

Environmental Profile

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

Ecochain v3.5.64



Product: 3062121 - Wafix PP Pipe BR 110 SN8 L=6
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	1.51E+1	1.47E+0	5.43E-1	1.71E+1	1.96E-1	5.68E+0	9.22E-2	-1.21E+1	1.09E+1
GWP-f	kg CO2 eq	1.50E+1	1.47E+0	3.94E-1	1.68E+1	1.96E-1	5.68E+0	9.22E-2	-1.21E+1	1.07E+1
GWP-b	kg CO2 eq	6.93E-2	6.67E-4	1.04E-1	1.74E-1	1.19E-4	-7.89E-3	8.03E-5	-3.24E-2	1.34E-1
GWP-luluc	kg CO2 eq	3.91E-3	5.41E-4	4.58E-2	5.03E-2	6.92E-5	1.10E-3	1.57E-6	-1.83E-3	4.96E-2
ODP	kg CFC11 eq	2.78E-7	3.23E-7	4.46E-8	6.46E-7	4.51E-8	1.43E-7	2.31E-9	-7.17E-7	1.19E-7
AP	mol H+ eq	5.34E-2	8.90E-3	3.34E-3	6.56E-2	1.11E-3	6.01E-3	5.51E-5	-2.79E-2	4.49E-2
EP-fw	kg P eq	2.22E-4	1.47E-5	7.27E-6	2.44E-4	1.61E-6	3.17E-5	7.18E-8	-1.04E-4	1.73E-4
EP-m	kg N eq	8.86E-3	3.09E-3	9.89E-4	1.29E-2	3.99E-4	1.75E-3	3.59E-5	-5.21E-3	9.90E-3
EP-T	mol N eq	9.99E-2	3.40E-2	1.09E-2	1.45E-1	4.39E-3	1.92E-2	2.24E-4	-5.76E-2	1.11E-1
POCP	kg NMVOC eq	4.62E-2	9.68E-3	3.01E-3	5.89E-2	1.26E-3	6.08E-3	8.40E-5	-2.57E-2	4.07E-2
ADP-mm	kg Sb eq	2.16E-4	3.69E-5	1.19E-5	2.64E-4	5.06E-6	2.38E-5	5.55E-8	-6.09E-5	2.32E-4
ADP-f	MJ	5.33E+2	2.21E+1	3.91E+0	5.59E+2	3.00E+0	1.91E+1	1.69E-1	-3.35E+2	2.46E+2
WDP	m3 depriv.	1.05E+1	7.85E-2	2.52E+0	1.31E+1	9.21E-3	3.74E-1	8.42E-4	-5.06E+0	8.43E+0
PM	disease inc.	4.69E-7	1.31E-7	5.63E-8	6.56E-7	1.77E-8	9.90E-8	1.16E-9	-2.22E-7	5.51E-7
IR	kBq U-235 eq	2.76E-1	9.25E-2	1.16E-2	3.81E-1	1.31E-2	5.75E-2	7.83E-4	-1.50E-1	3.02E-1
ETP-fw	CTUe	8.08E+1	1.96E+1	1.09E+1	1.11E+2	2.44E+0	2.15E+1	1.41E-1	-3.87E+1	9.67E+1
HTP-c	CTUh	3.91E-9	6.41E-10	4.31E-10	4.98E-9	8.67E-11	2.59E-9	4.12E-12	-1.73E-9	5.93E-9
HTP-nc	CTUh	1.01E-7	2.14E-8	1.18E-8	1.35E-7	2.91E-9	3.21E-8	9.09E-11	-4.04E-8	1.29E-7
SQP	Pt	1.87E+1	1.90E+1	5.15E-1	3.83E+1	2.57E+0	1.53E+1	4.33E-1	-8.33E+0	4.82E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	8.79E+0	2.75E-1	2.47E+1	3.38E+1	4.31E-2	9.41E-1	6.54E-3	-3.69E+0	3.11E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	8.79E+0	2.75E-1	2.47E+1	3.38E+1	4.31E-2	9.41E-1	6.54E-3	-3.69E+0	3.11E+1
PENRE	MJ	5.72E+2	2.34E+1	4.16E+0	6.00E+2	3.19E+0	2.03E+1	1.79E-1	-3.63E+2	2.61E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	5.72E+2	2.34E+1	4.16E+0	6.00E+2	3.19E+0	2.03E+1	1.79E-1	-3.63E+2	2.61E+2
PET	MJ	5.81E+2	2.37E+1	2.88E+1	6.33E+2	3.23E+0	2.13E+1	1.86E-1	-3.66E+2	2.92E+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	1.58E-1	2.67E-3	5.99E-2	2.20E-1	3.40E-4	1.10E-2	2.08E-4	-7.59E-2	1.56E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	6.66E-5	5.56E-5	5.96E-6	1.28E-4	7.68E-6	3.10E-5	2.03E-7	-1.29E-4	3.77E-5
NHWD	kg	6.00E-1	1.39E+0	1.83E-2	2.01E+0	1.86E-1	9.35E-1	7.44E-1	-2.40E-1	3.63E+0
RWD	kg	2.41E-4	1.45E-4	1.66E-5	4.03E-4	2.04E-5	7.29E-5	1.10E-6	-1.45E-4	3.53E-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