

Environmental Profile

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

Ecochain v3.5.64



Product: 3011026 - Ed Tech PP Reducer Type A HTR 75x110
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

This document and supporting material contain confidential and proprietary business information of Wavin - IT - SM Maddalena. These materials may be printed or (photo) copied or otherwise used only with the written consent of Wavin - IT - SM Maddalena.

Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	2.22E-1	1.47E-2	1.58E-2	2.52E-1	2.93E-3	1.63E-1	1.43E-3	-1.37E-1	2.82E-1
GWP-f	kg CO2 eq	2.65E-1	1.47E-2	1.35E-2	2.93E-1	2.92E-3	1.10E-1	1.43E-3	-1.56E-1	2.51E-1
GWP-b	kg CO2 eq	-4.34E-2	8.90E-6	1.14E-3	-4.22E-2	1.78E-6	5.28E-2	1.26E-6	1.96E-2	3.01E-2
GWP-luluc	kg CO2 eq	2.13E-4	5.19E-6	1.14E-3	1.36E-3	1.04E-6	1.65E-5	2.48E-8	-1.86E-4	1.19E-3
ODP	kg CFC11 eq	1.38E-8	3.38E-9	1.35E-9	1.85E-8	6.74E-10	2.43E-9	3.61E-11	-8.17E-9	1.35E-8
AP	mol H+ eq	1.06E-3	8.35E-5	5.44E-5	1.20E-3	1.67E-5	1.01E-4	8.65E-7	-5.08E-4	8.13E-4
EP-fw	kg P eq	5.62E-6	1.21E-7	2.09E-7	5.95E-6	2.41E-8	4.85E-7	1.14E-9	-3.47E-6	2.98E-6
EP-m	kg N eq	1.96E-4	2.99E-5	9.19E-6	2.35E-4	5.96E-6	3.07E-5	6.57E-7	-9.94E-5	1.73E-4
EP-T	mol N eq	2.17E-3	3.29E-4	1.03E-4	2.60E-3	6.57E-5	3.38E-4	3.51E-6	-1.12E-3	1.89E-3
POCP	kg NMVOC eq	9.02E-4	9.41E-5	3.21E-5	1.03E-3	1.88E-5	1.05E-4	1.31E-6	-4.47E-4	7.07E-4
ADP-mm	kg Sb eq	1.43E-5	3.79E-7	3.28E-7	1.50E-5	7.57E-8	3.92E-7	8.72E-10	-1.44E-6	1.40E-5
ADP-f	MJ	8.70E+0	2.25E-1	1.77E-1	9.10E+0	4.49E-2	2.99E-1	2.64E-3	-4.55E+0	4.90E+0
WDP	m3 depriv.	1.76E-1	6.91E-4	6.28E-2	2.39E-1	1.38E-4	5.84E-3	1.40E-5	-1.02E-1	1.43E-1
PM	disease inc.	1.10E-8	1.32E-9	5.45E-10	1.29E-8	2.64E-10	1.61E-9	1.81E-11	-5.79E-9	8.99E-9
IR	kBq U-235 eq	7.48E-3	9.84E-4	1.66E-4	8.63E-3	1.96E-4	9.31E-4	1.23E-5	-3.54E-3	6.22E-3
ETP-fw	CTUe	4.40E+0	1.83E-1	2.80E-1	4.87E+0	3.65E-2	3.91E-1	2.50E-3	-2.22E+0	3.08E+0
HTP-c	CTUh	9.36E-11	6.50E-12	1.49E-11	1.15E-10	1.30E-12	4.13E-11	6.56E-14	-5.01E-11	1.08E-10
HTP-nc	CTUh	2.16E-9	2.18E-10	3.10E-10	2.69E-9	4.35E-11	5.15E-10	1.50E-12	-1.16E-9	2.09E-9
SQP	Pt	4.93E+0	1.93E-1	3.23E-2	5.15E+0	3.84E-2	2.33E-1	6.76E-3	-6.80E+0	-1.37E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	8.41E-1	3.23E-3	6.14E-1	1.46E+0	6.44E-4	1.43E-2	1.03E-4	-1.17E+0	3.06E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	8.41E-1	3.23E-3	6.14E-1	1.46E+0	6.44E-4	1.43E-2	1.03E-4	-1.17E+0	3.06E-1
PENRE	MJ	9.33E+0	2.39E-1	1.94E-1	9.77E+0	4.77E-2	3.18E-1	2.80E-3	-4.91E+0	5.23E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	9.33E+0	2.39E-1	1.94E-1	9.77E+0	4.77E-2	3.18E-1	2.80E-3	-4.91E+0	5.23E+0
PET	MJ	1.02E+1	2.42E-1	8.07E-1	1.12E+1	4.83E-2	3.33E-1	2.90E-3	-6.07E+0	5.53E+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	3.01E-3	2.55E-5	1.49E-3	4.53E-3	5.08E-6	2.01E-4	3.25E-6	-1.88E-3	2.86E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.08E-6	5.76E-7	1.72E-7	2.82E-6	1.15E-7	5.24E-7	3.18E-9	-1.64E-6	1.82E-6
NHWD	kg	1.67E-2	1.40E-2	1.68E-3	3.23E-2	2.78E-3	1.50E-2	1.16E-2	-6.56E-3	5.52E-2
RWD	kg	7.89E-6	1.53E-6	1.84E-7	9.61E-6	3.05E-7	1.20E-6	1.72E-8	-3.39E-6	7.73E-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



Ecochain Technologies BV
H.J.E. Wenckebachweg 123, 1096 AM Amsterdam, The Netherlands
<https://www.ecochain.com>
+31 20 3035 777