

Environmental Profile

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

Ecochain v3.5.80



Product: 3043944 - Wafix PP Reducer GY 110x50 +2Gaskets
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

This document and supporting material contain confidential and proprietary business information of Wavin - PL -Buk - Extra products. These materials may be printed or (photo) copied or otherwise used only with the written consent of Wavin - PL -Buk - Extra products.

Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	3.15E-1	1.74E-3	1.45E-4	3.17E-1	2.79E-3	3.68E-1	1.63E-3	-1.92E-1	4.97E-1
GWP-f	kg CO2 eq	4.17E-1	1.74E-3	1.46E-4	4.18E-1	2.78E-3	2.62E-1	1.63E-3	-2.04E-1	4.82E-1
GWP-b	kg CO2 eq	-1.02E-1	1.06E-6	-1.54E-6	-1.02E-1	1.69E-6	1.05E-1	1.51E-6	1.20E-2	1.55E-2
GWP-luluc	kg CO2 eq	3.83E-4	6.16E-7	1.49E-7	3.84E-4	9.86E-7	1.33E-5	2.95E-8	-1.68E-4	2.30E-4
ODP	kg CFC11 eq	5.09E-8	4.01E-10	8.26E-12	5.13E-8	6.42E-10	2.30E-9	4.24E-11	-1.68E-8	3.75E-8
AP	mol H+ eq	1.99E-3	9.92E-6	1.47E-6	2.00E-3	1.59E-5	1.06E-4	1.03E-6	-5.06E-4	1.62E-3
EP-fw	kg P eq	1.19E-5	1.43E-8	8.24E-9	1.19E-5	2.29E-8	4.07E-7	1.35E-9	-3.21E-6	9.12E-6
EP-m	kg N eq	3.46E-4	3.55E-6	1.55E-7	3.50E-4	5.68E-6	3.45E-5	1.27E-6	-1.10E-4	2.81E-4
EP-T	mol N eq	3.87E-3	3.91E-5	1.85E-6	3.91E-3	6.26E-5	3.81E-4	4.14E-6	-1.24E-3	3.12E-3
POCP	kg NMVOC eq	1.65E-3	1.12E-5	6.28E-7	1.67E-3	1.79E-5	1.11E-4	1.53E-6	-4.80E-4	1.32E-3
ADP-mm	kg Sb eq	6.97E-5	4.50E-8	1.97E-8	6.98E-5	7.20E-8	3.33E-7	1.02E-9	-3.14E-6	6.70E-5
ADP-f	MJ	1.20E+1	2.67E-2	1.36E-3	1.21E+1	4.27E-2	2.55E-1	3.11E-3	-4.82E+0	7.56E+0
WDP	m3 depriv.	2.59E-1	8.20E-5	5.22E-5	2.59E-1	1.31E-4	6.18E-3	1.52E-5	-8.17E-2	1.84E-1
PM	disease inc.	2.24E-8	1.57E-10	9.08E-12	2.25E-8	2.51E-10	1.40E-9	2.13E-11	-5.85E-9	1.84E-8
IR	kBq U-235 eq	2.07E-2	1.17E-4	1.02E-6	2.08E-2	1.87E-4	8.00E-4	1.47E-5	-3.81E-3	1.80E-2
ETP-fw	CTUe	7.95E+0	2.17E-2	1.21E-2	7.98E+0	3.47E-2	5.51E-1	4.42E-3	-2.07E+0	6.51E+0
HTP-c	CTUh	2.40E-10	7.72E-13	6.17E-13	2.41E-10	1.24E-12	3.73E-11	7.90E-14	-6.77E-11	2.12E-10
HTP-nc	CTUh	5.02E-9	2.59E-11	1.57E-11	5.07E-9	4.14E-11	5.30E-10	2.12E-12	-9.19E-10	4.72E-9
SQP	Pt	1.03E+1	2.29E-2	2.24E-3	1.03E+1	3.66E-2	1.91E-1	7.94E-3	-9.54E+0	1.03E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.62E+0	3.83E-4	2.40E-2	2.64E+0	6.13E-4	1.21E-2	1.31E-4	-1.53E+0	1.12E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.62E+0	3.83E-4	2.40E-2	2.64E+0	6.13E-4	1.21E-2	1.31E-4	-1.53E+0	1.12E+0
PENRE	MJ	1.29E+1	2.84E-2	1.44E-3	1.29E+1	4.54E-2	2.72E-1	3.30E-3	-5.23E+0	8.01E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.29E+1	2.84E-2	1.44E-3	1.29E+1	4.54E-2	2.72E-1	3.30E-3	-5.23E+0	8.01E+0
PET	MJ	1.55E+1	2.88E-2	2.55E-2	1.56E+1	4.60E-2	2.84E-1	3.43E-3	-6.77E+0	9.13E+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	5.60E-3	3.02E-6	1.46E-6	5.60E-3	4.84E-6	3.48E-4	3.85E-6	-1.58E-3	4.38E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	5.05E-6	6.83E-8	2.73E-13	5.12E-6	1.09E-7	5.45E-7	3.73E-9	-3.36E-6	2.42E-6
NHWD	kg	3.46E-2	1.66E-3	1.05E-6	3.63E-2	2.65E-3	1.68E-2	1.36E-2	-8.39E-3	6.09E-2
RWD	kg	2.56E-5	1.82E-7	1.10E-13	2.57E-5	2.91E-7	1.03E-6	2.04E-8	-4.08E-6	2.30E-5
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



Ecochain Technologies BV
H.J.E. Wenckebachweg 123, 1096 AM Amsterdam, The Netherlands
<https://www.ecochain.com>
+31 20 3035 777