

Environmental Profile

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

Ecochain v3.5.64



Product: 3018728 - Ed Tech PP Bend HTB 67,5° 40
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	7.60E-2	5.53E-3	4.80E-3	8.64E-2	9.50E-4	5.93E-2	4.78E-4	-4.60E-2	1.01E-1
GWP-f	kg CO2 eq	9.06E-2	5.53E-3	4.11E-3	1.00E-1	9.50E-4	4.19E-2	4.78E-4	-5.18E-2	9.18E-2
GWP-b	kg CO2 eq	-1.46E-2	3.36E-6	3.47E-4	-1.43E-2	5.77E-7	1.73E-2	4.24E-7	5.88E-3	8.91E-3
GWP-luluc	kg CO2 eq	7.26E-5	1.96E-6	3.47E-4	4.21E-4	3.36E-7	5.21E-6	8.48E-9	-5.72E-5	3.70E-4
ODP	kg CFC11 eq	6.27E-9	1.27E-9	4.12E-10	7.96E-9	2.19E-10	7.75E-10	1.22E-11	-2.91E-9	6.06E-9
AP	mol H+ eq	3.81E-4	3.15E-5	1.66E-5	4.29E-4	5.41E-6	3.28E-5	2.92E-7	-1.61E-4	3.06E-4
EP-fw	kg P eq	2.03E-6	4.55E-8	6.38E-8	2.14E-6	7.81E-9	1.53E-7	3.86E-10	-1.08E-6	1.22E-6
EP-m	kg N eq	6.85E-5	1.13E-5	2.80E-6	8.25E-5	1.94E-6	1.00E-5	2.46E-7	-3.18E-5	6.29E-5
EP-T	mol N eq	7.62E-4	1.24E-4	3.15E-5	9.18E-4	2.13E-5	1.10E-4	1.18E-6	-3.58E-4	6.92E-4
POCP	kg NMVOC eq	3.19E-4	3.55E-5	9.77E-6	3.64E-4	6.10E-6	3.39E-5	4.41E-7	-1.43E-4	2.61E-4
ADP-mm	kg Sb eq	7.60E-6	1.43E-7	1.00E-7	7.84E-6	2.46E-8	1.23E-7	2.95E-10	-5.52E-7	7.44E-6
ADP-f	MJ	2.92E+0	8.49E-2	5.41E-2	3.06E+0	1.46E-2	9.46E-2	8.89E-4	-1.47E+0	1.69E+0
WDP	m3 depriv.	5.98E-2	2.60E-4	1.91E-2	7.92E-2	4.47E-5	1.92E-3	5.03E-6	-3.17E-2	4.95E-2
PM	disease inc.	4.02E-9	4.99E-10	1.66E-10	4.69E-9	8.57E-11	5.07E-10	6.10E-12	-1.82E-9	3.46E-9
IR	kBq U-235 eq	3.04E-3	3.71E-4	5.05E-5	3.46E-3	6.37E-5	2.94E-4	4.14E-6	-1.14E-3	2.68E-3
ETP-fw	CTUe	1.54E+0	6.89E-2	8.53E-2	1.70E+0	1.18E-2	1.35E-1	9.20E-4	-6.86E-1	1.16E+0
HTP-c	CTUh	3.42E-11	2.45E-12	4.55E-12	4.12E-11	4.21E-13	1.32E-11	2.25E-14	-1.61E-11	3.87E-11
HTP-nc	CTUh	7.89E-10	8.21E-11	9.44E-11	9.66E-10	1.41E-11	1.67E-10	5.25E-13	-3.65E-10	7.83E-10
SQP	Pt	1.66E+0	7.26E-2	9.85E-3	1.74E+0	1.25E-2	7.33E-2	2.27E-3	-2.15E+0	-3.23E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.81E-1	1.22E-3	1.87E-1	4.69E-1	2.09E-4	4.54E-3	3.51E-5	-3.67E-1	1.07E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.81E-1	1.22E-3	1.87E-1	4.69E-1	2.09E-4	4.54E-3	3.51E-5	-3.67E-1	1.07E-1
PENRE	MJ	3.13E+0	9.01E-2	5.90E-2	3.28E+0	1.55E-2	1.01E-1	9.43E-4	-1.59E+0	1.80E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.13E+0	9.01E-2	5.90E-2	3.28E+0	1.55E-2	1.01E-1	9.43E-4	-1.59E+0	1.80E+0
PET	MJ	3.41E+0	9.13E-2	2.46E-1	3.75E+0	1.57E-2	1.05E-1	9.78E-4	-1.96E+0	1.91E+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	1.08E-3	9.60E-6	4.54E-4	1.54E-3	1.65E-6	7.27E-5	1.09E-6	-5.86E-4	1.03E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	7.97E-7	2.17E-7	5.25E-8	1.07E-6	3.73E-8	1.70E-7	1.07E-9	-5.76E-7	7.00E-7
NHWD	kg	6.09E-3	5.26E-3	5.12E-4	1.19E-2	9.03E-4	4.88E-3	3.90E-3	-2.10E-3	1.95E-2
RWD	kg	3.41E-6	5.77E-7	5.61E-8	4.04E-6	9.91E-8	3.77E-7	5.80E-9	-1.10E-6	3.42E-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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