

Environmental Profile

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

Ecochain v4.3.1



Product: 3051002 - PPr Tee WT 75
 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	1.08E+0	7.78E-2	2.99E-2	1.18E+0	2.51E-2	8.68E-1	1.18E-2	-5.86E-1	1.50E+0
GWP-f	kg CO2 eq	1.07E+0	7.78E-2	2.88E-2	1.18E+0	2.51E-2	8.23E-1	1.18E-2	-6.36E-1	1.40E+0
GWP-b	kg CO2 eq	3.76E-3	-1.35E-5	1.01E-3	4.75E-3	1.52E-5	4.52E-2	1.03E-5	5.09E-2	1.01E-1
GWP-luluc	kg CO2 eq	7.38E-4	4.94E-5	1.76E-5	8.05E-4	8.87E-6	1.44E-4	2.02E-7	-4.82E-4	4.76E-4
ODP	kg CFC11 eq	2.72E-8	1.59E-8	2.31E-9	4.54E-8	5.77E-9	2.00E-8	2.96E-10	-2.80E-8	4.34E-8
AP	mol H+ eq	4.45E-3	2.17E-3	1.84E-4	6.81E-3	1.43E-4	8.33E-4	7.07E-6	-1.90E-3	5.89E-3
EP-fw	kg P eq	2.01E-5	3.92E-7	2.30E-6	2.28E-5	2.06E-7	4.19E-6	9.25E-9	-1.10E-5	1.62E-5
EP-m	kg N eq	7.22E-4	5.41E-4	6.40E-5	1.33E-3	5.11E-5	2.48E-4	4.59E-6	-3.52E-4	1.28E-3
EP-T	mol N eq	7.89E-3	6.02E-3	4.33E-4	1.43E-2	5.63E-4	2.73E-3	2.87E-5	-3.93E-3	1.37E-2
POCP	kg NMVOC eq	3.43E-3	1.57E-3	1.41E-4	5.14E-3	1.61E-4	8.57E-4	1.08E-5	-1.66E-3	4.50E-3
ADP-f	MJ	3.63E+1	1.02E+0	2.86E-1	3.76E+1	3.85E-1	2.55E+0	2.16E-2	-1.93E+1	2.13E+1
ADP-mm	kg Sb eq	1.40E-5	8.17E-7	2.29E-6	1.71E-5	6.48E-7	3.29E-6	7.14E-9	-4.22E-6	1.68E-5
WDP	m3 depriv.	7.56E-1	1.91E-3	5.95E-2	8.17E-1	1.18E-3	4.89E-2	1.12E-4	-3.95E-1	4.73E-1
PM	disease inc.	3.73E-8	3.17E-9	2.52E-9	4.30E-8	2.26E-9	1.36E-8	1.49E-10	-1.87E-8	4.02E-8
IR	kBq U-235 eq	2.21E-2	4.37E-3	8.60E-4	2.74E-2	1.68E-3	7.84E-3	1.00E-4	-1.19E-2	2.51E-2
ETP-fw	CTUe	1.29E+1	7.09E-1	1.55E+0	1.51E+1	3.12E-1	2.97E+0	1.81E-2	-6.30E+0	1.21E+1
HTP-c	CTUh	3.52E-10	4.23E-11	9.44E-11	4.89E-10	1.11E-11	3.60E-10	5.31E-13	-1.29E-10	7.31E-10
HTP-nc	CTUh	8.03E-9	6.20E-10	1.66E-9	1.03E-8	3.72E-10	4.37E-9	1.17E-11	-3.82E-9	1.13E-8
SQP	Pt	3.75E+0	2.81E-1	3.83E-1	4.41E+0	3.29E-1	2.02E+0	5.55E-2	-9.99E+0	-3.18E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.02E+0	7.87E-3	5.21E+0	6.24E+0	5.52E-3	1.24E-1	8.36E-4	-1.95E+0	4.42E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.02E+0	7.87E-3	5.21E+0	6.24E+0	5.52E-3	1.24E-1	8.36E-4	-1.95E+0	4.42E+0
PENRE	MJ	3.90E+1	1.09E+0	3.05E-1	4.04E+1	4.08E-1	2.72E+0	2.30E-2	-2.08E+1	2.27E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.90E+1	1.09E+0	3.05E-1	4.04E+1	4.08E-1	2.72E+0	2.30E-2	-2.08E+1	2.27E+1
PET	MJ	4.00E+1	1.10E+0	5.51E+0	4.66E+1	4.14E-1	2.84E+0	2.38E-2	-2.27E+1	2.72E+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	1.23E-2	6.66E-5	1.43E-3	1.38E-2	4.35E-5	1.47E-3	2.67E-5	-6.77E-3	8.61E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	6.38E-6	1.27E-6	1.84E-6	9.50E-6	9.84E-7	4.28E-6	2.61E-8	-5.41E-6	9.38E-6
NHWD	kg	7.37E-2	1.42E-2	3.42E-2	1.22E-1	2.38E-2	1.28E-1	9.53E-2	-1.85E-2	3.51E-1
RWD	kg	1.98E-5	7.05E-6	1.05E-6	2.79E-5	2.62E-6	1.00E-5	1.41E-7	-1.09E-5	2.97E-5
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	1.25E+0	1.25E+0	0	0	0	0	1.25E+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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