

Environmental Profile

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

Ecochain v3.5.80



Product: 3024024 - KANION PVC Branch 90/90x67 BK S/S/S
 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	7.72E-1	1.45E-2	1.45E-4	7.87E-1	7.98E-3	7.10E-1	2.56E-3	-4.15E-1	1.09E+0
GWP-f	kg CO2 eq	1.03E+0	1.45E-2	1.46E-4	1.05E+0	7.97E-3	3.83E-1	2.56E-3	-5.50E-1	8.89E-1
GWP-b	kg CO2 eq	-2.61E-1	8.83E-6	-1.54E-6	-2.60E-1	4.84E-6	3.27E-1	3.18E-6	1.36E-1	2.03E-1
GWP-luluc	kg CO2 eq	1.62E-3	5.14E-6	1.49E-7	1.62E-3	2.82E-6	1.04E-4	6.84E-8	-1.31E-3	4.20E-4
ODP	kg CFC11 eq	3.69E-7	3.35E-9	8.26E-12	3.72E-7	1.84E-9	2.97E-8	9.45E-11	-1.95E-7	2.08E-7
AP	mol H+ eq	5.01E-3	8.28E-5	1.47E-6	5.10E-3	4.54E-5	5.60E-4	2.31E-6	-2.28E-3	3.42E-3
EP-fw	kg P eq	4.70E-5	1.20E-7	8.24E-9	4.72E-5	6.56E-8	3.52E-6	3.07E-9	-2.67E-5	2.40E-5
EP-m	kg N eq	1.01E-3	2.96E-5	1.55E-7	1.04E-3	1.62E-5	1.50E-4	1.41E-6	-4.66E-4	7.40E-4
EP-T	mol N eq	1.07E-2	3.26E-4	1.85E-6	1.10E-2	1.79E-4	1.65E-3	9.19E-6	-5.19E-3	7.65E-3
POCP	kg NMVOC eq	3.53E-3	9.33E-5	6.28E-7	3.63E-3	5.12E-5	4.90E-4	3.17E-6	-1.66E-3	2.51E-3
ADP-mm	kg Sb eq	6.95E-4	3.76E-7	1.97E-8	6.96E-4	2.06E-7	2.17E-6	2.33E-9	-8.56E-6	6.90E-4
ADP-f	MJ	2.38E+1	2.23E-1	1.36E-3	2.40E+1	1.22E-1	1.42E+0	6.91E-3	-1.18E+1	1.37E+1
WDP	m3 depriv.	1.20E+0	6.85E-4	5.22E-5	1.20E+0	3.76E-4	5.13E-2	5.16E-5	-7.09E-1	5.45E-1
PM	disease inc.	4.60E-8	1.31E-9	9.08E-12	4.73E-8	7.20E-10	7.06E-9	4.76E-11	-2.68E-8	2.84E-8
IR	kBq U-235 eq	5.00E-2	9.75E-4	1.02E-6	5.10E-2	5.35E-4	5.16E-3	3.16E-5	-2.65E-2	3.02E-2
ETP-fw	CTUe	3.86E+1	1.81E-1	1.21E-2	3.88E+1	9.94E-2	1.00E+1	1.08E-1	-1.67E+1	3.24E+1
HTP-c	CTUh	9.74E-10	6.45E-12	6.17E-13	9.81E-10	3.54E-12	1.84E-10	1.96E-13	-3.64E-10	8.04E-10
HTP-nc	CTUh	2.46E-8	2.16E-10	1.57E-11	2.49E-8	1.18E-10	3.79E-9	2.07E-11	-8.24E-9	2.06E-8
SQP	Pt	3.10E+1	1.91E-1	2.24E-3	3.12E+1	1.05E-1	8.83E-1	1.77E-2	-4.45E+1	-1.23E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	7.35E+0	3.20E-3	2.40E-2	7.38E+0	1.76E-3	9.66E-2	2.54E-4	-7.67E+0	-1.92E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	7.35E+0	3.20E-3	2.40E-2	7.38E+0	1.76E-3	9.66E-2	2.54E-4	-7.67E+0	-1.92E-1
PENRE	MJ	2.55E+1	2.37E-1	1.44E-3	2.57E+1	1.30E-1	1.52E+0	7.34E-3	-1.27E+1	1.46E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.55E+1	2.37E-1	1.44E-3	2.57E+1	1.30E-1	1.52E+0	7.34E-3	-1.27E+1	1.46E+1
PET	MJ	3.28E+1	2.40E-1	2.55E-2	3.31E+1	1.32E-1	1.61E+0	7.59E-3	-2.04E+1	1.45E+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	1.65E-2	2.53E-5	1.46E-6	1.66E-2	1.38E-5	1.45E-3	8.44E-6	-1.08E-2	7.25E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.04E-4	5.71E-7	2.73E-13	1.05E-4	3.13E-7	2.50E-6	8.48E-9	-1.29E-5	9.49E-5
NHWD	kg	1.20E-1	1.38E-2	1.05E-6	1.34E-1	7.58E-3	5.96E-2	3.03E-2	-4.90E-2	1.83E-1
RWD	kg	4.67E-5	1.52E-6	1.10E-13	4.82E-5	8.32E-7	5.78E-6	4.49E-8	-2.48E-5	3.01E-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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