

Environmental Profile

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

Ecochain v4.3.1



Product: 3050987 - PPr Clips WT 32
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					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-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]; **PENRT** = 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	3.98E-2	2.27E-3	6.31E-4	4.27E-2	6.85E-4	3.83E-2	3.21E-4	-2.07E-2	6.13E-2
GWP-f	kg CO2 eq	4.00E-2	2.27E-3	6.10E-4	4.29E-2	6.84E-4	3.72E-2	3.21E-4	-2.19E-2	5.92E-2
GWP-b	kg CO2 eq	-3.91E-4	-1.19E-7	2.13E-5	-3.69E-4	4.16E-7	1.07E-3	2.73E-7	1.20E-3	1.91E-3
GWP-luluc	kg CO2 eq	1.71E-4	1.32E-6	3.72E-7	1.72E-4	2.42E-7	4.04E-6	6.51E-9	-1.21E-5	1.65E-4
ODP	kg CFC11 eq	1.85E-9	4.70E-10	4.89E-11	2.37E-9	1.58E-10	5.78E-10	8.15E-12	-1.22E-9	1.89E-9
AP	mol H+ eq	2.48E-4	5.34E-5	3.88E-6	3.06E-4	3.90E-6	2.49E-5	1.99E-7	-5.50E-5	2.80E-4
EP-fw	kg P eq	1.05E-6	1.34E-8	4.87E-8	1.11E-6	5.63E-9	1.18E-7	2.84E-10	-2.95E-7	9.43E-7
EP-m	kg N eq	3.28E-5	1.36E-5	1.35E-6	4.77E-5	1.39E-6	7.69E-6	1.19E-7	-1.06E-5	4.63E-5
EP-T	mol N eq	3.39E-4	1.51E-4	9.16E-6	4.99E-4	1.54E-5	8.47E-5	7.97E-7	-1.18E-4	4.82E-4
POCP	kg NMVOC eq	1.42E-4	3.95E-5	2.99E-6	1.84E-4	4.39E-6	2.62E-5	2.98E-7	-4.94E-5	1.66E-4
ADP-f	MJ	1.19E+0	3.07E-2	6.06E-3	1.23E+0	1.05E-2	7.25E-2	5.99E-4	-6.06E-1	7.06E-1
ADP-mm	kg Sb eq	4.78E-7	3.03E-8	4.84E-8	5.56E-7	1.77E-8	9.29E-8	2.09E-10	-1.17E-7	5.50E-7
WDP	m3 depriv.	3.05E-2	6.79E-5	1.26E-3	3.18E-2	3.22E-5	1.37E-3	6.57E-6	-1.09E-2	2.24E-2
PM	disease inc.	1.62E-9	1.13E-10	5.33E-11	1.79E-9	6.18E-11	3.94E-10	4.12E-12	-5.10E-10	1.74E-9
IR	kBq U-235 eq	1.11E-3	1.30E-4	1.82E-5	1.26E-3	4.59E-5	2.23E-4	2.71E-6	-3.41E-4	1.19E-3
ETP-fw	CTUe	5.93E-1	2.25E-2	3.28E-2	6.48E-1	8.53E-3	8.63E-2	5.00E-4	-1.65E-1	5.79E-1
HTP-c	CTUh	2.60E-11	1.18E-12	1.99E-12	2.92E-11	3.04E-13	1.37E-11	1.73E-14	-3.78E-12	3.94E-11
HTP-nc	CTUh	4.28E-10	2.10E-11	3.52E-11	4.85E-10	1.02E-11	1.40E-10	3.39E-13	-1.06E-10	5.29E-10
SQP	Pt	1.84E-1	1.21E-2	8.09E-3	2.04E-1	8.99E-3	5.74E-2	1.52E-3	-2.42E-1	3.03E-2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	4.53E-2	2.61E-4	1.10E-1	1.56E-1	1.51E-4	3.48E-3	2.12E-5	-4.75E-2	1.12E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	4.53E-2	2.61E-4	1.10E-1	1.56E-1	1.51E-4	3.48E-3	2.12E-5	-4.75E-2	1.12E-1
PENRE	MJ	1.28E+0	3.25E-2	6.44E-3	1.32E+0	1.12E-2	7.72E-2	6.36E-4	-6.56E-1	7.50E-1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.28E+0	3.25E-2	6.44E-3	1.32E+0	1.12E-2	7.72E-2	6.36E-4	-6.56E-1	7.50E-1
PET	MJ	1.32E+0	3.28E-2	1.17E-1	1.47E+0	1.13E-2	8.07E-2	6.57E-4	-7.03E-1	8.62E-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	6.00E-4	2.35E-6	3.02E-5	6.32E-4	1.19E-6	4.32E-5	7.21E-7	-1.85E-4	4.92E-4

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.08E-6	4.68E-8	3.90E-8	1.16E-6	2.69E-8	1.26E-7	7.52E-10	-2.36E-7	1.08E-6
NHWD	kg	6.13E-3	7.39E-4	7.23E-4	7.59E-3	6.51E-4	4.28E-3	2.60E-3	-5.25E-4	1.46E-2
RWD	kg	1.09E-6	2.09E-7	2.23E-8	1.32E-6	7.14E-8	2.86E-7	3.86E-9	-3.22E-7	1.36E-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	2.64E-2	2.64E-2	0	0	0	0	2.64E-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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