

Environmental Profile

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

Ecochain v3.5.64



Product: 3031667 - Wafix PP Pipe BK 32 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	1.64E+0	6.34E-2	5.74E-2	1.76E+0	2.14E-2	6.21E-1	1.01E-2	-9.97E-1	1.42E+0
GWP-f	kg CO2 eq	1.63E+0	6.34E-2	4.16E-2	1.74E+0	2.14E-2	6.22E-1	1.01E-2	-9.94E-1	1.40E+0
GWP-b	kg CO2 eq	7.46E-3	1.68E-5	1.09E-2	1.84E-2	1.30E-5	-8.63E-4	8.78E-6	-3.45E-3	1.41E-2
GWP-luluc	kg CO2 eq	4.25E-4	2.79E-5	4.84E-3	5.29E-3	7.57E-6	1.20E-4	1.72E-7	-1.90E-4	5.23E-3
ODP	kg CFC11 eq	2.93E-8	1.36E-8	4.71E-9	4.76E-8	4.93E-9	1.56E-8	2.53E-10	-3.66E-8	3.19E-8
AP	mol H+ eq	5.81E-3	8.59E-4	3.52E-4	7.02E-3	1.22E-4	6.58E-4	6.03E-6	-2.80E-3	5.01E-3
EP-fw	kg P eq	2.41E-5	5.25E-7	7.68E-7	2.54E-5	1.76E-7	3.47E-6	7.87E-9	-1.10E-5	1.80E-5
EP-m	kg N eq	9.62E-4	2.41E-4	1.04E-4	1.31E-3	4.36E-5	1.91E-4	3.93E-6	-4.94E-4	1.05E-3
EP-T	mol N eq	1.09E-2	2.67E-3	1.15E-3	1.47E-2	4.81E-4	2.10E-3	2.45E-5	-5.47E-3	1.18E-2
POCP	kg NMVOC eq	5.03E-3	7.17E-4	3.18E-4	6.07E-3	1.37E-4	6.65E-4	9.20E-6	-2.53E-3	4.35E-3
ADP-mm	kg Sb eq	2.21E-5	1.27E-6	1.25E-6	2.46E-5	5.54E-7	2.61E-6	6.08E-9	-6.58E-6	2.12E-5
ADP-f	MJ	5.82E+1	9.14E-1	4.13E-1	5.95E+1	3.29E-1	2.09E+0	1.85E-2	-3.13E+1	3.07E+1
WDP	m3 depriv.	1.15E+0	2.74E-3	2.66E-1	1.42E+0	1.01E-3	4.09E-2	9.32E-5	-5.43E-1	9.16E-1
PM	disease inc.	5.09E-8	4.61E-9	5.95E-9	6.14E-8	1.93E-9	1.08E-8	1.27E-10	-2.35E-8	5.08E-8
IR	kBq U-235 eq	2.98E-2	3.85E-3	1.23E-3	3.49E-2	1.44E-3	6.29E-3	8.56E-5	-1.45E-2	2.82E-2
ETP-fw	CTUe	8.70E+0	7.54E-1	1.15E+0	1.06E+1	2.67E-1	2.36E+0	1.55E-2	-3.96E+0	9.29E+0
HTP-c	CTUh	4.20E-10	2.93E-11	4.55E-11	4.95E-10	9.49E-12	2.84E-10	4.51E-13	-1.66E-10	6.23E-10
HTP-nc	CTUh	1.09E-8	7.79E-10	1.24E-9	1.30E-8	3.18E-10	3.51E-9	9.95E-12	-4.15E-9	1.26E-8
SQP	Pt	1.99E+0	6.22E-1	5.44E-2	2.66E+0	2.81E-1	1.67E+0	4.74E-2	-8.43E-1	3.82E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	8.38E-1	9.99E-3	2.61E+0	3.46E+0	4.71E-3	1.03E-1	7.15E-4	-3.88E-1	3.18E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	8.38E-1	9.99E-3	2.61E+0	3.46E+0	4.71E-3	1.03E-1	7.15E-4	-3.88E-1	3.18E+0
PENRE	MJ	6.25E+1	9.70E-1	4.39E-1	6.39E+1	3.49E-1	2.22E+0	1.96E-2	-3.37E+1	3.27E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	6.25E+1	9.70E-1	4.39E-1	6.39E+1	3.49E-1	2.22E+0	1.96E-2	-3.37E+1	3.27E+1
PET	MJ	6.33E+1	9.80E-1	3.05E+0	6.73E+1	3.53E-1	2.33E+0	2.03E-2	-3.41E+1	3.59E+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	1.72E-2	9.42E-5	6.33E-3	2.36E-2	3.72E-5	1.20E-3	2.28E-5	-8.12E-3	1.68E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	7.13E-6	1.93E-6	6.30E-7	9.69E-6	8.40E-7	3.39E-6	2.23E-8	-7.51E-6	6.44E-6
NHWD	kg	6.35E-2	4.37E-2	1.93E-3	1.09E-1	2.04E-2	1.02E-1	8.14E-2	-2.44E-2	2.89E-1
RWD	kg	2.58E-5	6.10E-6	1.75E-6	3.37E-5	2.23E-6	7.97E-6	1.21E-7	-1.31E-5	3.09E-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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