

Environmental Profile

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

Ecochain v4.3.1



Product: 3040233 - PPr Clips GY 25
 Unit: 1 piece
 Manufacturer: Wavin - TR - Adana
 Location: Güzelevler Mahallesi
 Address: Girne Bulvarı 294
 01321 Adana
 Turkey

LCA standard: EN15804+A2 (2019)
 Standard database: Worldwide - Ecoinvent v 3.6 Cut-Off
 Externally verified: Yes
 Issue date: 04-10-2022
 End of validity: 04-10-2027
 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 - TR - Adana (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-f** = EF Resource use, fossils [MJ]; **ADP-mm** = EF Resource use, minerals and metals [kg Sb eq]; **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	2.03E-2	1.24E-3	4.42E-4	2.20E-2	4.22E-4	1.87E-2	1.98E-4	-1.07E-2	3.06E-2
GWP-f	kg CO2 eq	2.03E-2	1.24E-3	4.27E-4	2.20E-2	4.21E-4	1.76E-2	1.98E-4	-1.19E-2	2.83E-2
GWP-b	kg CO2 eq	1.05E-5	-1.68E-7	1.49E-5	2.52E-5	2.56E-7	1.08E-3	1.69E-7	1.23E-3	2.33E-3
GWP-luluc	kg CO2 eq	1.48E-5	7.64E-7	2.60E-7	1.59E-5	1.49E-7	2.47E-6	3.88E-9	-1.07E-5	7.77E-6
ODP	kg CFC11 eq	7.11E-10	2.54E-10	3.42E-11	9.98E-10	9.71E-11	3.55E-10	5.01E-12	-6.00E-10	8.55E-10
AP	mol H+ eq	8.53E-5	3.28E-5	2.72E-6	1.21E-4	2.40E-6	1.49E-5	1.22E-7	-3.46E-5	1.04E-4
EP-fw	kg P eq	4.49E-7	6.58E-9	3.41E-8	4.90E-7	3.47E-9	7.21E-8	1.71E-10	-2.19E-7	3.46E-7
EP-m	kg N eq	1.48E-5	8.23E-6	9.47E-7	2.40E-5	8.58E-7	4.54E-6	7.40E-8	-6.58E-6	2.29E-5
EP-T	mol N eq	1.69E-4	9.15E-5	6.42E-6	2.67E-4	9.46E-6	4.99E-5	4.89E-7	-7.35E-5	2.53E-4
POCP	kg NMVOC eq	6.62E-5	2.39E-5	2.09E-6	9.21E-5	2.70E-6	1.56E-5	1.83E-7	-3.01E-5	8.05E-5
ADP-f	MJ	6.26E-1	1.64E-2	4.24E-3	6.46E-1	6.47E-3	4.44E-2	3.68E-4	-3.45E-1	3.52E-1
ADP-mm	kg Sb eq	4.99E-7	1.41E-8	3.39E-8	5.47E-7	1.09E-8	5.78E-8	1.27E-10	-7.40E-8	5.42E-7
WDP	m3 depriv.	1.43E-2	3.24E-5	8.81E-4	1.52E-2	1.98E-5	8.35E-4	3.60E-6	-7.24E-3	8.79E-3
PM	disease inc.	7.67E-10	5.40E-11	3.73E-11	8.58E-10	3.80E-11	2.40E-10	2.53E-12	-3.53E-10	7.85E-10
IR	kBq U-235 eq	4.53E-4	6.99E-5	1.27E-5	5.35E-4	2.83E-5	1.37E-4	1.67E-6	-2.28E-4	4.74E-4
ETP-fw	CTUe	3.27E-1	1.16E-2	2.29E-2	3.61E-1	5.25E-3	5.28E-2	3.07E-4	-1.35E-1	2.84E-1
HTP-c	CTUh	6.52E-12	6.64E-13	1.40E-12	8.59E-12	1.87E-13	7.59E-12	1.03E-14	-2.47E-12	1.39E-11
HTP-nc	CTUh	1.77E-10	1.04E-11	2.46E-11	2.12E-10	6.26E-12	8.11E-11	2.06E-13	-7.26E-11	2.27E-10
SQP	Pt	9.02E-2	5.14E-3	5.66E-3	1.01E-1	5.53E-3	3.49E-2	9.35E-4	-2.35E-1	-9.24E-2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.26E-2	1.31E-4	7.71E-2	9.98E-2	9.27E-5	2.13E-3	1.32E-5	-4.49E-2	5.72E-2
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.26E-2	1.31E-4	7.71E-2	9.98E-2	9.27E-5	2.13E-3	1.32E-5	-4.49E-2	5.72E-2
PENRE	MJ	6.71E-1	1.74E-2	4.51E-3	6.93E-1	6.86E-3	4.73E-2	3.90E-4	-3.73E-1	3.75E-1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	6.71E-1	1.74E-2	4.51E-3	6.93E-1	6.86E-3	4.73E-2	3.90E-4	-3.73E-1	3.75E-1
PET	MJ	6.94E-1	1.76E-2	8.16E-2	7.93E-1	6.96E-3	4.94E-2	4.03E-4	-4.18E-1	4.32E-1
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	2.57E-4	1.13E-6	2.11E-5	2.79E-4	7.32E-7	2.57E-5	4.45E-7	-1.29E-4	1.77E-4

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.44E-7	2.19E-8	2.73E-8	1.93E-7	1.65E-8	7.68E-8	4.58E-10	-1.15E-7	1.71E-7
NHWD	kg	1.35E-3	2.82E-4	5.06E-4	2.14E-3	4.01E-4	2.39E-3	1.60E-3	-3.47E-4	6.18E-3
RWD	kg	4.03E-7	1.13E-7	1.56E-8	5.32E-7	4.40E-8	1.76E-7	2.37E-9	-2.13E-7	5.42E-7
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	1.84E-2	1.84E-2	0	0	0	0	1.84E-2
EET	MJ	0	0	0	0	0	0	0	0	0
EEE	MJ	0	0	0	0	0	0	0	0	0



Ecochain Technologies BV
H.J.E. Wenckebachweg 123, 1096 AM Amsterdam, The Netherlands
<https://www.ecochain.com>
+31 20 3035 777