

Environmental Profile

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

Ecochain v3.5.80



Product: 3043636 - Angle ext. KANION PVC 70x90 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	3.68E-1	6.28E-3	1.45E-4	3.74E-1	3.64E-3	2.96E-1	1.17E-3	-1.80E-1	4.95E-1
GWP-f	kg CO2 eq	4.64E-1	6.28E-3	1.46E-4	4.70E-1	3.63E-3	1.66E-1	1.17E-3	-2.47E-1	3.95E-1
GWP-b	kg CO2 eq	-9.69E-2	3.81E-6	-1.54E-6	-9.69E-2	2.21E-6	1.30E-1	1.45E-6	6.72E-2	9.99E-2
GWP-luluc	kg CO2 eq	7.51E-4	2.22E-6	1.49E-7	7.53E-4	1.29E-6	4.76E-5	3.13E-8	-6.21E-4	1.81E-4
ODP	kg CFC11 eq	1.65E-7	1.45E-9	8.26E-12	1.66E-7	8.37E-10	1.35E-8	4.31E-11	-8.86E-8	9.20E-8
AP	mol H+ eq	2.27E-3	3.58E-5	1.47E-6	2.31E-3	2.07E-5	2.56E-4	1.05E-6	-1.05E-3	1.54E-3
EP-fw	kg P eq	2.16E-5	5.17E-8	8.24E-9	2.16E-5	2.99E-8	1.61E-6	1.40E-9	-1.25E-5	1.07E-5
EP-m	kg N eq	4.59E-4	1.28E-5	1.55E-7	4.72E-4	7.40E-6	6.84E-5	6.42E-7	-2.13E-4	3.36E-4
EP-T	mol N eq	4.85E-3	1.41E-4	1.85E-6	5.00E-3	8.16E-5	7.53E-4	4.19E-6	-2.37E-3	3.47E-3
POCP	kg NMVOC eq	1.58E-3	4.03E-5	6.28E-7	1.62E-3	2.33E-5	2.24E-4	1.44E-6	-7.55E-4	1.11E-3
ADP-mm	kg Sb eq	2.99E-4	1.62E-7	1.97E-8	3.00E-4	9.40E-8	9.97E-7	1.06E-9	-3.88E-6	2.97E-4
ADP-f	MJ	1.04E+1	9.64E-2	1.36E-3	1.05E+1	5.58E-2	6.51E-1	3.15E-3	-5.29E+0	5.94E+0
WDP	m3 depriv.	5.44E-1	2.96E-4	5.22E-5	5.44E-1	1.71E-4	2.33E-2	2.40E-5	-3.29E-1	2.38E-1
PM	disease inc.	2.05E-8	5.67E-10	9.08E-12	2.10E-8	3.28E-10	3.24E-9	2.17E-11	-1.24E-8	1.23E-8
IR	kBq U-235 eq	2.18E-2	4.21E-4	1.02E-6	2.22E-2	2.44E-4	2.36E-3	1.44E-5	-1.22E-2	1.26E-2
ETP-fw	CTUe	1.81E+1	7.82E-2	1.21E-2	1.81E+1	4.53E-2	4.57E+0	4.88E-2	-7.94E+0	1.49E+1
HTP-c	CTUh	4.64E-10	2.78E-12	6.17E-13	4.68E-10	1.61E-12	8.34E-11	8.95E-14	-1.61E-10	3.92E-10
HTP-nc	CTUh	1.15E-8	9.33E-11	1.57E-11	1.16E-8	5.40E-11	1.73E-9	9.41E-12	-3.46E-9	9.91E-9
SQP	Pt	1.25E+1	8.24E-2	2.24E-3	1.26E+1	4.77E-2	4.04E-1	8.05E-3	-1.97E+1	-6.64E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	3.09E+0	1.38E-3	2.40E-2	3.12E+0	8.00E-4	4.41E-2	1.16E-4	-3.43E+0	-2.68E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	3.09E+0	1.38E-3	2.40E-2	3.12E+0	8.00E-4	4.41E-2	1.16E-4	-3.43E+0	-2.68E-1
PENRE	MJ	1.12E+1	1.02E-1	1.44E-3	1.13E+1	5.92E-2	6.93E-1	3.34E-3	-5.70E+0	6.34E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.12E+1	1.02E-1	1.44E-3	1.13E+1	5.92E-2	6.93E-1	3.34E-3	-5.70E+0	6.34E+0
PET	MJ	1.43E+1	1.04E-1	2.55E-2	1.44E+1	6.00E-2	7.37E-1	3.46E-3	-9.14E+0	6.07E+0
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	7.51E-3	1.09E-5	1.46E-6	7.52E-3	6.31E-6	6.59E-4	3.84E-6	-5.08E-3	3.11E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	4.54E-5	2.46E-7	2.73E-13	4.56E-5	1.43E-7	1.15E-6	3.87E-9	-5.90E-6	4.10E-5
NHWD	kg	5.61E-2	5.97E-3	1.05E-6	6.20E-2	3.46E-3	2.69E-2	1.38E-2	-2.20E-2	8.42E-2
RWD	kg	1.98E-5	6.55E-7	1.10E-13	2.04E-5	3.79E-7	2.65E-6	2.04E-8	-1.14E-5	1.21E-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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