

Environmental Profile

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

Ecochain v3.5.80



Product: 3043943 - Wafix PP Reducer GY 75x50
 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	1.30E-1	6.79E-4	1.45E-4	1.30E-1	1.32E-3	1.56E-1	7.41E-4	-8.10E-2	2.08E-1
GWP-f	kg CO2 eq	1.80E-1	6.79E-4	1.46E-4	1.81E-1	1.32E-3	1.02E-1	7.41E-4	-8.99E-2	1.95E-1
GWP-b	kg CO2 eq	-5.02E-2	4.12E-7	-1.54E-6	-5.02E-2	8.01E-7	5.40E-2	6.81E-7	9.02E-3	1.28E-2
GWP-luluc	kg CO2 eq	1.84E-4	2.40E-7	1.49E-7	1.84E-4	4.67E-7	6.66E-6	1.34E-8	-1.04E-4	8.70E-5
ODP	kg CFC11 eq	2.07E-8	1.56E-10	8.26E-12	2.08E-8	3.04E-10	1.13E-9	1.92E-11	-7.31E-9	1.50E-8
AP	mol H+ eq	8.50E-4	3.87E-6	1.47E-6	8.55E-4	7.51E-6	5.02E-5	4.66E-7	-2.57E-4	6.56E-4
EP-fw	kg P eq	5.10E-6	5.59E-9	8.24E-9	5.11E-6	1.09E-8	2.02E-7	6.15E-10	-1.85E-6	3.47E-6
EP-m	kg N eq	1.52E-4	1.38E-6	1.55E-7	1.53E-4	2.69E-6	1.61E-5	5.29E-7	-5.50E-5	1.17E-4
EP-T	mol N eq	1.69E-3	1.52E-5	1.85E-6	1.71E-3	2.96E-5	1.78E-4	1.88E-6	-6.24E-4	1.29E-3
POCP	kg NMVOC eq	7.00E-4	4.36E-6	6.28E-7	7.05E-4	8.47E-6	5.26E-5	6.95E-7	-2.37E-4	5.30E-4
ADP-mm	kg Sb eq	2.72E-5	1.76E-8	1.97E-8	2.73E-5	3.41E-8	1.69E-7	4.65E-10	-1.34E-6	2.61E-5
ADP-f	MJ	5.20E+0	1.04E-2	1.36E-3	5.21E+0	2.02E-2	1.27E-1	1.41E-3	-2.21E+0	3.15E+0
WDP	m3 depriv.	1.10E-1	3.20E-5	5.22E-5	1.10E-1	6.21E-5	2.87E-3	7.43E-6	-4.51E-2	6.80E-2
PM	disease inc.	9.66E-9	6.13E-11	9.08E-12	9.73E-9	1.19E-10	6.96E-10	9.65E-12	-3.16E-9	7.40E-9
IR	kBq U-235 eq	8.42E-3	4.55E-5	1.02E-6	8.47E-3	8.85E-5	4.01E-4	6.62E-6	-1.99E-3	6.98E-3
ETP-fw	CTUe	3.78E+0	8.46E-3	1.21E-2	3.80E+0	1.64E-2	2.46E-1	1.87E-3	-1.24E+0	2.82E+0
HTP-c	CTUh	1.10E-10	3.01E-13	6.17E-13	1.11E-10	5.85E-13	1.80E-11	3.59E-14	-3.47E-11	9.51E-11
HTP-nc	CTUh	2.24E-9	1.01E-11	1.57E-11	2.26E-9	1.96E-11	2.48E-10	9.30E-13	-4.85E-10	2.04E-9
SQP	Pt	5.11E+0	8.92E-3	2.24E-3	5.13E+0	1.73E-2	9.56E-2	3.60E-3	-5.30E+0	-6.24E-2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.25E+0	1.50E-4	2.40E-2	1.28E+0	2.90E-4	5.99E-3	5.82E-5	-8.65E-1	4.19E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.25E+0	1.50E-4	2.40E-2	1.28E+0	2.90E-4	5.99E-3	5.82E-5	-8.65E-1	4.19E-1
PENRE	MJ	5.56E+0	1.11E-2	1.44E-3	5.58E+0	2.15E-2	1.35E-1	1.49E-3	-2.39E+0	3.34E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	5.56E+0	1.11E-2	1.44E-3	5.58E+0	2.15E-2	1.35E-1	1.49E-3	-2.39E+0	3.34E+0
PET	MJ	6.82E+0	1.12E-2	2.55E-2	6.85E+0	2.18E-2	1.41E-1	1.55E-3	-3.26E+0	3.76E+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	2.32E-3	1.18E-6	1.46E-6	2.32E-3	2.29E-6	1.48E-4	1.74E-6	-8.86E-4	1.59E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.25E-6	2.66E-8	2.73E-13	2.28E-6	5.18E-8	2.60E-7	1.69E-9	-1.45E-6	1.13E-6
NHWD	kg	1.55E-2	6.46E-4	1.05E-6	1.62E-2	1.25E-3	7.57E-3	6.17E-3	-4.36E-3	2.68E-2
RWD	kg	1.03E-5	7.09E-8	1.10E-13	1.04E-5	1.38E-7	5.19E-7	9.22E-9	-2.07E-6	8.96E-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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