

Environmental Profile

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

Ecochain v3.5.80



Product: 3020718 - Wafix PP Socket BK 40 S/S
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	6.86E-2	8.78E-4	1.45E-4	6.96E-2	8.56E-4	8.22E-2	4.03E-4	-4.68E-2	1.06E-1
GWP-f	kg CO2 eq	1.17E-1	8.77E-4	1.46E-4	1.19E-1	8.55E-4	2.98E-2	4.04E-4	-5.28E-2	9.68E-2
GWP-b	kg CO2 eq	-4.90E-2	5.33E-7	-1.54E-6	-4.90E-2	5.19E-7	5.23E-2	3.52E-7	6.09E-3	9.37E-3
GWP-luluc	kg CO2 eq	1.20E-4	3.10E-7	1.49E-7	1.20E-4	3.03E-7	5.18E-6	6.76E-9	-7.79E-5	4.76E-5
ODP	kg CFC11 eq	8.60E-9	2.02E-10	8.26E-12	8.81E-9	1.97E-10	7.97E-10	1.01E-11	-3.02E-9	6.80E-9
AP	mol H+ eq	5.27E-4	5.00E-6	1.47E-6	5.33E-4	4.87E-6	3.28E-5	2.41E-7	-1.91E-4	3.80E-4
EP-fw	kg P eq	3.03E-6	7.22E-9	8.24E-9	3.04E-6	7.04E-9	1.53E-7	3.11E-10	-1.35E-6	1.85E-6
EP-m	kg N eq	1.02E-4	1.79E-6	1.55E-7	1.04E-4	1.74E-6	1.01E-5	1.58E-7	-4.00E-5	7.55E-5
EP-T	mol N eq	1.14E-3	1.97E-5	1.85E-6	1.16E-3	1.92E-5	1.11E-4	9.78E-7	-4.55E-4	8.37E-4
POCP	kg NMVOC eq	4.39E-4	5.63E-6	6.28E-7	4.46E-4	5.49E-6	3.44E-5	3.67E-7	-1.77E-4	3.08E-4
ADP-mm	kg Sb eq	6.99E-6	2.27E-8	1.97E-8	7.03E-6	2.21E-8	1.27E-7	2.42E-10	-4.22E-7	6.75E-6
ADP-f	MJ	3.34E+0	1.35E-2	1.36E-3	3.36E+0	1.31E-2	9.52E-2	7.38E-4	-1.47E+0	1.99E+0
WDP	m3 depriv.	7.12E-2	4.13E-5	5.22E-5	7.13E-2	4.03E-5	1.73E-3	3.38E-6	-3.35E-2	3.97E-2
PM	disease inc.	5.79E-9	7.92E-11	9.08E-12	5.88E-9	7.72E-11	5.22E-10	5.07E-12	-2.49E-9	3.99E-9
IR	kBq U-235 eq	3.93E-3	5.89E-5	1.02E-6	3.99E-3	5.74E-5	3.04E-4	3.43E-6	-1.32E-3	3.04E-3
ETP-fw	CTUe	2.21E+0	1.09E-2	1.21E-2	2.24E+0	1.07E-2	1.13E-1	6.17E-4	-8.81E-1	1.48E+0
HTP-c	CTUh	7.40E-11	3.89E-13	6.17E-13	7.50E-11	3.79E-13	1.35E-11	1.78E-14	-2.84E-11	6.05E-11
HTP-nc	CTUh	1.41E-9	1.30E-11	1.57E-11	1.44E-9	1.27E-11	1.62E-10	3.96E-13	-3.74E-10	1.24E-9
SQP	Pt	4.71E+0	1.15E-2	2.24E-3	4.73E+0	1.12E-2	7.47E-2	1.89E-3	-4.69E+0	1.26E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	9.65E-1	1.93E-4	2.40E-2	9.89E-1	1.88E-4	4.50E-3	2.88E-5	-7.52E-1	2.42E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	9.65E-1	1.93E-4	2.40E-2	9.89E-1	1.88E-4	4.50E-3	2.88E-5	-7.52E-1	2.42E-1
PENRE	MJ	3.59E+0	1.43E-2	1.44E-3	3.60E+0	1.39E-2	1.01E-1	7.83E-4	-1.59E+0	2.13E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.59E+0	1.43E-2	1.44E-3	3.60E+0	1.39E-2	1.01E-1	7.83E-4	-1.59E+0	2.13E+0
PET	MJ	4.55E+0	1.45E-2	2.55E-2	4.59E+0	1.41E-2	1.06E-1	8.11E-4	-2.34E+0	2.37E+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	1.39E-3	1.52E-6	1.46E-6	1.40E-3	1.49E-6	5.36E-5	9.11E-7	-6.39E-4	8.12E-4

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.48E-6	3.44E-8	2.73E-13	1.52E-6	3.36E-8	1.66E-7	8.86E-10	-7.52E-7	9.64E-7
NHWD	kg	1.42E-2	8.35E-4	1.05E-6	1.50E-2	8.14E-4	4.83E-3	3.25E-3	-3.52E-3	2.04E-2
RWD	kg	4.36E-6	9.16E-8	1.10E-13	4.45E-6	8.93E-8	3.94E-7	4.82E-9	-1.31E-6	3.62E-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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