

Environmental Profile

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

Ecochain v3.5.80



Product: 3025810 - PVC Branch 87°3 GY 63 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	3.00E-1	9.94E-3	1.47E-2	3.25E-1	4.11E-3	1.76E-1	1.27E-3	-1.58E-1	3.48E-1
GWP-f	kg CO2 eq	3.42E-1	9.93E-3	1.14E-2	3.64E-1	4.11E-3	1.14E-1	1.27E-3	-1.94E-1	2.89E-1
GWP-b	kg CO2 eq	-4.22E-2	6.03E-6	3.30E-3	-3.89E-2	2.49E-6	6.21E-2	1.60E-6	3.64E-2	5.96E-2
GWP-luluc	kg CO2 eq	5.06E-4	3.52E-6	1.32E-5	5.23E-4	1.45E-6	5.14E-5	3.39E-8	-3.94E-4	1.82E-4
ODP	kg CFC11 eq	1.74E-7	2.29E-9	1.51E-9	1.78E-7	9.46E-10	1.43E-8	4.81E-11	-8.88E-8	1.05E-7
AP	mol H+ eq	1.67E-3	5.66E-5	7.42E-5	1.80E-3	2.34E-5	2.51E-4	1.17E-6	-8.59E-4	1.22E-3
EP-fw	kg P eq	1.70E-5	8.17E-8	2.75E-7	1.74E-5	3.38E-8	1.72E-6	1.52E-9	-9.81E-6	9.31E-6
EP-m	kg N eq	3.22E-4	2.02E-5	2.11E-5	3.63E-4	8.37E-6	6.32E-5	7.16E-7	-1.63E-4	2.73E-4
EP-T	mol N eq	3.44E-3	2.23E-4	2.65E-4	3.93E-3	9.22E-5	6.96E-4	4.66E-6	-1.78E-3	2.94E-3
POCP	kg NMVOC eq	1.07E-3	6.38E-5	6.23E-5	1.19E-3	2.64E-5	2.09E-4	1.60E-6	-5.72E-4	8.57E-4
ADP-mm	kg Sb eq	3.46E-4	2.57E-7	2.79E-7	3.46E-4	1.06E-7	9.98E-7	1.17E-9	-3.83E-6	3.43E-4
ADP-f	MJ	8.26E+0	1.52E-1	1.57E-1	8.57E+0	6.30E-2	6.72E-1	3.51E-3	-4.54E+0	4.77E+0
WDP	m3 depriv.	5.25E-1	4.68E-4	3.00E-1	8.25E-1	1.93E-4	2.56E-2	2.36E-5	-3.01E-1	5.50E-1
PM	disease inc.	1.31E-8	8.97E-10	1.05E-9	1.50E-8	3.71E-10	3.16E-9	2.41E-11	-8.42E-9	1.02E-8
IR	kBq U-235 eq	1.95E-2	6.66E-4	4.34E-4	2.06E-2	2.76E-4	2.39E-3	1.61E-5	-1.05E-2	1.28E-2
ETP-fw	CTUe	1.29E+1	1.24E-1	1.76E-1	1.32E+1	5.12E-2	4.99E+0	5.45E-2	-5.38E+0	1.29E+1
HTP-c	CTUh	3.00E-10	4.41E-12	1.24E-11	3.17E-10	1.82E-12	7.65E-11	9.66E-14	-1.28E-10	2.68E-10
HTP-nc	CTUh	9.28E-9	1.48E-10	3.38E-10	9.76E-9	6.10E-11	1.77E-9	1.05E-11	-3.99E-9	7.61E-9
SQP	Pt	6.39E+0	1.30E-1	1.08E+0	7.60E+0	5.39E-2	4.13E-1	8.96E-3	-1.04E+1	-2.31E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.26E+0	2.19E-3	2.74E-1	1.53E+0	9.04E-4	4.73E-2	1.29E-4	-1.88E+0	-3.00E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.26E+0	2.19E-3	2.74E-1	1.53E+0	9.04E-4	4.73E-2	1.29E-4	-1.88E+0	-3.00E-1
PENRE	MJ	8.86E+0	1.62E-1	1.70E-1	9.20E+0	6.69E-2	7.15E-1	3.72E-3	-4.88E+0	5.10E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	8.86E+0	1.62E-1	1.70E-1	9.20E+0	6.69E-2	7.15E-1	3.72E-3	-4.88E+0	5.10E+0
PET	MJ	1.01E+1	1.64E-1	4.44E-1	1.07E+1	6.78E-2	7.62E-1	3.85E-3	-6.76E+0	4.80E+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	6.14E-3	1.73E-5	7.03E-3	1.32E-2	7.13E-6	7.05E-4	4.29E-6	-4.02E-3	9.89E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	4.98E-5	3.90E-7	2.19E-7	5.04E-5	1.61E-7	1.12E-6	4.28E-9	-4.11E-6	4.76E-5
NHWD	kg	3.97E-2	9.45E-3	1.61E-3	5.07E-2	3.91E-3	2.46E-2	1.56E-2	-1.78E-2	7.71E-2
RWD	kg	1.75E-5	1.04E-6	4.43E-7	1.90E-5	4.29E-7	2.61E-6	2.28E-8	-9.51E-6	1.25E-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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