

Environmental Profile

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

Ecochain v3.5.64



Product: 3011028 - Ed Tech Reducer Type A HTR 110x125
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	3.30E-1	2.39E-2	2.24E-2	3.77E-1	4.21E-3	2.39E-1	2.08E-3	-1.99E-1	4.23E-1
GWP-f	kg CO2 eq	3.88E-1	2.39E-2	1.91E-2	4.31E-1	4.20E-3	1.68E-1	2.08E-3	-2.26E-1	3.80E-1
GWP-b	kg CO2 eq	-5.80E-2	1.45E-5	1.62E-3	-5.64E-2	2.55E-6	7.11E-2	1.84E-6	2.76E-2	4.22E-2
GWP-luluc	kg CO2 eq	3.10E-4	8.47E-6	1.62E-3	1.93E-3	1.49E-6	2.35E-5	3.63E-8	-2.61E-4	1.70E-3
ODP	kg CFC11 eq	2.26E-8	5.51E-9	1.92E-9	3.01E-8	9.69E-10	3.47E-9	5.26E-11	-1.21E-8	2.25E-8
AP	mol H+ eq	1.58E-3	1.36E-4	7.72E-5	1.79E-3	2.40E-5	1.45E-4	1.26E-6	-7.21E-4	1.24E-3
EP-fw	kg P eq	8.38E-6	1.97E-7	2.97E-7	8.88E-6	3.46E-8	6.90E-7	1.66E-9	-4.91E-6	4.70E-6
EP-m	kg N eq	2.89E-4	4.88E-5	1.30E-5	3.50E-4	8.57E-6	4.42E-5	1.00E-6	-1.41E-4	2.63E-4
EP-T	mol N eq	3.19E-3	5.37E-4	1.46E-4	3.88E-3	9.44E-5	4.86E-4	5.11E-6	-1.59E-3	2.87E-3
POCP	kg NMVOC eq	1.33E-3	1.54E-4	4.55E-5	1.53E-3	2.70E-5	1.50E-4	1.91E-6	-6.34E-4	1.08E-3
ADP-mm	kg Sb eq	2.54E-5	6.19E-7	4.66E-7	2.65E-5	1.09E-7	5.57E-7	1.27E-9	-2.21E-6	2.49E-5
ADP-f	MJ	1.27E+1	3.67E-1	2.52E-1	1.33E+1	6.45E-2	4.25E-1	3.85E-3	-6.53E+0	7.26E+0
WDP	m3 depriv.	2.57E-1	1.13E-3	8.91E-2	3.47E-1	1.98E-4	8.44E-3	2.05E-5	-1.44E-1	2.11E-1
PM	disease inc.	1.65E-8	2.16E-9	7.73E-10	1.94E-8	3.80E-10	2.28E-9	2.64E-11	-8.16E-9	1.39E-8
IR	kBq U-235 eq	1.17E-2	1.61E-3	2.35E-4	1.36E-2	2.82E-4	1.32E-3	1.79E-5	-5.05E-3	1.01E-2
ETP-fw	CTUe	6.50E+0	2.98E-1	3.97E-1	7.20E+0	5.24E-2	5.75E-1	3.78E-3	-3.13E+0	4.70E+0
HTP-c	CTUh	1.38E-10	1.06E-11	2.12E-11	1.70E-10	1.87E-12	5.87E-11	9.59E-14	-7.01E-11	1.61E-10
HTP-nc	CTUh	3.23E-9	3.56E-10	4.39E-10	4.02E-9	6.25E-11	7.39E-10	2.21E-12	-1.63E-9	3.19E-9
SQP	Pt	6.75E+0	3.14E-1	4.59E-2	7.11E+0	5.52E-2	3.31E-1	9.86E-3	-9.36E+0	-1.85E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.16E+0	5.27E-3	8.71E-1	2.04E+0	9.26E-4	2.04E-2	1.52E-4	-1.61E+0	4.48E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.16E+0	5.27E-3	8.71E-1	2.04E+0	9.26E-4	2.04E-2	1.52E-4	-1.61E+0	4.48E-1
PENRE	MJ	1.36E+1	3.90E-1	2.75E-1	1.43E+1	6.85E-2	4.53E-1	4.08E-3	-7.04E+0	7.74E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.36E+1	3.90E-1	2.75E-1	1.43E+1	6.85E-2	4.53E-1	4.08E-3	-7.04E+0	7.74E+0
PET	MJ	1.48E+1	3.95E-1	1.15E+0	1.63E+1	6.94E-2	4.74E-1	4.23E-3	-8.65E+0	8.19E+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	4.48E-3	4.16E-5	2.12E-3	6.64E-3	7.30E-6	3.01E-4	4.74E-6	-2.67E-3	4.29E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	3.15E-6	9.39E-7	2.45E-7	4.33E-6	1.65E-7	7.53E-7	4.64E-9	-2.41E-6	2.84E-6
NHWD	kg	2.48E-2	2.28E-2	2.39E-3	5.00E-2	4.00E-3	2.16E-2	1.69E-2	-9.19E-3	8.33E-2
RWD	kg	1.27E-5	2.50E-6	2.61E-7	1.55E-5	4.39E-7	1.70E-6	2.51E-8	-4.85E-6	1.28E-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



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