

Environmental Profile

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

Ecochain v3.5.64



Product: 3080374 - ED Tech PP Pipe HTDM 40 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	2.51E-1	1.91E-2	1.51E-2	2.86E-1	3.85E-3	1.57E-1	1.61E-3	-1.59E-1	2.88E-1
GWP-f	kg CO2 eq	2.78E-1	1.90E-2	1.35E-2	3.10E-1	3.85E-3	1.28E-1	1.61E-3	-1.59E-1	2.85E-1
GWP-b	kg CO2 eq	-2.78E-2	1.16E-5	8.54E-4	-2.69E-2	2.34E-6	2.82E-2	1.44E-6	-4.95E-4	7.45E-4
GWP-luluc	kg CO2 eq	1.54E-3	6.74E-6	7.68E-4	2.31E-3	1.36E-6	2.10E-5	3.04E-8	-3.82E-5	2.30E-3
ODP	kg CFC11 eq	1.38E-8	4.39E-9	1.47E-9	1.96E-8	8.87E-10	2.81E-9	4.51E-11	-7.08E-9	1.63E-8
AP	mol H+ eq	1.19E-3	1.08E-4	4.56E-5	1.35E-3	2.19E-5	1.19E-4	1.07E-6	-4.39E-4	1.05E-3
EP-fw	kg P eq	5.25E-6	1.57E-7	1.80E-7	5.59E-6	3.17E-8	6.10E-7	1.37E-9	-1.77E-6	4.46E-6
EP-m	kg N eq	1.97E-4	3.88E-5	8.71E-6	2.45E-4	7.84E-6	3.49E-5	7.74E-7	-8.04E-5	2.08E-4
EP-T	mol N eq	2.14E-3	4.28E-4	9.61E-5	2.66E-3	8.64E-5	3.85E-4	4.32E-6	-9.01E-4	2.24E-3
POCP	kg NMVOC eq	9.35E-4	1.22E-4	3.05E-5	1.09E-3	2.47E-5	1.20E-4	1.58E-6	-4.01E-4	8.33E-4
ADP-mm	kg Sb eq	1.69E-5	4.93E-7	2.47E-7	1.76E-5	9.95E-8	4.60E-7	1.07E-9	-1.42E-6	1.68E-5
ADP-f	MJ	9.31E+0	2.92E-1	1.86E-1	9.79E+0	5.91E-2	3.69E-1	3.27E-3	-4.81E+0	5.41E+0
WDP	m3 depriv.	1.97E-1	8.97E-4	4.27E-2	2.41E-1	1.81E-4	7.42E-3	1.93E-5	-8.08E-2	1.67E-1
PM	disease inc.	1.12E-8	1.72E-9	5.53E-10	1.35E-8	3.47E-10	1.92E-9	2.23E-11	-3.85E-9	1.19E-8
IR	kBq U-235 eq	7.74E-3	1.28E-3	1.82E-4	9.20E-3	2.58E-4	1.11E-3	1.51E-5	-2.41E-3	8.18E-3
ETP-fw	CTUe	2.49E+0	2.37E-1	2.24E-1	2.95E+0	4.80E-2	4.61E-1	3.00E-3	-7.25E-1	2.74E+0
HTP-c	CTUh	1.06E-10	8.45E-12	1.36E-11	1.28E-10	1.71E-12	5.08E-11	7.92E-14	-3.16E-11	1.49E-10
HTP-nc	CTUh	2.34E-9	2.83E-10	2.47E-10	2.87E-9	5.72E-11	6.29E-10	1.79E-12	-7.71E-10	2.79E-9
SQP	Pt	2.91E+0	2.50E-1	3.85E-2	3.20E+0	5.05E-2	2.94E-1	8.25E-3	-1.42E+0	2.13E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	5.18E-1	4.19E-3	4.15E-1	9.37E-1	8.47E-4	1.81E-2	1.20E-4	-2.62E-1	6.93E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	5.18E-1	4.19E-3	4.15E-1	9.37E-1	8.47E-4	1.81E-2	1.20E-4	-2.62E-1	6.93E-1
PENRE	MJ	9.98E+0	3.10E-1	2.04E-1	1.05E+1	6.27E-2	3.93E-1	3.47E-3	-5.19E+0	5.77E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	9.98E+0	3.10E-1	2.04E-1	1.05E+1	6.27E-2	3.93E-1	3.47E-3	-5.19E+0	5.77E+0
PET	MJ	1.05E+1	3.15E-1	6.18E-1	1.14E+1	6.35E-2	4.11E-1	3.59E-3	-5.45E+0	6.46E+0
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	3.40E-3	3.31E-5	1.02E-3	4.45E-3	6.68E-6	2.48E-4	4.00E-6	-1.24E-3	3.47E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.94E-6	7.48E-7	2.07E-7	2.89E-6	1.51E-7	6.20E-7	3.94E-9	-1.39E-6	2.28E-6
NHWD	kg	1.88E-2	1.81E-2	2.01E-3	3.90E-2	3.66E-3	1.88E-2	1.52E-2	-4.35E-3	7.22E-2
RWD	kg	8.22E-6	1.99E-6	2.21E-7	1.04E-5	4.02E-7	1.41E-6	2.14E-8	-2.27E-6	1.00E-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