

Environmental Profile

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

Ecochain v3.5.80



Product: 3020717 - Wafix PP Repair Socket WT 32
 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	6.75E-2	6.77E-4	1.45E-4	6.84E-2	7.06E-4	8.25E-2	3.32E-4	-4.37E-2	1.08E-1
GWP-f	kg CO2 eq	1.17E-1	6.76E-4	1.46E-4	1.17E-1	7.05E-4	3.08E-2	3.32E-4	-4.84E-2	1.01E-1
GWP-b	kg CO2 eq	-4.92E-2	4.11E-7	-1.54E-6	-4.92E-2	4.28E-7	5.17E-2	2.88E-7	4.78E-3	7.32E-3
GWP-luluc	kg CO2 eq	1.17E-4	2.39E-7	1.49E-7	1.18E-4	2.50E-7	4.34E-6	5.85E-9	-6.80E-5	5.44E-5
ODP	kg CFC11 eq	8.50E-9	1.56E-10	8.26E-12	8.66E-9	1.63E-10	6.83E-10	8.35E-12	-3.53E-9	5.99E-9
AP	mol H+ eq	5.39E-4	3.85E-6	1.47E-6	5.45E-4	4.02E-6	2.84E-5	2.00E-7	-1.69E-4	4.08E-4
EP-fw	kg P eq	3.10E-6	5.56E-9	8.24E-9	3.12E-6	5.80E-9	1.28E-7	2.66E-10	-1.20E-6	2.05E-6
EP-m	kg N eq	9.78E-5	1.38E-6	1.55E-7	9.93E-5	1.44E-6	8.87E-6	1.28E-7	-3.61E-5	7.37E-5
EP-T	mol N eq	1.11E-3	1.52E-5	1.85E-6	1.13E-3	1.58E-5	9.77E-5	8.10E-7	-4.11E-4	8.33E-4
POCP	kg NMVOC eq	4.30E-4	4.34E-6	6.28E-7	4.35E-4	4.53E-6	3.00E-5	3.04E-7	-1.59E-4	3.11E-4
ADP-mm	kg Sb eq	7.82E-6	1.75E-8	1.97E-8	7.86E-6	1.82E-8	1.08E-7	2.03E-10	-3.85E-7	7.60E-6
ADP-f	MJ	3.31E+0	1.04E-2	1.36E-3	3.32E+0	1.08E-2	8.05E-2	6.10E-4	-1.29E+0	2.13E+0
WDP	m3 depriv.	7.51E-2	3.19E-5	5.22E-5	7.51E-2	3.32E-5	1.45E-3	3.75E-6	-2.90E-2	4.76E-2
PM	disease inc.	5.73E-9	6.10E-11	9.08E-12	5.80E-9	6.37E-11	4.46E-10	4.20E-12	-2.21E-9	4.10E-9
IR	kBq U-235 eq	3.95E-3	4.54E-5	1.02E-6	3.99E-3	4.73E-5	2.59E-4	2.82E-6	-1.19E-3	3.11E-3
ETP-fw	CTUe	2.16E+0	8.43E-3	1.21E-2	2.18E+0	8.79E-3	9.65E-2	5.11E-4	-7.69E-1	1.51E+0
HTP-c	CTUh	7.33E-11	3.00E-13	6.17E-13	7.42E-11	3.13E-13	1.26E-11	1.54E-14	-2.71E-11	6.00E-11
HTP-nc	CTUh	1.40E-9	1.00E-11	1.57E-11	1.42E-9	1.05E-11	1.43E-10	3.32E-13	-3.34E-10	1.24E-9
SQP	Pt	4.64E+0	8.88E-3	2.24E-3	4.65E+0	9.26E-3	6.32E-2	1.56E-3	-4.45E+0	2.78E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	8.63E-1	1.49E-4	2.40E-2	8.87E-1	1.55E-4	3.78E-3	2.33E-5	-7.07E-1	1.84E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	8.63E-1	1.49E-4	2.40E-2	8.87E-1	1.55E-4	3.78E-3	2.33E-5	-7.07E-1	1.84E-1
PENRE	MJ	3.55E+0	1.10E-2	1.44E-3	3.56E+0	1.15E-2	8.58E-2	6.48E-4	-1.39E+0	2.27E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.55E+0	1.10E-2	1.44E-3	3.56E+0	1.15E-2	8.58E-2	6.48E-4	-1.39E+0	2.27E+0
PET	MJ	4.41E+0	1.12E-2	2.55E-2	4.45E+0	1.17E-2	8.95E-2	6.71E-4	-2.10E+0	2.45E+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	1.49E-3	1.17E-6	1.46E-6	1.49E-3	1.23E-6	4.59E-5	7.49E-7	-5.45E-4	9.97E-4

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.41E-6	2.65E-8	2.73E-13	1.44E-6	2.77E-8	1.43E-7	7.41E-10	-7.64E-7	8.47E-7
NHWD	kg	1.18E-2	6.43E-4	1.05E-6	1.24E-2	6.71E-4	4.35E-3	2.68E-3	-3.33E-3	1.68E-2
RWD	kg	4.28E-6	7.06E-8	1.10E-13	4.35E-6	7.36E-8	3.36E-7	3.98E-9	-1.20E-6	3.57E-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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