

Environmental Profile

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

Ecochain v3.5.64



Product: 3080386 - ED Tech PP Pipe HTEM 50 L=0,25 S/PL
 Unit: 1 piece
 Manufacturer: Wavin - IT - SM Maddalena

LCA standard: EN15804+A2 (2019)
 Standard database: Worldwide - Ecoinvent v 3.6 Cut-Off
 Externally verified: Yes
 Issue date: 24-11-2022
 End of validity: 24-11-2027
 Verifier: Martijn van Hövell - SGS Search



PP SWR (ED Tech) products made of PP for waste water discharge are the ideal solution for anyone who wants a quick and easy connection system. A push-fit system, made watertight using elastomeric seals. Triple-layer pipes, with a white inner layer for easier inspection. Low linear expansion.

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 - IT - SM Maddalena (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 Climate Change [kg CO2 eq]; **GWP-f** = EF Climate change - Fossil [kg CO2 eq]; **GWP-b** = EF Climate Change - Biogenic [kg CO2 eq]; **GWP-luluc** = EF 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-mm** = EF Resource use, minerals and metals [kg Sb eq]; **ADP-f** = EF Resource use, fossils [MJ]; **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]

Statement of Confidentiality

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Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	1.54E-1	1.23E-2	9.14E-3	1.75E-1	2.28E-3	1.14E-1	9.41E-4	-8.75E-2	2.05E-1
GWP-f	kg CO2 eq	1.82E-1	1.23E-2	8.16E-3	2.03E-1	2.28E-3	7.68E-2	9.41E-4	-1.05E-1	1.78E-1
GWP-b	kg CO2 eq	-2.89E-2	7.47E-6	5.16E-4	-2.83E-2	1.38E-6	3.71E-2	8.41E-7	1.75E-2	2.63E-2
GWP-luluc	kg CO2 eq	1.71E-4	4.36E-6	4.64E-4	6.40E-4	8.07E-7	1.30E-5	1.79E-8	-1.55E-4	4.99E-4
ODP	kg CFC11 eq	1.06E-8	2.84E-9	8.88E-10	1.43E-8	5.25E-10	1.93E-9	2.66E-11	-5.71E-9	1.11E-8
AP	mol H+ eq	8.39E-4	7.01E-5	2.75E-5	9.36E-4	1.30E-5	7.92E-5	6.28E-7	-3.55E-4	6.74E-4
EP-fw	kg P eq	4.32E-6	1.01E-7	1.09E-7	4.53E-6	1.88E-8	3.81E-7	8.04E-10	-2.69E-6	2.23E-6
EP-m	kg N eq	1.44E-4	2.51E-5	5.26E-6	1.74E-4	4.65E-6	2.39E-5	4.54E-7	-7.04E-5	1.33E-4
EP-T	mol N eq	1.57E-3	2.76E-4	5.80E-5	1.91E-3	5.12E-5	2.63E-4	2.55E-6	-7.94E-4	1.43E-3
POCP	kg NMVOC eq	6.32E-4	7.90E-5	1.84E-5	7.29E-4	1.46E-5	8.18E-5	9.30E-7	-3.07E-4	5.19E-4
ADP-mm	kg Sb eq	1.02E-5	3.18E-7	1.49E-7	1.07E-5	5.90E-8	3.11E-7	6.31E-10	-9.91E-7	1.00E-5
ADP-f	MJ	5.74E+0	1.89E-1	1.13E-1	6.04E+0	3.50E-2	2.36E-1	1.93E-3	-3.02E+0	3.29E+0
WDP	m3 depriv.	1.23E-1	5.80E-4	2.58E-2	1.49E-1	1.07E-4	4.53E-3	1.14E-5	-7.35E-2	8.05E-2
PM	disease inc.	8.09E-9	1.11E-9	3.34E-10	9.54E-9	2.06E-10	1.27E-9	1.32E-11	-4.24E-9	6.78E-9
IR	kBq U-235 eq	5.48E-3	8.26E-4	1.10E-4	6.41E-3	1.53E-4	7.37E-4	8.87E-6	-2.63E-3	4.68E-3
ETP-fw	CTUe	3.72E+0	1.53E-1	1.35E-1	4.01E+0	2.84E-2	3.05E-1	1.76E-3	-1.82E+0	2.52E+0
HTP-c	CTUh	8.24E-11	5.46E-12	8.21E-12	9.61E-11	1.01E-12	3.24E-11	4.65E-14	-3.57E-11	9.38E-11
HTP-nc	CTUh	1.69E-9	1.83E-10	1.49E-10	2.02E-9	3.39E-11	4.01E-10	1.05E-12	-8.53E-10	1.60E-9
SQP	Pt	3.51E+0	1.62E-1	2.33E-2	3.70E+0	2.99E-2	1.84E-1	4.86E-3	-5.33E+0	-1.42E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	6.05E-1	2.71E-3	2.50E-1	8.59E-1	5.02E-4	1.12E-2	7.01E-5	-9.22E-1	-5.20E-2
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	6.05E-1	2.71E-3	2.50E-1	8.59E-1	5.02E-4	1.12E-2	7.01E-5	-9.22E-1	-5.20E-2
PENRE	MJ	6.15E+0	2.01E-1	1.23E-1	6.47E+0	3.71E-2	2.51E-1	2.04E-3	-3.25E+0	3.52E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	6.15E+0	2.01E-1	1.23E-1	6.47E+0	3.71E-2	2.51E-1	2.04E-3	-3.25E+0	3.52E+0
PET	MJ	6.76E+0	2.03E-1	3.73E-1	7.33E+0	3.76E-2	2.62E-1	2.11E-3	-4.17E+0	3.46E+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	2.23E-3	2.14E-5	6.13E-4	2.86E-3	3.96E-6	1.53E-4	2.36E-6	-1.41E-3	1.61E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.58E-6	4.83E-7	1.25E-7	2.19E-6	8.95E-8	4.13E-7	2.32E-9	-1.14E-6	1.56E-6
NHWD	kg	1.64E-2	1.17E-2	1.21E-3	2.93E-2	2.17E-3	1.18E-2	9.01E-3	-4.68E-3	4.76E-2
RWD	kg	5.81E-6	1.28E-6	1.33E-7	7.23E-6	2.38E-7	9.49E-7	1.26E-8	-2.51E-6	5.91E-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	0	0	0	0	0	0	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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