

Environmental Profile

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

Ecochain v3.5.64



Product: 3080377 - ED Tech PP Pipe HTDM 40 L=3 S/S
 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	☑	☑	☑	☑									

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	1.07E+0	8.27E-2	7.42E-2	1.23E+0	1.70E-2	5.46E-1	6.88E-3	-6.80E-1	1.12E+0
GWP-f	kg CO2 eq	1.14E+0	8.26E-2	6.63E-2	1.29E+0	1.70E-2	4.72E-1	6.88E-3	-6.78E-1	1.11E+0
GWP-b	kg CO2 eq	-7.07E-2	5.02E-5	4.19E-3	-6.65E-2	1.03E-5	7.45E-2	6.10E-6	-2.31E-3	5.79E-3
GWP-luluc	kg CO2 eq	3.22E-3	2.92E-5	3.77E-3	7.02E-3	6.02E-6	9.51E-5	1.27E-7	-1.57E-4	6.96E-3
ODP	kg CFC11 eq	3.09E-8	1.90E-8	7.22E-9	5.72E-8	3.92E-9	1.25E-8	1.93E-10	-2.66E-8	4.71E-8
AP	mol H+ eq	4.48E-3	4.71E-4	2.24E-4	5.17E-3	9.69E-5	5.22E-4	4.53E-6	-1.93E-3	3.87E-3
EP-fw	kg P eq	1.86E-5	6.80E-7	8.85E-7	2.02E-5	1.40E-7	2.74E-6	5.72E-9	-7.73E-6	1.54E-5
EP-m	kg N eq	7.34E-4	1.68E-4	4.27E-5	9.45E-4	3.47E-5	1.51E-4	2.93E-6	-3.47E-4	7.88E-4
EP-T	mol N eq	8.12E-3	1.86E-3	4.72E-4	1.04E-2	3.82E-4	1.67E-3	1.84E-5	-3.86E-3	8.65E-3
POCP	kg NMVOC eq	3.64E-3	5.31E-4	1.50E-4	4.32E-3	1.09E-4	5.27E-4	6.74E-6	-1.75E-3	3.21E-3
ADP-mm	kg Sb eq	3.00E-5	2.14E-6	1.21E-6	3.34E-5	4.40E-7	2.07E-6	4.53E-9	-4.92E-6	3.10E-5
ADP-f	MJ	3.96E+1	1.27E+0	9.14E-1	4.18E+1	2.61E-1	1.66E+0	1.39E-2	-2.11E+1	2.26E+1
WDP	m3 depriv.	8.09E-1	3.89E-3	2.10E-1	1.02E+0	8.01E-4	3.24E-2	7.32E-5	-3.65E-1	6.91E-1
PM	disease inc.	3.98E-8	7.46E-9	2.71E-9	5.00E-8	1.54E-9	8.61E-9	9.52E-11	-1.67E-8	4.35E-8
IR	kBq U-235 eq	2.40E-2	5.54E-3	8.91E-4	3.05E-2	1.14E-3	5.01E-3	6.42E-5	-1.03E-2	2.64E-2
ETP-fw	CTUe	7.71E+0	1.03E+0	1.10E+0	9.84E+0	2.12E-1	1.91E+0	1.16E-2	-3.00E+0	8.97E+0
HTP-c	CTUh	3.59E-10	3.67E-11	6.67E-11	4.62E-10	7.54E-12	2.22E-10	3.28E-13	-1.31E-10	5.62E-10
HTP-nc	CTUh	8.35E-9	1.23E-9	1.21E-9	1.08E-8	2.53E-10	2.76E-9	7.29E-12	-3.33E-9	1.05E-8
SQP	Pt	8.00E+0	1.09E+0	1.89E-1	9.28E+0	2.23E-1	1.33E+0	3.52E-2	-4.45E+0	6.41E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.54E+0	1.82E-2	2.04E+0	3.60E+0	3.75E-3	8.14E-2	5.06E-4	-8.65E-1	2.82E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.54E+0	1.82E-2	2.04E+0	3.60E+0	3.75E-3	8.14E-2	5.06E-4	-8.65E-1	2.82E+0
PENRE	MJ	4.25E+1	1.35E+0	9.99E-1	4.48E+1	2.77E-1	1.77E+0	1.48E-2	-2.28E+1	2.41E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	4.25E+1	1.35E+0	9.99E-1	4.48E+1	2.77E-1	1.77E+0	1.48E-2	-2.28E+1	2.41E+1
PET	MJ	4.40E+1	1.36E+0	3.03E+0	4.84E+1	2.81E-1	1.85E+0	1.53E-2	-2.36E+1	2.69E+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	1.29E-2	1.44E-4	4.98E-3	1.80E-2	2.95E-5	9.80E-4	1.71E-5	-5.53E-3	1.35E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	6.17E-6	3.24E-6	1.02E-6	1.04E-5	6.68E-7	2.71E-6	1.67E-8	-5.31E-6	8.52E-6
NHWD	kg	6.36E-2	7.86E-2	9.85E-3	1.52E-1	1.62E-2	8.20E-2	6.53E-2	-1.83E-2	2.97E-1
RWD	kg	2.25E-5	8.63E-6	1.08E-6	3.22E-5	1.78E-6	6.35E-6	9.13E-8	-9.40E-6	3.11E-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	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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