

Environmental Profile

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

Ecochain v3.5.80



Product: 3021700 - KANION PVC Access Pipe 110 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	1.71E+0	2.69E-2	1.45E-4	1.74E+0	1.98E-2	1.23E+0	6.41E-3	-9.83E-1	2.01E+0
GWP-f	kg CO2 eq	2.07E+0	2.69E-2	1.46E-4	2.09E+0	1.98E-2	7.96E-1	6.41E-3	-1.12E+0	1.79E+0
GWP-b	kg CO2 eq	-3.54E-1	1.63E-5	-1.54E-6	-3.54E-1	1.20E-5	4.30E-1	7.95E-6	1.41E-1	2.17E-1
GWP-luluc	kg CO2 eq	2.47E-3	9.52E-6	1.49E-7	2.48E-3	6.99E-6	2.50E-4	1.71E-7	-1.74E-3	1.00E-3
ODP	kg CFC11 eq	8.70E-7	6.20E-9	8.26E-12	8.77E-7	4.55E-9	6.96E-8	2.36E-10	-4.54E-7	4.97E-7
AP	mol H+ eq	9.78E-3	1.53E-4	1.47E-6	9.93E-3	1.13E-4	1.25E-3	5.76E-6	-4.37E-3	6.93E-3
EP-fw	kg P eq	9.02E-5	2.21E-7	8.24E-9	9.05E-5	1.63E-7	8.39E-6	7.67E-9	-4.69E-5	5.22E-5
EP-m	kg N eq	1.81E-3	5.48E-5	1.55E-7	1.86E-3	4.03E-5	3.19E-4	3.62E-6	-8.44E-4	1.38E-3
EP-T	mol N eq	1.94E-2	6.04E-4	1.85E-6	2.00E-2	4.44E-4	3.52E-3	2.29E-5	-9.25E-3	1.48E-2
POCP	kg NMVOC eq	6.64E-3	1.73E-4	6.28E-7	6.81E-3	1.27E-4	1.05E-3	7.91E-6	-3.09E-3	4.91E-3
ADP-mm	kg Sb eq	4.72E-4	6.96E-7	1.97E-8	4.72E-4	5.11E-7	4.85E-6	5.82E-9	-1.94E-5	4.58E-4
ADP-f	MJ	4.98E+1	4.13E-1	1.36E-3	5.02E+1	3.03E-1	3.28E+0	1.72E-2	-2.51E+1	2.87E+1
WDP	m3 depriv.	2.75E+0	1.27E-3	5.22E-5	2.75E+0	9.31E-4	1.24E-1	1.29E-4	-1.45E+0	1.43E+0
PM	disease inc.	8.16E-8	2.43E-9	9.08E-12	8.40E-8	1.78E-9	1.55E-8	1.19E-10	-4.19E-8	5.95E-8
IR	kBq U-235 eq	1.02E-1	1.81E-3	1.02E-6	1.04E-1	1.33E-3	1.17E-2	7.90E-5	-5.11E-2	6.55E-2
ETP-fw	CTUe	5.63E+1	3.35E-1	1.21E-2	5.67E+1	2.46E-1	2.43E+1	2.65E-1	-2.49E+1	5.65E+1
HTP-c	CTUh	1.80E-9	1.19E-11	6.17E-13	1.82E-9	8.76E-12	4.03E-10	4.89E-13	-6.73E-10	1.55E-9
HTP-nc	CTUh	4.70E-8	4.00E-10	1.57E-11	4.74E-8	2.94E-10	8.83E-9	5.11E-11	-1.64E-8	4.02E-8
SQP	Pt	4.31E+1	3.53E-1	2.24E-3	4.35E+1	2.60E-1	2.03E+0	4.41E-2	-5.43E+1	-8.48E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.24E+1	5.92E-3	2.40E-2	1.24E+1	4.35E-3	2.30E-1	6.36E-4	-9.52E+0	3.14E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.24E+1	5.92E-3	2.40E-2	1.24E+1	4.35E-3	2.30E-1	6.36E-4	-9.52E+0	3.14E+0
PENRE	MJ	5.34E+1	4.38E-1	1.44E-3	5.39E+1	3.22E-1	3.48E+0	1.83E-2	-2.71E+1	3.06E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	5.34E+1	4.38E-1	1.44E-3	5.39E+1	3.22E-1	3.48E+0	1.83E-2	-2.71E+1	3.06E+1
PET	MJ	6.58E+1	4.44E-1	2.55E-2	6.63E+1	3.26E-1	3.71E+0	1.89E-2	-3.66E+1	3.37E+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	3.44E-2	4.67E-5	1.46E-6	3.44E-2	3.43E-5	3.49E-3	2.10E-5	-1.88E-2	1.91E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	9.17E-5	1.06E-6	2.73E-13	9.27E-5	7.76E-7	5.54E-6	2.12E-8	-2.55E-5	7.36E-5
NHWD	kg	2.26E-1	2.56E-2	1.05E-6	2.52E-1	1.88E-2	1.30E-1	7.56E-2	-9.30E-2	3.84E-1
RWD	kg	9.31E-5	2.81E-6	1.10E-13	9.59E-5	2.06E-6	1.28E-5	1.12E-7	-4.69E-5	6.40E-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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