

Environmental Profile

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

Ecochain v3.5.64



Product: 3020707 - Wafix PP Pipe BK 75 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]

Statement of Confidentiality

This document and supporting material contain confidential and proprietary business information of Wavin - SE - Eskilstuna. These materials may be printed or (photo) copied or otherwise used only with the written consent of Wavin - SE - Eskilstuna.

Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	6.81E+0	2.63E-1	2.38E-1	7.31E+0	8.86E-2	2.57E+0	4.17E-2	-4.13E+0	5.88E+0
GWP-f	kg CO2 eq	6.78E+0	2.62E-1	1.72E-1	7.21E+0	8.85E-2	2.57E+0	4.17E-2	-4.12E+0	5.80E+0
GWP-b	kg CO2 eq	3.10E-2	6.95E-5	4.54E-2	7.64E-2	5.38E-5	-3.58E-3	3.63E-5	-1.42E-2	5.87E-2
GWP-luluc	kg CO2 eq	1.77E-3	1.15E-4	2.00E-2	2.19E-2	3.13E-5	4.98E-4	7.09E-7	-7.82E-4	2.17E-2
ODP	kg CFC11 eq	1.22E-7	5.65E-8	1.95E-8	1.98E-7	2.04E-8	6.48E-8	1.05E-9	-1.52E-7	1.33E-7
AP	mol H+ eq	2.41E-2	3.56E-3	1.46E-3	2.91E-2	5.04E-4	2.72E-3	2.50E-5	-1.16E-2	2.08E-2
EP-fw	kg P eq	1.01E-4	2.18E-6	3.18E-6	1.06E-4	7.28E-7	1.44E-5	3.25E-8	-4.58E-5	7.54E-5
EP-m	kg N eq	3.99E-3	9.98E-4	4.33E-4	5.42E-3	1.80E-4	7.91E-4	1.63E-5	-2.05E-3	4.36E-3
EP-T	mol N eq	4.50E-2	1.11E-2	4.75E-3	6.08E-2	1.99E-3	8.71E-3	1.01E-4	-2.27E-2	4.90E-2
POCP	kg NMVOC eq	2.09E-2	2.97E-3	1.32E-3	2.52E-2	5.68E-4	2.76E-3	3.80E-5	-1.05E-2	1.80E-2
ADP-mm	kg Sb eq	9.08E-5	5.25E-6	5.19E-6	1.01E-4	2.29E-6	1.08E-5	2.51E-8	-2.72E-5	8.72E-5
ADP-f	MJ	2.41E+2	3.79E+0	1.71E+0	2.47E+2	1.36E+0	8.64E+0	7.64E-2	-1.30E+2	1.27E+2
WDP	m3 depriv.	4.75E+0	1.14E-2	1.10E+0	5.86E+0	4.17E-3	1.69E-1	3.82E-4	-2.25E+0	3.79E+0
PM	disease inc.	2.11E-7	1.91E-8	2.46E-8	2.55E-7	7.99E-9	4.49E-8	5.25E-10	-9.74E-8	2.11E-7
IR	kBq U-235 eq	1.24E-1	1.60E-2	5.09E-3	1.45E-1	5.94E-3	2.60E-2	3.54E-4	-5.98E-2	1.18E-1
ETP-fw	CTUe	3.64E+1	3.12E+0	4.78E+0	4.43E+1	1.10E+0	9.76E+0	6.39E-2	-1.65E+1	3.87E+1
HTP-c	CTUh	1.84E-9	1.21E-10	1.89E-10	2.15E-9	3.93E-11	1.17E-9	1.86E-12	-6.85E-10	2.68E-9
HTP-nc	CTUh	4.64E-8	3.23E-9	5.14E-9	5.48E-8	1.32E-9	1.45E-8	4.11E-11	-1.62E-8	5.45E-8
SQP	Pt	8.26E+0	2.58E+0	2.25E-1	1.11E+1	1.16E+0	6.91E+0	1.96E-1	-3.50E+0	1.58E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	3.49E+0	4.14E-2	1.08E+1	1.43E+1	1.95E-2	4.26E-1	2.96E-3	-1.60E+0	1.32E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	3.49E+0	4.14E-2	1.08E+1	1.43E+1	1.95E-2	4.26E-1	2.96E-3	-1.60E+0	1.32E+1
PENRE	MJ	2.59E+2	4.02E+0	1.82E+0	2.65E+2	1.44E+0	9.20E+0	8.11E-2	-1.40E+2	1.36E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.59E+2	4.02E+0	1.82E+0	2.65E+2	1.44E+0	9.20E+0	8.11E-2	-1.40E+2	1.36E+2
PET	MJ	2.62E+2	4.06E+0	1.26E+1	2.79E+2	1.46E+0	9.63E+0	8.40E-2	-1.41E+2	1.49E+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	7.13E-2	3.90E-4	2.62E-2	9.79E-2	1.54E-4	4.98E-3	9.42E-5	-3.36E-2	6.95E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	3.02E-5	8.01E-6	2.61E-6	4.08E-5	3.48E-6	1.40E-5	9.20E-8	-3.17E-5	2.67E-5
NHWD	kg	2.67E-1	1.81E-1	8.00E-3	4.56E-1	8.42E-2	4.24E-1	3.37E-1	-1.01E-1	1.20E+0
RWD	kg	1.08E-4	2.53E-5	7.25E-6	1.40E-4	9.24E-6	3.30E-5	4.99E-7	-5.40E-5	1.29E-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



Ecochain Technologies BV
H.J.E. Wenckebachweg 123, 1096 AM Amsterdam, The Netherlands
<https://www.ecochain.com>
+31 20 3035 777