

Environmental Profile

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

Ecochain v3.5.80



Product: 3024040 - KANION PVC Socket Bend 110x67 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	7.14E-1	1.25E-2	1.45E-4	7.27E-1	8.69E-3	5.44E-1	2.78E-3	-4.12E-1	8.71E-1
GWP-f	kg CO2 eq	9.06E-1	1.25E-2	1.46E-4	9.18E-1	8.68E-3	3.12E-1	2.78E-3	-4.82E-1	7.60E-1
GWP-b	kg CO2 eq	-1.92E-1	7.57E-6	-1.54E-6	-1.92E-1	5.27E-6	2.32E-1	3.47E-6	7.10E-2	1.10E-1
GWP-luluc	kg CO2 eq	1.18E-3	4.41E-6	1.49E-7	1.19E-3	3.07E-6	1.11E-4	7.40E-8	-8.43E-4	4.57E-4
ODP	kg CFC11 eq	3.87E-7	2.87E-9	8.26E-12	3.90E-7	2.00E-9	3.11E-8	1.03E-10	-1.99E-7	2.24E-7
AP	mol H+ eq	4.40E-3	7.11E-5	1.47E-6	4.47E-3	4.95E-5	5.54E-4	2.51E-6	-1.99E-3	3.09E-3
EP-fw	kg P eq	4.16E-5	1.03E-7	8.24E-9	4.17E-5	7.14E-8	3.73E-6	3.33E-9	-2.17E-5	2.38E-5
EP-m	kg N eq	8.35E-4	2.54E-5	1.55E-7	8.60E-4	1.77E-5	1.41E-4	1.54E-6	-3.86E-4	6.35E-4
EP-T	mol N eq	8.90E-3	2.80E-4	1.85E-6	9.19E-3	1.95E-4	1.56E-3	1.00E-5	-4.24E-3	6.71E-3
POCP	kg NMVOC eq	2.96E-3	8.01E-5	6.28E-7	3.04E-3	5.58E-5	4.64E-4	3.44E-6	-1.41E-3	2.15E-3
ADP-mm	kg Sb eq	6.95E-4	3.23E-7	1.97E-8	6.95E-4	2.25E-7	2.17E-6	2.53E-9	-8.57E-6	6.89E-4
ADP-f	MJ	2.13E+1	1.91E-1	1.36E-3	2.15E+1	1.33E-1	1.46E+0	7.52E-3	-1.08E+1	1.22E+1
WDP	m3 depriv.	1.19E+0	5.88E-4	5.22E-5	1.19E+0	4.09E-4	5.52E-2	5.44E-5	-6.53E-1	5.97E-1
PM	disease inc.	3.73E-8	1.13E-9	9.08E-12	3.84E-8	7.84E-10	6.91E-9	5.18E-11	-2.00E-8	2.62E-8
IR	kBq U-235 eq	4.67E-2	8.37E-4	1.02E-6	4.75E-2	5.83E-4	5.21E-3	3.45E-5	-2.32E-2	3.02E-2
ETP-fw	CTUe	2.98E+1	1.55E-1	1.21E-2	3.00E+1	1.08E-1	1.08E+1	1.18E-1	-1.18E+1	2.92E+1
HTP-c	CTUh	9.11E-10	5.53E-12	6.17E-13	9.17E-10	3.85E-12	1.75E-10	2.12E-13	-3.14E-10	7.81E-10
HTP-nc	CTUh	2.38E-8	1.85E-10	1.57E-11	2.40E-8	1.29E-10	3.90E-9	2.27E-11	-7.29E-9	2.08E-8
SQP	Pt	2.25E+1	1.64E-1	2.24E-3	2.27E+1	1.14E-1	9.00E-1	1.92E-2	-2.82E+1	-4.45E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	5.99E+0	2.75E-3	2.40E-2	6.02E+0	1.91E-3	1.02E-1	2.78E-4	-4.88E+0	1.25E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	5.99E+0	2.75E-3	2.40E-2	6.02E+0	1.91E-3	1.02E-1	2.78E-4	-4.88E+0	1.25E+0
PENRE	MJ	2.28E+1	2.03E-1	1.44E-3	2.30E+1	1.41E-1	1.55E+0	7.98E-3	-1.17E+1	1.30E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.28E+1	2.03E-1	1.44E-3	2.30E+1	1.41E-1	1.55E+0	7.98E-3	-1.17E+1	1.30E+1
PET	MJ	2.88E+1	2.06E-1	2.55E-2	2.90E+1	1.43E-1	1.65E+0	8.26E-3	-1.66E+1	1.43E+1
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	1.48E-2	2.17E-5	1.46E-6	1.49E-2	1.51E-5	1.53E-3	9.19E-6	-8.65E-3	7.78E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.03E-4	4.90E-7	2.73E-13	1.04E-4	3.41E-7	2.46E-6	9.21E-9	-1.12E-5	9.52E-5
NHWD	kg	1.03E-1	1.19E-2	1.05E-6	1.14E-1	8.26E-3	5.64E-2	3.30E-2	-4.32E-2	1.69E-1
RWD	kg	4.32E-5	1.30E-6	1.10E-13	4.45E-5	9.06E-7	5.70E-6	4.89E-8	-2.13E-5	2.99E-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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