Environmental Profile

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

Ecochain v3.5.80

Product:	3025912 - Gutter Outlet Stopend LGY 25 Right
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

A1 Raw material supply A2 Transport A3 Manufacturing

Construction process stage

A4 Transport gate to site
A5 Assembly / Construction installation process

Use stage

B1 Use B2 Maintenance B3 Repair B4 Replacement B5 Refurbishment
B6 Operational energy use B7 Operational water use

End-of-Life stage

C1 De-construction demolition C2 Transport C3 Waste processing
C4 Disposal

Benefits and loads beyond the system boundaries

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

Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	9.86E-2	1.88E-3	1.45E-4	1.01E-1	1.21E-3	8.45E-2	3.84E-4	-5.92E-2	1.27E-1
GWP-f	kg CO2 eq	1.31E-1	1.88E-3	1.46E-4	1.33E-1	1.21E-3	4.80E-2	3.84E-4	-6.61E-2	1.16E-1
GWP-b	kg CO2 eq	-3.24E-2	1.14E-6	-1.54E-6	-3.24E-2	7.35E-7	3.65E-2	4.60E-7	7.00E-3	1.11E-2
GWP-luluc	kg CO2 eq	1.64E-4	6.66E-7	1.49E-7	1.65E-4	4.29E-7	1.44E-5	1.09E-8	-9.95E-5	8.00E-5
ODP	kg CFC11 eq	4.90E-8	4.33E-10	8.26E-12	4.94E-8	2.79E-10	3.91E-9	1.42E-11	-2.68E-8	2.68E-8
AP	mol H+ eq	8.14E-4	1.07E-5	1.47E-6	8.26E-4	6.90E-6	7.24E-5	3.48E-7	-2.58E-4	6.47E-4
EP-fw	kg P eq	6.09E-6	1.55E-8	8.24E-9	6.12E-6	9.96E-9	4.80E-7	4.78E-10	-2.69E-6	3.92E-6
EP-m	kg N eq	1.25E-4	3.83E-6	1.55E-7	1.28E-4	2.47E-6	1.87E-5	2.03E-7	-5.05E-5	9.93E-5
EP-T	mol N eq	1.35E-3	4.22E-5	1.85E-6	1.39E-3	2.72E-5	2.06E-4	1.38E-6	-5.55E-4	1.07E-3
POCP	kg NMVOC eq	4.51E-4	1.21E-5	6.28E-7	4.64E-4	7.77E-6	6.15E-5	4.76E-7	-1.85E-4	3.49E-4
ADP-mm	kg Sb eq	1.47E-4	4.87E-8	1.97E-8	1.47E-4	3.13E-8	2.81E-7	3.58E-10	-1.14E-6	1.47E-4
ADP-f	MJ	2.95E+0	2.89E-2	1.36E-3	2.98E+0	1.86E-2	1.93E-1	1.04E-3	-1.49E+0	1.70E+0
WDP	m3 depriv.	1.71E-1	8.86E-5	5.22E-5	1.71E-1	5.70E-5	7.05E-3	1.05E-5	-8.39E-2	9.46E-2
PM	disease inc.	5.55E-9	1.70E-10	9.08E-12	5.73E-9	1.09E-10	9.18E-10	7.14E-12	-2.50E-9	4.26E-9
IR	kBq U-235 eq	6.57E-3	1.26E-4	1.02E-6	6.70E-3	8.12E-5	6.80E-4	4.70E-6	-3.02E-3	4.44E-3
ETP-fw	CTUe	4.46E+0	2.34E-2	1.21E-2	4.50E+0	1.51E-2	1.34E+0	1.46E-2	-1.39E+0	4.48E+0
HTP-c	CTUh	1.49E-10	8.34E-13	6.17E-13	1.50E-10	5.37E-13	2.58E-11	3.09E-14	-4.30E-11	1.34E-10
HTP-nc	CTUh	3.59E-9	2.79E-11	1.57E-11	3.63E-9	1.80E-11	5.10E-10	2.86E-12	-1.16E-9	3.00E-9
SQP	Pt	3.57E+0	2.47E-2	2.24E-3	3.60E+0	1.59E-2	1.21E-1	2.63E-3	-3.79E+0	-4.72E-2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	8.86E-1	4.14E-4	2.40E-2	9.11E-1	2.67E-4	1.32E-2	3.61E-5	-6.42E-1	2.83E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	8.86E-1	4.14E-4	2.40E-2	9.11E-1	2.67E-4	1.32E-2	3.61E-5	-6.42E-1	2.83E-1
PENRE	MJ	3.16E+0	3.06E-2	1.44E-3	3.19E+0	1.97E-2	2.05E-1	1.10E-3	-1.61E+0	1.81E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.16E+0	3.06E-2	1.44E-3	3.19E+0	1.97E-2	2.05E-1	1.10E-3	-1.61E+0	1.81E+0
PET	MJ	4.04E+0	3.11E-2	2.55E-2	4.10E+0	2.00E-2	2.18E-1	1.14E-3	-2.25E+0	2.09E+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	2.42E-3	3.27E-6	1.46E-6	2.42E-3	2.10E-6	1.97E-4	1.25E-6	-1.07E-3	1.55E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.07E-5	7.38E-8	2.73E-13	2.07E-5	4.75E-8	3.25E-7	1.29E-9	-1.44E-6	1.97E-5
NHWD	kg	2.19E-2	1.79E-3	1.05E-6	2.37E-2	1.15E-3	7.90E-3	4.61E-3	-5.74E-3	3.16E-2
RWD	kg	5.91E-6	1.96E-7	1.10E-13	6.10E-6	1.26E-7	7.50E-7	6.71E-9	-2.78E-6	4.21E-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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