

Environmental Profile

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

Ecochain v3.5.80



Product: 3004596 - PVC Hanging Gutter GY PVC 5" Bracket
Unit: 1 piece
Manufacturer: Wavin - PL -Buk - Extra products

LCA standard: EN15804+A2 (2019)
Standard database: Worldwide - Ecoinvent v 3.6 Cut-Off
Externally verified: Yes
Issue date: 08-06-2023
End of validity: 08-06-2028
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 - PL -Buk - Extra products (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]

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Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	1.51E-1	2.30E-3	1.45E-4	1.53E-1	2.00E-3	1.01E-1	6.39E-4	-9.09E-2	1.66E-1
GWP-f	kg CO2 eq	1.82E-1	2.30E-3	1.46E-4	1.85E-1	2.00E-3	6.42E-2	6.39E-4	-9.87E-2	1.53E-1
GWP-b	kg CO2 eq	-3.16E-2	1.40E-6	-1.54E-6	-3.16E-2	1.21E-6	3.70E-2	7.98E-7	7.90E-3	1.33E-2
GWP-luluc	kg CO2 eq	2.11E-4	8.13E-7	1.49E-7	2.12E-4	7.07E-7	2.51E-5	1.70E-8	-1.30E-4	1.07E-4
ODP	kg CFC11 eq	8.66E-8	5.30E-10	8.26E-12	8.71E-8	4.60E-10	6.97E-9	2.37E-11	-4.46E-8	5.00E-8
AP	mol H+ eq	8.80E-4	1.31E-5	1.47E-6	8.94E-4	1.14E-5	1.21E-4	5.78E-7	-3.97E-4	6.30E-4
EP-fw	kg P eq	8.40E-6	1.89E-8	8.24E-9	8.43E-6	1.64E-8	8.42E-7	7.65E-10	-4.11E-6	5.18E-6
EP-m	kg N eq	1.59E-4	4.68E-6	1.55E-7	1.64E-4	4.07E-6	3.00E-5	3.54E-7	-7.43E-5	1.24E-4
EP-T	mol N eq	1.73E-3	5.16E-5	1.85E-6	1.78E-3	4.48E-5	3.31E-4	2.30E-6	-8.09E-4	1.35E-3
POCP	kg NMVOC eq	5.67E-4	1.48E-5	6.28E-7	5.83E-4	1.28E-5	9.88E-5	7.92E-7	-2.72E-4	4.23E-4
ADP-mm	kg Sb eq	1.49E-4	5.94E-8	1.97E-8	1.49E-4	5.17E-8	4.73E-7	5.82E-10	-1.88E-6	1.48E-4
ADP-f	MJ	4.35E+0	3.53E-2	1.36E-3	4.39E+0	3.06E-2	3.23E-1	1.73E-3	-2.30E+0	2.44E+0
WDP	m3 depriv.	2.68E-1	1.08E-4	5.22E-5	2.68E-1	9.41E-5	1.26E-2	1.26E-5	-1.37E-1	1.44E-1
PM	disease inc.	6.60E-9	2.07E-10	9.08E-12	6.81E-9	1.80E-10	1.50E-9	1.19E-11	-3.47E-9	5.03E-9
IR	kBq U-235 eq	9.61E-3	1.54E-4	1.02E-6	9.77E-3	1.34E-4	1.15E-3	7.93E-6	-4.73E-3	6.33E-3
ETP-fw	CTUe	5.41E+0	2.86E-2	1.21E-2	5.45E+0	2.49E-2	2.46E+0	2.71E-2	-1.97E+0	5.99E+0
HTP-c	CTUh	1.64E-10	1.02E-12	6.17E-13	1.66E-10	8.86E-13	3.79E-11	4.87E-14	-6.24E-11	1.43E-10
HTP-nc	CTUh	4.83E-9	3.41E-11	1.57E-11	4.88E-9	2.97E-11	8.70E-10	5.21E-12	-1.79E-9	3.99E-9
SQP	Pt	3.73E+0	3.02E-2	2.24E-3	3.76E+0	2.62E-2	1.99E-1	4.43E-3	-4.08E+0	-9.41E-2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.09E+0	5.06E-4	2.40E-2	1.11E+0	4.40E-4	2.31E-2	6.39E-5	-7.16E-1	4.22E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.09E+0	5.06E-4	2.40E-2	1.11E+0	4.40E-4	2.31E-2	6.39E-5	-7.16E-1	4.22E-1
PENRE	MJ	4.67E+0	3.74E-2	1.44E-3	4.70E+0	3.25E-2	3.44E-1	1.84E-3	-2.48E+0	2.60E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	4.67E+0	3.74E-2	1.44E-3	4.70E+0	3.25E-2	3.44E-1	1.84E-3	-2.48E+0	2.60E+0
PET	MJ	5.76E+0	3.80E-2	2.55E-2	5.82E+0	3.30E-2	3.67E-1	1.90E-3	-3.20E+0	3.03E+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	3.18E-3	3.99E-6	1.46E-6	3.19E-3	3.47E-6	3.47E-4	2.11E-6	-1.65E-3	1.89E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.19E-5	9.02E-8	2.73E-13	2.20E-5	7.84E-8	5.34E-7	2.12E-9	-2.12E-6	2.05E-5
NHWD	kg	1.96E-2	2.19E-3	1.05E-6	2.18E-2	1.90E-3	1.21E-2	7.59E-3	-8.58E-3	3.49E-2
RWD	kg	8.52E-6	2.40E-7	1.10E-13	8.76E-6	2.08E-7	1.24E-6	1.12E-8	-4.28E-6	5.93E-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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