

Environmental Profile

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

Ecochain v3.5.64



Product: 3061929 - Wafix PP Pipe WT 50 L=0,5 S/CH
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																
A4 Transport gate to site																
A5 Assembly / Construction installation process					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]

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	3.43E-1	1.39E-2	9.84E-3	3.67E-1	4.37E-3	1.27E-1	2.06E-3	-2.02E-1	2.97E-1
GWP-f	kg CO2 eq	3.41E-1	1.39E-2	7.13E-3	3.62E-1	4.36E-3	1.27E-1	2.06E-3	-2.02E-1	2.94E-1
GWP-b	kg CO2 eq	1.66E-3	4.27E-6	1.88E-3	3.54E-3	2.65E-6	-1.75E-4	1.79E-6	-7.08E-4	2.66E-3
GWP-luluc	kg CO2 eq	9.60E-5	5.90E-6	8.29E-4	9.31E-4	1.54E-6	2.45E-5	3.53E-8	-3.91E-5	9.18E-4
ODP	kg CFC11 eq	8.72E-9	3.01E-9	8.08E-10	1.25E-8	1.01E-9	3.18E-9	5.16E-11	-7.42E-9	9.35E-9
AP	mol H+ eq	1.27E-3	1.66E-4	6.04E-5	1.49E-3	2.48E-5	1.34E-4	1.23E-6	-5.68E-4	1.08E-3
EP-fw	kg P eq	5.27E-6	1.21E-7	1.32E-7	5.52E-6	3.59E-8	7.06E-7	1.61E-9	-2.23E-6	4.04E-6
EP-m	kg N eq	2.10E-4	4.77E-5	1.79E-5	2.76E-4	8.89E-6	3.88E-5	7.99E-7	-1.00E-4	2.24E-4
EP-T	mol N eq	2.39E-3	5.28E-4	1.96E-4	3.11E-3	9.80E-5	4.28E-4	5.00E-6	-1.11E-3	2.53E-3
POCP	kg NMVOC eq	1.07E-3	1.43E-4	5.46E-5	1.27E-3	2.80E-5	1.35E-4	1.88E-6	-5.13E-4	9.21E-4
ADP-mm	kg Sb eq	7.87E-6	2.94E-7	2.15E-7	8.38E-6	1.13E-7	5.30E-7	1.24E-9	-1.34E-6	7.68E-6
ADP-f	MJ	1.19E+1	2.03E-1	7.09E-2	1.22E+1	6.70E-2	4.25E-1	3.77E-3	-6.38E+0	6.31E+0
WDP	m3 depriv.	2.39E-1	6.34E-4	4.57E-2	2.85E-1	2.05E-4	8.33E-3	2.01E-5	-1.11E-1	1.83E-1
PM	disease inc.	1.12E-8	1.06E-9	1.02E-9	1.33E-8	3.94E-10	2.20E-9	2.59E-11	-4.75E-9	1.12E-8
IR	kBq U-235 eq	6.88E-3	8.53E-4	2.11E-4	7.95E-3	2.93E-4	1.28E-3	1.74E-5	-2.96E-3	6.58E-3
ETP-fw	CTUe	2.13E+0	1.70E-1	1.98E-1	2.50E+0	5.44E-2	4.79E-1	3.15E-3	-7.87E-1	2.24E+0
HTP-c	CTUh	8.82E-11	6.36E-12	7.80E-12	1.02E-10	1.93E-12	5.85E-11	9.29E-14	-3.37E-11	1.29E-10
HTP-nc	CTUh	2.44E-9	1.78E-10	2.13E-10	2.83E-9	6.48E-11	7.15E-10	2.03E-12	-9.54E-10	2.66E-9
SQP	Pt	5.11E-1	1.46E-1	9.32E-3	6.67E-1	5.73E-2	3.39E-1	9.66E-3	-1.71E-1	9.02E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	3.55E-1	2.29E-3	4.47E-1	8.05E-1	9.61E-4	2.10E-2	1.45E-4	-7.92E-2	7.47E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	3.55E-1	2.29E-3	4.47E-1	8.05E-1	9.61E-4	2.10E-2	1.45E-4	-7.92E-2	7.47E-1
PENRE	MJ	1.28E+1	2.15E-1	7.52E-2	1.31E+1	7.11E-2	4.53E-1	4.00E-3	-6.87E+0	6.74E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.28E+1	2.15E-1	7.52E-2	1.31E+1	7.11E-2	4.53E-1	4.00E-3	-6.87E+0	6.74E+0
PET	MJ	1.31E+1	2.17E-1	5.22E-1	1.39E+1	7.20E-2	4.74E-1	4.14E-3	-6.95E+0	7.48E+0
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	3.69E-3	2.17E-5	1.08E-3	4.80E-3	7.58E-6	2.45E-4	4.64E-6	-1.65E-3	3.40E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.71E-6	4.47E-7	1.08E-7	2.27E-6	1.71E-7	6.91E-7	4.55E-9	-1.46E-6	1.67E-6
NHWD	kg	1.65E-2	1.04E-2	3.31E-4	2.72E-2	4.15E-3	2.08E-2	1.66E-2	-4.91E-3	6.39E-2
RWD	kg	6.36E-6	1.35E-6	3.00E-7	8.01E-6	4.55E-7	1.62E-6	2.46E-8	-2.66E-6	7.45E-6
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