

Environmental Profile

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

Ecochain v3.5.64



Product: 3011025 - Ed Tech PP Reducer Type A HTR 50x110
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	2.24E-1	1.63E-2	1.65E-2	2.56E-1	3.02E-3	1.58E-1	1.46E-3	-1.40E-1	2.79E-1
GWP-f	kg CO2 eq	2.67E-1	1.62E-2	1.41E-2	2.97E-1	3.02E-3	1.05E-1	1.46E-3	-1.59E-1	2.48E-1
GWP-b	kg CO2 eq	-4.32E-2	9.86E-6	1.19E-3	-4.20E-2	1.83E-6	5.28E-2	1.28E-6	1.95E-2	3.03E-2
GWP-luluc	kg CO2 eq	2.10E-4	5.75E-6	1.19E-3	1.41E-3	1.07E-6	1.72E-5	2.55E-8	-1.87E-4	1.24E-3
ODP	kg CFC11 eq	1.21E-8	3.74E-9	1.42E-9	1.73E-8	6.95E-10	2.50E-9	3.68E-11	-7.99E-9	1.25E-8
AP	mol H+ eq	1.06E-3	9.25E-5	5.70E-5	1.21E-3	1.72E-5	1.04E-4	8.81E-7	-5.21E-4	8.11E-4
EP-fw	kg P eq	5.52E-6	1.34E-7	2.19E-7	5.87E-6	2.48E-8	5.04E-7	1.16E-9	-3.53E-6	2.88E-6
EP-m	kg N eq	1.95E-4	3.31E-5	9.62E-6	2.38E-4	6.15E-6	3.14E-5	6.36E-7	-1.01E-4	1.75E-4
EP-T	mol N eq	2.16E-3	3.65E-4	1.08E-4	2.63E-3	6.77E-5	3.46E-4	3.57E-6	-1.14E-3	1.91E-3
POCP	kg NMVOC eq	8.95E-4	1.04E-4	3.36E-5	1.03E-3	1.94E-5	1.08E-4	1.34E-6	-4.59E-4	7.02E-4
ADP-mm	kg Sb eq	1.15E-5	4.20E-7	3.44E-7	1.22E-5	7.80E-8	4.06E-7	8.90E-10	-1.38E-6	1.13E-5
ADP-f	MJ	8.77E+0	2.49E-1	1.86E-1	9.21E+0	4.63E-2	3.10E-1	2.69E-3	-4.68E+0	4.88E+0
WDP	m3 depriv.	1.78E-1	7.65E-4	6.58E-2	2.44E-1	1.42E-4	5.99E-3	1.52E-5	-1.05E-1	1.45E-1
PM	disease inc.	1.08E-8	1.47E-9	5.71E-10	1.29E-8	2.72E-10	1.66E-9	1.85E-11	-5.91E-9	8.90E-9
IR	kBq U-235 eq	6.95E-3	1.09E-3	1.73E-4	8.22E-3	2.02E-4	9.65E-4	1.25E-5	-3.59E-3	5.81E-3
ETP-fw	CTUe	4.32E+0	2.02E-1	2.93E-1	4.82E+0	3.76E-2	3.92E-1	2.45E-3	-2.23E+0	3.02E+0
HTP-c	CTUh	9.30E-11	7.20E-12	1.56E-11	1.16E-10	1.34E-12	4.34E-11	6.72E-14	-5.08E-11	1.10E-10
HTP-nc	CTUh	2.16E-9	2.41E-10	3.24E-10	2.72E-9	4.48E-11	5.32E-10	1.50E-12	-1.18E-9	2.12E-9
SQP	Pt	4.90E+0	2.13E-1	3.39E-2	5.14E+0	3.96E-2	2.42E-1	6.88E-3	-6.80E+0	-1.37E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	8.37E-1	3.58E-3	6.43E-1	1.48E+0	6.64E-4	1.49E-2	1.04E-4	-1.17E+0	3.31E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	8.37E-1	3.58E-3	6.43E-1	1.48E+0	6.64E-4	1.49E-2	1.04E-4	-1.17E+0	3.31E-1
PENRE	MJ	9.41E+0	2.65E-1	2.03E-1	9.88E+0	4.92E-2	3.30E-1	2.85E-3	-5.05E+0	5.22E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	9.41E+0	2.65E-1	2.03E-1	9.88E+0	4.92E-2	3.30E-1	2.85E-3	-5.05E+0	5.22E+0
PET	MJ	1.03E+1	2.68E-1	8.46E-1	1.14E+1	4.98E-2	3.45E-1	2.95E-3	-6.22E+0	5.55E+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	3.00E-3	2.82E-5	1.56E-3	4.59E-3	5.24E-6	1.98E-4	3.31E-6	-1.92E-3	2.88E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.02E-6	6.37E-7	1.81E-7	2.84E-6	1.18E-7	5.38E-7	3.25E-9	-1.62E-6	1.88E-6
NHWD	kg	1.66E-2	1.54E-2	1.76E-3	3.38E-2	2.87E-3	1.54E-2	1.18E-2	-6.66E-3	5.72E-2
RWD	kg	7.10E-6	1.69E-6	1.93E-7	8.99E-6	3.15E-7	1.24E-6	1.75E-8	-3.42E-6	7.15E-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