

Environmental Profile

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

Ecochain v3.5.64



Product: 3020702 - Wafix PP Pipe WT 32x3,0 L=4
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					Use stage							End-of-Life stage				
A1 Raw material supply A2 Transport A3 Manufacturing					B1 Use B2 Maintenance B3 Repair B4 Replacement B5 Refurbishment B6 Operational energy use B7 Operational water use							C1 De-construction demolition C2 Transport C3 Waste processing C4 Disposal				
Construction process stage					Benefits and loads beyond the system boundaries											
A4 Transport gate to site A5 Assembly / Construction installation process					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]

Statement of Confidentiality

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Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	2.28E+0	8.45E-2	7.64E-2	2.44E+0	2.86E-2	8.99E-1	1.34E-2	-1.37E+0	2.01E+0
GWP-f	kg CO2 eq	2.27E+0	8.45E-2	5.54E-2	2.41E+0	2.85E-2	9.00E-1	1.34E-2	-1.37E+0	1.98E+0
GWP-b	kg CO2 eq	7.87E-3	2.25E-5	1.46E-2	2.25E-2	1.73E-5	-1.15E-3	1.17E-5	-4.62E-3	1.67E-2
GWP-luluc	kg CO2 eq	6.52E-4	3.71E-5	6.44E-3	7.13E-3	1.01E-5	1.61E-4	2.32E-7	-2.55E-4	7.05E-3
ODP	kg CFC11 eq	4.41E-8	1.82E-8	6.28E-9	6.86E-8	6.58E-9	2.11E-8	3.38E-10	-5.32E-8	4.33E-8
AP	mol H+ eq	8.24E-3	1.14E-3	4.69E-4	9.84E-3	1.63E-4	8.89E-4	8.06E-6	-3.77E-3	7.13E-3
EP-fw	kg P eq	3.55E-5	7.01E-7	1.02E-6	3.73E-5	2.35E-7	4.65E-6	1.06E-8	-1.48E-5	2.73E-5
EP-m	kg N eq	1.36E-3	3.20E-4	1.39E-4	1.82E-3	5.82E-5	2.60E-4	5.22E-6	-6.70E-4	1.48E-3
EP-T	mol N eq	1.54E-2	3.55E-3	1.53E-3	2.05E-2	6.41E-4	2.86E-3	3.27E-5	-7.42E-3	1.66E-2
POCP	kg NMVOC eq	7.07E-3	9.52E-4	4.24E-4	8.44E-3	1.83E-4	9.02E-4	1.23E-5	-3.42E-3	6.12E-3
ADP-mm	kg Sb eq	3.28E-5	1.69E-6	1.67E-6	3.62E-5	7.38E-7	3.50E-6	8.15E-9	-8.80E-6	3.16E-5
ADP-f	MJ	7.95E+1	1.22E+0	5.51E-1	8.12E+1	4.38E-1	2.80E+0	2.46E-2	-4.25E+1	4.20E+1
WDP	m3 depriv.	1.59E+0	3.67E-3	3.55E-1	1.95E+0	1.34E-3	5.47E-2	1.34E-4	-7.27E-1	1.28E+0
PM	disease inc.	7.18E-8	6.15E-9	7.92E-9	8.59E-8	2.58E-9	1.46E-8	1.69E-10	-3.15E-8	7.17E-8
IR	kBq U-235 eq	4.27E-2	5.14E-3	1.64E-3	4.94E-2	1.91E-3	8.44E-3	1.14E-4	-1.96E-2	4.04E-2
ETP-fw	CTUe	1.33E+1	1.01E+0	1.53E+0	1.59E+1	3.56E-1	3.17E+0	2.06E-2	-5.35E+0	1.41E+1
HTP-c	CTUh	6.08E-10	3.90E-11	6.06E-11	7.08E-10	1.27E-11	3.93E-10	6.09E-13	-2.24E-10	8.90E-10
HTP-nc	CTUh	1.58E-8	1.04E-9	1.65E-9	1.85E-8	4.24E-10	4.77E-9	1.33E-11	-5.52E-9	1.81E-8
SQP	Pt	3.09E+0	8.32E-1	7.24E-2	4.00E+0	3.75E-1	2.24E+0	6.32E-2	-1.15E+0	5.52E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.22E+0	1.33E-2	3.47E+0	4.71E+0	6.28E-3	1.38E-1	9.49E-4	-5.21E-1	4.33E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.22E+0	1.33E-2	3.47E+0	4.71E+0	6.28E-3	1.38E-1	9.49E-4	-5.21E-1	4.33E+0
PENRE	MJ	8.53E+1	1.29E+0	5.85E-1	8.72E+1	4.65E-1	2.98E+0	2.62E-2	-4.58E+1	4.48E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	8.53E+1	1.29E+0	5.85E-1	8.72E+1	4.65E-1	2.98E+0	2.62E-2	-4.58E+1	4.48E+1
PET	MJ	8.65E+1	1.31E+0	4.06E+0	9.19E+1	4.71E-1	3.12E+0	2.71E-2	-4.64E+1	4.91E+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	2.46E-2	1.26E-4	8.43E-3	3.32E-2	4.96E-5	1.62E-3	3.03E-5	-1.09E-2	2.40E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.06E-5	2.58E-6	8.38E-7	1.40E-5	1.12E-6	4.57E-6	2.98E-8	-1.09E-5	8.84E-6
NHWD	kg	9.49E-2	5.85E-2	2.57E-3	1.56E-1	2.71E-2	1.40E-1	1.09E-1	-3.28E-2	3.99E-1
RWD	kg	3.69E-5	8.13E-6	2.33E-6	4.74E-5	2.98E-6	1.07E-5	1.61E-7	-1.77E-5	4.35E-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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