

Environmental Profile

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

Ecochain v3.5.80



Product: 3025869 - Gutter Branch 45° Sand 80 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	6.08E-1	2.20E-2	2.64E-2	6.56E-1	7.93E-3	4.10E-1	2.50E-3	-2.93E-1	7.83E-1
GWP-f	kg CO2 eq	7.36E-1	2.20E-2	2.08E-2	7.79E-1	7.92E-3	2.24E-1	2.50E-3	-4.03E-1	6.10E-1
GWP-b	kg CO2 eq	-1.30E-1	1.34E-5	5.59E-3	-1.24E-1	4.81E-6	1.86E-1	3.08E-6	1.11E-1	1.73E-1
GWP-luluc	kg CO2 eq	1.26E-3	7.80E-6	2.00E-5	1.29E-3	2.80E-6	9.85E-5	6.87E-8	-1.06E-3	3.22E-4
ODP	kg CFC11 eq	3.34E-7	5.08E-9	2.71E-9	3.42E-7	1.83E-9	2.75E-8	9.32E-11	-1.76E-7	1.95E-7
AP	mol H+ eq	4.34E-3	1.25E-4	1.18E-4	4.59E-3	4.51E-5	4.99E-4	2.28E-6	-1.89E-3	3.24E-3
EP-fw	kg P eq	3.76E-5	1.81E-7	4.95E-7	3.83E-5	6.52E-8	3.30E-6	3.05E-9	-2.28E-5	1.89E-5
EP-m	kg N eq	7.52E-4	4.49E-5	3.46E-5	8.31E-4	1.61E-5	1.29E-4	1.37E-6	-3.70E-4	6.07E-4
EP-T	mol N eq	7.95E-3	4.95E-4	4.17E-4	8.86E-3	1.78E-4	1.41E-3	9.05E-6	-4.09E-3	6.38E-3
POCP	kg NMVOC eq	2.43E-3	1.41E-4	1.02E-4	2.67E-3	5.09E-5	4.24E-4	3.12E-6	-1.28E-3	1.87E-3
ADP-mm	kg Sb eq	7.40E-4	5.70E-7	4.10E-7	7.41E-4	2.05E-7	1.99E-6	2.31E-9	-7.81E-6	7.36E-4
ADP-f	MJ	1.66E+1	3.38E-1	2.89E-1	1.73E+1	1.22E-1	1.32E+0	6.81E-3	-9.26E+0	9.44E+0
WDP	m3 depriv.	1.06E+0	1.04E-3	5.81E-1	1.64E+0	3.73E-4	4.84E-2	5.69E-5	-6.42E-1	1.05E+0
PM	disease inc.	3.23E-8	1.99E-9	1.72E-9	3.60E-8	7.15E-10	6.36E-9	4.69E-11	-2.10E-8	2.21E-8
IR	kBq U-235 eq	4.07E-2	1.48E-3	8.28E-4	4.30E-2	5.32E-4	4.73E-3	3.11E-5	-2.32E-2	2.51E-2
ETP-fw	CTUe	3.18E+1	2.75E-1	2.77E-1	3.24E+1	9.88E-2	9.40E+0	1.02E-1	-1.36E+1	2.83E+1
HTP-c	CTUh	7.66E-10	9.77E-12	2.12E-11	7.97E-10	3.51E-12	1.59E-10	1.95E-13	-2.89E-10	6.72E-10
HTP-nc	CTUh	2.02E-8	3.27E-10	5.52E-10	2.11E-8	1.18E-10	3.43E-9	1.97E-11	-8.67E-9	1.60E-8
SQP	Pt	1.84E+1	2.89E-1	1.41E+0	2.01E+1	1.04E-1	8.15E-1	1.73E-2	-3.07E+1	-9.72E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	3.41E+0	4.85E-3	3.59E-1	3.77E+0	1.74E-3	9.06E-2	2.45E-4	-5.46E+0	-1.59E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	3.41E+0	4.85E-3	3.59E-1	3.77E+0	1.74E-3	9.06E-2	2.45E-4	-5.46E+0	-1.59E+0
PENRE	MJ	1.78E+1	3.59E-1	3.13E-1	1.85E+1	1.29E-1	1.41E+0	7.23E-3	-9.94E+0	1.01E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.78E+1	3.59E-1	3.13E-1	1.85E+1	1.29E-1	1.41E+0	7.23E-3	-9.94E+0	1.01E+1
PET	MJ	2.12E+1	3.64E-1	6.72E-1	2.23E+1	1.31E-1	1.50E+0	7.48E-3	-1.54E+1	8.51E+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	1.37E-2	3.83E-5	1.36E-2	2.73E-2	1.38E-5	1.34E-3	8.28E-6	-9.34E-3	1.94E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.07E-4	8.65E-7	4.25E-7	1.08E-4	3.11E-7	2.25E-6	8.40E-9	-8.71E-6	1.02E-4
NHWD	kg	1.20E-1	2.10E-2	3.12E-3	1.44E-1	7.54E-3	4.91E-2	3.01E-2	-3.95E-2	1.91E-1
RWD	kg	3.66E-5	2.30E-6	8.61E-7	3.98E-5	8.27E-7	5.24E-6	4.42E-8	-2.12E-5	2.47E-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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