

Environmental Profile

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

Ecochain v3.5.64



Product: 3061954 - Wafix PP Pipe GY 75 L=6 PL/CH
 Unit: 1 piece
 Manufacturer: Wavin - SE - Eskilstuna

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



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.

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 non-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	6.48E+0	2.50E-1	2.26E-1	6.96E+0	8.43E-2	2.44E+0	3.97E-2	-3.93E+0	5.60E+0
GWP-f	kg CO2 eq	6.45E+0	2.50E-1	1.64E-1	6.86E+0	8.42E-2	2.45E+0	3.97E-2	-3.92E+0	5.52E+0
GWP-b	kg CO2 eq	2.95E-2	6.61E-5	4.31E-2	7.27E-2	5.11E-5	-3.41E-3	3.46E-5	-1.35E-2	5.59E-2
GWP-luluc	kg CO2 eq	1.69E-3	1.10E-4	1.91E-2	2.09E-2	2.98E-5	4.73E-4	6.74E-7	-7.43E-4	2.06E-2
ODP	kg CFC11 eq	1.16E-7	5.37E-8	1.86E-8	1.89E-7	1.94E-8	6.16E-8	9.96E-10	-1.44E-7	1.26E-7
AP	mol H+ eq	2.29E-2	3.38E-3	1.39E-3	2.77E-2	4.80E-4	2.59E-3	2.37E-5	-1.10E-2	1.97E-2
EP-fw	kg P eq	9.59E-5	2.07E-6	3.03E-6	1.01E-4	6.93E-7	1.37E-5	3.09E-8	-4.36E-5	7.18E-5
EP-m	kg N eq	3.80E-3	9.49E-4	4.12E-4	5.16E-3	1.72E-4	7.53E-4	1.55E-5	-1.95E-3	4.15E-3
EP-T	mol N eq	4.29E-2	1.05E-2	4.52E-3	5.79E-2	1.89E-3	8.29E-3	9.64E-5	-2.16E-2	4.66E-2
POCP	kg NMVOC eq	1.99E-2	2.83E-3	1.25E-3	2.40E-2	5.41E-4	2.62E-3	3.62E-5	-1.00E-2	1.72E-2
ADP-mm	kg Sb eq	8.64E-5	4.99E-6	4.94E-6	9.63E-5	2.18E-6	1.03E-5	2.39E-8	-2.59E-5	8.29E-5
ADP-f	MJ	2.29E+2	3.60E+0	1.63E+0	2.35E+2	1.29E+0	8.22E+0	7.27E-2	-1.23E+2	1.21E+2
WDP	m3 depriv.	4.52E+0	1.08E-2	1.05E+0	5.58E+0	3.97E-3	1.61E-1	3.63E-4	-2.14E+0	3.61E+0
PM	disease inc.	2.01E-7	1.81E-8	2.34E-8	2.43E-7	7.60E-9	4.27E-8	5.00E-10	-9.27E-8	2.01E-7
IR	kBq U-235 eq	1.18E-1	1.52E-2	4.85E-3	1.38E-1	5.65E-3	2.48E-2	3.37E-4	-5.69E-2	1.12E-1
ETP-fw	CTUe	3.47E+1	2.97E+0	4.54E+0	4.22E+1	1.05E+0	9.29E+0	6.08E-2	-1.58E+1	3.69E+1
HTP-c	CTUh	1.76E-9	1.15E-10	1.79E-10	2.06E-9	3.74E-11	1.12E-9	1.77E-12	-6.52E-10	2.56E-9
HTP-nc	CTUh	4.44E-8	3.07E-9	4.89E-9	5.23E-8	1.25E-9	1.38E-8	3.91E-11	-1.52E-8	5.22E-8
SQP	Pt	7.87E+0	2.45E+0	2.14E-1	1.05E+1	1.11E+0	6.57E+0	1.87E-1	-3.33E+0	1.51E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	3.32E+0	3.94E-2	1.03E+1	1.36E+1	1.85E-2	4.06E-1	2.82E-3	-1.53E+0	1.25E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	3.32E+0	3.94E-2	1.03E+1	1.36E+1	1.85E-2	4.06E-1	2.82E-3	-1.53E+0	1.25E+1
PENRE	MJ	2.46E+2	3.82E+0	1.73E+0	2.52E+2	1.37E+0	8.76E+0	7.71E-2	-1.33E+2	1.29E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.46E+2	3.82E+0	1.73E+0	2.52E+2	1.37E+0	8.76E+0	7.71E-2	-1.33E+2	1.29E+2
PET	MJ	2.50E+2	3.86E+0	1.20E+1	2.65E+2	1.39E+0	9.16E+0	7.99E-2	-1.34E+2	1.42E+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	6.79E-2	3.71E-4	2.49E-2	9.32E-2	1.46E-4	4.74E-3	8.96E-5	-3.20E-2	6.62E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.88E-5	7.62E-6	2.48E-6	3.89E-5	3.31E-6	1.34E-5	8.75E-8	-3.03E-5	2.54E-5
NHWD	kg	2.55E-1	1.72E-1	7.61E-3	4.34E-1	8.01E-2	4.03E-1	3.20E-1	-9.64E-2	1.14E+0
RWD	kg	1.03E-4	2.40E-5	6.90E-6	1.33E-4	8.79E-6	3.14E-5	4.74E-7	-5.13E-5	1.23E-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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