

Environmental Profile

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

Ecochain v3.5.64



Product: 3031672 - Wafix PP Pipe BK 110 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	6.88E+0	2.66E-1	2.41E-1	7.39E+0	8.97E-2	2.60E+0	4.23E-2	-4.18E+0	5.95E+0
GWP-f	kg CO2 eq	6.85E+0	2.66E-1	1.75E-1	7.29E+0	8.96E-2	2.61E+0	4.23E-2	-4.16E+0	5.87E+0
GWP-b	kg CO2 eq	3.13E-2	7.03E-5	4.59E-2	7.73E-2	5.44E-5	-3.62E-3	3.68E-5	-1.44E-2	5.94E-2
GWP-luluc	kg CO2 eq	1.78E-3	1.17E-4	2.03E-2	2.22E-2	3.17E-5	5.04E-4	7.18E-7	-7.95E-4	2.19E-2
ODP	kg CFC11 eq	1.23E-7	5.72E-8	1.98E-8	2.00E-7	2.07E-8	6.56E-8	1.06E-9	-1.54E-7	1.33E-7
AP	mol H+ eq	2.43E-2	3.60E-3	1.48E-3	2.94E-2	5.11E-4	2.76E-3	2.53E-5	-1.17E-2	2.10E-2
EP-fw	kg P eq	1.01E-4	2.20E-6	3.22E-6	1.07E-4	7.38E-7	1.45E-5	3.29E-8	-4.62E-5	7.57E-5
EP-m	kg N eq	4.03E-3	1.01E-3	4.38E-4	5.48E-3	1.83E-4	8.01E-4	1.65E-5	-2.07E-3	4.41E-3
EP-T	mol N eq	4.55E-2	1.12E-2	4.81E-3	6.15E-2	2.01E-3	8.82E-3	1.03E-4	-2.29E-2	4.95E-2
POCP	kg NMVOC eq	2.11E-2	3.01E-3	1.34E-3	2.54E-2	5.76E-4	2.79E-3	3.85E-5	-1.06E-2	1.82E-2
ADP-mm	kg Sb eq	9.20E-5	5.31E-6	5.25E-6	1.03E-4	2.32E-6	1.09E-5	2.55E-8	-2.76E-5	8.83E-5
ADP-f	MJ	2.44E+2	3.83E+0	1.74E+0	2.50E+2	1.38E+0	8.75E+0	7.74E-2	-1.31E+2	1.29E+2
WDP	m3 depriv.	4.81E+0	1.15E-2	1.12E+0	5.94E+0	4.22E-3	1.71E-1	3.88E-4	-2.27E+0	3.84E+0
PM	disease inc.	2.13E-7	1.93E-8	2.50E-8	2.58E-7	8.09E-9	4.54E-8	5.32E-10	-9.84E-8	2.13E-7
IR	kBq U-235 eq	1.25E-1	1.62E-2	5.16E-3	1.46E-1	6.02E-3	2.64E-2	3.59E-4	-6.06E-2	1.19E-1
ETP-fw	CTUe	3.65E+1	3.16E+0	4.84E+0	4.45E+1	1.12E+0	9.88E+0	6.48E-2	-1.66E+1	3.89E+1
HTP-c	CTUh	1.78E-9	1.23E-10	1.91E-10	2.10E-9	3.98E-11	1.19E-9	1.89E-12	-6.94E-10	2.63E-9
HTP-nc	CTUh	4.61E-8	3.27E-9	5.21E-9	5.46E-8	1.33E-9	1.47E-8	4.17E-11	-1.71E-8	5.35E-8
SQP	Pt	8.32E+0	2.61E+0	2.28E-1	1.12E+1	1.18E+0	6.99E+0	1.99E-1	-3.54E+0	1.60E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	3.52E+0	4.19E-2	1.09E+1	1.45E+1	1.97E-2	4.32E-1	3.00E-3	-1.63E+0	1.33E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	3.52E+0	4.19E-2	1.09E+1	1.45E+1	1.97E-2	4.32E-1	3.00E-3	-1.63E+0	1.33E+1
PENRE	MJ	2.62E+2	4.07E+0	1.84E+0	2.68E+2	1.46E+0	9.32E+0	8.21E-2	-1.41E+2	1.37E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.62E+2	4.07E+0	1.84E+0	2.68E+2	1.46E+0	9.32E+0	8.21E-2	-1.41E+2	1.37E+2
PET	MJ	2.65E+2	4.11E+0	1.28E+1	2.82E+2	1.48E+0	9.75E+0	8.51E-2	-1.43E+2	1.51E+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	7.21E-2	3.95E-4	2.66E-2	9.91E-2	1.56E-4	5.04E-3	9.54E-5	-3.40E-2	7.03E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	3.00E-5	8.10E-6	2.64E-6	4.07E-5	3.52E-6	1.42E-5	9.32E-8	-3.17E-5	2.69E-5
NHWD	kg	2.67E-1	1.83E-1	8.10E-3	4.58E-1	8.53E-2	4.29E-1	3.41E-1	-1.02E-1	1.21E+0
RWD	kg	1.08E-4	2.56E-5	7.34E-6	1.41E-4	9.36E-6	3.34E-5	5.05E-7	-5.47E-5	1.30E-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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