

Environmental Profile

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

Ecochain v3.5.64



Product: 3080375 - ED Tech PP Pipe HTDM 40 L=1 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	4.11E-1	3.15E-2	2.70E-2	4.70E-1	6.35E-3	2.27E-1	2.62E-3	-2.59E-1	4.46E-1
GWP-f	kg CO2 eq	4.41E-1	3.14E-2	2.41E-2	4.97E-1	6.35E-3	1.94E-1	2.62E-3	-2.58E-1	4.41E-1
GWP-b	kg CO2 eq	-3.14E-2	1.91E-5	1.52E-3	-2.98E-2	3.85E-6	3.24E-2	2.33E-6	-8.44E-4	1.74E-3
GWP-luluc	kg CO2 eq	1.58E-3	1.11E-5	1.37E-3	2.96E-3	2.25E-6	3.51E-5	4.85E-8	-5.96E-5	2.94E-3
ODP	kg CFC11 eq	1.66E-8	7.24E-9	2.62E-9	2.64E-8	1.46E-9	4.65E-9	7.32E-11	-1.08E-8	2.18E-8
AP	mol H+ eq	1.77E-3	1.79E-4	8.12E-5	2.03E-3	3.62E-5	1.95E-4	1.72E-6	-7.22E-4	1.54E-3
EP-fw	kg P eq	7.64E-6	2.59E-7	3.21E-7	8.22E-6	5.22E-8	1.01E-6	2.19E-9	-2.90E-6	6.39E-6
EP-m	kg N eq	2.94E-4	6.40E-5	1.55E-5	3.73E-4	1.29E-5	5.70E-5	1.19E-6	-1.31E-4	3.14E-4
EP-T	mol N eq	3.24E-3	7.06E-4	1.71E-4	4.11E-3	1.43E-4	6.27E-4	7.00E-6	-1.46E-3	3.43E-3
POCP	kg NMVOC eq	1.44E-3	2.02E-4	5.43E-5	1.70E-3	4.08E-5	1.97E-4	2.57E-6	-6.57E-4	1.28E-3
ADP-mm	kg Sb eq	1.92E-5	8.13E-7	4.40E-7	2.05E-5	1.64E-7	7.65E-7	1.73E-9	-2.08E-6	1.93E-5
ADP-f	MJ	1.52E+1	4.82E-1	3.32E-1	1.60E+1	9.74E-2	6.13E-1	5.30E-3	-7.94E+0	8.75E+0
WDP	m3 depriv.	3.12E-1	1.48E-3	7.61E-2	3.89E-1	2.99E-4	1.22E-2	2.83E-5	-1.35E-1	2.66E-1
PM	disease inc.	1.63E-8	2.84E-9	9.84E-10	2.02E-8	5.73E-10	3.19E-9	3.62E-11	-6.26E-9	1.77E-8
IR	kBq U-235 eq	1.07E-2	2.11E-3	3.24E-4	1.32E-2	4.26E-4	1.85E-3	2.44E-5	-3.90E-3	1.16E-2
ETP-fw	CTUe	3.35E+0	3.92E-1	3.99E-1	4.14E+0	7.91E-2	7.36E-1	4.64E-3	-1.14E+0	3.82E+0
HTP-c	CTUh	1.45E-10	1.39E-11	2.42E-11	1.83E-10	2.82E-12	8.26E-11	1.26E-13	-4.97E-11	2.19E-10
HTP-nc	CTUh	3.38E-9	4.67E-10	4.39E-10	4.28E-9	9.43E-11	1.03E-9	2.84E-12	-1.25E-9	4.16E-9
SQP	Pt	3.48E+0	4.13E-1	6.86E-2	3.96E+0	8.34E-2	4.90E-1	1.34E-2	-1.81E+0	2.74E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	6.53E-1	6.92E-3	7.39E-1	1.40E+0	1.40E-3	3.01E-2	1.94E-4	-3.47E-1	1.08E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	6.53E-1	6.92E-3	7.39E-1	1.40E+0	1.40E-3	3.01E-2	1.94E-4	-3.47E-1	1.08E+0
PENRE	MJ	1.63E+1	5.12E-1	3.63E-1	1.71E+1	1.03E-1	6.53E-1	5.62E-3	-8.56E+0	9.34E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.63E+1	5.12E-1	3.63E-1	1.71E+1	1.03E-1	6.53E-1	5.62E-3	-8.56E+0	9.34E+0
PET	MJ	1.69E+1	5.19E-1	1.10E+0	1.85E+1	1.05E-1	6.84E-1	5.82E-3	-8.91E+0	1.04E+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	5.46E-5	1.81E-3	6.98E-3	1.10E-5	3.87E-4	6.50E-6	-2.06E-3	5.32E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.67E-6	1.23E-6	3.69E-7	4.27E-6	2.49E-7	1.02E-6	6.36E-9	-2.13E-6	3.41E-6
NHWD	kg	2.54E-2	2.99E-2	3.58E-3	5.89E-2	6.04E-3	3.07E-2	2.47E-2	-6.93E-3	1.13E-1
RWD	kg	1.08E-5	3.28E-6	3.94E-7	1.45E-5	6.63E-7	2.35E-6	3.47E-8	-3.62E-6	1.39E-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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