

Environmental Profile

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

Ecochain v3.5.80



Product: 3002685 - Azura PP Leaf sep Stand pipe GY 80
Unit: 1 piece
Manufacturer: Wavin - PL -Buk - Extra products

Azura IT: efficient and budget-friendly infiltration

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]

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Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	5.92E-1	1.52E-3	1.45E-4	5.94E-1	7.24E-3	4.99E-1	3.41E-3	-4.00E-1	7.04E-1
GWP-f	kg CO2 eq	7.71E-1	1.52E-3	1.46E-4	7.72E-1	7.23E-3	3.00E-1	3.41E-3	-4.38E-1	6.45E-1
GWP-b	kg CO2 eq	-1.79E-1	9.22E-7	-1.54E-6	-1.79E-1	4.39E-6	1.99E-1	2.97E-6	3.90E-2	5.85E-2
GWP-luluc	kg CO2 eq	5.90E-4	5.38E-7	1.49E-7	5.91E-4	2.56E-6	4.30E-5	5.85E-8	-5.02E-4	1.34E-4
ODP	kg CFC11 eq	2.63E-8	3.50E-10	8.26E-12	2.67E-8	1.67E-9	6.38E-9	8.56E-11	-2.67E-8	8.08E-9
AP	mol H+ eq	3.04E-3	8.65E-6	1.47E-6	3.05E-3	4.12E-5	2.67E-4	2.04E-6	-1.38E-3	1.99E-3
EP-fw	kg P eq	1.70E-5	1.25E-8	8.24E-9	1.70E-5	5.95E-8	1.26E-6	2.68E-9	-9.38E-6	8.94E-6
EP-m	kg N eq	5.64E-4	3.10E-6	1.55E-7	5.68E-4	1.47E-5	8.20E-5	1.32E-6	-2.76E-4	3.90E-4
EP-T	mol N eq	6.21E-3	3.41E-5	1.85E-6	6.24E-3	1.62E-4	9.03E-4	8.29E-6	-3.11E-3	4.21E-3
POCP	kg NMVOC eq	2.58E-3	9.75E-6	6.28E-7	2.59E-3	4.65E-5	2.80E-4	3.11E-6	-1.23E-3	1.69E-3
ADP-mm	kg Sb eq	1.05E-5	3.93E-8	1.97E-8	1.06E-5	1.87E-7	1.03E-6	2.06E-9	-3.04E-6	8.74E-6
ADP-f	MJ	2.40E+1	2.33E-2	1.36E-3	2.40E+1	1.11E-1	7.81E-1	6.25E-3	-1.23E+1	1.26E+1
WDP	m3 depriv.	5.03E-1	7.16E-5	5.22E-5	5.03E-1	3.41E-4	1.45E-2	3.32E-5	-2.71E-1	2.47E-1
PM	disease inc.	2.98E-8	1.37E-10	9.08E-12	2.99E-8	6.53E-10	4.26E-9	4.30E-11	-1.58E-8	1.91E-8
IR	kBq U-235 eq	1.76E-2	1.02E-4	1.02E-6	1.77E-2	4.85E-4	2.45E-3	2.89E-5	-9.59E-3	1.10E-2
ETP-fw	CTUe	1.14E+1	1.89E-2	1.21E-2	1.14E+1	9.02E-2	9.30E-1	5.23E-3	-5.92E+0	6.52E+0
HTP-c	CTUh	2.95E-10	6.74E-13	6.17E-13	2.97E-10	3.21E-12	1.17E-10	1.54E-13	-1.51E-10	2.66E-10
HTP-nc	CTUh	6.67E-9	2.26E-11	1.57E-11	6.71E-9	1.08E-10	1.38E-9	3.37E-12	-3.22E-9	4.98E-9
SQP	Pt	1.79E+1	1.99E-2	2.24E-3	1.79E+1	9.50E-2	6.13E-1	1.60E-2	-2.11E+1	-2.50E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	4.22E+0	3.35E-4	2.40E-2	4.24E+0	1.59E-3	3.72E-2	2.41E-4	-3.54E+0	7.43E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	4.22E+0	3.35E-4	2.40E-2	4.24E+0	1.59E-3	3.72E-2	2.41E-4	-3.54E+0	7.43E-1
PENRE	MJ	2.58E+1	2.48E-2	1.44E-3	2.58E+1	1.18E-1	8.32E-1	6.63E-3	-1.33E+1	1.35E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.58E+1	2.48E-2	1.44E-3	2.58E+1	1.18E-1	8.32E-1	6.63E-3	-1.33E+1	1.35E+1
PET	MJ	3.00E+1	2.51E-2	2.55E-2	3.00E+1	1.19E-1	8.69E-1	6.87E-3	-1.68E+1	1.42E+1
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	8.85E-3	2.64E-6	1.46E-6	8.85E-3	1.26E-5	4.51E-4	7.70E-6	-4.95E-3	4.38E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	8.01E-6	5.96E-8	2.73E-13	8.07E-6	2.84E-7	1.35E-6	7.54E-9	-5.10E-6	4.61E-6
NHWD	kg	4.63E-2	1.45E-3	1.05E-6	4.77E-2	6.88E-3	4.17E-2	2.75E-2	-1.93E-2	1.05E-1
RWD	kg	1.61E-5	1.59E-7	1.10E-13	1.62E-5	7.55E-7	3.16E-6	4.08E-8	-9.21E-6	1.10E-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



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