-12	2.24E-10	1.24E-12	5.32E-11	6.58E-14	-9.14E-11	1.87E-10
HTP-nc	CTUh	6.44E-9	1.01E-10	1.93E-10	6.74E-9	4.15E-11	1.20E-9	7.05E-12	-2.72E-9	5.27E-9
SQP	Pt	5.55E+0	8.93E-2	5.06E-1	6.15E+0	3.66E-2	2.81E-1	6.07E-3	-7.84E+0	-1.37E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.03E+0	1.50E-3	1.29E-1	1.16E+0	6.14E-4	3.20E-2	8.70E-5	-1.39E+0	-1.96E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.03E+0	1.50E-3	1.29E-1	1.16E+0	6.14E-4	3.20E-2	8.70E-5	-1.39E+0	-1.96E-1
PENRE	MJ	6.29E+0	1.11E-1	1.08E-1	6.51E+0	4.55E-2	4.85E-1	2.53E-3	-3.42E+0	3.62E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	6.29E+0	1.11E-1	1.08E-1	6.51E+0	4.55E-2	4.85E-1	2.53E-3	-3.42E+0	3.62E+0
PET	MJ	7.32E+0	1.12E-1	2.37E-1	7.67E+0	4.61E-2	5.17E-1	2.61E-3	-4.81E+0	3.43E+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	4.31E-3	1.18E-5	4.69E-3	9.02E-3	4.85E-6	4.77E-4	2.91E-6	-2.69E-3	6.81E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	3.54E-5	2.67E-7	1.47E-7	3.58E-5	1.10E-7	7.64E-7	2.91E-9	-2.94E-6	3.38E-5
NHWD	kg	2.80E-2	6.47E-3	1.07E-3	3.56E-2	2.65E-3	1.71E-2	1.06E-2	-1.25E-2	5.34E-2
RWD	kg	1.23E-5	7.10E-7	2.97E-7	1.33E-5	2.91E-7	1.78E-6	1.55E-8	-6.50E-6	8.86E-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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