

Environmental Profile

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

Ecochain v3.5.80



Product: 3023991 - KANION PVC Angle ext. 100x90 Graphite
 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



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.

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

A1 Raw material supply A2 Transport A3 Manufacturing

Construction process stage

A4 Transport gate to site
 A5 Assembly / Construction installation process

Use stage

B1 Use B2 Maintenance B3 Repair B4 Replacement B5 Refurbishment
 B6 Operational energy use B7 Operational water use

End-of-Life stage

C1 De-construction demolition C2 Transport C3 Waste processing
 C4 Disposal

Benefits and loads beyond the system boundaries

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	6.38E-1	1.27E-2	1.45E-4	6.50E-1	7.27E-3	6.36E-1	2.38E-3	-3.55E-1	9.41E-1
GWP-f	kg CO2 eq	8.96E-1	1.27E-2	1.46E-4	9.09E-1	7.26E-3	3.15E-1	2.38E-3	-4.76E-1	7.57E-1
GWP-b	kg CO2 eq	-2.60E-1	7.68E-6	-1.54E-6	-2.60E-1	4.41E-6	3.21E-1	2.93E-6	1.23E-1	1.84E-1
GWP-luluc	kg CO2 eq	1.45E-3	4.48E-6	1.49E-7	1.45E-3	2.57E-6	9.36E-5	6.35E-8	-1.19E-3	3.57E-4
ODP	kg CFC11 eq	3.27E-7	2.92E-9	8.26E-12	3.30E-7	1.67E-9	2.66E-8	8.71E-11	-1.74E-7	1.84E-7
AP	mol H+ eq	4.44E-3	7.21E-5	1.47E-6	4.51E-3	4.14E-5	5.00E-4	2.13E-6	-2.07E-3	2.99E-3
EP-fw	kg P eq	4.17E-5	1.04E-7	8.24E-9	4.18E-5	5.98E-8	3.15E-6	2.84E-9	-2.42E-5	2.07E-5
EP-m	kg N eq	8.91E-4	2.58E-5	1.55E-7	9.17E-4	1.48E-5	1.33E-4	1.36E-6	-4.21E-4	6.45E-4
EP-T	mol N eq	9.46E-3	2.84E-4	1.85E-6	9.75E-3	1.63E-4	1.46E-3	8.47E-6	-4.69E-3	6.69E-3
POCP	kg NMVOC eq	3.08E-3	8.13E-5	6.28E-7	3.16E-3	4.66E-5	4.35E-4	2.92E-6	-1.51E-3	2.14E-3
ADP-mm	kg Sb eq	6.05E-4	3.27E-7	1.97E-8	6.05E-4	1.88E-7	1.94E-6	2.15E-9	-7.97E-6	5.99E-4
ADP-f	MJ	2.01E+1	1.94E-1	1.36E-3	2.03E+1	1.11E-1	1.28E+0	6.37E-3	-1.03E+1	1.14E+1
WDP	m3 depriv.	1.06E+0	5.96E-4	5.22E-5	1.06E+0	3.42E-4	4.60E-2	4.91E-5	-6.38E-1	4.66E-1
PM	disease inc.	4.06E-8	1.14E-9	9.08E-12	4.18E-8	6.56E-10	6.30E-9	4.39E-11	-2.46E-8	2.42E-8
IR	kBq U-235 eq	4.35E-2	8.49E-4	1.02E-6	4.44E-2	4.87E-4	4.62E-3	2.92E-5	-2.39E-2	2.56E-2
ETP-fw	CTUe	3.45E+1	1.58E-1	1.21E-2	3.47E+1	9.05E-2	8.99E+0	9.65E-2	-1.51E+1	2.87E+1
HTP-c	CTUh	8.97E-10	5.61E-12	6.17E-13	9.03E-10	3.22E-12	1.61E-10	1.81E-13	-3.36E-10	7.31E-10
HTP-nc	CTUh	2.22E-8	1.88E-10	1.57E-11	2.24E-8	1.08E-10	3.37E-9	1.87E-11	-7.35E-9	1.86E-8
SQP	Pt	3.00E+1	1.66E-1	2.24E-3	3.02E+1	9.54E-2	7.91E-1	1.63E-2	-4.19E+1	-1.09E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	6.90E+0	2.79E-3	2.40E-2	6.92E+0	1.60E-3	8.66E-2	2.35E-4	-7.19E+0	-1.76E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	6.90E+0	2.79E-3	2.40E-2	6.92E+0	1.60E-3	8.66E-2	2.35E-4	-7.19E+0	-1.76E-1
PENRE	MJ	2.16E+1	2.06E-1	1.44E-3	2.18E+1	1.18E-1	1.36E+0	6.76E-3	-1.11E+1	1.22E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.16E+1	2.06E-1	1.44E-3	2.18E+1	1.18E-1	1.36E+0	6.76E-3	-1.11E+1	1.22E+1
PET	MJ	2.85E+1	2.09E-1	2.55E-2	2.87E+1	1.20E-1	1.44E+0	6.99E-3	-1.83E+1	1.20E+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	1.45E-2	2.20E-5	1.46E-6	1.45E-2	1.26E-5	1.31E-3	7.77E-6	-9.72E-3	6.10E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	9.06E-5	4.97E-7	2.73E-13	9.11E-5	2.85E-7	2.24E-6	7.82E-9	-1.14E-5	8.23E-5
NHWD	kg	1.09E-1	1.20E-2	1.05E-6	1.21E-1	6.91E-3	5.18E-2	2.79E-2	-4.51E-2	1.63E-1
RWD	kg	4.03E-5	1.32E-6	1.10E-13	4.16E-5	7.58E-7	5.18E-6	4.13E-8	-2.24E-5	2.52E-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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