

Environmental Profile

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

Ecochain v3.5.64



Product: 3020708 - Wafix PP Pipe BK 90 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	8.24E+0	3.17E-1	2.88E-1	8.84E+0	1.07E-1	3.11E+0	5.04E-2	-4.99E+0	7.11E+0
GWP-f	kg CO2 eq	8.20E+0	3.17E-1	2.08E-1	8.72E+0	1.07E-1	3.11E+0	5.05E-2	-4.98E+0	7.02E+0
GWP-b	kg CO2 eq	3.75E-2	8.40E-5	5.48E-2	9.24E-2	6.50E-5	-4.33E-3	4.39E-5	-1.72E-2	7.10E-2
GWP-luluc	kg CO2 eq	2.14E-3	1.40E-4	2.42E-2	2.65E-2	3.79E-5	6.02E-4	8.57E-7	-9.44E-4	2.62E-2
ODP	kg CFC11 eq	1.48E-7	6.83E-8	2.36E-8	2.40E-7	2.47E-8	7.83E-8	1.27E-9	-1.83E-7	1.61E-7
AP	mol H+ eq	2.91E-2	4.30E-3	1.77E-3	3.52E-2	6.10E-4	3.29E-3	3.02E-5	-1.40E-2	2.51E-2
EP-fw	kg P eq	1.22E-4	2.63E-6	3.85E-6	1.28E-4	8.80E-7	1.74E-5	3.93E-8	-5.54E-5	9.14E-5
EP-m	kg N eq	4.83E-3	1.21E-3	5.23E-4	6.56E-3	2.18E-4	9.57E-4	1.96E-5	-2.48E-3	5.28E-3
EP-T	mol N eq	5.45E-2	1.34E-2	5.74E-3	7.36E-2	2.40E-3	1.05E-2	1.23E-4	-2.74E-2	5.92E-2
POCP	kg NMVOC eq	2.53E-2	3.59E-3	1.59E-3	3.04E-2	6.87E-4	3.33E-3	4.60E-5	-1.27E-2	2.18E-2
ADP-mm	kg Sb eq	1.10E-4	6.34E-6	6.27E-6	1.22E-4	2.77E-6	1.31E-5	3.04E-8	-3.29E-5	1.05E-4
ADP-f	MJ	2.92E+2	4.58E+0	2.07E+0	2.98E+2	1.64E+0	1.04E+1	9.23E-2	-1.57E+2	1.54E+2
WDP	m3 depriv.	5.74E+0	1.37E-2	1.33E+0	7.09E+0	5.04E-3	2.05E-1	4.62E-4	-2.72E+0	4.59E+0
PM	disease inc.	2.56E-7	2.31E-8	2.98E-8	3.09E-7	9.66E-9	5.42E-8	6.35E-10	-1.18E-7	2.55E-7
IR	kBq U-235 eq	1.51E-1	1.93E-2	6.16E-3	1.76E-1	7.18E-3	3.15E-2	4.28E-4	-7.23E-2	1.43E-1
ETP-fw	CTUe	4.42E+1	3.78E+0	5.77E+0	5.37E+1	1.33E+0	1.18E+1	7.73E-2	-2.00E+1	4.69E+1
HTP-c	CTUh	2.25E-9	1.47E-10	2.28E-10	2.63E-9	4.75E-11	1.42E-9	2.25E-12	-8.29E-10	3.26E-9
HTP-nc	CTUh	5.65E-8	3.90E-9	6.22E-9	6.66E-8	1.59E-9	1.76E-8	4.97E-11	-1.93E-8	6.65E-8
SQP	Pt	1.00E+1	3.12E+0	2.72E-1	1.34E+1	1.41E+0	8.36E+0	2.37E-1	-4.23E+0	1.92E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	4.22E+0	5.00E-2	1.31E+1	1.73E+1	2.36E-2	5.16E-1	3.58E-3	-1.94E+0	1.59E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	4.22E+0	5.00E-2	1.31E+1	1.73E+1	2.36E-2	5.16E-1	3.58E-3	-1.94E+0	1.59E+1
PENRE	MJ	3.13E+2	4.86E+0	2.20E+0	3.20E+2	1.74E+0	1.11E+1	9.80E-2	-1.69E+2	1.64E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.13E+2	4.86E+0	2.20E+0	3.20E+2	1.74E+0	1.11E+1	9.80E-2	-1.69E+2	1.64E+2
PET	MJ	3.17E+2	4.91E+0	1.53E+1	3.37E+2	1.77E+0	1.16E+1	1.02E-1	-1.71E+2	1.80E+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	8.63E-2	4.71E-4	3.17E-2	1.18E-1	1.86E-4	6.02E-3	1.14E-4	-4.06E-2	8.41E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	3.67E-5	9.68E-6	3.15E-6	4.95E-5	4.20E-6	1.70E-5	1.11E-7	-3.85E-5	3.23E-5
NHWD	kg	3.24E-1	2.19E-1	9.67E-3	5.53E-1	1.02E-1	5.12E-1	4.07E-1	-1.23E-1	1.45E+0
RWD	kg	1.30E-4	3.05E-5	8.76E-6	1.70E-4	1.12E-5	3.99E-5	6.03E-7	-6.52E-5	1.56E-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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