

Environmental Profile

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

Ecochain v3.5.64



Product: 3020705 - Wafix PP Pipe WT 50x3,0 L=5
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	4.60E+0	1.71E-1	1.55E-1	4.92E+0	5.79E-2	1.80E+0	2.72E-2	-2.77E+0	4.04E+0
GWP-f	kg CO2 eq	4.58E+0	1.71E-1	1.12E-1	4.86E+0	5.78E-2	1.81E+0	2.72E-2	-2.76E+0	3.99E+0
GWP-b	kg CO2 eq	1.65E-2	4.55E-5	2.96E-2	4.61E-2	3.51E-5	-2.33E-3	2.37E-5	-9.34E-3	3.45E-2
GWP-luluc	kg CO2 eq	1.31E-3	7.51E-5	1.31E-2	1.44E-2	2.05E-5	3.26E-4	4.69E-7	-5.16E-4	1.43E-2
ODP	kg CFC11 eq	8.88E-8	3.68E-8	1.27E-8	1.38E-7	1.33E-8	4.26E-8	6.84E-10	-1.07E-7	8.83E-8
AP	mol H+ eq	1.66E-2	2.31E-3	9.52E-4	1.99E-2	3.29E-4	1.80E-3	1.63E-5	-7.63E-3	1.44E-2
EP-fw	kg P eq	7.14E-5	1.42E-6	2.07E-6	7.49E-5	4.76E-7	9.41E-6	2.14E-8	-3.00E-5	5.48E-5
EP-m	kg N eq	2.75E-3	6.48E-4	2.82E-4	3.68E-3	1.18E-4	5.25E-4	1.06E-5	-1.36E-3	2.98E-3
EP-T	mol N eq	3.11E-2	7.18E-3	3.09E-3	4.14E-2	1.30E-3	5.78E-3	6.63E-5	-1.50E-2	3.35E-2
POCP	kg NMVOC eq	1.42E-2	1.93E-3	8.60E-4	1.70E-2	3.71E-4	1.82E-3	2.49E-5	-6.92E-3	1.23E-2
ADP-mm	kg Sb eq	6.61E-5	3.43E-6	3.38E-6	7.30E-5	1.50E-6	7.08E-6	1.65E-8	-1.78E-5	6.37E-5
ADP-f	MJ	1.60E+2	2.47E+0	1.12E+0	1.64E+2	8.87E-1	5.66E+0	4.99E-2	-8.59E+1	8.47E+1
WDP	m3 depriv.	3.21E+0	7.42E-3	7.19E-1	3.94E+0	2.72E-3	1.11E-1	2.71E-4	-1.47E+0	2.58E+0
PM	disease inc.	1.45E-7	1.25E-8	1.61E-8	1.73E-7	5.22E-9	2.95E-8	3.43E-10	-6.38E-8	1.45E-7
IR	kBq U-235 eq	8.59E-2	1.04E-2	3.32E-3	9.97E-2	3.88E-3	1.71E-2	2.31E-4	-3.95E-2	8.13E-2
ETP-fw	CTUe	2.67E+1	2.04E+0	3.11E+0	3.19E+1	7.21E-1	6.42E+0	4.18E-2	-1.08E+1	2.82E+1
HTP-c	CTUh	1.23E-9	7.90E-11	1.23E-10	1.44E-9	2.56E-11	7.94E-10	1.23E-12	-4.53E-10	1.80E-9
HTP-nc	CTUh	3.18E-8	2.11E-9	3.35E-9	3.73E-8	8.59E-10	9.65E-9	2.70E-11	-1.11E-8	3.68E-8
SQP	Pt	6.17E+0	1.68E+0	1.47E-1	8.00E+0	7.59E-1	4.53E+0	1.28E-1	-2.32E+0	1.11E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.45E+0	2.70E-2	7.04E+0	9.52E+0	1.27E-2	2.79E-1	1.92E-3	-1.05E+0	8.76E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.45E+0	2.70E-2	7.04E+0	9.52E+0	1.27E-2	2.79E-1	1.92E-3	-1.05E+0	8.76E+0
PENRE	MJ	1.72E+2	2.62E+0	1.19E+0	1.76E+2	9.42E-1	6.03E+0	5.30E-2	-9.27E+1	9.04E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.72E+2	2.62E+0	1.19E+0	1.76E+2	9.42E-1	6.03E+0	5.30E-2	-9.27E+1	9.04E+1
PET	MJ	1.75E+2	2.65E+0	8.23E+0	1.86E+2	9.55E-1	6.31E+0	5.49E-2	-9.37E+1	9.91E+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	4.95E-2	2.55E-4	1.71E-2	6.68E-2	1.00E-4	3.28E-3	6.15E-5	-2.21E-2	4.82E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.14E-5	5.23E-6	1.70E-6	2.83E-5	2.27E-6	9.25E-6	6.03E-8	-2.19E-5	1.80E-5
NHWD	kg	1.91E-1	1.18E-1	5.21E-3	3.14E-1	5.50E-2	2.83E-1	2.20E-1	-6.65E-2	8.06E-1
RWD	kg	7.44E-5	1.65E-5	4.72E-6	9.55E-5	6.03E-6	2.17E-5	3.26E-7	-3.58E-5	8.78E-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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