

Environmental Profile

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

Ecochain v3.5.64



Product: 3062145 - Wafix PP ML Pipe RD 160 SN8 L=2 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	8.68E+0	9.23E-1	4.12E-1	1.00E+1	1.60E-1	3.72E+0	5.30E-2	-5.18E+0	8.77E+0
GWP-f	kg CO2 eq	8.64E+0	9.23E-1	2.99E-1	9.87E+0	1.60E-1	3.71E+0	5.30E-2	-5.16E+0	8.62E+0
GWP-b	kg CO2 eq	2.90E-2	3.68E-4	7.86E-2	1.08E-1	9.73E-5	8.25E-3	4.80E-5	-1.81E-2	9.82E-2
GWP-luluc	kg CO2 eq	1.10E-2	3.60E-4	3.47E-2	4.61E-2	5.67E-5	9.01E-4	1.05E-6	-1.01E-3	4.60E-2
ODP	kg CFC11 eq	1.93E-7	2.02E-7	3.38E-8	4.28E-7	3.69E-8	1.18E-7	1.70E-9	-1.91E-7	3.94E-7
AP	mol H+ eq	3.17E-2	7.62E-3	2.53E-3	4.19E-2	9.13E-4	4.85E-3	3.91E-5	-1.47E-2	3.30E-2
EP-fw	kg P eq	1.36E-4	8.78E-6	5.51E-6	1.51E-4	1.32E-6	2.60E-5	4.69E-8	-5.89E-5	1.19E-4
EP-m	kg N eq	5.36E-3	2.40E-3	7.50E-4	8.51E-3	3.27E-4	1.39E-3	2.32E-5	-2.59E-3	7.66E-3
EP-T	mol N eq	6.04E-2	2.65E-2	8.23E-3	9.52E-2	3.60E-3	1.53E-2	1.59E-4	-2.88E-2	8.54E-2
POCP	kg NMVOC eq	2.71E-2	7.37E-3	2.29E-3	3.67E-2	1.03E-3	4.86E-3	5.69E-5	-1.32E-2	2.94E-2
ADP-mm	kg Sb eq	1.65E-4	2.18E-5	8.99E-6	1.96E-4	4.14E-6	1.96E-5	3.87E-8	-3.41E-5	1.85E-4
ADP-f	MJ	3.03E+2	1.37E+1	2.97E+0	3.19E+2	2.46E+0	1.57E+1	1.22E-1	-1.62E+2	1.75E+2
WDP	m3 depriv.	6.07E+0	4.66E-2	1.91E+0	8.03E+0	7.55E-3	3.02E-1	5.83E-4	-2.85E+0	5.50E+0
PM	disease inc.	2.83E-7	7.78E-8	4.27E-8	4.03E-7	1.45E-8	8.15E-8	8.25E-10	-1.23E-7	3.77E-7
IR	kBq U-235 eq	1.72E-1	5.76E-2	8.83E-3	2.38E-1	1.07E-2	4.75E-2	5.56E-4	-7.71E-2	2.20E-1
ETP-fw	CTUe	5.69E+1	1.20E+1	8.28E+0	7.72E+1	2.00E+0	1.76E+1	9.43E-2	-2.30E+1	7.38E+1
HTP-c	CTUh	2.63E-9	4.10E-10	3.27E-10	3.37E-9	7.11E-11	2.00E-9	2.65E-12	-8.67E-10	4.58E-9
HTP-nc	CTUh	6.50E-8	1.29E-8	8.91E-9	8.68E-8	2.38E-9	2.55E-8	5.94E-11	-2.00E-8	9.47E-8
SQP	Pt	1.35E+1	1.11E+1	3.90E-1	2.50E+1	2.10E+0	1.27E+1	3.02E-1	-4.52E+0	3.56E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	7.83E+0	1.65E-1	1.87E+1	2.67E+1	3.53E-2	7.71E-1	4.09E-3	-2.07E+0	2.55E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	7.83E+0	1.65E-1	1.87E+1	2.67E+1	3.53E-2	7.71E-1	4.09E-3	-2.07E+0	2.55E+1
PENRE	MJ	3.25E+2	1.46E+1	3.15E+0	3.42E+2	2.61E+0	1.67E+1	1.29E-1	-1.75E+2	1.87E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.25E+2	1.46E+1	3.15E+0	3.42E+2	2.61E+0	1.67E+1	1.29E-1	-1.75E+2	1.87E+2
PET	MJ	3.32E+2	1.47E+1	2.19E+1	3.69E+2	2.65E+0	1.75E+1	1.33E-1	-1.77E+2	2.12E+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	9.40E-2	1.59E-3	4.55E-2	1.41E-1	2.78E-4	8.76E-3	1.49E-4	-4.31E-2	1.07E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	4.52E-5	3.30E-5	4.52E-6	8.27E-5	6.29E-6	2.54E-5	1.44E-7	-4.00E-5	7.45E-5
NHWD	kg	4.17E-1	8.04E-1	1.39E-2	1.24E+0	1.52E-1	7.67E-1	6.09E-1	-1.28E-1	2.64E+0
RWD	kg	1.54E-4	9.05E-5	1.26E-5	2.57E-4	1.67E-5	6.03E-5	8.01E-7	-6.95E-5	2.65E-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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