

Environmental Profile

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

Ecochain v3.5.64



Product: 3062142 - Wafix PP ML Pipe RD 110 SN8 L=3 S/CH
Unit: 1 piece
Manufacturer: Wavin - SE - Eskilstuna

Wafix PP is a versatile, uncomplicated solution for your indoor drain. You can install the impact-resistant pipes even in frost. Their excellent chemical resistance makes them ideal for embedment applications.

LCA standard: EN15804+A2 (2019)
Standard database: Worldwide - Ecoinvent v 3.6 Cut-Off
Externally verified: Yes
Issue date: 20-06-2022
End of validity: 20-06-2027
Verifier: Harry van Ewijk - 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 - SE - Eskilstuna (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]

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Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	5.73E+0	6.25E-1	2.97E-1	6.66E+0	1.08E-1	2.48E+0	3.52E-2	-3.44E+0	5.84E+0
GWP-f	kg CO2 eq	5.71E+0	6.24E-1	2.15E-1	6.55E+0	1.08E-1	2.48E+0	3.52E-2	-3.42E+0	5.74E+0
GWP-b	kg CO2 eq	1.82E-2	2.48E-4	5.66E-2	7.50E-2	6.55E-5	5.49E-3	3.19E-5	-1.21E-2	6.85E-2
GWP-luluc	kg CO2 eq	7.30E-3	2.44E-4	2.50E-2	3.25E-2	3.81E-5	6.06E-4	7.03E-7	-6.71E-4	3.25E-2
ODP	kg CFC11 eq	1.20E-7	1.37E-7	2.44E-8	2.81E-7	2.48E-8	7.94E-8	1.14E-9	-1.27E-7	2.60E-7
AP	mol H+ eq	2.09E-2	5.20E-3	1.82E-3	2.79E-2	6.14E-4	3.26E-3	2.62E-5	-9.73E-3	2.21E-2
EP-fw	kg P eq	8.93E-5	5.93E-6	3.97E-6	9.92E-5	8.87E-7	1.75E-5	3.13E-8	-3.90E-5	7.85E-5
EP-m	kg N eq	3.51E-3	1.63E-3	5.40E-4	5.69E-3	2.20E-4	9.33E-4	1.55E-5	-1.72E-3	5.13E-3
EP-T	mol N eq	3.97E-2	1.80E-2	5.92E-3	6.36E-2	2.42E-3	1.03E-2	1.07E-4	-1.91E-2	5.73E-2
POCP	kg NMVOC eq	1.78E-2	5.01E-3	1.64E-3	2.45E-2	6.92E-4	3.27E-3	3.80E-5	-8.78E-3	1.97E-2
ADP-mm	kg Sb eq	1.04E-4	1.47E-5	6.47E-6	1.25E-4	2.79E-6	1.32E-5	2.59E-8	-2.26E-5	1.18E-4
ADP-f	MJ	2.00E+2	9.28E+0	2.14E+0	2.12E+2	1.65E+0	1.06E+1	8.15E-2	-1.08E+2	1.16E+2
WDP	m3 depriv.	4.03E+0	3.15E-2	1.38E+0	5.44E+0	5.08E-3	2.03E-1	3.91E-4	-1.89E+0	3.75E+0
PM	disease inc.	1.85E-7	5.26E-8	3.07E-8	2.68E-7	9.73E-9	5.48E-8	5.52E-10	-8.17E-8	2.52E-7
IR	kBq U-235 eq	1.11E-1	3.90E-2	6.35E-3	1.57E-1	7.23E-3	3.19E-2	3.72E-4	-5.13E-2	1.45E-1
ETP-fw	CTUe	3.69E+1	8.08E+0	5.96E+0	5.09E+1	1.34E+0	1.18E+1	6.30E-2	-1.53E+1	4.89E+1
HTP-c	CTUh	1.67E-9	2.78E-10	2.35E-10	2.19E-9	4.78E-11	1.35E-9	1.77E-12	-5.75E-10	3.01E-9
HTP-nc	CTUh	4.18E-8	8.69E-9	6.41E-9	5.69E-8	1.60E-9	1.71E-8	3.97E-11	-1.38E-8	6.19E-8
SQP	Pt	8.70E+0	7.50E+0	2.81E-1	1.65E+1	1.42E+0	8.53E+0	2.02E-1	-3.00E+0	2.36E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	4.22E+0	1.12E-1	1.35E+1	1.78E+1	2.37E-2	5.18E-1	2.72E-3	-1.37E+0	1.70E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	4.22E+0	1.12E-1	1.35E+1	1.78E+1	2.37E-2	5.18E-1	2.72E-3	-1.37E+0	1.70E+1
PENRE	MJ	2.15E+2	9.85E+0	2.27E+0	2.27E+2	1.76E+0	1.13E+1	8.64E-2	-1.16E+2	1.24E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.15E+2	9.85E+0	2.27E+0	2.27E+2	1.76E+0	1.13E+1	8.64E-2	-1.16E+2	1.24E+2
PET	MJ	2.19E+2	9.96E+0	1.57E+1	2.45E+2	1.78E+0	1.18E+1	8.92E-2	-1.17E+2	1.41E+2
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	6.22E-2	1.08E-3	3.27E-2	9.60E-2	1.87E-4	5.89E-3	9.96E-5	-2.86E-2	7.36E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.92E-5	2.23E-5	3.25E-6	5.48E-5	4.23E-6	1.71E-5	9.67E-8	-2.63E-5	4.99E-5
NHWD	kg	2.64E-1	5.43E-1	9.97E-3	8.17E-1	1.03E-1	5.16E-1	4.10E-1	-8.48E-2	1.76E+0
RWD	kg	9.87E-5	6.12E-5	9.04E-6	1.69E-4	1.13E-5	4.06E-5	5.37E-7	-4.62E-5	1.75E-4
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