

Environmental Profile

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

Ecochain v3.5.80



Product: 3024193 - KANION PVC Socket Bend 50x67 Graph. S/PL
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	1.34E-1	3.18E-3	1.45E-4	1.37E-1	1.40E-3	1.48E-1	4.53E-4	-7.13E-2	2.16E-1
GWP-f	kg CO2 eq	1.99E-1	3.18E-3	1.46E-4	2.02E-1	1.39E-3	6.69E-2	4.53E-4	-1.05E-1	1.66E-1
GWP-b	kg CO2 eq	-6.52E-2	1.93E-6	-1.54E-6	-6.52E-2	8.47E-7	8.15E-2	5.55E-7	3.37E-2	5.01E-2
GWP-luluc	kg CO2 eq	3.54E-4	1.12E-6	1.49E-7	3.55E-4	4.94E-7	1.84E-5	1.23E-8	-3.06E-4	6.78E-5
ODP	kg CFC11 eq	6.36E-8	7.32E-10	8.26E-12	6.44E-8	3.21E-10	5.27E-9	1.66E-11	-3.52E-8	3.48E-8
AP	mol H+ eq	9.89E-4	1.81E-5	1.47E-6	1.01E-3	7.95E-6	1.03E-4	4.06E-7	-4.68E-4	6.52E-4
EP-fw	kg P eq	9.32E-6	2.62E-8	8.24E-9	9.35E-6	1.15E-8	6.21E-7	5.49E-10	-5.70E-6	4.28E-6
EP-m	kg N eq	2.07E-4	6.48E-6	1.55E-7	2.13E-4	2.84E-6	2.83E-5	2.45E-7	-9.79E-5	1.47E-4
EP-T	mol N eq	2.18E-3	7.14E-5	1.85E-6	2.25E-3	3.13E-5	3.11E-4	1.61E-6	-1.10E-3	1.50E-3
POCP	kg NMVOC eq	7.02E-4	2.04E-5	6.28E-7	7.23E-4	8.96E-6	9.24E-5	5.57E-7	-3.49E-4	4.76E-4
ADP-mm	kg Sb eq	1.49E-4	8.22E-8	1.97E-8	1.49E-4	3.61E-8	4.02E-7	4.13E-10	-1.61E-6	1.48E-4
ADP-f	MJ	4.30E+0	4.88E-2	1.36E-3	4.35E+0	2.14E-2	2.59E-1	1.21E-3	-2.20E+0	2.44E+0
WDP	m3 depriv.	2.12E-1	1.50E-4	5.22E-5	2.13E-1	6.57E-5	8.89E-3	1.03E-5	-1.39E-1	8.26E-2
PM	disease inc.	9.50E-9	2.87E-10	9.08E-12	9.80E-9	1.26E-10	1.32E-9	8.35E-12	-6.05E-9	5.20E-9
IR	kBq U-235 eq	9.10E-3	2.13E-4	1.02E-6	9.32E-3	9.36E-5	9.46E-4	5.53E-6	-5.34E-3	5.02E-3
ETP-fw	CTUe	8.44E+0	3.96E-2	1.21E-2	8.49E+0	1.74E-2	1.74E+0	1.83E-2	-3.78E+0	6.48E+0
HTP-c	CTUh	2.17E-10	1.41E-12	6.17E-13	2.19E-10	6.19E-13	3.44E-11	3.52E-14	-7.67E-11	1.77E-10
HTP-nc	CTUh	5.00E-9	4.72E-11	1.57E-11	5.06E-9	2.07E-11	6.76E-10	3.55E-12	-1.42E-9	4.34E-9
SQP	Pt	7.50E+0	4.17E-2	2.24E-3	7.54E+0	1.83E-2	1.62E-1	3.09E-3	-1.10E+1	-3.23E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.60E+0	7.00E-4	2.40E-2	1.62E+0	3.07E-4	1.71E-2	4.39E-5	-1.87E+0	-2.35E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.60E+0	7.00E-4	2.40E-2	1.62E+0	3.07E-4	1.71E-2	4.39E-5	-1.87E+0	-2.35E-1
PENRE	MJ	4.62E+0	5.18E-2	1.44E-3	4.67E+0	2.27E-2	2.75E-1	1.29E-3	-2.36E+0	2.61E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	4.62E+0	5.18E-2	1.44E-3	4.67E+0	2.27E-2	2.75E-1	1.29E-3	-2.36E+0	2.61E+0
PET	MJ	6.21E+0	5.25E-2	2.55E-2	6.29E+0	2.30E-2	2.92E-1	1.33E-3	-4.24E+0	2.37E+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	3.10E-3	5.52E-6	1.46E-6	3.11E-3	2.42E-6	2.54E-4	1.47E-6	-2.28E-3	1.08E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.21E-5	1.25E-7	2.73E-13	2.22E-5	5.48E-8	4.66E-7	1.50E-9	-2.63E-6	2.01E-5
NHWD	kg	2.54E-2	3.02E-3	1.05E-6	2.84E-2	1.33E-3	1.09E-2	5.31E-3	-1.03E-2	3.57E-2
RWD	kg	8.38E-6	3.32E-7	1.10E-13	8.71E-6	1.46E-7	1.08E-6	7.85E-9	-5.05E-6	4.90E-6
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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