

Environmental Profile

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

Ecochain v3.5.80



Product: 3021718 - KANION PVC Pipe Bracket 90 BK
 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	2.53E-1	3.39E-3	1.45E-4	2.57E-1	2.00E-3	1.50E-1	6.47E-4	-1.27E-1	2.83E-1
GWP-f	kg CO2 eq	2.85E-1	3.39E-3	1.46E-4	2.89E-1	2.00E-3	1.12E-1	6.47E-4	-1.38E-1	2.66E-1
GWP-b	kg CO2 eq	-3.25E-2	2.06E-6	-1.54E-6	-3.25E-2	1.21E-6	3.83E-2	7.94E-7	1.09E-2	1.67E-2
GWP-luluc	kg CO2 eq	3.01E-4	1.20E-6	1.49E-7	3.02E-4	7.07E-7	2.55E-5	1.76E-8	-1.47E-4	1.81E-4
ODP	kg CFC11 eq	9.01E-8	7.80E-10	8.26E-12	9.09E-8	4.60E-10	7.06E-9	2.37E-11	-4.80E-8	5.04E-8
AP	mol H+ eq	1.41E-3	1.93E-5	1.47E-6	1.43E-3	1.14E-5	1.32E-4	5.81E-7	-4.64E-4	1.11E-3
EP-fw	kg P eq	1.21E-5	2.79E-8	8.24E-9	1.22E-5	1.64E-8	8.57E-7	7.83E-10	-4.69E-6	8.36E-6
EP-m	kg N eq	2.55E-4	6.90E-6	1.55E-7	2.62E-4	4.07E-6	3.45E-5	3.51E-7	-9.02E-5	2.11E-4
EP-T	mol N eq	2.77E-3	7.60E-5	1.85E-6	2.85E-3	4.48E-5	3.80E-4	2.31E-6	-9.89E-4	2.29E-3
POCP	kg NMVOC eq	9.69E-4	2.17E-5	6.28E-7	9.92E-4	1.28E-5	1.13E-4	7.96E-7	-3.52E-4	7.66E-4
ADP-mm	kg Sb eq	1.98E-4	8.76E-8	1.97E-8	1.98E-4	5.17E-8	5.02E-7	5.90E-10	-1.92E-6	1.97E-4
ADP-f	MJ	6.50E+0	5.20E-2	1.36E-3	6.55E+0	3.06E-2	3.38E-1	1.73E-3	-2.91E+0	4.01E+0
WDP	m3 depriv.	3.09E-1	1.59E-4	5.22E-5	3.09E-1	9.41E-5	1.25E-2	1.45E-5	-1.45E-1	1.77E-1
PM	disease inc.	1.24E-8	3.06E-10	9.08E-12	1.27E-8	1.80E-10	1.64E-9	1.19E-11	-4.26E-9	1.03E-8
IR	kBq U-235 eq	1.33E-2	2.27E-4	1.02E-6	1.35E-2	1.34E-4	1.21E-3	7.91E-6	-4.97E-3	9.88E-3
ETP-fw	CTUe	8.06E+0	4.22E-2	1.21E-2	8.11E+0	2.49E-2	2.44E+0	2.64E-2	-2.48E+0	8.12E+0
HTP-c	CTUh	6.79E-10	1.50E-12	6.17E-13	6.81E-10	8.86E-13	4.57E-11	5.02E-14	-6.73E-11	6.60E-10
HTP-nc	CTUh	7.08E-9	5.03E-11	1.57E-11	7.14E-9	2.97E-11	9.31E-10	5.10E-12	-5.05E-10	7.60E-9
SQP	Pt	4.27E+0	4.45E-2	2.24E-3	4.32E+0	2.62E-2	2.15E-1	4.43E-3	-4.64E+0	-7.71E-2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.20E+0	7.46E-4	2.40E-2	1.23E+0	4.40E-4	2.36E-2	6.30E-5	-8.13E-1	4.37E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.20E+0	7.46E-4	2.40E-2	1.23E+0	4.40E-4	2.36E-2	6.30E-5	-8.13E-1	4.37E-1
PENRE	MJ	6.96E+0	5.52E-2	1.44E-3	7.02E+0	3.25E-2	3.60E-1	1.84E-3	-3.14E+0	4.27E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	6.96E+0	5.52E-2	1.44E-3	7.02E+0	3.25E-2	3.60E-1	1.84E-3	-3.14E+0	4.27E+0
PET	MJ	8.16E+0	5.59E-2	2.55E-2	8.24E+0	3.30E-2	3.83E-1	1.90E-3	-3.96E+0	4.71E+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	4.38E-3	5.88E-6	1.46E-6	4.39E-3	3.47E-6	3.54E-4	2.11E-6	-1.83E-3	2.92E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.92E-5	1.33E-7	2.73E-13	2.93E-5	7.84E-8	5.81E-7	2.14E-9	-3.60E-6	2.63E-5
NHWD	kg	5.89E-2	3.22E-3	1.05E-6	6.22E-2	1.90E-3	1.50E-2	7.59E-3	-9.73E-3	7.70E-2
RWD	kg	1.22E-5	3.53E-7	1.10E-13	1.26E-5	2.08E-7	1.33E-6	1.12E-8	-4.64E-6	9.50E-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



Ecochain Technologies BV
H.J.E. Wenckebachweg 123, 1096 AM Amsterdam, The Netherlands
<https://www.ecochain.com>
+31 20 3035 777