

Environmental Profile

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

Ecochain v3.5.64



Product: 3018751 - Ed Tech Branch Reduced HTEA 67,5° 50x40
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	1.50E-1	1.07E-2	9.00E-3	1.70E-1	1.78E-3	1.20E-1	9.05E-4	-8.44E-2	2.08E-1
GWP-f	kg CO2 eq	1.79E-1	1.07E-2	7.70E-3	1.98E-1	1.78E-3	8.32E-2	9.05E-4	-1.02E-1	1.82E-1
GWP-b	kg CO2 eq	-2.93E-2	6.49E-6	6.51E-4	-2.86E-2	1.08E-6	3.72E-2	8.06E-7	1.76E-2	2.61E-2
GWP-luluc	kg CO2 eq	1.77E-4	3.78E-6	6.50E-4	8.31E-4	6.30E-7	9.85E-6	1.61E-8	-1.53E-4	6.88E-4
ODP	kg CFC11 eq	1.37E-8	2.46E-9	7.73E-10	1.70E-8	4.10E-10	1.54E-9	2.31E-11	-6.13E-9	1.28E-8
AP	mol H+ eq	7.71E-4	6.09E-5	3.11E-5	8.63E-4	1.01E-5	6.47E-5	5.55E-7	-3.34E-4	6.05E-4
EP-fw	kg P eq	4.37E-6	8.80E-8	1.20E-7	4.58E-6	1.47E-8	2.92E-7	7.35E-10	-2.60E-6	2.29E-6
EP-m	kg N eq	1.43E-4	2.18E-5	5.25E-6	1.70E-4	3.63E-6	2.01E-5	4.83E-7	-6.71E-5	1.27E-4
EP-T	mol N eq	1.58E-3	2.40E-4	5.90E-5	1.88E-3	4.00E-5	2.20E-4	2.24E-6	-7.59E-4	1.38E-3
POCP	kg NMVOC eq	6.39E-4	6.87E-5	1.83E-5	7.26E-4	1.14E-5	6.75E-5	8.37E-7	-2.90E-4	5.16E-4
ADP-mm	kg Sb eq	1.62E-5	2.77E-7	1.88E-7	1.67E-5	4.61E-8	2.44E-7	5.60E-10	-1.14E-6	1.58E-5
ADP-f	MJ	5.63E+0	1.64E-1	1.01E-1	5.89E+0	2.73E-2	1.82E-1	1.69E-3	-2.83E+0	3.28E+0
WDP	m3 depriv.	1.16E-1	5.04E-4	3.59E-2	1.53E-1	8.39E-5	3.66E-3	9.65E-6	-6.84E-2	8.80E-2
PM	disease inc.	8.37E-9	9.65E-10	3.11E-10	9.64E-9	1.61E-10	9.92E-10	1.16E-11	-4.05E-9	6.76E-9
IR	kBq U-235 eq	6.38E-3	7.17E-4	9.46E-5	7.20E-3	1.19E-4	5.74E-4	7.86E-6	-2.55E-3	5.35E-3
ETP-fw	CTUe	3.81E+0	1.33E-1	1.60E-1	4.10E+0	2.22E-2	2.70E-1	1.79E-3	-1.79E+0	2.61E+0
HTP-c	CTUh	7.05E-11	4.74E-12	8.53E-12	8.38E-11	7.90E-13	2.55E-11	4.28E-14	-3.47E-11	7.54E-11
HTP-nc	CTUh	1.63E-9	1.59E-10	1.77E-10	1.97E-9	2.65E-11	3.23E-10	1.01E-12	-8.17E-10	1.50E-9
SQP	Pt	3.55E+0	1.40E-1	1.85E-2	3.71E+0	2.34E-2	1.40E-1	4.32E-3	-5.33E+0	-1.46E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	6.08E-1	2.35E-3	3.51E-1	9.61E-1	3.92E-4	8.63E-3	6.69E-5	-9.19E-1	5.11E-2
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	6.08E-1	2.35E-3	3.51E-1	9.61E-1	3.92E-4	8.63E-3	6.69E-5	-9.19E-1	5.11E-2
PENRE	MJ	6.03E+0	1.74E-1	1.11E-1	6.32E+0	2.90E-2	1.94E-1	1.79E-3	-3.05E+0	3.49E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	6.03E+0	1.74E-1	1.11E-1	6.32E+0	2.90E-2	1.94E-1	1.79E-3	-3.05E+0	3.49E+0
PET	MJ	6.64E+0	1.77E-1	4.61E-1	7.28E+0	2.94E-2	2.03E-1	1.86E-3	-3.97E+0	3.54E+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	2.16E-3	1.86E-5	8.52E-4	3.04E-3	3.09E-6	1.44E-4	2.08E-6	-1.34E-3	1.84E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.71E-6	4.20E-7	9.85E-8	2.23E-6	6.99E-8	3.36E-7	2.04E-9	-1.20E-6	1.43E-6
NHWD	kg	1.31E-2	1.02E-2	9.60E-4	2.42E-2	1.69E-3	9.42E-3	7.41E-3	-4.51E-3	3.82E-2
RWD	kg	7.24E-6	1.12E-6	1.05E-7	8.47E-6	1.86E-7	7.41E-7	1.10E-8	-2.48E-6	6.92E-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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