

Environmental Profile

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

Ecochain v3.5.64



Product: 3061970 - Wafix PP Pipe GY 160 L=1 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

A1 Raw material supply A2 Transport A3 Manufacturing

Construction process stage

A4 Transport gate to site
 A5 Assembly / Construction installation process

Use stage

B1 Use B2 Maintenance B3 Repair B4 Replacement B5 Refurbishment
 B6 Operational energy use B7 Operational water use

End-of-Life stage

C1 De-construction demolition C2 Transport C3 Waste processing
 C4 Disposal

Benefits and loads beyond the system boundaries

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	5.57E+0	2.26E-1	1.67E-1	5.96E+0	7.09E-2	2.06E+0	3.34E-2	-3.31E+0	4.81E+0
GWP-f	kg CO2 eq	5.54E+0	2.25E-1	1.21E-1	5.89E+0	7.08E-2	2.06E+0	3.34E-2	-3.30E+0	4.75E+0
GWP-b	kg CO2 eq	2.76E-2	6.78E-5	3.19E-2	5.96E-2	4.30E-5	-2.88E-3	2.91E-5	-1.13E-2	4.55E-2
GWP-luluc	kg CO2 eq	1.52E-3	9.62E-5	1.41E-2	1.57E-2	2.51E-5	3.99E-4	5.66E-7	-6.19E-4	1.55E-2
ODP	kg CFC11 eq	1.26E-7	4.87E-8	1.37E-8	1.88E-7	1.63E-8	5.20E-8	8.37E-10	-1.22E-7	1.35E-7
AP	mol H+ eq	2.01E-2	2.74E-3	1.03E-3	2.39E-2	4.03E-4	2.19E-3	2.00E-5	-9.32E-3	1.72E-2
EP-fw	kg P eq	8.61E-5	1.94E-6	2.23E-6	9.03E-5	5.83E-7	1.15E-5	2.60E-8	-3.70E-5	6.54E-5
EP-m	kg N eq	3.37E-3	7.85E-4	3.04E-4	4.46E-3	1.44E-4	6.35E-4	1.30E-5	-1.65E-3	3.61E-3
EP-T	mol N eq	3.80E-2	8.69E-3	3.33E-3	5.00E-2	1.59E-3	6.99E-3	8.11E-5	-1.82E-2	4.05E-2
POCP	kg NMVOC eq	1.74E-2	2.35E-3	9.26E-4	2.06E-2	4.55E-4	2.21E-3	3.04E-5	-8.46E-3	1.49E-2
ADP-mm	kg Sb eq	1.01E-4	4.73E-6	3.64E-6	1.09E-4	1.83E-6	8.67E-6	2.01E-8	-2.18E-5	9.77E-5
ADP-f	MJ	1.95E+2	3.28E+0	1.20E+0	1.99E+2	1.09E+0	6.92E+0	6.11E-2	-1.04E+2	1.03E+2
WDP	m3 depriv.	3.84E+0	1.02E-2	7.75E-1	4.62E+0	3.34E-3	1.35E-1	3.03E-4	-1.80E+0	2.96E+0
PM	disease inc.	1.80E-7	1.71E-8	1.73E-8	2.14E-7	6.39E-9	3.60E-8	4.20E-10	-7.85E-8	1.79E-7
IR	kBq U-235 eq	1.10E-1	1.38E-2	3.58E-3	1.27E-1	4.75E-3	2.09E-2	2.84E-4	-4.77E-2	1.05E-1
ETP-fw	CTUe	3.35E+1	2.75E+0	3.35E+0	3.96E+1	8.83E-1	7.83E+0	5.12E-2	-1.36E+1	3.48E+1
HTP-c	CTUh	1.79E-9	1.03E-10	1.32E-10	2.03E-9	3.14E-11	9.37E-10	1.49E-12	-5.50E-10	2.45E-9
HTP-nc	CTUh	4.26E-8	2.87E-9	3.61E-9	4.91E-8	1.05E-9	1.16E-8	3.29E-11	-1.10E-8	5.08E-8
SQP	Pt	7.85E+0	2.35E+0	1.58E-1	1.04E+1	9.30E-1	5.54E+0	1.57E-1	-2.81E+0	1.42E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	5.66E+0	3.68E-2	7.59E+0	1.33E+1	1.56E-2	3.42E-1	2.37E-3	-1.28E+0	1.24E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	5.66E+0	3.68E-2	7.59E+0	1.33E+1	1.56E-2	3.42E-1	2.37E-3	-1.28E+0	1.24E+1
PENRE	MJ	2.09E+2	3.48E+0	1.28E+0	2.14E+2	1.15E+0	7.37E+0	6.48E-2	-1.12E+2	1.10E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.09E+2	3.48E+0	1.28E+0	2.14E+2	1.15E+0	7.37E+0	6.48E-2	-1.12E+2	1.10E+2
PET	MJ	2.14E+2	3.52E+0	8.86E+0	2.27E+2	1.17E+0	7.72E+0	6.72E-2	-1.13E+2	1.23E+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	5.85E-2	3.49E-4	1.84E-2	7.73E-2	1.23E-4	3.99E-3	7.54E-5	-2.69E-2	5.45E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.83E-5	7.19E-6	1.83E-6	3.73E-5	2.78E-6	1.13E-5	7.36E-8	-2.66E-5	2.49E-5
NHWD	kg	2.64E-1	1.66E-1	5.61E-3	4.36E-1	6.74E-2	3.40E-1	2.69E-1	-8.20E-2	1.03E+0
RWD	kg	9.95E-5	2.18E-5	5.09E-6	1.26E-4	7.39E-6	2.65E-5	3.99E-7	-4.31E-5	1.18E-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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