

Environmental Profile

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

Ecochain v3.5.64



Product: 3020703 - Wafix PP Pipe WT 40x3,0 L=4
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					D Reuse- Recovery- Recycling- potential											
A5 Assembly / Construction installation process																

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	2.89E+0	1.08E-1	9.74E-2	3.10E+0	3.64E-2	1.14E+0	1.71E-2	-1.75E+0	2.55E+0
GWP-f	kg CO2 eq	2.88E+0	1.08E-1	7.06E-2	3.06E+0	3.63E-2	1.14E+0	1.71E-2	-1.74E+0	2.52E+0
GWP-b	kg CO2 eq	1.02E-2	2.86E-5	1.86E-2	2.88E-2	2.21E-5	-1.46E-3	1.49E-5	-5.89E-3	2.15E-2
GWP-luluc	kg CO2 eq	8.23E-4	4.72E-5	8.21E-3	9.08E-3	1.29E-5	2.05E-4	2.95E-7	-3.26E-4	8.97E-3
ODP	kg CFC11 eq	5.57E-8	2.31E-8	8.00E-9	8.69E-8	8.38E-9	2.68E-8	4.30E-10	-6.75E-8	5.50E-8
AP	mol H+ eq	1.04E-2	1.45E-3	5.98E-4	1.25E-2	2.07E-4	1.13E-3	1.03E-5	-4.80E-3	9.05E-3
EP-fw	kg P eq	4.49E-5	8.93E-7	1.30E-6	4.71E-5	2.99E-7	5.92E-6	1.35E-8	-1.88E-5	3.45E-5
EP-m	kg N eq	1.73E-3	4.07E-4	1.77E-4	2.31E-3	7.41E-5	3.30E-4	6.65E-6	-8.52E-4	1.87E-3
EP-T	mol N eq	1.96E-2	4.51E-3	1.94E-3	2.60E-2	8.16E-4	3.64E-3	4.17E-5	-9.43E-3	2.11E-2
POCP	kg NMVOC eq	8.96E-3	1.21E-3	5.40E-4	1.07E-2	2.33E-4	1.15E-3	1.56E-5	-4.35E-3	7.76E-3
ADP-mm	kg Sb eq	4.17E-5	2.15E-6	2.12E-6	4.60E-5	9.40E-7	4.45E-6	1.04E-8	-1.12E-5	4.02E-5
ADP-f	MJ	1.01E+2	1.55E+0	7.01E-1	1.03E+2	5.58E-1	3.56E+0	3.14E-2	-5.41E+1	5.33E+1
WDP	m3 depriv.	2.03E+0	4.67E-3	4.52E-1	2.48E+0	1.71E-3	6.97E-2	1.71E-4	-9.26E-1	1.63E+0
PM	disease inc.	9.10E-8	7.83E-9	1.01E-8	1.09E-7	3.28E-9	1.85E-8	2.16E-10	-4.00E-8	9.09E-8
IR	kBq U-235 eq	5.40E-2	6.54E-3	2.09E-3	6.26E-2	2.44E-3	1.07E-2	1.45E-4	-2.49E-2	5.10E-2
ETP-fw	CTUe	1.68E+1	1.28E+0	1.96E+0	2.00E+1	4.53E-1	4.03E+0	2.63E-2	-6.78E+0	1.78E+1
HTP-c	CTUh	7.51E-10	4.97E-11	7.72E-11	8.78E-10	1.61E-11	5.00E-10	7.76E-13	-2.85E-10	1.11E-9
HTP-nc	CTUh	1.98E-8	1.32E-9	2.11E-9	2.32E-8	5.40E-10	6.07E-9	1.70E-11	-7.24E-9	2.26E-8
SQP	Pt	3.90E+0	1.06E+0	9.22E-2	5.05E+0	4.77E-1	2.85E+0	8.05E-2	-1.46E+0	7.00E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.55E+0	1.70E-2	4.42E+0	5.99E+0	8.01E-3	1.76E-1	1.21E-3	-6.63E-1	5.51E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.55E+0	1.70E-2	4.42E+0	5.99E+0	8.01E-3	1.76E-1	1.21E-3	-6.63E-1	5.51E+0
PENRE	MJ	1.08E+2	1.65E+0	7.45E-1	1.11E+2	5.92E-1	3.79E+0	3.33E-2	-5.83E+1	5.69E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.08E+2	1.65E+0	7.45E-1	1.11E+2	5.92E-1	3.79E+0	3.33E-2	-5.83E+1	5.69E+1
PET	MJ	1.10E+2	1.66E+0	5.17E+0	1.17E+2	6.00E-1	3.97E+0	3.45E-2	-5.90E+1	6.24E+1
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	3.12E-2	1.60E-4	1.07E-2	4.21E-2	6.31E-5	2.06E-3	3.87E-5	-1.39E-2	3.04E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.33E-5	3.29E-6	1.07E-6	1.77E-5	1.43E-6	5.82E-6	3.79E-8	-1.37E-5	1.12E-5
NHWD	kg	1.19E-1	7.44E-2	3.27E-3	1.97E-1	3.46E-2	1.78E-1	1.38E-1	-4.17E-2	5.07E-1
RWD	kg	4.67E-5	1.04E-5	2.97E-6	6.00E-5	3.79E-6	1.36E-5	2.05E-7	-2.26E-5	5.51E-5
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