

Environmental Profile

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

Ecochain v3.5.64



Product: 3010717 - ED Tech PP Pipe HTEM 75 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 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	3.85E-1	3.13E-2	2.58E-2	4.42E-1	6.48E-3	2.64E-1	2.67E-3	-2.68E-1	4.47E-1
GWP-f	kg CO2 eq	4.54E-1	3.13E-2	2.30E-2	5.09E-1	6.48E-3	1.94E-1	2.67E-3	-2.67E-1	4.44E-1
GWP-b	kg CO2 eq	-6.92E-2	1.90E-5	1.46E-3	-6.77E-2	3.93E-6	7.04E-2	2.38E-6	-8.72E-4	1.78E-3
GWP-luluc	kg CO2 eq	1.73E-4	1.11E-5	1.31E-3	1.49E-3	2.29E-6	3.60E-5	4.90E-8	-7.54E-5	1.46E-3
ODP	kg CFC11 eq	1.61E-8	7.20E-9	2.51E-9	2.58E-8	1.49E-9	4.80E-9	7.45E-11	-1.13E-8	2.08E-8
AP	mol H+ eq	1.81E-3	1.78E-4	7.77E-5	2.07E-3	3.69E-5	2.02E-4	1.75E-6	-7.70E-4	1.54E-3
EP-fw	kg P eq	7.81E-6	2.57E-7	3.07E-7	8.38E-6	5.33E-8	1.04E-6	2.22E-9	-3.16E-6	6.32E-6
EP-m	kg N eq	2.95E-4	6.37E-5	1.48E-5	3.73E-4	1.32E-5	5.91E-5	1.19E-6	-1.42E-4	3.05E-4
EP-T	mol N eq	3.35E-3	7.02E-4	1.64E-4	4.21E-3	1.46E-4	6.51E-4	7.11E-6	-1.60E-3	3.42E-3
POCP	kg NMVOC eq	1.50E-3	2.01E-4	5.20E-5	1.75E-3	4.16E-5	2.04E-4	2.61E-6	-7.05E-4	1.29E-3
ADP-mm	kg Sb eq	1.72E-5	8.09E-7	4.22E-7	1.84E-5	1.68E-7	7.88E-7	1.75E-9	-2.13E-6	1.72E-5
ADP-f	MJ	1.56E+1	4.80E-1	3.18E-1	1.64E+1	9.95E-2	6.31E-1	5.39E-3	-8.20E+0	8.94E+0
WDP	m3 depriv.	3.17E-1	1.47E-3	7.28E-2	3.92E-1	3.05E-4	1.24E-2	2.77E-5	-1.40E-1	2.64E-1
PM	disease inc.	1.74E-8	2.82E-9	9.42E-10	2.12E-8	5.85E-10	3.29E-9	3.68E-11	-7.00E-9	1.81E-8
IR	kBq U-235 eq	1.08E-2	2.10E-3	3.10E-4	1.32E-2	4.35E-4	1.91E-3	2.49E-5	-4.17E-3	1.14E-2
ETP-fw	CTUe	3.33E+0	3.90E-1	3.82E-1	4.11E+0	8.08E-2	7.47E-1	4.66E-3	-1.33E+0	3.61E+0
HTP-c	CTUh	1.57E-10	1.39E-11	2.32E-11	1.94E-10	2.87E-12	8.54E-11	1.27E-13	-6.11E-11	2.22E-10
HTP-nc	CTUh	3.44E-9	4.65E-10	4.20E-10	4.33E-9	9.63E-11	1.06E-9	2.86E-12	-1.39E-9	4.10E-9
SQP	Pt	6.82E+0	4.11E-1	6.57E-2	7.29E+0	8.51E-2	5.04E-1	1.36E-2	-3.94E+0	3.95E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.14E+0	6.88E-3	7.07E-1	1.86E+0	1.43E-3	3.09E-2	1.98E-4	-6.82E-1	1.21E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.14E+0	6.88E-3	7.07E-1	1.86E+0	1.43E-3	3.09E-2	1.98E-4	-6.82E-1	1.21E+0
PENRE	MJ	1.67E+1	5.09E-1	3.47E-1	1.76E+1	1.06E-1	6.72E-1	5.72E-3	-8.84E+0	9.54E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.67E+1	5.09E-1	3.47E-1	1.76E+1	1.06E-1	6.72E-1	5.72E-3	-8.84E+0	9.54E+0
PET	MJ	1.79E+1	5.16E-1	1.05E+0	1.94E+1	1.07E-1	7.03E-1	5.92E-3	-9.52E+0	1.07E+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	5.11E-3	5.43E-5	1.73E-3	6.89E-3	1.13E-5	3.92E-4	6.62E-6	-2.15E-3	5.16E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.84E-6	1.23E-6	3.53E-7	4.42E-6	2.54E-7	1.04E-6	6.46E-9	-2.30E-6	3.43E-6
NHWD	kg	2.67E-2	2.97E-2	3.42E-3	5.99E-2	6.16E-3	3.17E-2	2.51E-2	-8.22E-3	1.15E-1
RWD	kg	1.07E-5	3.26E-6	3.77E-7	1.44E-5	6.76E-7	2.43E-6	3.53E-8	-3.90E-6	1.36E-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



Ecochain Technologies BV
H.J.E. Wenckebachweg 123, 1096 AM Amsterdam, The Netherlands
<https://www.ecochain.com>
+31 20 3035 777