

Environmental Profile

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

Ecochain v3.5.64



Product: 3010974 - Ed Tech Branch Reduced HTEA 87,5° 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	1.52E-1	1.08E-2	9.15E-3	1.72E-1	1.81E-3	1.21E-1	9.17E-4	-8.56E-2	2.10E-1
GWP-f	kg CO2 eq	1.81E-1	1.08E-2	7.83E-3	2.00E-1	1.81E-3	8.40E-2	9.17E-4	-1.03E-1	1.84E-1
GWP-b	kg CO2 eq	-2.93E-2	6.57E-6	6.62E-4	-2.86E-2	1.10E-6	3.72E-2	8.16E-7	1.75E-2	2.61E-2
GWP-luluc	kg CO2 eq	1.78E-4	3.83E-6	6.61E-4	8.43E-4	6.40E-7	1.00E-5	1.63E-8	-1.54E-4	7.00E-4
ODP	kg CFC11 eq	1.38E-8	2.49E-9	7.86E-10	1.70E-8	4.17E-10	1.56E-9	2.34E-11	-6.18E-9	1.29E-8
AP	mol H+ eq	7.78E-4	6.17E-5	3.16E-5	8.71E-4	1.03E-5	6.55E-5	5.63E-7	-3.37E-4	6.10E-4
EP-fw	kg P eq	4.40E-6	8.91E-8	1.22E-7	4.61E-6	1.49E-8	2.97E-7	7.45E-10	-2.61E-6	2.31E-6
EP-m	kg N eq	1.45E-4	2.21E-5	5.34E-6	1.72E-4	3.68E-6	2.03E-5	4.88E-7	-6.78E-5	1.29E-4
EP-T	mol N eq	1.59E-3	2.43E-4	6.00E-5	1.90E-3	4.06E-5	2.23E-4	2.27E-6	-7.65E-4	1.40E-3
POCP	kg NMVOC eq	6.45E-4	6.95E-5	1.86E-5	7.33E-4	1.16E-5	6.83E-5	8.48E-7	-2.93E-4	5.21E-4
ADP-mm	kg Sb eq	1.62E-5	2.80E-7	1.91E-7	1.67E-5	4.68E-8	2.47E-7	5.67E-10	-1.15E-6	1.59E-5
ADP-f	MJ	5.70E+0	1.66E-1	1.03E-1	5.97E+0	2.77E-2	1.85E-1	1.71E-3	-2.86E+0	3.32E+0
WDP	m3 depriv.	1.18E-1	5.10E-4	3.65E-2	1.55E-1	8.51E-5	3.71E-3	9.76E-6	-6.91E-2	8.94E-2
PM	disease inc.	8.43E-9	9.77E-10	3.16E-10	9.72E-9	1.63E-10	1.00E-9	1.17E-11	-4.08E-9	6.82E-9
IR	kBq U-235 eq	6.42E-3	7.26E-4	9.62E-5	7.24E-3	1.21E-4	5.81E-4	7.96E-6	-2.57E-3	5.39E-3
ETP-fw	CTUe	3.82E+0	1.35E-1	1.63E-1	4.12E+0	2.25E-2	2.73E-1	1.81E-3	-1.79E+0	2.62E+0
HTP-c	CTUh	7.10E-11	4.80E-12	8.67E-12	8.44E-11	8.02E-13	2.59E-11	4.33E-14	-3.49E-11	7.62E-11
HTP-nc	CTUh	1.64E-9	1.61E-10	1.80E-10	1.99E-9	2.69E-11	3.27E-10	1.02E-12	-8.22E-10	1.52E-9
SQP	Pt	3.55E+0	1.42E-1	1.88E-2	3.71E+0	2.37E-2	1.42E-1	4.37E-3	-5.33E+0	-1.45E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	6.09E-1	2.38E-3	3.57E-1	9.68E-1	3.98E-4	8.75E-3	6.77E-5	-9.20E-1	5.76E-2
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	6.09E-1	2.38E-3	3.57E-1	9.68E-1	3.98E-4	8.75E-3	6.77E-5	-9.20E-1	5.76E-2
PENRE	MJ	6.11E+0	1.76E-1	1.12E-1	6.40E+0	2.95E-2	1.97E-1	1.81E-3	-3.09E+0	3.54E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	6.11E+0	1.76E-1	1.12E-1	6.40E+0	2.95E-2	1.97E-1	1.81E-3	-3.09E+0	3.54E+0
PET	MJ	6.72E+0	1.79E-1	4.69E-1	7.37E+0	2.99E-2	2.05E-1	1.88E-3	-4.01E+0	3.59E+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	2.19E-3	1.88E-5	8.66E-4	3.07E-3	3.14E-6	1.45E-4	2.11E-6	-1.35E-3	1.87E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.72E-6	4.25E-7	1.00E-7	2.24E-6	7.10E-8	3.41E-7	2.07E-9	-1.21E-6	1.45E-6
NHWD	kg	1.31E-2	1.03E-2	9.76E-4	2.44E-2	1.72E-3	9.55E-3	7.51E-3	-4.54E-3	3.86E-2
RWD	kg	7.28E-6	1.13E-6	1.07E-7	8.51E-6	1.89E-7	7.50E-7	1.12E-8	-2.50E-6	6.97E-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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