

Environmental Profile

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

Ecochain v3.5.64



Product: 3061963 - Wafix PP Pipe GY 110 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	2.65E+0	1.07E-1	8.08E-2	2.83E+0	3.38E-2	9.82E-1	1.59E-2	-1.58E+0	2.28E+0
GWP-f	kg CO2 eq	2.63E+0	1.07E-1	5.86E-2	2.80E+0	3.38E-2	9.83E-1	1.59E-2	-1.58E+0	2.25E+0
GWP-b	kg CO2 eq	1.30E-2	3.17E-5	1.54E-2	2.84E-2	2.05E-5	-1.38E-3	1.39E-5	-5.35E-3	2.17E-2
GWP-luluc	kg CO2 eq	7.28E-4	4.57E-5	6.81E-3	7.59E-3	1.20E-5	1.90E-4	2.70E-7	-2.94E-4	7.49E-3
ODP	kg CFC11 eq	5.97E-8	2.31E-8	6.64E-9	8.94E-8	7.79E-9	2.48E-8	3.99E-10	-5.81E-8	6.43E-8
AP	mol H+ eq	9.56E-3	1.31E-3	4.96E-4	1.14E-2	1.92E-4	1.04E-3	9.52E-6	-4.45E-3	8.17E-3
EP-fw	kg P eq	4.12E-5	9.16E-7	1.08E-6	4.32E-5	2.78E-7	5.50E-6	1.24E-8	-1.77E-5	3.13E-5
EP-m	kg N eq	1.60E-3	3.75E-4	1.47E-4	2.12E-3	6.89E-5	3.03E-4	6.21E-6	-7.86E-4	1.72E-3
EP-T	mol N eq	1.81E-2	4.16E-3	1.61E-3	2.38E-2	7.59E-4	3.34E-3	3.87E-5	-8.71E-3	1.92E-2
POCP	kg NMVOC eq	8.25E-3	1.12E-3	4.48E-4	9.82E-3	2.17E-4	1.06E-3	1.45E-5	-4.05E-3	7.06E-3
ADP-mm	kg Sb eq	4.79E-5	2.23E-6	1.76E-6	5.19E-5	8.74E-7	4.14E-6	9.59E-9	-1.04E-5	4.65E-5
ADP-f	MJ	9.24E+1	1.55E+0	5.82E-1	9.45E+1	5.19E-1	3.30E+0	2.92E-2	-4.95E+1	4.88E+1
WDP	m3 depriv.	1.82E+0	4.81E-3	3.75E-1	2.20E+0	1.59E-3	6.46E-2	1.45E-4	-8.59E-1	1.41E+0
PM	disease inc.	8.57E-8	8.06E-9	8.37E-9	1.02E-7	3.05E-9	1.72E-8	2.00E-10	-3.76E-8	8.50E-8
IR	kBq U-235 eq	5.23E-2	6.54E-3	1.73E-3	6.06E-2	2.27E-3	9.97E-3	1.35E-4	-2.27E-2	5.02E-2
ETP-fw	CTUe	1.61E+1	1.30E+0	1.62E+0	1.90E+1	4.21E-1	3.74E+0	2.44E-2	-6.53E+0	1.66E+1
HTP-c	CTUh	8.86E-10	4.89E-11	6.41E-11	9.99E-10	1.50E-11	4.48E-10	7.11E-13	-2.63E-10	1.20E-9
HTP-nc	CTUh	2.06E-8	1.36E-9	1.75E-9	2.37E-8	5.02E-10	5.56E-9	1.57E-11	-4.90E-9	2.49E-8
SQP	Pt	3.71E+0	1.11E+0	7.65E-2	4.90E+0	4.44E-1	2.65E+0	7.48E-2	-1.34E+0	6.72E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.56E+0	1.74E-2	3.67E+0	6.25E+0	7.44E-3	1.63E-1	1.13E-3	-6.11E-1	5.81E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.56E+0	1.74E-2	3.67E+0	6.25E+0	7.44E-3	1.63E-1	1.13E-3	-6.11E-1	5.81E+0
PENRE	MJ	9.91E+1	1.65E+0	6.18E-1	1.01E+2	5.51E-1	3.52E+0	3.09E-2	-5.34E+1	5.21E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	9.91E+1	1.65E+0	6.18E-1	1.01E+2	5.51E-1	3.52E+0	3.09E-2	-5.34E+1	5.21E+1
PET	MJ	1.02E+2	1.66E+0	4.29E+0	1.08E+2	5.58E-1	3.68E+0	3.21E-2	-5.40E+1	5.79E+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	2.79E-2	1.65E-4	8.91E-3	3.69E-2	5.87E-5	1.90E-3	3.60E-5	-1.29E-2	2.61E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.37E-5	3.39E-6	8.86E-7	1.79E-5	1.33E-6	5.38E-6	3.51E-8	-1.29E-5	1.18E-5
NHWD	kg	1.25E-1	7.83E-2	2.72E-3	2.06E-1	3.21E-2	1.62E-1	1.28E-1	-3.93E-2	4.90E-1
RWD	kg	4.73E-5	1.03E-5	2.46E-6	6.01E-5	3.53E-6	1.26E-5	1.90E-7	-2.06E-5	5.59E-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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