

Environmental Profile

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

Ecochain v3.5.64



Product: 3062132 - Wafix PP ML Pipe RD 110 SN4 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]

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	1.82E+0	1.82E-1	8.59E-2	2.09E+0	3.19E-2	7.53E-1	1.08E-2	-1.06E+0	1.82E+0
GWP-f	kg CO2 eq	1.81E+0	1.82E-1	6.22E-2	2.06E+0	3.19E-2	7.49E-1	1.08E-2	-1.06E+0	1.79E+0
GWP-b	kg CO2 eq	4.65E-3	7.30E-5	1.64E-2	2.11E-2	1.94E-5	3.48E-3	9.73E-6	-3.60E-3	2.10E-2
GWP-luluc	kg CO2 eq	3.40E-3	7.06E-5	7.24E-3	1.07E-2	1.13E-5	1.80E-4	2.12E-7	-1.99E-4	1.07E-2
ODP	kg CFC11 eq	4.76E-8	3.98E-8	7.05E-9	9.44E-8	7.34E-9	2.36E-8	3.41E-10	-3.90E-8	8.67E-8
AP	mol H+ eq	6.79E-3	1.48E-3	5.27E-4	8.80E-3	1.82E-4	9.70E-4	7.85E-6	-3.02E-3	6.94E-3
EP-fw	kg P eq	3.05E-5	1.73E-6	1.15E-6	3.34E-5	2.62E-7	5.19E-6	9.48E-9	-1.23E-5	2.66E-5
EP-m	kg N eq	1.16E-3	4.68E-4	1.56E-4	1.79E-3	6.50E-5	2.78E-4	4.68E-6	-5.34E-4	1.60E-3
EP-T	mol N eq	1.30E-2	5.18E-3	1.71E-3	1.99E-2	7.16E-4	3.06E-3	3.20E-5	-5.92E-3	1.78E-2
POCP	kg NMVOC eq	5.75E-3	1.44E-3	4.76E-4	7.67E-3	2.05E-4	9.73E-4	1.14E-5	-2.74E-3	6.11E-3
ADP-mm	kg Sb eq	4.15E-5	4.31E-6	1.87E-6	4.77E-5	8.25E-7	3.93E-6	7.78E-9	-6.95E-6	4.55E-5
ADP-f	MJ	6.23E+1	2.70E+0	6.18E-1	6.56E+1	4.89E-1	3.13E+0	2.44E-2	-3.31E+1	3.62E+1
WDP	m3 depriv.	1.26E+0	9.21E-3	3.99E-1	1.66E+0	1.50E-3	6.02E-2	1.19E-4	-5.81E-1	1.14E+0
PM	disease inc.	6.17E-8	1.54E-8	8.90E-9	8.60E-8	2.88E-9	1.63E-8	1.65E-10	-2.56E-8	7.97E-8
IR	kBq U-235 eq	3.86E-2	1.13E-2	1.84E-3	5.17E-2	2.14E-3	9.48E-3	1.11E-4	-1.55E-2	4.79E-2
ETP-fw	CTUe	1.34E+1	2.36E+0	1.72E+0	1.74E+1	3.97E-1	3.52E+0	1.90E-2	-4.93E+0	1.64E+1
HTP-c	CTUh	7.35E-10	8.07E-11	6.81E-11	8.83E-10	1.41E-11	4.02E-10	5.37E-13	-1.77E-10	1.12E-9
HTP-nc	CTUh	1.60E-8	2.54E-9	1.86E-9	2.04E-8	4.74E-10	5.11E-9	1.20E-11	-2.49E-9	2.35E-8
SQP	Pt	3.21E+0	2.20E+0	8.13E-2	5.48E+0	4.19E-1	2.53E+0	6.07E-2	-9.32E-1	7.56E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.14E+0	3.26E-2	3.90E+0	6.07E+0	7.02E-3	1.54E-1	8.26E-4	-4.18E-1	5.81E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.14E+0	3.26E-2	3.90E+0	6.07E+0	7.02E-3	1.54E-1	8.26E-4	-4.18E-1	5.81E+0
PENRE	MJ	6.69E+1	2.87E+0	6.57E-1	7.04E+1	5.19E-1	3.34E+0	2.59E-2	-3.57E+1	3.86E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	6.69E+1	2.87E+0	6.57E-1	7.04E+1	5.19E-1	3.34E+0	2.59E-2	-3.57E+1	3.86E+1
PET	MJ	6.90E+1	2.90E+0	4.56E+0	7.65E+1	5.26E-1	3.49E+0	2.67E-2	-3.61E+1	4.44E+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	1.99E-2	3.14E-4	9.47E-3	2.96E-2	5.54E-5	1.75E-3	2.98E-5	-8.79E-3	2.27E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.12E-5	6.52E-6	9.42E-7	1.87E-5	1.25E-6	5.08E-6	2.90E-8	-9.13E-6	1.59E-5
NHWD	kg	1.03E-1	1.59E-1	2.89E-3	2.65E-1	3.03E-2	1.53E-1	1.21E-1	-2.69E-2	5.42E-1
RWD	kg	3.55E-5	1.78E-5	2.62E-6	5.60E-5	3.33E-6	1.20E-5	1.60E-7	-1.41E-5	5.74E-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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