

Environmental Profile

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

Ecochain v3.5.64



Product: 3062131 - Wafix PP ML Pipe RD 110 SN4 L=0,5 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]

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	1.10E+0	1.02E-1	4.30E-2	1.25E+0	1.79E-2	5.23E-1	6.26E-3	-6.66E-1	1.13E+0
GWP-f	kg CO2 eq	1.18E+0	1.02E-1	3.12E-2	1.31E+0	1.78E-2	4.35E-1	6.27E-3	-6.63E-1	1.11E+0
GWP-b	kg CO2 eq	-8.23E-2	4.14E-5	8.21E-3	-7.41E-2	1.08E-5	8.73E-2	5.63E-6	-2.13E-3	1.12E-2
GWP-luluc	kg CO2 eq	3.62E-3	3.93E-5	3.63E-3	7.29E-3	6.31E-6	1.03E-4	1.21E-7	-7.61E-4	6.63E-3
ODP	kg CFC11 eq	3.85E-8	2.23E-8	3.53E-9	6.43E-8	4.11E-9	1.44E-8	1.93E-10	-2.93E-8	5.37E-8
AP	mol H+ eq	5.08E-3	8.06E-4	2.64E-4	6.15E-3	1.02E-4	5.86E-4	4.46E-6	-2.17E-3	4.67E-3
EP-fw	kg P eq	3.59E-5	9.75E-7	5.76E-7	3.75E-5	1.47E-7	3.00E-6	5.43E-9	-1.50E-5	2.56E-5
EP-m	kg N eq	9.44E-4	2.57E-4	7.83E-5	1.28E-3	3.64E-5	1.72E-4	2.68E-6	-4.08E-4	1.08E-3
EP-T	mol N eq	1.01E-2	2.84E-3	8.59E-4	1.38E-2	4.01E-4	1.89E-3	1.81E-5	-4.57E-3	1.15E-2
POCP	kg NMVOC eq	3.85E-3	7.90E-4	2.39E-4	4.88E-3	1.15E-4	5.98E-4	6.53E-6	-1.86E-3	3.74E-3
ADP-mm	kg Sb eq	3.04E-5	2.42E-6	9.39E-7	3.38E-5	4.62E-7	2.38E-6	4.42E-9	-4.66E-6	3.20E-5
ADP-f	MJ	3.76E+1	1.51E+0	3.10E-1	3.95E+1	2.74E-1	1.83E+0	1.38E-2	-2.01E+1	2.15E+1
WDP	m3 depriv.	8.35E-1	5.18E-3	2.00E-1	1.04E+0	8.40E-4	3.44E-2	6.80E-5	-4.69E-1	6.06E-1
PM	disease inc.	4.85E-8	8.64E-9	4.46E-9	6.16E-8	1.61E-9	9.75E-9	9.39E-11	-2.34E-8	4.97E-8
IR	kBq U-235 eq	2.70E-2	6.35E-3	9.22E-4	3.43E-2	1.20E-3	5.66E-3	6.33E-5	-1.48E-2	2.64E-2
ETP-fw	CTUe	1.22E+1	1.32E+0	8.64E-1	1.44E+1	2.22E-1	2.13E+0	1.09E-2	-9.71E+0	7.03E+0
HTP-c	CTUh	4.37E-10	4.50E-11	3.41E-11	5.16E-10	7.91E-12	2.39E-10	3.08E-13	-1.56E-10	6.06E-10
HTP-nc	CTUh	1.10E-8	1.43E-9	9.31E-10	1.34E-8	2.65E-10	3.00E-9	6.87E-12	-3.94E-9	1.27E-8
SQP	Pt	6.84E+0	1.24E+0	4.08E-2	8.11E+0	2.34E-1	1.46E+0	3.45E-2	-1.71E+1	-7.26E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.88E+0	1.83E-2	1.96E+0	4.86E+0	3.93E-3	8.85E-2	4.75E-4	-3.25E+0	1.70E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.88E+0	1.83E-2	1.96E+0	4.86E+0	3.93E-3	8.85E-2	4.75E-4	-3.25E+0	1.70E+0
PENRE	MJ	4.04E+1	1.61E+0	3.29E-1	4.23E+1	2.91E-1	1.95E+0	1.47E-2	-2.16E+1	2.29E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	4.04E+1	1.61E+0	3.29E-1	4.23E+1	2.91E-1	1.95E+0	1.47E-2	-2.16E+1	2.29E+1
PET	MJ	4.33E+1	1.63E+0	2.28E+0	4.72E+1	2.95E-1	2.04E+0	1.51E-2	-2.49E+1	2.46E+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	1.52E-2	1.77E-4	4.75E-3	2.01E-2	3.10E-5	1.01E-3	1.69E-5	-8.55E-3	1.26E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	8.82E-6	3.67E-6	4.72E-7	1.30E-5	7.00E-7	3.06E-6	1.64E-8	-6.05E-6	1.07E-5
NHWD	kg	7.73E-2	8.97E-2	1.45E-3	1.69E-1	1.70E-2	8.90E-2	6.78E-2	-2.25E-2	3.20E-1
RWD	kg	2.60E-5	9.98E-6	1.31E-6	3.73E-5	1.86E-6	7.25E-6	9.08E-8	-1.36E-5	3.29E-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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