

Environmental Profile

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

Ecochain v3.5.80



Product: 3043849 - Wafix PP Pipe WT 50 L=0.25 L/CH
Unit: 1 piece
Manufacturer: Wavin - PL -Buk - Extra products

Wafix PP is a versatile, uncomplicated solution for your indoor drainage. You can easily install the impact-resistant pipes even in frost. Their excellent chemical resistance makes them ideal for cast-in applications.

LCA standard: EN15804+A2 (2019)
Standard database: Worldwide - Ecoinvent v 3.6 Cut-Off
Externally verified: Yes
Issue date: 08-06-2023
End of validity: 08-06-2028
Verifier: Martijn van Hövell - 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 - PL -Buk - Extra products (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 EN15804+A2 Climate Change [kg CO2 eq]; **GWP-f** = EF Climate change - Fossil [kg CO2 eq]; **GWP-b** = EF EN15804+A2 Climate Change - Biogenic [kg CO2 eq]; **GWP-luluc** = EF EN15804+A2 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

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Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	1.46E-1	7.61E-4	1.45E-4	1.47E-1	2.46E-3	1.89E-1	1.16E-3	-1.25E-1	2.16E-1
GWP-f	kg CO2 eq	2.44E-1	7.60E-4	1.46E-4	2.45E-1	2.45E-3	8.16E-2	1.16E-3	-1.42E-1	1.88E-1
GWP-b	kg CO2 eq	-9.78E-2	4.62E-7	-1.54E-6	-9.78E-2	1.49E-6	1.08E-1	1.00E-6	1.76E-2	2.76E-2
GWP-luluc	kg CO2 eq	2.59E-4	2.69E-7	1.49E-7	2.59E-4	8.68E-7	1.46E-5	1.99E-8	-2.07E-4	6.77E-5
ODP	kg CFC11 eq	1.05E-8	1.75E-10	8.26E-12	1.07E-8	5.65E-10	2.21E-9	2.90E-11	-8.76E-9	4.70E-9
AP	mol H+ eq	9.82E-4	4.33E-6	1.47E-6	9.88E-4	1.40E-5	9.08E-5	6.93E-7	-5.06E-4	5.88E-4
EP-fw	kg P eq	5.62E-6	6.25E-9	8.24E-9	5.63E-6	2.02E-8	4.30E-7	9.11E-10	-3.64E-6	2.45E-6
EP-m	kg N eq	1.91E-4	1.55E-6	1.55E-7	1.93E-4	5.00E-6	2.78E-5	4.49E-7	-1.03E-4	1.23E-4
EP-T	mol N eq	2.09E-3	1.71E-5	1.85E-6	2.11E-3	5.51E-5	3.06E-4	2.81E-6	-1.17E-3	1.30E-3
POCP	kg NMVOC eq	8.37E-4	4.88E-6	6.28E-7	8.43E-4	1.58E-5	9.51E-5	1.06E-6	-4.55E-4	5.00E-4
ADP-mm	kg Sb eq	5.06E-6	1.97E-8	1.97E-8	5.10E-6	6.35E-8	3.56E-7	7.01E-10	-1.14E-6	4.37E-6
ADP-f	MJ	7.58E+0	1.17E-2	1.36E-3	7.60E+0	3.77E-2	2.68E-1	2.12E-3	-4.06E+0	3.85E+0
WDP	m3 depriv.	1.54E-1	3.58E-5	5.22E-5	1.54E-1	1.16E-4	4.91E-3	1.16E-5	-9.62E-2	6.30E-2
PM	disease inc.	1.05E-8	6.86E-11	9.08E-12	1.05E-8	2.21E-10	1.46E-9	1.46E-11	-6.31E-9	5.91E-9
IR	kBq U-235 eq	5.90E-3	5.10E-5	1.02E-6	5.96E-3	1.65E-4	8.48E-4	9.81E-6	-3.62E-3	3.36E-3
ETP-fw	CTUe	4.36E+0	9.47E-3	1.21E-2	4.38E+0	3.06E-2	3.18E-1	1.77E-3	-2.35E+0	2.38E+0
HTP-c	CTUh	1.13E-10	3.37E-13	6.17E-13	1.14E-10	1.09E-12	3.85E-11	5.25E-14	-6.67E-11	8.68E-11
HTP-nc	CTUh	2.25E-9	1.13E-11	1.57E-11	2.28E-9	3.65E-11	4.56E-10	1.15E-12	-1.26E-9	1.51E-9
SQP	Pt	9.38E+0	9.98E-3	2.24E-3	9.39E+0	3.22E-2	2.09E-1	5.43E-3	-1.05E+1	-8.84E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.85E+0	1.67E-4	2.40E-2	1.87E+0	5.40E-4	1.27E-2	8.15E-5	-1.72E+0	1.62E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.85E+0	1.67E-4	2.40E-2	1.87E+0	5.40E-4	1.27E-2	8.15E-5	-1.72E+0	1.62E-1
PENRE	MJ	8.14E+0	1.24E-2	1.44E-3	8.15E+0	4.00E-2	2.85E-1	2.25E-3	-4.37E+0	4.11E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	8.14E+0	1.24E-2	1.44E-3	8.15E+0	4.00E-2	2.85E-1	2.25E-3	-4.37E+0	4.11E+0
PET	MJ	9.98E+0	1.26E-2	2.55E-2	1.00E+1	4.05E-2	2.98E-1	2.33E-3	-6.09E+0	4.27E+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	2.69E-3	1.32E-6	1.46E-6	2.69E-3	4.26E-6	1.51E-4	2.61E-6	-1.80E-3	1.05E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.15E-6	2.98E-8	2.73E-13	2.18E-6	9.63E-8	4.64E-7	2.56E-9	-1.73E-6	1.01E-6
NHWD	kg	1.72E-2	7.23E-4	1.05E-6	1.79E-2	2.33E-3	1.34E-2	9.33E-3	-8.42E-3	3.46E-2
RWD	kg	5.80E-6	7.93E-8	1.10E-13	5.88E-6	2.56E-7	1.10E-6	1.38E-8	-3.51E-6	3.74E-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



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