

Environmental Profile

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

Ecochain v3.5.64



Product: 3011009 - Ed Tech PP Coupler HTU 110
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

This document and supporting material contain confidential and proprietary business information of Wavin - IT - SM Maddalena. These materials may be printed or (photo) copied or otherwise used only with the written consent of Wavin - IT - SM Maddalena.

Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	3.23E-1	2.35E-2	1.79E-2	3.64E-1	3.67E-3	2.68E-1	1.92E-3	-1.83E-1	4.54E-1
GWP-f	kg CO2 eq	3.82E-1	2.35E-2	1.53E-2	4.20E-1	3.67E-3	1.97E-1	1.92E-3	-2.11E-1	4.12E-1
GWP-b	kg CO2 eq	-5.93E-2	1.43E-5	1.29E-3	-5.80E-2	2.23E-6	7.11E-2	1.73E-6	2.77E-2	4.09E-2
GWP-luluc	kg CO2 eq	3.36E-4	8.32E-6	1.29E-3	1.63E-3	1.30E-6	1.95E-5	3.40E-8	-2.56E-4	1.40E-3
ODP	kg CFC11 eq	3.41E-8	5.42E-9	1.53E-9	4.10E-8	8.46E-10	3.03E-9	4.92E-11	-1.32E-8	3.17E-8
AP	mol H+ eq	1.67E-3	1.34E-4	6.16E-5	1.86E-3	2.09E-5	1.30E-4	1.19E-6	-6.41E-4	1.37E-3
EP-fw	kg P eq	9.27E-6	1.93E-7	2.37E-7	9.71E-6	3.02E-8	5.79E-7	1.56E-9	-4.59E-6	5.73E-6
EP-m	kg N eq	3.00E-4	4.79E-5	1.04E-5	3.59E-4	7.48E-6	4.03E-5	1.14E-6	-1.29E-4	2.79E-4
EP-T	mol N eq	3.33E-3	5.28E-4	1.17E-4	3.97E-3	8.25E-5	4.43E-4	4.79E-6	-1.45E-3	3.05E-3
POCP	kg NMVOC eq	1.39E-3	1.51E-4	3.63E-5	1.58E-3	2.36E-5	1.35E-4	1.78E-6	-5.65E-4	1.18E-3
ADP-mm	kg Sb eq	4.45E-5	6.08E-7	3.72E-7	4.55E-5	9.50E-8	4.73E-7	1.19E-9	-2.63E-6	4.34E-5
ADP-f	MJ	1.21E+1	3.61E-1	2.01E-1	1.26E+1	5.64E-2	3.59E-1	3.60E-3	-5.75E+0	7.29E+0
WDP	m3 depriv.	2.48E-1	1.11E-3	7.11E-2	3.20E-1	1.73E-4	7.59E-3	1.84E-5	-1.26E-1	2.02E-1
PM	disease inc.	1.83E-8	2.12E-9	6.17E-10	2.10E-8	3.31E-10	1.94E-9	2.47E-11	-7.45E-9	1.58E-8
IR	kBq U-235 eq	1.52E-2	1.58E-3	1.88E-4	1.70E-2	2.46E-4	1.12E-3	1.69E-5	-4.77E-3	1.36E-2
ETP-fw	CTUe	7.30E+0	2.93E-1	3.17E-1	7.91E+0	4.58E-2	5.76E-1	4.13E-3	-3.04E+0	5.50E+0
HTP-c	CTUh	1.51E-10	1.04E-11	1.69E-11	1.79E-10	1.63E-12	4.88E-11	9.03E-14	-6.62E-11	1.63E-10
HTP-nc	CTUh	3.49E-9	3.49E-10	3.51E-10	4.19E-9	5.46E-11	6.49E-10	2.21E-12	-1.50E-9	3.40E-9
SQP	Pt	6.98E+0	3.09E-1	3.66E-2	7.32E+0	4.82E-2	2.75E-1	9.21E-3	-9.34E+0	-1.69E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.19E+0	5.18E-3	6.96E-1	1.89E+0	8.09E-4	1.71E-2	1.46E-4	-1.60E+0	3.09E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.19E+0	5.18E-3	6.96E-1	1.89E+0	8.09E-4	1.71E-2	1.46E-4	-1.60E+0	3.09E-1
PENRE	MJ	1.29E+1	3.83E-1	2.19E-1	1.35E+1	5.98E-2	3.83E-1	3.82E-3	-6.21E+0	7.76E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.29E+1	3.83E-1	2.19E-1	1.35E+1	5.98E-2	3.83E-1	3.82E-3	-6.21E+0	7.76E+0
PET	MJ	1.41E+1	3.88E-1	9.15E-1	1.54E+1	6.06E-2	4.00E-1	3.97E-3	-7.81E+0	8.07E+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	4.70E-3	4.08E-5	1.69E-3	6.43E-3	6.38E-6	3.25E-4	4.45E-6	-2.41E-3	4.35E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	3.74E-6	9.22E-7	1.95E-7	4.86E-6	1.44E-7	6.75E-7	4.33E-9	-2.57E-6	3.12E-6
NHWD	kg	2.74E-2	2.24E-2	1.90E-3	5.16E-2	3.49E-3	1.92E-2	1.58E-2	-8.54E-3	8.15E-2
RWD	kg	1.79E-5	2.45E-6	2.09E-7	2.06E-5	3.83E-7	1.44E-6	2.36E-8	-4.72E-6	1.77E-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



Ecochain Technologies BV
H.J.E. Wenckebachweg 123, 1096 AM Amsterdam, The Netherlands
<https://www.ecochain.com>
+31 20 3035 777