

Environmental Profile

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

Ecochain v3.5.80



Product: 3043893 - Wafix PP Bend GY 40x32 Trap
 Unit: 1 piece
 Manufacturer: Wavin - PL -Buk - Extra products

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



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.

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

A1 Raw material supply A2 Transport A3 Manufacturing

Construction process stage

A4 Transport gate to site
 A5 Assembly / Construction installation process

Use stage

B1 Use B2 Maintenance B3 Repair B4 Replacement B5 Refurbishment
 B6 Operational energy use B7 Operational water use

End-of-Life stage

C1 De-construction demolition C2 Transport C3 Waste processing
 C4 Disposal

Benefits and loads beyond the system boundaries

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	4.82E-2	1.29E-4	1.45E-4	4.85E-2	8.69E-4	8.62E-2	4.09E-4	-5.03E-2	8.56E-2
GWP-f	kg CO2 eq	9.71E-2	1.29E-4	1.46E-4	9.74E-2	8.69E-4	3.43E-2	4.09E-4	-5.54E-2	7.76E-2
GWP-b	kg CO2 eq	-4.90E-2	7.83E-8	-1.54E-6	-4.90E-2	5.27E-7	5.19E-2	3.55E-7	5.08E-3	7.95E-3
GWP-luluc	kg CO2 eq	9.94E-5	4.56E-8	1.49E-7	9.96E-5	3.07E-7	5.26E-6	7.14E-9	-7.17E-5	3.35E-5
ODP	kg CFC11 eq	3.97E-9	2.97E-11	8.26E-12	4.01E-9	2.00E-10	8.03E-10	1.03E-11	-3.75E-9	1.27E-9
AP	mol H+ eq	4.10E-4	7.35E-7	1.47E-6	4.12E-4	4.95E-6	3.33E-5	2.46E-7	-1.91E-4	2.59E-4
EP-fw	kg P eq	2.39E-6	1.06E-9	8.24E-9	2.39E-6	7.15E-9	1.55E-7	3.25E-10	-1.31E-6	1.25E-6
EP-m	kg N eq	7.77E-5	2.63E-7	1.55E-7	7.81E-5	1.77E-6	1.03E-5	1.58E-7	-4.00E-5	5.03E-5
EP-T	mol N eq	8.57E-4	2.90E-6	1.85E-6	8.62E-4	1.95E-5	1.13E-4	9.97E-7	-4.54E-4	5.42E-4
POCP	kg NMVOC eq	3.46E-4	8.28E-7	6.28E-7	3.48E-4	5.58E-6	3.50E-5	3.74E-7	-1.78E-4	2.11E-4
ADP-mm	kg Sb eq	1.79E-6	3.34E-9	1.97E-8	1.81E-6	2.25E-8	1.28E-7	2.49E-10	-4.36E-7	1.53E-6
ADP-f	MJ	2.90E+0	1.98E-3	1.36E-3	2.90E+0	1.33E-2	9.65E-2	7.51E-4	-1.52E+0	1.49E+0
WDP	m3 depriv.	6.01E-2	6.08E-6	5.22E-5	6.02E-2	4.09E-5	1.76E-3	4.40E-6	-3.35E-2	2.84E-2
PM	disease inc.	4.33E-9	1.16E-11	9.08E-12	4.35E-9	7.84E-11	5.29E-10	5.16E-12	-2.42E-9	2.55E-9
IR	kBq U-235 eq	2.26E-3	8.65E-6	1.02E-6	2.27E-3	5.83E-5	3.07E-4	3.47E-6	-1.32E-3	1.32E-3
ETP-fw	CTUe	1.76E+0	1.61E-3	1.21E-2	1.77E+0	1.08E-2	1.15E-1	6.29E-4	-8.22E-1	1.08E+0
HTP-c	CTUh	6.67E-11	5.72E-14	6.17E-13	6.74E-11	3.85E-13	1.46E-11	1.88E-14	-2.85E-11	5.39E-11
HTP-nc	CTUh	1.24E-9	1.92E-12	1.57E-11	1.26E-9	1.29E-11	1.69E-10	4.07E-13	-3.75E-10	1.06E-9
SQP	Pt	4.52E+0	1.69E-3	2.24E-3	4.53E+0	1.14E-2	7.59E-2	1.92E-3	-4.52E+0	1.02E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.21E+0	2.84E-5	2.40E-2	1.23E+0	1.91E-4	4.57E-3	2.87E-5	-7.21E-1	5.14E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.21E+0	2.84E-5	2.40E-2	1.23E+0	1.91E-4	4.57E-3	2.87E-5	-7.21E-1	5.14E-1
PENRE	MJ	3.11E+0	2.10E-3	1.44E-3	3.11E+0	1.42E-2	1.03E-1	7.97E-4	-1.64E+0	1.59E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.11E+0	2.10E-3	1.44E-3	3.11E+0	1.42E-2	1.03E-1	7.97E-4	-1.64E+0	1.59E+0
PET	MJ	4.31E+0	2.13E-3	2.55E-2	4.34E+0	1.43E-2	1.07E-1	8.26E-4	-2.36E+0	2.11E+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	1.08E-3	2.24E-7	1.46E-6	1.08E-3	1.51E-6	5.49E-5	9.23E-7	-6.18E-4	5.22E-4

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	9.21E-7	5.06E-9	2.73E-13	9.26E-7	3.41E-8	1.69E-7	9.10E-10	-8.08E-7	3.22E-7
NHWD	kg	7.42E-3	1.23E-4	1.05E-6	7.54E-3	8.26E-4	5.08E-3	3.30E-3	-3.53E-3	1.32E-2
RWD	kg	2.15E-6	1.35E-8	1.10E-13	2.17E-6	9.07E-8	3.97E-7	4.90E-9	-1.31E-6	1.35E-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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