

Environmental Profile

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

Ecochain v3.5.64



Product: 3061927 - Wafix PP Pipe WT 40 L=3 PL/CH
 Unit: 1 piece
 Manufacturer: Wavin - SE - Eskilstuna

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.

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



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	1.43E+0	5.17E-2	4.90E-2	1.53E+0	1.74E-2	5.73E-1	8.20E-3	-8.55E-1	1.27E+0
GWP-f	kg CO2 eq	1.42E+0	5.17E-2	3.55E-2	1.51E+0	1.74E-2	5.73E-1	8.20E-3	-8.52E-1	1.26E+0
GWP-b	kg CO2 eq	4.17E-3	1.38E-5	9.34E-3	1.35E-2	1.06E-5	-7.02E-4	7.13E-6	-2.81E-3	1.00E-2
GWP-luluc	kg CO2 eq	4.30E-4	2.27E-5	4.13E-3	4.58E-3	6.16E-6	9.84E-5	1.41E-7	-1.55E-4	4.53E-3
ODP	kg CFC11 eq	2.87E-8	1.11E-8	4.02E-9	4.38E-8	4.01E-9	1.29E-8	2.06E-10	-3.41E-8	2.69E-8
AP	mol H+ eq	5.20E-3	6.95E-4	3.01E-4	6.20E-3	9.91E-5	5.47E-4	4.92E-6	-2.32E-3	4.53E-3
EP-fw	kg P eq	2.31E-5	4.30E-7	6.55E-7	2.42E-5	1.43E-7	2.84E-6	6.46E-9	-9.12E-6	1.81E-5
EP-m	kg N eq	8.64E-4	1.95E-4	8.91E-5	1.15E-3	3.55E-5	1.60E-4	3.18E-6	-4.14E-4	9.34E-4
EP-T	mol N eq	9.78E-3	2.17E-3	9.78E-4	1.29E-2	3.91E-4	1.76E-3	1.99E-5	-4.58E-3	1.05E-2
POCP	kg NMVOC eq	4.46E-3	5.82E-4	2.72E-4	5.31E-3	1.12E-4	5.56E-4	7.48E-6	-2.11E-3	3.88E-3
ADP-mm	kg Sb eq	2.07E-5	1.04E-6	1.07E-6	2.29E-5	4.50E-7	2.14E-6	4.97E-9	-5.38E-6	2.01E-5
ADP-f	MJ	4.93E+1	7.46E-1	3.53E-1	5.04E+1	2.67E-1	1.71E+0	1.50E-2	-2.62E+1	2.62E+1
WDP	m3 depriv.	9.94E-1	2.25E-3	2.27E-1	1.22E+0	8.20E-4	3.35E-2	8.22E-5	-4.45E-1	8.13E-1
PM	disease inc.	4.54E-8	3.77E-9	5.07E-9	5.42E-8	1.57E-9	8.94E-9	1.03E-10	-1.93E-8	4.55E-8
IR	kBq U-235 eq	2.73E-2	3.15E-3	1.05E-3	3.15E-2	1.17E-3	5.17E-3	6.96E-5	-1.20E-2	2.59E-2
ETP-fw	CTUe	8.78E+0	6.17E-1	9.83E-1	1.04E+1	2.17E-1	1.95E+0	1.26E-2	-3.34E+0	9.22E+0
HTP-c	CTUh	4.14E-10	2.39E-11	3.88E-11	4.77E-10	7.72E-12	2.43E-10	3.72E-13	-1.38E-10	5.91E-10
HTP-nc	CTUh	1.03E-8	6.38E-10	1.06E-9	1.20E-8	2.59E-10	2.94E-9	8.13E-12	-3.08E-9	1.21E-8
SQP	Pt	2.05E+0	5.10E-1	4.64E-2	2.60E+0	2.28E-1	1.37E+0	3.85E-2	-7.09E-1	3.53E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	7.89E-1	8.18E-3	2.22E+0	3.02E+0	3.83E-3	8.44E-2	5.78E-4	-3.18E-1	2.79E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	7.89E-1	8.18E-3	2.22E+0	3.02E+0	3.83E-3	8.44E-2	5.78E-4	-3.18E-1	2.79E+0
PENRE	MJ	5.30E+1	7.92E-1	3.75E-1	5.41E+1	2.84E-1	1.82E+0	1.59E-2	-2.83E+1	2.80E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	5.30E+1	7.92E-1	3.75E-1	5.41E+1	2.84E-1	1.82E+0	1.59E-2	-2.83E+1	2.80E+1
PET	MJ	5.37E+1	8.01E-1	2.60E+0	5.71E+1	2.87E-1	1.91E+0	1.65E-2	-2.86E+1	3.08E+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	1.56E-2	7.71E-5	5.40E-3	2.10E-2	3.02E-5	9.94E-4	1.85E-5	-6.68E-3	1.54E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	7.09E-6	1.58E-6	5.37E-7	9.21E-6	6.83E-7	2.81E-6	1.82E-8	-7.15E-6	5.57E-6
NHWD	kg	6.25E-2	3.59E-2	1.65E-3	1.00E-1	1.66E-2	8.69E-2	6.62E-2	-2.03E-2	2.49E-1
RWD	kg	2.36E-5	4.98E-6	1.49E-6	3.01E-5	1.82E-6	6.56E-6	9.80E-8	-1.09E-5	2.77E-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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