

Environmental Profile

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

Ecochain v3.5.80



Product: 3025429 - Gutter Running Outlet LGY 16
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]

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	2.07E-1	3.40E-3	1.45E-4	2.11E-1	2.45E-3	1.22E-1	7.72E-4	-1.07E-1	2.28E-1
GWP-f	kg CO2 eq	2.38E-1	3.39E-3	1.46E-4	2.41E-1	2.45E-3	8.22E-2	7.72E-4	-1.21E-1	2.06E-1
GWP-b	kg CO2 eq	-3.11E-2	2.06E-6	-1.54E-6	-3.11E-2	1.49E-6	3.97E-2	9.45E-7	1.40E-2	2.26E-2
GWP-luluc	kg CO2 eq	2.92E-4	1.20E-6	1.49E-7	2.93E-4	8.66E-7	2.98E-5	2.14E-8	-1.84E-4	1.39E-4
ODP	kg CFC11 eq	1.01E-7	7.82E-10	8.26E-12	1.02E-7	5.64E-10	8.15E-9	2.88E-11	-5.34E-8	5.76E-8
AP	mol H+ eq	1.41E-3	1.93E-5	1.47E-6	1.43E-3	1.39E-5	1.46E-4	7.03E-7	-4.88E-4	1.11E-3
EP-fw	kg P eq	1.12E-5	2.79E-8	8.24E-9	1.13E-5	2.01E-8	9.93E-7	9.46E-10	-5.24E-6	7.06E-6
EP-m	kg N eq	2.20E-4	6.92E-6	1.55E-7	2.27E-4	4.99E-6	3.68E-5	4.19E-7	-9.22E-5	1.77E-4
EP-T	mol N eq	2.37E-3	7.63E-5	1.85E-6	2.45E-3	5.50E-5	4.05E-4	2.79E-6	-1.01E-3	1.90E-3
POCP	kg NMVOC eq	7.76E-4	2.18E-5	6.28E-7	7.99E-4	1.57E-5	1.21E-4	9.61E-7	-3.32E-4	6.05E-4
ADP-mm	kg Sb eq	2.46E-4	8.78E-8	1.97E-8	2.47E-4	6.33E-8	5.71E-7	7.15E-10	-2.25E-6	2.45E-4
ADP-f	MJ	5.45E+0	5.21E-2	1.36E-3	5.50E+0	3.76E-2	3.90E-1	2.10E-3	-2.80E+0	3.12E+0
WDP	m3 depriv.	3.34E-1	1.60E-4	5.22E-5	3.35E-1	1.15E-4	1.47E-2	1.82E-5	-1.69E-1	1.80E-1
PM	disease inc.	9.39E-9	3.06E-10	9.08E-12	9.71E-9	2.21E-10	1.83E-9	1.45E-11	-4.43E-9	7.35E-9
IR	kBq U-235 eq	1.24E-2	2.28E-4	1.02E-6	1.26E-2	1.64E-4	1.38E-3	9.57E-6	-5.88E-3	8.30E-3
ETP-fw	CTUe	8.06E+0	4.23E-2	1.21E-2	8.12E+0	3.05E-2	2.84E+0	3.10E-2	-2.66E+0	8.36E+0
HTP-c	CTUh	2.56E-10	1.51E-12	6.17E-13	2.58E-10	1.09E-12	4.84E-11	6.06E-14	-7.46E-11	2.33E-10
HTP-nc	CTUh	6.64E-9	5.04E-11	1.57E-11	6.70E-9	3.64E-11	1.04E-9	6.02E-12	-2.25E-9	5.53E-9
SQP	Pt	4.26E+0	4.46E-2	2.24E-3	4.30E+0	3.21E-2	2.43E-1	5.35E-3	-5.24E+0	-6.54E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.40E+0	7.48E-4	2.40E-2	1.43E+0	5.39E-4	2.73E-2	7.50E-5	-9.35E-1	5.19E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.40E+0	7.48E-4	2.40E-2	1.43E+0	5.39E-4	2.73E-2	7.50E-5	-9.35E-1	5.19E-1
PENRE	MJ	5.84E+0	5.53E-2	1.44E-3	5.90E+0	3.99E-2	4.15E-1	2.23E-3	-3.02E+0	3.33E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	5.84E+0	5.53E-2	1.44E-3	5.90E+0	3.99E-2	4.15E-1	2.23E-3	-3.02E+0	3.33E+0
PET	MJ	7.24E+0	5.61E-2	2.55E-2	7.32E+0	4.04E-2	4.43E-1	2.31E-3	-3.96E+0	3.85E+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	4.38E-3	5.90E-6	1.46E-6	4.39E-3	4.25E-6	4.07E-4	2.55E-6	-2.13E-3	2.68E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	3.49E-5	1.33E-7	2.73E-13	3.51E-5	9.61E-8	6.52E-7	2.60E-9	-2.56E-6	3.33E-5
NHWD	kg	3.68E-2	3.23E-3	1.05E-6	4.00E-2	2.33E-3	1.51E-2	9.31E-3	-1.03E-2	5.64E-2
RWD	kg	1.11E-5	3.54E-7	1.10E-13	1.14E-5	2.56E-7	1.51E-6	1.36E-8	-5.33E-6	7.87E-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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