

Environmental Profile

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

Ecochain v3.5.71



Product: 3038865 - RainChannel PP End plate BK
 Unit: 1 piece
 Manufacturer: Wavin - UK - Chippenham - Verified

LCA standard: EN15804+A2 (2019)
 Standard database: Worldwide - Ecoinvent v 3.6 Cut-Off
 Externally verified: Yes
 Issue date: 09-02-2023
 End of validity: 09-02-2028
 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 - UK - Chippenham - Verified (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

A1 Raw material supply A2 Transport A3 Manufacturing

Construction process stage

A4 Transport gate to site
 A5 Assembly / Construction installation process

Use stage

B1 Use B2 Maintenance B3 Repair B4 Replacement B5 Refurbishment
 B6 Operational energy use B7 Operational water use

End-of-Life stage

C1 De-construction demolition C2 Transport C3 Waste processing
 C4 Disposal

Benefits and loads beyond the system boundaries

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	3.98E-2	2.07E-3	1.35E-2	5.53E-2	8.96E-4	2.60E-2	4.22E-4	-1.89E-2	6.37E-2
GWP-f	kg CO2 eq	3.84E-2	2.07E-3	1.34E-2	5.38E-2	8.95E-4	2.60E-2	4.22E-4	-1.89E-2	6.23E-2
GWP-b	kg CO2 eq	1.35E-3	1.19E-6	1.28E-4	1.48E-3	5.43E-7	-3.59E-5	3.68E-7	-4.33E-5	1.40E-3
GWP-luluc	kg CO2 eq	1.71E-5	7.53E-7	1.46E-5	3.24E-5	3.17E-7	5.02E-6	7.07E-9	-2.52E-6	3.52E-5
ODP	kg CFC11 eq	9.26E-10	4.75E-10	8.70E-10	2.27E-9	2.06E-10	6.53E-10	1.06E-11	-1.17E-9	1.97E-9
AP	mol H+ eq	1.43E-4	1.39E-5	7.98E-5	2.36E-4	5.10E-6	2.74E-5	2.52E-7	-3.83E-5	2.31E-4
EP-fw	kg P eq	8.91E-7	1.67E-8	1.97E-7	1.10E-6	7.36E-9	1.45E-7	3.26E-10	-1.39E-7	1.12E-6
EP-m	kg N eq	2.36E-5	4.69E-6	1.31E-5	4.14E-5	1.82E-6	7.98E-6	1.65E-7	-7.54E-6	4.38E-5
EP-T	mol N eq	2.62E-4	5.17E-5	1.49E-4	4.63E-4	2.01E-5	8.78E-5	1.02E-6	-8.33E-5	4.88E-4
POCP	kg NMVOC eq	1.15E-4	1.46E-5	5.45E-5	1.84E-4	5.75E-6	2.78E-5	3.84E-7	-3.60E-5	1.82E-4
ADP-mm	kg Sb eq	5.13E-7	5.21E-8	4.24E-7	9.89E-7	2.32E-8	1.09E-7	2.53E-10	-8.04E-8	1.04E-6
ADP-f	MJ	1.30E+0	3.16E-2	1.48E-1	1.48E+0	1.37E-2	8.72E-2	7.72E-4	-4.92E-1	1.09E+0
WDP	m3 depriv.	2.46E-2	9.52E-5	3.85E-3	2.86E-2	4.22E-5	1.71E-3	3.53E-6	-6.72E-3	2.36E-2
PM	disease inc.	1.29E-9	1.82E-10	5.69E-10	2.04E-9	8.08E-11	4.52E-10	5.30E-12	-2.95E-10	2.28E-9
IR	kBq U-235 eq	1.25E-3	1.38E-4	2.87E-4	1.68E-3	6.00E-5	2.63E-4	3.58E-6	-2.05E-4	1.80E-3
ETP-fw	CTUe	3.03E-1	2.55E-2	4.63E-1	7.92E-1	1.12E-2	9.83E-2	6.46E-4	-5.52E-2	8.47E-1
HTP-c	CTUh	1.01E-11	9.25E-13	1.81E-11	2.91E-11	3.97E-13	1.17E-11	1.86E-14	-2.45E-12	3.88E-11
HTP-nc	CTUh	2.74E-10	3.01E-11	6.24E-10	9.28E-10	1.33E-11	1.46E-10	4.14E-13	-6.24E-11	1.03E-9
SQP	Pt	7.47E-2	2.63E-2	5.83E-2	1.59E-1	1.18E-2	6.96E-2	1.98E-3	-1.32E-2	2.29E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	3.14E-2	4.45E-4	1.06E+0	1.09E+0	1.97E-4	4.30E-3	3.01E-5	-4.90E-3	1.09E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	3.14E-2	4.45E-4	1.06E+0	1.09E+0	1.97E-4	4.30E-3	3.01E-5	-4.90E-3	1.09E+0
PENRE	MJ	1.40E+0	3.35E-2	1.57E-1	1.59E+0	1.46E-2	9.29E-2	8.19E-4	-5.34E-1	1.16E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.40E+0	3.35E-2	1.57E-1	1.59E+0	1.46E-2	9.29E-2	8.19E-4	-5.34E-1	1.16E+0
PET	MJ	1.43E+0	3.40E-2	1.22E+0	2.68E+0	1.48E-2	9.72E-2	8.49E-4	-5.38E-1	2.26E+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	4.14E-4	3.51E-6	1.23E-4	5.40E-4	1.55E-6	5.03E-5	9.53E-7	-1.03E-4	4.90E-4

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.05E-7	7.91E-8	5.82E-7	8.65E-7	3.51E-8	1.41E-7	9.27E-10	-2.28E-7	8.15E-7
NHWD	kg	2.01E-3	1.90E-3	1.34E-4	4.04E-3	8.51E-4	4.27E-3	3.40E-3	-3.32E-4	1.22E-2
RWD	kg	1.06E-6	2.15E-7	1.54E-7	1.43E-6	9.34E-8	3.33E-7	5.04E-9	-2.01E-7	1.66E-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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