Environmental Profile

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

Ecochain v3.5.80

Product:	3084828 - KANION PVC Stopend ext. 130 BK
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

Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	1.21E+1	6.77E-2	1.45E-4	1.22E+1	1.66E-1	4.55E+0	4.93E-2	-6.61E+0	1.04E+1
GWP-f	kg CO2 eq	1.21E+1	6.77E-2	1.46E-4	1.22E+1	1.66E-1	4.48E+0	4.93E-2	-6.60E+0	1.03E+1
GWP-b	kg CO2 eq	4.87E-2	4.11E-5	-1.54E-6	4.87E-2	1.01E-4	7.70E-2	6.21E-5	-1.18E-2	1.14E-1
GWP-luluc	kg CO2 eq	9.14E-3	2.40E-5	1.49E-7	9.16E-3	5.87E-5	1.98E-3	1.34E-6	-4.53E-3	6.67E-3
ODP	kg CFC11 eq	6.52E-6	1.56E-8	8.26E-12	6.54E-6	3.82E-8	5.34E-7	1.92E-9	-3.31E-6	3.80E-6
AP	mol H+ eq	5.31E-2	3.86E-4	1.47E-6	5.35E-2	9.44E-4	9.16E-3	4.63E-5	-2.51E-2	3.85E-2
EP-fw	kg P eq	5.14E-4	5.57E-7	8.24E-9	5.15E-4	1.36E-6	6.59E-5	6.02E-8	-2.46E-4	3.36E-4
EP-m	kg N eq	8.97E-3	1.38E-4	1.55E-7	9.11E-3	3.38E-4	2.22E-3	2.80E-5	-4.36E-3	7.34E-3
EP-T	mol N eq	9.62E-2	1.52E-3	1.85E-6	9.77E-2	3.72E-3	2.45E-2	1.85E-4	-4.64E-2	7.96E-2
POCP	kg NMVOC eq	3.44E-2	4.35E-4	6.28E-7	3.49E-2	1.06E-3	7.35E-3	6.32E-5	-1.61E-2	2.72E-2
ADP-mm	kg Sb eq	4.72E-4	1.75E-6	1.97E-8	4.74E-4	4.29E-6	3.62E-5	4.65E-8	-1.35E-4	3.79E-4
ADP-f	MJ	3.11E+2	1.04E+0	1.36E-3	3.12E+2	2.55E+0	2.52E+1	1.39E-1	-1.60E+2	1.80E+2
WDP	m3 depriv.	1.95E+1	3.19E-3	5.22E-5	1.95E+1	7.81E-3	9.85E-1	9.67E-4	-9.54E+0	1.10E+1
PM	disease inc.	3.59E-7	6.11E-9	9.08E-12	3.65E-7	1.50E-8	1.15E-7	9.58E-10	-1.62E-7	3.34E-7
IR	kBq U-235 eq	6.32E-1	4.54E-3	1.02E-6	6.37E-1	1.11E-2	8.82E-2	6.38E-4	-3.09E-1	4.28E-1
ETP-fw	CTUe	2.02E+2	8.44E-1	1.21E-2	2.03E+2	2.07E+0	1.90E+2	2.09E+0	-9.46E+1	3.02E+2
HTP-c	CTUh	8.29E-9	3.00E-11	6.17E-13	8.32E-9	7.35E-11	2.85E-9	3.81E-12	-3.52E-9	7.72E-9
HTP-nc	CTUh	2.51E-7	1.01E-9	1.57E-11	2.52E-7	2.46E-9	6.70E-8	4.04E-10	-1.21E-7	2.01E-7
SQP	Pt	4.23E+1	8.89E-1	2.24E-3	4.32E+1	2.18E+0	1.57E+1	3.55E-1	-2.77E+1	3.37E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.58E+1	1.49E-2	2.40E-2	1.58E+1	3.65E-2	1.81E+0	5.02E-3	-8.70E+0	8.97E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.58E+1	1.49E-2	2.40E-2	1.58E+1	3.65E-2	1.81E+0	5.02E-3	-8.70E+0	8.97E+0
PENRE	MJ	3.34E+2	1.10E+0	1.44E-3	3.35E+2	2.70E+0	2.68E+1	1.48E-1	-1.72E+2	1.92E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.34E+2	1.10E+0	1.44E-3	3.35E+2	2.70E+0	2.68E+1	1.48E-1	-1.72E+2	1.92E+2
PET	MJ	3.49E+2	1.12E+0	2.55E-2	3.51E+2	2.74E+0	2.86E+1	1.53E-1	-1.81E+2	2.01E+2
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	2.12E-1	1.18E-4	1.46E-6	2.12E-1	2.88E-4	2.69E-2	1.70E-4	-1.00E-1	1.39E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.59E-4	2.66E-6	2.73E-13	2.62E-4	6.51E-6	4.07E-5	1.70E-7	-1.34E-4	1.75E-4
NHWD	kg	1.08E+0	6.44E-2	1.05E-6	1.14E+0	1.58E-1	9.29E-1	6.31E-1	-5.10E-1	2.35E+0
RWD	kg	5.61E-4	7.06E-6	1.10E-13	5.68E-4	1.73E-5	9.45E-5	9.08E-7	-2.72E-4	4.08E-4
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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