

Environmental Profile

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

Ecochain v3.5.64



Product: 3018474 - ED Tech PP Pipe HTEM 110 L=1,5 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	2.02E+0	1.58E-1	1.43E-1	2.32E+0	3.25E-2	1.05E+0	1.31E-2	-1.30E+0	2.11E+0
GWP-f	kg CO2 eq	2.17E+0	1.58E-1	1.28E-1	2.45E+0	3.24E-2	8.90E-1	1.31E-2	-1.30E+0	2.09E+0
GWP-b	kg CO2 eq	-1.51E-1	9.61E-5	8.10E-3	-1.43E-1	1.97E-5	1.59E-1	1.16E-5	-4.42E-3	1.14E-2
GWP-luluc	kg CO2 eq	6.86E-4	5.60E-5	7.29E-3	8.03E-3	1.15E-5	1.81E-4	2.40E-7	-3.24E-4	7.90E-3
ODP	kg CFC11 eq	5.57E-8	3.65E-8	1.39E-8	1.06E-7	7.47E-9	2.39E-8	3.67E-10	-5.13E-8	8.65E-8
AP	mol H+ eq	8.39E-3	9.02E-4	4.32E-4	9.72E-3	1.85E-4	9.93E-4	8.60E-6	-3.71E-3	7.20E-3
EP-fw	kg P eq	3.47E-5	1.30E-6	1.71E-6	3.78E-5	2.67E-7	5.24E-6	1.08E-8	-1.51E-5	2.82E-5
EP-m	kg N eq	1.34E-3	3.23E-4	8.26E-5	1.75E-3	6.61E-5	2.88E-4	5.54E-6	-6.71E-4	1.44E-3
EP-T	mol N eq	1.52E-2	3.56E-3	9.11E-4	1.97E-2	7.28E-4	3.17E-3	3.50E-5	-7.46E-3	1.62E-2
POCP	kg NMVOC eq	6.91E-3	1.02E-3	2.89E-4	8.21E-3	2.08E-4	1.00E-3	1.28E-5	-3.38E-3	6.05E-3
ADP-mm	kg Sb eq	5.30E-5	4.10E-6	2.34E-6	5.94E-5	8.39E-7	3.95E-6	8.60E-9	-9.38E-6	5.48E-5
ADP-f	MJ	7.56E+1	2.43E+0	1.77E+0	7.98E+1	4.98E-1	3.16E+0	2.65E-2	-4.04E+1	4.31E+1
WDP	m3 depriv.	1.53E+0	7.46E-3	4.05E-1	1.94E+0	1.53E-3	6.18E-2	1.34E-4	-6.98E-1	1.31E+0
PM	disease inc.	7.36E-8	1.43E-8	5.24E-9	9.31E-8	2.93E-9	1.64E-8	1.81E-10	-3.27E-8	7.99E-8
IR	kBq U-235 eq	4.48E-2	1.06E-2	1.72E-3	5.72E-2	2.18E-3	9.56E-3	1.22E-4	-1.99E-2	4.91E-2
ETP-fw	CTUe	1.39E+1	1.97E+0	2.12E+0	1.80E+1	4.04E-1	3.62E+0	2.20E-2	-5.80E+0	1.63E+1
HTP-c	CTUh	6.68E-10	7.02E-11	1.29E-10	8.67E-10	1.44E-11	4.20E-10	6.19E-13	-2.70E-10	1.03E-9
HTP-nc	CTUh	1.54E-8	2.35E-9	2.34E-9	2.01E-8	4.82E-10	5.25E-9	1.38E-11	-6.48E-9	1.94E-8
SQP	Pt	1.66E+1	2.08E+0	3.65E-1	1.90E+1	4.26E-1	2.54E+0	6.70E-2	-1.23E+1	9.75E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	3.09E+0	3.49E-2	3.93E+0	7.06E+0	7.14E-3	1.55E-1	9.64E-4	-2.18E+0	5.04E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	3.09E+0	3.49E-2	3.93E+0	7.06E+0	7.14E-3	1.55E-1	9.64E-4	-2.18E+0	5.04E+0
PENRE	MJ	8.11E+1	2.58E+0	1.93E+0	8.56E+1	5.28E-1	3.37E+0	2.81E-2	-4.35E+1	4.60E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	8.11E+1	2.58E+0	1.93E+0	8.56E+1	5.28E-1	3.37E+0	2.81E-2	-4.35E+1	4.60E+1
PET	MJ	8.42E+1	2.61E+0	5.86E+0	9.27E+1	5.36E-1	3.53E+0	2.91E-2	-4.57E+1	5.10E+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	2.38E-2	2.75E-4	9.63E-3	3.37E-2	5.63E-5	1.86E-3	3.25E-5	-1.06E-2	2.51E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.16E-5	6.22E-6	1.96E-6	1.98E-5	1.27E-6	5.17E-6	3.17E-8	-1.04E-5	1.59E-5
NHWD	kg	1.18E-1	1.51E-1	1.90E-2	2.87E-1	3.08E-2	1.56E-1	1.24E-1	-3.71E-2	5.61E-1
RWD	kg	4.16E-5	1.65E-5	2.09E-6	6.02E-5	3.38E-6	1.21E-5	1.74E-7	-1.83E-5	5.76E-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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