

Environmental Profile

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

Ecochain v3.5.80



Product: 3021913 - Wafix PP Repair Socket GY 32
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	6.61E-2	6.68E-4	1.45E-4	6.70E-2	7.06E-4	8.13E-2	3.32E-4	-4.30E-2	1.06E-1
GWP-f	kg CO2 eq	1.15E-1	6.67E-4	1.46E-4	1.16E-1	7.05E-4	2.96E-2	3.32E-4	-4.77E-2	9.90E-2
GWP-b	kg CO2 eq	-4.92E-2	4.05E-7	-1.54E-6	-4.92E-2	4.28E-7	5.17E-2	2.88E-7	4.78E-3	7.35E-3
GWP-luluc	kg CO2 eq	1.16E-4	2.36E-7	1.49E-7	1.17E-4	2.50E-7	4.33E-6	5.85E-9	-6.80E-5	5.34E-5
ODP	kg CFC11 eq	8.46E-9	1.54E-10	8.26E-12	8.62E-9	1.63E-10	6.80E-10	8.35E-12	-3.45E-9	6.02E-9
AP	mol H+ eq	5.33E-4	3.80E-6	1.47E-6	5.39E-4	4.02E-6	2.82E-5	2.00E-7	-1.68E-4	4.03E-4
EP-fw	kg P eq	3.06E-6	5.49E-9	8.24E-9	3.07E-6	5.80E-9	1.28E-7	2.66E-10	-1.20E-6	2.01E-6
EP-m	kg N eq	9.66E-5	1.36E-6	1.55E-7	9.82E-5	1.44E-6	8.79E-6	1.28E-7	-3.59E-5	7.26E-5
EP-T	mol N eq	1.10E-3	1.50E-5	1.85E-6	1.12E-3	1.58E-5	9.68E-5	8.10E-7	-4.09E-4	8.21E-4
POCP	kg NMVOC eq	4.24E-4	4.29E-6	6.28E-7	4.29E-4	4.53E-6	2.98E-5	3.04E-7	-1.58E-4	3.06E-4
ADP-mm	kg Sb eq	7.81E-6	1.73E-8	1.97E-8	7.85E-6	1.82E-8	1.08E-7	2.03E-10	-3.84E-7	7.59E-6
ADP-f	MJ	3.27E+0	1.02E-2	1.36E-3	3.28E+0	1.08E-2	8.03E-2	6.10E-4	-1.28E+0	2.10E+0
WDP	m3 depriv.	7.40E-2	3.14E-5	5.22E-5	7.41E-2	3.32E-5	1.44E-3	3.75E-6	-2.89E-2	4.67E-2
PM	disease inc.	5.68E-9	6.02E-11	9.08E-12	5.75E-9	6.37E-11	4.44E-10	4.20E-12	-2.21E-9	4.05E-9
IR	kBq U-235 eq	3.91E-3	4.48E-5	1.02E-6	3.95E-3	4.73E-5	2.58E-4	2.82E-6	-1.19E-3	3.07E-3
ETP-fw	CTUe	2.14E+0	8.32E-3	1.21E-2	2.16E+0	8.79E-3	9.61E-2	5.11E-4	-7.68E-1	1.50E+0
HTP-c	CTUh	7.29E-11	2.96E-13	6.17E-13	7.38E-11	3.13E-13	1.24E-11	1.54E-14	-2.70E-11	5.95E-11
HTP-nc	CTUh	1.39E-9	9.92E-12	1.57E-11	1.41E-9	1.05E-11	1.42E-10	3.32E-13	-3.33E-10	1.23E-9
SQP	Pt	4.64E+0	8.76E-3	2.24E-3	4.65E+0	9.26E-3	6.30E-2	1.56E-3	-4.45E+0	2.72E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	8.63E-1	1.47E-4	2.40E-2	8.87E-1	1.55E-4	3.77E-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	1.47E-4	2.40E-2	8.87E-1	1.55E-4	3.77E-3	2.33E-5	-7.07E-1	1.84E-1
PENRE	MJ	3.51E+0	1.09E-2	1.44E-3	3.52E+0	1.15E-2	8.55E-2	6.48E-4	-1.38E+0	2.24E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.51E+0	1.09E-2	1.44E-3	3.52E+0	1.15E-2	8.55E-2	6.48E-4	-1.38E+0	2.24E+0
PET	MJ	4.37E+0	1.10E-2	2.55E-2	4.41E+0	1.17E-2	8.93E-2	6.71E-4	-2.08E+0	2.43E+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	1.47E-3	1.16E-6	1.46E-6	1.47E-3	1.23E-6	4.56E-5	7.49E-7	-5.44E-4	9.74E-4

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.41E-6	2.62E-8	2.73E-13	1.43E-6	2.77E-8	1.42E-7	7.41E-10	-7.50E-7	8.53E-7
NHWD	kg	1.16E-2	6.35E-4	1.05E-6	1.23E-2	6.71E-4	4.29E-3	2.68E-3	-3.32E-3	1.66E-2
RWD	kg	4.25E-6	6.97E-8	1.10E-13	4.32E-6	7.36E-8	3.35E-7	3.98E-9	-1.19E-6	3.54E-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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