

Environmental Profile

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

Ecochain v3.5.80



Product: 3043718 - Angle ext. KANION PVC 130xordered 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	1.64E+0	1.57E-2	6.12E-4	1.66E+0	9.21E-3	1.18E+0	3.05E-3	-1.44E-1	2.71E+0
GWP-f	kg CO2 eq	1.88E+0	1.57E-2	6.18E-4	1.90E+0	9.21E-3	5.27E-1	3.05E-3	-1.03E+0	1.41E+0
GWP-b	kg CO2 eq	-2.45E-1	9.52E-6	-6.53E-6	-2.45E-1	5.59E-6	6.56E-1	3.70E-6	8.89E-1	1.30E+0
GWP-luluc	kg CO2 eq	5.96E-3	5.55E-6	6.32E-7	5.96E-3	3.26E-6	1.36E-4	8.28E-8	-6.59E-3	-4.90E-4
ODP	kg CFC11 eq	4.99E-7	3.61E-9	3.50E-11	5.03E-7	2.12E-9	4.31E-8	1.10E-10	-2.77E-7	2.71E-7
AP	mol H+ eq	9.49E-3	8.93E-5	6.24E-6	9.58E-3	5.24E-5	9.80E-4	2.71E-6	-5.99E-3	4.63E-3
EP-fw	kg P eq	9.91E-5	1.29E-7	3.48E-8	9.93E-5	7.58E-8	4.69E-6	3.68E-9	-9.34E-5	1.07E-5
EP-m	kg N eq	2.42E-3	3.20E-5	6.56E-7	2.45E-3	1.88E-5	3.01E-4	1.70E-6	-1.31E-3	1.46E-3
EP-T	mol N eq	2.43E-2	3.52E-4	7.84E-6	2.47E-2	2.07E-4	3.29E-3	1.08E-5	-1.50E-2	1.32E-2
POCP	kg NMVOC eq	6.65E-3	1.01E-4	2.65E-6	6.75E-3	5.91E-5	9.83E-4	3.72E-6	-4.08E-3	3.72E-3
ADP-mm	kg Sb eq	1.01E-3	4.06E-7	8.32E-8	1.01E-3	2.38E-7	3.93E-6	2.76E-9	-1.48E-5	9.95E-4
ADP-f	MJ	3.73E+1	2.41E-1	5.74E-3	3.76E+1	1.41E-1	2.27E+0	8.09E-3	-2.03E+1	1.97E+1
WDP	m3 depriv.	1.62E+0	7.39E-4	2.21E-4	1.62E+0	4.34E-4	6.28E-2	7.04E-5	-1.86E+0	-1.70E-1
PM	disease inc.	1.07E-7	1.42E-9	3.84E-11	1.09E-7	8.31E-10	1.32E-8	5.57E-11	-9.84E-8	2.45E-8
IR	kBq U-235 eq	8.92E-2	1.05E-3	4.31E-6	9.02E-2	6.18E-4	8.71E-3	3.69E-5	-7.55E-2	2.41E-2
ETP-fw	CTUe	1.36E+2	1.95E-1	5.11E-2	1.36E+2	1.15E-1	1.24E+1	1.19E-1	-7.41E+1	7.47E+1
HTP-c	CTUh	1.30E-9	6.95E-12	2.61E-12	1.31E-9	4.08E-12	3.16E-10	2.36E-13	-8.27E-10	8.08E-10
HTP-nc	CTUh	3.65E-8	2.33E-10	6.62E-11	3.68E-8	1.37E-10	5.42E-9	2.32E-11	-2.56E-8	1.68E-8
SQP	Pt	6.17E+1	2.06E-1	9.47E-3	6.19E+1	1.21E-1	1.36E+0	2.06E-2	-1.80E+2	-1.16E+2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.18E+1	3.45E-3	1.02E-1	1.19E+1	2.03E-3	1.28E-1	2.94E-4	-3.22E+1	-2.01E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.18E+1	3.45E-3	1.02E-1	1.19E+1	2.03E-3	1.28E-1	2.94E-4	-3.22E+1	-2.01E+1
PENRE	MJ	4.01E+1	2.55E-1	6.11E-3	4.04E+1	1.50E-1	2.41E+0	8.59E-3	-2.17E+1	2.12E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	4.01E+1	2.55E-1	6.11E-3	4.04E+1	1.50E-1	2.41E+0	8.59E-3	-2.17E+1	2.12E+1
PET	MJ	5.19E+1	2.59E-1	1.08E-1	5.23E+1	1.52E-1	2.54E+0	8.88E-3	-5.39E+1	1.07E+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	2.87E-2	2.72E-5	6.17E-6	2.87E-2	1.60E-5	1.91E-3	9.83E-6	-3.97E-2	-9.03E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.57E-4	6.15E-7	1.16E-12	1.58E-4	3.61E-7	4.62E-6	1.00E-8	-2.29E-5	1.40E-4
NHWD	kg	2.63E-1	1.49E-2	4.46E-6	2.78E-1	8.76E-3	9.65E-2	3.54E-2	-1.11E-1	3.07E-1
RWD	kg	8.66E-5	1.64E-6	4.64E-13	8.83E-5	9.61E-7	1.07E-5	5.24E-8	-7.12E-5	2.88E-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



Ecochain Technologies BV
H.J.E. Wenckebachweg 123, 1096 AM Amsterdam, The Netherlands
<https://www.ecochain.com>
+31 20 3035 777