

Environmental Profile

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

Ecochain v3.5.80



Product: 3021696 - KANION PVC Access Pipe 90 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					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	1.34E+0	1.96E-2	1.45E-4	1.36E+0	1.44E-2	8.57E-1	4.81E-3	-7.29E-1	1.51E+0
GWP-f	kg CO2 eq	1.53E+0	1.96E-2	1.46E-4	1.55E+0	1.44E-2	6.25E-1	4.81E-3	-7.97E-1	1.40E+0
GWP-b	kg CO2 eq	-1.92E-1	1.19E-5	-1.54E-6	-1.92E-1	8.75E-6	2.32E-1	5.92E-6	6.94E-2	1.09E-1
GWP-luluc	kg CO2 eq	1.68E-3	6.94E-6	1.49E-7	1.69E-3	5.10E-6	1.79E-4	1.26E-7	-9.97E-4	8.78E-4
ODP	kg CFC11 eq	6.38E-7	4.52E-9	8.26E-12	6.42E-7	3.32E-9	4.96E-8	1.75E-10	-3.24E-7	3.71E-7
AP	mol H+ eq	7.42E-3	1.12E-4	1.47E-6	7.53E-3	8.21E-5	8.85E-4	4.27E-6	-2.94E-3	5.56E-3
EP-fw	kg P eq	6.71E-5	1.61E-7	8.24E-9	6.73E-5	1.19E-7	5.99E-6	5.67E-9	-3.04E-5	4.30E-5
EP-m	kg N eq	1.34E-3	3.99E-5	1.55E-7	1.38E-3	2.94E-5	2.25E-4	2.89E-6	-5.58E-4	1.08E-3
EP-T	mol N eq	1.44E-2	4.40E-4	1.85E-6	1.49E-2	3.24E-4	2.48E-3	1.70E-5	-6.09E-3	1.16E-2
POCP	kg NMVOC eq	5.01E-3	1.26E-4	6.28E-7	5.14E-3	9.25E-5	7.37E-4	5.88E-6	-2.06E-3	3.92E-3
ADP-mm	kg Sb eq	1.12E-3	5.07E-7	1.97E-8	1.12E-3	3.73E-7	3.41E-6	4.31E-9	-1.43E-5	1.11E-3
ADP-f	MJ	3.72E+1	3.01E-1	1.36E-3	3.75E+1	2.21E-1	2.32E+0	1.28E-2	-1.79E+1	2.21E+1
WDP	m3 depriv.	1.99E+0	9.23E-4	5.22E-5	1.99E+0	6.79E-4	8.97E-2	9.28E-5	-9.91E-1	1.09E+0
PM	disease inc.	6.12E-8	1.77E-9	9.08E-12	6.30E-8	1.30E-9	1.09E-8	8.81E-11	-2.59E-8	4.94E-8
IR	kBq U-235 eq	8.09E-2	1.31E-3	1.02E-6	8.23E-2	9.67E-4	8.24E-3	5.88E-5	-3.45E-2	5.70E-2
ETP-fw	CTUe	4.37E+1	2.44E-1	1.21E-2	4.40E+1	1.80E-1	1.75E+1	1.91E-1	-1.52E+1	4.67E+1
HTP-c	CTUh	1.35E-9	8.69E-12	6.17E-13	1.36E-9	6.39E-12	2.83E-10	3.60E-13	-4.43E-10	1.20E-9
HTP-nc	CTUh	3.75E-8	2.91E-10	1.57E-11	3.78E-8	2.14E-10	6.31E-9	3.71E-11	-1.16E-8	3.27E-8
SQP	Pt	2.49E+1	2.57E-1	2.24E-3	2.52E+1	1.89E-1	1.43E+0	3.27E-2	-2.88E+1	-1.99E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	8.00E+0	4.32E-3	2.40E-2	8.03E+0	3.17E-3	1.65E-1	4.77E-4	-5.13E+0	3.07E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	8.00E+0	4.32E-3	2.40E-2	8.03E+0	3.17E-3	1.65E-1	4.77E-4	-5.13E+0	3.07E+0
PENRE	MJ	3.99E+1	3.19E-1	1.44E-3	4.02E+1	2.35E-1	2.47E+0	1.36E-2	-1.94E+1	2.35E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.99E+1	3.19E-1	1.44E-3	4.02E+1	2.35E-1	2.47E+0	1.36E-2	-1.94E+1	2.35E+1
PET	MJ	4.79E+1	3.24E-1	2.55E-2	4.82E+1	2.38E-1	2.64E+0	1.41E-2	-2.45E+1	2.66E+1
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	2.54E-2	3.40E-5	1.46E-6	2.54E-2	2.50E-5	2.56E-3	1.56E-5	-1.23E-2	1.58E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.62E-4	7.69E-7	2.73E-13	1.63E-4	5.66E-7	3.93E-6	1.57E-8	-1.75E-5	1.50E-4
NHWD	kg	1.58E-1	1.86E-2	1.05E-6	1.76E-1	1.37E-2	9.32E-2	5.61E-2	-6.15E-2	2.78E-1
RWD	kg	7.75E-5	2.05E-6	1.10E-13	7.95E-5	1.50E-6	8.96E-6	8.31E-8	-3.16E-5	5.85E-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



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