

Environmental Profile

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

Ecochain v3.5.80



Product: 3023964 - KANION PVC Access Pipe 110 WT
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

This document and supporting material contain confidential and proprietary business information of Wavin - PL -Buk - Extra products. These materials may be printed or (photo) copied or otherwise used only with the written consent of Wavin - PL -Buk - Extra products.

Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	1.73E+0	3.00E-2	1.45E-4	1.76E+0	1.94E-2	1.24E+0	6.40E-3	-9.74E-1	2.05E+0
GWP-f	kg CO2 eq	2.08E+0	3.00E-2	1.46E-4	2.11E+0	1.94E-2	8.08E-1	6.40E-3	-1.11E+0	1.83E+0
GWP-b	kg CO2 eq	-3.53E-1	1.82E-5	-1.54E-6	-3.53E-1	1.18E-5	4.30E-1	7.73E-6	1.41E-1	2.18E-1
GWP-luluc	kg CO2 eq	2.66E-3	1.06E-5	1.49E-7	2.67E-3	6.85E-6	2.39E-4	1.76E-7	-1.73E-3	1.19E-3
ODP	kg CFC11 eq	8.27E-7	6.91E-9	8.26E-12	8.34E-7	4.46E-9	6.60E-8	2.32E-10	-4.46E-7	4.58E-7
AP	mol H+ eq	1.03E-2	1.71E-4	1.47E-6	1.05E-2	1.10E-4	1.21E-3	5.69E-6	-4.31E-3	7.52E-3
EP-fw	kg P eq	9.50E-5	2.47E-7	8.24E-9	9.53E-5	1.59E-7	8.01E-6	7.78E-9	-4.63E-5	5.72E-5
EP-m	kg N eq	1.91E-3	6.11E-5	1.55E-7	1.97E-3	3.95E-5	3.11E-4	3.49E-6	-8.35E-4	1.49E-3
EP-T	mol N eq	2.09E-2	6.73E-4	1.85E-6	2.16E-2	4.35E-4	3.43E-3	2.26E-5	-9.15E-3	1.63E-2
POCP	kg NMVOC eq	6.89E-3	1.93E-4	6.28E-7	7.08E-3	1.24E-4	1.02E-3	7.81E-6	-3.06E-3	5.18E-3
ADP-mm	kg Sb eq	1.89E-3	7.76E-7	1.97E-8	1.89E-3	5.01E-7	4.68E-6	5.82E-9	-1.91E-5	1.88E-3
ADP-f	MJ	4.84E+1	4.60E-1	1.36E-3	4.89E+1	2.97E-1	3.17E+0	1.70E-2	-2.49E+1	2.75E+1
WDP	m3 depriv.	2.71E+0	1.41E-3	5.22E-5	2.71E+0	9.12E-4	1.18E-1	1.57E-4	-1.43E+0	1.40E+0
PM	disease inc.	8.41E-8	2.71E-9	9.08E-12	8.69E-8	1.75E-9	1.51E-8	1.17E-10	-4.16E-8	6.23E-8
IR	kBq U-235 eq	1.05E-1	2.01E-3	1.02E-6	1.07E-1	1.30E-3	1.13E-2	7.72E-5	-5.03E-2	6.89E-2
ETP-fw	CTUe	6.97E+1	3.74E-1	1.21E-2	7.00E+1	2.41E-1	2.28E+1	2.48E-1	-2.47E+1	6.86E+1
HTP-c	CTUh	2.09E-9	1.33E-11	6.17E-13	2.11E-9	8.59E-12	4.13E-10	5.01E-13	-6.65E-10	1.86E-9
HTP-nc	CTUh	5.56E-8	4.46E-10	1.57E-11	5.61E-8	2.88E-10	8.51E-9	4.84E-11	-1.61E-8	4.88E-8
SQP	Pt	4.37E+1	3.94E-1	2.24E-3	4.41E+1	2.54E-1	1.98E+0	4.32E-2	-5.43E+1	-7.93E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.26E+1	6.60E-3	2.40E-2	1.26E+1	4.26E-3	2.20E-1	6.10E-4	-9.50E+0	3.36E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.26E+1	6.60E-3	2.40E-2	1.26E+1	4.26E-3	2.20E-1	6.10E-4	-9.50E+0	3.36E+0
PENRE	MJ	5.19E+1	4.89E-1	1.44E-3	5.24E+1	3.16E-1	3.37E+0	1.80E-2	-2.68E+1	2.93E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	5.19E+1	4.89E-1	1.44E-3	5.24E+1	3.16E-1	3.37E+0	1.80E-2	-2.68E+1	2.93E+1
PET	MJ	6.45E+1	4.95E-1	2.55E-2	6.51E+1	3.20E-1	3.59E+0	1.86E-2	-3.63E+1	3.27E+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	3.58E-2	5.21E-5	1.46E-6	3.58E-2	3.36E-5	3.32E-3	2.06E-5	-1.86E-2	2.06E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.71E-4	1.18E-6	2.73E-13	2.72E-4	7.60E-7	5.39E-6	2.11E-8	-2.53E-5	2.53E-4
NHWD	kg	2.38E-1	2.85E-2	1.05E-6	2.67E-1	1.84E-2	1.29E-1	7.41E-2	-9.17E-2	3.96E-1
RWD	kg	9.48E-5	3.13E-6	1.10E-13	9.79E-5	2.02E-6	1.24E-5	1.10E-7	-4.62E-5	6.62E-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



Ecochain Technologies BV
H.J.E. Wenckebachweg 123, 1096 AM Amsterdam, The Netherlands
<https://www.ecochain.com>
+31 20 3035 777