

Environmental Profile

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

Ecochain v3.5.64



Product: 3011080 - Ed Tech PP Endcap HTM 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

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Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	1.13E-1	8.67E-3	9.30E-3	1.31E-1	1.66E-3	8.38E-2	7.82E-4	-7.53E-2	1.42E-1
GWP-f	kg CO2 eq	1.41E-1	8.66E-3	7.96E-3	1.58E-1	1.66E-3	4.92E-2	7.82E-4	-8.70E-2	1.23E-1
GWP-b	kg CO2 eq	-2.87E-2	5.26E-6	6.72E-4	-2.80E-2	1.01E-6	3.46E-2	6.80E-7	1.18E-2	1.84E-2
GWP-luluc	kg CO2 eq	1.16E-4	3.07E-6	6.72E-4	7.91E-4	5.87E-7	9.70E-6	1.34E-8	-1.13E-4	6.89E-4
ODP	kg CFC11 eq	4.26E-9	2.00E-9	7.99E-10	7.05E-9	3.82E-10	1.41E-9	1.96E-11	-4.15E-9	4.71E-9
AP	mol H+ eq	5.39E-4	4.93E-5	3.21E-5	6.21E-4	9.45E-6	5.78E-5	4.68E-7	-2.98E-4	3.90E-4
EP-fw	kg P eq	2.80E-6	7.13E-8	1.24E-7	3.00E-6	1.36E-8	2.83E-7	6.12E-10	-2.07E-6	1.22E-6
EP-m	kg N eq	1.03E-4	1.77E-5	5.42E-6	1.26E-4	3.38E-6	1.74E-5	3.04E-7	-5.82E-5	8.86E-5
EP-T	mol N eq	1.13E-3	1.95E-4	6.10E-5	1.38E-3	3.72E-5	1.91E-4	1.90E-6	-6.56E-4	9.56E-4
POCP	kg NMVOC eq	4.64E-4	5.56E-5	1.89E-5	5.39E-4	1.06E-5	5.99E-5	7.13E-7	-2.62E-4	3.48E-4
ADP-mm	kg Sb eq	2.13E-6	2.24E-7	1.94E-7	2.55E-6	4.29E-8	2.30E-7	4.73E-10	-6.56E-7	2.17E-6
ADP-f	MJ	4.72E+0	1.33E-1	1.05E-1	4.96E+0	2.55E-2	1.75E-1	1.43E-3	-2.60E+0	2.56E+0
WDP	m3 depriv.	9.41E-2	4.08E-4	3.71E-2	1.32E-1	7.81E-5	3.27E-3	7.51E-6	-6.03E-2	7.46E-2
PM	disease inc.	5.46E-9	7.82E-10	3.22E-10	6.56E-9	1.50E-10	9.40E-10	9.85E-12	-3.46E-9	4.20E-9
IR	kBq U-235 eq	3.02E-3	5.81E-4	9.77E-5	3.70E-3	1.11E-4	5.46E-4	6.63E-6	-2.05E-3	2.31E-3
ETP-fw	CTUe	2.28E+0	1.08E-1	1.65E-1	2.55E+0	2.07E-2	2.06E-1	1.20E-3	-1.32E+0	1.46E+0
HTP-c	CTUh	4.81E-11	3.84E-12	8.81E-12	6.08E-11	7.36E-13	2.42E-11	3.52E-14	-3.03E-11	5.55E-11
HTP-nc	CTUh	1.08E-9	1.29E-10	1.83E-10	1.39E-9	2.46E-11	2.94E-10	7.73E-13	-6.88E-10	1.02E-9
SQP	Pt	3.10E+0	1.14E-1	1.91E-2	3.23E+0	2.18E-2	1.37E-1	3.67E-3	-4.29E+0	-8.89E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	5.21E-1	1.91E-3	3.63E-1	8.85E-1	3.65E-4	8.37E-3	5.53E-5	-7.30E-1	1.64E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	5.21E-1	1.91E-3	3.63E-1	8.85E-1	3.65E-4	8.37E-3	5.53E-5	-7.30E-1	1.64E-1
PENRE	MJ	5.07E+0	1.41E-1	1.14E-1	5.33E+0	2.70E-2	1.86E-1	1.52E-3	-2.80E+0	2.74E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	5.07E+0	1.41E-1	1.14E-1	5.33E+0	2.70E-2	1.86E-1	1.52E-3	-2.80E+0	2.74E+0
PET	MJ	5.59E+0	1.43E-1	4.77E-1	6.21E+0	2.74E-2	1.94E-1	1.57E-3	-3.53E+0	2.91E+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	1.52E-3	1.50E-5	8.81E-4	2.42E-3	2.88E-6	9.85E-5	1.76E-6	-1.11E-3	1.41E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	9.73E-7	3.40E-7	1.02E-7	1.41E-6	6.51E-8	2.97E-7	1.73E-9	-8.64E-7	9.15E-7
NHWD	kg	8.44E-3	8.24E-3	9.92E-4	1.77E-2	1.58E-3	8.51E-3	6.31E-3	-3.96E-3	3.01E-2
RWD	kg	2.79E-6	9.04E-7	1.09E-7	3.80E-6	1.73E-7	7.02E-7	9.34E-9	-1.94E-6	2.74E-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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