

Environmental Profile

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

Ecochain v3.5.64



Product: 3020699 - Wafix PP Pipe BK 110 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	1.15E+1	4.43E-1	4.01E-1	1.23E+1	1.49E-1	4.33E+0	7.03E-2	-6.96E+0	9.91E+0
GWP-f	kg CO2 eq	1.14E+1	4.42E-1	2.91E-1	1.22E+1	1.49E-1	4.34E+0	7.03E-2	-6.93E+0	9.77E+0
GWP-b	kg CO2 eq	5.22E-2	1.17E-4	7.65E-2	1.29E-1	9.06E-5	-6.03E-3	6.13E-5	-2.40E-2	9.89E-2
GWP-luluc	kg CO2 eq	2.98E-3	1.95E-4	3.38E-2	3.70E-2	5.28E-5	8.39E-4	1.19E-6	-1.32E-3	3.65E-2
ODP	kg CFC11 eq	2.05E-7	9.52E-8	3.29E-8	3.33E-7	3.44E-8	1.09E-7	1.76E-9	-2.56E-7	2.23E-7
AP	mol H+ eq	4.06E-2	5.99E-3	2.46E-3	4.90E-2	8.50E-4	4.59E-3	4.21E-5	-1.95E-2	3.49E-2
EP-fw	kg P eq	1.69E-4	3.67E-6	5.36E-6	1.78E-4	1.23E-6	2.42E-5	5.48E-8	-7.71E-5	1.27E-4
EP-m	kg N eq	6.72E-3	1.68E-3	7.30E-4	9.14E-3	3.04E-4	1.33E-3	2.74E-5	-3.45E-3	7.35E-3
EP-T	mol N eq	7.58E-2	1.86E-2	8.01E-3	1.02E-1	3.35E-3	1.47E-2	1.71E-4	-3.82E-2	8.25E-2
POCP	kg NMVOC eq	3.52E-2	5.01E-3	2.22E-3	4.24E-2	9.58E-4	4.64E-3	6.41E-5	-1.77E-2	3.04E-2
ADP-mm	kg Sb eq	1.53E-4	8.84E-6	8.75E-6	1.71E-4	3.86E-6	1.82E-5	4.24E-8	-4.59E-5	1.47E-4
ADP-f	MJ	4.06E+2	6.38E+0	2.89E+0	4.16E+2	2.29E+0	1.46E+1	1.29E-1	-2.18E+2	2.14E+2
WDP	m3 depriv.	8.00E+0	1.92E-2	1.86E+0	9.88E+0	7.03E-3	2.85E-1	6.44E-4	-3.79E+0	6.39E+0
PM	disease inc.	3.56E-7	3.21E-8	4.15E-8	4.29E-7	1.35E-8	7.56E-8	8.85E-10	-1.64E-7	3.55E-7
IR	kBq U-235 eq	2.09E-1	2.69E-2	8.59E-3	2.45E-1	1.00E-2	4.39E-2	5.97E-4	-1.01E-1	1.98E-1
ETP-fw	CTUe	6.11E+1	5.27E+0	8.05E+0	7.45E+1	1.86E+0	1.64E+1	1.08E-1	-2.78E+1	6.51E+1
HTP-c	CTUh	3.05E-9	2.04E-10	3.18E-10	3.58E-9	6.62E-11	1.98E-9	3.14E-12	-1.16E-9	4.47E-9
HTP-nc	CTUh	7.77E-8	5.44E-9	8.67E-9	9.18E-8	2.22E-9	2.45E-8	6.93E-11	-2.77E-8	9.09E-8
SQP	Pt	1.39E+1	4.34E+0	3.80E-1	1.86E+1	1.96E+0	1.16E+1	3.30E-1	-5.89E+0	2.67E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	5.87E+0	6.98E-2	1.82E+1	2.42E+1	3.29E-2	7.19E-1	4.99E-3	-2.70E+0	2.22E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	5.87E+0	6.98E-2	1.82E+1	2.42E+1	3.29E-2	7.19E-1	4.99E-3	-2.70E+0	2.22E+1
PENRE	MJ	4.36E+2	6.77E+0	3.07E+0	4.46E+2	2.43E+0	1.55E+1	1.37E-1	-2.35E+2	2.29E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	4.36E+2	6.77E+0	3.07E+0	4.46E+2	2.43E+0	1.55E+1	1.37E-1	-2.35E+2	2.29E+2
PET	MJ	4.42E+2	6.84E+0	2.13E+1	4.70E+2	2.46E+0	1.62E+1	1.42E-1	-2.38E+2	2.51E+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	1.20E-1	6.57E-4	4.42E-2	1.65E-1	2.59E-4	8.39E-3	1.59E-4	-5.67E-2	1.17E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	5.05E-5	1.35E-5	4.40E-6	6.84E-5	5.86E-6	2.37E-5	1.55E-7	-5.32E-5	4.49E-5
NHWD	kg	4.48E-1	3.05E-1	1.35E-2	7.66E-1	1.42E-1	7.14E-1	5.67E-1	-1.70E-1	2.02E+0
RWD	kg	1.81E-4	4.26E-5	1.22E-5	2.36E-4	1.56E-5	5.56E-5	8.41E-7	-9.10E-5	2.17E-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



Ecochain Technologies BV
H.J.E. Wenckebachweg 123, 1096 AM Amsterdam, The Netherlands
<https://www.ecochain.com>
+31 20 3035 777