

Environmental Profile

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

Ecochain v3.5.64



Product: 3062120 - Wafix PP Pipe BR 110 SN8 L=3
 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	7.69E+0	7.43E-1	2.72E-1	8.71E+0	9.98E-2	2.89E+0	4.70E-2	-4.65E+0	7.10E+0
GWP-f	kg CO2 eq	7.66E+0	7.43E-1	1.97E-1	8.60E+0	9.97E-2	2.90E+0	4.70E-2	-4.63E+0	7.01E+0
GWP-b	kg CO2 eq	3.58E-2	3.38E-4	5.19E-2	8.81E-2	6.05E-5	-4.02E-3	4.09E-5	-1.61E-2	6.81E-2
GWP-luluc	kg CO2 eq	2.01E-3	2.74E-4	2.29E-2	2.52E-2	3.53E-5	5.60E-4	7.98E-7	-8.85E-4	2.49E-2
ODP	kg CFC11 eq	1.47E-7	1.64E-7	2.23E-8	3.33E-7	2.30E-8	7.29E-8	1.18E-9	-1.71E-7	2.60E-7
AP	mol H+ eq	2.74E-2	4.51E-3	1.67E-3	3.35E-2	5.68E-4	3.06E-3	2.81E-5	-1.30E-2	2.42E-2
EP-fw	kg P eq	1.14E-4	7.44E-6	3.64E-6	1.25E-4	8.20E-7	1.62E-5	3.66E-8	-5.14E-5	9.07E-5
EP-m	kg N eq	4.55E-3	1.56E-3	4.95E-4	6.61E-3	2.03E-4	8.90E-4	1.83E-5	-2.30E-3	5.42E-3
EP-T	mol N eq	5.13E-2	1.72E-2	5.43E-3	7.40E-2	2.24E-3	9.80E-3	1.14E-4	-2.55E-2	6.06E-2
POCP	kg NMVOC eq	2.37E-2	4.90E-3	1.51E-3	3.01E-2	6.40E-4	3.10E-3	4.28E-5	-1.18E-2	2.21E-2
ADP-mm	kg Sb eq	1.16E-4	1.87E-5	5.94E-6	1.41E-4	2.58E-6	1.22E-5	2.83E-8	-3.06E-5	1.25E-4
ADP-f	MJ	2.72E+2	1.12E+1	1.96E+0	2.85E+2	1.53E+0	9.72E+0	8.60E-2	-1.46E+2	1.51E+2
WDP	m3 depriv.	5.36E+0	3.98E-2	1.26E+0	6.66E+0	4.70E-3	1.91E-1	4.29E-4	-2.53E+0	4.33E+0
PM	disease inc.	2.41E-7	6.62E-8	2.82E-8	3.35E-7	9.00E-9	5.05E-8	5.92E-10	-1.09E-7	2.86E-7
IR	kBq U-235 eq	1.43E-1	4.69E-2	5.83E-3	1.96E-1	6.69E-3	2.93E-2	3.99E-4	-6.75E-2	1.64E-1
ETP-fw	CTUe	4.19E+1	9.95E+0	5.47E+0	5.73E+1	1.24E+0	1.10E+1	7.20E-2	-1.84E+1	5.11E+1
HTP-c	CTUh	2.01E-9	3.25E-10	2.16E-10	2.55E-9	4.42E-11	1.32E-9	2.10E-12	-7.71E-10	3.15E-9
HTP-nc	CTUh	5.23E-8	1.09E-8	5.89E-9	6.91E-8	1.48E-9	1.63E-8	4.63E-11	-1.93E-8	6.76E-8
SQP	Pt	9.79E+0	9.63E+0	2.58E-1	1.97E+1	1.31E+0	7.78E+0	2.21E-1	-3.93E+0	2.51E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	5.04E+0	1.39E-1	1.24E+1	1.75E+1	2.20E-2	4.80E-1	3.33E-3	-1.81E+0	1.62E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	5.04E+0	1.39E-1	1.24E+1	1.75E+1	2.20E-2	4.80E-1	3.33E-3	-1.81E+0	1.62E+1
PENRE	MJ	2.92E+2	1.19E+1	2.08E+0	3.06E+2	1.62E+0	1.04E+1	9.13E-2	-1.57E+2	1.61E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.92E+2	1.19E+1	2.08E+0	3.06E+2	1.62E+0	1.04E+1	9.13E-2	-1.57E+2	1.61E+2
PET	MJ	2.97E+2	1.20E+1	1.44E+1	3.24E+2	1.65E+0	1.08E+1	9.46E-2	-1.59E+2	1.77E+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	8.07E-2	1.35E-3	3.00E-2	1.12E-1	1.73E-4	5.61E-3	1.06E-4	-3.78E-2	8.01E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	3.45E-5	2.82E-5	2.99E-6	6.57E-5	3.91E-6	1.58E-5	1.04E-7	-3.50E-5	5.05E-5
NHWD	kg	3.14E-1	7.03E-1	9.15E-3	1.03E+0	9.49E-2	4.77E-1	3.79E-1	-1.13E-1	1.86E+0
RWD	kg	1.26E-4	7.35E-5	8.30E-6	2.07E-4	1.04E-5	3.71E-5	5.62E-7	-6.08E-5	1.95E-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



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