

Environmental Profile

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

Ecochain v3.5.80



Product: 3026073 - PP Bracket GY 80 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]

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	6.87E-2	9.95E-4	1.45E-4	6.98E-2	7.38E-4	6.70E-2	3.47E-4	-4.82E-2	8.97E-2
GWP-f	kg CO2 eq	1.02E-1	9.94E-4	1.46E-4	1.03E-1	7.37E-4	3.28E-2	3.47E-4	-5.02E-2	8.64E-2
GWP-b	kg CO2 eq	-3.29E-2	6.04E-7	-1.54E-6	-3.29E-2	4.48E-7	3.42E-2	2.99E-7	2.01E-3	3.27E-3
GWP-luluc	kg CO2 eq	7.43E-5	3.52E-7	1.49E-7	7.48E-5	2.61E-7	4.52E-6	6.38E-9	-3.54E-5	4.42E-5
ODP	kg CFC11 eq	4.45E-9	2.29E-10	8.26E-12	4.69E-9	1.70E-10	6.76E-10	8.74E-12	-3.76E-9	1.78E-9
AP	mol H+ eq	4.55E-4	5.66E-6	1.47E-6	4.62E-4	4.20E-6	2.86E-5	2.11E-7	-1.58E-4	3.37E-4
EP-fw	kg P eq	2.65E-6	8.18E-9	8.24E-9	2.67E-6	6.06E-9	1.35E-7	2.86E-10	-9.80E-7	1.83E-6
EP-m	kg N eq	8.09E-5	2.03E-6	1.55E-7	8.31E-5	1.50E-6	8.72E-6	1.32E-7	-3.21E-5	6.14E-5
EP-T	mol N eq	9.16E-4	2.23E-5	1.85E-6	9.40E-4	1.66E-5	9.63E-5	8.50E-7	-3.63E-4	6.91E-4
POCP	kg NMVOC eq	3.57E-4	6.38E-6	6.28E-7	3.64E-4	4.73E-6	2.96E-5	3.18E-7	-1.56E-4	2.42E-4
ADP-mm	kg Sb eq	2.06E-6	2.57E-8	1.97E-8	2.11E-6	1.91E-8	1.09E-7	2.16E-10	-3.53E-7	1.88E-6
ADP-f	MJ	2.69E+0	1.53E-2	1.36E-3	2.71E+0	1.13E-2	8.19E-2	6.40E-4	-1.30E+0	1.51E+0
WDP	m3 depriv.	5.59E-2	4.68E-5	5.22E-5	5.60E-2	3.47E-5	1.49E-3	4.84E-6	-2.61E-2	3.14E-2
PM	disease inc.	4.93E-9	8.97E-11	9.08E-12	5.02E-9	6.65E-11	4.50E-10	4.40E-12	-1.85E-9	3.70E-9
IR	kBq U-235 eq	2.74E-3	6.67E-5	1.02E-6	2.81E-3	4.95E-5	2.61E-4	2.94E-6	-8.83E-4	2.24E-3
ETP-fw	CTUe	1.65E+0	1.24E-2	1.21E-2	1.68E+0	9.19E-3	9.87E-2	5.35E-4	-5.88E-1	1.20E+0
HTP-c	CTUh	3.41E-10	4.41E-13	6.17E-13	3.42E-10	3.27E-13	1.31E-11	1.68E-14	-2.07E-11	3.34E-10
HTP-nc	CTUh	1.58E-9	1.48E-11	1.57E-11	1.61E-9	1.10E-11	1.51E-10	3.52E-13	4.43E-10	2.21E-9
SQP	Pt	3.12E+0	1.31E-2	2.24E-3	3.13E+0	9.68E-3	6.67E-2	1.63E-3	-2.76E+0	4.56E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	5.25E-1	2.19E-4	2.40E-2	5.49E-1	1.62E-4	4.00E-3	2.39E-5	-4.33E-1	1.21E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	5.25E-1	2.19E-4	2.40E-2	5.49E-1	1.62E-4	4.00E-3	2.39E-5	-4.33E-1	1.21E-1
PENRE	MJ	2.88E+0	1.62E-2	1.44E-3	2.90E+0	1.20E-2	8.73E-2	6.79E-4	-1.40E+0	1.60E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.88E+0	1.62E-2	1.44E-3	2.90E+0	1.20E-2	8.73E-2	6.79E-4	-1.40E+0	1.60E+0
PET	MJ	3.41E+0	1.64E-2	2.55E-2	3.45E+0	1.22E-2	9.13E-2	7.03E-4	-1.83E+0	1.73E+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	1.07E-3	1.73E-6	1.46E-6	1.08E-3	1.28E-6	4.67E-5	7.81E-7	-4.35E-4	6.89E-4

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.18E-6	3.90E-8	2.73E-13	1.22E-6	2.89E-8	1.44E-7	7.85E-10	-1.10E-6	2.95E-7
NHWD	kg	2.75E-2	9.46E-4	1.05E-6	2.84E-2	7.01E-4	4.53E-3	2.80E-3	-2.85E-3	3.36E-2
RWD	kg	2.57E-6	1.04E-7	1.10E-13	2.68E-6	7.69E-8	3.36E-7	4.15E-9	-9.12E-7	2.18E-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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