

Environmental Profile

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

Ecochain v3.5.64



Product: 3011041 - Ed Tech PP Reducer Type B HTR GY 110x75
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	2.30E-1	1.52E-2	1.64E-2	2.61E-1	3.03E-3	1.66E-1	1.48E-3	-1.42E-1	2.90E-1
GWP-f	kg CO2 eq	2.73E-1	1.52E-2	1.40E-2	3.02E-1	3.03E-3	1.13E-1	1.48E-3	-1.61E-1	2.58E-1
GWP-b	kg CO2 eq	-4.34E-2	9.22E-6	1.18E-3	-4.22E-2	1.84E-6	5.28E-2	1.30E-6	1.95E-2	3.02E-2
GWP-luluc	kg CO2 eq	2.15E-4	5.37E-6	1.18E-3	1.40E-3	1.07E-6	1.71E-5	2.57E-8	-1.87E-4	1.23E-3
ODP	kg CFC11 eq	1.39E-8	3.50E-9	1.40E-9	1.88E-8	6.98E-10	2.51E-9	3.74E-11	-8.35E-9	1.37E-8
AP	mol H+ eq	1.09E-3	8.65E-5	5.65E-5	1.23E-3	1.73E-5	1.05E-4	8.95E-7	-5.22E-4	8.36E-4
EP-fw	kg P eq	5.73E-6	1.25E-7	2.17E-7	6.07E-6	2.49E-8	5.02E-7	1.17E-9	-3.53E-6	3.07E-6
EP-m	kg N eq	2.01E-4	3.09E-5	9.54E-6	2.41E-4	6.18E-6	3.17E-5	6.77E-7	-1.02E-4	1.78E-4
EP-T	mol N eq	2.22E-3	3.41E-4	1.07E-4	2.67E-3	6.81E-5	3.48E-4	3.63E-6	-1.15E-3	1.94E-3
POCP	kg NMVOC eq	9.27E-4	9.75E-5	3.33E-5	1.06E-3	1.95E-5	1.08E-4	1.36E-6	-4.59E-4	7.27E-4
ADP-mm	kg Sb eq	1.44E-5	3.93E-7	3.41E-7	1.51E-5	7.84E-8	4.05E-7	9.02E-10	-1.48E-6	1.41E-5
ADP-f	MJ	8.99E+0	2.33E-1	1.84E-1	9.41E+0	4.65E-2	3.09E-1	2.73E-3	-4.71E+0	5.06E+0
WDP	m3 depriv.	1.81E-1	7.15E-4	6.52E-2	2.47E-1	1.43E-4	6.04E-3	1.44E-5	-1.05E-1	1.49E-1
PM	disease inc.	1.13E-8	1.37E-9	5.65E-10	1.32E-8	2.74E-10	1.66E-9	1.88E-11	-5.90E-9	9.25E-9
IR	kBq U-235 eq	7.62E-3	1.02E-3	1.72E-4	8.81E-3	2.03E-4	9.62E-4	1.27E-5	-3.62E-3	6.37E-3
ETP-fw	CTUe	4.44E+0	1.89E-1	2.91E-1	4.92E+0	3.78E-2	4.03E-1	2.58E-3	-2.24E+0	3.13E+0
HTP-c	CTUh	9.54E-11	6.73E-12	1.55E-11	1.18E-10	1.34E-12	4.27E-11	6.78E-14	-5.09E-11	1.11E-10
HTP-nc	CTUh	2.21E-9	2.26E-10	3.21E-10	2.76E-9	4.50E-11	5.32E-10	1.55E-12	-1.18E-9	2.16E-9
SQP	Pt	4.94E+0	1.99E-1	3.36E-2	5.17E+0	3.98E-2	2.41E-1	7.00E-3	-6.81E+0	-1.35E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	8.45E-1	3.34E-3	6.37E-1	1.49E+0	6.67E-4	1.48E-2	1.07E-4	-1.17E+0	3.32E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	8.45E-1	3.34E-3	6.37E-1	1.49E+0	6.67E-4	1.48E-2	1.07E-4	-1.17E+0	3.32E-1
PENRE	MJ	9.64E+0	2.47E-1	2.01E-1	1.01E+1	4.94E-2	3.29E-1	2.90E-3	-5.07E+0	5.40E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	9.64E+0	2.47E-1	2.01E-1	1.01E+1	4.94E-2	3.29E-1	2.90E-3	-5.07E+0	5.40E+0
PET	MJ	1.05E+1	2.51E-1	8.38E-1	1.16E+1	5.01E-2	3.44E-1	3.00E-3	-6.24E+0	5.73E+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	3.10E-3	2.64E-5	1.55E-3	4.67E-3	5.26E-6	2.07E-4	3.37E-6	-1.92E-3	2.97E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.11E-6	5.96E-7	1.79E-7	2.88E-6	1.19E-7	5.41E-7	3.29E-9	-1.68E-6	1.87E-6
NHWD	kg	1.70E-2	1.44E-2	1.74E-3	3.32E-2	2.88E-3	1.55E-2	1.20E-2	-6.67E-3	5.69E-2
RWD	kg	8.02E-6	1.58E-6	1.91E-7	9.79E-6	3.16E-7	1.23E-6	1.78E-8	-3.46E-6	7.91E-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