

Environmental Profile

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

Ecochain v3.5.80



Product: 3021698 - KANION PVC Access Pipe 90 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	1.31E+0	2.14E-2	1.45E-4	1.33E+0	1.44E-2	8.57E-1	4.91E-3	-7.26E-1	1.48E+0
GWP-f	kg CO2 eq	1.50E+0	2.14E-2	1.46E-4	1.52E+0	1.44E-2	6.25E-1	4.91E-3	-7.95E-1	1.37E+0
GWP-b	kg CO2 eq	-1.91E-1	1.30E-5	-1.54E-6	-1.91E-1	8.75E-6	2.32E-1	5.87E-6	6.94E-2	1.10E-1
GWP-luluc	kg CO2 eq	1.74E-3	7.57E-6	1.49E-7	1.75E-3	5.10E-6	1.74E-4	1.33E-7	-9.97E-4	9.31E-4
ODP	kg CFC11 eq	6.09E-7	4.93E-9	8.26E-12	6.14E-7	3.32E-9	4.76E-8	1.75E-10	-3.24E-7	3.41E-7
AP	mol H+ eq	7.47E-3	1.22E-4	1.47E-6	7.59E-3	8.21E-5	8.66E-4	4.31E-6	-2.93E-3	5.61E-3
EP-fw	kg P eq	6.74E-5	1.76E-7	8.24E-9	6.75E-5	1.19E-7	5.80E-6	5.90E-9	-3.04E-5	4.31E-5
EP-m	kg N eq	1.34E-3	4.36E-5	1.55E-7	1.39E-3	2.94E-5	2.21E-4	2.84E-6	-5.58E-4	1.08E-3
EP-T	mol N eq	1.48E-2	4.81E-4	1.85E-6	1.53E-2	3.24E-4	2.44E-3	1.71E-5	-6.08E-3	1.20E-2
POCP	kg NMVOC eq	4.96E-3	1.37E-4	6.28E-7	5.10E-3	9.25E-5	7.26E-4	5.93E-6	-2.05E-3	3.87E-3
ADP-mm	kg Sb eq	1.41E-3	5.54E-7	1.97E-8	1.42E-3	3.73E-7	3.34E-6	4.41E-9	-1.43E-5	1.40E-3
ADP-f	MJ	3.56E+1	3.28E-1	1.36E-3	3.59E+1	2.21E-1	2.28E+0	1.29E-2	-1.79E+1	2.06E+1
WDP	m3 depriv.	1.98E+0	1.01E-3	5.22E-5	1.98E+0	6.79E-4	8.64E-2	1.18E-4	-9.91E-1	1.08E+0
PM	disease inc.	5.97E-8	1.93E-9	9.08E-12	6.16E-8	1.30E-9	1.08E-8	8.85E-11	-2.59E-8	4.79E-8
IR	kBq U-235 eq	7.84E-2	1.44E-3	1.02E-6	7.98E-2	9.67E-4	8.06E-3	5.86E-5	-3.45E-2	5.44E-2
ETP-fw	CTUe	4.67E+1	2.67E-1	1.21E-2	4.70E+1	1.80E-1	1.67E+1	1.82E-1	-1.52E+1	4.89E+1
HTP-c	CTUh	1.42E-9	9.49E-12	6.17E-13	1.43E-9	6.39E-12	2.95E-10	3.79E-13	-4.43E-10	1.29E-9
HTP-nc	CTUh	3.92E-8	3.18E-10	1.57E-11	3.95E-8	2.14E-10	6.16E-9	3.57E-11	-1.16E-8	3.43E-8
SQP	Pt	2.50E+1	2.81E-1	2.24E-3	2.53E+1	1.89E-1	1.42E+0	3.27E-2	-2.88E+1	-1.86E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	7.27E+0	4.71E-3	2.40E-2	7.30E+0	3.17E-3	1.60E-1	4.66E-4	-5.13E+0	2.33E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	7.27E+0	4.71E-3	2.40E-2	7.30E+0	3.17E-3	1.60E-1	4.66E-4	-5.13E+0	2.33E+0
PENRE	MJ	3.82E+1	3.49E-1	1.44E-3	3.85E+1	2.35E-1	2.43E+0	1.36E-2	-1.93E+1	2.19E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.82E+1	3.49E-1	1.44E-3	3.85E+1	2.35E-1	2.43E+0	1.36E-2	-1.93E+1	2.19E+1
PET	MJ	4.55E+1	3.53E-1	2.55E-2	4.58E+1	2.38E-1	2.59E+0	1.41E-2	-2.44E+1	2.42E+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	2.61E-2	3.72E-5	1.46E-6	2.62E-2	2.50E-5	2.47E-3	1.56E-5	-1.23E-2	1.64E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.99E-4	8.40E-7	2.73E-13	2.00E-4	5.66E-7	3.87E-6	1.60E-8	-1.75E-5	1.87E-4
NHWD	kg	1.66E-1	2.04E-2	1.05E-6	1.87E-1	1.37E-2	9.27E-2	5.61E-2	-6.15E-2	2.88E-1
RWD	kg	7.28E-5	2.23E-6	1.10E-13	7.50E-5	1.50E-6	8.81E-6	8.32E-8	-3.16E-5	5.38E-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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