

Environmental Profile

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

Ecochain v3.5.64



Product: 3018757 - Ed Tech Branch Reduc. HTEA 67,5° 110x50
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	4.20E-1	3.03E-2	2.79E-2	4.78E-1	5.28E-3	3.06E-1	2.62E-3	-2.50E-1	5.42E-1
GWP-f	kg CO2 eq	4.92E-1	3.02E-2	2.39E-2	5.46E-1	5.27E-3	2.16E-1	2.62E-3	-2.85E-1	4.85E-1
GWP-b	kg CO2 eq	-7.26E-2	1.84E-5	2.02E-3	-7.06E-2	3.20E-6	8.95E-2	2.32E-6	3.60E-2	5.49E-2
GWP-luluc	kg CO2 eq	4.01E-4	1.07E-5	2.02E-3	2.43E-3	1.87E-6	2.94E-5	4.58E-8	-3.38E-4	2.12E-3
ODP	kg CFC11 eq	3.00E-8	6.97E-9	2.40E-9	3.94E-8	1.22E-9	4.36E-9	6.63E-11	-1.55E-8	2.95E-8
AP	mol H+ eq	2.02E-3	1.72E-4	9.63E-5	2.29E-3	3.00E-5	1.83E-4	1.59E-6	-9.09E-4	1.59E-3
EP-fw	kg P eq	1.08E-5	2.49E-7	3.71E-7	1.14E-5	4.34E-8	8.64E-7	2.09E-9	-6.27E-6	6.04E-6
EP-m	kg N eq	3.69E-4	6.17E-5	1.63E-5	4.47E-4	1.07E-5	5.58E-5	1.28E-6	-1.79E-4	3.36E-4
EP-T	mol N eq	4.08E-3	6.79E-4	1.83E-4	4.94E-3	1.18E-4	6.14E-4	6.44E-6	-2.01E-3	3.67E-3
POCP	kg NMVOC eq	1.70E-3	1.94E-4	5.68E-5	1.95E-3	3.39E-5	1.90E-4	2.41E-6	-7.99E-4	1.38E-3
ADP-mm	kg Sb eq	3.42E-5	7.83E-7	5.82E-7	3.56E-5	1.36E-7	6.99E-7	1.60E-9	-2.84E-6	3.36E-5
ADP-f	MJ	1.60E+1	4.64E-1	3.14E-1	1.68E+1	8.09E-2	5.33E-1	4.85E-3	-8.20E+0	9.19E+0
WDP	m3 depriv.	3.25E-1	1.43E-3	1.11E-1	4.38E-1	2.48E-4	1.06E-2	2.61E-5	-1.82E-1	2.66E-1
PM	disease inc.	2.11E-8	2.73E-9	9.65E-10	2.48E-8	4.76E-10	2.86E-9	3.33E-11	-1.03E-8	1.79E-8
IR	kBq U-235 eq	1.53E-2	2.03E-3	2.93E-4	1.76E-2	3.54E-4	1.66E-3	2.26E-5	-6.43E-3	1.32E-2
ETP-fw	CTUe	8.47E+0	3.77E-1	4.96E-1	9.34E+0	6.57E-2	7.31E-1	4.82E-3	-4.03E+0	6.11E+0
HTP-c	CTUh	1.77E-10	1.34E-11	2.64E-11	2.17E-10	2.34E-12	7.37E-11	1.21E-13	-8.87E-11	2.04E-10
HTP-nc	CTUh	4.14E-9	4.50E-10	5.49E-10	5.14E-9	7.84E-11	9.29E-10	2.81E-12	-2.08E-9	4.07E-9
SQP	Pt	8.53E+0	3.97E-1	5.73E-2	8.99E+0	6.92E-2	4.14E-1	1.24E-2	-1.20E+1	-2.49E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.47E+0	6.66E-3	1.09E+0	2.56E+0	1.16E-3	2.55E-2	1.91E-4	-2.06E+0	5.28E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.47E+0	6.66E-3	1.09E+0	2.56E+0	1.16E-3	2.55E-2	1.91E-4	-2.06E+0	5.28E-1
PENRE	MJ	1.71E+1	4.93E-1	3.43E-1	1.80E+1	8.59E-2	5.68E-1	5.15E-3	-8.84E+0	9.80E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.71E+1	4.93E-1	3.43E-1	1.80E+1	8.59E-2	5.68E-1	5.15E-3	-8.84E+0	9.80E+0
PET	MJ	1.86E+1	5.00E-1	1.43E+0	2.05E+1	8.71E-2	5.93E-1	5.34E-3	-1.09E+1	1.03E+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	5.72E-3	5.25E-5	2.64E-3	8.41E-3	9.16E-6	3.85E-4	5.98E-6	-3.39E-3	5.42E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	4.07E-6	1.19E-6	3.05E-7	5.56E-6	2.07E-7	9.49E-7	5.85E-9	-3.07E-6	3.65E-6
NHWD	kg	3.19E-2	2.88E-2	2.98E-3	6.37E-2	5.02E-3	2.71E-2	2.13E-2	-1.16E-2	1.06E-1
RWD	kg	1.67E-5	3.16E-6	3.26E-7	2.02E-5	5.50E-7	2.13E-6	3.17E-8	-6.19E-6	1.67E-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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