

Environmental Profile

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

Ecochain v3.5.80



Product: 3009575 - KG Access Pipe DN100
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



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	3.42E+0	3.96E-2	1.45E-4	3.46E+0	3.25E-2	1.20E+0	1.09E-2	-1.28E+0	3.42E+0
GWP-f	kg CO2 eq	3.39E+0	3.96E-2	1.46E-4	3.43E+0	3.24E-2	1.20E+0	1.09E-2	-1.28E+0	3.40E+0
GWP-b	kg CO2 eq	2.12E-2	2.40E-5	-1.54E-6	2.12E-2	1.97E-5	-1.01E-3	1.36E-5	-5.22E-3	1.50E-2
GWP-luluc	kg CO2 eq	3.31E-3	1.40E-5	1.49E-7	3.32E-3	1.15E-5	3.99E-4	2.81E-7	-4.69E-4	3.27E-3
ODP	kg CFC11 eq	1.44E-6	9.12E-9	8.26E-12	1.45E-6	7.48E-9	1.10E-7	3.98E-10	-6.73E-7	8.93E-7
AP	mol H+ eq	6.33E-2	2.26E-4	1.47E-6	6.35E-2	1.85E-4	1.91E-3	9.70E-6	6.78E-4	6.63E-2
EP-fw	kg P eq	5.25E-4	3.26E-7	8.24E-9	5.26E-4	2.67E-7	1.34E-5	1.27E-8	3.19E-7	5.40E-4
EP-m	kg N eq	4.81E-3	8.07E-5	1.55E-7	4.89E-3	6.61E-5	4.68E-4	6.88E-6	-2.57E-4	5.17E-3
EP-T	mol N eq	6.22E-2	8.89E-4	1.85E-6	6.31E-2	7.29E-4	5.17E-3	3.86E-5	-3.80E-4	6.87E-2
POCP	kg NMVOC eq	1.86E-2	2.54E-4	6.28E-7	1.88E-2	2.08E-4	1.53E-3	1.34E-5	-1.26E-3	1.93E-2
ADP-mm	kg Sb eq	5.75E-3	1.02E-6	1.97E-8	5.75E-3	8.39E-7	7.44E-6	9.71E-9	2.32E-3	8.07E-3
ADP-f	MJ	7.75E+1	6.08E-1	1.36E-3	7.81E+1	4.98E-1	5.07E+0	2.91E-2	-3.22E+1	5.15E+1
WDP	m3 depriv.	4.75E+0	1.87E-3	5.22E-5	4.75E+0	1.53E-3	2.02E-1	1.87E-4	-1.75E+0	3.21E+0
PM	disease inc.	2.05E-7	3.57E-9	9.08E-12	2.09E-7	2.93E-9	2.33E-8	2.00E-10	-1.16E-8	2.24E-7
IR	kBq U-235 eq	1.88E-1	2.66E-3	1.02E-6	1.91E-1	2.18E-3	1.79E-2	1.34E-4	-4.69E-2	1.64E-1
ETP-fw	CTUe	5.64E+2	4.94E-1	1.21E-2	5.64E+2	4.04E-1	3.94E+1	4.35E-1	9.10E+1	6.96E+2
HTP-c	CTUh	9.49E-9	1.76E-11	6.17E-13	9.51E-9	1.44E-11	5.64E-10	8.03E-13	1.74E-9	1.18E-8
HTP-nc	CTUh	6.51E-7	5.88E-10	1.57E-11	6.52E-7	4.82E-10	1.39E-8	8.43E-11	1.32E-7	7.99E-7
SQP	Pt	1.81E+1	5.20E-1	2.24E-3	1.87E+1	4.26E-1	3.17E+0	7.44E-2	-1.35E+0	2.10E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.26E+1	8.72E-3	2.40E-2	1.26E+1	7.14E-3	3.69E-1	1.10E-3	-7.63E-1	1.22E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.26E+1	8.72E-3	2.40E-2	1.26E+1	7.14E-3	3.69E-1	1.10E-3	-7.63E-1	1.22E+1
PENRE	MJ	8.31E+1	6.45E-1	1.44E-3	8.37E+1	5.29E-1	5.39E+0	3.09E-2	-3.48E+1	5.48E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	8.31E+1	6.45E-1	1.44E-3	8.37E+1	5.29E-1	5.39E+0	3.09E-2	-3.48E+1	5.48E+1
PET	MJ	9.57E+1	6.54E-1	2.55E-2	9.63E+1	5.36E-1	5.76E+0	3.20E-2	-3.56E+1	6.71E+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	6.31E-2	6.88E-5	1.46E-6	6.32E-2	5.63E-5	5.75E-3	3.56E-5	-1.51E-2	5.39E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	7.55E-4	1.55E-6	2.73E-13	7.56E-4	1.27E-6	8.45E-6	3.54E-8	2.65E-4	1.03E-3
NHWD	kg	4.60E-1	3.77E-2	1.05E-6	4.97E-1	3.09E-2	1.93E-1	1.28E-1	-2.40E-3	8.47E-1
RWD	kg	1.73E-4	4.13E-6	1.10E-13	1.77E-4	3.39E-6	1.92E-5	1.89E-7	-4.35E-5	1.56E-4
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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