

Environmental Profile

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

Ecochain v3.5.80



Product: 3025435 - Gutter Support Bracket 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	5.15E-2	1.31E-3	1.45E-4	5.29E-2	7.11E-4	6.71E-2	2.28E-4	-3.74E-2	8.35E-2
GWP-f	kg CO2 eq	8.41E-2	1.31E-3	1.46E-4	8.56E-2	7.11E-4	3.10E-2	2.28E-4	-4.34E-2	7.41E-2
GWP-b	kg CO2 eq	-3.27E-2	7.94E-7	-1.54E-6	-3.28E-2	4.32E-7	3.61E-2	2.70E-7	6.09E-3	9.39E-3
GWP-luluc	kg CO2 eq	1.18E-4	4.62E-7	1.49E-7	1.19E-4	2.52E-7	8.52E-6	6.57E-9	-7.89E-5	4.88E-5
ODP	kg CFC11 eq	2.91E-8	3.01E-10	8.26E-12	2.94E-8	1.64E-10	2.32E-9	8.36E-12	-1.64E-8	1.55E-8
AP	mol H+ eq	5.05E-4	7.44E-6	1.47E-6	5.14E-4	4.05E-6	4.42E-5	2.06E-7	-1.75E-4	3.88E-4
EP-fw	kg P eq	3.91E-6	1.08E-8	8.24E-9	3.93E-6	5.85E-9	2.84E-7	2.86E-10	-1.85E-6	2.37E-6
EP-m	kg N eq	8.31E-5	2.66E-6	1.55E-7	8.59E-5	1.45E-6	1.17E-5	1.19E-7	-3.56E-5	6.36E-5
EP-T	mol N eq	9.04E-4	2.94E-5	1.85E-6	9.35E-4	1.60E-5	1.29E-4	8.14E-7	-3.95E-4	6.85E-4
POCP	kg NMVOC eq	3.00E-4	8.39E-6	6.28E-7	3.10E-4	4.56E-6	3.84E-5	2.81E-7	-1.31E-4	2.22E-4
ADP-mm	kg Sb eq	9.82E-5	3.38E-8	1.97E-8	9.82E-5	1.84E-8	1.70E-7	2.12E-10	-7.20E-7	9.77E-5
ADP-f	MJ	1.87E+0	2.01E-2	1.36E-3	1.89E+0	1.09E-2	1.16E-1	6.12E-4	-9.56E-1	1.06E+0
WDP	m3 depriv.	1.03E-1	6.16E-5	5.22E-5	1.03E-1	3.35E-5	4.13E-3	6.61E-6	-5.30E-2	5.44E-2
PM	disease inc.	3.80E-9	1.18E-10	9.08E-12	3.93E-9	6.42E-11	5.63E-10	4.21E-12	-1.91E-9	2.65E-9
IR	kBq U-235 eq	4.14E-3	8.77E-5	1.02E-6	4.23E-3	4.77E-5	4.12E-4	2.76E-6	-2.00E-3	2.69E-3
ETP-fw	CTUe	3.05E+0	1.63E-2	1.21E-2	3.08E+0	8.86E-3	7.84E-1	8.45E-3	-1.02E+0	2.86E+0
HTP-c	CTUh	9.53E-11	5.80E-13	6.17E-13	9.65E-11	3.15E-13	1.62E-11	1.85E-14	-3.16E-11	8.15E-11
HTP-nc	CTUh	2.26E-9	1.94E-11	1.57E-11	2.29E-9	1.06E-11	3.05E-10	1.66E-12	-7.68E-10	1.84E-9
SQP	Pt	3.34E+0	1.72E-2	2.24E-3	3.36E+0	9.33E-3	7.34E-2	1.55E-3	-3.54E+0	-1.03E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	7.03E-1	2.88E-4	2.40E-2	7.27E-1	1.57E-4	7.81E-3	2.11E-5	-5.86E-1	1.49E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	7.03E-1	2.88E-4	2.40E-2	7.27E-1	1.57E-4	7.81E-3	2.11E-5	-5.86E-1	1.49E-1
PENRE	MJ	2.01E+0	2.13E-2	1.44E-3	2.03E+0	1.16E-2	1.23E-1	6.50E-4	-1.03E+0	1.13E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.01E+0	2.13E-2	1.44E-3	2.03E+0	1.16E-2	1.23E-1	6.50E-4	-1.03E+0	1.13E+0
PET	MJ	2.71E+0	2.16E-2	2.55E-2	2.76E+0	1.17E-2	1.31E-1	6.71E-4	-1.62E+0	1.28E+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	1.51E-3	2.27E-6	1.46E-6	1.51E-3	1.23E-6	1.16E-4	7.37E-7	-7.24E-4	9.05E-4

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.37E-5	5.13E-8	2.73E-13	1.38E-5	2.79E-8	1.99E-7	7.67E-10	-9.76E-7	1.30E-5
NHWD	kg	1.35E-2	1.24E-3	1.05E-6	1.48E-2	6.76E-4	4.90E-3	2.70E-3	-4.09E-3	1.90E-2
RWD	kg	3.76E-6	1.36E-7	1.10E-13	3.90E-6	7.42E-8	4.60E-7	3.95E-9	-1.87E-6	2.56E-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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