

Environmental Profile

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

Ecochain v3.5.80



Product: 3021697 - KANION PVC Access Pipe 90 Dark Brown
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	1.32E+0	1.71E-2	1.45E-4	1.34E+0	1.51E-2	7.56E-1	5.03E-3	-7.26E-1	1.39E+0
GWP-f	kg CO2 eq	1.44E+0	1.71E-2	1.46E-4	1.46E+0	1.50E-2	6.00E-1	5.03E-3	-7.73E-1	1.31E+0
GWP-b	kg CO2 eq	-1.25E-1	1.04E-5	-1.54E-6	-1.25E-1	9.14E-6	1.56E-1	6.17E-6	4.77E-2	7.85E-2
GWP-luluc	kg CO2 eq	1.44E-3	6.06E-6	1.49E-7	1.44E-3	5.32E-6	1.84E-4	1.33E-7	-8.39E-4	7.96E-4
ODP	kg CFC11 eq	6.49E-7	3.94E-9	8.26E-12	6.53E-7	3.47E-9	5.09E-8	1.83E-10	-3.33E-7	3.75E-7
AP	mol H+ eq	6.83E-3	9.75E-5	1.47E-6	6.93E-3	8.57E-5	8.94E-4	4.46E-6	-2.83E-3	5.09E-3
EP-fw	kg P eq	6.15E-5	1.41E-7	8.24E-9	6.16E-5	1.24E-7	6.17E-6	5.95E-9	-2.88E-5	3.92E-5
EP-m	kg N eq	1.19E-3	3.49E-5	1.55E-7	1.23E-3	3.07E-5	2.24E-4	2.99E-6	-5.25E-4	9.63E-4
EP-T	mol N eq	1.30E-2	3.84E-4	1.85E-6	1.34E-2	3.38E-4	2.47E-3	1.78E-5	-5.68E-3	1.05E-2
POCP	kg NMVOC eq	4.52E-3	1.10E-4	6.28E-7	4.63E-3	9.66E-5	7.36E-4	6.14E-6	-1.92E-3	3.55E-3
ADP-mm	kg Sb eq	3.78E-4	4.43E-7	1.97E-8	3.79E-4	3.89E-7	3.46E-6	4.50E-9	-1.45E-5	3.68E-4
ADP-f	MJ	3.59E+1	2.63E-1	1.36E-3	3.62E+1	2.31E-1	2.37E+0	1.34E-2	-1.78E+1	2.10E+1
WDP	m3 depriv.	2.02E+0	8.06E-4	5.22E-5	2.02E+0	7.09E-4	9.28E-2	1.00E-4	-9.93E-1	1.12E+0
PM	disease inc.	5.31E-8	1.54E-9	9.08E-12	5.47E-8	1.36E-9	1.10E-8	9.19E-11	-2.28E-8	4.44E-8
IR	kBq U-235 eq	7.50E-2	1.15E-3	1.02E-6	7.62E-2	1.01E-3	8.39E-3	6.13E-5	-3.40E-2	5.16E-2
ETP-fw	CTUe	3.38E+1	2.13E-1	1.21E-2	3.40E+1	1.88E-1	1.81E+1	1.99E-1	-1.33E+1	3.91E+1
HTP-c	CTUh	1.04E-9	7.59E-12	6.17E-13	1.05E-9	6.67E-12	2.86E-10	3.78E-13	-4.18E-10	9.26E-10
HTP-nc	CTUh	3.14E-8	2.54E-10	1.57E-11	3.16E-8	2.24E-10	6.45E-9	3.85E-11	-1.31E-8	2.53E-8
SQP	Pt	1.82E+1	2.25E-1	2.24E-3	1.84E+1	1.98E-1	1.46E+0	3.41E-2	-2.04E+1	-2.59E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	6.97E+0	3.77E-3	2.40E-2	6.99E+0	3.31E-3	1.69E-1	4.96E-4	-3.76E+0	3.41E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	6.97E+0	3.77E-3	2.40E-2	6.99E+0	3.31E-3	1.69E-1	4.96E-4	-3.76E+0	3.41E+0
PENRE	MJ	3.85E+1	2.79E-1	1.44E-3	3.88E+1	2.45E-1	2.53E+0	1.42E-2	-1.92E+1	2.24E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.85E+1	2.79E-1	1.44E-3	3.88E+1	2.45E-1	2.53E+0	1.42E-2	-1.92E+1	2.24E+1
PET	MJ	4.55E+1	2.83E-1	2.55E-2	4.58E+1	2.48E-1	2.69E+0	1.47E-2	-2.30E+1	2.58E+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	2.47E-2	2.97E-5	1.46E-6	2.47E-2	2.61E-5	2.63E-3	1.63E-5	-1.17E-2	1.56E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	6.65E-5	6.72E-7	2.73E-13	6.72E-5	5.91E-7	3.96E-6	1.64E-8	-1.60E-5	5.58E-5
NHWD	kg	1.43E-1	1.63E-2	1.05E-6	1.60E-1	1.43E-2	9.30E-2	5.85E-2	-5.84E-2	2.67E-1
RWD	kg	7.01E-5	1.79E-6	1.10E-13	7.19E-5	1.57E-6	9.05E-6	8.67E-8	-3.08E-5	5.18E-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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