

Environmental Profile

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

Ecochain v3.5.80



Product: 3043728 - Reducer KANION PVC 110/90 BK S/S
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	5.41E-1	1.20E-2	2.62E-3	5.56E-1	2.58E-3	3.52E-1	8.98E-4	-8.40E-2	8.28E-1
GWP-f	kg CO2 eq	6.00E-1	1.20E-2	2.65E-3	6.14E-1	2.58E-3	1.89E-1	8.98E-4	-3.02E-1	5.06E-1
GWP-b	kg CO2 eq	-5.99E-2	7.27E-6	-2.80E-5	-5.99E-2	1.56E-6	1.63E-1	9.91E-7	2.19E-1	3.22E-1
GWP-luluc	kg CO2 eq	1.59E-3	4.24E-6	2.71E-6	1.60E-3	9.12E-7	3.50E-5	2.74E-8	-1.64E-3	1.19E-6
ODP	kg CFC11 eq	1.31E-7	2.76E-9	1.50E-10	1.34E-7	5.94E-10	1.07E-8	3.09E-11	-7.87E-8	6.62E-8
AP	mol H+ eq	3.05E-3	6.82E-5	2.67E-5	3.14E-3	1.47E-5	2.58E-4	7.75E-7	-1.57E-3	1.85E-3
EP-fw	kg P eq	2.96E-5	9.85E-8	1.49E-7	2.99E-5	2.12E-8	1.20E-6	1.16E-9	-2.37E-5	7.35E-6
EP-m	kg N eq	7.34E-4	2.44E-5	2.81E-6	7.61E-4	5.25E-6	8.02E-5	4.23E-7	-3.44E-4	5.03E-4
EP-T	mol N eq	7.49E-3	2.69E-4	3.36E-5	7.80E-3	5.79E-5	8.78E-4	3.04E-6	-3.91E-3	4.83E-3
POCP	kg NMVOC eq	2.16E-3	7.69E-5	1.14E-5	2.25E-3	1.65E-5	2.62E-4	1.06E-6	-1.09E-3	1.44E-3
ADP-mm	kg Sb eq	8.26E-4	3.10E-7	3.56E-7	8.27E-4	6.66E-8	1.02E-6	8.27E-10	-3.90E-6	8.24E-4
ADP-f	MJ	1.21E+1	1.84E-1	2.46E-2	1.23E+1	3.95E-2	5.97E-1	2.28E-3	-5.91E+0	7.06E+0
WDP	m3 depriv.	4.49E-1	5.64E-4	9.46E-4	4.50E-1	1.21E-4	1.56E-2	3.52E-5	-4.82E-1	-1.55E-2
PM	disease inc.	3.32E-8	1.08E-9	1.65E-10	3.44E-8	2.33E-10	3.52E-9	1.57E-11	-2.49E-8	1.33E-8
IR	kBq U-235 eq	2.83E-2	8.03E-4	1.84E-5	2.92E-2	1.73E-4	2.26E-3	1.01E-5	-1.94E-2	1.22E-2
ETP-fw	CTUe	4.02E+1	1.49E-1	2.19E-1	4.06E+1	3.21E-2	2.98E+0	2.79E-2	-1.86E+1	2.50E+1
HTP-c	CTUh	5.23E-10	5.31E-12	1.12E-11	5.39E-10	1.14E-12	9.85E-11	7.69E-14	-2.15E-10	4.25E-10
HTP-nc	CTUh	1.39E-8	1.78E-10	2.84E-10	1.43E-8	3.83E-11	1.44E-9	5.65E-12	-6.05E-9	9.75E-9
SQP	Pt	1.58E+1	1.57E-1	4.06E-2	1.60E+1	3.38E-2	3.73E-1	5.73E-3	-4.44E+1	-2.80E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	3.06E+0	2.64E-3	4.36E-1	3.50E+0	5.67E-4	3.28E-2	7.38E-5	-7.97E+0	-4.44E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	3.06E+0	2.64E-3	4.36E-1	3.50E+0	5.67E-4	3.28E-2	7.38E-5	-7.97E+0	-4.44E+0
PENRE	MJ	1.30E+1	1.95E-1	2.62E-2	1.32E+1	4.20E-2	6.35E-1	2.42E-3	-6.36E+0	7.56E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.30E+1	1.95E-1	2.62E-2	1.32E+1	4.20E-2	6.35E-1	2.42E-3	-6.36E+0	7.56E+0
PET	MJ	1.61E+1	1.98E-1	4.62E-1	1.67E+1	4.25E-2	6.67E-1	2.49E-3	-1.43E+1	3.12E+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	8.73E-3	2.08E-5	2.64E-5	8.78E-3	4.47E-6	4.80E-4	2.69E-6	-1.01E-2	-8.00E-4

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.14E-4	4.70E-7	4.95E-12	1.14E-4	1.01E-7	1.22E-6	2.95E-9	-6.88E-6	1.09E-4
NHWD	kg	7.69E-2	1.14E-2	1.91E-5	8.83E-2	2.45E-3	2.83E-2	9.80E-3	-2.91E-2	9.98E-2
RWD	kg	2.87E-5	1.25E-6	1.99E-12	3.00E-5	2.69E-7	2.81E-6	1.45E-8	-1.84E-5	1.47E-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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