

Environmental Profile

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

Ecochain v4.3.1



Product: 3040235 - PPr Clips GY 40
 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	3.87E-2	2.43E-3	7.58E-4	4.19E-2	6.85E-4	3.97E-2	3.22E-4	-2.01E-2	6.24E-2
GWP-f	kg CO2 eq	3.88E-2	2.43E-3	7.32E-4	4.19E-2	6.84E-4	3.75E-2	3.22E-4	-2.26E-2	5.79E-2
GWP-b	kg CO2 eq	-1.07E-4	-1.49E-7	2.56E-5	-8.13E-5	4.16E-7	2.17E-3	2.77E-7	2.46E-3	4.56E-3
GWP-luluc	kg CO2 eq	3.00E-5	1.42E-6	4.46E-7	3.19E-5	2.42E-7	4.11E-6	5.96E-9	-2.09E-5	1.54E-5
ODP	kg CFC11 eq	1.23E-9	5.03E-10	5.87E-11	1.80E-9	1.58E-10	6.13E-10	8.12E-12	-1.31E-9	1.27E-9
AP	mol H+ eq	1.59E-4	5.81E-5	4.66E-6	2.21E-4	3.90E-6	2.62E-5	1.96E-7	-6.09E-5	1.91E-4
EP-fw	kg P eq	9.01E-7	1.42E-8	5.84E-8	9.74E-7	5.63E-9	1.21E-7	2.67E-10	-4.04E-7	6.96E-7
EP-m	kg N eq	2.87E-5	1.47E-5	1.62E-6	4.50E-5	1.39E-6	8.16E-6	1.23E-7	-1.20E-5	4.28E-5
EP-T	mol N eq	3.20E-4	1.64E-4	1.10E-5	4.95E-4	1.54E-5	8.99E-5	7.90E-7	-1.34E-4	4.67E-4
POCP	kg NMVOC eq	1.30E-4	4.28E-5	3.59E-6	1.77E-4	4.39E-6	2.78E-5	2.96E-7	-5.33E-5	1.56E-4
ADP-f	MJ	1.20E+0	3.28E-2	7.27E-3	1.24E+0	1.05E-2	7.47E-2	5.94E-4	-6.17E-1	7.06E-1
ADP-mm	kg Sb eq	7.12E-7	3.19E-8	5.81E-8	8.02E-7	1.77E-8	9.80E-8	2.01E-10	-1.25E-7	7.93E-7
WDP	m3 depriv.	2.71E-2	7.18E-5	1.51E-3	2.86E-2	3.22E-5	1.40E-3	4.64E-6	-1.27E-2	1.74E-2
PM	disease inc.	1.43E-9	1.20E-10	6.39E-11	1.62E-9	6.18E-11	4.12E-10	4.09E-12	-6.28E-10	1.47E-9
IR	kBq U-235 eq	8.82E-4	1.39E-4	2.18E-5	1.04E-3	4.59E-5	2.33E-4	2.73E-6	-4.18E-4	9.07E-4
ETP-fw	CTUe	6.27E-1	2.40E-2	3.93E-2	6.90E-1	8.53E-3	9.08E-2	4.97E-4	-2.60E-1	5.30E-1
HTP-c	CTUh	1.15E-11	1.27E-12	2.39E-12	1.52E-11	3.04E-13	1.29E-11	1.57E-14	-4.50E-12	2.39E-11
HTP-nc	CTUh	3.15E-10	2.23E-11	4.22E-11	3.79E-10	1.02E-11	1.41E-10	3.28E-13	-1.31E-10	4.00E-10
SQP	Pt	1.83E-1	1.27E-2	9.70E-3	2.06E-1	8.99E-3	5.87E-2	1.52E-3	-4.68E-1	-1.93E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	4.62E-2	2.77E-4	1.32E-1	1.79E-1	1.51E-4	3.55E-3	2.21E-5	-8.85E-2	9.38E-2
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	4.62E-2	2.77E-4	1.32E-1	1.79E-1	1.51E-4	3.55E-3	2.21E-5	-8.85E-2	9.38E-2
PENRE	MJ	1.28E+0	3.48E-2	7.73E-3	1.33E+0	1.12E-2	7.96E-2	6.31E-4	-6.67E-1	7.51E-1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.28E+0	3.48E-2	7.73E-3	1.33E+0	1.12E-2	7.96E-2	6.31E-4	-6.67E-1	7.51E-1
PET	MJ	1.33E+0	3.51E-2	1.40E-1	1.51E+0	1.13E-2	8.31E-2	6.53E-4	-7.56E-1	8.45E-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	5.01E-4	2.48E-6	3.62E-5	5.40E-4	1.19E-6	4.42E-5	7.25E-7	-2.32E-4	3.54E-4

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.44E-7	4.95E-8	4.68E-8	3.40E-7	2.69E-8	1.32E-7	7.31E-10	-2.51E-7	2.49E-7
NHWD	kg	2.50E-3	7.67E-4	8.67E-4	4.13E-3	6.51E-4	4.37E-3	2.60E-3	-6.23E-4	1.11E-2
RWD	kg	7.74E-7	2.24E-7	2.67E-8	1.02E-6	7.14E-8	3.01E-7	3.86E-9	-3.96E-7	1.01E-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	3.16E-2	3.16E-2	0	0	0	0	3.16E-2
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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