

Environmental Profile

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

Ecochain v3.5.80



Product: 3043736 - Access Pipe KANION PVC 90 graphite
Unit: 1 piece
Manufacturer: Wavin - PL -Buk - Extra products

Kanion gutters mean original design, elegance and aesthetics. They are designed to drain 100% of rainwater. It is safe to say that they are intended for the most demanding users.

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	1.31E+0	1.38E-2	1.45E-4	1.33E+0	1.42E-2	5.62E-1	4.73E-3	-6.88E-1	1.22E+0
GWP-f	kg CO2 eq	1.31E+0	1.38E-2	1.46E-4	1.32E+0	1.42E-2	5.62E-1	4.72E-3	-6.84E-1	1.22E+0
GWP-b	kg CO2 eq	7.60E-3	8.36E-6	-1.54E-6	7.60E-3	8.63E-6	-3.74E-4	5.85E-6	-4.14E-3	3.10E-3
GWP-luluc	kg CO2 eq	1.06E-3	4.87E-6	1.49E-7	1.07E-3	5.03E-6	1.74E-4	1.23E-7	-3.89E-4	8.59E-4
ODP	kg CFC11 eq	6.09E-7	3.17E-9	8.26E-12	6.12E-7	3.27E-9	4.78E-8	1.72E-10	-3.08E-7	3.55E-7
AP	mol H+ eq	6.15E-3	7.84E-5	1.47E-6	6.23E-3	8.09E-5	8.21E-4	4.21E-6	-2.33E-3	4.81E-3
EP-fw	kg P eq	5.59E-5	1.13E-7	8.24E-9	5.61E-5	1.17E-7	5.81E-6	5.55E-9	-2.21E-5	3.99E-5
EP-m	kg N eq	1.04E-3	2.81E-5	1.55E-7	1.07E-3	2.90E-5	2.02E-4	2.86E-6	-4.11E-4	8.92E-4
EP-T	mol N eq	1.13E-2	3.09E-4	1.85E-6	1.17E-2	3.19E-4	2.23E-3	1.68E-5	-4.38E-3	9.84E-3
POCP	kg NMVOC eq	4.00E-3	8.84E-5	6.28E-7	4.09E-3	9.12E-5	6.63E-4	5.79E-6	-1.53E-3	3.32E-3
ADP-mm	kg Sb eq	8.29E-4	3.56E-7	1.97E-8	8.30E-4	3.68E-7	3.17E-6	4.23E-9	-1.31E-5	8.20E-4
ADP-f	MJ	3.26E+1	2.11E-1	1.36E-3	3.29E+1	2.18E-1	2.20E+0	1.26E-2	-1.60E+1	1.93E+1
WDP	m3 depriv.	1.91E+0	6.49E-4	5.22E-5	1.91E+0	6.69E-4	8.82E-2	8.63E-5	-8.62E-1	1.13E+0
PM	disease inc.	4.37E-8	1.24E-9	9.08E-12	4.49E-8	1.28E-9	1.00E-8	8.68E-11	-1.46E-8	4.17E-8
IR	kBq U-235 eq	6.98E-2	9.24E-4	1.02E-6	7.08E-2	9.53E-4	7.72E-3	5.80E-5	-2.83E-2	5.12E-2
ETP-fw	CTUe	2.81E+1	1.72E-1	1.21E-2	2.83E+1	1.77E-1	1.72E+1	1.90E-1	-8.38E+0	3.75E+1
HTP-c	CTUh	9.20E-10	6.11E-12	6.17E-13	9.26E-10	6.30E-12	2.57E-10	3.52E-13	-3.21E-10	8.69E-10
HTP-nc	CTUh	2.98E-8	2.05E-10	1.57E-11	3.00E-8	2.11E-10	6.04E-9	3.68E-11	-1.10E-8	2.53E-8
SQP	Pt	4.56E+0	1.81E-1	2.24E-3	4.74E+0	1.87E-1	1.35E+0	3.23E-2	-1.58E+0	4.73E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.87E+0	3.03E-3	2.40E-2	1.90E+0	3.13E-3	1.60E-1	4.73E-4	-6.28E-1	1.43E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.87E+0	3.03E-3	2.40E-2	1.90E+0	3.13E-3	1.60E-1	4.73E-4	-6.28E-1	1.43E+0
PENRE	MJ	3.50E+1	2.24E-1	1.44E-3	3.52E+1	2.32E-1	2.34E+0	1.34E-2	-1.73E+1	2.05E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.50E+1	2.24E-1	1.44E-3	3.52E+1	2.32E-1	2.34E+0	1.34E-2	-1.73E+1	2.05E+1
PET	MJ	3.69E+1	2.27E-1	2.55E-2	3.71E+1	2.35E-1	2.50E+0	1.39E-2	-1.79E+1	2.20E+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	2.28E-2	2.39E-5	1.46E-6	2.29E-2	2.47E-5	2.49E-3	1.54E-5	-9.07E-3	1.63E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.21E-4	5.41E-7	2.73E-13	1.22E-4	5.58E-7	3.61E-6	1.54E-8	-1.38E-5	1.12E-4
NHWD	kg	1.24E-1	1.31E-2	1.05E-6	1.37E-1	1.35E-2	8.53E-2	5.53E-2	-4.63E-2	2.45E-1
RWD	kg	6.44E-5	1.44E-6	1.10E-13	6.59E-5	1.48E-6	8.23E-6	8.20E-8	-2.52E-5	5.05E-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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