

Environmental Profile

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

Ecochain v3.5.64



Product: 3031669 - Wafix PP Pipe BK 50 L=3
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]

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Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	2.68E+0	1.03E-1	9.31E-2	2.87E+0	3.47E-2	1.01E+0	1.64E-2	-1.62E+0	2.31E+0
GWP-f	kg CO2 eq	2.66E+0	1.03E-1	6.75E-2	2.83E+0	3.47E-2	1.01E+0	1.64E-2	-1.61E+0	2.28E+0
GWP-b	kg CO2 eq	1.22E-2	2.72E-5	1.78E-2	3.00E-2	2.11E-5	-1.41E-3	1.42E-5	-5.55E-3	2.31E-2
GWP-luluc	kg CO2 eq	7.01E-4	4.52E-5	7.85E-3	8.60E-3	1.23E-5	1.95E-4	2.78E-7	-3.05E-4	8.50E-3
ODP	kg CFC11 eq	4.86E-8	2.21E-8	7.65E-9	7.83E-8	7.99E-9	2.54E-8	4.10E-10	-5.95E-8	5.27E-8
AP	mol H+ eq	9.48E-3	1.39E-3	5.72E-4	1.14E-2	1.98E-4	1.07E-3	9.78E-6	-4.55E-3	8.17E-3
EP-fw	kg P eq	3.99E-5	8.53E-7	1.25E-6	4.20E-5	2.85E-7	5.64E-6	1.28E-8	-1.80E-5	3.00E-5
EP-m	kg N eq	1.57E-3	3.91E-4	1.69E-4	2.13E-3	7.07E-5	3.10E-4	6.37E-6	-8.04E-4	1.72E-3
EP-T	mol N eq	1.77E-2	4.33E-3	1.86E-3	2.39E-2	7.79E-4	3.42E-3	3.97E-5	-8.90E-3	1.93E-2
POCP	kg NMVOC eq	8.21E-3	1.16E-3	5.17E-4	9.89E-3	2.23E-4	1.08E-3	1.49E-5	-4.13E-3	7.08E-3
ADP-mm	kg Sb eq	3.59E-5	2.06E-6	2.03E-6	3.99E-5	8.98E-7	4.24E-6	9.86E-9	-1.07E-5	3.44E-5
ADP-f	MJ	9.46E+1	1.48E+0	6.71E-1	9.67E+1	5.33E-1	3.39E+0	2.99E-2	-5.08E+1	4.99E+1
WDP	m3 depriv.	1.86E+0	4.46E-3	4.32E-1	2.30E+0	1.63E-3	6.63E-2	1.50E-4	-8.81E-1	1.49E+0
PM	disease inc.	8.34E-8	7.48E-9	9.65E-9	1.01E-7	3.13E-9	1.76E-8	2.06E-10	-3.83E-8	8.32E-8
IR	kBq U-235 eq	4.92E-2	6.26E-3	1.99E-3	5.74E-2	2.33E-3	1.02E-2	1.39E-4	-2.34E-2	4.67E-2
ETP-fw	CTUe	1.46E+1	1.22E+0	1.87E+0	1.76E+1	4.32E-1	3.83E+0	2.51E-2	-6.55E+0	1.54E+1
HTP-c	CTUh	7.64E-10	4.75E-11	7.39E-11	8.85E-10	1.54E-11	4.60E-10	7.31E-13	-2.69E-10	1.09E-9
HTP-nc	CTUh	1.87E-8	1.27E-9	2.01E-9	2.20E-8	5.16E-10	5.70E-9	1.61E-11	-5.93E-9	2.23E-8
SQP	Pt	3.27E+0	1.01E+0	8.82E-2	4.37E+0	4.56E-1	2.71E+0	7.68E-2	-1.37E+0	6.24E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.38E+0	1.62E-2	4.23E+0	5.63E+0	7.64E-3	1.67E-1	1.16E-3	-6.28E-1	5.17E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.38E+0	1.62E-2	4.23E+0	5.63E+0	7.64E-3	1.67E-1	1.16E-3	-6.28E-1	5.17E+0
PENRE	MJ	1.02E+2	1.58E+0	7.12E-1	1.04E+2	5.65E-1	3.61E+0	3.18E-2	-5.47E+1	5.33E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.02E+2	1.58E+0	7.12E-1	1.04E+2	5.65E-1	3.61E+0	3.18E-2	-5.47E+1	5.33E+1
PET	MJ	1.03E+2	1.59E+0	4.94E+0	1.09E+2	5.73E-1	3.78E+0	3.29E-2	-5.54E+1	5.84E+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	2.80E-2	1.53E-4	1.03E-2	3.85E-2	6.03E-5	1.95E-3	3.69E-5	-1.32E-2	2.73E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.22E-5	3.14E-6	1.02E-6	1.63E-5	1.36E-6	5.51E-6	3.61E-8	-1.27E-5	1.06E-5
NHWD	kg	1.07E-1	7.10E-2	3.13E-3	1.81E-1	3.30E-2	1.66E-1	1.32E-1	-3.99E-2	4.72E-1
RWD	kg	4.26E-5	9.90E-6	2.84E-6	5.53E-5	3.62E-6	1.30E-5	1.95E-7	-2.11E-5	5.10E-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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