

Environmental Profile

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

Ecochain v3.5.64



Product: 3010727 - ED Tech PP Pipe HTEM 110 L=2 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

This document and supporting material contain confidential and proprietary business information of Wavin - IT - SM Maddalena. These materials may be printed or (photo) copied or otherwise used only with the written consent of Wavin - IT - SM Maddalena.

Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	2.41E+0	2.11E-1	1.89E-1	2.81E+0	4.27E-2	1.65E+0	1.72E-2	-1.73E+0	2.78E+0
GWP-f	kg CO2 eq	2.89E+0	2.11E-1	1.69E-1	3.27E+0	4.27E-2	1.16E+0	1.72E-2	-1.73E+0	2.76E+0
GWP-b	kg CO2 eq	-4.76E-1	1.28E-4	1.07E-2	-4.65E-1	2.59E-5	4.86E-1	1.52E-5	-5.84E-3	1.52E-2
GWP-luluc	kg CO2 eq	1.05E-3	7.46E-5	9.59E-3	1.07E-2	1.51E-5	2.40E-4	3.15E-7	-5.19E-4	1.05E-2
ODP	kg CFC11 eq	7.52E-8	4.86E-8	1.84E-8	1.42E-7	9.84E-9	3.18E-8	4.82E-10	-6.99E-8	1.14E-7
AP	mol H+ eq	1.13E-2	1.20E-3	5.69E-4	1.31E-2	2.43E-4	1.33E-3	1.13E-5	-5.09E-3	9.59E-3
EP-fw	kg P eq	4.75E-5	1.74E-6	2.25E-6	5.15E-5	3.51E-7	6.93E-6	1.42E-8	-2.11E-5	3.78E-5
EP-m	kg N eq	1.84E-3	4.30E-4	1.09E-4	2.38E-3	8.70E-5	3.86E-4	7.23E-6	-9.37E-4	1.92E-3
EP-T	mol N eq	2.09E-2	4.74E-3	1.20E-3	2.69E-2	9.59E-4	4.25E-3	4.60E-5	-1.05E-2	2.16E-2
POCP	kg NMVOC eq	9.36E-3	1.35E-3	3.81E-4	1.11E-2	2.74E-4	1.34E-3	1.69E-5	-4.67E-3	8.07E-3
ADP-mm	kg Sb eq	6.42E-5	5.46E-6	3.09E-6	7.28E-5	1.10E-6	5.24E-6	1.13E-8	-1.26E-5	6.66E-5
ADP-f	MJ	1.00E+2	3.24E+0	2.33E+0	1.06E+2	6.55E-1	4.20E+0	3.48E-2	-5.36E+1	5.69E+1
WDP	m3 depriv.	2.02E+0	9.93E-3	5.33E-1	2.57E+0	2.01E-3	8.15E-2	1.77E-4	-9.28E-1	1.72E+0
PM	disease inc.	1.06E-7	1.90E-8	6.90E-9	1.32E-7	3.85E-9	2.18E-8	2.38E-10	-4.69E-8	1.11E-7
IR	kBq U-235 eq	6.03E-2	1.41E-2	2.27E-3	7.67E-2	2.86E-3	1.27E-2	1.60E-4	-2.74E-2	6.51E-2
ETP-fw	CTUe	1.93E+1	2.63E+0	2.79E+0	2.47E+1	5.32E-1	4.78E+0	2.87E-2	-8.73E+0	2.13E+1
HTP-c	CTUh	9.94E-10	9.35E-11	1.70E-10	1.26E-9	1.89E-11	5.64E-10	8.14E-13	-4.19E-10	1.42E-9
HTP-nc	CTUh	2.12E-8	3.13E-9	3.08E-9	2.75E-8	6.34E-10	6.96E-9	1.81E-11	-9.23E-9	2.58E-8
SQP	Pt	4.58E+1	2.77E+0	4.81E-1	4.90E+1	5.61E-1	3.36E+0	8.81E-2	-2.96E+1	2.35E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	7.60E+0	4.64E-2	5.18E+0	1.28E+1	9.40E-3	2.06E-1	1.27E-3	-4.99E+0	8.04E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	7.60E+0	4.64E-2	5.18E+0	1.28E+1	9.40E-3	2.06E-1	1.27E-3	-4.99E+0	8.04E+0
PENRE	MJ	1.07E+2	3.44E+0	2.54E+0	1.13E+2	6.96E-1	4.47E+0	3.70E-2	-5.78E+1	6.07E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.07E+2	3.44E+0	2.54E+0	1.13E+2	6.96E-1	4.47E+0	3.70E-2	-5.78E+1	6.07E+1
PET	MJ	1.15E+2	3.48E+0	7.72E+0	1.26E+2	7.05E-1	4.67E+0	3.82E-2	-6.28E+1	6.88E+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	3.17E-2	3.66E-4	1.27E-2	4.48E-2	7.42E-5	2.45E-3	4.28E-5	-1.42E-2	3.32E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.69E-5	8.28E-6	2.58E-6	2.78E-5	1.68E-6	6.86E-6	4.17E-8	-1.45E-5	2.19E-5
NHWD	kg	1.68E-1	2.01E-1	2.51E-2	3.94E-1	4.06E-2	2.08E-1	1.63E-1	-5.60E-2	7.50E-1
RWD	kg	5.59E-5	2.20E-5	2.76E-6	8.07E-5	4.46E-6	1.61E-5	2.28E-7	-2.54E-5	7.61E-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