

Environmental Profile

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

Ecochain v3.5.64



Product: 3070950 - Wafix PP Pipe BK 90 L=1
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	1.67E+0	6.26E-2	5.68E-2	1.79E+0	2.10E-2	6.10E-1	9.88E-3	-9.95E-1	1.44E+0
GWP-f	kg CO2 eq	1.67E+0	6.26E-2	4.12E-2	1.77E+0	2.10E-2	6.11E-1	9.88E-3	-9.92E-1	1.42E+0
GWP-b	kg CO2 eq	7.68E-3	1.66E-5	1.08E-2	1.85E-2	1.27E-5	-8.76E-4	8.60E-6	-3.18E-3	1.45E-2
GWP-luluc	kg CO2 eq	4.75E-4	2.75E-5	4.79E-3	5.29E-3	7.42E-6	1.19E-4	1.68E-7	-1.72E-4	5.25E-3
ODP	kg CFC11 eq	3.39E-8	1.35E-8	4.67E-9	5.20E-8	4.83E-9	1.56E-8	2.48E-10	-3.63E-8	3.63E-8
AP	mol H+ eq	6.00E-3	8.44E-4	3.49E-4	7.19E-3	1.19E-4	6.55E-4	5.91E-6	-2.81E-3	5.16E-3
EP-fw	kg P eq	2.75E-5	5.19E-7	7.60E-7	2.88E-5	1.72E-7	3.44E-6	7.70E-9	-1.15E-5	2.10E-5
EP-m	kg N eq	1.00E-3	2.37E-4	1.03E-4	1.34E-3	4.27E-5	1.90E-4	3.85E-6	-4.97E-4	1.08E-3
EP-T	mol N eq	1.13E-2	2.63E-3	1.13E-3	1.50E-2	4.71E-4	2.10E-3	2.40E-5	-5.51E-3	1.21E-2
POCP	kg NMVOC eq	5.18E-3	7.06E-4	3.15E-4	6.21E-3	1.35E-4	6.61E-4	9.00E-6	-2.59E-3	4.42E-3
ADP-mm	kg Sb eq	2.23E-5	1.25E-6	1.24E-6	2.48E-5	5.42E-7	2.61E-6	5.95E-9	-6.45E-6	2.15E-5
ADP-f	MJ	5.79E+1	9.03E-1	4.09E-1	5.92E+1	3.22E-1	2.06E+0	1.81E-2	-3.08E+1	3.08E+1
WDP	m3 depriv.	1.14E+0	2.71E-3	2.64E-1	1.41E+0	9.87E-4	4.02E-2	9.04E-5	-5.35E-1	9.13E-1
PM	disease inc.	5.42E-8	4.56E-9	5.89E-9	6.46E-8	1.89E-9	1.08E-8	1.24E-10	-2.41E-8	5.33E-8
IR	kBq U-235 eq	3.29E-2	3.81E-3	1.22E-3	3.79E-2	1.41E-3	6.25E-3	8.39E-5	-1.39E-2	3.18E-2
ETP-fw	CTUe	1.06E+1	7.46E-1	1.14E+0	1.25E+1	2.61E-1	2.35E+0	1.51E-2	-4.50E+0	1.06E+1
HTP-c	CTUh	7.89E-10	2.89E-11	4.51E-11	8.63E-10	9.29E-12	2.79E-10	4.41E-13	-1.65E-10	9.87E-10
HTP-nc	CTUh	1.53E-8	7.71E-10	1.23E-9	1.73E-8	3.11E-10	3.49E-9	9.74E-12	-4.27E-10	2.06E-8
SQP	Pt	2.18E+0	6.16E-1	5.38E-2	2.85E+0	2.75E-1	1.66E+0	4.64E-2	-8.55E-1	3.98E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	9.13E-1	9.88E-3	2.58E+0	3.50E+0	4.61E-3	1.02E-1	7.01E-4	-3.76E-1	3.24E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	9.13E-1	9.88E-3	2.58E+0	3.50E+0	4.61E-3	1.02E-1	7.01E-4	-3.76E-1	3.24E+0
PENRE	MJ	6.22E+1	9.58E-1	4.35E-1	6.35E+1	3.41E-1	2.20E+0	1.92E-2	-3.32E+1	3.29E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	6.22E+1	9.58E-1	4.35E-1	6.35E+1	3.41E-1	2.20E+0	1.92E-2	-3.32E+1	3.29E+1
PET	MJ	6.31E+1	9.68E-1	3.02E+0	6.71E+1	3.46E-1	2.30E+0	1.99E-2	-3.36E+1	3.62E+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	1.75E-2	9.31E-5	6.27E-3	2.39E-2	3.64E-5	1.18E-3	2.23E-5	-8.02E-3	1.71E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	9.83E-6	1.91E-6	6.23E-7	1.24E-5	8.23E-7	3.38E-6	2.18E-8	-9.61E-6	6.97E-6
NHWD	kg	8.06E-2	4.33E-2	1.91E-3	1.26E-1	1.99E-2	1.01E-1	7.97E-2	-2.57E-2	3.01E-1
RWD	kg	2.87E-5	6.02E-6	1.73E-6	3.65E-5	2.19E-6	7.93E-6	1.18E-7	-1.27E-5	3.41E-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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