

Environmental Profile

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

Ecochain v3.5.64



Product: 3010764 - ED Tech PP Pipe HTDM 125 L=3 S/S
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	4.14E+0	3.52E-1	3.19E-1	4.81E+0	7.20E-2	2.79E+0	2.91E-2	-2.93E+0	4.76E+0
GWP-f	kg CO2 eq	4.90E+0	3.51E-1	2.85E-1	5.54E+0	7.20E-2	2.01E+0	2.91E-2	-2.92E+0	4.72E+0
GWP-b	kg CO2 eq	-7.60E-1	2.13E-4	1.80E-2	-7.41E-1	4.37E-5	7.76E-1	2.58E-5	-9.76E-3	2.45E-2
GWP-luluc	kg CO2 eq	1.78E-3	1.24E-4	1.62E-2	1.81E-2	2.55E-5	4.03E-4	5.33E-7	-8.70E-4	1.77E-2
ODP	kg CFC11 eq	1.41E-7	8.10E-8	3.10E-8	2.53E-7	1.66E-8	5.34E-8	8.16E-10	-1.20E-7	2.03E-7
AP	mol H+ eq	1.92E-2	2.00E-3	9.60E-4	2.22E-2	4.10E-4	2.23E-3	1.91E-5	-8.54E-3	1.63E-2
EP-fw	kg P eq	8.14E-5	2.89E-6	3.80E-6	8.81E-5	5.92E-7	1.16E-5	2.41E-8	-3.54E-5	6.50E-5
EP-m	kg N eq	3.13E-3	7.16E-4	1.83E-4	4.03E-3	1.47E-4	6.50E-4	1.25E-5	-1.57E-3	3.26E-3
EP-T	mol N eq	3.55E-2	7.89E-3	2.03E-3	4.55E-2	1.62E-3	7.16E-3	7.78E-5	-1.76E-2	3.67E-2
POCP	kg NMVOC eq	1.60E-2	2.26E-3	6.43E-4	1.88E-2	4.62E-4	2.26E-3	2.85E-5	-7.84E-3	1.38E-2
ADP-mm	kg Sb eq	1.33E-4	9.09E-6	5.21E-6	1.47E-4	1.86E-6	8.80E-6	1.91E-8	-2.19E-5	1.36E-4
ADP-f	MJ	1.69E+2	5.39E+0	3.93E+0	1.79E+2	1.10E+0	7.05E+0	5.90E-2	-9.03E+1	9.67E+1
WDP	m3 depriv.	3.43E+0	1.65E-2	9.00E-1	4.34E+0	3.39E-3	1.37E-1	2.98E-4	-1.56E+0	2.93E+0
PM	disease inc.	1.79E-7	3.17E-8	1.16E-8	2.22E-7	6.50E-9	3.67E-8	4.03E-10	-7.85E-8	1.87E-7
IR	kBq U-235 eq	1.06E-1	2.36E-2	3.83E-3	1.34E-1	4.83E-3	2.13E-2	2.72E-4	-4.62E-2	1.14E-1
ETP-fw	CTUe	3.35E+1	4.38E+0	4.72E+0	4.26E+1	8.97E-1	8.12E+0	4.93E-2	-1.46E+1	3.71E+1
HTP-c	CTUh	1.68E-9	1.56E-10	2.86E-10	2.12E-9	3.19E-11	9.44E-10	1.38E-12	-7.06E-10	2.39E-9
HTP-nc	CTUh	3.62E-8	5.22E-9	5.20E-9	4.66E-8	1.07E-9	1.17E-8	3.08E-11	-1.55E-8	4.39E-8
SQP	Pt	7.35E+1	4.61E+0	8.12E-1	7.89E+1	9.45E-1	5.65E+0	1.49E-1	-4.95E+1	3.62E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.23E+1	7.74E-2	8.74E+0	2.11E+1	1.58E-2	3.45E-1	2.15E-3	-8.30E+0	1.31E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.23E+1	7.74E-2	8.74E+0	2.11E+1	1.58E-2	3.45E-1	2.15E-3	-8.30E+0	1.31E+1
PENRE	MJ	1.82E+2	5.72E+0	4.29E+0	1.92E+2	1.17E+0	7.51E+0	6.26E-2	-9.73E+1	1.03E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.82E+2	5.72E+0	4.29E+0	1.92E+2	1.17E+0	7.51E+0	6.26E-2	-9.73E+1	1.03E+2
PET	MJ	1.94E+2	5.80E+0	1.30E+1	2.13E+2	1.19E+0	7.86E+0	6.47E-2	-1.06E+2	1.16E+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	5.41E-2	6.10E-4	2.14E-2	7.61E-2	1.25E-4	4.19E-3	7.24E-5	-2.38E-2	5.66E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.92E-5	1.38E-5	4.36E-6	4.73E-5	2.82E-6	1.16E-5	7.06E-8	-2.49E-5	3.69E-5
NHWD	kg	2.84E-1	3.34E-1	4.23E-2	6.60E-1	6.85E-2	3.50E-1	2.76E-1	-9.42E-2	1.26E+0
RWD	kg	1.01E-4	3.67E-5	4.66E-6	1.42E-4	7.51E-6	2.71E-5	3.87E-7	-4.31E-5	1.34E-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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