

Environmental Profile

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

Ecochain v3.5.64



Product: 3077080 - Wafix PP Pipe BR 160 SN8 L=2
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	1.11E+1	1.05E+0	3.78E-1	1.25E+1	1.43E-1	4.16E+0	6.76E-2	-6.68E+0	1.02E+1
GWP-f	kg CO2 eq	1.11E+1	1.05E+0	2.74E-1	1.24E+1	1.43E-1	4.17E+0	6.76E-2	-6.66E+0	1.01E+1
GWP-b	kg CO2 eq	5.31E-2	4.80E-4	7.21E-2	1.26E-1	8.70E-5	-5.79E-3	5.89E-5	-2.30E-2	9.70E-2
GWP-luluc	kg CO2 eq	2.93E-3	3.89E-4	3.19E-2	3.52E-2	5.07E-5	8.06E-4	1.15E-6	-1.27E-3	3.48E-2
ODP	kg CFC11 eq	2.24E-7	2.32E-7	3.10E-8	4.88E-7	3.30E-8	1.05E-7	1.69E-9	-2.46E-7	3.82E-7
AP	mol H+ eq	3.97E-2	6.39E-3	2.32E-3	4.84E-2	8.16E-4	4.41E-3	4.04E-5	-1.88E-2	3.49E-2
EP-fw	kg P eq	1.66E-4	1.06E-5	5.06E-6	1.82E-4	1.18E-6	2.33E-5	5.26E-8	-7.40E-5	1.32E-4
EP-m	kg N eq	6.62E-3	2.22E-3	6.88E-4	9.53E-3	2.92E-4	1.28E-3	2.63E-5	-3.31E-3	7.81E-3
EP-T	mol N eq	7.47E-2	2.45E-2	7.55E-3	1.07E-1	3.22E-3	1.41E-2	1.64E-4	-3.67E-2	8.75E-2
POCP	kg NMVOC eq	3.44E-2	6.96E-3	2.10E-3	4.34E-2	9.20E-4	4.46E-3	6.16E-5	-1.70E-2	3.19E-2
ADP-mm	kg Sb eq	1.79E-4	2.65E-5	8.25E-6	2.14E-4	3.71E-6	1.75E-5	4.07E-8	-4.41E-5	1.91E-4
ADP-f	MJ	3.92E+2	1.59E+1	2.72E+0	4.10E+2	2.20E+0	1.40E+1	1.24E-1	-2.10E+2	2.17E+2
WDP	m3 depriv.	7.72E+0	5.65E-2	1.75E+0	9.53E+0	6.75E-3	2.74E-1	6.15E-4	-3.64E+0	6.17E+0
PM	disease inc.	3.51E-7	9.40E-8	3.92E-8	4.84E-7	1.29E-8	7.26E-8	8.50E-10	-1.58E-7	4.13E-7
IR	kBq U-235 eq	2.10E-1	6.65E-2	8.10E-3	2.85E-1	9.62E-3	4.22E-2	5.74E-4	-9.69E-2	2.40E-1
ETP-fw	CTUe	6.21E+1	1.41E+1	7.59E+0	8.38E+1	1.79E+0	1.58E+1	1.04E-1	-2.67E+1	7.48E+1
HTP-c	CTUh	3.04E-9	4.61E-10	3.00E-10	3.80E-9	6.36E-11	1.90E-9	3.02E-12	-1.11E-9	4.66E-9
HTP-nc	CTUh	7.78E-8	1.54E-8	8.17E-9	1.01E-7	2.13E-9	2.35E-8	6.66E-11	-2.69E-8	1.00E-7
SQP	Pt	1.47E+1	1.37E+1	3.58E-1	2.87E+1	1.88E+0	1.12E+1	3.17E-1	-5.66E+0	3.64E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	8.81E+0	1.98E-1	1.72E+1	2.62E+1	3.16E-2	6.90E-1	4.79E-3	-2.60E+0	2.43E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	8.81E+0	1.98E-1	1.72E+1	2.62E+1	3.16E-2	6.90E-1	4.79E-3	-2.60E+0	2.43E+1
PENRE	MJ	4.20E+2	1.69E+1	2.89E+0	4.40E+2	2.34E+0	1.49E+1	1.31E-1	-2.26E+2	2.31E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	4.20E+2	1.69E+1	2.89E+0	4.40E+2	2.34E+0	1.49E+1	1.31E-1	-2.26E+2	2.31E+2
PET	MJ	4.29E+2	1.71E+1	2.01E+1	4.66E+2	2.37E+0	1.56E+1	1.36E-1	-2.29E+2	2.56E+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	1.17E-1	1.92E-3	4.17E-2	1.60E-1	2.49E-4	8.06E-3	1.53E-4	-5.44E-2	1.14E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	5.15E-5	4.00E-5	4.15E-6	9.56E-5	5.63E-6	2.27E-5	1.49E-7	-5.09E-5	7.32E-5
NHWD	kg	4.77E-1	9.99E-1	1.27E-2	1.49E+0	1.36E-1	6.86E-1	5.45E-1	-1.64E-1	2.69E+0
RWD	kg	1.87E-4	1.04E-4	1.15E-5	3.02E-4	1.50E-5	5.34E-5	8.08E-7	-8.74E-5	2.84E-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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