

Environmental Profile

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

Ecochain v3.5.80



Product: 3026071 - PP Bracket GY 125 BC
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	1.39E-1	1.68E-3	1.45E-4	1.41E-1	1.55E-3	9.35E-2	7.31E-4	-8.55E-2	1.51E-1
GWP-f	kg CO2 eq	1.72E-1	1.67E-3	1.46E-4	1.74E-1	1.55E-3	5.79E-2	7.32E-4	-9.05E-2	1.43E-1
GWP-b	kg CO2 eq	-3.25E-2	1.02E-6	-1.54E-6	-3.25E-2	9.43E-7	3.55E-2	6.35E-7	5.03E-3	8.04E-3
GWP-luluc	kg CO2 eq	1.11E-4	5.93E-7	1.49E-7	1.12E-4	5.50E-7	9.19E-6	1.28E-8	-6.47E-5	5.68E-5
ODP	kg CFC11 eq	6.28E-9	3.86E-10	8.26E-12	6.68E-9	3.58E-10	1.32E-9	1.84E-11	-5.47E-9	2.90E-9
AP	mol H+ eq	7.20E-4	9.54E-6	1.47E-6	7.31E-4	8.85E-6	5.54E-5	4.40E-7	-2.80E-4	5.16E-4
EP-fw	kg P eq	3.92E-6	1.38E-8	8.24E-9	3.94E-6	1.28E-8	2.71E-7	5.83E-10	-1.67E-6	2.55E-6
EP-m	kg N eq	1.27E-4	3.41E-6	1.55E-7	1.30E-4	3.17E-6	1.66E-5	2.83E-7	-5.45E-5	9.58E-5
EP-T	mol N eq	1.42E-3	3.76E-5	1.85E-6	1.46E-3	3.49E-5	1.83E-4	1.78E-6	-6.13E-4	1.07E-3
POCP	kg NMVOC eq	5.76E-4	1.08E-5	6.28E-7	5.88E-4	9.97E-6	5.70E-5	6.69E-7	-2.63E-4	3.93E-4
ADP-mm	kg Sb eq	3.13E-6	4.33E-8	1.97E-8	3.19E-6	4.02E-8	2.15E-7	4.47E-10	-6.25E-7	2.82E-6
ADP-f	MJ	5.05E+0	2.57E-2	1.36E-3	5.08E+0	2.38E-2	1.64E-1	1.34E-3	-2.53E+0	2.73E+0
WDP	m3 depriv.	1.02E-1	7.89E-5	5.22E-5	1.03E-1	7.32E-5	3.08E-3	8.06E-6	-5.14E-2	5.44E-2
PM	disease inc.	7.28E-9	1.51E-10	9.08E-12	7.44E-9	1.40E-10	8.88E-10	9.24E-12	-3.04E-9	5.44E-9
IR	kBq U-235 eq	4.08E-3	1.12E-4	1.02E-6	4.19E-3	1.04E-4	5.13E-4	6.21E-6	-1.64E-3	3.18E-3
ETP-fw	CTUe	2.57E+0	2.09E-2	1.21E-2	2.61E+0	1.94E-2	1.94E-1	1.12E-3	-9.75E-1	1.85E+0
HTP-c	CTUh	3.66E-10	7.43E-13	6.17E-13	3.68E-10	6.89E-13	2.43E-11	3.38E-14	-2.89E-11	3.64E-10
HTP-nc	CTUh	2.28E-9	2.49E-11	1.57E-11	2.32E-9	2.31E-11	2.90E-10	7.29E-13	2.02E-10	2.83E-9
SQP	Pt	3.36E+0	2.20E-2	2.24E-3	3.38E+0	2.04E-2	1.32E-1	3.44E-3	-3.35E+0	1.86E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	9.89E-1	3.69E-4	2.40E-2	1.01E+0	3.42E-4	8.02E-3	5.13E-5	-5.50E-1	4.71E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	9.89E-1	3.69E-4	2.40E-2	1.01E+0	3.42E-4	8.02E-3	5.13E-5	-5.50E-1	4.71E-1
PENRE	MJ	5.42E+0	2.73E-2	1.44E-3	5.44E+0	2.53E-2	1.75E-1	1.43E-3	-2.73E+0	2.92E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	5.42E+0	2.73E-2	1.44E-3	5.44E+0	2.53E-2	1.75E-1	1.43E-3	-2.73E+0	2.92E+0
PET	MJ	6.40E+0	2.77E-2	2.55E-2	6.46E+0	2.57E-2	1.83E-1	1.48E-3	-3.28E+0	3.39E+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	1.81E-3	2.91E-6	1.46E-6	1.81E-3	2.70E-6	9.40E-5	1.65E-6	-8.63E-4	1.05E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.51E-6	6.57E-8	2.73E-13	1.58E-6	6.10E-8	2.82E-7	1.63E-9	-1.43E-6	4.94E-7
NHWD	kg	3.03E-2	1.59E-3	1.05E-6	3.19E-2	1.48E-3	8.61E-3	5.91E-3	-4.02E-3	4.39E-2
RWD	kg	3.76E-6	1.75E-7	1.10E-13	3.94E-6	1.62E-7	6.59E-7	8.75E-9	-1.60E-6	3.17E-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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