

Environmental Profile

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

Ecochain v3.5.80



Product: 3021694 - KANION PVC Access Pipe 75 BN
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	9.54E-1	1.40E-2	1.45E-4	9.69E-1	9.95E-3	6.26E-1	3.39E-3	-5.09E-1	1.10E+0
GWP-f	kg CO2 eq	1.08E+0	1.40E-2	1.46E-4	1.10E+0	9.94E-3	4.63E-1	3.39E-3	-5.75E-1	9.97E-1
GWP-b	kg CO2 eq	-1.29E-1	8.52E-6	-1.54E-6	-1.29E-1	6.03E-6	1.63E-1	4.13E-6	6.65E-2	1.01E-1
GWP-luluc	kg CO2 eq	1.23E-3	4.96E-6	1.49E-7	1.24E-3	3.52E-6	1.22E-4	8.92E-8	-8.11E-4	5.54E-4
ODP	kg CFC11 eq	4.37E-7	3.23E-9	8.26E-12	4.40E-7	2.29E-9	3.39E-8	1.22E-10	-2.24E-7	2.52E-7
AP	mol H+ eq	5.18E-3	7.99E-5	1.47E-6	5.26E-3	5.66E-5	6.17E-4	2.99E-6	-2.12E-3	3.82E-3
EP-fw	kg P eq	4.63E-5	1.15E-7	8.24E-9	4.64E-5	8.18E-8	4.09E-6	3.99E-9	-2.25E-5	2.80E-5
EP-m	kg N eq	9.40E-4	2.86E-5	1.55E-7	9.69E-4	2.03E-5	1.59E-4	2.08E-6	-4.08E-4	7.43E-4
EP-T	mol N eq	1.02E-2	3.15E-4	1.85E-6	1.05E-2	2.23E-4	1.75E-3	1.19E-5	-4.46E-3	8.03E-3
POCP	kg NMVOC eq	3.55E-3	9.00E-5	6.28E-7	3.64E-3	6.38E-5	5.19E-4	4.11E-6	-1.49E-3	2.74E-3
ADP-mm	kg Sb eq	2.72E-4	3.63E-7	1.97E-8	2.72E-4	2.57E-7	2.37E-6	3.02E-9	-1.01E-5	2.64E-4
ADP-f	MJ	2.64E+1	2.15E-1	1.36E-3	2.66E+1	1.53E-1	1.60E+0	8.93E-3	-1.27E+1	1.56E+1
WDP	m3 depriv.	1.39E+0	6.61E-4	5.22E-5	1.39E+0	4.68E-4	6.11E-2	6.84E-5	-7.05E-1	7.43E-1
PM	disease inc.	4.41E-8	1.27E-9	9.08E-12	4.54E-8	8.97E-10	7.61E-9	6.14E-11	-1.96E-8	3.43E-8
IR	kBq U-235 eq	5.52E-2	9.41E-4	1.02E-6	5.61E-2	6.67E-4	5.70E-3	4.10E-5	-2.48E-2	3.77E-2
ETP-fw	CTUe	2.88E+1	1.75E-1	1.21E-2	2.90E+1	1.24E-1	1.18E+1	1.29E-1	-1.19E+1	2.92E+1
HTP-c	CTUh	9.11E-10	6.22E-12	6.17E-13	9.18E-10	4.41E-12	2.00E-10	2.54E-13	-3.14E-10	8.08E-10
HTP-nc	CTUh	2.39E-8	2.08E-10	1.57E-11	2.41E-8	1.48E-10	4.34E-9	2.52E-11	-7.79E-9	2.08E-8
SQP	Pt	1.76E+1	1.84E-1	2.24E-3	1.78E+1	1.31E-1	9.93E-1	2.28E-2	-2.29E+1	-3.93E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	5.52E+0	3.09E-3	2.40E-2	5.54E+0	2.19E-3	1.12E-1	3.33E-4	-4.09E+0	1.57E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	5.52E+0	3.09E-3	2.40E-2	5.54E+0	2.19E-3	1.12E-1	3.33E-4	-4.09E+0	1.57E+0
PENRE	MJ	2.83E+1	2.29E-1	1.44E-3	2.85E+1	1.62E-1	1.71E+0	9.48E-3	-1.37E+1	1.66E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.83E+1	2.29E-1	1.44E-3	2.85E+1	1.62E-1	1.71E+0	9.48E-3	-1.37E+1	1.66E+1
PET	MJ	3.38E+1	2.32E-1	2.55E-2	3.40E+1	1.64E-1	1.82E+0	9.81E-3	-1.78E+1	1.82E+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	1.80E-2	2.44E-5	1.46E-6	1.80E-2	1.73E-5	1.77E-3	1.09E-5	-9.11E-3	1.07E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	4.78E-5	5.50E-7	2.73E-13	4.84E-5	3.90E-7	2.75E-6	1.10E-8	-1.29E-5	3.87E-5
NHWD	kg	1.17E-1	1.33E-2	1.05E-6	1.30E-1	9.46E-3	6.56E-2	3.91E-2	-4.38E-2	2.01E-1
RWD	kg	5.28E-5	1.46E-6	1.10E-13	5.43E-5	1.04E-6	6.24E-6	5.80E-8	-2.28E-5	3.88E-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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