Environmental Profile

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

Ecochain v3.5.80

Product:	3043935 - Wafix PP Adaptor WT 50x32 Universal
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

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

Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	3.34E-1	2.30E-3	1.45E-4	3.36E-1	2.02E-3	3.76E-1	1.51E-3	-1.59E-1	5.57E-1
GWP-f	kg CO2 eq	3.88E-1	2.30E-3	1.46E-4	3.90E-1	2.02E-3	3.25E-1	1.51E-3	-1.64E-1	5.55E-1
GWP-b	kg CO2 eq	-5.40E-2	1.39E-6	-1.54E-6	-5.40E-2	1.23E-6	5.11E-2	1.48E-6	4.39E-3	1.52E-3
GWP-luluc	kg CO2 eq	3.26E-4	8.13E-7	1.49E-7	3.27E-4	7.16E-7	5.95E-6	2.89E-8	-7.17E-5	2.62E-4
ODP	kg CFC11 eq	7.67E-8	5.29E-10	8.26E-12	7.72E-8	4.66E-10	1.34E-9	4.06E-11	-1.75E-8	6.16E-8
AP	mol H+ eq	2.07E-3	1.31E-5	1.47E-6	2.09E-3	1.15E-5	7.24E-5	1.00E-6	-2.77E-4	1.89E-3
EP-fw	kg P eq	1.23E-5	1.89E-8	8.24E-9	1.23E-5	1.66E-8	1.98E-7	1.33E-9	-1.53E-6	1.10E-5
EP-m	kg N eq	3.38E-4	4.68E-6	1.55E-7	3.43E-4	4.12E-6	2.53E-5	1.70E-6	-6.55E-5	3.09E-4
EP-T	mol N eq	3.84E-3	5.16E-5	1.85E-6	3.90E-3	4.54E-5	2.80E-4	3.99E-6	-7.38E-4	3.49E-3
POCP	kg NMVOC eq	1.69E-3	1.48E-5	6.28E-7	1.71E-3	1.30E-5	7.50E-5	1.46E-6	-2.75E-4	1.52E-3
ADP-mm	kg Sb eq	1.17E-4	5.94E-8	1.97E-8	1.17E-4	5.23E-8	1.56E-7	9.84E-10	-4.19E-6	1.13E-4
ADP-f	MJ	1.08E+1	3.53E-2	1.36E-3	1.09E+1	3.11E-2	1.26E-1	2.98E-3	-3.25E+0	7.77E+0
WDP	m3 depriv.	2.38E-1	1.08E-4	5.22E-5	2.38E-1	9.53E-5	4.97E-3	1.47E-5	-3.43E-2	2.09E-1
PM	disease inc.	2.48E-8	2.07E-10	9.08E-12	2.50E-8	1.83E-10	6.75E-10	2.04E-11	-2.82E-9	2.30E-8
IR	kBq U-235 eq	2.85E-2	1.54E-4	1.02E-6	2.87E-2	1.36E-4	3.81E-4	1.43E-5	-2.55E-3	2.67E-2
ETP-fw	CTUe	7.94E+0	2.86E-2	1.21E-2	7.98E+0	2.52E-2	5.81E-1	5.69E-3	-9.99E-1	7.59E+0
HTP-c	CTUh	2.07E-10	1.02E-12	6.17E-13	2.09E-10	8.97E-13	1.62E-11	7.86E-14	-3.81E-11	1.88E-10
HTP-nc	CTUh	4.66E-9	3.41E-11	1.57E-11	4.71E-9	3.01E-11	3.52E-10	2.39E-12	-5.54E-10	4.54E-9
SQP	Pt	6.21E+0	3.02E-2	2.24E-3	6.24E+0	2.66E-2	8.30E-2	7.59E-3	-4.40E+0	1.96E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.08E+0	5.06E-4	2.40E-2	1.10E+0	4.46E-4	6.03E-3	1.34E-4	-6.94E-1	4.13E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.08E+0	5.06E-4	2.40E-2	1.10E+0	4.46E-4	6.03E-3	1.34E-4	-6.94E-1	4.13E-1
PENRE	MJ	1.15E+1	3.74E-2	1.44E-3	1.16E+1	3.30E-2	1.35E-1	3.16E-3	-3.55E+0	8.20E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.15E+1	3.74E-2	1.44E-3	1.16E+1	3.30E-2	1.35E-1	3.16E-3	-3.55E+0	8.20E+0
PET	MJ	1.26E+1	3.79E-2	2.55E-2	1.27E+1	3.34E-2	1.41E-1	3.30E-3	-4.25E+0	8.61E+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	5.86E-3	3.99E-6	1.46E-6	5.87E-3	3.51E-6	4.25E-4	3.71E-6	-7.37E-4	5.56E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	5.97E-6	9.02E-8	2.73E-13	6.06E-6	7.94E-8	3.91E-7	3.57E-9	-3.13E-6	3.40E-6
NHWD	kg	3.61E-2	2.19E-3	1.05E-6	3.83E-2	1.92E-3	1.16E-2	1.30E-2	-4.46E-3	6.04E-2
RWD	kg	3.75E-5	2.40E-7	1.10E-13	3.78E-5	2.11E-7	4.86E-7	1.96E-8	-3.06E-6	3.54E-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

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