

Environmental Profile

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

Ecochain v3.5.64



Product: 3061976 - Wafix PP Pipe GY 32 L=2 S/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					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	7.72E-1	2.90E-2	2.46E-2	8.26E-1	9.56E-3	2.85E-1	4.50E-3	-4.51E-1	6.74E-1
GWP-f	kg CO2 eq	7.69E-1	2.90E-2	1.78E-2	8.16E-1	9.55E-3	2.85E-1	4.50E-3	-4.50E-1	6.66E-1
GWP-b	kg CO2 eq	3.32E-3	8.03E-6	4.68E-3	8.01E-3	5.80E-6	-3.87E-4	3.92E-6	-1.52E-3	6.11E-3
GWP-luluc	kg CO2 eq	2.18E-4	1.26E-5	2.07E-3	2.30E-3	3.38E-6	5.38E-5	7.66E-8	-8.39E-5	2.27E-3
ODP	kg CFC11 eq	1.69E-8	6.25E-9	2.02E-9	2.52E-8	2.20E-9	7.02E-9	1.13E-10	-1.69E-8	1.76E-8
AP	mol H+ eq	2.80E-3	3.79E-4	1.51E-4	3.33E-3	5.44E-5	2.96E-4	2.69E-6	-1.26E-3	2.42E-3
EP-fw	kg P eq	1.21E-5	2.44E-7	3.29E-7	1.27E-5	7.86E-8	1.55E-6	3.51E-9	-4.98E-6	9.32E-6
EP-m	kg N eq	4.65E-4	1.07E-4	4.47E-5	6.17E-4	1.95E-5	8.61E-5	1.75E-6	-2.23E-4	5.01E-4
EP-T	mol N eq	5.26E-3	1.19E-3	4.90E-4	6.94E-3	2.14E-4	9.47E-4	1.09E-5	-2.47E-3	5.64E-3
POCP	kg NMVOC eq	2.40E-3	3.19E-4	1.36E-4	2.85E-3	6.13E-5	2.99E-4	4.10E-6	-1.14E-3	2.07E-3
ADP-mm	kg Sb eq	1.33E-5	5.89E-7	5.36E-7	1.44E-5	2.47E-7	1.17E-6	2.71E-9	-2.94E-6	1.29E-5
ADP-f	MJ	2.69E+1	4.19E-1	1.77E-1	2.75E+1	1.47E-1	9.34E-1	8.24E-3	-1.41E+1	1.45E+1
WDP	m3 depriv.	5.34E-1	1.28E-3	1.14E-1	6.50E-1	4.50E-4	1.83E-2	4.15E-5	-2.43E-1	4.25E-1
PM	disease inc.	2.48E-8	2.14E-9	2.54E-9	2.94E-8	8.62E-10	4.86E-9	5.67E-11	-1.06E-8	2.46E-8
IR	kBq U-235 eq	1.51E-2	1.77E-3	5.26E-4	1.74E-2	6.41E-4	2.82E-3	3.82E-5	-6.46E-3	1.44E-2
ETP-fw	CTUe	4.65E+0	3.48E-1	4.93E-1	5.49E+0	1.19E-1	1.06E+0	6.90E-3	-1.82E+0	4.85E+0
HTP-c	CTUh	2.36E-10	1.34E-11	1.95E-11	2.69E-10	4.24E-12	1.28E-10	2.01E-13	-7.44E-11	3.27E-10
HTP-nc	CTUh	5.73E-9	3.61E-10	5.31E-10	6.62E-9	1.42E-10	1.58E-9	4.44E-12	-1.57E-9	6.78E-9
SQP	Pt	1.06E+0	2.91E-1	2.33E-2	1.37E+0	1.25E-1	7.48E-1	2.11E-2	-3.81E-1	1.89E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	5.32E-1	4.63E-3	1.12E+0	1.65E+0	2.10E-3	4.61E-2	3.19E-4	-1.73E-1	1.53E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	5.32E-1	4.63E-3	1.12E+0	1.65E+0	2.10E-3	4.61E-2	3.19E-4	-1.73E-1	1.53E+0
PENRE	MJ	2.89E+1	4.45E-1	1.88E-1	2.95E+1	1.56E-1	9.95E-1	8.74E-3	-1.52E+1	1.55E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.89E+1	4.45E-1	1.88E-1	2.95E+1	1.56E-1	9.95E-1	8.74E-3	-1.52E+1	1.55E+1
PET	MJ	2.94E+1	4.50E-1	1.30E+0	3.11E+1	1.58E-1	1.04E+0	9.06E-3	-1.53E+1	1.70E+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	8.21E-3	4.37E-5	2.71E-3	1.10E-2	1.66E-5	5.39E-4	1.02E-5	-3.64E-3	7.89E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	3.96E-6	8.99E-7	2.69E-7	5.13E-6	3.75E-7	1.52E-6	9.93E-9	-3.63E-6	3.41E-6
NHWD	kg	3.48E-2	2.05E-2	8.26E-4	5.61E-2	9.08E-3	4.62E-2	3.63E-2	-1.10E-2	1.37E-1
RWD	kg	1.34E-5	2.80E-6	7.48E-7	1.70E-5	9.97E-7	3.58E-6	5.38E-8	-5.85E-6	1.58E-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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