

Environmental Profile

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

Ecochain v3.5.80



Product: 3043947 - Wafix PP Adaptor GY 50
 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	9.90E-2	5.54E-4	1.45E-4	9.97E-2	1.08E-3	1.34E-1	5.94E-4	-6.66E-2	1.69E-1
GWP-f	kg CO2 eq	1.49E-1	5.53E-4	1.46E-4	1.50E-1	1.08E-3	8.02E-2	5.94E-4	-7.56E-2	1.56E-1
GWP-b	kg CO2 eq	-5.00E-2	3.36E-7	-1.54E-6	-5.00E-2	6.53E-7	5.40E-2	5.43E-7	9.04E-3	1.30E-2
GWP-luluc	kg CO2 eq	1.66E-4	1.96E-7	1.49E-7	1.67E-4	3.81E-7	5.63E-6	1.08E-8	-1.02E-4	7.04E-5
ODP	kg CFC11 eq	1.61E-8	1.27E-10	8.26E-12	1.62E-8	2.48E-10	9.72E-10	1.54E-11	-6.22E-9	1.12E-8
AP	mol H+ eq	7.03E-4	3.15E-6	1.47E-6	7.08E-4	6.12E-6	4.25E-5	3.72E-7	-2.29E-4	5.27E-4
EP-fw	kg P eq	4.31E-6	4.55E-9	8.24E-9	4.32E-6	8.85E-9	1.71E-7	4.92E-10	-1.74E-6	2.76E-6
EP-m	kg N eq	1.28E-4	1.13E-6	1.55E-7	1.29E-4	2.19E-6	1.37E-5	4.06E-7	-4.94E-5	9.62E-5
EP-T	mol N eq	1.42E-3	1.24E-5	1.85E-6	1.43E-3	2.41E-5	1.51E-4	1.50E-6	-5.62E-4	1.05E-3
POCP	kg NMVOC eq	5.79E-4	3.55E-6	6.28E-7	5.84E-4	6.90E-6	4.48E-5	5.56E-7	-2.11E-4	4.25E-4
ADP-mm	kg Sb eq	2.01E-5	1.43E-8	1.97E-8	2.02E-5	2.78E-8	1.46E-7	3.72E-10	-1.07E-6	1.93E-5
ADP-f	MJ	4.25E+0	8.49E-3	1.36E-3	4.26E+0	1.65E-2	1.08E-1	1.12E-3	-1.85E+0	2.53E+0
WDP	m3 depriv.	9.04E-2	2.61E-5	5.22E-5	9.05E-2	5.06E-5	2.34E-3	6.13E-6	-4.05E-2	5.24E-2
PM	disease inc.	8.01E-9	4.99E-11	9.08E-12	8.07E-9	9.71E-11	5.98E-10	7.71E-12	-2.94E-9	5.84E-9
IR	kBq U-235 eq	6.63E-3	3.71E-5	1.02E-6	6.67E-3	7.21E-5	3.45E-4	5.28E-6	-1.79E-3	5.30E-3
ETP-fw	CTUe	3.33E+0	6.89E-3	1.21E-2	3.35E+0	1.34E-2	2.00E-1	1.45E-3	-1.20E+0	2.36E+0
HTP-c	CTUh	9.74E-11	2.45E-13	6.17E-13	9.83E-11	4.77E-13	1.56E-11	2.88E-14	-3.27E-11	8.17E-11
HTP-nc	CTUh	1.93E-9	8.22E-12	1.57E-11	1.95E-9	1.60E-11	2.09E-10	7.32E-13	-4.38E-10	1.74E-9
SQP	Pt	4.99E+0	7.26E-3	2.24E-3	4.99E+0	1.41E-2	8.15E-2	2.87E-3	-5.29E+0	-1.99E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.25E+0	1.22E-4	2.40E-2	1.27E+0	2.37E-4	5.05E-3	4.62E-5	-8.61E-1	4.14E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.25E+0	1.22E-4	2.40E-2	1.27E+0	2.37E-4	5.05E-3	4.62E-5	-8.61E-1	4.14E-1
PENRE	MJ	4.55E+0	9.01E-3	1.44E-3	4.56E+0	1.75E-2	1.15E-1	1.19E-3	-2.01E+0	2.69E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	4.55E+0	9.01E-3	1.44E-3	4.56E+0	1.75E-2	1.15E-1	1.19E-3	-2.01E+0	2.69E+0
PET	MJ	5.80E+0	9.14E-3	2.55E-2	5.83E+0	1.78E-2	1.20E-1	1.24E-3	-2.87E+0	3.10E+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	1.90E-3	9.61E-7	1.46E-6	1.91E-3	1.87E-6	1.16E-4	1.39E-6	-8.10E-4	1.22E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.85E-6	2.17E-8	2.73E-13	1.87E-6	4.22E-8	2.19E-7	1.36E-9	-1.26E-6	8.75E-7
NHWD	kg	1.30E-2	5.26E-4	1.05E-6	1.35E-2	1.02E-3	6.36E-3	4.93E-3	-4.10E-3	2.17E-2
RWD	kg	7.99E-6	5.77E-8	1.10E-13	8.05E-6	1.12E-7	4.48E-7	7.36E-9	-1.86E-6	6.76E-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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