

Environmental Profile

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

Ecochain v3.5.64



Product: 3011056 - Ed Tech Trap Bend HTSW 40x1 1/4"
 Unit: 1 piece
 Manufacturer: Wavin - IT - SM Maddalena

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



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.

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

A1 Raw material supply A2 Transport A3 Manufacturing

Construction process stage

A4 Transport gate to site
 A5 Assembly / Construction installation process

Use stage

B1 Use B2 Maintenance B3 Repair B4 Replacement B5 Refurbishment
 B6 Operational energy use B7 Operational water use

End-of-Life stage

C1 De-construction demolition C2 Transport C3 Waste processing
 C4 Disposal

Benefits and loads beyond the system boundaries

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	1.03E-1	4.82E-3	4.95E-3	1.13E-1	8.96E-4	7.23E-2	4.22E-4	-5.89E-2	1.28E-1
GWP-f	kg CO2 eq	1.18E-1	4.82E-3	4.24E-3	1.27E-1	8.95E-4	5.50E-2	4.22E-4	-6.47E-2	1.19E-1
GWP-b	kg CO2 eq	-1.49E-2	2.93E-6	3.58E-4	-1.46E-2	5.43E-7	1.73E-2	3.66E-7	5.86E-3	8.60E-3
GWP-luluc	kg CO2 eq	9.56E-5	1.70E-6	3.58E-4	4.55E-4	3.17E-7	5.44E-6	7.35E-9	-5.78E-5	4.03E-4
ODP	kg CFC11 eq	4.28E-9	1.11E-9	4.25E-10	5.82E-9	2.06E-10	8.25E-10	1.06E-11	-4.03E-9	2.83E-9
AP	mol H+ eq	4.81E-4	2.74E-5	1.71E-5	5.25E-4	5.10E-6	3.56E-5	2.53E-7	-1.73E-4	3.93E-4
EP-fw	kg P eq	2.96E-6	3.96E-8	6.58E-8	3.06E-6	7.36E-9	1.60E-7	3.35E-10	-1.11E-6	2.12E-6
EP-m	kg N eq	8.84E-5	9.82E-6	2.89E-6	1.01E-4	1.82E-6	1.12E-5	1.63E-7	-3.52E-5	7.92E-5
EP-T	mol N eq	9.81E-4	1.08E-4	3.24E-5	1.12E-3	2.01E-5	1.24E-4	1.03E-6	-3.95E-4	8.71E-4
POCP	kg NMVOC eq	4.06E-4	3.09E-5	1.01E-5	4.47E-4	5.75E-6	3.80E-5	3.85E-7	-1.57E-4	3.35E-4
ADP-mm	kg Sb eq	1.61E-6	1.25E-7	1.03E-7	1.83E-6	2.32E-8	1.30E-7	2.57E-10	-3.59E-7	1.63E-6
ADP-f	MJ	3.58E+0	7.39E-2	5.58E-2	3.71E+0	1.37E-2	9.95E-2	7.74E-4	-1.71E+0	2.11E+0
WDP	m3 depriv.	7.15E-2	2.27E-4	1.97E-2	9.14E-2	4.22E-5	1.85E-3	4.50E-6	-3.33E-2	6.00E-2
PM	disease inc.	4.38E-9	4.35E-10	1.71E-10	4.99E-9	8.08E-11	5.53E-10	5.32E-12	-1.87E-9	3.76E-9
IR	kBq U-235 eq	3.09E-3	3.23E-4	5.20E-5	3.46E-3	6.00E-5	3.13E-4	3.58E-6	-1.18E-3	2.66E-3
ETP-fw	CTUe	1.77E+0	6.00E-2	8.80E-2	1.92E+0	1.12E-2	1.21E-1	6.48E-4	-7.00E-1	1.35E+0
HTP-c	CTUh	3.80E-11	2.14E-12	4.69E-12	4.49E-11	3.97E-13	1.69E-11	1.94E-14	-1.70E-11	4.52E-11
HTP-nc	CTUh	9.33E-10	7.16E-11	9.73E-11	1.10E-9	1.33E-11	1.90E-10	4.20E-13	-3.80E-10	9.26E-10
SQP	Pt	1.71E+0	6.33E-2	1.02E-2	1.78E+0	1.18E-2	7.83E-2	1.98E-3	-2.15E+0	-2.80E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	3.08E-1	1.06E-3	1.93E-1	5.02E-1	1.97E-4	4.71E-3	2.96E-5	-3.68E-1	1.39E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	3.08E-1	1.06E-3	1.93E-1	5.02E-1	1.97E-4	4.71E-3	2.96E-5	-3.68E-1	1.39E-1
PENRE	MJ	3.84E+0	7.85E-2	6.08E-2	3.98E+0	1.46E-2	1.06E-1	8.21E-4	-1.85E+0	2.25E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.84E+0	7.85E-2	6.08E-2	3.98E+0	1.46E-2	1.06E-1	8.21E-4	-1.85E+0	2.25E+0
PET	MJ	4.15E+0	7.96E-2	2.54E-1	4.48E+0	1.48E-2	1.11E-1	8.51E-4	-2.22E+0	2.39E+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	1.33E-3	8.37E-6	4.69E-4	1.81E-3	1.55E-6	5.96E-5	9.51E-7	-6.09E-4	1.26E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.18E-6	1.89E-7	5.42E-8	1.42E-6	3.51E-8	1.76E-7	9.38E-10	-8.09E-7	8.22E-7
NHWD	kg	7.68E-3	4.58E-3	5.28E-4	1.28E-2	8.51E-4	6.05E-3	3.40E-3	-2.19E-3	2.09E-2
RWD	kg	2.75E-6	5.03E-7	5.79E-8	3.31E-6	9.34E-8	4.04E-7	5.04E-9	-1.14E-6	2.67E-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



Ecochain Technologies BV
H.J.E. Wenckebachweg 123, 1096 AM Amsterdam, The Netherlands
<https://www.ecochain.com>
+31 20 3035 777