

Environmental Profile

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

Ecochain v3.5.64



Product: 3062149 - Wafix PP ML Pipe BR SN8 200 L=3
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	2.03E+1	2.14E+0	1.06E+0	2.35E+1	3.66E-1	9.32E+0	1.18E-1	-1.20E+1	2.12E+1
GWP-f	kg CO2 eq	2.02E+1	2.14E+0	7.70E-1	2.31E+1	3.66E-1	9.30E+0	1.18E-1	-1.20E+1	2.09E+1
GWP-b	kg CO2 eq	2.05E-2	8.48E-4	2.03E-1	2.24E-1	2.22E-4	1.97E-2	1.07E-4	-4.07E-2	2.03E-1
GWP-luluc	kg CO2 eq	2.59E-2	8.37E-4	8.95E-2	1.16E-1	1.30E-4	2.07E-3	2.37E-6	-2.28E-3	1.16E-1
ODP	kg CFC11 eq	3.97E-7	4.69E-7	8.72E-8	9.53E-7	8.43E-8	2.72E-7	3.86E-9	-4.80E-7	8.33E-7
AP	mol H+ eq	7.42E-2	1.79E-2	6.52E-3	9.86E-2	2.08E-3	1.12E-2	8.84E-5	-3.30E-2	7.90E-2
EP-fw	kg P eq	3.26E-4	2.03E-5	1.42E-5	3.61E-4	3.01E-6	5.96E-5	1.05E-7	-1.31E-4	2.92E-4
EP-m	kg N eq	1.25E-2	5.63E-3	1.93E-3	2.01E-2	7.46E-4	3.24E-3	5.21E-5	-5.89E-3	1.82E-2
EP-T	mol N eq	1.41E-1	6.22E-2	2.12E-2	2.24E-1	8.22E-3	3.56E-2	3.60E-4	-6.53E-2	2.03E-1
POCP	kg NMVOC eq	6.27E-2	1.73E-2	5.89E-3	8.59E-2	2.35E-3	1.13E-2	1.28E-4	-2.98E-2	6.98E-2
ADP-mm	kg Sb eq	3.20E-4	5.04E-5	2.32E-5	3.94E-4	9.47E-6	4.51E-5	8.74E-8	-7.61E-5	3.73E-4
ADP-f	MJ	7.04E+2	3.18E+1	7.65E+0	7.43E+2	5.62E+0	3.61E+1	2.75E-1	-3.70E+2	4.15E+2
WDP	m3 depriv.	1.42E+1	1.08E-1	4.93E+0	1.92E+1	1.72E-2	6.93E-1	1.32E-3	-6.36E+0	1.36E+1
PM	disease inc.	6.50E-7	1.80E-7	1.10E-7	9.40E-7	3.30E-8	1.88E-7	1.87E-9	-2.75E-7	8.88E-7
IR	kBq U-235 eq	3.85E-1	1.34E-1	2.28E-2	5.41E-1	2.46E-2	1.09E-1	1.26E-3	-1.75E-1	5.02E-1
ETP-fw	CTUe	1.34E+2	2.77E+1	2.13E+1	1.83E+2	4.56E+0	4.05E+1	2.12E-1	-5.18E+1	1.76E+2
HTP-c	CTUh	5.59E-9	9.52E-10	8.43E-10	7.38E-9	1.62E-10	4.71E-9	5.96E-12	-1.96E-9	1.03E-8
HTP-nc	CTUh	1.43E-7	2.98E-8	2.30E-8	1.96E-7	5.44E-9	5.93E-8	1.34E-10	-4.88E-8	2.12E-7
SQP	Pt	3.30E+1	2.57E+1	1.01E+0	5.97E+1	4.81E+0	2.91E+1	6.83E-1	-1.03E+1	8.40E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.15E+1	3.82E-1	4.83E+1	6.02E+1	8.06E-2	1.77E+0	9.15E-3	-4.63E+0	5.74E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.15E+1	3.82E-1	4.83E+1	6.02E+1	8.06E-2	1.77E+0	9.15E-3	-4.63E+0	5.74E+1
PENRE	MJ	7.55E+2	3.38E+1	8.13E+0	7.97E+2	5.96E+0	3.85E+1	2.92E-1	-3.99E+2	4.43E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	7.55E+2	3.38E+1	8.13E+0	7.97E+2	5.96E+0	3.85E+1	2.92E-1	-3.99E+2	4.43E+2
PET	MJ	7.67E+2	3.42E+1	5.64E+1	8.57E+2	6.04E+0	4.02E+1	3.01E-1	-4.04E+2	5.00E+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	2.25E-1	3.68E-3	1.17E-1	3.45E-1	6.36E-4	2.02E-2	3.36E-4	-9.65E-2	2.70E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	9.94E-5	7.63E-5	1.17E-5	1.87E-4	1.44E-5	5.86E-5	3.26E-7	-9.76E-5	1.63E-4
NHWD	kg	9.18E-1	1.86E+0	3.57E-2	2.81E+0	3.48E-1	1.81E+0	1.39E+0	-2.87E-1	6.07E+0
RWD	kg	3.34E-4	2.10E-4	3.24E-5	5.77E-4	3.82E-5	1.39E-4	1.81E-6	-1.59E-4	5.97E-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



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