

Environmental Profile

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

Ecochain v3.5.80



Product: 3021574 - KANION PVC Gutter Bracket 160 WT
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					Use stage							End-of-Life stage				
A1 Raw material supply A2 Transport A3 Manufacturing					B1 Use B2 Maintenance B3 Repair B4 Replacement B5 Refurbishment B6 Operational energy use B7 Operational water use							C1 De-construction demolition C2 Transport C3 Waste processing C4 Disposal				
Construction process stage					Benefits and loads beyond the system boundaries											
A4 Transport gate to site A5 Assembly / Construction installation process					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	3.73E-1	6.05E-3	1.45E-4	3.79E-1	4.34E-3	2.43E-1	1.42E-3	-2.11E-1	4.17E-1
GWP-f	kg CO2 eq	4.36E-1	6.04E-3	1.46E-4	4.42E-1	4.34E-3	1.66E-1	1.42E-3	-2.34E-1	3.79E-1
GWP-b	kg CO2 eq	-6.35E-2	3.67E-6	-1.54E-6	-6.35E-2	2.63E-6	7.74E-2	1.72E-6	2.37E-2	3.76E-2
GWP-luluc	kg CO2 eq	5.26E-4	2.14E-6	1.49E-7	5.29E-4	1.54E-6	5.37E-5	3.90E-8	-3.26E-4	2.58E-4
ODP	kg CFC11 eq	1.83E-7	1.39E-9	8.26E-12	1.85E-7	1.00E-9	1.48E-8	5.16E-11	-9.89E-8	1.01E-7
AP	mol H+ eq	2.15E-3	3.44E-5	1.47E-6	2.18E-3	2.47E-5	2.65E-4	1.27E-6	-9.06E-4	1.57E-3
EP-fw	kg P eq	1.99E-5	4.97E-8	8.24E-9	1.99E-5	3.57E-8	1.79E-6	1.73E-9	-9.54E-6	1.22E-5
EP-m	kg N eq	3.91E-4	1.23E-5	1.55E-7	4.03E-4	8.84E-6	6.72E-5	7.57E-7	-1.72E-4	3.08E-4
EP-T	mol N eq	4.29E-3	1.36E-4	1.85E-6	4.43E-3	9.75E-5	7.41E-4	5.02E-6	-1.88E-3	3.39E-3
POCP	kg NMVOC eq	1.40E-3	3.88E-5	6.28E-7	1.44E-3	2.79E-5	2.21E-4	1.74E-6	-6.29E-4	1.07E-3
ADP-mm	kg Sb eq	3.97E-4	1.56E-7	1.97E-8	3.97E-4	1.12E-7	1.03E-6	1.29E-9	-4.13E-6	3.94E-4
ADP-f	MJ	1.02E+1	9.28E-2	1.36E-3	1.03E+1	6.66E-2	7.02E-1	3.78E-3	-5.33E+0	5.75E+0
WDP	m3 depriv.	5.95E-1	2.85E-4	5.22E-5	5.96E-1	2.04E-4	2.66E-2	3.44E-5	-3.08E-1	3.14E-1
PM	disease inc.	1.66E-8	5.46E-10	9.08E-12	1.71E-8	3.92E-10	3.31E-9	2.60E-11	-8.17E-9	1.27E-8
IR	kBq U-235 eq	2.19E-2	4.05E-4	1.02E-6	2.23E-2	2.91E-4	2.49E-3	1.72E-5	-1.07E-2	1.44E-2
ETP-fw	CTUe	1.38E+1	7.53E-2	1.21E-2	1.39E+1	5.41E-2	5.14E+0	5.62E-2	-4.82E+0	1.44E+1
HTP-c	CTUh	4.12E-10	2.68E-12	6.17E-13	4.15E-10	1.92E-12	8.98E-11	1.11E-13	-1.39E-10	3.68E-10
HTP-nc	CTUh	1.15E-8	8.98E-11	1.57E-11	1.16E-8	6.45E-11	1.89E-9	1.09E-11	-3.77E-9	9.82E-9
SQP	Pt	8.06E+0	7.94E-2	2.24E-3	8.14E+0	5.70E-2	4.37E-1	9.63E-3	-9.64E+0	-9.98E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.38E+0	1.33E-3	2.40E-2	2.40E+0	9.56E-4	4.93E-2	1.36E-4	-1.71E+0	7.45E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.38E+0	1.33E-3	2.40E-2	2.40E+0	9.56E-4	4.93E-2	1.36E-4	-1.71E+0	7.45E-1
PENRE	MJ	1.10E+1	9.85E-2	1.44E-3	1.11E+1	7.07E-2	7.47E-1	4.01E-3	-5.75E+0	6.13E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.10E+1	9.85E-2	1.44E-3	1.11E+1	7.07E-2	7.47E-1	4.01E-3	-5.75E+0	6.13E+0
PET	MJ	1.33E+1	9.98E-2	2.55E-2	1.35E+1	7.17E-2	7.96E-1	4.14E-3	-7.46E+0	6.88E+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	7.61E-3	1.05E-5	1.46E-6	7.62E-3	7.54E-6	7.38E-4	4.58E-6	-3.85E-3	4.52E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	5.71E-5	2.37E-7	2.73E-13	5.73E-5	1.70E-7	1.18E-6	4.68E-9	-5.12E-6	5.35E-5
NHWD	kg	4.86E-2	5.75E-3	1.05E-6	5.44E-2	4.13E-3	2.79E-2	1.65E-2	-1.92E-2	8.37E-2
RWD	kg	1.94E-5	6.31E-7	1.10E-13	2.00E-5	4.53E-7	2.72E-6	2.44E-8	-9.75E-6	1.35E-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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