

Environmental Profile

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

Ecochain v4.3.1



Product: 3050989 - PPr Clips WT 50
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	7.86E-2	5.19E-3	1.77E-3	8.56E-2	1.63E-3	6.93E-2	7.68E-4	-4.24E-2	1.15E-1
GWP-f	kg CO2 eq	7.87E-2	5.19E-3	1.71E-3	8.56E-2	1.63E-3	6.66E-2	7.68E-4	-4.54E-2	1.09E-1
GWP-b	kg CO2 eq	-2.20E-4	-6.67E-7	5.97E-5	-1.61E-4	9.91E-7	2.69E-3	6.63E-7	3.01E-3	5.54E-3
GWP-luluc	kg CO2 eq	1.91E-4	3.19E-6	1.04E-6	1.95E-4	5.78E-7	9.47E-6	1.40E-8	-2.95E-5	1.76E-4
ODP	kg CFC11 eq	2.69E-9	1.07E-9	1.37E-10	3.90E-9	3.76E-10	1.33E-9	1.94E-11	-2.22E-9	3.40E-9
AP	mol H+ eq	3.88E-4	1.36E-4	1.09E-5	5.35E-4	9.30E-6	5.60E-5	4.66E-7	-1.26E-4	4.75E-4
EP-fw	kg P eq	1.71E-6	2.79E-8	1.36E-7	1.88E-6	1.34E-8	2.76E-7	6.29E-10	-7.02E-7	1.47E-6
EP-m	kg N eq	5.77E-5	3.42E-5	3.79E-6	9.58E-5	3.33E-6	1.69E-5	2.94E-7	-2.37E-5	9.26E-5
EP-T	mol N eq	6.15E-4	3.80E-4	2.57E-5	1.02E-3	3.67E-5	1.86E-4	1.88E-6	-2.64E-4	9.82E-4
POCP	kg NMVOC eq	2.63E-4	9.92E-5	8.37E-6	3.70E-4	1.05E-5	5.82E-5	7.04E-7	-1.11E-4	3.28E-4
ADP-f	MJ	2.54E+0	6.90E-2	1.70E-2	2.62E+0	2.51E-2	1.68E-1	1.42E-3	-1.33E+0	1.49E+0
ADP-mm	kg Sb eq	9.84E-7	6.00E-8	1.36E-7	1.18E-6	4.22E-8	2.16E-7	4.77E-10	-2.75E-7	1.16E-6
WDP	m3 depriv.	5.71E-2	1.38E-4	3.52E-3	6.08E-2	7.69E-5	3.22E-3	1.03E-5	-2.56E-2	3.85E-2
PM	disease inc.	2.90E-9	2.29E-10	1.49E-10	3.28E-9	1.47E-10	9.03E-10	9.74E-12	-1.21E-9	3.14E-9
IR	kBq U-235 eq	1.86E-3	2.94E-4	5.09E-5	2.21E-3	1.09E-4	5.18E-4	6.51E-6	-7.82E-4	2.06E-3
ETP-fw	CTUe	1.02E+0	4.88E-2	9.18E-2	1.16E+0	2.03E-2	1.98E-1	1.18E-3	-3.94E-1	9.83E-1
HTP-c	CTUh	3.52E-11	2.78E-12	5.59E-12	4.35E-11	7.24E-13	2.67E-11	3.70E-14	-8.57E-12	6.25E-11
HTP-nc	CTUh	6.86E-10	4.38E-11	9.85E-11	8.28E-10	2.43E-11	3.02E-10	7.77E-13	-2.47E-10	9.08E-10
SQP	Pt	3.07E-1	2.21E-2	2.26E-2	3.52E-1	2.14E-2	1.33E-1	3.62E-3	-5.99E-1	-8.89E-2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	8.02E-2	5.52E-4	3.08E-1	3.89E-1	3.59E-4	8.15E-3	5.30E-5	-1.18E-1	2.80E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	8.02E-2	5.52E-4	3.08E-1	3.89E-1	3.59E-4	8.15E-3	5.30E-5	-1.18E-1	2.80E-1
PENRE	MJ	2.72E+0	7.33E-2	1.80E-2	2.81E+0	2.66E-2	1.79E-1	1.50E-3	-1.43E+0	1.59E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.72E+0	7.33E-2	1.80E-2	2.81E+0	2.66E-2	1.79E-1	1.50E-3	-1.43E+0	1.59E+0
PET	MJ	2.80E+0	7.38E-2	3.26E-1	3.20E+0	2.70E-2	1.88E-1	1.56E-3	-1.55E+0	1.87E+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	1.01E-3	4.79E-6	8.45E-5	1.10E-3	2.83E-6	9.81E-5	1.73E-6	-4.36E-4	7.70E-4

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.26E-6	9.31E-8	1.09E-7	1.47E-6	6.41E-8	2.86E-7	1.73E-9	-4.29E-7	1.39E-6
NHWD	kg	7.87E-3	1.23E-3	2.02E-3	1.11E-2	1.55E-3	9.03E-3	6.21E-3	-1.21E-3	2.67E-2
RWD	kg	1.75E-6	4.73E-7	6.23E-8	2.29E-6	1.70E-7	6.62E-7	9.20E-9	-7.26E-7	2.40E-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	7.38E-2	7.38E-2	0	0	0	0	7.38E-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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