

Environmental Profile

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

Ecochain v3.5.80



Product: 3023375 - KANION PVC Access Pipe 110 Graphite
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	1.68E+0	2.56E-2	1.45E-4	1.70E+0	1.85E-2	1.19E+0	6.02E-3	-9.27E-1	1.99E+0
GWP-f	kg CO2 eq	2.03E+0	2.56E-2	1.46E-4	2.05E+0	1.85E-2	7.62E-1	6.02E-3	-1.07E+0	1.77E+0
GWP-b	kg CO2 eq	-3.53E-1	1.55E-5	-1.54E-6	-3.53E-1	1.12E-5	4.30E-1	7.45E-6	1.42E-1	2.19E-1
GWP-luluc	kg CO2 eq	2.52E-3	9.05E-6	1.49E-7	2.53E-3	6.56E-6	2.34E-4	1.61E-7	-1.70E-3	1.07E-3
ODP	kg CFC11 eq	8.11E-7	5.89E-9	8.26E-12	8.17E-7	4.27E-9	6.53E-8	2.21E-10	-4.27E-7	4.60E-7
AP	mol H+ eq	9.88E-3	1.46E-4	1.47E-6	1.00E-2	1.06E-4	1.18E-3	5.41E-6	-4.17E-3	7.14E-3
EP-fw	kg P eq	9.11E-5	2.10E-7	8.24E-9	9.13E-5	1.52E-7	7.86E-6	7.21E-9	-4.49E-5	5.44E-5
EP-m	kg N eq	1.84E-3	5.21E-5	1.55E-7	1.89E-3	3.78E-5	3.02E-4	3.39E-6	-8.08E-4	1.43E-3
EP-T	mol N eq	1.98E-2	5.74E-4	1.85E-6	2.04E-2	4.16E-4	3.33E-3	2.15E-5	-8.87E-3	1.53E-2
POCP	kg NMVOC eq	6.65E-3	1.64E-4	6.28E-7	6.82E-3	1.19E-4	9.91E-4	7.42E-6	-2.96E-3	4.98E-3
ADP-mm	kg Sb eq	1.41E-3	6.62E-7	1.97E-8	1.41E-3	4.79E-7	4.57E-6	5.46E-9	-1.83E-5	1.39E-3
ADP-f	MJ	4.73E+1	3.93E-1	1.36E-3	4.77E+1	2.84E-1	3.08E+0	1.62E-2	-2.38E+1	2.73E+1
WDP	m3 depriv.	2.61E+0	1.20E-3	5.22E-5	2.61E+0	8.73E-4	1.16E-1	1.24E-4	-1.37E+0	1.36E+0
PM	disease inc.	8.13E-8	2.31E-9	9.08E-12	8.37E-8	1.67E-9	1.47E-8	1.11E-10	-4.07E-8	5.94E-8
IR	kBq U-235 eq	9.98E-2	1.72E-3	1.02E-6	1.01E-1	1.24E-3	1.10E-2	7.41E-5	-4.86E-2	6.52E-2
ETP-fw	CTUe	6.33E+1	3.19E-1	1.21E-2	6.36E+1	2.31E-1	2.27E+1	2.47E-1	-2.42E+1	6.26E+1
HTP-c	CTUh	1.93E-9	1.13E-11	6.17E-13	1.94E-9	8.22E-12	3.82E-10	4.60E-13	-6.45E-10	1.68E-9
HTP-nc	CTUh	5.09E-8	3.80E-10	1.57E-11	5.13E-8	2.75E-10	8.30E-9	4.78E-11	-1.54E-8	4.45E-8
SQP	Pt	4.32E+1	3.36E-1	2.24E-3	4.35E+1	2.43E-1	1.91E+0	4.13E-2	-5.42E+1	-8.47E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.23E+1	5.63E-3	2.40E-2	1.23E+1	4.08E-3	2.16E-1	5.96E-4	-9.46E+0	3.06E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.23E+1	5.63E-3	2.40E-2	1.23E+1	4.08E-3	2.16E-1	5.96E-4	-9.46E+0	3.06E+0
PENRE	MJ	5.07E+1	4.17E-1	1.44E-3	5.11E+1	3.02E-1	3.28E+0	1.72E-2	-2.57E+1	2.91E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	5.07E+1	4.17E-1	1.44E-3	5.11E+1	3.02E-1	3.28E+0	1.72E-2	-2.57E+1	2.91E+1
PET	MJ	6.30E+1	4.22E-1	2.55E-2	6.34E+1	3.06E-1	3.49E+0	1.78E-2	-3.51E+1	3.21E+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	3.37E-2	4.44E-5	1.46E-6	3.37E-2	3.22E-5	3.27E-3	1.97E-5	-1.80E-2	1.90E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.09E-4	1.00E-6	2.73E-13	2.10E-4	7.27E-7	5.23E-6	1.99E-8	-2.43E-5	1.91E-4
NHWD	kg	2.26E-1	2.43E-2	1.05E-6	2.50E-1	1.76E-2	1.23E-1	7.09E-2	-8.89E-2	3.73E-1
RWD	kg	9.08E-5	2.67E-6	1.10E-13	9.35E-5	1.93E-6	1.20E-5	1.05E-7	-4.47E-5	6.29E-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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