

Environmental Profile

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

Ecochain v3.5.64



Product: 3010732 - ED Tech PP Pipe HTEM 125 L=3 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	4.15E+0	3.38E-1	3.11E-1	4.79E+0	6.99E-2	2.43E+0	2.81E-2	-2.80E+0	4.52E+0
GWP-f	kg CO2 eq	4.67E+0	3.37E-1	2.77E-1	5.28E+0	6.98E-2	1.89E+0	2.81E-2	-2.79E+0	4.47E+0
GWP-b	kg CO2 eq	-5.23E-1	2.05E-4	1.75E-2	-5.06E-1	4.24E-5	5.40E-1	2.49E-5	-9.55E-3	2.51E-2
GWP-luluc	kg CO2 eq	1.57E-3	1.19E-4	1.58E-2	1.75E-2	2.47E-5	3.92E-4	5.14E-7	-7.42E-4	1.71E-2
ODP	kg CFC11 eq	1.16E-7	7.77E-8	3.02E-8	2.24E-7	1.61E-8	5.17E-8	7.87E-10	-1.10E-7	1.82E-7
AP	mol H+ eq	1.81E-2	1.92E-3	9.36E-4	2.10E-2	3.98E-4	2.15E-3	1.85E-5	-8.10E-3	1.55E-2
EP-fw	kg P eq	7.54E-5	2.78E-6	3.70E-6	8.18E-5	5.75E-7	1.13E-5	2.32E-8	-3.30E-5	6.07E-5
EP-m	kg N eq	2.93E-3	6.87E-4	1.79E-4	3.79E-3	1.42E-4	6.26E-4	1.18E-5	-1.47E-3	3.10E-3
EP-T	mol N eq	3.32E-2	7.58E-3	1.97E-3	4.28E-2	1.57E-3	6.89E-3	7.51E-5	-1.65E-2	3.48E-2
POCP	kg NMVOC eq	1.50E-2	2.17E-3	6.26E-4	1.78E-2	4.48E-4	2.18E-3	2.75E-5	-7.39E-3	1.30E-2
ADP-mm	kg Sb eq	1.01E-4	8.73E-6	5.08E-6	1.15E-4	1.81E-6	8.54E-6	1.85E-8	-1.99E-5	1.05E-4
ADP-f	MJ	1.63E+2	5.18E+0	3.83E+0	1.72E+2	1.07E+0	6.84E+0	5.69E-2	-8.70E+1	9.25E+1
WDP	m3 depriv.	3.29E+0	1.59E-2	8.77E-1	4.18E+0	3.29E-3	1.33E-1	2.88E-4	-1.51E+0	2.81E+0
PM	disease inc.	1.65E-7	3.04E-8	1.14E-8	2.07E-7	6.30E-9	3.56E-8	3.89E-10	-7.25E-8	1.77E-7
IR	kBq U-235 eq	9.56E-2	2.26E-2	3.73E-3	1.22E-1	4.68E-3	2.07E-2	2.62E-4	-4.33E-2	1.04E-1
ETP-fw	CTUe	3.02E+1	4.20E+0	4.60E+0	3.90E+1	8.70E-1	7.78E+0	4.68E-2	-1.33E+1	3.45E+1
HTP-c	CTUh	1.50E-9	1.50E-10	2.79E-10	1.93E-9	3.10E-11	9.16E-10	1.33E-12	-6.07E-10	2.27E-9
HTP-nc	CTUh	3.36E-8	5.01E-9	5.06E-9	4.37E-8	1.04E-9	1.14E-8	2.95E-11	-1.44E-8	4.18E-8
SQP	Pt	5.32E+1	4.43E+0	7.91E-1	5.84E+1	9.17E-1	5.48E+0	1.44E-1	-3.29E+1	3.21E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	9.26E+0	7.43E-2	8.52E+0	1.79E+1	1.54E-2	3.36E-1	2.07E-3	-5.80E+0	1.24E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	9.26E+0	7.43E-2	8.52E+0	1.79E+1	1.54E-2	3.36E-1	2.07E-3	-5.80E+0	1.24E+1
PENRE	MJ	1.74E+2	5.50E+0	4.18E+0	1.84E+2	1.14E+0	7.29E+0	6.04E-2	-9.38E+1	9.88E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.74E+2	5.50E+0	4.18E+0	1.84E+2	1.14E+0	7.29E+0	6.04E-2	-9.38E+1	9.88E+1
PET	MJ	1.84E+2	5.57E+0	1.27E+1	2.02E+2	1.15E+0	7.63E+0	6.24E-2	-9.96E+1	1.11E+2
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	5.12E-2	5.86E-4	2.09E-2	7.27E-2	1.21E-4	3.98E-3	6.99E-5	-2.29E-2	5.39E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.58E-5	1.32E-5	4.25E-6	4.33E-5	2.74E-6	1.12E-5	6.82E-8	-2.25E-5	3.48E-5
NHWD	kg	2.60E-1	3.21E-1	4.12E-2	6.22E-1	6.64E-2	3.38E-1	2.67E-1	-8.30E-2	1.21E+0
RWD	kg	8.78E-5	3.52E-5	4.54E-6	1.28E-4	7.29E-6	2.63E-5	3.73E-7	-3.99E-5	1.22E-4
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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