

Environmental Profile

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

Ecochain v3.5.64



Product: 3010726 - ED Tech PP Pipe HTEM 110 L=1 S/PL
Unit: 1 piece
Manufacturer: Wavin - IT - SM Maddalena

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.

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



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					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 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	1.28E+0	1.12E-1	9.80E-2	1.49E+0	2.25E-2	9.03E-1	9.13E-3	-9.21E-1	1.50E+0
GWP-f	kg CO2 eq	1.55E+0	1.12E-1	8.75E-2	1.74E+0	2.25E-2	6.33E-1	9.13E-3	-9.18E-1	1.49E+0
GWP-b	kg CO2 eq	-2.65E-1	6.78E-5	5.54E-3	-2.59E-1	1.37E-5	2.70E-1	8.10E-6	-3.06E-3	7.47E-3
GWP-luluc	kg CO2 eq	5.81E-4	3.95E-5	4.98E-3	5.60E-3	7.97E-6	1.26E-4	1.67E-7	-2.75E-4	5.46E-3
ODP	kg CFC11 eq	4.60E-8	2.57E-8	9.53E-9	8.13E-8	5.19E-9	1.68E-8	2.56E-10	-3.79E-8	6.56E-8
AP	mol H+ eq	6.14E-3	6.36E-4	2.95E-4	7.07E-3	1.28E-4	7.01E-4	6.01E-6	-2.69E-3	5.22E-3
EP-fw	kg P eq	2.60E-5	9.19E-7	1.17E-6	2.81E-5	1.85E-7	3.65E-6	7.57E-9	-1.11E-5	2.08E-5
EP-m	kg N eq	9.96E-4	2.28E-4	5.64E-5	1.28E-3	4.59E-5	2.05E-4	3.93E-6	-4.97E-4	1.04E-3
EP-T	mol N eq	1.13E-2	2.51E-3	6.23E-4	1.44E-2	5.06E-4	2.26E-3	2.44E-5	-5.58E-3	1.16E-2
POCP	kg NMVOC eq	5.05E-3	7.17E-4	1.98E-4	5.97E-3	1.45E-4	7.10E-4	8.95E-6	-2.47E-3	4.37E-3
ADP-mm	kg Sb eq	4.33E-5	2.89E-6	1.60E-6	4.78E-5	5.83E-7	2.76E-6	6.01E-9	-6.91E-6	4.42E-5
ADP-f	MJ	5.33E+1	1.71E+0	1.21E+0	5.62E+1	3.46E-1	2.21E+0	1.85E-2	-2.83E+1	3.04E+1
WDP	m3 depriv.	1.08E+0	5.26E-3	2.77E-1	1.36E+0	1.06E-3	4.31E-2	9.43E-5	-4.88E-1	9.20E-1
PM	disease inc.	5.81E-8	1.01E-8	3.58E-9	7.18E-8	2.03E-9	1.15E-8	1.26E-10	-2.48E-8	6.07E-8
IR	kBq U-235 eq	3.41E-2	7.49E-3	1.18E-3	4.28E-2	1.51E-3	6.69E-3	8.52E-5	-1.45E-2	3.66E-2
ETP-fw	CTUe	1.08E+1	1.39E+0	1.45E+0	1.36E+1	2.81E-1	2.55E+0	1.55E-2	-4.67E+0	1.18E+1
HTP-c	CTUh	5.46E-10	4.95E-11	8.81E-11	6.84E-10	9.99E-12	2.98E-10	4.33E-13	-2.21E-10	7.71E-10
HTP-nc	CTUh	1.16E-8	1.66E-9	1.60E-9	1.48E-8	3.35E-10	3.68E-9	9.69E-12	-4.89E-9	1.40E-8
SQP	Pt	2.55E+1	1.47E+0	2.50E-1	2.73E+1	2.96E-1	1.77E+0	4.68E-2	-1.57E+1	1.36E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	4.22E+0	2.46E-2	2.69E+0	6.94E+0	4.96E-3	1.08E-1	6.74E-4	-2.67E+0	4.38E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	4.22E+0	2.46E-2	2.69E+0	6.94E+0	4.96E-3	1.08E-1	6.74E-4	-2.67E+0	4.38E+0
PENRE	MJ	5.71E+1	1.82E+0	1.32E+0	6.03E+1	3.67E-1	2.35E+0	1.96E-2	-3.05E+1	3.25E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	5.71E+1	1.82E+0	1.32E+0	6.03E+1	3.67E-1	2.35E+0	1.96E-2	-3.05E+1	3.25E+1
PET	MJ	6.14E+1	1.84E+0	4.01E+0	6.72E+1	3.72E-1	2.46E+0	2.03E-2	-3.32E+1	3.69E+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	1.72E-2	1.94E-4	6.58E-3	2.39E-2	3.91E-5	1.32E-3	2.27E-5	-7.47E-3	1.78E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	9.43E-6	4.38E-6	1.34E-6	1.52E-5	8.84E-7	3.63E-6	2.22E-8	-7.82E-6	1.19E-5
NHWD	kg	9.27E-2	1.06E-1	1.30E-2	2.12E-1	2.14E-2	1.10E-1	8.66E-2	-2.96E-2	4.01E-1
RWD	kg	3.26E-5	1.17E-5	1.43E-6	4.57E-5	2.35E-6	8.50E-6	1.21E-7	-1.35E-5	4.31E-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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