

Environmental Profile

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

Ecochain v3.5.64



Product: 3011039 - Ed Tech PP Reducer Type B HTR GY 75x50
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	1.05E-1	7.22E-3	6.45E-3	1.19E-1	1.25E-3	7.27E-2	6.26E-4	-5.85E-2	1.35E-1
GWP-f	kg CO2 eq	1.19E-1	7.21E-3	5.52E-3	1.32E-1	1.25E-3	5.34E-2	6.26E-4	-6.88E-2	1.19E-1
GWP-b	kg CO2 eq	-1.45E-2	4.38E-6	4.66E-4	-1.40E-2	7.61E-7	1.93E-2	5.55E-7	1.03E-2	1.55E-2
GWP-luluc	kg CO2 eq	1.05E-4	2.55E-6	4.66E-4	5.74E-4	4.43E-7	6.97E-6	1.10E-8	-9.11E-5	4.90E-4
ODP	kg CFC11 eq	7.83E-9	1.66E-9	5.54E-10	1.00E-8	2.89E-10	1.06E-9	1.59E-11	-3.86E-9	7.55E-9
AP	mol H+ eq	4.96E-4	4.11E-5	2.23E-5	5.59E-4	7.14E-6	4.42E-5	3.82E-7	-2.21E-4	3.90E-4
EP-fw	kg P eq	2.72E-6	5.94E-8	8.58E-8	2.86E-6	1.03E-8	2.06E-7	5.02E-10	-1.62E-6	1.46E-6
EP-m	kg N eq	9.14E-5	1.47E-5	3.76E-6	1.10E-4	2.55E-6	1.36E-5	3.14E-7	-4.36E-5	8.26E-5
EP-T	mol N eq	1.01E-3	1.62E-4	4.23E-5	1.21E-3	2.81E-5	1.49E-4	1.54E-6	-4.92E-4	8.98E-4
POCP	kg NMVOC eq	4.14E-4	4.63E-5	1.31E-5	4.74E-4	8.04E-6	4.59E-5	5.77E-7	-1.92E-4	3.36E-4
ADP-mm	kg Sb eq	9.01E-6	1.87E-7	1.34E-7	9.33E-6	3.24E-8	1.69E-7	3.84E-10	-7.06E-7	8.82E-6
ADP-f	MJ	3.85E+0	1.11E-1	7.27E-2	4.03E+0	1.92E-2	1.27E-1	1.16E-3	-1.96E+0	2.22E+0
WDP	m3 depriv.	7.85E-2	3.40E-4	2.57E-2	1.05E-1	5.90E-5	2.54E-3	6.28E-6	-4.56E-2	6.16E-2
PM	disease inc.	5.23E-9	6.51E-10	2.23E-10	6.10E-9	1.13E-10	6.88E-10	7.98E-12	-2.57E-9	4.35E-9
IR	kBq U-235 eq	3.87E-3	4.84E-4	6.78E-5	4.42E-3	8.40E-5	3.98E-4	5.41E-6	-1.62E-3	3.28E-3
ETP-fw	CTUe	2.27E+0	8.99E-2	1.15E-1	2.47E+0	1.56E-2	1.79E-1	1.18E-3	-1.08E+0	1.59E+0
HTP-c	CTUh	4.27E-11	3.20E-12	6.11E-12	5.21E-11	5.56E-13	1.76E-11	2.91E-14	-2.11E-11	4.92E-11
HTP-nc	CTUh	1.02E-9	1.07E-10	1.27E-10	1.26E-9	1.86E-11	2.23E-10	6.78E-13	-5.19E-10	9.81E-10
SQP	Pt	1.88E+0	9.47E-2	1.32E-2	1.99E+0	1.65E-2	9.84E-2	2.97E-3	-2.97E+0	-8.62E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	3.32E-1	1.59E-3	2.51E-1	5.85E-1	2.76E-4	6.08E-3	4.59E-5	-5.18E-1	7.37E-2
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	3.32E-1	1.59E-3	2.51E-1	5.85E-1	2.76E-4	6.08E-3	4.59E-5	-5.18E-1	7.37E-2
PENRE	MJ	4.12E+0	1.18E-1	7.93E-2	4.32E+0	2.04E-2	1.36E-1	1.23E-3	-2.11E+0	2.37E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	4.12E+0	1.18E-1	7.93E-2	4.32E+0	2.04E-2	1.36E-1	1.23E-3	-2.11E+0	2.37E+0
PET	MJ	4.46E+0	1.19E-1	3.31E-1	4.91E+0	2.07E-2	1.42E-1	1.28E-3	-2.63E+0	2.44E+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	1.41E-3	1.25E-5	6.11E-4	2.03E-3	2.18E-6	9.42E-5	1.43E-6	-8.66E-4	1.26E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.02E-6	2.83E-7	7.06E-8	1.37E-6	4.92E-8	2.29E-7	1.40E-9	-7.51E-7	8.99E-7
NHWD	kg	7.94E-3	6.86E-3	6.88E-4	1.55E-2	1.19E-3	6.50E-3	5.11E-3	-2.79E-3	2.55E-2
RWD	kg	4.27E-6	7.53E-7	7.54E-8	5.10E-6	1.31E-7	5.13E-7	7.59E-9	-1.56E-6	4.19E-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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