

Environmental Profile

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

Ecochain v3.5.80



Product: 3026171 - PP Bracket GY 125
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]

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Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	1.42E-1	1.69E-3	1.45E-4	1.44E-1	1.55E-3	9.58E-2	7.31E-4	-8.70E-2	1.55E-1
GWP-f	kg CO2 eq	1.75E-1	1.69E-3	1.46E-4	1.77E-1	1.55E-3	6.02E-2	7.32E-4	-9.20E-2	1.47E-1
GWP-b	kg CO2 eq	-3.26E-2	1.03E-6	-1.54E-6	-3.26E-2	9.43E-7	3.55E-2	6.35E-7	5.03E-3	7.98E-3
GWP-luluc	kg CO2 eq	1.13E-4	5.99E-7	1.49E-7	1.14E-4	5.50E-7	9.21E-6	1.28E-8	-6.47E-5	5.89E-5
ODP	kg CFC11 eq	6.37E-9	3.90E-10	8.26E-12	6.77E-9	3.58E-10	1.32E-9	1.84E-11	-5.62E-9	2.85E-9
AP	mol H+ eq	7.32E-4	9.64E-6	1.47E-6	7.43E-4	8.85E-6	5.57E-5	4.40E-7	-2.81E-4	5.27E-4
EP-fw	kg P eq	4.01E-6	1.39E-8	8.24E-9	4.03E-6	1.28E-8	2.71E-7	5.83E-10	-1.67E-6	2.64E-6
EP-m	kg N eq	1.29E-4	3.45E-6	1.55E-7	1.33E-4	3.17E-6	1.68E-5	2.83E-7	-5.48E-5	9.79E-5
EP-T	mol N eq	1.44E-3	3.80E-5	1.85E-6	1.48E-3	3.49E-5	1.85E-4	1.78E-6	-6.17E-4	1.09E-3
POCP	kg NMVOC eq	5.87E-4	1.09E-5	6.28E-7	5.99E-4	9.97E-6	5.75E-5	6.69E-7	-2.64E-4	4.03E-4
ADP-mm	kg Sb eq	3.15E-6	4.38E-8	1.97E-8	3.22E-6	4.02E-8	2.16E-7	4.47E-10	-6.26E-7	2.85E-6
ADP-f	MJ	5.12E+0	2.60E-2	1.36E-3	5.15E+0	2.38E-2	1.65E-1	1.34E-3	-2.56E+0	2.78E+0
WDP	m3 depriv.	1.05E-1	7.97E-5	5.22E-5	1.05E-1	7.32E-5	3.08E-3	8.06E-6	-5.15E-2	5.63E-2
PM	disease inc.	7.38E-9	1.53E-10	9.08E-12	7.54E-9	1.40E-10	8.92E-10	9.24E-12	-3.04E-9	5.54E-9
IR	kBq U-235 eq	4.15E-3	1.14E-4	1.02E-6	4.27E-3	1.04E-4	5.15E-4	6.21E-6	-1.64E-3	3.25E-3
ETP-fw	CTUe	2.61E+0	2.11E-2	1.21E-2	2.64E+0	1.94E-2	1.95E-1	1.12E-3	-9.77E-1	1.88E+0
HTP-c	CTUh	3.67E-10	7.51E-13	6.17E-13	3.69E-10	6.89E-13	2.46E-11	3.38E-14	-2.90E-11	3.65E-10
HTP-nc	CTUh	2.30E-9	2.51E-11	1.57E-11	2.34E-9	2.31E-11	2.93E-10	7.29E-13	2.00E-10	2.86E-9
SQP	Pt	3.37E+0	2.22E-2	2.24E-3	3.39E+0	2.04E-2	1.32E-1	3.44E-3	-3.35E+0	1.98E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	9.92E-1	3.73E-4	2.40E-2	1.02E+0	3.42E-4	8.03E-3	5.13E-5	-5.50E-1	4.74E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	9.92E-1	3.73E-4	2.40E-2	1.02E+0	3.42E-4	8.03E-3	5.13E-5	-5.50E-1	4.74E-1
PENRE	MJ	5.50E+0	2.76E-2	1.44E-3	5.53E+0	2.53E-2	1.76E-1	1.43E-3	-2.76E+0	2.97E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	5.50E+0	2.76E-2	1.44E-3	5.53E+0	2.53E-2	1.76E-1	1.43E-3	-2.76E+0	2.97E+0
PET	MJ	6.49E+0	2.80E-2	2.55E-2	6.54E+0	2.57E-2	1.84E-1	1.48E-3	-3.31E+0	3.44E+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	1.85E-3	2.94E-6	1.46E-6	1.86E-3	2.70E-6	9.45E-5	1.65E-6	-8.65E-4	1.09E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.53E-6	6.64E-8	2.73E-13	1.59E-6	6.10E-8	2.83E-7	1.63E-9	-1.46E-6	4.82E-7
NHWD	kg	3.06E-2	1.61E-3	1.05E-6	3.22E-2	1.48E-3	8.73E-3	5.91E-3	-4.03E-3	4.42E-2
RWD	kg	3.83E-6	1.77E-7	1.10E-13	4.00E-6	1.62E-7	6.61E-7	8.75E-9	-1.61E-6	3.22E-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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