

Environmental Profile

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

Ecochain v3.5.64



Product: 3020704 - Wafix PP Pipe BK 40 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]

Statement of Confidentiality

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Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	3.48E+0	1.35E-1	1.22E-1	3.74E+0	4.54E-2	1.32E+0	2.14E-2	-2.12E+0	3.01E+0
GWP-f	kg CO2 eq	3.47E+0	1.35E-1	8.84E-2	3.69E+0	4.54E-2	1.32E+0	2.14E-2	-2.11E+0	2.97E+0
GWP-b	kg CO2 eq	1.58E-2	3.56E-5	2.33E-2	3.91E-2	2.76E-5	-1.83E-3	1.86E-5	-7.32E-3	3.00E-2
GWP-luluc	kg CO2 eq	8.99E-4	5.92E-5	1.03E-2	1.12E-2	1.61E-5	2.55E-4	3.64E-7	-4.03E-4	1.11E-2
ODP	kg CFC11 eq	6.18E-8	2.89E-8	1.00E-8	1.01E-7	1.05E-8	3.32E-8	5.37E-10	-7.77E-8	6.73E-8
AP	mol H+ eq	1.23E-2	1.82E-3	7.49E-4	1.49E-2	2.59E-4	1.40E-3	1.28E-5	-5.94E-3	1.06E-2
EP-fw	kg P eq	5.10E-5	1.11E-6	1.63E-6	5.38E-5	3.74E-7	7.36E-6	1.67E-8	-2.34E-5	3.81E-5
EP-m	kg N eq	2.04E-3	5.12E-4	2.22E-4	2.77E-3	9.25E-5	4.05E-4	8.34E-6	-1.05E-3	2.23E-3
EP-T	mol N eq	2.30E-2	5.67E-3	2.43E-3	3.11E-2	1.02E-3	4.46E-3	5.20E-5	-1.16E-2	2.50E-2
POCP	kg NMVOC eq	1.07E-2	1.52E-3	6.76E-4	1.29E-2	2.92E-4	1.41E-3	1.95E-5	-5.37E-3	9.22E-3
ADP-mm	kg Sb eq	4.66E-5	2.69E-6	2.66E-6	5.20E-5	1.17E-6	5.53E-6	1.29E-8	-1.40E-5	4.47E-5
ADP-f	MJ	1.24E+2	1.94E+0	8.78E-1	1.26E+2	6.97E-1	4.43E+0	3.92E-2	-6.64E+1	6.51E+1
WDP	m3 depriv.	2.43E+0	5.82E-3	5.66E-1	3.01E+0	2.14E-3	8.68E-2	1.97E-4	-1.15E+0	1.94E+0
PM	disease inc.	1.08E-7	9.78E-9	1.26E-8	1.30E-7	4.10E-9	2.30E-8	2.69E-10	-4.98E-8	1.08E-7
IR	kBq U-235 eq	6.32E-2	8.18E-3	2.61E-3	7.40E-2	3.05E-3	1.33E-2	1.82E-4	-3.07E-2	5.98E-2
ETP-fw	CTUe	1.84E+1	1.60E+0	2.45E+0	2.24E+1	5.66E-1	5.00E+0	3.28E-2	-8.38E+0	1.96E+1
HTP-c	CTUh	8.81E-10	6.22E-11	9.67E-11	1.04E-9	2.01E-11	6.02E-10	9.57E-13	-3.51E-10	1.31E-9
HTP-nc	CTUh	2.31E-8	1.65E-9	2.64E-9	2.74E-8	6.75E-10	7.44E-9	2.11E-11	-8.89E-9	2.66E-8
SQP	Pt	4.20E+0	1.32E+0	1.15E-1	5.64E+0	5.96E-1	3.54E+0	1.01E-1	-1.79E+0	8.09E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.77E+0	2.12E-2	5.54E+0	7.34E+0	1.00E-2	2.19E-1	1.52E-3	-8.24E-1	6.74E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.77E+0	2.12E-2	5.54E+0	7.34E+0	1.00E-2	2.19E-1	1.52E-3	-8.24E-1	6.74E+0
PENRE	MJ	1.33E+2	2.06E+0	9.33E-1	1.36E+2	7.40E-1	4.72E+0	4.16E-2	-7.16E+1	6.95E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.33E+2	2.06E+0	9.33E-1	1.36E+2	7.40E-1	4.72E+0	4.16E-2	-7.16E+1	6.95E+1
PET	MJ	1.34E+2	2.08E+0	6.47E+0	1.43E+2	7.50E-1	4.94E+0	4.31E-2	-7.24E+1	7.62E+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	3.65E-2	2.00E-4	1.34E-2	5.01E-2	7.89E-5	2.55E-3	4.83E-5	-1.72E-2	3.56E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.50E-5	4.10E-6	1.34E-6	2.05E-5	1.78E-6	7.20E-6	4.72E-8	-1.59E-5	1.36E-5
NHWD	kg	1.34E-1	9.28E-2	4.10E-3	2.31E-1	4.32E-2	2.17E-1	1.73E-1	-5.16E-2	6.12E-1
RWD	kg	5.47E-5	1.29E-5	3.72E-6	7.13E-5	4.74E-6	1.69E-5	2.56E-7	-2.77E-5	6.55E-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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