

Environmental Profile

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

Ecochain v3.5.80



Product: 3043703 - Gutter PVC union KANION 70 BK
 Unit: 1 piece
 Manufacturer: Wavin - PL -Buk - Extra products

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



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.

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

A1 Raw material supply A2 Transport A3 Manufacturing

Construction process stage

A4 Transport gate to site
 A5 Assembly / Construction installation process

Use stage

B1 Use B2 Maintenance B3 Repair B4 Replacement B5 Refurbishment
 B6 Operational energy use B7 Operational water use

End-of-Life stage

C1 De-construction demolition C2 Transport C3 Waste processing
 C4 Disposal

Benefits and loads beyond the system boundaries

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	3.13E-1	5.84E-3	1.45E-4	3.19E-1	2.71E-3	2.89E-1	8.69E-4	-1.53E-1	4.58E-1
GWP-f	kg CO2 eq	4.10E-1	5.83E-3	1.46E-4	4.16E-1	2.71E-3	1.59E-1	8.69E-4	-2.20E-1	3.59E-1
GWP-b	kg CO2 eq	-9.82E-2	3.54E-6	-1.54E-6	-9.82E-2	1.65E-6	1.30E-1	1.08E-6	6.75E-2	9.89E-2
GWP-luluc	kg CO2 eq	7.03E-4	2.06E-6	1.49E-7	7.05E-4	9.60E-7	3.65E-5	2.32E-8	-5.96E-4	1.47E-4
ODP	kg CFC11 eq	1.30E-7	1.34E-9	8.26E-12	1.31E-7	6.25E-10	1.05E-8	3.21E-11	-6.99E-8	7.22E-8
AP	mol H+ eq	1.99E-3	3.32E-5	1.47E-6	2.02E-3	1.54E-5	2.07E-4	7.85E-7	-9.09E-4	1.34E-3
EP-fw	kg P eq	1.88E-5	4.80E-8	8.24E-9	1.88E-5	2.23E-8	1.23E-6	1.04E-9	-1.11E-5	8.98E-6
EP-m	kg N eq	4.14E-4	1.19E-5	1.55E-7	4.26E-4	5.53E-6	5.72E-5	4.80E-7	-1.90E-4	3.00E-4
EP-T	mol N eq	4.36E-3	1.31E-4	1.85E-6	4.49E-3	6.09E-5	6.29E-4	3.12E-6	-2.13E-3	3.06E-3
POCP	kg NMVOC eq	1.44E-3	3.74E-5	6.28E-7	1.48E-3	1.74E-5	1.87E-4	1.08E-6	-6.72E-4	1.01E-3
ADP-mm	kg Sb eq	2.48E-4	1.51E-7	1.97E-8	2.49E-4	7.01E-8	7.97E-7	7.92E-10	-3.08E-6	2.46E-4
ADP-f	MJ	9.33E+0	8.95E-2	1.36E-3	9.43E+0	4.16E-2	5.13E-1	2.35E-3	-4.55E+0	5.43E+0
WDP	m3 depriv.	4.41E-1	2.75E-4	5.22E-5	4.41E-1	1.28E-4	1.77E-2	1.75E-5	-2.74E-1	1.86E-1
PM	disease inc.	1.91E-8	5.26E-10	9.08E-12	1.97E-8	2.45E-10	2.63E-9	1.62E-11	-1.15E-8	1.11E-8
IR	kBq U-235 eq	1.91E-2	3.91E-4	1.02E-6	1.95E-2	1.82E-4	1.88E-3	1.08E-5	-1.04E-2	1.11E-2
ETP-fw	CTUe	1.65E+1	7.27E-2	1.21E-2	1.66E+1	3.38E-2	3.47E+0	3.66E-2	-7.41E+0	1.28E+1
HTP-c	CTUh	4.06E-10	2.59E-12	6.17E-13	4.09E-10	1.20E-12	6.92E-11	6.65E-14	-1.41E-10	3.38E-10
HTP-nc	CTUh	9.61E-9	8.67E-11	1.57E-11	9.71E-9	4.03E-11	1.36E-9	7.05E-12	-2.76E-9	8.37E-9
SQP	Pt	1.23E+1	7.66E-2	2.24E-3	1.24E+1	3.56E-2	3.20E-1	6.01E-3	-1.96E+1	-6.82E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.79E+0	1.28E-3	2.40E-2	2.82E+0	5.97E-4	3.39E-2	8.65E-5	-3.39E+0	-5.39E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.79E+0	1.28E-3	2.40E-2	2.82E+0	5.97E-4	3.39E-2	8.65E-5	-3.39E+0	-5.39E-1
PENRE	MJ	1.00E+1	9.50E-2	1.44E-3	1.01E+1	4.42E-2	5.45E-1	2.49E-3	-4.91E+0	5.79E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.00E+1	9.50E-2	1.44E-3	1.01E+1	4.42E-2	5.45E-1	2.49E-3	-4.91E+0	5.79E+0
PET	MJ	1.28E+1	9.63E-2	2.55E-2	1.29E+1	4.48E-2	5.79E-1	2.58E-3	-8.30E+0	5.25E+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	6.49E-3	1.01E-5	1.46E-6	6.50E-3	4.71E-6	5.09E-4	2.87E-6	-4.51E-3	2.51E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	3.79E-5	2.29E-7	2.73E-13	3.81E-5	1.06E-7	9.28E-7	2.88E-9	-5.34E-6	3.38E-5
NHWD	kg	4.97E-2	5.55E-3	1.05E-6	5.53E-2	2.58E-3	2.27E-2	1.03E-2	-1.91E-2	7.18E-2
RWD	kg	1.78E-5	6.09E-7	1.10E-13	1.84E-5	2.83E-7	2.14E-6	1.53E-8	-9.84E-6	1.10E-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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