

# Environmental Profile

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

Ecochain v3.5.80



Product: 3043945 - Wafix PP Adaptor GY 110x75 Universal  
 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	3.05E-1	1.65E-3	1.45E-4	3.07E-1	2.88E-3	3.59E-1	1.69E-3	-1.85E-1	4.85E-1
GWP-f	kg CO2 eq	4.06E-1	1.65E-3	1.46E-4	4.08E-1	2.88E-3	2.54E-1	1.69E-3	-1.97E-1	4.69E-1
GWP-b	kg CO2 eq	-1.01E-1	1.00E-6	-1.54E-6	-1.01E-1	1.75E-6	1.05E-1	1.57E-6	1.20E-2	1.59E-2
GWP-luluc	kg CO2 eq	3.73E-4	5.84E-7	1.49E-7	3.74E-4	1.02E-6	1.35E-5	3.06E-8	-1.68E-4	2.20E-4
ODP	kg CFC11 eq	5.23E-8	3.80E-10	8.26E-12	5.27E-8	6.63E-10	2.30E-9	4.40E-11	-1.61E-8	3.96E-8
AP	mol H+ eq	1.95E-3	9.40E-6	1.47E-6	1.96E-3	1.64E-5	1.05E-4	1.07E-6	-5.05E-4	1.58E-3
EP-fw	kg P eq	1.15E-5	1.36E-8	8.24E-9	1.15E-5	2.37E-8	4.12E-7	1.40E-9	-3.21E-6	8.72E-6
EP-m	kg N eq	3.37E-4	3.36E-6	1.55E-7	3.41E-4	5.87E-6	3.41E-5	1.32E-6	-1.09E-4	2.74E-4
EP-T	mol N eq	3.78E-3	3.71E-5	1.85E-6	3.82E-3	6.47E-5	3.77E-4	4.30E-6	-1.23E-3	3.03E-3
POCP	kg NMVOC eq	1.61E-3	1.06E-5	6.28E-7	1.62E-3	1.85E-5	1.10E-4	1.59E-6	-4.76E-4	1.28E-3
ADP-mm	kg Sb eq	7.28E-5	4.27E-8	1.97E-8	7.29E-5	7.45E-8	3.35E-7	1.06E-9	-3.26E-6	7.00E-5
ADP-f	MJ	1.18E+1	2.53E-2	1.36E-3	1.19E+1	4.42E-2	2.58E-1	3.22E-3	-4.75E+0	7.42E+0
WDP	m3 depriv.	2.51E-1	7.77E-5	5.22E-5	2.51E-1	1.36E-4	6.32E-3	1.58E-5	-8.22E-2	1.75E-1
PM	disease inc.	2.22E-8	1.49E-10	9.08E-12	2.24E-8	2.60E-10	1.40E-9	2.21E-11	-5.86E-9	1.82E-8
IR	kBq U-235 eq	2.09E-2	1.11E-4	1.02E-6	2.10E-2	1.93E-4	8.04E-4	1.52E-5	-3.83E-3	1.82E-2
ETP-fw	CTUe	7.83E+0	2.06E-2	1.21E-2	7.86E+0	3.59E-2	5.63E-1	4.60E-3	-2.05E+0	6.42E+0
HTP-c	CTUh	2.30E-10	7.32E-13	6.17E-13	2.31E-10	1.28E-12	3.57E-11	8.19E-14	-6.75E-11	2.01E-10
HTP-nc	CTUh	4.88E-9	2.45E-11	1.57E-11	4.92E-9	4.28E-11	5.23E-10	2.20E-12	-1.02E-9	4.47E-9
SQP	Pt	1.03E+1	2.17E-2	2.24E-3	1.03E+1	3.78E-2	1.93E-1	8.23E-3	-9.54E+0	9.94E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.62E+0	3.63E-4	2.40E-2	2.64E+0	6.34E-4	1.23E-2	1.36E-4	-1.53E+0	1.12E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.62E+0	3.63E-4	2.40E-2	2.64E+0	6.34E-4	1.23E-2	1.36E-4	-1.53E+0	1.12E+0
PENRE	MJ	1.27E+1	2.69E-2	1.44E-3	1.27E+1	4.69E-2	2.75E-1	3.42E-3	-5.15E+0	7.86E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.27E+1	2.69E-2	1.44E-3	1.27E+1	4.69E-2	2.75E-1	3.42E-3	-5.15E+0	7.86E+0
PET	MJ	1.53E+1	2.73E-2	2.55E-2	1.53E+1	4.75E-2	2.87E-1	3.55E-3	-6.69E+0	8.99E+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	5.40E-3	2.87E-6	1.46E-6	5.40E-3	5.00E-6	3.57E-4	3.99E-6	-1.58E-3	4.19E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	5.05E-6	6.48E-8	2.73E-13	5.11E-6	1.13E-7	5.49E-7	3.87E-9	-3.15E-6	2.62E-6
NHWD	kg	3.35E-2	1.57E-3	1.05E-6	3.51E-2	2.74E-3	1.63E-2	1.41E-2	-8.35E-3	5.99E-2
RWD	kg	2.61E-5	1.72E-7	1.10E-13	2.63E-5	3.00E-7	1.03E-6	2.11E-8	-4.09E-6	2.35E-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