

Environmental Profile

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

Ecochain v3.5.64



Product: 3080384 - ED Tech PP Pipe HTEM 40 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	1.22E-1	1.03E-2	7.56E-3	1.40E-1	1.93E-3	1.02E-1	7.92E-4	-7.53E-2	1.69E-1
GWP-f	kg CO2 eq	1.52E-1	1.03E-2	6.75E-3	1.69E-1	1.92E-3	6.47E-2	7.92E-4	-8.70E-2	1.49E-1
GWP-b	kg CO2 eq	-3.13E-2	6.25E-6	4.27E-4	-3.09E-2	1.17E-6	3.69E-2	7.05E-7	1.18E-2	1.78E-2
GWP-luluc	kg CO2 eq	1.56E-3	3.64E-6	3.84E-4	1.95E-3	6.81E-7	1.09E-5	1.55E-8	-1.12E-4	1.85E-3
ODP	kg CFC11 eq	9.01E-9	2.37E-9	7.35E-10	1.21E-8	4.43E-10	1.59E-9	2.25E-11	-4.65E-9	9.53E-9
AP	mol H+ eq	7.25E-4	5.86E-5	2.28E-5	8.06E-4	1.10E-5	6.55E-5	5.32E-7	-2.89E-4	5.94E-4
EP-fw	kg P eq	3.65E-6	8.46E-8	9.01E-8	3.83E-6	1.58E-8	3.19E-7	6.90E-10	-2.04E-6	2.12E-6
EP-m	kg N eq	1.31E-4	2.10E-5	4.35E-6	1.57E-4	3.92E-6	1.97E-5	3.81E-7	-5.71E-5	1.23E-4
EP-T	mol N eq	1.35E-3	2.31E-4	4.80E-5	1.63E-3	4.32E-5	2.17E-4	2.15E-6	-6.44E-4	1.24E-3
POCP	kg NMVOC eq	5.32E-4	6.60E-5	1.52E-5	6.14E-4	1.24E-5	6.74E-5	7.86E-7	-2.54E-4	4.40E-4
ADP-mm	kg Sb eq	8.80E-6	2.66E-7	1.24E-7	9.19E-6	4.98E-8	2.57E-7	5.38E-10	-8.28E-7	8.66E-6
ADP-f	MJ	4.73E+0	1.58E-1	9.31E-2	4.98E+0	2.95E-2	1.97E-1	1.63E-3	-2.52E+0	2.69E+0
WDP	m3 depriv.	1.05E-1	4.84E-4	2.13E-2	1.27E-1	9.06E-5	3.80E-3	1.10E-5	-5.77E-2	7.31E-2
PM	disease inc.	6.94E-9	9.28E-10	2.76E-10	8.14E-9	1.74E-10	1.05E-9	1.11E-11	-3.38E-9	6.01E-9
IR	kBq U-235 eq	4.58E-3	6.90E-4	9.08E-5	5.37E-3	1.29E-4	6.11E-4	7.47E-6	-2.06E-3	4.05E-3
ETP-fw	CTUe	2.95E+0	1.28E-1	1.12E-1	3.19E+0	2.40E-2	2.53E-1	1.49E-3	-1.33E+0	2.14E+0
HTP-c	CTUh	7.62E-11	4.56E-12	6.79E-12	8.76E-11	8.53E-13	2.78E-11	4.03E-14	-3.00E-11	8.63E-11
HTP-nc	CTUh	1.51E-9	1.53E-10	1.23E-10	1.79E-9	2.86E-11	3.36E-10	8.95E-13	-6.73E-10	1.48E-9
SQP	Pt	3.34E+0	1.35E-1	1.93E-2	3.50E+0	2.53E-2	1.54E-1	4.10E-3	-4.29E+0	-6.04E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	5.62E-1	2.26E-3	2.07E-1	7.72E-1	4.24E-4	9.41E-3	5.84E-5	-7.29E-1	5.25E-2
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	5.62E-1	2.26E-3	2.07E-1	7.72E-1	4.24E-4	9.41E-3	5.84E-5	-7.29E-1	5.25E-2
PENRE	MJ	5.07E+0	1.68E-1	1.02E-1	5.34E+0	3.13E-2	2.09E-1	1.73E-3	-2.71E+0	2.87E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	5.07E+0	1.68E-1	1.02E-1	5.34E+0	3.13E-2	2.09E-1	1.73E-3	-2.71E+0	2.87E+0
PET	MJ	5.64E+0	1.70E-1	3.09E-1	6.11E+0	3.18E-2	2.19E-1	1.79E-3	-3.44E+0	2.93E+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	1.98E-3	1.79E-5	5.08E-4	2.51E-3	3.34E-6	1.28E-4	1.99E-6	-1.08E-3	1.56E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.36E-6	4.04E-7	1.03E-7	1.87E-6	7.55E-8	3.43E-7	1.97E-9	-9.41E-7	1.34E-6
NHWD	kg	1.45E-2	9.78E-3	1.00E-3	2.53E-2	1.83E-3	9.84E-3	7.61E-3	-3.89E-3	4.07E-2
RWD	kg	4.89E-6	1.07E-6	1.10E-7	6.07E-6	2.01E-7	7.86E-7	1.06E-8	-1.98E-6	5.09E-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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