

Environmental Profile

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

Ecochain v3.5.64



Product: 3061967 - Wafix PP Pipe GY 110 L=5 w/socket
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	1.18E+1	4.60E-1	4.01E-1	1.26E+1	1.53E-1	4.44E+0	7.21E-2	-7.13E+0	1.02E+1
GWP-f	kg CO2 eq	1.17E+1	4.60E-1	2.91E-1	1.25E+1	1.53E-1	4.44E+0	7.21E-2	-7.10E+0	1.00E+1
GWP-b	kg CO2 eq	5.45E-2	1.25E-4	7.65E-2	1.31E-1	9.28E-5	-6.17E-3	6.28E-5	-2.46E-2	1.00E-1
GWP-luluc	kg CO2 eq	3.08E-3	2.01E-4	3.38E-2	3.71E-2	5.41E-5	8.59E-4	1.22E-6	-1.35E-3	3.66E-2
ODP	kg CFC11 eq	2.21E-7	9.90E-8	3.29E-8	3.53E-7	3.52E-8	1.12E-7	1.81E-9	-2.62E-7	2.40E-7
AP	mol H+ eq	4.18E-2	6.09E-3	2.46E-3	5.04E-2	8.71E-4	4.70E-3	4.31E-5	-2.00E-2	3.59E-2
EP-fw	kg P eq	1.75E-4	3.84E-6	5.36E-6	1.84E-4	1.26E-6	2.48E-5	5.62E-8	-7.90E-5	1.31E-4
EP-m	kg N eq	6.94E-3	1.72E-3	7.30E-4	9.39E-3	3.12E-4	1.37E-3	2.81E-5	-3.53E-3	7.56E-3
EP-T	mol N eq	7.83E-2	1.90E-2	8.01E-3	1.05E-1	3.43E-3	1.50E-2	1.75E-4	-3.91E-2	8.48E-2
POCP	kg NMVOC eq	3.62E-2	5.12E-3	2.22E-3	4.36E-2	9.82E-4	4.76E-3	6.57E-5	-1.81E-2	3.12E-2
ADP-mm	kg Sb eq	1.70E-4	9.28E-6	8.75E-6	1.88E-4	3.95E-6	1.86E-5	4.34E-8	-4.70E-5	1.63E-4
ADP-f	MJ	4.16E+2	6.64E+0	2.89E+0	4.26E+2	2.35E+0	1.49E+1	1.32E-1	-2.24E+2	2.20E+2
WDP	m3 depriv.	8.20E+0	2.01E-2	1.86E+0	1.01E+1	7.20E-3	2.92E-1	6.58E-4	-3.88E+0	6.51E+0
PM	disease inc.	3.68E-7	3.37E-8	4.15E-8	4.43E-7	1.38E-8	7.75E-8	9.07E-10	-1.68E-7	3.67E-7
IR	kBq U-235 eq	2.18E-1	2.80E-2	8.59E-3	2.54E-1	1.03E-2	4.50E-2	6.12E-4	-1.03E-1	2.07E-1
ETP-fw	CTUe	6.40E+1	5.50E+0	8.05E+0	7.75E+1	1.91E+0	1.68E+1	1.10E-1	-2.85E+1	6.79E+1
HTP-c	CTUh	3.17E-9	2.12E-10	3.18E-10	3.70E-9	6.78E-11	2.02E-9	3.22E-12	-1.18E-9	4.61E-9
HTP-nc	CTUh	8.08E-8	5.69E-9	8.67E-9	9.52E-8	2.27E-9	2.51E-8	7.10E-11	-2.85E-8	9.41E-8
SQP	Pt	1.47E+1	4.57E+0	3.80E-1	1.97E+1	2.01E+0	1.19E+1	3.39E-1	-6.03E+0	2.79E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	7.21E+0	7.30E-2	1.82E+1	2.55E+1	3.37E-2	7.36E-1	5.11E-3	-2.77E+0	2.35E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	7.21E+0	7.30E-2	1.82E+1	2.55E+1	3.37E-2	7.36E-1	5.11E-3	-2.77E+0	2.35E+1
PENRE	MJ	4.47E+2	7.05E+0	3.07E+0	4.57E+2	2.49E+0	1.59E+1	1.40E-1	-2.41E+2	2.34E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	4.47E+2	7.05E+0	3.07E+0	4.57E+2	2.49E+0	1.59E+1	1.40E-1	-2.41E+2	2.34E+2
PET	MJ	4.54E+2	7.12E+0	2.13E+1	4.82E+2	2.52E+0	1.66E+1	1.45E-1	-2.44E+2	2.58E+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	1.23E-1	6.89E-4	4.42E-2	1.68E-1	2.66E-4	8.60E-3	1.63E-4	-5.80E-2	1.19E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	5.28E-5	1.42E-5	4.40E-6	7.13E-5	6.00E-6	2.43E-5	1.59E-7	-5.44E-5	4.73E-5
NHWD	kg	4.75E-1	3.22E-1	1.35E-2	8.10E-1	1.45E-1	7.32E-1	5.81E-1	-1.75E-1	2.09E+0
RWD	kg	1.90E-4	4.43E-5	1.22E-5	2.47E-4	1.60E-5	5.70E-5	8.61E-7	-9.32E-5	2.28E-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



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