

Environmental Profile

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

Ecochain v3.5.64



Product: 3011007 - Ed Tech PP Coupler HTU 75
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	1.59E-1	8.27E-3	8.25E-3	1.76E-1	1.75E-3	1.35E-1	9.23E-4	-8.61E-2	2.28E-1
GWP-f	kg CO2 eq	1.89E-1	8.26E-3	7.06E-3	2.04E-1	1.74E-3	9.83E-2	9.23E-4	-1.04E-1	2.02E-1
GWP-b	kg CO2 eq	-2.97E-2	5.02E-6	5.96E-4	-2.91E-2	1.06E-6	3.72E-2	8.34E-7	1.76E-2	2.57E-2
GWP-luluc	kg CO2 eq	1.89E-4	2.92E-6	5.96E-4	7.88E-4	6.17E-7	9.27E-6	1.64E-8	-1.53E-4	6.45E-4
ODP	kg CFC11 eq	1.80E-8	1.90E-9	7.09E-10	2.06E-8	4.02E-10	1.49E-9	2.37E-11	-6.83E-9	1.57E-8
AP	mol H+ eq	8.39E-4	4.70E-5	2.85E-5	9.14E-4	9.93E-6	6.38E-5	5.71E-7	-3.25E-4	6.63E-4
EP-fw	kg P eq	4.84E-6	6.80E-8	1.10E-7	5.02E-6	1.43E-8	2.77E-7	7.50E-10	-2.56E-6	2.75E-6
EP-m	kg N eq	1.54E-4	1.68E-5	4.81E-6	1.76E-4	3.55E-6	2.00E-5	5.63E-7	-6.63E-5	1.34E-4
EP-T	mol N eq	1.70E-3	1.86E-4	5.41E-5	1.94E-3	3.92E-5	2.20E-4	2.31E-6	-7.50E-4	1.45E-3
POCP	kg NMVOC eq	6.98E-4	5.30E-5	1.68E-5	7.68E-4	1.12E-5	6.66E-5	8.58E-7	-2.83E-4	5.64E-4
ADP-mm	kg Sb eq	2.33E-5	2.14E-7	1.72E-7	2.36E-5	4.51E-8	2.32E-7	5.72E-10	-1.34E-6	2.26E-5
ADP-f	MJ	5.87E+0	1.27E-1	9.30E-2	6.09E+0	2.68E-2	1.73E-1	1.73E-3	-2.77E+0	3.52E+0
WDP	m3 depriv.	1.21E-1	3.89E-4	3.29E-2	1.54E-1	8.22E-5	3.66E-3	8.91E-6	-6.57E-2	9.25E-2
PM	disease inc.	9.35E-9	7.46E-10	2.85E-10	1.04E-8	1.57E-10	9.45E-10	1.19E-11	-3.96E-9	7.53E-9
IR	kBq U-235 eq	7.88E-3	5.54E-4	8.67E-5	8.52E-3	1.17E-4	5.46E-4	8.12E-6	-2.56E-3	6.63E-3
ETP-fw	CTUe	4.13E+0	1.03E-1	1.47E-1	4.38E+0	2.17E-2	2.88E-1	2.04E-3	-1.79E+0	2.91E+0
HTP-c	CTUh	7.71E-11	3.66E-12	7.82E-12	8.86E-11	7.74E-13	2.36E-11	4.36E-14	-3.45E-11	7.84E-11
HTP-nc	CTUh	1.78E-9	1.23E-10	1.62E-10	2.07E-9	2.59E-11	3.15E-10	1.08E-12	-8.02E-10	1.61E-9
SQP	Pt	3.64E+0	1.08E-1	1.69E-2	3.77E+0	2.29E-2	1.31E-1	4.43E-3	-5.33E+0	-1.41E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	6.24E-1	1.82E-3	3.22E-1	9.48E-1	3.84E-4	8.19E-3	7.03E-5	-9.18E-1	3.84E-2
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	6.24E-1	1.82E-3	3.22E-1	9.48E-1	3.84E-4	8.19E-3	7.03E-5	-9.18E-1	3.84E-2
PENRE	MJ	6.29E+0	1.35E-1	1.01E-1	6.52E+0	2.84E-2	1.85E-1	1.84E-3	-2.99E+0	3.74E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	6.29E+0	1.35E-1	1.01E-1	6.52E+0	2.84E-2	1.85E-1	1.84E-3	-2.99E+0	3.74E+0
PET	MJ	6.91E+0	1.36E-1	4.23E-1	7.47E+0	2.88E-2	1.93E-1	1.91E-3	-3.91E+0	3.78E+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	2.36E-3	1.43E-5	7.81E-4	3.15E-3	3.03E-6	1.61E-4	2.14E-6	-1.31E-3	2.01E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.95E-6	3.24E-7	9.03E-8	2.37E-6	6.85E-8	3.33E-7	2.09E-9	-1.32E-6	1.45E-6
NHWD	kg	1.43E-2	7.86E-3	8.80E-4	2.30E-2	1.66E-3	9.29E-3	7.61E-3	-4.46E-3	3.71E-2
RWD	kg	9.34E-6	8.62E-7	9.64E-8	1.03E-5	1.82E-7	7.05E-7	1.13E-8	-2.53E-6	8.67E-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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