

Environmental Profile

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

Ecochain v3.5.64



Product: 3080382 - ED Tech PP Pipe HTEM 32 L=0,25 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	9.52E-2	7.75E-3	6.36E-3	1.09E-1	1.54E-3	8.68E-2	6.20E-4	-5.65E-2	1.42E-1
GWP-f	kg CO2 eq	1.25E-1	7.74E-3	5.68E-3	1.38E-1	1.54E-3	4.79E-2	6.20E-4	-7.26E-2	1.16E-1
GWP-b	kg CO2 eq	-3.12E-2	4.70E-6	3.59E-4	-3.08E-2	9.36E-7	3.89E-2	5.49E-7	1.62E-2	2.42E-2
GWP-luluc	kg CO2 eq	1.57E-3	2.74E-6	3.23E-4	1.90E-3	5.45E-7	9.00E-6	1.24E-8	-1.40E-4	1.77E-3
ODP	kg CFC11 eq	7.17E-9	1.78E-9	6.18E-10	9.57E-9	3.55E-10	1.38E-9	1.77E-11	-4.08E-9	7.24E-9
AP	mol H+ eq	6.21E-4	4.41E-5	1.92E-5	6.84E-4	8.78E-6	5.59E-5	4.19E-7	-2.68E-4	4.81E-4
EP-fw	kg P eq	3.32E-6	6.37E-8	7.58E-8	3.46E-6	1.27E-8	2.65E-7	5.48E-10	-2.25E-6	1.48E-6
EP-m	kg N eq	1.18E-4	1.58E-5	3.66E-6	1.38E-4	3.14E-6	1.70E-5	2.80E-7	-5.41E-5	1.04E-4
EP-T	mol N eq	1.18E-3	1.74E-4	4.04E-5	1.40E-3	3.46E-5	1.87E-4	1.69E-6	-6.14E-4	1.01E-3
POCP	kg NMVOC eq	4.41E-4	4.97E-5	1.28E-5	5.03E-4	9.89E-6	5.81E-5	6.18E-7	-2.30E-4	3.42E-4
ADP-mm	kg Sb eq	5.38E-6	2.00E-7	1.04E-7	5.68E-6	3.99E-8	2.22E-7	4.26E-10	-6.62E-7	5.28E-6
ADP-f	MJ	3.76E+0	1.19E-1	7.84E-2	3.95E+0	2.37E-2	1.65E-1	1.28E-3	-2.07E+0	2.07E+0
WDP	m3 depriv.	8.57E-2	3.65E-4	1.80E-2	1.04E-1	7.26E-5	3.07E-3	9.49E-6	-5.63E-2	5.09E-2
PM	disease inc.	6.01E-9	6.99E-10	2.32E-10	6.94E-9	1.39E-10	9.01E-10	8.76E-12	-3.44E-9	4.54E-9
IR	kBq U-235 eq	3.64E-3	5.19E-4	7.64E-5	4.24E-3	1.03E-4	5.23E-4	5.86E-6	-2.09E-3	2.78E-3
ETP-fw	CTUe	3.19E+0	9.65E-2	9.41E-2	3.38E+0	1.92E-2	2.09E-1	1.12E-3	-1.60E+0	2.02E+0
HTP-c	CTUh	6.91E-11	3.43E-12	5.71E-12	7.83E-11	6.83E-13	2.39E-11	3.22E-14	-2.99E-11	7.29E-11
HTP-nc	CTUh	1.33E-9	1.15E-10	1.04E-10	1.55E-9	2.29E-11	2.81E-10	6.94E-13	-6.89E-10	1.16E-9
SQP	Pt	3.44E+0	1.02E-1	1.62E-2	3.56E+0	2.02E-2	1.29E-1	3.22E-3	-5.05E+0	-1.34E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	5.78E-1	1.70E-3	1.74E-1	7.54E-1	3.39E-4	7.81E-3	4.51E-5	-8.65E-1	-1.03E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	5.78E-1	1.70E-3	1.74E-1	7.54E-1	3.39E-4	7.81E-3	4.51E-5	-8.65E-1	-1.03E-1
PENRE	MJ	4.03E+0	1.26E-1	8.56E-2	4.24E+0	2.51E-2	1.76E-1	1.36E-3	-2.23E+0	2.21E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	4.03E+0	1.26E-1	8.56E-2	4.24E+0	2.51E-2	1.76E-1	1.36E-3	-2.23E+0	2.21E+0
PET	MJ	4.61E+0	1.28E-1	2.60E-1	5.00E+0	2.55E-2	1.84E-1	1.41E-3	-3.10E+0	2.11E+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	1.67E-3	1.34E-5	4.27E-4	2.11E-3	2.68E-6	1.00E-4	1.56E-6	-1.13E-3	1.09E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.21E-6	3.04E-7	8.70E-8	1.60E-6	6.05E-8	2.92E-7	1.56E-9	-8.31E-7	1.12E-6
NHWD	kg	1.37E-2	7.36E-3	8.44E-4	2.19E-2	1.47E-3	8.16E-3	6.01E-3	-3.86E-3	3.36E-2
RWD	kg	3.76E-6	8.08E-7	9.29E-8	4.66E-6	1.61E-7	6.77E-7	8.37E-9	-2.00E-6	3.51E-6
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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