

Environmental Profile

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

Ecochain v3.5.80



Product: 3025671 - Gutter Branch 67°3 Sand 100 S/S/SP
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	8.02E-1	2.70E-2	3.49E-2	8.64E-1	1.06E-2	4.50E-1	3.35E-3	-4.50E-1	8.78E-1
GWP-f	kg CO2 eq	9.07E-1	2.69E-2	2.75E-2	9.62E-1	1.06E-2	3.17E-1	3.35E-3	-4.89E-1	8.04E-1
GWP-b	kg CO2 eq	-1.06E-1	1.64E-5	7.34E-3	-9.91E-2	6.44E-6	1.33E-1	4.12E-6	3.98E-2	7.35E-2
GWP-luluc	kg CO2 eq	1.07E-3	9.53E-6	2.57E-5	1.11E-3	3.75E-6	1.29E-4	9.19E-8	-6.39E-4	6.00E-4
ODP	kg CFC11 eq	4.34E-7	6.21E-9	3.59E-9	4.44E-7	2.44E-9	3.53E-8	1.25E-10	-2.28E-7	2.53E-7
AP	mol H+ eq	5.29E-3	1.53E-4	1.54E-4	5.60E-3	6.04E-5	6.17E-4	3.05E-6	-1.98E-3	4.30E-3
EP-fw	kg P eq	4.42E-5	2.22E-7	6.56E-7	4.51E-5	8.73E-8	4.31E-6	4.08E-9	-2.07E-5	2.87E-5
EP-m	kg N eq	8.29E-4	5.49E-5	4.52E-5	9.29E-4	2.16E-5	1.53E-4	1.83E-6	-3.65E-4	7.41E-4
EP-T	mol N eq	8.98E-3	6.05E-4	5.42E-4	1.01E-2	2.38E-4	1.69E-3	1.21E-5	-3.96E-3	8.11E-3
POCP	kg NMVOC eq	2.91E-3	1.73E-4	1.34E-4	3.22E-3	6.81E-5	5.06E-4	4.17E-6	-1.33E-3	2.47E-3
ADP-mm	kg Sb eq	1.03E-3	6.97E-7	5.26E-7	1.04E-3	2.74E-7	2.43E-6	3.09E-9	-9.58E-6	1.03E-3
ADP-f	MJ	2.15E+1	4.13E-1	3.85E-1	2.23E+1	1.63E-1	1.67E+0	9.12E-3	-1.15E+1	1.26E+1
WDP	m3 depriv.	1.40E+0	1.27E-3	7.78E-1	2.18E+0	5.00E-4	6.41E-2	7.60E-5	-7.03E-1	1.54E+0
PM	disease inc.	3.44E-8	2.43E-9	2.24E-9	3.91E-8	9.58E-10	7.74E-9	6.27E-11	-1.67E-8	3.12E-8
IR	kBq U-235 eq	5.02E-2	1.81E-3	1.11E-3	5.31E-2	7.12E-4	5.89E-3	4.16E-5	-2.40E-2	3.57E-2
ETP-fw	CTUe	2.96E+1	3.36E-1	3.60E-1	3.03E+1	1.32E-1	1.24E+1	1.36E-1	-9.83E+0	3.31E+1
HTP-c	CTUh	9.50E-10	1.19E-11	2.79E-11	9.89E-10	4.71E-12	2.01E-10	2.61E-13	-3.00E-10	8.95E-10
HTP-nc	CTUh	2.57E-8	4.00E-10	7.21E-10	2.69E-8	1.58E-10	4.44E-9	2.64E-11	-9.28E-9	2.22E-8
SQP	Pt	1.46E+1	3.54E-1	1.77E+0	1.67E+1	1.39E-1	1.04E+0	2.32E-2	-1.68E+1	1.03E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.85E+0	5.93E-3	4.51E-1	3.31E+0	2.34E-3	1.18E-1	3.28E-4	-3.06E+0	3.72E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.85E+0	5.93E-3	4.51E-1	3.31E+0	2.34E-3	1.18E-1	3.28E-4	-3.06E+0	3.72E-1
PENRE	MJ	2.30E+1	4.39E-1	4.16E-1	2.39E+1	1.73E-1	1.78E+0	9.68E-3	-1.24E+1	1.34E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.30E+1	4.39E-1	4.16E-1	2.39E+1	1.73E-1	1.78E+0	9.68E-3	-1.24E+1	1.34E+1
PET	MJ	2.59E+1	4.45E-1	8.67E-1	2.72E+1	1.75E-1	1.90E+0	1.00E-2	-1.55E+1	1.38E+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	1.73E-2	4.68E-5	1.82E-2	3.56E-2	1.84E-5	1.76E-3	1.11E-5	-8.39E-3	2.90E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.46E-4	1.06E-6	5.69E-7	1.48E-4	4.16E-7	2.76E-6	1.12E-8	-1.03E-5	1.41E-4
NHWD	kg	1.38E-1	2.56E-2	4.17E-3	1.68E-1	1.01E-2	6.26E-2	4.03E-2	-4.18E-2	2.39E-1
RWD	kg	4.42E-5	2.81E-6	1.15E-6	4.81E-5	1.11E-6	6.38E-6	5.91E-8	-2.16E-5	3.41E-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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