

Environmental Profile

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

Ecochain v3.5.64



Product: 3061952 - Wafix PP Pipe GY 75 L=2 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 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	2.35E+0	9.02E-2	7.56E-2	2.52E+0	2.96E-2	8.90E-1	1.39E-2	-1.40E+0	2.05E+0
GWP-f	kg CO2 eq	2.34E+0	9.02E-2	5.48E-2	2.49E+0	2.95E-2	8.91E-1	1.39E-2	-1.40E+0	2.03E+0
GWP-b	kg CO2 eq	1.02E-2	2.52E-5	1.44E-2	2.46E-2	1.79E-5	-1.20E-3	1.21E-5	-4.72E-3	1.87E-2
GWP-luluc	kg CO2 eq	6.55E-4	3.92E-5	6.38E-3	7.07E-3	1.05E-5	1.66E-4	2.36E-7	-2.60E-4	6.99E-3
ODP	kg CFC11 eq	4.81E-8	1.94E-8	6.21E-9	7.38E-8	6.80E-9	2.17E-8	3.49E-10	-5.27E-8	4.99E-8
AP	mol H+ eq	8.45E-3	1.17E-3	4.65E-4	1.01E-2	1.68E-4	9.15E-4	8.32E-6	-3.90E-3	7.28E-3
EP-fw	kg P eq	3.65E-5	7.59E-7	1.01E-6	3.83E-5	2.43E-7	4.81E-6	1.08E-8	-1.54E-5	2.80E-5
EP-m	kg N eq	1.41E-3	3.31E-4	1.38E-4	1.88E-3	6.02E-5	2.67E-4	5.42E-6	-6.90E-4	1.52E-3
EP-T	mol N eq	1.59E-2	3.67E-3	1.51E-3	2.11E-2	6.63E-4	2.94E-3	3.38E-5	-7.64E-3	1.71E-2
POCP	kg NMVOC eq	7.30E-3	9.88E-4	4.20E-4	8.71E-3	1.90E-4	9.27E-4	1.27E-5	-3.54E-3	6.30E-3
ADP-mm	kg Sb eq	3.56E-5	1.84E-6	1.65E-6	3.91E-5	7.64E-7	3.62E-6	8.39E-9	-9.09E-6	3.44E-5
ADP-f	MJ	8.23E+1	1.31E+0	5.45E-1	8.41E+1	4.53E-1	2.89E+0	2.55E-2	-4.36E+1	4.39E+1
WDP	m3 depriv.	1.62E+0	3.98E-3	3.51E-1	1.98E+0	1.39E-3	5.66E-2	1.27E-4	-7.51E-1	1.28E+0
PM	disease inc.	7.46E-8	6.67E-9	7.84E-9	8.91E-8	2.67E-9	1.50E-8	1.75E-10	-3.27E-8	7.42E-8
IR	kBq U-235 eq	4.52E-2	5.50E-3	1.62E-3	5.23E-2	1.98E-3	8.72E-3	1.18E-4	-2.00E-2	4.31E-2
ETP-fw	CTUe	1.37E+1	1.08E+0	1.52E+0	1.63E+1	3.68E-1	3.27E+0	2.13E-2	-5.63E+0	1.44E+1
HTP-c	CTUh	7.01E-10	4.15E-11	6.00E-11	8.03E-10	1.31E-11	3.95E-10	6.22E-13	-2.31E-10	9.81E-10
HTP-nc	CTUh	1.71E-8	1.13E-9	1.64E-9	1.99E-8	4.39E-10	4.89E-9	1.37E-11	-4.93E-9	2.03E-8
SQP	Pt	3.16E+0	9.07E-1	7.16E-2	4.13E+0	3.88E-1	2.31E+0	6.54E-2	-1.18E+0	5.72E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.67E+0	1.44E-2	3.44E+0	5.13E+0	6.50E-3	1.43E-1	9.87E-4	-5.36E-1	4.74E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.67E+0	1.44E-2	3.44E+0	5.13E+0	6.50E-3	1.43E-1	9.87E-4	-5.36E-1	4.74E+0
PENRE	MJ	8.83E+1	1.39E+0	5.79E-1	9.03E+1	4.81E-1	3.08E+0	2.70E-2	-4.70E+1	4.68E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	8.83E+1	1.39E+0	5.79E-1	9.03E+1	4.81E-1	3.08E+0	2.70E-2	-4.70E+1	4.68E+1
PET	MJ	9.00E+1	1.40E+0	4.02E+0	9.54E+1	4.88E-1	3.22E+0	2.80E-2	-4.75E+1	5.16E+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	2.48E-2	1.36E-4	8.34E-3	3.32E-2	5.13E-5	1.67E-3	3.14E-5	-1.13E-2	2.37E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.17E-5	2.80E-6	8.30E-7	1.53E-5	1.16E-6	4.71E-6	3.07E-8	-1.13E-5	9.95E-6
NHWD	kg	1.03E-1	6.40E-2	2.54E-3	1.69E-1	2.81E-2	1.43E-1	1.12E-1	-3.42E-2	4.19E-1
RWD	kg	3.99E-5	8.70E-6	2.31E-6	5.09E-5	3.08E-6	1.11E-5	1.66E-7	-1.81E-5	4.71E-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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