

Environmental Profile

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

Ecochain v3.5.64



Product: 3061950 - Wafix PP Pipe GY 75 L=1 S/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	1.28E+0	4.87E-2	3.80E-2	1.37E+0	1.55E-2	4.83E-1	7.32E-3	-7.50E-1	1.13E+0
GWP-f	kg CO2 eq	1.28E+0	4.87E-2	2.76E-2	1.36E+0	1.55E-2	4.84E-1	7.32E-3	-7.47E-1	1.11E+0
GWP-b	kg CO2 eq	5.30E-3	1.42E-5	7.25E-3	1.26E-2	9.43E-6	-6.35E-4	6.37E-6	-2.45E-3	9.50E-3
GWP-luluc	kg CO2 eq	3.84E-4	2.09E-5	3.20E-3	3.61E-3	5.49E-6	8.78E-5	1.24E-7	-1.34E-4	3.57E-3
ODP	kg CFC11 eq	2.97E-8	1.05E-8	3.12E-9	4.33E-8	3.58E-9	1.15E-8	1.84E-10	-2.88E-8	2.98E-8
AP	mol H+ eq	4.69E-3	6.08E-4	2.33E-4	5.53E-3	8.84E-5	4.86E-4	4.38E-6	-2.07E-3	4.03E-3
EP-fw	kg P eq	2.12E-5	4.16E-7	5.08E-7	2.21E-5	1.28E-7	2.54E-6	5.70E-9	-8.25E-6	1.65E-5
EP-m	kg N eq	7.86E-4	1.73E-4	6.92E-5	1.03E-3	3.16E-5	1.42E-4	2.85E-6	-3.68E-4	8.37E-4
EP-T	mol N eq	8.86E-3	1.92E-3	7.59E-4	1.15E-2	3.49E-4	1.56E-3	1.78E-5	-4.08E-3	9.40E-3
POCP	kg NMVOC eq	4.03E-3	5.19E-4	2.11E-4	4.76E-3	9.97E-5	4.93E-4	6.67E-6	-1.89E-3	3.47E-3
ADP-mm	kg Sb eq	2.14E-5	1.01E-6	8.29E-7	2.33E-5	4.02E-7	1.92E-6	4.41E-9	-4.79E-6	2.08E-5
ADP-f	MJ	4.42E+1	7.07E-1	2.74E-1	4.52E+1	2.38E-1	1.53E+0	1.34E-2	-2.31E+1	2.39E+1
WDP	m3 depriv.	8.74E-1	2.18E-3	1.76E-1	1.05E+0	7.31E-4	2.98E-2	6.71E-5	-3.96E-1	6.87E-1
PM	disease inc.	4.18E-8	3.66E-9	3.94E-9	4.94E-8	1.40E-9	7.97E-9	9.21E-11	-1.75E-8	4.14E-8
IR	kBq U-235 eq	2.61E-2	2.98E-3	8.14E-4	2.99E-2	1.04E-3	4.62E-3	6.21E-5	-1.05E-2	2.51E-2
ETP-fw	CTUe	8.27E+0	5.90E-1	7.63E-1	9.63E+0	1.93E-1	1.74E+0	1.12E-2	-3.10E+0	8.46E+0
HTP-c	CTUh	4.64E-10	2.23E-11	3.01E-11	5.16E-10	6.89E-12	2.10E-10	3.27E-13	-1.22E-10	6.11E-10
HTP-nc	CTUh	1.04E-8	6.15E-10	8.22E-10	1.18E-8	2.31E-10	2.60E-9	7.21E-12	-1.86E-9	1.28E-8
SQP	Pt	1.88E+0	5.00E-1	3.60E-2	2.42E+0	2.04E-1	1.22E+0	3.44E-2	-6.31E-1	3.25E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.14E+0	7.89E-3	1.73E+0	2.87E+0	3.42E-3	7.54E-2	5.19E-4	-2.82E-1	2.67E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.14E+0	7.89E-3	1.73E+0	2.87E+0	3.42E-3	7.54E-2	5.19E-4	-2.82E-1	2.67E+0
PENRE	MJ	4.75E+1	7.51E-1	2.91E-1	4.85E+1	2.53E-1	1.63E+0	1.42E-2	-2.49E+1	2.55E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	4.75E+1	7.51E-1	2.91E-1	4.85E+1	2.53E-1	1.63E+0	1.42E-2	-2.49E+1	2.55E+1
PET	MJ	4.86E+1	7.59E-1	2.02E+0	5.14E+1	2.56E-1	1.70E+0	1.47E-2	-2.52E+1	2.81E+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	1.36E-2	7.47E-5	4.19E-3	1.78E-2	2.70E-5	8.82E-4	1.65E-5	-5.94E-3	1.28E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	7.34E-6	1.54E-6	4.17E-7	9.30E-6	6.09E-7	2.50E-6	1.61E-8	-6.58E-6	5.84E-6
NHWD	kg	6.31E-2	3.54E-2	1.28E-3	9.98E-2	1.48E-2	7.63E-2	5.90E-2	-1.84E-2	2.31E-1
RWD	kg	2.33E-5	4.71E-6	1.16E-6	2.92E-5	1.62E-6	5.86E-6	8.75E-8	-9.57E-6	2.72E-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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