

Environmental Profile

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

Ecochain v3.5.80



Product: 3043715 - Angle ext. KANION PVC 100xordered graph.
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	1.48E+0	1.32E-2	6.12E-4	1.50E+0	7.16E-3	1.13E+0	2.35E-3	-5.01E-2	2.58E+0
GWP-f	kg CO2 eq	1.73E+0	1.32E-2	6.18E-4	1.74E+0	7.16E-3	4.60E-1	2.35E-3	-9.54E-1	1.26E+0
GWP-b	kg CO2 eq	-2.48E-1	8.01E-6	-6.53E-6	-2.48E-1	4.35E-6	6.65E-1	2.89E-6	9.10E-1	1.33E+0
GWP-luluc	kg CO2 eq	5.91E-3	4.67E-6	6.32E-7	5.91E-3	2.53E-6	1.14E-4	6.27E-8	-6.67E-3	-6.46E-4
ODP	kg CFC11 eq	4.25E-7	3.04E-9	3.50E-11	4.28E-7	1.65E-9	3.72E-8	8.58E-11	-2.35E-7	2.32E-7
AP	mol H+ eq	8.69E-3	7.51E-5	6.24E-6	8.77E-3	4.08E-5	8.84E-4	2.10E-6	-5.79E-3	3.91E-3
EP-fw	kg P eq	9.28E-5	1.09E-7	3.48E-8	9.29E-5	5.89E-8	3.95E-6	2.81E-9	-9.23E-5	4.63E-6
EP-m	kg N eq	2.30E-3	2.69E-5	6.56E-7	2.33E-3	1.46E-5	2.78E-4	1.34E-6	-1.28E-3	1.34E-3
EP-T	mol N eq	2.30E-2	2.96E-4	7.84E-6	2.33E-2	1.61E-4	3.04E-3	8.35E-6	-1.47E-2	1.18E-2
POCP	kg NMVOC eq	6.19E-3	8.47E-5	2.65E-6	6.28E-3	4.60E-5	9.09E-4	2.88E-6	-3.98E-3	3.26E-3
ADP-mm	kg Sb eq	6.14E-4	3.41E-7	8.32E-8	6.14E-4	1.85E-7	3.56E-6	2.12E-9	-1.31E-5	6.05E-4
ADP-f	MJ	3.34E+1	2.02E-1	5.74E-3	3.37E+1	1.10E-1	1.99E+0	6.28E-3	-1.83E+1	1.74E+1
WDP	m3 depriv.	1.38E+0	6.21E-4	2.21E-4	1.38E+0	3.37E-4	5.14E-2	4.87E-5	-1.76E+0	-3.32E-1
PM	disease inc.	1.04E-7	1.19E-9	3.84E-11	1.05E-7	6.46E-10	1.21E-8	4.32E-11	-9.87E-8	1.91E-8
IR	kBq U-235 eq	8.06E-2	8.85E-4	4.31E-6	8.15E-2	4.80E-4	7.78E-3	2.87E-5	-7.25E-2	1.72E-2
ETP-fw	CTUe	1.33E+2	1.64E-1	5.11E-2	1.33E+2	8.92E-2	1.03E+1	9.49E-2	-7.47E+1	6.88E+1
HTP-c	CTUh	1.28E-9	5.85E-12	2.61E-12	1.29E-9	3.17E-12	2.79E-10	1.79E-13	-7.94E-10	7.74E-10
HTP-nc	CTUh	3.28E-8	1.96E-10	6.62E-11	3.31E-8	1.06E-10	4.66E-9	1.84E-11	-2.28E-8	1.51E-8
SQP	Pt	6.18E+1	1.73E-1	9.47E-3	6.20E+1	9.40E-2	1.20E+0	1.60E-2	-1.83E+2	-1.20E+2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.18E+1	2.91E-3	1.02E-1	1.19E+1	1.58E-3	1.07E-1	2.31E-4	-3.28E+1	-2.08E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.18E+1	2.91E-3	1.02E-1	1.19E+1	1.58E-3	1.07E-1	2.31E-4	-3.28E+1	-2.08E+1
PENRE	MJ	3.59E+1	2.15E-1	6.11E-3	3.62E+1	1.17E-1	2.12E+0	6.66E-3	-1.96E+1	1.88E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.59E+1	2.15E-1	6.11E-3	3.62E+1	1.17E-1	2.12E+0	6.66E-3	-1.96E+1	1.88E+1
PET	MJ	4.77E+1	2.18E-1	1.08E-1	4.81E+1	1.18E-1	2.22E+0	6.89E-3	-5.24E+1	-1.97E+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	2.57E-2	2.29E-5	6.17E-6	2.58E-2	1.24E-5	1.59E-3	7.66E-6	-3.92E-2	-1.18E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.06E-4	5.18E-7	1.16E-12	1.07E-4	2.81E-7	4.20E-6	7.71E-9	-2.22E-5	8.92E-5
NHWD	kg	2.53E-1	1.26E-2	4.46E-6	2.65E-1	6.81E-3	8.60E-2	2.75E-2	-1.07E-1	2.79E-1
RWD	kg	7.91E-5	1.38E-6	4.64E-13	8.05E-5	7.47E-7	9.77E-6	4.07E-8	-6.88E-5	2.22E-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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