

Environmental Profile

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

Ecochain v3.5.80



Product: 3025914 - Gutter Running Outlet LGY 25
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	4.59E-1	8.03E-3	1.45E-4	4.67E-1	5.77E-3	3.04E-1	1.81E-3	-2.56E-1	5.22E-1
GWP-f	kg CO2 eq	5.53E-1	8.02E-3	1.46E-4	5.61E-1	5.76E-3	1.91E-1	1.81E-3	-2.84E-1	4.75E-1
GWP-b	kg CO2 eq	-9.47E-2	4.87E-6	-1.54E-6	-9.47E-2	3.50E-6	1.13E-1	2.23E-6	2.88E-2	4.71E-2
GWP-luluc	kg CO2 eq	6.71E-4	2.84E-6	1.49E-7	6.74E-4	2.04E-6	7.03E-5	5.00E-8	-4.15E-4	3.32E-4
ODP	kg CFC11 eq	2.40E-7	1.85E-9	8.26E-12	2.41E-7	1.33E-9	1.92E-8	6.77E-11	-1.26E-7	1.36E-7
AP	mol H+ eq	3.21E-3	4.57E-5	1.47E-6	3.25E-3	3.28E-5	3.42E-4	1.65E-6	-1.15E-3	2.48E-3
EP-fw	kg P eq	2.61E-5	6.60E-8	8.24E-9	2.62E-5	4.74E-8	2.35E-6	2.22E-9	-1.21E-5	1.65E-5
EP-m	kg N eq	5.09E-4	1.64E-5	1.55E-7	5.26E-4	1.17E-5	8.63E-5	9.90E-7	-2.17E-4	4.07E-4
EP-T	mol N eq	5.50E-3	1.80E-4	1.85E-6	5.68E-3	1.29E-4	9.51E-4	6.57E-6	-2.37E-3	4.40E-3
POCP	kg NMVOC eq	1.81E-3	5.15E-5	6.28E-7	1.86E-3	3.70E-5	2.84E-4	2.26E-6	-7.90E-4	1.39E-3
ADP-mm	kg Sb eq	5.91E-4	2.08E-7	1.97E-8	5.91E-4	1.49E-7	1.34E-6	1.68E-9	-5.32E-6	5.88E-4
ADP-f	MJ	1.27E+1	1.23E-1	1.36E-3	1.29E+1	8.85E-2	9.19E-1	4.95E-3	-6.59E+0	7.28E+0
WDP	m3 depriv.	7.82E-1	3.78E-4	5.22E-5	7.82E-1	2.72E-4	3.48E-2	4.16E-5	-3.93E-1	4.24E-1
PM	disease inc.	2.17E-8	7.24E-10	9.08E-12	2.25E-8	5.20E-10	4.30E-9	3.40E-11	-1.04E-8	1.69E-8
IR	kBq U-235 eq	2.90E-2	5.38E-4	1.02E-6	2.95E-2	3.87E-4	3.25E-3	2.25E-5	-1.37E-2	1.95E-2
ETP-fw	CTUe	1.85E+1	1.00E-1	1.21E-2	1.86E+1	7.19E-2	6.71E+0	7.34E-2	-6.03E+0	1.94E+1
HTP-c	CTUh	5.94E-10	3.56E-12	6.17E-13	5.98E-10	2.56E-12	1.13E-10	1.42E-13	-1.81E-10	5.33E-10
HTP-nc	CTUh	1.55E-8	1.19E-10	1.57E-11	1.57E-8	8.57E-11	2.44E-9	1.42E-11	-5.29E-9	1.29E-8
SQP	Pt	1.16E+1	1.05E-1	2.24E-3	1.17E+1	7.57E-2	5.71E-1	1.26E-2	-1.31E+1	-7.23E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	3.51E+0	1.77E-3	2.40E-2	3.54E+0	1.27E-3	6.45E-2	1.77E-4	-2.29E+0	1.31E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	3.51E+0	1.77E-3	2.40E-2	3.54E+0	1.27E-3	6.45E-2	1.77E-4	-2.29E+0	1.31E+0
PENRE	MJ	1.37E+1	1.31E-1	1.44E-3	1.38E+1	9.39E-2	9.77E-1	5.25E-3	-7.10E+0	7.77E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.37E+1	1.31E-1	1.44E-3	1.38E+1	9.39E-2	9.77E-1	5.25E-3	-7.10E+0	7.77E+0
PET	MJ	1.72E+1	1.33E-1	2.55E-2	1.73E+1	9.52E-2	1.04E+0	5.43E-3	-9.39E+0	9.08E+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	1.01E-2	1.39E-5	1.46E-6	1.01E-2	1.00E-5	9.62E-4	6.01E-6	-4.87E-3	6.22E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	8.37E-5	3.15E-7	2.73E-13	8.40E-5	2.26E-7	1.53E-6	6.10E-9	-6.06E-6	7.97E-5
NHWD	kg	8.23E-2	7.63E-3	1.05E-6	9.00E-2	5.48E-3	3.54E-2	2.19E-2	-2.47E-2	1.28E-1
RWD	kg	2.59E-5	8.38E-7	1.10E-13	2.67E-5	6.02E-7	3.54E-6	3.21E-8	-1.25E-5	1.84E-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



Ecochain Technologies BV
H.J.E. Wenckebachweg 123, 1096 AM Amsterdam, The Netherlands
<https://www.ecochain.com>
+31 20 3035 777