

Environmental Profile

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

Ecochain v3.5.80



Product: 3021919 - Wafix PP Repair Socket 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	8.83E-2	9.73E-4	1.45E-4	8.95E-2	1.09E-3	9.10E-2	5.14E-4	-5.66E-2	1.25E-1
GWP-f	kg CO2 eq	1.37E-1	9.72E-4	1.46E-4	1.39E-1	1.09E-3	3.62E-2	5.14E-4	-6.63E-2	1.10E-1
GWP-b	kg CO2 eq	-4.92E-2	5.90E-7	-1.54E-6	-4.92E-2	6.62E-7	5.47E-2	4.48E-7	9.88E-3	1.54E-2
GWP-luluc	kg CO2 eq	1.56E-4	3.44E-7	1.49E-7	1.57E-4	3.86E-7	6.65E-6	8.61E-9	-1.10E-4	5.36E-5
ODP	kg CFC11 eq	8.57E-9	2.24E-10	8.26E-12	8.80E-9	2.51E-10	1.04E-9	1.29E-11	-3.72E-9	6.39E-9
AP	mol H+ eq	6.04E-4	5.54E-6	1.47E-6	6.11E-4	6.21E-6	4.26E-5	3.06E-7	-2.45E-4	4.15E-4
EP-fw	kg P eq	3.60E-6	8.00E-9	8.24E-9	3.61E-6	8.97E-9	1.97E-7	3.97E-10	-1.88E-6	1.94E-6
EP-m	kg N eq	1.20E-4	1.98E-6	1.55E-7	1.22E-4	2.22E-6	1.31E-5	2.01E-7	-5.07E-5	8.67E-5
EP-T	mol N eq	1.32E-3	2.18E-5	1.85E-6	1.35E-3	2.45E-5	1.44E-4	1.25E-6	-5.77E-4	9.39E-4
POCP	kg NMVOC eq	5.02E-4	6.24E-6	6.28E-7	5.09E-4	7.00E-6	4.48E-5	4.68E-7	-2.23E-4	3.38E-4
ADP-mm	kg Sb eq	5.59E-6	2.52E-8	1.97E-8	5.63E-6	2.82E-8	1.68E-7	3.08E-10	-5.25E-7	5.30E-6
ADP-f	MJ	3.91E+0	1.49E-2	1.36E-3	3.92E+0	1.67E-2	1.23E-1	9.40E-4	-1.85E+0	2.21E+0
WDP	m3 depriv.	8.12E-2	4.58E-5	5.22E-5	8.13E-2	5.13E-5	2.21E-3	4.30E-6	-4.58E-2	3.77E-2
PM	disease inc.	6.62E-9	8.78E-11	9.08E-12	6.71E-9	9.84E-11	6.81E-10	6.46E-12	-3.21E-9	4.29E-9
IR	kBq U-235 eq	4.02E-3	6.52E-5	1.02E-6	4.09E-3	7.31E-5	3.96E-4	4.36E-6	-1.74E-3	2.82E-3
ETP-fw	CTUe	2.93E+0	1.21E-2	1.21E-2	2.95E+0	1.36E-2	1.49E-1	7.86E-4	-1.28E+0	1.83E+0
HTP-c	CTUh	9.88E-11	4.31E-13	6.17E-13	9.99E-11	4.83E-13	1.71E-11	2.26E-14	-3.28E-11	8.47E-11
HTP-nc	CTUh	1.87E-9	1.44E-11	1.57E-11	1.90E-9	1.62E-11	2.10E-10	5.04E-13	-3.65E-10	1.76E-9
SQP	Pt	4.94E+0	1.28E-2	2.24E-3	4.95E+0	1.43E-2	9.63E-2	2.41E-3	-5.50E+0	-4.32E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.31E+0	2.14E-4	2.40E-2	1.33E+0	2.40E-4	5.81E-3	3.66E-5	-9.01E-1	4.36E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.31E+0	2.14E-4	2.40E-2	1.33E+0	2.40E-4	5.81E-3	3.66E-5	-9.01E-1	4.36E-1
PENRE	MJ	4.19E+0	1.58E-2	1.44E-3	4.21E+0	1.78E-2	1.31E-1	9.97E-4	-1.99E+0	2.36E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	4.19E+0	1.58E-2	1.44E-3	4.21E+0	1.78E-2	1.31E-1	9.97E-4	-1.99E+0	2.36E+0
PET	MJ	5.50E+0	1.61E-2	2.55E-2	5.54E+0	1.80E-2	1.37E-1	1.03E-3	-2.90E+0	2.80E+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	1.54E-3	1.69E-6	1.46E-6	1.54E-3	1.89E-6	6.85E-5	1.16E-6	-8.94E-4	7.21E-4

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.67E-6	3.82E-8	2.73E-13	1.71E-6	4.28E-8	2.17E-7	1.13E-9	-9.70E-7	1.00E-6
NHWD	kg	1.62E-2	9.25E-4	1.05E-6	1.72E-2	1.04E-3	6.15E-3	4.14E-3	-4.25E-3	2.42E-2
RWD	kg	4.31E-6	1.02E-7	1.10E-13	4.41E-6	1.14E-7	5.14E-7	6.14E-9	-1.71E-6	3.33E-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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