

Environmental Profile

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

Ecochain v3.5.64



Product: 3010780 - Ed Tech PP Bend HTB 87,5° 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	4.99E-2	3.46E-3	3.60E-3	5.70E-2	6.99E-4	4.41E-2	3.44E-4	-3.38E-2	6.83E-2
GWP-f	kg CO2 eq	6.45E-2	3.46E-3	3.08E-3	7.10E-2	6.98E-4	2.76E-2	3.44E-4	-3.77E-2	6.19E-2
GWP-b	kg CO2 eq	-1.46E-2	2.10E-6	2.60E-4	-1.43E-2	4.24E-7	1.65E-2	3.03E-7	3.99E-3	6.16E-3
GWP-luluc	kg CO2 eq	5.12E-5	1.22E-6	2.60E-4	3.13E-4	2.47E-7	3.91E-6	6.14E-9	-4.17E-5	2.75E-4
ODP	kg CFC11 eq	3.79E-9	7.97E-10	3.09E-10	4.89E-9	1.61E-10	5.74E-10	8.73E-12	-2.02E-9	3.62E-9
AP	mol H+ eq	2.67E-4	1.97E-5	1.24E-5	2.99E-4	3.98E-6	2.41E-5	2.10E-7	-1.21E-4	2.06E-4
EP-fw	kg P eq	1.40E-6	2.85E-8	4.79E-8	1.48E-6	5.75E-9	1.15E-7	2.79E-10	-7.95E-7	8.03E-7
EP-m	kg N eq	4.84E-5	7.05E-6	2.10E-6	5.76E-5	1.42E-6	7.31E-6	1.63E-7	-2.40E-5	4.25E-5
EP-T	mol N eq	5.40E-4	7.77E-5	2.36E-5	6.42E-4	1.57E-5	8.04E-5	8.49E-7	-2.70E-4	4.68E-4
POCP	kg NMVOC eq	2.24E-4	2.22E-5	7.33E-6	2.54E-4	4.49E-6	2.49E-5	3.17E-7	-1.09E-4	1.75E-4
ADP-mm	kg Sb eq	4.18E-6	8.95E-8	7.50E-8	4.35E-6	1.81E-8	9.21E-8	2.13E-10	-3.69E-7	4.09E-6
ADP-f	MJ	2.08E+0	5.31E-2	4.06E-2	2.17E+0	1.07E-2	7.07E-2	6.38E-4	-1.09E+0	1.17E+0
WDP	m3 depriv.	4.27E-2	1.63E-4	1.43E-2	5.72E-2	3.29E-5	1.40E-3	3.88E-6	-2.33E-2	3.53E-2
PM	disease inc.	2.80E-9	3.12E-10	1.24E-10	3.24E-9	6.31E-11	3.78E-10	4.39E-12	-1.39E-9	2.30E-9
IR	kBq U-235 eq	1.94E-3	2.32E-4	3.78E-5	2.21E-3	4.69E-5	2.20E-4	2.96E-6	-8.33E-4	1.65E-3
ETP-fw	CTUe	1.04E+0	4.31E-2	6.40E-2	1.15E+0	8.71E-3	9.44E-2	6.22E-4	-4.94E-1	7.60E-1
HTP-c	CTUh	2.53E-11	1.53E-12	3.41E-12	3.03E-11	3.10E-13	1.00E-11	1.63E-14	-1.31E-11	2.76E-11
HTP-nc	CTUh	5.57E-10	5.14E-11	7.08E-11	6.79E-10	1.04E-11	1.23E-10	3.69E-13	-2.75E-10	5.38E-10
SQP	Pt	1.51E+0	4.54E-2	7.39E-3	1.56E+0	9.17E-3	5.51E-2	1.63E-3	-1.80E+0	-1.66E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.47E-1	7.61E-4	1.40E-1	3.89E-1	1.54E-4	3.39E-3	2.48E-5	-3.00E-1	9.19E-2
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.47E-1	7.61E-4	1.40E-1	3.89E-1	1.54E-4	3.39E-3	2.48E-5	-3.00E-1	9.19E-2
PENRE	MJ	2.23E+0	5.64E-2	4.42E-2	2.33E+0	1.14E-2	7.53E-2	6.77E-4	-1.17E+0	1.24E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.23E+0	5.64E-2	4.42E-2	2.33E+0	1.14E-2	7.53E-2	6.77E-4	-1.17E+0	1.24E+0
PET	MJ	2.48E+0	5.71E-2	1.85E-1	2.72E+0	1.15E-2	7.87E-2	7.02E-4	-1.47E+0	1.34E+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	7.50E-4	6.01E-6	3.41E-4	1.10E-3	1.21E-6	4.96E-5	7.85E-7	-4.27E-4	7.21E-4

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	5.57E-7	1.36E-7	3.94E-8	7.32E-7	2.74E-8	1.25E-7	7.75E-10	-4.15E-7	4.70E-7
NHWD	kg	4.36E-3	3.29E-3	3.84E-4	8.04E-3	6.65E-4	3.58E-3	2.80E-3	-1.67E-3	1.34E-2
RWD	kg	2.10E-6	3.61E-7	4.21E-8	2.50E-6	7.29E-8	2.82E-7	4.16E-9	-8.07E-7	2.05E-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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