

Environmental Profile

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

Ecochain v3.5.64



Product: 3031670 - Wafix PP Pipe BK 75 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	4.12E+0	1.58E-1	1.43E-1	4.42E+0	5.32E-2	1.54E+0	2.51E-2	-2.49E+0	3.55E+0
GWP-f	kg CO2 eq	4.10E+0	1.58E-1	1.04E-1	4.36E+0	5.32E-2	1.55E+0	2.51E-2	-2.48E+0	3.50E+0
GWP-b	kg CO2 eq	1.88E-2	4.18E-5	2.72E-2	4.60E-2	3.23E-5	-2.16E-3	2.18E-5	-8.47E-3	3.55E-2
GWP-luluc	kg CO2 eq	1.09E-3	6.94E-5	1.20E-2	1.32E-2	1.88E-5	2.99E-4	4.26E-7	-4.65E-4	1.31E-2
ODP	kg CFC11 eq	7.53E-8	3.40E-8	1.17E-8	1.21E-7	1.23E-8	3.90E-8	6.29E-10	-9.13E-8	8.16E-8
AP	mol H+ eq	1.46E-2	2.14E-3	8.77E-4	1.76E-2	3.03E-4	1.64E-3	1.50E-5	-7.00E-3	1.26E-2
EP-fw	kg P eq	6.19E-5	1.31E-6	1.91E-6	6.51E-5	4.38E-7	8.65E-6	1.96E-8	-2.77E-5	4.65E-5
EP-m	kg N eq	2.42E-3	6.00E-4	2.60E-4	3.28E-3	1.08E-4	4.77E-4	9.77E-6	-1.24E-3	2.64E-3
EP-T	mol N eq	2.73E-2	6.65E-3	2.85E-3	3.68E-2	1.19E-3	5.25E-3	6.09E-5	-1.37E-2	2.96E-2
POCP	kg NMVOC eq	1.26E-2	1.79E-3	7.92E-4	1.52E-2	3.42E-4	1.66E-3	2.29E-5	-6.35E-3	1.09E-2
ADP-mm	kg Sb eq	5.50E-5	3.16E-6	3.12E-6	6.13E-5	1.38E-6	6.51E-6	1.51E-8	-1.64E-5	5.28E-5
ADP-f	MJ	1.45E+2	2.28E+0	1.03E+0	1.49E+2	8.17E-1	5.20E+0	4.59E-2	-7.79E+1	7.67E+1
WDP	m3 depriv.	2.86E+0	6.84E-3	6.63E-1	3.53E+0	2.51E-3	1.02E-1	2.30E-4	-1.35E+0	2.28E+0
PM	disease inc.	1.29E-7	1.15E-8	1.48E-8	1.55E-7	4.80E-9	2.70E-8	3.16E-10	-5.89E-8	1.28E-7
IR	kBq U-235 eq	7.60E-2	9.60E-3	3.06E-3	8.87E-2	3.57E-3	1.57E-2	2.13E-4	-3.58E-2	7.23E-2
ETP-fw	CTUe	2.27E+1	1.88E+0	2.87E+0	2.74E+1	6.63E-1	5.88E+0	3.84E-2	-1.02E+1	2.38E+1
HTP-c	CTUh	1.24E-9	7.30E-11	1.13E-10	1.42E-9	2.36E-11	7.06E-10	1.12E-12	-4.13E-10	1.74E-9
HTP-nc	CTUh	2.95E-8	1.94E-9	3.09E-9	3.46E-8	7.90E-10	8.75E-9	2.47E-11	-8.43E-9	3.57E-8
SQP	Pt	5.05E+0	1.55E+0	1.35E-1	6.74E+0	6.99E-1	4.16E+0	1.18E-1	-2.11E+0	9.60E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.13E+0	2.49E-2	6.49E+0	8.65E+0	1.17E-2	2.57E-1	1.78E-3	-9.63E-1	7.95E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.13E+0	2.49E-2	6.49E+0	8.65E+0	1.17E-2	2.57E-1	1.78E-3	-9.63E-1	7.95E+0
PENRE	MJ	1.56E+2	2.42E+0	1.09E+0	1.59E+2	8.67E-1	5.54E+0	4.87E-2	-8.40E+1	8.18E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.56E+2	2.42E+0	1.09E+0	1.59E+2	8.67E-1	5.54E+0	4.87E-2	-8.40E+1	8.18E+1
PET	MJ	1.58E+2	2.44E+0	7.58E+0	1.68E+2	8.79E-1	5.79E+0	5.05E-2	-8.49E+1	8.98E+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	4.31E-2	2.35E-4	1.58E-2	5.91E-2	9.24E-5	2.99E-3	5.66E-5	-2.02E-2	4.20E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.91E-5	4.82E-6	1.57E-6	2.55E-5	2.09E-6	8.46E-6	5.53E-8	-1.98E-5	1.63E-5
NHWD	kg	1.67E-1	1.09E-1	4.80E-3	2.81E-1	5.06E-2	2.55E-1	2.02E-1	-6.15E-2	7.27E-1
RWD	kg	6.59E-5	1.52E-5	4.35E-6	8.55E-5	5.55E-6	1.99E-5	3.00E-7	-3.24E-5	7.88E-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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