

Environmental Profile

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

Ecochain v3.5.80



Product: 3020695 - Wafix PP Reducer BK 75x40
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					Use stage							End-of-Life stage				
A1 Raw material supply A2 Transport A3 Manufacturing					B1 Use B2 Maintenance B3 Repair B4 Replacement B5 Refurbishment B6 Operational energy use B7 Operational water use							C1 De-construction demolition C2 Transport C3 Waste processing C4 Disposal				
Construction process stage												Benefits and loads beyond the system boundaries				
A4 Transport gate to site A5 Assembly / Construction installation process												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	1.50E-1	6.11E-4	1.45E-4	1.50E-1	1.95E-3	1.21E-1	9.21E-4	-9.90E-2	1.76E-1
GWP-f	kg CO2 eq	1.98E-1	6.11E-4	1.46E-4	1.99E-1	1.95E-3	6.64E-2	9.21E-4	-1.09E-1	1.59E-1
GWP-b	kg CO2 eq	-4.90E-2	3.71E-7	-1.54E-6	-4.90E-2	1.19E-6	5.50E-2	8.01E-7	1.03E-2	1.63E-2
GWP-luluc	kg CO2 eq	1.74E-4	2.16E-7	1.49E-7	1.75E-4	6.91E-7	1.15E-5	1.57E-8	-1.23E-4	6.39E-5
ODP	kg CFC11 eq	9.45E-9	1.41E-10	8.26E-12	9.60E-9	4.50E-10	1.69E-9	2.31E-11	-6.07E-9	5.69E-9
AP	mol H+ eq	8.22E-4	3.48E-6	1.47E-6	8.27E-4	1.11E-5	6.99E-5	5.51E-7	-3.62E-4	5.46E-4
EP-fw	kg P eq	4.53E-6	5.03E-9	8.24E-9	4.54E-6	1.61E-8	3.38E-7	7.20E-10	-2.39E-6	2.51E-6
EP-m	kg N eq	1.49E-4	1.25E-6	1.55E-7	1.51E-4	3.98E-6	2.12E-5	3.58E-7	-7.18E-5	1.04E-4
EP-T	mol N eq	1.64E-3	1.37E-5	1.85E-6	1.66E-3	4.39E-5	2.33E-4	2.24E-6	-8.10E-4	1.13E-3
POCP	kg NMVOC eq	6.74E-4	3.92E-6	6.28E-7	6.79E-4	1.25E-5	7.27E-5	8.40E-7	-3.26E-4	4.39E-4
ADP-mm	kg Sb eq	5.66E-6	1.58E-8	1.97E-8	5.70E-6	5.05E-8	2.74E-7	5.56E-10	-8.11E-7	5.21E-6
ADP-f	MJ	6.20E+0	9.38E-3	1.36E-3	6.21E+0	3.00E-2	2.08E-1	1.69E-3	-3.16E+0	3.29E+0
WDP	m3 depriv.	1.25E-1	2.88E-5	5.22E-5	1.25E-1	9.20E-5	3.88E-3	8.67E-6	-6.96E-2	5.92E-2
PM	disease inc.	8.36E-9	5.51E-11	9.08E-12	8.42E-9	1.76E-10	1.13E-9	1.16E-11	-4.19E-9	5.55E-9
IR	kBq U-235 eq	5.02E-3	4.10E-5	1.02E-6	5.07E-3	1.31E-4	6.53E-4	7.82E-6	-2.42E-3	3.43E-3
ETP-fw	CTUe	3.48E+0	7.61E-3	1.21E-2	3.50E+0	2.43E-2	2.46E-1	1.41E-3	-1.48E+0	2.29E+0
HTP-c	CTUh	1.14E-10	2.71E-13	6.17E-13	1.15E-10	8.66E-13	2.96E-11	4.13E-14	-4.04E-11	1.05E-10
HTP-nc	CTUh	2.44E-9	9.08E-12	1.57E-11	2.46E-9	2.90E-11	3.57E-10	9.09E-13	-6.83E-10	2.16E-9
SQP	Pt	5.01E+0	8.02E-3	2.24E-3	5.02E+0	2.56E-2	1.64E-1	4.33E-3	-5.64E+0	-4.27E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.01E+0	1.35E-4	2.40E-2	2.03E+0	4.30E-4	9.97E-3	6.52E-5	-9.37E-1	1.10E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.01E+0	1.35E-4	2.40E-2	2.03E+0	4.30E-4	9.97E-3	6.52E-5	-9.37E-1	1.10E+0
PENRE	MJ	6.66E+0	9.95E-3	1.44E-3	6.67E+0	3.18E-2	2.22E-1	1.79E-3	-3.41E+0	3.51E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	6.66E+0	9.95E-3	1.44E-3	6.67E+0	3.18E-2	2.22E-1	1.79E-3	-3.41E+0	3.51E+0
PET	MJ	8.66E+0	1.01E-2	2.55E-2	8.70E+0	3.23E-2	2.32E-1	1.85E-3	-4.34E+0	4.62E+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	2.17E-3	1.06E-6	1.46E-6	2.17E-3	3.39E-6	1.18E-4	2.08E-6	-1.25E-3	1.04E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.58E-6	2.40E-8	2.73E-13	1.60E-6	7.67E-8	3.57E-7	2.03E-9	-1.28E-6	7.55E-7
NHWD	kg	1.27E-2	5.81E-4	1.05E-6	1.33E-2	1.86E-3	1.05E-2	7.43E-3	-5.30E-3	2.78E-2
RWD	kg	5.13E-6	6.38E-8	1.10E-13	5.20E-6	2.04E-7	8.40E-7	1.10E-8	-2.33E-6	3.92E-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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