

Environmental Profile

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

Ecochain v3.5.80



Product: 3021629 - KANION PVC Angle ext. 130x to order BN
 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	☑	☑	☑	☑									

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	1.55E+0	1.58E-2	7.57E-5	1.57E+0	8.53E-3	1.16E+0	2.82E-3	-1.18E-1	2.63E+0
GWP-f	kg CO2 eq	1.80E+0	1.57E-2	7.64E-5	1.81E+0	8.52E-3	5.09E-1	2.82E-3	-1.00E+0	1.33E+0
GWP-b	kg CO2 eq	-2.47E-1	9.56E-6	-8.07E-7	-2.47E-1	5.17E-6	6.56E-1	3.43E-6	8.89E-1	1.30E+0
GWP-luluc	kg CO2 eq	5.83E-3	5.57E-6	7.81E-8	5.83E-3	3.02E-6	1.28E-4	7.66E-8	-6.57E-3	-6.10E-4
ODP	kg CFC11 eq	4.76E-7	3.63E-9	4.32E-12	4.79E-7	1.96E-9	4.09E-8	1.02E-10	-2.63E-7	2.60E-7
AP	mol H+ eq	8.89E-3	8.97E-5	7.71E-7	8.98E-3	4.85E-5	9.42E-4	2.51E-6	-5.88E-3	4.09E-3
EP-fw	kg P eq	9.34E-5	1.30E-7	4.31E-9	9.35E-5	7.01E-8	4.41E-6	3.40E-9	-9.23E-5	5.65E-6
EP-m	kg N eq	2.31E-3	3.21E-5	8.11E-8	2.34E-3	1.74E-5	2.91E-4	1.59E-6	-1.30E-3	1.36E-3
EP-T	mol N eq	2.31E-2	3.54E-4	9.70E-7	2.35E-2	1.91E-4	3.19E-3	9.97E-6	-1.48E-2	1.21E-2
POCP	kg NMVOC eq	6.31E-3	1.01E-4	3.28E-7	6.41E-3	5.47E-5	9.53E-4	3.45E-6	-4.01E-3	3.41E-3
ADP-mm	kg Sb eq	3.07E-4	4.07E-7	1.03E-8	3.07E-4	2.20E-7	3.78E-6	2.56E-9	-1.42E-5	2.97E-4
ADP-f	MJ	3.61E+1	2.42E-1	7.09E-4	3.64E+1	1.31E-1	2.16E+0	7.50E-3	-1.96E+1	1.91E+1
WDP	m3 depriv.	1.53E+0	7.42E-4	2.73E-5	1.53E+0	4.01E-4	5.87E-2	6.48E-5	-1.82E+0	-2.28E-1
PM	disease inc.	1.04E-7	1.42E-9	4.75E-12	1.06E-7	7.69E-10	1.28E-8	5.16E-11	-9.77E-8	2.14E-8
IR	kBq U-235 eq	8.41E-2	1.06E-3	5.32E-7	8.52E-2	5.72E-4	8.34E-3	3.42E-5	-7.41E-2	2.00E-2
ETP-fw	CTUe	1.29E+2	1.96E-1	6.32E-3	1.29E+2	1.06E-1	1.16E+1	1.10E-1	-7.37E+1	6.71E+1
HTP-c	CTUh	1.14E-9	6.98E-12	3.22E-13	1.15E-9	3.78E-12	3.04E-10	2.18E-13	-8.12E-10	6.41E-10
HTP-nc	CTUh	3.10E-8	2.34E-10	8.18E-12	3.13E-8	1.27E-10	5.14E-9	2.15E-11	-2.50E-8	1.15E-8
SQP	Pt	6.13E+1	2.07E-1	1.17E-3	6.15E+1	1.12E-1	1.30E+0	1.91E-2	-1.80E+2	-1.17E+2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.17E+1	3.47E-3	1.26E-2	1.17E+1	1.88E-3	1.20E-1	2.72E-4	-3.22E+1	-2.03E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.17E+1	3.47E-3	1.26E-2	1.17E+1	1.88E-3	1.20E-1	2.72E-4	-3.22E+1	-2.03E+1
PENRE	MJ	3.88E+1	2.57E-1	7.55E-4	3.91E+1	1.39E-1	2.30E+0	7.96E-3	-2.10E+1	2.05E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.88E+1	2.57E-1	7.55E-4	3.91E+1	1.39E-1	2.30E+0	7.96E-3	-2.10E+1	2.05E+1
PET	MJ	5.06E+1	2.60E-1	1.33E-2	5.08E+1	1.41E-1	2.42E+0	8.23E-3	-5.32E+1	2.05E-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	2.71E-2	2.73E-5	7.63E-7	2.71E-2	1.48E-5	1.79E-3	9.11E-6	-3.93E-2	-1.03E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	6.81E-5	6.18E-7	1.43E-13	6.87E-5	3.35E-7	4.45E-6	9.27E-9	-2.23E-5	5.12E-5
NHWD	kg	2.54E-1	1.50E-2	5.51E-7	2.68E-1	8.11E-3	9.27E-2	3.28E-2	-1.09E-1	2.93E-1
RWD	kg	8.27E-5	1.64E-6	5.73E-14	8.44E-5	8.90E-7	1.03E-5	4.85E-8	-7.00E-5	2.56E-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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