

Environmental Profile

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

Ecochain v3.5.64



Product: 3018743 - Ed Tech PP Bend HTB 67,5° 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	3.79E-1	2.95E-2	2.76E-2	4.36E-1	5.13E-3	3.19E-1	2.51E-3	-2.40E-1	5.24E-1
GWP-f	kg CO2 eq	4.80E-1	2.95E-2	2.36E-2	5.34E-1	5.13E-3	1.97E-1	2.51E-3	-2.84E-1	4.54E-1
GWP-b	kg CO2 eq	-1.02E-1	1.79E-5	2.00E-3	-9.96E-2	3.11E-6	1.23E-1	2.22E-6	4.47E-2	6.78E-2
GWP-luluc	kg CO2 eq	4.47E-4	1.04E-5	1.99E-3	2.45E-3	1.81E-6	2.92E-5	4.35E-8	-4.11E-4	2.07E-3
ODP	kg CFC11 eq	2.67E-8	6.79E-9	2.37E-9	3.58E-8	1.18E-9	4.43E-9	6.35E-11	-1.56E-8	2.59E-8
AP	mol H+ eq	1.95E-3	1.68E-4	9.53E-5	2.22E-3	2.92E-5	1.84E-4	1.52E-6	-9.60E-4	1.47E-3
EP-fw	kg P eq	1.08E-5	2.43E-7	3.67E-7	1.14E-5	4.22E-8	8.61E-7	1.99E-9	-7.14E-6	5.14E-6
EP-m	kg N eq	3.70E-4	6.01E-5	1.61E-5	4.47E-4	1.04E-5	5.62E-5	1.17E-6	-1.92E-4	3.23E-4
EP-T	mol N eq	4.06E-3	6.62E-4	1.81E-4	4.91E-3	1.15E-4	6.18E-4	6.17E-6	-2.17E-3	3.48E-3
POCP	kg NMVOC eq	1.66E-3	1.89E-4	5.62E-5	1.91E-3	3.29E-5	1.91E-4	2.31E-6	-8.41E-4	1.29E-3
ADP-mm	kg Sb eq	2.66E-5	7.62E-7	5.75E-7	2.80E-5	1.33E-7	7.10E-7	1.53E-9	-2.70E-6	2.61E-5
ADP-f	MJ	1.55E+1	4.52E-1	3.11E-1	1.63E+1	7.87E-2	5.34E-1	4.64E-3	-8.13E+0	8.79E+0
WDP	m3 depriv.	3.14E-1	1.39E-3	1.10E-1	4.25E-1	2.41E-4	1.03E-2	2.41E-5	-1.94E-1	2.42E-1
PM	disease inc.	2.09E-8	2.66E-9	9.54E-10	2.45E-8	4.63E-10	2.90E-9	3.19E-11	-1.16E-8	1.63E-8
IR	kBq U-235 eq	1.41E-2	1.98E-3	2.90E-4	1.63E-2	3.44E-4	1.68E-3	2.16E-5	-7.02E-3	1.13E-2
ETP-fw	CTUe	9.16E+0	3.67E-1	4.91E-1	1.00E+1	6.39E-2	7.10E-1	4.44E-3	-4.77E+0	6.03E+0
HTP-c	CTUh	1.81E-10	1.31E-11	2.62E-11	2.21E-10	2.27E-12	7.38E-11	1.15E-13	-1.03E-10	1.94E-10
HTP-nc	CTUh	4.05E-9	4.38E-10	5.43E-10	5.03E-9	7.62E-11	9.21E-10	2.64E-12	-2.31E-9	3.72E-9
SQP	Pt	1.12E+1	3.87E-1	5.66E-2	1.17E+1	6.73E-2	4.14E-1	1.19E-2	-1.56E+1	-3.44E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.87E+0	6.49E-3	1.08E+0	2.96E+0	1.13E-3	2.54E-2	1.82E-4	-2.65E+0	3.31E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.87E+0	6.49E-3	1.08E+0	2.96E+0	1.13E-3	2.54E-2	1.82E-4	-2.65E+0	3.31E-1
PENRE	MJ	1.67E+1	4.80E-1	3.39E-1	1.75E+1	8.35E-2	5.69E-1	4.92E-3	-8.76E+0	9.38E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.67E+1	4.80E-1	3.39E-1	1.75E+1	8.35E-2	5.69E-1	4.92E-3	-8.76E+0	9.38E+0
PET	MJ	1.85E+1	4.87E-1	1.42E+0	2.04E+1	8.47E-2	5.94E-1	5.11E-3	-1.14E+1	9.71E+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	5.48E-3	5.12E-5	2.61E-3	8.15E-3	8.90E-6	3.61E-4	5.72E-6	-3.71E-3	4.81E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	4.04E-6	1.16E-6	3.02E-7	5.50E-6	2.01E-7	9.49E-7	5.60E-9	-3.17E-6	3.49E-6
NHWD	kg	3.24E-2	2.80E-2	2.95E-3	6.34E-2	4.88E-3	2.68E-2	2.04E-2	-1.33E-2	1.02E-1
RWD	kg	1.50E-5	3.08E-6	3.23E-7	1.84E-5	5.35E-7	2.16E-6	3.03E-8	-6.76E-6	1.43E-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