

Environmental Profile

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

Ecochain v3.5.64



Product: 3011004 - Ed Tech PP Coupler HTU 32
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	5.03E-2	2.92E-3	2.85E-3	5.60E-2	6.08E-4	4.95E-2	3.16E-4	-2.99E-2	7.66E-2
GWP-f	kg CO2 eq	6.50E-2	2.91E-3	2.44E-3	7.03E-2	6.07E-4	3.20E-2	3.16E-4	-3.62E-2	6.71E-2
GWP-b	kg CO2 eq	-1.47E-2	1.77E-6	2.06E-4	-1.45E-2	3.69E-7	1.75E-2	2.83E-7	6.33E-3	9.29E-3
GWP-luluc	kg CO2 eq	6.83E-5	1.03E-6	2.06E-4	2.75E-4	2.15E-7	3.30E-6	5.77E-9	-5.69E-5	2.22E-4
ODP	kg CFC11 eq	5.89E-9	6.71E-10	2.45E-10	6.80E-9	1.40E-10	5.31E-10	8.11E-12	-2.35E-9	5.14E-9
AP	mol H+ eq	2.92E-4	1.66E-5	9.84E-6	3.18E-4	3.46E-6	2.25E-5	1.96E-7	-1.19E-4	2.26E-4
EP-fw	kg P eq	1.68E-6	2.40E-8	3.79E-8	1.75E-6	5.00E-9	9.84E-8	2.62E-10	-9.41E-7	9.08E-7
EP-m	kg N eq	5.40E-5	5.94E-6	1.66E-6	6.16E-5	1.24E-6	7.04E-6	1.83E-7	-2.44E-5	4.57E-5
EP-T	mol N eq	5.97E-4	6.54E-5	1.87E-5	6.81E-4	1.36E-5	7.74E-5	7.90E-7	-2.76E-4	4.97E-4
POCP	kg NMVOC eq	2.40E-4	1.87E-5	5.80E-6	2.64E-4	3.90E-6	2.35E-5	2.94E-7	-1.04E-4	1.88E-4
ADP-mm	kg Sb eq	7.26E-6	7.54E-8	5.94E-8	7.40E-6	1.57E-8	8.27E-8	1.98E-10	-4.50E-7	7.05E-6
ADP-f	MJ	1.99E+0	4.47E-2	3.21E-2	2.06E+0	9.32E-3	6.16E-2	5.94E-4	-9.76E-1	1.16E+0
WDP	m3 depriv.	4.17E-2	1.37E-4	1.14E-2	5.32E-2	2.86E-5	1.27E-3	3.68E-6	-2.36E-2	3.09E-2
PM	disease inc.	3.25E-9	2.63E-10	9.86E-11	3.61E-9	5.48E-11	3.37E-10	4.08E-12	-1.49E-9	2.52E-9
IR	kBq U-235 eq	2.59E-3	1.95E-4	3.00E-5	2.81E-3	4.08E-5	1.95E-4	2.77E-6	-9.27E-4	2.12E-3
ETP-fw	CTUe	1.46E+0	3.63E-2	5.07E-2	1.55E+0	7.57E-3	9.79E-2	6.73E-4	-6.54E-1	1.00E+0
HTP-c	CTUh	2.86E-11	1.29E-12	2.70E-12	3.26E-11	2.69E-13	8.79E-12	1.54E-14	-1.37E-11	2.80E-11
HTP-nc	CTUh	6.33E-10	4.33E-11	5.60E-11	7.33E-10	9.03E-12	1.12E-10	3.66E-13	-2.98E-10	5.56E-10
SQP	Pt	1.64E+0	3.83E-2	5.85E-3	1.68E+0	7.98E-3	4.69E-2	1.52E-3	-2.21E+0	-4.66E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.71E-1	6.41E-4	1.11E-1	3.83E-1	1.34E-4	2.90E-3	2.36E-5	-3.73E-1	1.25E-2
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.71E-1	6.41E-4	1.11E-1	3.83E-1	1.34E-4	2.90E-3	2.36E-5	-3.73E-1	1.25E-2
PENRE	MJ	2.13E+0	4.75E-2	3.50E-2	2.21E+0	9.90E-3	6.56E-2	6.30E-4	-1.05E+0	1.23E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.13E+0	4.75E-2	3.50E-2	2.21E+0	9.90E-3	6.56E-2	6.30E-4	-1.05E+0	1.23E+0
PET	MJ	2.40E+0	4.81E-2	1.46E-1	2.59E+0	1.00E-2	6.85E-2	6.54E-4	-1.43E+0	1.25E+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	8.10E-4	5.06E-6	2.70E-4	1.09E-3	1.06E-6	5.37E-5	7.30E-7	-4.71E-4	6.70E-4

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	6.98E-7	1.14E-7	3.12E-8	8.43E-7	2.38E-8	1.17E-7	7.20E-10	-4.65E-7	5.20E-7
NHWD	kg	5.18E-3	2.77E-3	3.04E-4	8.26E-3	5.78E-4	3.26E-3	2.60E-3	-1.74E-3	1.30E-2
RWD	kg	3.02E-6	3.04E-7	3.33E-8	3.36E-6	6.34E-8	2.52E-7	3.88E-9	-9.16E-7	2.76E-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