

Environmental Profile

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

Ecochain v3.5.64



Product: 3020700 - Wafix PP Pipe BK 125 L=5
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	1.48E+1	5.71E-1	5.17E-1	1.59E+1	1.93E-1	5.59E+0	9.07E-2	-8.97E+0	1.28E+1
GWP-f	kg CO2 eq	1.47E+1	5.70E-1	3.75E-1	1.57E+1	1.92E-1	5.59E+0	9.07E-2	-8.94E+0	1.26E+1
GWP-b	kg CO2 eq	6.72E-2	1.51E-4	9.86E-2	1.66E-1	1.17E-4	-7.77E-3	7.90E-5	-3.10E-2	1.27E-1
GWP-luluc	kg CO2 eq	3.83E-3	2.51E-4	4.36E-2	4.77E-2	6.81E-5	1.08E-3	1.54E-6	-1.71E-3	4.71E-2
ODP	kg CFC11 eq	2.63E-7	1.23E-7	4.25E-8	4.28E-7	4.43E-8	1.41E-7	2.28E-9	-3.30E-7	2.86E-7
AP	mol H+ eq	5.22E-2	7.73E-3	3.18E-3	6.31E-2	1.10E-3	5.92E-3	5.42E-5	-2.52E-2	4.50E-2
EP-fw	kg P eq	2.17E-4	4.73E-6	6.92E-6	2.29E-4	1.58E-6	3.12E-5	7.07E-8	-9.93E-5	1.63E-4
EP-m	kg N eq	8.66E-3	2.17E-3	9.41E-4	1.18E-2	3.92E-4	1.72E-3	3.53E-5	-4.45E-3	9.47E-3
EP-T	mol N eq	9.76E-2	2.40E-2	1.03E-2	1.32E-1	4.32E-3	1.89E-2	2.20E-4	-4.92E-2	1.06E-1
POCP	kg NMVOC eq	4.53E-2	6.46E-3	2.87E-3	5.46E-2	1.24E-3	5.99E-3	8.27E-5	-2.28E-2	3.91E-2
ADP-mm	kg Sb eq	1.97E-4	1.14E-5	1.13E-5	2.20E-4	4.98E-6	2.35E-5	5.47E-8	-5.92E-5	1.89E-4
ADP-f	MJ	5.24E+2	8.23E+0	3.73E+0	5.36E+2	2.95E+0	1.88E+1	1.66E-1	-2.82E+2	2.76E+2
WDP	m3 depriv.	1.03E+1	2.47E-2	2.40E+0	1.27E+1	9.07E-3	3.68E-1	8.31E-4	-4.88E+0	8.24E+0
PM	disease inc.	4.58E-7	4.15E-8	5.36E-8	5.53E-7	1.74E-8	9.75E-8	1.14E-9	-2.11E-7	4.58E-7
IR	kBq U-235 eq	2.69E-1	3.47E-2	1.11E-2	3.15E-1	1.29E-2	5.66E-2	7.70E-4	-1.30E-1	2.55E-1
ETP-fw	CTUe	7.84E+1	6.79E+0	1.04E+1	9.56E+1	2.40E+0	2.12E+1	1.39E-1	-3.57E+1	8.36E+1
HTP-c	CTUh	3.85E-9	2.64E-10	4.10E-10	4.52E-9	8.54E-11	2.55E-9	4.05E-12	-1.49E-9	5.67E-9
HTP-nc	CTUh	9.92E-8	7.01E-9	1.12E-8	1.17E-7	2.86E-9	3.16E-8	8.94E-11	-3.66E-8	1.15E-7
SQP	Pt	1.79E+1	5.60E+0	4.90E-1	2.40E+1	2.53E+0	1.50E+1	4.26E-1	-7.59E+0	3.43E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	7.55E+0	8.99E-2	2.35E+1	3.11E+1	4.24E-2	9.27E-1	6.43E-3	-3.49E+0	2.86E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	7.55E+0	8.99E-2	2.35E+1	3.11E+1	4.24E-2	9.27E-1	6.43E-3	-3.49E+0	2.86E+1
PENRE	MJ	5.62E+2	8.73E+0	3.96E+0	5.75E+2	3.14E+0	2.00E+1	1.76E-1	-3.04E+2	2.95E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	5.62E+2	8.73E+0	3.96E+0	5.75E+2	3.14E+0	2.00E+1	1.76E-1	-3.04E+2	2.95E+2
PET	MJ	5.70E+2	8.82E+0	2.75E+1	6.06E+2	3.18E+0	2.09E+1	1.83E-1	-3.07E+2	3.23E+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	1.55E-1	8.47E-4	5.70E-2	2.13E-1	3.34E-4	1.08E-2	2.05E-4	-7.31E-2	1.51E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	6.45E-5	1.74E-5	5.67E-6	8.75E-5	7.55E-6	3.05E-5	2.00E-7	-6.81E-5	5.78E-5
NHWD	kg	5.73E-1	3.93E-1	1.74E-2	9.84E-1	1.83E-1	9.21E-1	7.32E-1	-2.19E-1	2.60E+0
RWD	kg	2.33E-4	5.49E-5	1.58E-5	3.03E-4	2.01E-5	7.17E-5	1.08E-6	-1.17E-4	2.79E-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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