

Environmental Profile

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

Ecochain v3.5.71



Product: 3038719 - Irish Acorn Pb Straight Connector W 1i
Unit: 1 piece
Manufacturer: Wavin - UK - Doncaster - Verified

LCA standard: EN15804+A2 (2019)
Standard database: Worldwide - Ecoinvent v 3.6 Cut-Off
Externally verified: Yes
Issue date: 09-02-2023
End of validity: 09-02-2028
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 - UK - Doncaster - Verified (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	7.08E-1	9.47E-3	5.42E-2	7.72E-1	2.37E-3	8.41E-2	1.07E-3	-3.57E-1	5.03E-1
GWP-f	kg CO2 eq	7.07E-1	9.46E-3	5.06E-2	7.67E-1	2.37E-3	8.42E-2	1.07E-3	-3.56E-1	4.99E-1
GWP-b	kg CO2 eq	1.32E-3	5.46E-6	3.61E-3	4.93E-3	1.44E-6	-8.83E-5	1.08E-6	-7.31E-4	4.11E-3
GWP-luluc	kg CO2 eq	3.82E-5	3.44E-6	2.24E-5	6.40E-5	8.39E-7	1.35E-5	2.09E-8	-1.96E-6	7.64E-5
ODP	kg CFC11 eq	8.65E-9	2.17E-9	5.53E-9	1.63E-8	5.47E-10	1.95E-9	2.94E-11	-3.65E-9	1.52E-8
AP	mol H+ eq	3.23E-3	6.30E-5	1.37E-4	3.43E-3	1.35E-5	7.78E-5	7.28E-7	-1.32E-3	2.20E-3
EP-fw	kg P eq	8.23E-6	7.63E-8	3.86E-7	8.69E-6	1.95E-8	3.96E-7	9.63E-10	-3.11E-6	6.00E-6
EP-m	kg N eq	5.98E-4	2.14E-5	2.75E-5	6.47E-4	4.83E-6	2.32E-5	1.38E-6	-2.76E-4	4.00E-4
EP-T	mol N eq	6.08E-3	2.36E-4	2.73E-4	6.59E-3	5.33E-5	2.54E-4	2.90E-6	-2.77E-3	4.13E-3
POCP	kg NMVOC eq	2.29E-3	6.65E-5	8.77E-5	2.44E-3	1.52E-5	7.80E-5	1.05E-6	-1.05E-3	1.49E-3
ADP-mm	kg Sb eq	1.52E-5	2.38E-7	6.17E-7	1.60E-5	6.14E-8	2.90E-7	7.11E-10	-2.10E-6	1.43E-5
ADP-f	MJ	9.63E+0	1.44E-1	7.02E-1	1.05E+1	3.64E-2	2.31E-1	2.16E-3	-4.82E+0	5.92E+0
WDP	m3 depriv.	2.17E-1	4.35E-4	7.43E-3	2.25E-1	1.12E-4	5.01E-3	9.98E-6	-8.83E-2	1.42E-1
PM	disease inc.	2.80E-8	8.34E-10	1.00E-9	2.98E-8	2.14E-10	1.19E-9	1.47E-11	-1.21E-8	1.92E-8
IR	kBq U-235 eq	3.23E-3	6.31E-4	6.25E-4	4.49E-3	1.59E-4	7.00E-4	1.04E-5	-2.47E-4	5.11E-3
ETP-fw	CTUe	1.69E+0	1.16E-1	7.29E-1	2.53E+0	2.96E-2	3.84E-1	4.56E-3	-2.55E-1	2.70E+0
HTP-c	CTUh	1.44E-10	4.22E-12	2.99E-11	1.78E-10	1.05E-12	3.19E-11	5.72E-14	-2.85E-11	1.82E-10
HTP-nc	CTUh	2.32E-9	1.38E-10	6.40E-10	3.10E-9	3.52E-11	4.21E-10	1.84E-12	-6.07E-10	2.95E-9
SQP	Pt	4.58E-1	1.20E-1	1.00E-1	6.78E-1	3.11E-2	1.80E-1	5.49E-3	-2.38E-2	8.71E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.03E-1	2.04E-3	1.49E+0	1.59E+0	5.22E-4	1.17E-2	9.97E-5	-2.31E-2	1.58E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.03E-1	2.04E-3	1.49E+0	1.59E+0	5.22E-4	1.17E-2	9.97E-5	-2.31E-2	1.58E+0
PENRE	MJ	1.04E+1	1.53E-1	7.68E-1	1.13E+1	3.87E-2	2.46E-1	2.29E-3	-5.22E+0	6.37E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.04E+1	1.53E-1	7.68E-1	1.13E+1	3.87E-2	2.46E-1	2.29E-3	-5.22E+0	6.37E+0
PET	MJ	1.05E+1	1.55E-1	2.25E+0	1.29E+1	3.92E-2	2.57E-1	2.39E-3	-5.24E+0	7.95E+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	5.16E-3	1.61E-5	2.27E-4	5.41E-3	4.12E-6	1.66E-4	2.69E-6	-2.06E-3	3.52E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.26E-6	3.62E-7	6.99E-7	2.32E-6	9.31E-8	3.95E-7	2.57E-9	-6.73E-7	2.13E-6
NHWD	kg	2.95E-2	8.69E-3	3.27E-3	4.15E-2	2.26E-3	1.15E-2	9.41E-3	-3.10E-3	6.15E-2
RWD	kg	4.00E-6	9.82E-7	5.29E-7	5.51E-6	2.48E-7	8.76E-7	1.42E-8	-3.29E-7	6.32E-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



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