Environmental Profile

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

Ecochain v3.5.80

Product:	3024201 - KANION PVC Stopend ext. 70 BN
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

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	1.12E-1	2.64E-3	1.45E-4	1.15E-1	1.19E-3	1.46E-1	3.87E-4	-6.45E-2	1.97E-1
GWP-f	kg CO2 eq	1.77E-1	2.64E-3	1.46E-4	1.80E-1	1.18E-3	6.40E-2	3.87E-4	-9.80E-2	1.48E-1
GWP-b	kg CO2 eq	-6.57E-2	1.60E-6	-1.54E-6	-6.57E-2	7.19E-7	8.15E-2	4.69E-7	3.38E-2	4.96E-2
GWP-luluc	kg CO2 eq	3.32E-4	9.34E-7	1.49E-7	3.33E-4	4.19E-7	1.57E-5	1.07E-8	-3.01E-4	4.87E-5
ODP	kg CFC11 eq	5.52E-8	6.08E-10	8.26E-12	5.58E-8	2.73E-10	4.52E-9	1.41E-11	-3.09E-8	2.97E-8
AP	mol H+ eq	8.67E-4	1.50E-5	1.47E-6	8.83E-4	6.75E-6	9.13E-5	3.46E-7	-4.36E-4	5.46E-4
EP-fw	kg P eq	8.16E-6	2.17E-8	8.24E-9	8.19E-6	9.75E-9	5.31E-7	4.72E-10	-5.38E-6	3.35E-6
EP-m	kg N eq	1.84E-4	5.38E-6	1.55E-7	1.90E-4	2.41E-6	2.55E-5	2.06E-7	-9.25E-5	1.26E-4
EP-T	mol N eq	1.95E-3	5.93E-5	1.85E-6	2.01E-3	2.66E-5	2.81E-4	1.37E-6	-1.04E-3	1.28E-3
POCP	kg NMVOC eq	6.34E-4	1.69E-5	6.28E-7	6.52E-4	7.61E-6	8.33E-5	4.74E-7	-3.29E-4	4.14E-4
ADP-mm	kg Sb eq	5.21E-5	6.83E-8	1.97E-8	5.22E-5	3.06E-8	3.54E-7	3.54E-10	-1.43E-6	5.12E-5
ADP-f	MJ	3.95E+0	4.05E-2	1.36E-3	3.99E+0	1.82E-2	2.26E-1	1.03E-3	-2.02E+0	2.22E+0
WDP	m3 depriv.	1.87E-1	1.24E-4	5.22E-5	1.87E-1	5.58E-5	7.52E-3	9.51E-6	-1.26E-1	6.82E-2
PM	disease inc.	8.81E-9	2.38E-10	9.08E-12	9.06E-9	1.07E-10	1.17E-9	7.10E-12	-5.84E-9	4.51E-9
IR	kBq U-235 eq	8.00E-3	1.77E-4	1.02E-6	8.18E-3	7.95E-5	8.29E-4	4.69E-6	-4.94E-3	4.16E-3
ETP-fw	CTUe	7.32E+0	3.29E-2	1.21E-2	7.37E+0	1.48E-2	1.46E+0	1.53E-2	-3.66E+0	5.20E+0
HTP-c	CTUh	1.88E-10	1.17E-12	6.17E-13	1.90E-10	5.25E-13	3.13E-11	3.04E-14	-7.21E-11	1.49E-10
HTP-nc	CTUh	4.02E-9	3.92E-11	1.57E-11	4.08E-9	1.76E-11	5.88E-10	2.97E-12	-1.26E-9	3.43E-9
SQP	Pt	7.43E+0	3.47E-2	2.24E-3	7.47E+0	1.56E-2	1.42E-1	2.63E-3	-1.09E+1	-3.31E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.50E+0	5.81E-4	2.40E-2	1.52E+0	2.61E-4	1.46E-2	3.70E-5	-1.86E+0	-3.26E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.50E+0	5.81E-4	2.40E-2	1.52E+0	2.61E-4	1.46E-2	3.70E-5	-1.86E+0	-3.26E-1
PENRE	MJ	4.23E+0	4.30E-2	1.44E-3	4.28E+0	1.93E-2	2.40E-1	1.09E-3	-2.17E+0	2.37E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	4.23E+0	4.30E-2	1.44E-3	4.28E+0	1.93E-2	2.40E-1	1.09E-3	-2.17E+0	2.37E+0
PET	MJ	5.73E+0	4.36E-2	2.55E-2	5.80E+0	1.96E-2	2.55E-1	1.13E-3	-4.03E+0	2.04E+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	2.78E-3	4.59E-6	1.46E-6	2.79E-3	2.06E-6	2.17E-4	1.25E-6	-2.15E-3	8.59E-4

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	9.60E-6	1.04E-7	2.73E-13	9.71E-6	4.65E-8	4.14E-7	1.28E-9	-2.50E-6	7.67E-6
NHWD	kg	2.35E-2	2.51E-3	1.05E-6	2.60E-2	1.13E-3	9.87E-3	4.51E-3	-9.58E-3	3.19E-2
RWD	kg	7.46E-6	2.76E-7	1.10E-13	7.73E-6	1.24E-7	9.57E-7	6.67E-9	-4.69E-6	4.13E-6
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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