

# Environmental Profile

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

Ecochain v3.5.64



Product: 3061949 - Wafix PP Pipe GY 75 L=0,5 S/CH  
 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

A1 Raw material supply A2 Transport A3 Manufacturing

## Construction process stage

A4 Transport gate to site  
 A5 Assembly / Construction installation process

## Use stage

B1 Use B2 Maintenance B3 Repair B4 Replacement B5 Refurbishment  
 B6 Operational energy use B7 Operational water use

## End-of-Life stage

C1 De-construction demolition C2 Transport C3 Waste processing  
 C4 Disposal

## Benefits and loads beyond the system boundaries

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	6.76E-1	2.76E-2	1.92E-2	7.22E-1	8.50E-3	2.52E-1	4.00E-3	-3.98E-1	5.89E-1
GWP-f	kg CO2 eq	6.78E-1	2.76E-2	1.39E-2	7.19E-1	8.49E-3	2.47E-1	4.01E-3	-3.97E-1	5.82E-1
GWP-b	kg CO2 eq	-2.06E-3	8.56E-6	3.66E-3	1.61E-3	5.16E-6	5.11E-3	3.49E-6	-1.38E-3	5.35E-3
GWP-luluc	kg CO2 eq	3.01E-4	1.17E-5	1.62E-3	1.93E-3	3.01E-6	4.78E-5	6.80E-8	-1.17E-4	1.86E-3
ODP	kg CFC11 eq	1.63E-8	5.97E-9	1.57E-9	2.38E-8	1.96E-9	6.28E-9	1.00E-10	-1.49E-8	1.72E-8
AP	mol H+ eq	2.51E-3	3.24E-4	1.18E-4	2.95E-3	4.84E-5	2.63E-4	2.39E-6	-1.13E-3	2.13E-3
EP-fw	kg P eq	1.13E-5	2.40E-7	2.57E-7	1.18E-5	6.99E-8	1.38E-6	3.12E-9	-4.85E-6	8.38E-6
EP-m	kg N eq	4.26E-4	9.37E-5	3.49E-5	5.54E-4	1.73E-5	7.67E-5	1.56E-6	-2.02E-4	4.48E-4
EP-T	mol N eq	4.77E-3	1.04E-3	3.83E-4	6.20E-3	1.91E-4	8.44E-4	9.72E-6	-2.24E-3	5.00E-3
POCP	kg NMVOC eq	2.13E-3	2.81E-4	1.06E-4	2.52E-3	5.45E-5	2.67E-4	3.65E-6	-1.02E-3	1.83E-3
ADP-mm	kg Sb eq	1.36E-5	5.86E-7	4.18E-7	1.46E-5	2.20E-7	1.04E-6	2.41E-9	-2.65E-6	1.32E-5
ADP-f	MJ	2.37E+1	4.02E-1	1.38E-1	2.42E+1	1.30E-1	8.33E-1	7.33E-3	-1.25E+1	1.27E+1
WDP	m3 depriv.	4.73E-1	1.26E-3	8.90E-2	5.64E-1	4.00E-4	1.63E-2	3.64E-5	-2.24E-1	3.57E-1
PM	disease inc.	2.25E-8	2.11E-9	1.99E-9	2.66E-8	7.67E-10	4.33E-9	5.04E-11	-9.81E-9	2.19E-8
IR	kBq U-235 eq	1.35E-2	1.69E-3	4.11E-4	1.56E-2	5.70E-4	2.52E-3	3.40E-5	-6.13E-3	1.26E-2
ETP-fw	CTUe	4.23E+0	3.38E-1	3.85E-1	4.95E+0	1.06E-1	9.43E-1	6.14E-3	-1.98E+0	4.03E+0
HTP-c	CTUh	1.72E-10	1.26E-11	1.52E-11	2.00E-10	3.77E-12	1.13E-10	1.79E-13	-6.90E-11	2.48E-10
HTP-nc	CTUh	4.81E-9	3.55E-10	4.15E-10	5.58E-9	1.26E-10	1.40E-9	3.95E-12	-1.97E-9	5.13E-9
SQP	Pt	1.28E+0	2.92E-1	1.82E-2	1.59E+0	1.12E-1	6.64E-1	1.88E-2	-1.39E+0	1.00E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	8.51E-1	4.55E-3	8.71E-1	1.73E+0	1.87E-3	4.10E-2	2.84E-4	-3.45E-1	1.42E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	8.51E-1	4.55E-3	8.71E-1	1.73E+0	1.87E-3	4.10E-2	2.84E-4	-3.45E-1	1.42E+0
PENRE	MJ	2.54E+1	4.27E-1	1.47E-1	2.60E+1	1.38E-1	8.87E-1	7.78E-3	-1.34E+1	1.36E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.54E+1	4.27E-1	1.47E-1	2.60E+1	1.38E-1	8.87E-1	7.78E-3	-1.34E+1	1.36E+1
PET	MJ	2.62E+1	4.31E-1	1.02E+0	2.77E+1	1.40E-1	9.28E-1	8.06E-3	-1.38E+1	1.50E+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	7.34E-3	4.32E-5	2.11E-3	9.49E-3	1.48E-5	4.79E-4	9.04E-6	-3.44E-3	6.56E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	3.34E-6	8.91E-7	2.10E-7	4.44E-6	3.33E-7	1.36E-6	8.83E-9	-2.93E-6	3.21E-6
NHWD	kg	3.26E-2	2.07E-2	6.45E-4	5.39E-2	8.08E-3	4.08E-2	3.23E-2	-1.00E-2	1.25E-1
RWD	kg	1.24E-5	2.67E-6	5.85E-7	1.57E-5	8.87E-7	3.19E-6	4.79E-8	-5.53E-6	1.42E-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



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