

Environmental Profile

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

Ecochain v3.5.64



Product: 3010757 - ED Tech PP Pipe HTDM 110 L=0,5 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	8.53E-1	7.27E-2	5.99E-2	9.85E-1	1.43E-2	6.52E-1	5.99E-3	-6.02E-1	1.06E+0
GWP-f	kg CO2 eq	1.04E+0	7.26E-2	5.35E-2	1.16E+0	1.43E-2	4.65E-1	5.99E-3	-6.00E-1	1.05E+0
GWP-b	kg CO2 eq	-1.85E-1	4.41E-5	3.38E-3	-1.82E-1	8.70E-6	1.87E-1	5.35E-6	-1.88E-3	3.29E-3
GWP-luluc	kg CO2 eq	4.30E-4	2.57E-5	3.04E-3	3.50E-3	5.07E-6	7.89E-5	1.10E-7	-1.73E-4	3.41E-3
ODP	kg CFC11 eq	4.61E-8	1.67E-8	5.82E-9	6.86E-8	3.30E-9	1.06E-8	1.67E-10	-2.69E-8	5.58E-8
AP	mol H+ eq	4.21E-3	4.14E-4	1.80E-4	4.81E-3	8.16E-5	4.49E-4	3.93E-6	-1.71E-3	3.63E-3
EP-fw	kg P eq	1.87E-5	5.97E-7	7.14E-7	2.00E-5	1.18E-7	2.29E-6	4.97E-9	-7.02E-6	1.54E-5
EP-m	kg N eq	6.90E-4	1.48E-4	3.45E-5	8.72E-4	2.92E-5	1.33E-4	2.83E-6	-3.19E-4	7.18E-4
EP-T	mol N eq	7.85E-3	1.63E-3	3.81E-4	9.87E-3	3.22E-4	1.46E-3	1.60E-5	-3.60E-3	8.06E-3
POCP	kg NMVOC eq	3.50E-3	4.66E-4	1.21E-4	4.08E-3	9.20E-5	4.56E-4	5.86E-6	-1.57E-3	3.07E-3
ADP-mm	kg Sb eq	5.46E-5	1.88E-6	9.79E-7	5.74E-5	3.71E-7	1.73E-6	3.93E-9	-5.22E-6	5.43E-5
ADP-f	MJ	3.53E+1	1.11E+0	7.38E-1	3.72E+1	2.20E-1	1.39E+0	1.21E-2	-1.81E+1	2.06E+1
WDP	m3 depriv.	7.19E-1	3.42E-3	1.69E-1	8.91E-1	6.75E-4	2.77E-2	6.04E-5	-3.06E-1	6.14E-1
PM	disease inc.	4.24E-8	6.55E-9	2.19E-9	5.11E-8	1.29E-9	7.24E-9	8.26E-11	-1.57E-8	4.41E-8
IR	kBq U-235 eq	2.77E-2	4.87E-3	7.19E-4	3.33E-2	9.62E-4	4.20E-3	5.59E-5	-9.35E-3	2.92E-2
ETP-fw	CTUe	8.30E+0	9.05E-1	8.86E-1	1.01E+1	1.79E-1	1.71E+0	1.09E-2	-3.07E+0	8.92E+0
HTP-c	CTUh	3.76E-10	3.22E-11	5.38E-11	4.62E-10	6.36E-12	1.88E-10	2.85E-13	-1.39E-10	5.17E-10
HTP-nc	CTUh	8.13E-9	1.08E-9	9.77E-10	1.02E-8	2.13E-10	2.35E-9	6.53E-12	-3.12E-9	9.63E-9
SQP	Pt	1.81E+1	9.54E-1	1.53E-1	1.92E+1	1.88E-1	1.11E+0	3.06E-2	-9.62E+0	1.09E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.98E+0	1.60E-2	1.64E+0	4.64E+0	3.16E-3	6.79E-2	4.48E-4	-1.67E+0	3.05E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.98E+0	1.60E-2	1.64E+0	4.64E+0	3.16E-3	6.79E-2	4.48E-4	-1.67E+0	3.05E+0
PENRE	MJ	3.79E+1	1.18E+0	8.06E-1	3.99E+1	2.34E-1	1.48E+0	1.28E-2	-1.96E+1	2.20E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.79E+1	1.18E+0	8.06E-1	3.99E+1	2.34E-1	1.48E+0	1.28E-2	-1.96E+1	2.20E+1
PET	MJ	4.09E+1	1.20E+0	2.45E+0	4.45E+1	2.37E-1	1.55E+0	1.33E-2	-2.12E+1	2.51E+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	1.18E-2	1.26E-4	4.02E-3	1.60E-2	2.49E-5	9.15E-4	1.49E-5	-4.71E-3	1.22E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	7.16E-6	2.85E-6	8.20E-7	1.08E-5	5.63E-7	2.32E-6	1.45E-8	-5.42E-6	8.31E-6
NHWD	kg	6.33E-2	6.91E-2	7.95E-3	1.40E-1	1.36E-2	7.08E-2	5.63E-2	-1.86E-2	2.62E-1
RWD	kg	2.89E-5	7.58E-6	8.75E-7	3.74E-5	1.50E-6	5.34E-6	7.93E-8	-8.86E-6	3.54E-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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