

Environmental Profile

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

Ecochain v3.5.64



Product: 3010729 - ED Tech PP Pipe HTEM 125 L=0,5 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					D Reuse- Recovery- Recycling- potential											
A5 Assembly / Construction installation process																

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	7.87E-1	6.57E-2	5.85E-2	9.11E-1	1.41E-2	6.57E-1	5.83E-3	-5.88E-1	1.00E+0
GWP-f	kg CO2 eq	1.01E+0	6.56E-2	5.22E-2	1.12E+0	1.41E-2	4.35E-1	5.83E-3	-5.87E-1	9.93E-1
GWP-b	kg CO2 eq	-2.20E-1	3.99E-5	3.30E-3	-2.17E-1	8.56E-6	2.22E-1	5.19E-6	-1.87E-3	3.65E-3
GWP-luluc	kg CO2 eq	4.26E-4	2.32E-5	2.97E-3	3.42E-3	4.99E-6	7.82E-5	1.07E-7	-1.81E-4	3.32E-3
ODP	kg CFC11 eq	4.00E-8	1.51E-8	5.69E-9	6.08E-8	3.25E-9	1.05E-8	1.63E-10	-2.58E-8	4.89E-8
AP	mol H+ eq	4.06E-3	3.74E-4	1.76E-4	4.61E-3	8.03E-5	4.44E-4	3.83E-6	-1.71E-3	3.43E-3
EP-fw	kg P eq	1.79E-5	5.40E-7	6.97E-7	1.92E-5	1.16E-7	2.27E-6	4.83E-9	-7.04E-6	1.45E-5
EP-m	kg N eq	6.71E-4	1.34E-4	3.37E-5	8.38E-4	2.87E-5	1.31E-4	2.66E-6	-3.20E-4	6.81E-4
EP-T	mol N eq	7.64E-3	1.47E-3	3.72E-4	9.49E-3	3.17E-4	1.44E-3	1.55E-5	-3.63E-3	7.64E-3
POCP	kg NMVOC eq	3.38E-3	4.22E-4	1.18E-4	3.92E-3	9.05E-5	4.52E-4	5.70E-6	-1.57E-3	2.90E-3
ADP-mm	kg Sb eq	4.39E-5	1.70E-6	9.56E-7	4.65E-5	3.65E-7	1.71E-6	3.82E-9	-4.87E-6	4.37E-5
ADP-f	MJ	3.43E+1	1.01E+0	7.21E-1	3.61E+1	2.16E-1	1.37E+0	1.18E-2	-1.78E+1	1.98E+1
WDP	m3 depriv.	6.98E-1	3.09E-3	1.65E-1	8.66E-1	6.64E-4	2.72E-2	5.89E-5	-3.03E-1	5.91E-1
PM	disease inc.	4.16E-8	5.93E-9	2.14E-9	4.96E-8	1.27E-9	7.18E-9	8.04E-11	-1.59E-8	4.22E-8
IR	kBq U-235 eq	2.55E-2	4.40E-3	7.02E-4	3.06E-2	9.45E-4	4.17E-3	5.43E-5	-9.26E-3	2.65E-2
ETP-fw	CTUe	7.82E+0	8.18E-1	8.65E-1	9.50E+0	1.76E-1	1.65E+0	1.04E-2	-3.16E+0	8.18E+0
HTP-c	CTUh	3.74E-10	2.91E-11	5.26E-11	4.55E-10	6.25E-12	1.87E-10	2.76E-13	-1.44E-10	5.06E-10
HTP-nc	CTUh	7.86E-9	9.75E-10	9.54E-10	9.79E-9	2.09E-10	2.31E-9	6.29E-12	-3.16E-9	9.16E-9
SQP	Pt	2.10E+1	8.62E-1	1.49E-1	2.21E+1	1.85E-1	1.10E+0	2.98E-2	-1.11E+1	1.23E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	3.41E+0	1.45E-2	1.60E+0	5.03E+0	3.10E-3	6.72E-2	4.34E-4	-1.90E+0	3.19E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	3.41E+0	1.45E-2	1.60E+0	5.03E+0	3.10E-3	6.72E-2	4.34E-4	-1.90E+0	3.19E+0
PENRE	MJ	3.68E+1	1.07E+0	7.87E-1	3.87E+1	2.30E-1	1.46E+0	1.25E-2	-1.92E+1	2.12E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.68E+1	1.07E+0	7.87E-1	3.87E+1	2.30E-1	1.46E+0	1.25E-2	-1.92E+1	2.12E+1
PET	MJ	4.02E+1	1.08E+0	2.39E+0	4.37E+1	2.33E-1	1.53E+0	1.29E-2	-2.11E+1	2.43E+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	1.14E-2	1.14E-4	3.93E-3	1.54E-2	2.45E-5	8.77E-4	1.45E-5	-4.67E-3	1.17E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	6.89E-6	2.58E-6	8.00E-7	1.03E-5	5.53E-7	2.29E-6	1.41E-8	-5.26E-6	7.87E-6
NHWD	kg	6.18E-2	6.25E-2	7.76E-3	1.32E-1	1.34E-2	7.00E-2	5.49E-2	-1.91E-2	2.51E-1
RWD	kg	2.59E-5	6.85E-6	8.54E-7	3.36E-5	1.47E-6	5.30E-6	7.72E-8	-8.76E-6	3.17E-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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