

Environmental Profile

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

Ecochain v3.5.80



Product: 3025583 - Gutter Support Bracket WT 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	1.36E-1	2.61E-3	1.45E-4	1.39E-1	1.63E-3	9.29E-2	5.22E-4	-7.29E-2	1.61E-1
GWP-f	kg CO2 eq	1.68E-1	2.60E-3	1.46E-4	1.71E-1	1.63E-3	5.60E-2	5.22E-4	-8.08E-2	1.48E-1
GWP-b	kg CO2 eq	-3.17E-2	1.58E-6	-1.54E-6	-3.17E-2	9.91E-7	3.69E-2	6.13E-7	7.93E-3	1.31E-2
GWP-luluc	kg CO2 eq	2.01E-4	9.21E-7	1.49E-7	2.02E-4	5.78E-7	1.89E-5	1.52E-8	-1.18E-4	1.04E-4
ODP	kg CFC11 eq	6.37E-8	6.00E-10	8.26E-12	6.43E-8	3.76E-10	5.05E-9	1.91E-11	-3.51E-8	3.47E-8
AP	mol H+ eq	1.17E-3	1.48E-5	1.47E-6	1.19E-3	9.30E-6	9.33E-5	4.71E-7	-3.25E-4	9.65E-4
EP-fw	kg P eq	7.93E-6	2.14E-8	8.24E-9	7.96E-6	1.34E-8	6.27E-7	6.59E-10	-3.40E-6	5.20E-6
EP-m	kg N eq	1.61E-4	5.31E-6	1.55E-7	1.66E-4	3.33E-6	2.38E-5	2.69E-7	-6.20E-5	1.32E-4
EP-T	mol N eq	1.74E-3	5.85E-5	1.85E-6	1.80E-3	3.67E-5	2.63E-4	1.86E-6	-6.78E-4	1.42E-3
POCP	kg NMVOC eq	5.74E-4	1.67E-5	6.28E-7	5.91E-4	1.05E-5	7.87E-5	6.43E-7	-2.26E-4	4.55E-4
ADP-mm	kg Sb eq	1.97E-4	6.73E-8	1.97E-8	1.97E-4	4.22E-8	3.65E-7	4.88E-10	-1.49E-6	1.96E-4
ADP-f	MJ	3.65E+0	4.00E-2	1.36E-3	3.69E+0	2.51E-2	2.52E-1	1.40E-3	-1.86E+0	2.10E+0
WDP	m3 depriv.	2.25E-1	1.23E-4	5.22E-5	2.25E-1	7.69E-5	9.18E-3	1.59E-5	-1.10E-1	1.24E-1
PM	disease inc.	7.27E-9	2.35E-10	9.08E-12	7.52E-9	1.47E-10	1.19E-9	9.64E-12	-3.00E-9	5.87E-9
IR	kBq U-235 eq	8.57E-3	1.75E-4	1.02E-6	8.75E-3	1.09E-4	8.84E-4	6.30E-6	-3.86E-3	5.89E-3
ETP-fw	CTUe	5.82E+0	3.24E-2	1.21E-2	5.86E+0	2.03E-2	1.73E+0	1.88E-2	-1.70E+0	5.94E+0
HTP-c	CTUh	2.13E-10	1.15E-12	6.17E-13	2.14E-10	7.24E-13	3.41E-11	4.28E-14	-5.24E-11	1.97E-10
HTP-nc	CTUh	4.86E-9	3.87E-11	1.57E-11	4.91E-9	2.43E-11	6.61E-10	3.72E-12	-1.49E-9	4.11E-9
SQP	Pt	3.79E+0	3.42E-2	2.24E-3	3.83E+0	2.14E-2	1.60E-1	3.54E-3	-4.02E+0	-2.47E-3
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.05E+0	5.73E-4	2.40E-2	1.08E+0	3.59E-4	1.73E-2	4.76E-5	-6.93E-1	4.01E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.05E+0	5.73E-4	2.40E-2	1.08E+0	3.59E-4	1.73E-2	4.76E-5	-6.93E-1	4.01E-1
PENRE	MJ	3.91E+0	4.24E-2	1.44E-3	3.95E+0	2.66E-2	2.68E-1	1.49E-3	-2.01E+0	2.24E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.91E+0	4.24E-2	1.44E-3	3.95E+0	2.66E-2	2.68E-1	1.49E-3	-2.01E+0	2.24E+0
PET	MJ	4.96E+0	4.30E-2	2.55E-2	5.03E+0	2.70E-2	2.85E-1	1.53E-3	-2.70E+0	2.64E+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	3.22E-3	4.52E-6	1.46E-6	3.22E-3	2.83E-6	2.55E-4	1.68E-6	-1.36E-3	2.12E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.75E-5	1.02E-7	2.73E-13	2.76E-5	6.41E-8	4.23E-7	1.76E-9	-1.73E-6	2.63E-5
NHWD	kg	3.33E-2	2.48E-3	1.05E-6	3.58E-2	1.55E-3	1.01E-2	6.21E-3	-7.10E-3	4.65E-2
RWD	kg	7.76E-6	2.72E-7	1.10E-13	8.03E-6	1.70E-7	9.75E-7	9.03E-9	-3.51E-6	5.67E-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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