

Environmental Profile

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

Ecochain v3.5.80



Product: 3043679 - Angle int. KANION PVC 100x to order BN
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]

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Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	1.45E+0	1.35E-2	1.42E-3	1.46E+0	7.01E-3	1.12E+0	2.30E-3	-4.50E-2	2.55E+0
GWP-f	kg CO2 eq	1.69E+0	1.35E-2	1.43E-3	1.70E+0	7.00E-3	4.56E-1	2.30E-3	-9.49E-1	1.22E+0
GWP-b	kg CO2 eq	-2.48E-1	8.17E-6	-1.51E-5	-2.48E-1	4.25E-6	6.65E-1	2.83E-6	9.10E-1	1.33E+0
GWP-luluc	kg CO2 eq	5.84E-3	4.76E-6	1.46E-6	5.85E-3	2.48E-6	1.11E-4	6.15E-8	-6.67E-3	-7.05E-4
ODP	kg CFC11 eq	4.20E-7	3.10E-9	8.10E-11	4.23E-7	1.61E-9	3.67E-8	8.39E-11	-2.31E-7	2.30E-7
AP	mol H+ eq	8.41E-3	7.67E-5	1.45E-5	8.50E-3	3.99E-5	8.75E-4	2.05E-6	-5.76E-3	3.66E-3
EP-fw	kg P eq	9.00E-5	1.11E-7	8.07E-8	9.02E-5	5.76E-8	3.88E-6	2.75E-9	-9.20E-5	2.14E-6
EP-m	kg N eq	2.25E-3	2.74E-5	1.52E-6	2.28E-3	1.43E-5	2.76E-4	1.31E-6	-1.28E-3	1.29E-3
EP-T	mol N eq	2.24E-2	3.02E-4	1.82E-5	2.27E-2	1.57E-4	3.02E-3	8.17E-6	-1.47E-2	1.12E-2
POCP	kg NMVOC eq	6.04E-3	8.64E-5	6.15E-6	6.13E-3	4.49E-5	9.02E-4	2.82E-6	-3.96E-3	3.12E-3
ADP-mm	kg Sb eq	2.05E-4	3.48E-7	1.93E-7	2.05E-4	1.81E-7	3.53E-6	2.08E-9	-1.30E-5	1.96E-4
ADP-f	MJ	3.32E+1	2.07E-1	1.33E-2	3.34E+1	1.07E-1	1.97E+0	6.14E-3	-1.82E+1	1.73E+1
WDP	m3 depriv.	1.35E+0	6.34E-4	5.11E-4	1.35E+0	3.30E-4	5.03E-2	4.81E-5	-1.75E+0	-3.51E-1
PM	disease inc.	1.02E-7	1.21E-9	8.90E-11	1.04E-7	6.32E-10	1.20E-8	4.23E-11	-9.86E-8	1.78E-8
IR	kBq U-235 eq	7.85E-2	9.03E-4	9.97E-6	7.95E-2	4.70E-4	7.69E-3	2.81E-5	-7.22E-2	1.54E-2
ETP-fw	CTUe	1.29E+2	1.68E-1	1.18E-1	1.29E+2	8.73E-2	1.01E+1	9.27E-2	-7.46E+1	6.48E+1
HTP-c	CTUh	1.19E-9	5.97E-12	6.04E-12	1.20E-9	3.10E-12	2.76E-10	1.75E-13	-7.91E-10	6.92E-10
HTP-nc	CTUh	3.00E-8	2.00E-10	1.53E-10	3.03E-8	1.04E-10	4.59E-9	1.79E-11	-2.27E-8	1.24E-8
SQP	Pt	6.17E+1	1.77E-1	2.20E-2	6.19E+1	9.19E-2	1.18E+0	1.57E-2	-1.83E+2	-1.20E+2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.17E+1	2.96E-3	2.36E-1	1.20E+1	1.54E-3	1.06E-1	2.26E-4	-3.28E+1	-2.07E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.17E+1	2.96E-3	2.36E-1	1.20E+1	1.54E-3	1.06E-1	2.26E-4	-3.28E+1	-2.07E+1
PENRE	MJ	3.57E+1	2.19E-1	1.42E-2	3.59E+1	1.14E-1	2.09E+0	6.52E-3	-1.95E+1	1.86E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.57E+1	2.19E-1	1.42E-2	3.59E+1	1.14E-1	2.09E+0	6.52E-3	-1.95E+1	1.86E+1
PET	MJ	4.74E+1	2.22E-1	2.50E-1	4.79E+1	1.16E-1	2.19E+0	6.74E-3	-5.22E+1	-2.06E+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	2.51E-2	2.34E-5	1.43E-5	2.51E-2	1.22E-5	1.57E-3	7.49E-6	-3.91E-2	-1.24E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	5.44E-5	5.28E-7	2.68E-12	5.50E-5	2.75E-7	4.16E-6	7.55E-9	-2.21E-5	3.73E-5
NHWD	kg	2.49E-1	1.28E-2	1.03E-5	2.62E-1	6.66E-3	8.51E-2	2.69E-2	-1.07E-1	2.74E-1
RWD	kg	7.76E-5	1.41E-6	1.07E-12	7.90E-5	7.31E-7	9.67E-6	3.98E-8	-6.85E-5	2.09E-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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