

Environmental Profile

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

Ecochain v3.5.64



Product: 3062140 - Wafix PP ML Pipe RD 110 SN8 L=1 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	2.05E+0	2.09E-1	9.95E-2	2.36E+0	3.65E-2	8.56E-1	1.22E-2	-1.21E+0	2.06E+0
GWP-f	kg CO2 eq	2.05E+0	2.09E-1	7.21E-2	2.33E+0	3.64E-2	8.53E-1	1.22E-2	-1.20E+0	2.03E+0
GWP-b	kg CO2 eq	5.75E-3	8.36E-5	1.90E-2	2.48E-2	2.21E-5	3.32E-3	1.11E-5	-4.11E-3	2.41E-2
GWP-luluc	kg CO2 eq	3.46E-3	8.11E-5	8.39E-3	1.19E-2	1.29E-5	2.05E-4	2.42E-7	-2.27E-4	1.19E-2
ODP	kg CFC11 eq	5.18E-8	4.57E-8	8.17E-9	1.06E-7	8.40E-9	2.70E-8	3.89E-10	-4.43E-8	9.71E-8
AP	mol H+ eq	7.63E-3	1.71E-3	6.11E-4	9.95E-3	2.08E-4	1.11E-3	8.95E-6	-3.42E-3	7.85E-3
EP-fw	kg P eq	3.40E-5	1.99E-6	1.33E-6	3.73E-5	3.00E-7	5.93E-6	1.08E-8	-1.39E-5	2.97E-5
EP-m	kg N eq	1.30E-3	5.39E-4	1.81E-4	2.02E-3	7.43E-5	3.18E-4	5.33E-6	-6.05E-4	1.81E-3
EP-T	mol N eq	1.46E-2	5.96E-3	1.99E-3	2.26E-2	8.19E-4	3.49E-3	3.65E-5	-6.72E-3	2.02E-2
POCP	kg NMVOC eq	6.48E-3	1.65E-3	5.52E-4	8.68E-3	2.34E-4	1.11E-3	1.30E-5	-3.11E-3	6.94E-3
ADP-mm	kg Sb eq	4.52E-5	4.94E-6	2.17E-6	5.23E-5	9.43E-7	4.49E-6	8.86E-9	-7.90E-6	4.98E-5
ADP-f	MJ	7.07E+1	3.10E+0	7.17E-1	7.45E+1	5.60E-1	3.58E+0	2.78E-2	-3.76E+1	4.10E+1
WDP	m3 depriv.	1.42E+0	1.06E-2	4.62E-1	1.89E+0	1.72E-3	6.89E-2	1.35E-4	-6.60E-1	1.31E+0
PM	disease inc.	6.90E-8	1.76E-8	1.03E-8	9.70E-8	3.29E-9	1.86E-8	1.89E-10	-2.89E-8	9.01E-8
IR	kBq U-235 eq	4.29E-2	1.30E-2	2.13E-3	5.81E-2	2.45E-3	1.08E-2	1.27E-4	-1.77E-2	5.38E-2
ETP-fw	CTUe	1.47E+1	2.71E+0	2.00E+0	1.94E+1	4.54E-1	4.02E+0	2.16E-2	-5.55E+0	1.84E+1
HTP-c	CTUh	7.90E-10	9.26E-11	7.89E-11	9.61E-10	1.62E-11	4.58E-10	6.11E-13	-2.01E-10	1.24E-9
HTP-nc	CTUh	1.75E-8	2.91E-9	2.15E-9	2.26E-8	5.42E-10	5.84E-9	1.37E-11	-3.17E-9	2.58E-8
SQP	Pt	3.52E+0	2.52E+0	9.42E-2	6.14E+0	4.79E-1	2.89E+0	6.93E-2	-1.06E+0	8.52E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.26E+0	3.74E-2	4.52E+0	6.82E+0	8.03E-3	1.76E-1	9.41E-4	-4.75E-1	6.53E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.26E+0	3.74E-2	4.52E+0	6.82E+0	8.03E-3	1.76E-1	9.41E-4	-4.75E-1	6.53E+0
PENRE	MJ	7.58E+1	3.29E+0	7.61E-1	7.99E+1	5.94E-1	3.82E+0	2.95E-2	-4.05E+1	4.38E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	7.58E+1	3.29E+0	7.61E-1	7.99E+1	5.94E-1	3.82E+0	2.95E-2	-4.05E+1	4.38E+1
PET	MJ	7.81E+1	3.33E+0	5.28E+0	8.67E+1	6.02E-1	3.99E+0	3.04E-2	-4.10E+1	5.03E+1
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	2.24E-2	3.60E-4	1.10E-2	3.37E-2	6.33E-5	2.00E-3	3.40E-5	-9.98E-3	2.58E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.23E-5	7.47E-6	1.09E-6	2.09E-5	1.43E-6	5.80E-6	3.30E-8	-1.02E-5	1.80E-5
NHWD	kg	1.12E-1	1.82E-1	3.34E-3	2.98E-1	3.47E-2	1.75E-1	1.39E-1	-3.03E-2	6.16E-1
RWD	kg	3.93E-5	2.05E-5	3.03E-6	6.28E-5	3.81E-6	1.38E-5	1.83E-7	-1.60E-5	6.46E-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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