

# Environmental Profile

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

Ecochain v3.5.80



Product: 3021515 - KANION PVC Branch 75/75x67 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	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]

## 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	5.42E-1	1.10E-2	1.45E-4	5.53E-1	5.82E-3	5.07E-1	1.87E-3	-2.71E-1	7.97E-1
GWP-f	kg CO2 eq	7.35E-1	1.10E-2	1.46E-4	7.46E-1	5.81E-3	2.48E-1	1.87E-3	-4.05E-1	5.97E-1
GWP-b	kg CO2 eq	-1.94E-1	6.70E-6	-1.54E-6	-1.94E-1	3.53E-6	2.59E-1	2.32E-6	1.35E-1	2.00E-1
GWP-luluc	kg CO2 eq	1.32E-3	3.90E-6	1.49E-7	1.32E-3	2.06E-6	7.66E-5	5.06E-8	-1.20E-3	1.99E-4
ODP	kg CFC11 eq	2.68E-7	2.54E-9	8.26E-12	2.70E-7	1.34E-9	2.19E-8	6.90E-11	-1.43E-7	1.50E-7
AP	mol H+ eq	3.55E-3	6.28E-5	1.47E-6	3.62E-3	3.31E-5	4.21E-4	1.69E-6	-1.84E-3	2.24E-3
EP-fw	kg P eq	3.42E-5	9.07E-8	8.24E-9	3.43E-5	4.78E-8	2.59E-6	2.26E-9	-2.27E-5	1.42E-5
EP-m	kg N eq	7.41E-4	2.25E-5	1.55E-7	7.64E-4	1.18E-5	1.14E-4	1.02E-6	-3.78E-4	5.13E-4
EP-T	mol N eq	7.80E-3	2.48E-4	1.85E-6	8.05E-3	1.31E-4	1.25E-3	6.71E-6	-4.23E-3	5.21E-3
POCP	kg NMVOC eq	2.49E-3	7.08E-5	6.28E-7	2.57E-3	3.73E-5	3.73E-4	2.31E-6	-1.33E-3	1.64E-3
ADP-mm	kg Sb eq	1.62E-4	2.85E-7	1.97E-8	1.63E-4	1.50E-7	1.65E-6	1.71E-9	-6.48E-6	1.58E-4
ADP-f	MJ	1.66E+1	1.69E-1	1.36E-3	1.67E+1	8.92E-2	1.07E+0	5.05E-3	-8.61E+0	9.27E+0
WDP	m3 depriv.	8.54E-1	5.20E-4	5.22E-5	8.55E-1	2.74E-4	3.72E-2	4.02E-5	-5.67E-1	3.25E-1
PM	disease inc.	3.44E-8	9.95E-10	9.08E-12	3.54E-8	5.25E-10	5.37E-9	3.48E-11	-2.32E-8	1.82E-8
IR	kBq U-235 eq	3.47E-2	7.40E-4	1.02E-6	3.54E-2	3.90E-4	3.89E-3	2.31E-5	-2.13E-2	1.84E-2
ETP-fw	CTUe	2.94E+1	1.37E-1	1.21E-2	2.96E+1	7.25E-2	7.30E+0	7.75E-2	-1.50E+1	2.21E+1
HTP-c	CTUh	7.46E-10	4.89E-12	6.17E-13	7.52E-10	2.58E-12	1.36E-10	1.45E-13	-2.87E-10	6.03E-10
HTP-nc	CTUh	1.71E-8	1.64E-10	1.57E-11	1.73E-8	8.64E-11	2.78E-9	1.50E-11	-5.76E-9	1.44E-8
SQP	Pt	2.42E+1	1.45E-1	2.24E-3	2.44E+1	7.63E-2	6.62E-1	1.29E-2	-3.92E+1	-1.40E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	5.54E+0	2.43E-3	2.40E-2	5.56E+0	1.28E-3	7.10E-2	1.84E-4	-6.80E+0	-1.16E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	5.54E+0	2.43E-3	2.40E-2	5.56E+0	1.28E-3	7.10E-2	1.84E-4	-6.80E+0	-1.16E+0
PENRE	MJ	1.78E+1	1.80E-1	1.44E-3	1.79E+1	9.47E-2	1.13E+0	5.36E-3	-9.27E+0	9.91E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.78E+1	1.80E-1	1.44E-3	1.79E+1	9.47E-2	1.13E+0	5.36E-3	-9.27E+0	9.91E+0
PET	MJ	2.33E+1	1.82E-1	2.55E-2	2.35E+1	9.60E-2	1.20E+0	5.54E-3	-1.61E+1	8.74E+0
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	1.17E-2	1.92E-5	1.46E-6	1.17E-2	1.01E-5	1.06E-3	6.15E-6	-9.18E-3	3.60E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	3.33E-5	4.33E-7	2.73E-13	3.37E-5	2.28E-7	1.90E-6	6.21E-9	-1.00E-5	2.58E-5
NHWD	kg	9.44E-2	1.05E-2	1.05E-6	1.05E-1	5.53E-3	4.33E-2	2.21E-2	-3.90E-2	1.37E-1
RWD	kg	3.21E-5	1.15E-6	1.10E-13	3.32E-5	6.07E-7	4.41E-6	3.27E-8	-2.00E-5	1.83E-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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